

Report on the Feasibility of a Footpath along the Lamprey River in the Wild and Scenic Corridor of Epping/Lee/Durham/Newmarket

The Lamprey River - A Wild and Scenic River

The Lamprey River Watershed Association (LRWA) was formed in 1983 to promote the restoration, conservation, wise development and use of the natural resources of the Lamprey River Watershed in seacoast New Hampshire. Many of the early members of the Association were residents living along the riverfront in Lee and Durham. The Association became galvanized when a hydropower project was proposed for Wiswall Dam in Durham, and work proceeded in earnest toward obtaining a Federal Designation of the river in the two towns into the Wild and Scenic Program, under the administration of the National Parks Service (NPS). At a later date this designation was expanded to include portions of the corridor in Epping and Newmarket. At present the Wild and Scenic designation applies to the river from the site of the now-removed Bunker Pond Dam in Epping to the confluence of the Lamprey and Piscassic Rivers in Newmarket.

To conduct the official business of the Wild and Scenic Program, the Lamprey River Advisory Committee (LRAC) was formed. This committee is made up of appointees from the various town governments within the designated corridor. Among other benefits, this Federal Designation brings the significant resources of the National Parks Service to bear in planning for the conservation of corridor resources, and congressional funding has been used to acquire conservation easements on over 2500 acres of waterfront land within the corridor.

The State of New Hampshire Designated Rivers Program

In 1988 The New Hampshire State Legislature passed RSA 483, creating the State's Designated Rivers Program. Among the various rivers designated to the program were the Lamprey River and all of its major tributaries. RSA 483 not only limited certain activities and industries on the riverfront, but it provided for the public review of developments or activities within one quarter mile of the designated rivers. It also required the adoption of a River Management Plan to guide the public in the protection and wise use of the natural resources within the watershed. Similar to the Wild and Scenic Program, RSA 483 requires a body of locally appointed citizens to oversee the Designated Rivers Program, and to meet this obligation the LRAC was expanded to include all fourteen towns within the watershed.

The LRAC Recreation Working Group

Recognizing the significant responsibility involved in administering the dual programs of the Federal Wild and Scenic Program and the State Designated Rivers Program, the Lamprey Rivers Advisory Committee has organized itself into Working Groups, each charged with authority to implement a part of the River Management Plan. The current plan can be found here <http://www.lampreyriver.org/about-us-2013-management-plan-draft>. There are seven Working Groups, one of which is the Recreation Working Group.

The Concept of the Lamprey River Footpath

Members of the Recreation Working Group are outdoor enthusiasts with many years of combined experience in hiking, camping, canoeing/kayaking and allied activities. Several of us are naturalists with expertise in a broad range of environmental focus areas. Others have experience in developing outdoor recreational facilities, including trails, canoe/kayak launch sites, picnic areas, historic markers and kiosks.

All of us agree that the Sweet Trail, a four-mile footpath located in Durham and Newmarket, represents the finest elements of the perfect outdoor experience. Information on the trail can be found here <http://www.greatbaypartnership.org/mapsweet.html>. Two attributes of this trail impress us the most. First, the number of waterfront intercepts. These intercepts give the hiker opportunities to observe wildlife in many different contextual situations, as well as simply providing pleasant overlooks on the waterfront. Secondly, these experiences are available so very close to home; no need to drive for hours to a State or National park for this experience.

Another footpath that deserves our admiration is the Bay Circuit Trail in Massachusetts. This trail extends for about 230 miles in a circular arc around Metropolitan Boston beginning at Plum Island (Newburyport) and extending to Duxbury Beach on the Massachusetts South Shore. Information on this trail can be found here <http://www.outdoors.org/conservation/wherewework/baycircuittrail/>. This trail exemplifies the significant amount of cooperation that is required among local governments and private interest groups to create and maintain such a significant trail.

