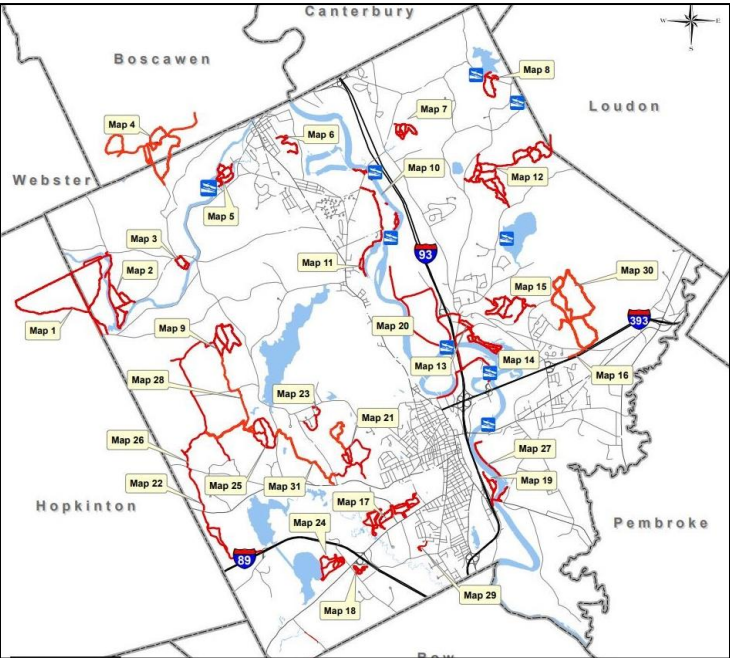


# CONCORD TRAILS PLAN

Concord, New Hampshire





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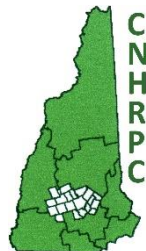
City of Concord, New Hampshire

Adoption by the Planning Board: Month Day, 2021

Adoption by the Conservation Commission: Month Day, 2021

This Plan was adopted by the Planning Board under recommendation from the Conservation Commission. It was developed by the Central New Hampshire Regional Planning Commission with guidance and support from City Planning Staff, and a Work Group with representatives from the Planning Board, Conservation Commission, and Trails Subcommittee.

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# TABLE OF CONTENTS

Executive Summary.....	iv
Introduction Purpose of plan.....	1
Chapter 1.....	3
Trails.....	3
Trail Management and Lands .....	4
Staff and Volunteer Roles and Responsibilities .....	5
Chapter 2 Public Input .....	8
Work Group .....	8
Survey.....	8
Meetings .....	8
Conservation Commission and Planning Board Approval .....	9
Chapter 3 Vision.....	10
1. Trails are an Integral part of the Concord Community (identity) .....	11
2. Trails are Built and Maintained Sustainably – (Sustainability).....	12
3. Trails are for Everyone .....	14
Chapter 4 Trail Network.....	17
New Trail building procedures.....	17
New Trail Connections and Access to Trails.....	18
Trails that Connect the Community.....	18
Connections to Neighborhoods .....	21
Connections Between Trail Networks – Long Distance Trails.....	27
Possible Trail System Expansions and New Trail Areas .....	28
Trail Amenities .....	29
Routine Maintenance .....	31
Structures.....	32
Litter Cleanup and Dumping .....	32
Policing and Enforcement .....	33
Lands Managed For Multiple Use .....	37
Chapter 6 Wildlife Habitat – Trails for People and Wildlife.....	39
Trails for People and Wildlife.....	39
Trail Planning for Wildlife in Concord .....	40

Chapter 7 Conclusion and Recommendations.....	42
Roles and Responsibilities, and Human Resource Needs .....	44
Determining Where and Whether to Build New Trail .....	45
Building the Desired Trail Network.....	45
Urban Trails, Shared-Use Paths, and Rail Trails .....	46
Trail Stewardship .....	46
Bi-Annual Trail Reporting and Routine Maintenance .....	47
Trails for People and Wildlife.....	47
Keeping the Forestry Fund sustainable, and other Funding Sources .....	48

## PLAN MAPS

Base Map

Conservation and Public Lands Map

Trails that Connect the Community – Non-motorized Transportation

Trails for People and Wildlife

Trails for People and Wildlife Layer with 400’ Corridor of Influence

## APPENDIX

Index Map of Concord Trails from Trail Guide

Trail Management List

New Trail Procedure and Trail Criteria Checklist

Survey Results

Public Meeting Findings



# EXECUTIVE SUMMARY

Concord has an amazing network of over 80 miles of trails open to the public for non-motorized use, with new trails and various changes occurring continuously. This plan helps develop a vision for what this trail network should look like to best meet the needs of the City, and makes recommendations in order to sustainably maintain this resource. The plan encompasses all trails within the City of Concord, but has an emphasis on trails that are on City property and are stewarded or managed by the Conservation Commission.

Primary findings of the plan include:

- Trails are a valuable asset and cherished part of the community that bring a range of benefits to the City.
- A diversity of trail types and a network approach are needed to serve a range of activities and abilities.
- As the trail system grows in size and prominence, additional City resources are needed to supplement current staff and volunteer efforts.

The plan incorporates extensive public input, based on a public forum and public survey that together reached over 600 individuals, plus interviews and meetings with various stakeholders and City staff. This outreach formed the basis of a three-part vision for trails in Concord:

1. Trails are an Integral Part of the Community (IDENTITY): Concord's trails provide a range of benefits to the City and its people. This valuable asset is unique in New Hampshire and is celebrated.
2. Trails are Built and Maintained Sustainably (SUSTAINABILITY): The privilege of miles of trails is earned through thoughtful trail building and stewardship.
3. Trails are for Everyone (DIVERSITY): Concord's trails encompass a variety of trail types that serve a range of trail users and activities. The trails are enjoyed by people of all ages, abilities, and walks of life.

The plan outlines gaps and needs in the City's trail network, and includes a series of potential future trail additions and new connections for further review. This is done using a comprehensive network approach, with an eye toward fulfilling community objectives and implementing the City's vision for trails.

This is a planning document, adopted by the Planning Board under recommendation from the Conservation Commission. It was developed by the Central New Hampshire Regional Planning Commission with guidance and support from City Planning Staff, and a steering committee with representatives from the Planning Board, Conservation Commission, and Trails Subcommittee.



## INTRODUCTION

### PURPOSE OF PLAN

The City of Concord has over 80 miles of public trails spanning all corners of the City. The quantity and quality of trails in Concord is unique, special, and valuable to the City and its residents and visitors. This sentiment was widely shared by the Concord community during public outreach and visioning conducted as part of this plan.

Current and future management of this valuable and extensive trail system presents opportunity, as well as challenges and questions. Trails are many things to many people, from places of quiet contemplation and connecting to nature, to a means for exciting outdoor adventure. Trails are enjoyed by avid outdoor enthusiasts, and also children, seniors, and people with special mobility needs. How can the City help to best meet all of the various wishes of trail users? And how can this be done while respecting abutters, agricultural operations, forestry, hunting, and wildlife? For trails on conservation properties, how can this be done in a manner that is consistent with the purposes for which the lands were acquired and preserved? What resources are needed to maintain and operate such a vast

trail system? How can trails be better connected into the community? How do trails benefit the community?

In addition to the many miles of natural hiking and mountain bike trails, the City has an opportunity to advance other trail typologies, such as accessible trails, urban trails, rail trails, and bike paths. Trails like these can be used by a wider range of abilities and offer some unique and distinct opportunities for the City. How might trails like these fit into our community?

The trails located on Concord's conservation and open space lands have grown significantly over the past 50 years, and have become so well used, and are so beloved that it is now effectively a sizeable parks system in and of itself. How must the City adapt to maintain, manage, and realize the benefits of this great asset?

This plan seeks to answer these questions and many more. It does not attempt to make trail-by-trail specific recommendations, but instead encompasses broader topics and issues that can inform decision making regarding trails.





## CHAPTER 1

# EXISTING CONDITIONS

### TRAILS

The many miles of trails in Concord are held on a range of public and private properties. From a trail user perspective, differences in ownership and management are immaterial. In this brief section of the plan, all trails in Concord are described equally, regardless of ownership and management.

The trail system in Concord is comprised of a number of different types of trail, many of which are interconnected and some that cross into neighboring towns. There are trail systems that offer a variety of short to medium length loops, such as the Audubon Center Trails or Oak Hill Trails. Some trails traverse long distances and connect trail systems, including the West End Farm Trail and the Winant/Swope/Carter Hill Connectors. Other trails are more local, primarily catering to a neighborhood. The City has recently established a partnership with the local chapter of the New England Mountain Biking Association (NEMBA) to design multi-use trails with characteristics desirable by mountain bikers. Most of Concord's 80+ miles of trail have

a natural trail surface and are narrow "single track" or wider "double track" trails.

In addition to the 80 or so miles of official trails in Concord, there are many miles of unofficial trails. Many of these trails cross private land, some have existed for many years, and others have more recently been cut with or without property owner permission. The City does not have jurisdiction over trails that are not on City property, but there are some steps the City and trails advocates can take to address problems or opportunities associated with such trails.

Concord's trails traverse the variety of landscapes Concord has to offer. Some provide water access. The Lehtinen Park Trails and Jim Hill River Walk follow the Contoocook River. The Sewall's Falls Trails and Society of the Protection of New Hampshire Forests (SPNHF) Conservation Center trails overlook the Merrimack River. Some trails, including the Marjory Swope and Oak Hill Trails, offer distant hilltop views, while others including Carter Hill Orchard Trails and Dimond Hill Farm Trails traverse agricultural lands. Most trails travel through forest lands.



There are also four paved shared-use paths, commonly called bike paths, connecting streets that were separated by the construction of Interstates 93, 393, or 89. These trails total only about 2 miles, with the longest just over one mile. Despite their short lengths, they are locally important trail connections for hikers, pedestrians, and bicyclist. Other accessible trails in the City are primarily limited to City parks, such as Terrill Park, Rollins Park, and White Park.