If the Sweet Trail is such an enjoyable trail because of its relationship with the water bodies it closely follows, our Working Group would ask is it possible to create a similar experience along the shores of the Lamprey River? If the Sweet Trail is so convenient for that spur-of-the-moment get-away for a few hours on a sunny afternoon, our working group would ask can the same experience be provided by a trail that would actually pass through the urbanized areas of Newmarket and Epping? If the Bay Circuit Trail can be created through the cooperation of over thirty communities and advocacy groups, could a similar, but smaller cooperative be formed among the four towns of Epping, Lee, Durham and Newmarket? This study was commissioned to investigate these questions.

The (Extended) Wild and Scenic Corridor

Through the combined efforts of the LRWA and the LRAC, the four towns in the Wild and Scenic Lamprey River Corridor have preserved and enhanced considerable lands adjacent to the river. Our outreach efforts have, over a period of thirty years or so, worked to instill an awareness of the special character of the relatively undeveloped corridor that is the Lamprey River. This awareness helps to promote stewardship of lands, even where they are not formally protected by conservation easements. We have worked to interpret historical and archaeological sites, such that respect can be afforded to those who called this riverfront their home before us.

For the purposes of considering the feasibility of a footpath in this Wild and Scenic Corridor, we have set bounds that differ slightly from the current Wild and Scenic designation. Our corridor would start at Mary Blair Park (site of the former Bunker Pond Dam), but extend downriver to the MacCallen Dam in Newmarket. At that point the corridor would continue along Bay Road in Newmarket to the Lubberland Creek Preserve owned by the Nature Conservancy. The distance, as the river flows along this route, is approximately 23 miles. We define our corridor as being up to 1/4 mile on either side of the river. This definition corresponds to the jurisdictional limits of the State's RSA 483.

Footpath Description

A footpath is the most primitive conveyance for the transportation of man. It is the least expensive conveyance to build. Because it is the least susceptible to degradation over time, it is the easiest to maintain. While there will be some who wish to expand the purpose of our path to accommodate mountain bikes, horses, snowmobiles and motorized recreational vehicles, we will resist such suggestions for many reasons. Most notable among our reasons are our knowledge that owners of host properties we would rely on for locating the footpath would not allow such uses. This is not to say that we have a bias against other uses. In fact, where such uses already occur, we would support continued multi-use of the trail and would work to develop a cooperative four-season trail maintenance program.

We understand the need to avoid or mitigate the environmental impacts of our footpath. Following generally accepted practice developed by the US Army Corps of Engineers, our primary strategy would be to avoid the impacts entirely. For the purposes of this early study, avoidance is provided by routing the preferred location of the trail around GIS-mapped wetlands. If future phases of work are undertaken it will be necessary to conduct field reviews using qualified personnel and additional avoidance may be necessary. If avoidance is not feasible, such as at wetland crossings, minimization of impacts will be implemented, and mitigation will be considered to render the remaining impacts as de minimus.

To guide the design and construction of the footpath, we propose to use the **AMC's Complete Guide to Trail Building & Maintenance**, current edition. Among other topics, this reference covers the physical dimensions of trail cross section, methods of surface stabilization, and types of obstruction bridging. In general, a trail "right of way" width (the cleared area) would be limited to four to six feet. The use of the traditional AMC markers, white strips about the size of a dollar bill is recommended because of its contrast with other locally used markers.

As a part of laying out a preferred location for the trail, we wish to consider the possibility of canoe/kayak portage routes around the various falls and dams within the corridor. Although ancient laws exist assuring the rights of portage at these waterway obstructions, there have been many cases where land owners have denied canoeist's rights. In New York's Adirondacks there are many instances where property owners have set barbed wire fences across navigable streams to keep canoeists out. On the Meramac River near Steelville, Missouri a land owner shot and killed the leader of a family canoe outing who stepped onto a mid-stream sandbar he claimed he owned. Where possible, we desire to set out modern, enforceable easements to assure that portage rights are respected on the Lamprey.

Base Mapping

In late 2014, as our Working Group was gathering its thoughts on the Footpath concept, the National Parks Service issued a Call to Action in advance of its 100th anniversary, which would occur in 2016. The Call to Action was an appeal to all corners of the NPS organization to prepare for the anniversary with specific goals in mind. The complete Call to Action document can be viewed here <http://www.nps.gov/calltoaction/index.html>.