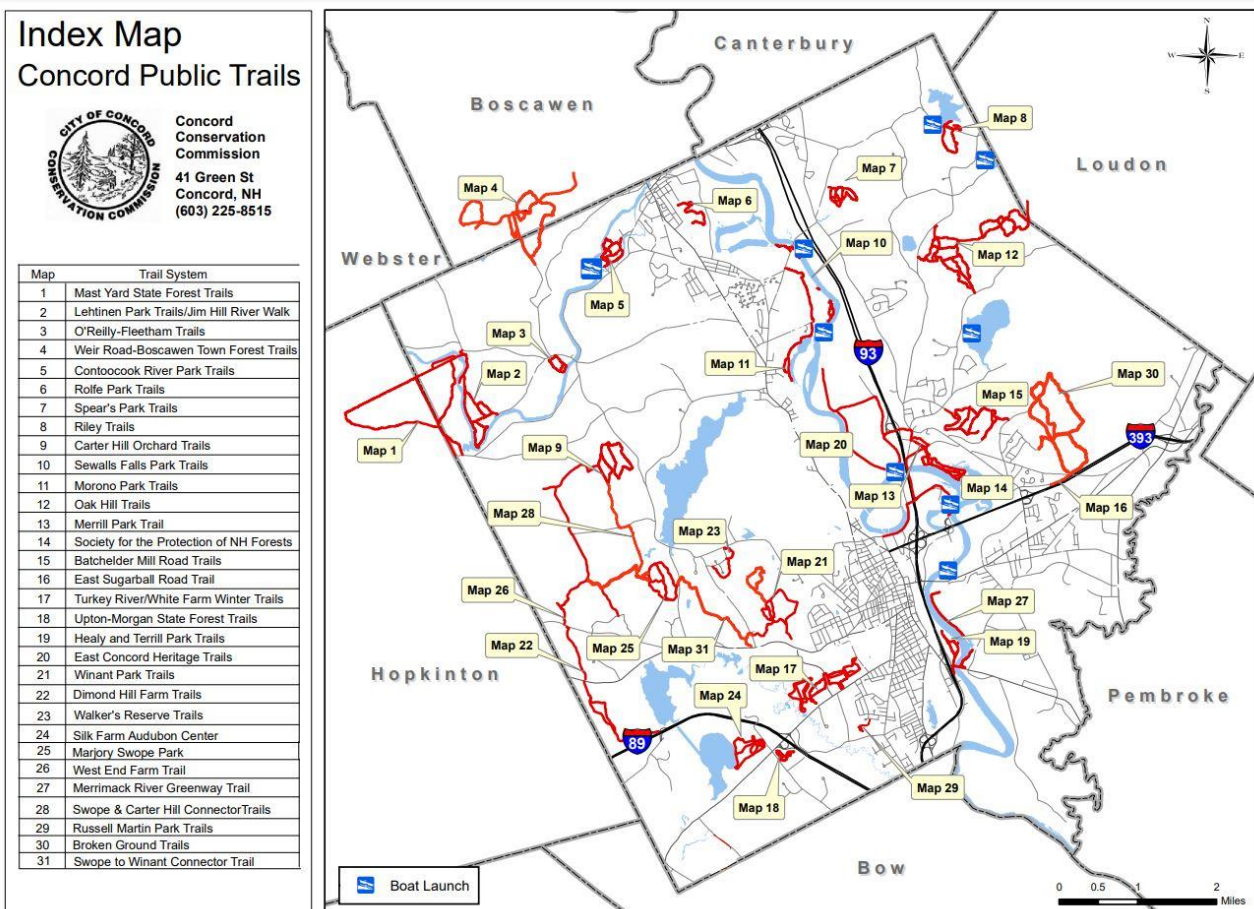
An index map of Concord's trails can be found in the Concord Trail Guidebook, and also in the appendix of this plan. The guidebook is also available for download on the City's website.

## TRAIL MANAGEMENT AND LANDS

Most public trails in Concord are either on City property or are on private properties with trail agreements or easements held by the City.

These trails are managed by the Conservation Commission, and built and maintained by the Commission's Trails Subcommittee. The Commission and Subcommittee are supported by City staff from the Planning Division and consulting City Forester.

Other trails are owned and operated by other entities and are not under the purview of the City. Private trails, such as the trails at the Audubon Center and SPNHF Conservation Center, are managed and maintained by those organizations under their own procedures. The Sewall's Falls Recreation area trails are owned and managed by NH Fish and Game. The Mast Yard State Forest Trails, Upton-Morgan Forest Trails, and White Farm Ski Trails are owned and managed by the NH Department of Natural and Cultural Resources. The Trails Subcommittee and volunteers monitor these trails, and City