Four tasks were identified as important steps toward positioning the NPS to serve the public, going forward into the next century. They are: 1) Develop and nurture life-long connections between the public and parks, especially for young people, through a continuum of engaging recreational, educational, volunteer, and work experiences, 2) Connect urban communities to parks, trails, waterways, and community green spaces that give people access to fun outdoor experiences close to home, 3) Expand the use of parks as places for healthy outdoor recreation that contributes to people's physical, mental, and social well-being, and 4) Welcome and engage diverse communities through culturally relevant park stories and experiences that are accessible to all. A small grant program was offered to participants who could take on one or more of above-described tasks.

Recognizing the strong connection between several of these tasks and the potential of a footpath in the Lamprey River corridor, we applied for, and secured a \$6000 grant from the Call to Action program. This grant has been applied to the preparation of maps by the Strafford Regional Planning Commission. The maps are very similar to topographic maps publish by the US Geological Service; however, they contain additional terrestrial data and detail available only from the composite Geographical Information System maintained by the Planning Commission. The maps are appended to this report. The cover sheet of the ten-sheet set contains an index of maps for the four-town study area. It also contains a listing of the numerous sites where recreational opportunities already exist within the Wild and Scenic corridor, and the types of recreation that can be enjoyed at each.

Talk, Talk and Walk

After reviewing the maps and considering various options for routing the footpath, we conducted meetings with three of the four conservation commissions in the project area to evaluate the amount of interest that might be gathered for the plan, and to discuss any concerns that these groups might have. The three commissions we met with were Newmarket, Durham and Lee. Epping did not respond to our request for a meeting. In general, the commissions were supportive of the plan, with all reserving detailed comments pending knowledge of the specifics of trail location.

We also met with the three land trusts who own properties or easements in the project area. Specifics of our conversations will be covered in our Preferred Location notes further on in this report. Our contacts were as follows:

Southeast Land Trust of NH (SELT)
The Nature Conservancy (TNC)
The Forest Society (SPNHF)

Brian Hart
Joanne Glode
Wendy Weisinger

bhart@seltnh.org
jglode@tnc.org
wweisinger@forestsociety.org

We also contacted representatives of the three riverfront campgrounds within the project area. All three campgrounds are located in Lee. Contacts were made with other non-commercial land owners as individual issues were identified during the development of the preferred trail location. Specifics of our conversations will be covered in our Preferred Location notes further on in this report.

We conducted a series of field walks into areas where questions remained about existing conditions. These

conditions involved ownership and current land use as well as environmental factors such as the presence of wetlands.

We completed this phase of our work by collecting maps of snowmobile trails in the area. While we were able to locate maps for Newmarket and Lee, and we purchased a statewide map produced by the NH Department of Economic Development, these maps were of limited value because they did not contain trails found to exist at various locations during our field visits.

Guidelines for the Preferred Location

From the onset of this study, we agreed that the footpath should not cross the Lamprey River except at existing roadway crossings. The expense and environmental impacts of such a crossing are well beyond the limits of our resources. The challenge then becomes one of choosing the optimum side of the river for the location of each segment of the path. Through the consideration of current development patterns in the project area, as well as our knowledge of the natural features of the land, we developed guidelines for choosing the preferred side of the river;

- 1) Avoid residential subdivisions with small lots, as the intrusion would be unwelcome.
- 2) Avoid wetlands as the footpath would quickly degrade the environment.
- 3) Avoid town or State arterial roads as they present unsafe walking conditions.
- 4) Seek out appealing river overlooks, but don't turn the footpath into a "towpath".
- 5) Visit as many town parks and recreation areas as possible.
- 6) Visit as many historical and cultural sites as possible.
- 7) Make connections with the urban centers (a condition of our NPS grant).
- 8) Make connections with public transportation routes (a condition of our NPS grant).

The Big Multiplier - Connections to Other Trails

One of the most substantial drawbacks to many trails in the region is their isolation from any trail network of substance. As such, the appeal of these short trails is mostly for the very young or the very old. To be of appeal to a broader portion of the population, trails have to be networked into a system, and interesting routes and have to be available in lengths of five miles or more. The potential for linking of trails within the Lamprey River corridor is substantial. The following is an inventory of trails within, or close to, our footpath study area.

- ⤴ The Rockingham Recreation Trail is a former railroad line extending from Rockingham Junction in Newmarket to the urban environs of Manchester. It skirts the study area in two locations in Epping.
- ⤴ The SELT Mast Road Preserve in Epping is currently under development and will contain several new trails.
- ⤴ Camp Hedding is a Methodist Church retreat located in Epping, adjacent to the Mast Road Preserve, and it has its own small system of trails.
- ⤴ Little River Park is a Town of Lee recreation area located on the shores of the Little River. It contains a handicapped accessible footpath, and also serves as a snowmobile trail connector in winter months.
- ⤴ Spruce Hole, in Durham, was designated a National Natural Landmark in 1972. It is a glacial kettle hole, surrounded by a footpath. The footpath connects to other trails in the nearby Oyster River Forest and College Woods trail system.
- ⤴ West Foss Farm in Durham is on land controlled by the University of New Hampshire, and it contains trails which currently end just beyond our 1/4 mile study area, near Packers Falls.
- ⤴ The Lamprey River Preserve in Durham is owned by the Nature Conservancy and contains several miles of informal walking trails with interesting waterfront intercepts.
- ⤴ Heron Point is a Town of Newmarket-owned park with a bold and ledgy overview of the historic Newmarket Manufacturing Company Mills and the Village area. Several short trails exist throughout the property.
- ⤴ The Lubberland Creek Preserve, located on Bay Road in Newmarket, is owned by the Nature Conservancy. It contains the southern-most trailhead for the Sweet Trail.

Public Meetings

After considering all of the research, meetings and discussions detailed above, we set out a Preferred Location for the footpath. This Preferred Location is shown on the attached maps. We then conducted listening sessions

in each of the four towns within the study area. The dates of the meeting were as follows:

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|--------------------|---------------------------|
| September 16, 2015 | Durham Police Station |
| September 17, 2015 | Lee Public Safety Complex |
| September 21, 2015 | Newmarket Town Hall |
| September 22, 2015 | Epping Town Hall |

The meetings were sparsely attended, but in each, valuable information was presented that added to the value of our study. Specifics were offered by representatives of the Lee Trails Committee, Lee Conservation Commission, Oyster River Watershed Association, Lee Recreation Committee, and the Epping Recreation Committee. This information is discussed in the trail location descriptions below.

The Preferred Location

Below is a narrative describing our preferred location for the footpath on a segment-by-segment basis. Please note that this is a conceptual layout. Many of the property owners have not been contacted or agreed to participate in the locations shown. Also, no on-the-ground evaluations have yet been conducted on the environmental factors that would be affected by such locations.

Epping, Mary Blair Park to Blake Road

Using the terminology of whitewater paddlers, the first segments of the footpath should be located on "river left" because of the considerable conservation and public property located there. "River right" is occupied by a number of residential subdivisions.

Our footpath begins at the kiosk located near the entrance to Mary Blair Park in Epping, and proceeds southward to Route 27. At that intercept, it is noted that the Rockingham Recreational Trail is located less than a quarter mile further south, and that a safe connection can be made along Holt Road. The trail then turns westward and crosses the Route 27 bridge before entering Pendexter Lane and traveling through a parcel owned by SELT to the bridge abutments at the shore of the Pawtuckaway River. Bridging the river on the old abutments appears feasible. The footpath would continue northward along Folsom Mill Road to the junction with Blake Road.