**Table : Trail Tasks and Expenses**

Task	Who Does It? (X is primary, s is supporting)						Who Pays For It? (X is primary, s is supporting)		
	City Forester	City Planning	General Services	Trails Sub-Committee and Other Volunteers	Conservation Commission	Contracted Out	Forestry Fund	Conservation Funds	Planning Staff Time
Bridges and Structures Construction/Maintenance	X			s			X		s
Down Tree Removal (chainsaws)	X			s			X		s
Light Trail Cleanup (minor litter and brush removal)	X			X			X		s
Dumping Removal	X		X			X	X	X	s
Bi-Annual Trail Reporting				X					s
New Trail Construction	X			X	s		X		
Whether to Build a new Trail (checklist procedure etc.)		X		X	X				X
New Trail Layout	X			X	X		X		
Trail Erosion/Drainage Maintenance/Re-routing	X			X			X		
Maintenance Requiring Heavy Equipment	s					X	X	X	s
Parking Lot Maintenance	X		X			X	X	X	s
Parking Lot Snow Removal						X		X	
Trail Maps and Trail Guides		X		s				X	X
Kiosk content	X	X		s	s		s	X	X
Trail Signage	X	X		X	s		X	X	X
Addressing Abutter Issues	X	X			s		X		X
Volunteer Database and Coordination - General		X		X					X
Community Service/School Volunteer Coordination	X	X		s			X		X
Manages Summer Trails Intern	X	X					X		X
Point of Contact for Addressing Calls/ Concerns	s	X							X
Education and Outreach	s	X							

Staff coordinates with these entities regarding trails as needed. The City has included these trails on the City's maps and guidebooks of City trails with permission from the landowner. The City's Parks and Recreation Department is responsible for the trails on City Park land that are also identified above. There are several popular trails on the St. Paul's School campus; however, they are not monitored or maintained

by the City volunteers and are not included in the City trail guidebook.

## STAFF AND VOLUNTEER ROLES AND RESPONSIBILITIES

While City Council has ultimate jurisdiction over all City property, the Conservation Commission is the body tasked with overseeing conservation land, along with associated trails on such land. Planning staff, in conjunction with the Trails

Subcommittee, trail stewards, and the consulting City Forester play the most direct role in daily maintenance and operation of these trails. However, multiple City departments have worked together as needed to address specific concerns, though without clear or formally defined responsibilities.

The Planning Division provides a staff liaison to the Conservation Commission and Trails Subcommittee and is involved in the overall planning and strategizing for the City's trails. Planning staff has become the de facto main contact for community concerns regarding trails. The Engineering Services Division assists with review of parking and traffic concerns. Parks & Recreation provides assistance with mowing some areas. The agreements for this work are not formalized and are addressed on a case by case basis.

The City's consulting Forester plays a major role in the maintenance and construction of the trail system, most of which are located on forested lands. The Forester assists with the layout of new trails or bypasses, assists in the construction of trailheads and parking lots, determines the need for and constructs bridges and plank-walks, and plans and maintains vistas. The Forester also coordinates with school community service projects for Concord High School, St. Paul's School, Second Start, as well as Boy Scout Eagle projects. The consulting Forester provides Concord with many services to trails that go well above and beyond the typical responsibilities of a forester, including heavy trail maintenance and supervising the summer Trails Intern.

Funds for the consulting City Forester, building materials and the summer intern come from the

Forestry Fund, which is funded by annual timber sales on City conservation and open space lands.

Other than the Police Department, there is no specific enforcement entity for Concord's trails and public lands. The Police Department does not patrol trails, but responds to reports by trail users or reports from the consulting City Forester and City staff. NH Fish & Game assists with illegal ATV activity enforcement and reports of hunting concerns.

The General Services Department (GSD) oversees a wide range of City properties, from municipal buildings to roads and sidewalks. They do not have any designated responsibilities for maintaining trails or trail amenities; however, they will provide assistance if requested and they are available. For example, GSD has assisted in cleanup of illicit dumping, parking lot maintenance requiring heavy equipment, and the installation of gates. The materials for these projects are charged back to the Conservation Commission's Property Management budget account, which is funded through the Conservation Trust Fund. The City currently has a contract with a private contractor to plow four



*Volunteers conducting light trail maintenance*



trailhead parking lots in winter, paid for through funds from the Conservation Commission's General Fund operating budget.

The Trails Subcommittee assigns a volunteer trail steward to each of the trails under the City's purview. The trail steward is responsible for regularly monitoring their trails and providing two formal Trail Check Reports, once in the spring and once in the fall. A checklist is available to assist each steward with the report. The Chair

of the Trails Subcommittee oversees the stewardship program, maintains a database of volunteers, and collects the Trail Check Reports. The trail steward typically takes care of smaller maintenance issues on their own. Larger projects are either referred to the consulting City Forester, or a work group of volunteers is organized to address the issue. Specific roles and maintenance tasks are further elaborated in Chapter 5.



## CHAPTER 2

# PUBLIC INPUT

Public input is critical to this Trails Plan. The vision for trails described in this plan comes directly from public input, and any findings and recommendations in the plan are sourced from listening to the Concord community. This approach helps empower the community and helps ensure the plan directs trail efforts to meet local needs and desires. Public outreach for this plan consisted of a project work group, an online survey, public meetings, and various meetings with staff and other stakeholders.