Epping, Blake Road to Epping Town Hall

At this point it is desired to connect with the Dow Parcel and the Lamprey River Forest, both owned by SPNHF. We recommend entering Shepard Lane and finding one supporting land owner who would allow a trail along the edge of his property. Fencing may be installed to define the trail in this case, and prevent those who stray from doing so. Once on the SPNHF properties, the trail can be located in cooperation with SPNHF staff. Our contact confirms that the footpath could be accommodated on these properties. Arriving at the eastern end of the SPNHF parcels, it is desired to make way across Prescott Road and skirt several farm parcels before arriving on Town property on the shore of Hoar Pond, where the water Department maintains three wells. The path continues along a very narrow lake frontage before entering the Epping Schools property. On the schools property, the footpath would be located to avoid other recreational facilities already located there. From the school property it would follow Plummer Street southward to Town Hall, and pass through the Town Hall property, avoiding the parking lot if possible.

Epping, Epping Town Hall to Route 125

At this point it is recognized that a crossing of the very busy Route 125 is necessary, and traffic controls are definitely required to make the crossing safe. There are no such controls at the intersection with Route 27. The trail, therefore, winds its way through several town streets and connects with the Rockingham Recreational Trail, where a pedestrian signal was installed within the past several years. The sufficiency of sidewalks along Main Street should be evaluated in areas that would be used for the trail.

Epping, Route 125 to Route 87

After making the crossing, the footpath would use several town streets to return to, and cross, Route 27. Trail developers should work with The NH Department of Transportation to install "hikers ahead" warning signs at this

crossing location. Once across, the footpath would soon leave the urban environs to follow the river through the Verdant Pastures property before entering the Mast Road Preserve owned by SELT. Trails are currently being constructed on the Mast Road Preserve, but we have been warned that there will be section in the middle of the property where trails cannot pass because of wetlands. For the purposes of the study, we have shown the trail skirting the wetlands by moving northward onto the Camp Hedding property and following the perimeter of that property to the Route 87 bridge crossing the Lamprey River.

Epping, Route 87 to North River Bridge

At this point we look ahead and note the the trail should follow "river left" for the next few sections because of residential developments and wetlands on the right, as well as numerous conservation properties on the left.

The footpath crosses the Route 87 bridge and soon turns right onto a Class A Trail formerly Dimond Hill Road. Within 1000 feet, the trail crosses a brook. From this point to the top of Dimond Hill, properties on the right side of the road are controlled by SELT, and there may be an opportunity to gain several river intercepts. Further study, in cooperation with SELT, should be undertaken. For the purposes of the study, however, we have shown the trail following the Dimond Hill Road location.

Stopping at the top of the hill, it is noticed that our mapping shows wetlands further north. A field walk in the very dry summer of 2015 revealed that this wetland actually extends pretty much unabated under the power lines and up to the brook crossing shown on the map. Much damage has occurred to the wetlands by various vehicular incursions, and this in not a pretty place to hike.

On the other hand, we note that SELT is currently planning to renovate an historic farmhouse off to the west, on North River Road, and perhaps that would be an interesting destination. SELT maintains trails on a number of its properties, so maybe there would be an opportunity to get information on those properties at the farmhouse. Our maps indicate that access to the SELT headquarters might be gained through conservation lands by using two farm passes located on the circle at the end of Meadow Brook Drive.

After visiting at the SELT headquarters, the trail returns to the woods via North River Road, Range Road and Dimond Hill Road (a Class 6 road from the top of Diamond Hill northward). At the end of Dimond Hill Road, the footpath turns right and encounters a crossing of the North River. Snowmobilers have constructed a bridge here using the abutments of a former roadway bridge; however, this bridge is not safe for summertime pedestrian travel and would need to be replaced with a engineered structure to be safe.

Lee, North River Bridge to Wadleigh Falls Bridge

Immediately after the bridge, the trail turns right and follows an existing snowmobile trail through "The Cow Palace" and Flag Hill Winery. Soon after entering the open space portions of the Riverside Farm Drive Subdivision, the snowmobile trail continues northward across the road while we prefer to stay along the river , working our way up to, and crossing the back portion of a parcel which fronts on Riverside Farm Drive and Route 152 before emerging on Route 152 at the Lee Canoe Access. From there, the short distance to the Wadleigh Falls bridge can be walked off pavement, passing over one privately owned riverfront parcel.

At Wadleigh Falls, a canoe portage route is needed. The preferred route is shown on "river right", beginning just above the Route 152 bridge and ending on the second lot below the bridge. Though preferred on a conceptual basis, this route needs to be evaluated in various seasons. The take-out location needs to be located far enough upriver to avoid the current associated with the falls; however this may force it into an area where there is low and marshy backwater conditions at certain times of the year. Shifting the take-out to the already-established launch site about 1/8 above the falls would require canoeists to walk across the narrow Route 152 bridge. This would create a traffic hazard.

Lee, Wadleigh Falls Bridge to Lee Hook Road

As at other major road crossing of the river, we pause to look ahead and note that "river left" from here to Lee Hook Road is occupied by several residential subdivisions. That which is not subdivided is wetland; therefore, "right right" is suggested for the trail location. Even though we make this choice, the first mile or so of the riverfront is occupied by residential uses, so we show our trail returning to the woods via relatively undeveloped

land leading to Jan Lane. This alignment actually leads us out of Lee and into Newmarket for a short distance, and a portion of the route shown on the maps passes through conservation lands associated with the Town of Newmarket's Ash Swamp properties.

The crossing of Route 152 in the 's-curves' associated with the brook exiting the swamp will need to be carefully planned for safety, and hiker warning signs should definitely be installed in the crossing area. Once across the highway, the footpath can follow the river closely through various large farm parcels including, but not limited to the former Ath-Mor Farm, the UNH Burleigh Demeritt Farm and the Bartlett-Dudley Farm.

Once arriving at the Captain Ruben Hill Bridge on Lee Hook Road, there is an opportunity to connect with Town of Lee trails located at Little River Park and the Lee Town Forest through conservation land on the north side of the river. The Lee Snow Travelers maintain a snowmobile trail on portions of this land and it might be possible to route the connector to the park by following that trail in part.

Lee, Lee Hook Road to Wiswall Falls Bridge

Once again, we stand on the Captain Ruben Hill Bridge and look downriver, evaluating which side of the river to use for the next segment of the footpath. The presence of conservation properties on "river-right" draws our attention. Noting that there are commercial campgrounds on both side of the river in the section, we've contacted the owners to discuss our ideas. Neither are interested in participating, citing security and liability concerns. Pat Wellington, owner of Wellington Campground has left the door open very slightly, allowing that the trail might be located along the fringe of her property, but only with extremely tight controls over who uses the trail.

For the purposes of the study, we've shown the trail making a brief stop at the site of Captain Hill's mill site before skirting the Wellington Campground property and diving into several conservation properties downriver. Then it makes its way to Wiswall Road through another conservation property and then proceeds along Wiswall Road to Wiswall Falls.

Durham, Wiswall Falls Bridge to Packers Falls Bridge

From the bridge the footpath enters Durham's John Hatch Park. This park and the surrounding area were the industrial center of the town of Durham in the earliest days of settlement, and the area has been designated a National Register Historic District by the Town of Durham. A kiosk with picture panels depicting the history was recently erected in the park with the support of the LRAC.

The rapids below the Wiswall Falls Dam are a popular spot for fly fishing, and trails have existed for considerable time to the bottom of the rapids. Our footpath would follow these trails to the Weeks Property, a parcel owned by the Town. Just beyond the Weeks Property is a residence, prohibiting further riverfront access, so we propose to take the trail back to Wiswall Road, and thence to the intersection with Packers Falls Road. From there, following Packers Falls Road would be risky due to the poor alignment and sight distances to the south of the intersection, so we propose to take the trail through a farm pass opposite Wiswall Road. This leads into University-controlled lands generally known as West Foss Farm. Within these lands, mapping provided by the SRPC indicates a dead-end trail called the West Foss Farm Trail. Our proposed footpath can easily connect to that trail, and extend through to Packers Falls Park in a very short distance.