### WORK GROUP

This document is a strategic plan that fits in with the City's Comprehensive Master Plan and other various plans. As such, this planning document is a product of the Planning Board, which is tasked with planning for the long term future of the City. Representatives from the Trails Subcommittee and Conservation Commission also have a stake in the plan, and thus played an important role in the plan's creation.

The work group was made from representatives of the Planning Board, Conservation Commission, Trails Subcommittee, and Planning

Division staff, and was important in framing the issues and questions that this plan must address. In addition, this group's experience and local knowledge were critical in understanding various concerns, challenges, and the needs of the community.

### SURVEY

An in-depth 23 question survey was distributed online and was taken by over 500 individuals. Questions covered a wide range of topics and left wide opportunity for individuals to comment openly. This is a relatively large sample that provides abundant useful information on people's views of trails in the City. Survey results can be found in the appendix.

### MEETINGS

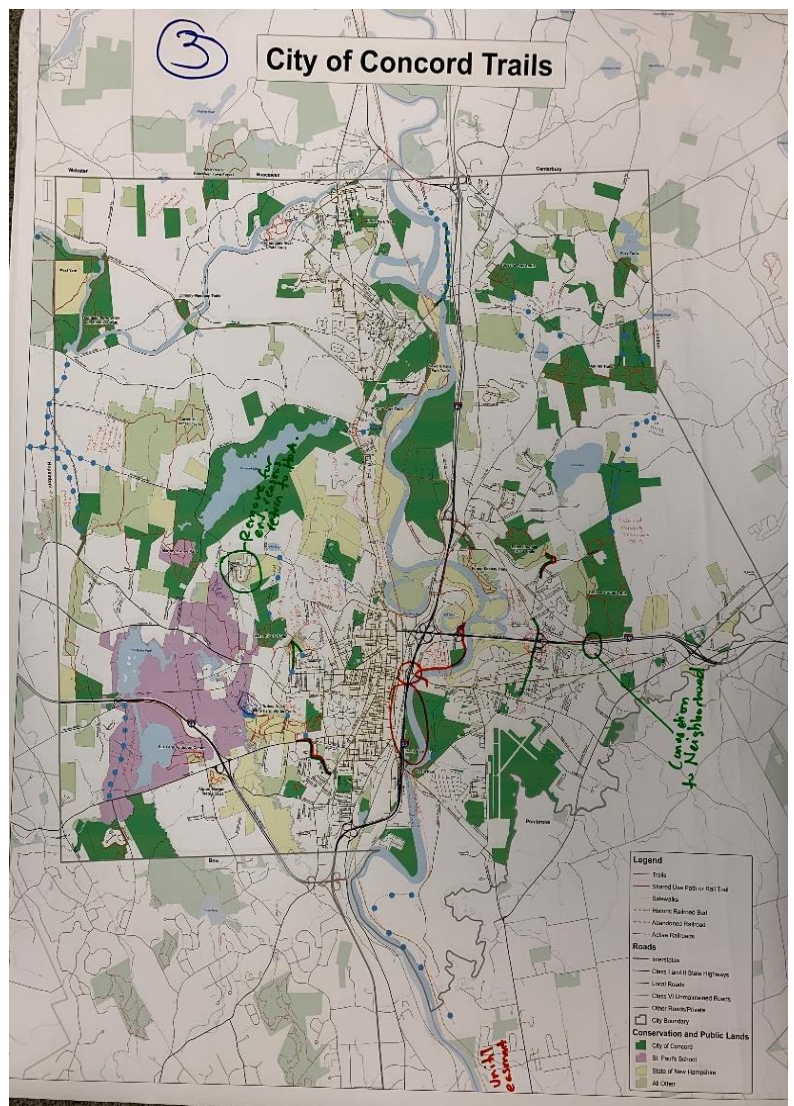
A public forum was held in order to engage the public. Public meetings offer more nuanced perspectives and information than can be gleaned from a survey alone. The primary meeting was a public forum that was attended by approximately 75 people. It was organized to facilitate small group conversations around five topics, including Vision, Favorite Trails/Places,

Trail Connections and New Trails, Environmental or Wildlife Habitat, and Concerns (Maintenance, safety, etc.). Each topic had a table with a moderator, map for marking up, and notepads. After the meeting, notepad notes were transcribed and conversations and key takeaways were documented in detailed notes, found in the appendix.

Multiple informal meetings, trailside interviews, and various conversations took place throughout the development of the plan in order to seek a broader range of perspectives. This approach helped reach specific stakeholders and interests, and reach individuals who may not have been inclined to attend a public meeting or fill out a survey.

## CONSERVATION COMMISSION AND PLANNING BOARD APPROVAL

The Conservation Commission received and reviewed a near final draft of the plan document for comments and edits, which was on the agenda and discussed at the September 2020 meeting. A final draft of the Trails plan was presented at the following meeting, where the Commission recommended the Trails Plan be set for public hearing and adoption by the Planning Board as an addition to the City's comprehensive master plan.



*A marked up map from the public forum*





## CHAPTER 3

### VISION

“Trails are a vital element of the Concord community, serving a wide range of trail users, providing a multitude of benefits to the community, and built and maintained with respect for the environment, abutters, and agricultural operations.”

While there are many diverging viewpoints on issues large and small regarding trails, an evaluation of countless conversations and over 500 detailed survey returns reveal broad agreement on key themes. This broad agreement can be summarized in three vision statements for trails in Concord.

#### **1. TRAILS ARE AN INTEGRAL PART OF THE CONCORD COMMUNITY (IDENTITY):**

Concord’s trails provide a range of benefits to the City and its people, from public health to economic development and quality of life. The trail network is a valuable asset that is unique in New Hampshire and is celebrated. Trail activities can be easily incorporated into the daily lives of residents and visitors who choose to use them.

#### **2. TRAILS ARE BUILT AND MAINTAINED SUSTAINABLY**

**(SUSTAINABILITY):** The privilege of miles of trails is earned through thoughtful trail building and stewardship. Trails are built and maintained with respect for the natural environment, abutters, landowners, agricultural operations, wildlife, and management resources. Trails are a worthwhile investment, and adequate resources should be provided through volunteer efforts when possible, and City or other government contributions when necessary.

#### **3. TRAILS ARE FOR EVERYONE (DIVERSITY):**

**(DIVERSITY):** Concord’s trails encompass a variety of trail types that serve a range of trail users and abilities. The trails are enjoyed by people of all ages, abilities, and walks of life.

## 1. TRAILS ARE AN INTEGRAL PART OF THE CONCORD COMMUNITY (IDENTITY)

Throughout the public input process there was a strong agreement that Concord's trail system was unique and special, and that it brought a wide range of benefits to Concord and its residents. Research and best practices from across the country largely back up this assessment.

**RECREATION:** The most obvious and widely cited benefit of trails is the recreational component. The ability to hike, mountain bike, or go for a simple walk in nature is highly valued by Concord residents and visitors. Having trails so close to home or work lets people recreate more often and with fewer barriers.

**QUALITY OF LIFE:** Many people cited a general quality of life benefit that trails bring. While it was recognized there are many wonderful trails across New Hampshire, having trails close to home and work helps them become a part of daily life. Nearly 50% of survey respondents report using Concord's trails once per week or more. Survey responses also indicate broad trail use on both weekdays and weekends, over four seasons.

**ECONOMIC DEVELOPMENT:** Having a robust trail system is part of what makes Concord an attractive place to live and work, and is part of Concord's identity. Many people noted that trails and outdoor activities generally were among the primary reasons for locating in Concord. Tourism potential is seen as a secondary benefit, particularly with any trails and shared-use pathways that connect into the downtown. Concord is able to showcase both an attractive downtown with civic and cultural attractions, as well as an extensive trail system and outdoor access. These contrasting assets are major selling points for Concord. Further backing up this sentiment is Concord's Economic

## Trail Benefits



Recreation



Quality of Life



Economic Development



Access to Nature



Physical and Mental Health

Development initiative, which identifies the 7,000 acres of preserved conservation land and 80+ miles of hiking, biking and running trails as amenities that contribute to the City's "quality of place."

**ACCESS TO NATURE:** Among the primary reasons for people to use trails was to get into nature. This is especially valuable for those who live in more densely settled neighborhoods. This access to trails and nature is seen as an important contrasting and complimentary element to a community that also has dense neighborhoods and a vibrant downtown. Nearly 80% of survey respondents say that the access to nature Concord's trails provide is "extremely important."

**PHYSICAL AND MENTAL HEALTH:** Trails offer an opportunity for physical activity and exercise,



which is considered to be an important element to a healthy community. A significant number of people cite trails as an important part of their mental health and wellbeing. Health and exercise benefits of trails was continually cited as extremely important in the survey and public meetings.

## 2. TRAILS ARE BUILT AND MAINTAINED SUSTAINABLY – (SUSTAINABILITY)

Concord residents recognized that the privilege of a robust trail system comes with responsibility, and any new trails must undergo a thoughtful process before trail building begins. This may mean mitigating negative impacts the trails might have to people, businesses, or wildlife. The Conservation Commission and Trails Subcommittee follow procedures and practices intended to take these considerations into account, and this plan can be used as a resource to help evaluate and improve the process.

Maintenance and stewardship entails not only obvious trail maintenance issues like removing downed trees, but includes addressing a range of issues that have and will continue to arise on occasion. Examples include trail user conflicts, parking issues, disruptions to property owners or business operations, safety issues, vandalism concerns, illegal dumping, homeless encampments, and a range of other issues. Chapter 5 goes into more detail about these concerns and how the City currently deals with them, Chapter 7 introduces recommendations for improving maintenance and stewardship.

**MAINTENANCE:** A vast majority of respondents to the survey and meeting attendees agreed that overall trails in Concord are well maintained (97% of survey respondents said trails were well maintained or mostly well maintained). A majority of the light trail work is conducted by volunteers, and the community envisioned



*Hoit Marsh Overlook*

volunteerism being the primary method for maintaining trails. While there appears to be a perception that trails are nearly entirely volunteer driven, the City does and will continue to provide a great deal of oversight and resources. The public preference was for volunteerism to continue to play a role in trail maintenance.