At Wiswall Falls we have designated a preferred Canoe Portage Route on "river left". Although there is a natural landing area within John Hatch Park in the area of the former penstock, it should be avoided in high water conditions because of the proximity of the dam. Instead, we recommend take-out on the corner of the Burroughs Easement, just upstream of the Wadleigh Falls Road Bridge. Put-in can occur at various locations below the dam, depending on water levels.

Durham, Packers Falls Bridge to Newmarket Town Line

At Packers Falls, it is desired to access the "river-right" side of the river to take advantage of the existing informal trails leading down to, and through the Lamprey River Preserve owned by TNC. Although the beginning of this segment crosses five residential lots, none of the properties make use of the waterfront because of the topography. It is hoped that the informal trails that already exist in this area could be formalized with easements. We have talked with TNC and find them cautiously curious about the prospects of a formal trail, but they have

warned us in advance that dogs are prohibited on TNC properties as a matter of policy. The issue of dogs, and the nuisance they can cause to wildlife and other hikers is one that will have to be addressed for the trail as a whole if this concept is advanced anywhere in the corridor.

While we have shown the footpath following existing trails and then staying on high ground as it proceeds downriver, one is eventually brought to the reality of the Portland-to-Boston railroad line that bisects the TNC parcel and precludes further access near the Newmarket Town Line. For conceptual purposes we propose to cross a backwater of the Piscassic River with an elevated boardwalk; not the cheapest or easiest to permit, but perhaps the better of the available options. One option would be to bridge the Piscassic at its confluence with the Lamprey River. This would connect directly into the parkland associated with the Piscassic Street Boat Ramp in Newmarket. Another alternative would be to have the footpath cross the railroad opposite Constable Road in Durham and gain access through the farm pass there. It is thought that the deeds for the Lamprey River Preserve include farm crossing rights over the railroad; however use of this crossing for hiker's use would have to be validated through legal channels. If the safety concerns of such a routing could be overcome, one would still have to deal with the concerns of walking along Packers Falls Road, which is narrow and lacks sidewalks.

Within this section, we recommend laying out a canoe portage route at Packers Falls. The route needs to skirt the entire falls, although at high water experienced paddlers may choose to ignore all or parts of the portage. The route begins ("river-right") on the first property upstream of the Packers Falls Road Bridge and continues to the pool opposite the confluence with Woodman Brook.

Newmarket, Newmarket Town Line to Bay Road

Just south of the Newmarket/Durham Town Line, the railroad right of way bellies out to the east, and the map indicates two embankments with water in between. In the field, one sees the current mainline tracks located on the westerly embankment with a bridge over the Piscassic River. The easterly embankment appears to be remnants of the original railroad alignment, and there exists abutments of a bridge, long gone, over the Piscassic River. This area is frequented by fishermen, as well as children from the local neighborhood. Because this existing access presents a significant liability for the railroad, there may be reason for the normally unapproachable Pan-Am Railroad authorities to consider divestiture of the easterly alignment in exchange for a significant access control project (fencing) extending from the Elm Street crossing to a point well within Durham, and perhaps involving the discontinuance of the deeded farm crossings in the TNC deed. If this were possible, it could possibly be implemented with railroad grade crossing elimination money available from the New Hampshire Department of Transportation. Once the very complicated transactions have taken place, it would be a relatively simple process to build a footbridge across the Piscassic using the ancient, currently unused abutments, thereby providing the much-desired access to the trail directly from an urbanized area.

The balance of this section of the trail lies on town sidewalks and pathways. Our recommended routing would take advantage of interesting topography and historic resources as it passes over Zion Hill, past the Stone Church, down Water Street to Schanda Park, along the Riverwalk and through Penstock Way to pass over the Lamprey River on the existing footbridge before exiting onto Bay Road.

Within this section, the trail would intercept the Wildcat Public Transportation System at no fewer than three bus stops. The Wildcat Line is operated by the University of New Hampshire; however the public may use the line for a nominal fee. Having the footpath make these intercepts helps to promote access by a more diverse cross section of the local population, which is one of the goals of the NPS Call To Action.