**PROPERTY OWNER AND ABUTTER CONCERNS:** Trails can and occasionally do impact abutters. The primary impacts that were heard through public outreach include parking issues, privacy concerns, and rogue trail building. Most people saw these issues as resolvable or avoidable with proper stewardship.

Outreach indicated a strong sentiment that the public should have access to trails where property is publicly owned or public access rights are conserved in an easement. It was agreed that concerns from abutters and landowners should be taken seriously, and legitimate effort should be made to address concerns. Most people also agreed that a landowner or abutter grievance shouldn't be able to unilaterally block trail use on property that is publicly owned or



where public access rights are required or allowed in an easement.

In other cases, people were strongly appreciative of landowners who generously provide public access to their lands. This appreciation is accompanied by a sense of responsibility to be good stewards.

**USER CONFLICTS:** With trails being so well used, minor conflicts between trail users can be expected. The City can work with the community to help mitigate some of these conflicts through education and other community efforts.

Pet waste and unleashed dogs combine to be by far the most commonly cited user conflict. At the same time, dog walking was a very popular activity for trail users. Needless to say, banning dogs from most trails would not be seen as an appropriate step to mitigate the problem. Trail advocates and the Conservation Commission/Trails Subcommittee should help mitigate these issues through education, encouragement, and enforcement. This issue is primarily a user-experience issue, but also can be considered a safety or environmental concern.

Balancing trail needs with non-trail recreational uses of the land, particularly hunting, were identified as a perennial issue.

Other concerns included mountain bikers traveling too fast, and wintertime snow etiquette. Again, there is little appetite to restrict current trail use, but combinations of education, communication, and understanding of other trail users needs can help reduce trail user conflicts such as these.

**AGRICULTURE:** Some of Concord's trails traverse active agricultural lands. Trail users that participated in the public meetings indicated their support for local agriculture, and felt that trail use should certainly consider the needs of active farms. The health and safety of trail users



*Carter Hill Orchard is a host to trails.*

must also be considered. There was also a sentiment that the public should have recreational access to farmlands when it can reasonably be done, especially in cases where the property is publicly owned or conservation easements with public access or use requirements are secured. People viewed public access to farmlands as a way to build a bond between people, the land, and the agricultural activities taking place on it.

**WILDLIFE AND HABITAT:** Awareness has been increasing across the State that trails can and do impact wildlife. Concord is no exception. Trail users in general value nature and wildlife, and do not want to have an undue negative impact. There is broad agreement that wildlife considerations should come into play when locating new trails. There is also some interest in evaluating existing impacts and exploring ways to mitigate them.

New Hampshire Fish and Game has produced a document “Trails for People and Wildlife” with associated tools and resources. There is support from the Conservation Commission, Trails Subcommittee, and much of the public to utilize these resources to inform trail building and stewardship. Trails for people and wildlife are discussed in detail in Chapter 6.

Access to nature is also a primary reason why people use trails. Trails help people value and build a relationship with nature, which can in turn build support for conservation measures.

### 3. TRAILS ARE FOR EVERYONE

**DIVERSITY OF TRAIL TYPES:** Trails in Concord serve a broad range of activities, abilities, and distances. While there is broad support for trails in general, trail users have varying preferences, and use trails in different ways. Concord’s trail system will best serve the City if it can meet these diverse needs with a range of trail types. During public outreach, several categories of trail types emerged as having a distinct following and serving a distinct purpose. A diversity of trail types will together create a comprehensive trail network that best serves the needs of the City.

**Short Loop Natural Trails:** Short loop trails are popular for families with children and others who want a short distance trip. These are also often used when people have only a short amount of time, such as lunch breaks from work. Trail loops keep things interesting, avoiding out-and-back trips. Popular areas with shorter walk trail loops include trails at Batchelder Mill Road and the Audubon Center. Some of the most popular trails in Concord are slightly longer, including the Marjory Swope and Winant Trail areas.

**Longer Distance Natural Trails:** Longer distance trails appear to be the most popular among trail enthusiasts. Longer trails enable an outdoor experience where trail users can cover considerable distances and time and immerse



*Nesting Herons at Broken Ground.*



*A Family Walk at Winant*

themselves in the activity in a natural environment. Many people value these trails because they provide a quality local alternative to places like the White Mountains. The survey indicated higher support for more trails of this type than any other.



**Mountain Bike Trails:** Mountain bikers enjoy trails that are designed and built with mountain biking in mind. Characteristics such as good flow and fun terrain features are sought out by mountain bikers. Trails that are built specifically with mountain biking in mind are usually still suitable and enjoyable for other uses, although the many twists and turns on some mountain bike trails may not be preferable to some. Local mountain bike organizations, such as the New England Mountain Bike Association (NEMBA), contribute to trail building and maintenance. NEMBA lead an effort to build a mountain bike trail in the Broken Ground Trail network, and recently completed new trails at Knowlton Woods near Oak Hill.