Within this section a canoe portage is required at MacCallen Dam. We have shown a preferred route on "river-right", beginning just upstream of the Route 108 bridge and continuing along Penstock Way, the frontage road behind Rivermoor Landing and the Town's riverwalk to the Water Street Boat Ramp. At the time of this writing, the Town is considering an easement at the take-out location above the Route 108 bridge. This easement would allow construction of a primitive path to ease the climb over the 14-foot high slope at river's edge.

Newmarket, Bay Road to Nature Conservancy Center

Bay Road is an arterial street with considerable traffic. Sections of it have poor alignment. To locate a trail along this road as shown on our maps, sidewalks would have to be built. We show our concept of taking the trail off Bay Road to connect with Heron Point, a Town-owned park with a small trail system. The views back into the historic mills and Newmarket Village from this vantage should not be missed. We exit back to Bay Road along a

power line, staying to one side of the line to pass over a small conservation parcel.

Originally, we had considered routing the footpath down Cushing Road to avoid the safety hazards of Bay Road. This would require the footpath to make a wetlands crossing through the Moody Point open space and into the Lubberland Creek Preserve; however TNC staff have stated clearly that this would not be acceptable. Further investigations should be undertaken to see if an acceptable route could be found off-road to the north of Bay Road from the power line to a suitable connection with the Sweet Trail, where the footpath would finally terminate.

Parking

Throughout the corridor, parking needs to be available. Provision of a few large lots at key locations should be avoided, as it promotes over-use of trail sections nearest the lots. Instead, we suggest provision of small turnouts, with a capacity of as little as two vehicles, at regular intervals throughout the corridor. We have marked the location of existing parking areas on our maps. Each has a capacity of two vehicle or more.

Handicapped Accessibility

In general, the footpath can be considered a "wilderness" facility, not subject to handicapped accessibility regulations. Regardless, if grant funding is used for any part of the project, the grantor may require its standards be applied for that part of the construction. This is particularly true for the application of NPS funds. Additionally, advocates may wish to have certain portions of the trail accessible, such as the various historic sites at falls. The point of this paragraph is simply to advise the reader to consider the handicapped at the earliest stages of planning for any portion of this footpath, and to make "reasonable" accommodations where appropriate.

Alternative Footpath Routes

During two of our listening sessions, in Durham and Lee, interest was expressed in investigating the feasibility of an alternate location for the footpath from Lee Hook Road to Wiswall Falls. Accordingly, a line has been laid out on the plan. In Lee, the advantage of this line lies only in the degree to which affected property owners might support the plan; however the advantages in Durham could be substantial. A greater percentage of the footpath would lie on conservation properties. More importantly, the alignment would facilitate a connection to the trails in the Oyster River Woods, Spruce Hole, and University Woods complex. The connection would be made through the Durham Water Department's proposed in-ground storage basin property at the intersection of Jenkins Lane and Packers Falls Road.

The Future of the Footpath

The concept of the Lamprey River Footpath is a very aggressive plan, and not something that will be accomplished in a fortnight. Consensus for the plan will have to be built through the public participation process on a town-by-town basis. We see the "next step" being taken by the individual town governments through their conservation or recreation committees. Alternatively, one or more of the land trusts may be able to expand their services by acquiring easements in the vicinity of their existing properties.

There are a number of levels of easement that could be applied, depending on land-owner preferences. Some of the more common forms of easement are discussed in **AMC'S Complete Guide to Trail Building & Maintenance**. The New Hampshire Department of Economic Development is also a good source of support. Although most of the information is appropriate for off-highway recreational vehicle trails, it could be modified to suit the needs of the footpath. Go here for information <http://www.nhstateparks.org/partner-and-community-resources/grants/grant-in-aid.aspx>.

To assist in forwarding this concept, the LRAC has established a small reserve of funds with the Strafford Regional Planning Commission. This money is available to help develop more detailed maps for any entity which would desire to study the possibility of building a "seed" section of the footpath. If interested, contact can be made with the LRAC Small Grants Coordinator, Sharon Meeker, at (603) 659 - 5441.