**Winter Use Trails:** There is an appreciation in Concord for trails that are maintained for winter use for cross country skiing, including trails at White Farm, Beaver Meadow Golf Course, Memorial Field, and Carter Hill Orchard. Ungroomed longer distance trails are very popular with snowshoers and, to a less extent, skiers. More recently, winter “fat bike” mountain biking has become popular, and some communities have begun grooming some mountain bike trails specifically for this purpose. In Concord, the New England Mountain Bike Association (NEMBA) began grooming some trails at Broken Ground. While all of Concord’s trails are open for winter use, there continues to be a desire for some trails to be groomed for winter activities.

**Accessible Trails:** There is a clear need for trails that are accessible to wheelchairs, visually or physically impaired individuals, seniors, and others who require or prefer an obstacle free path. While there is strong support for most trails to remain in a natural state, there is also a recognition that not everyone has the ability or desire to traverse trails with natural obstacles like rocks, roots, and steep slopes. An accessible trail was recently built in Keach Park behind the



*Concord offers several miles of groomed cross country ski trails at White Farm (shown) and Beaver Meadow Golf Course. Grooming is done through volunteering and fundraising, and trail use is free to all.*



*Mountain Biking on Rough Terrain.*

Community Center. During public input, it was noted that Concord lacked accessible trails that



provide access to nature for people of all ages and abilities.

**Rail Trails and Bike Paths** – Rail trails and bike paths, often referred to as shared-use paths, are a distinct type of trail from those that are the primary focus of this plan. They typically consist of 8 to 12 foot wide paved or smooth hard-packed surface trails, with generally gentle grades. These trails are usually accessible trails, are often used as non-motorized transportation routes, and may also serve as transportation routes that lead to natural trails. They are popular with bicyclists as well as walkers and joggers. During public visioning, it was noted there were relatively few trails of this type in Concord and that more were desired. Existing examples of trails of this type include a section of the Concord to Lake Sunapee Rail Trail along Bog Road, a short piece of the Merrimack River Greenway Trail in Terrill Park, and short bike paths along I-89 by St. Paul’s School to Hopkinton and I-93 by Delta Drive.

**Trails in Neighborhood Parks:** Trails within parks fall under the jurisdiction of Concord Parks and Recreation Department. Concord’s Parks contain some of the only accessible trails in the City, and serve a unique purpose from the more remote natural trails. Park space accessible to residential neighborhoods is valued. Examples of trails in Concord parks include White Park, Terrill Park, Keach Park, and Rollins Park. A new riverfront park in Penacook could fill this role, while the Heights neighborhood is relatively underserved.

**Regional Trails:** There is a strong case to be made for Concord to host portions of trails that expand well beyond the City’s boundaries. Rail Trails and Shared Use Paths such as the Merrimack River Greenway Trail and the Concord to Lake Sunapee Rail Trail are great local amenities, but their values are greatly enhanced when they continue for many miles. Long



*The Merrimack River greenway Trail in Terrill Park is an example of a shared use path, where people of all abilities can ride free from cars.*

distance trails such as these (when completed) have a distinct following, and have been known to attract visitors and over-night guests. The Sunapee-Ragged-Kearsarge Greenway, a 75 mile loop of trails to the west of Concord, is an example of a long distance natural trail that hosts through hikers and recreation tourists. In many cases, trails of such distance are created by linking together nearby trail networks, as is the case with much of the SRK Greenway. Concord’s neighboring communities have their own isolated but expanding trail systems that can be leveraged to become greater than the sum of their parts. Municipal boundaries are irrelevant to most trail users, but Concord is well positioned to benefit from long distance trails because of its abundance of amenities for visitors and overnight guests.

**Other Trail Types:** Other trail types were envisioned by Concord residents during public visioning. Two of the more prominent ideas included water trails, where kayakers and canoers link up waterways, and downhill backcountry ski/snowboard trails and glades. There were several calls for trails that accommodate equestrians. There are three snowmobile corridors in in Concord that are maintained by local snowmobile clubs for snowmobile use. A vast majority of people surveyed agreed that Concord’s trails should remain non-motorized during the summer months.



## CHAPTER 4

# TRAIL NETWORK

An ideal comprehensive trail network in Concord would include a mix of the trail types explored in the previous chapter. This will enable a range of non-motorized trail uses, a range of abilities, and have options for both short and long distances. Importantly, these trails must connect to each other and to the places where people can access them. The envisioned trail system would function as a coherent network.

The difficult questions regarding where, how, and how many trails to build require thoughtful consideration. This plan proposes to formalize procedures and involve a public process for making decisions regarding significant new trails. The plan also proposes trail additions and new connections based on the public meetings conducted and staff analysis. It could also help inform decisions on possible trail closures or re-routes. The plan also maps out a series of planned shared use paths and bikeways to connect people to places and serve as a backbone for non-motorized transportation routes.

### NEW TRAIL BUILDING PROCEDURES

In late 2018, the Conservation Commission adopted procedures for the consideration of new trails, which was drafted by the Trails Subcommittee. This procedure, along with a companion “Trail Criteria Checklist”, has only recently begun to be used for determining whether and how a new trail gets built.

The process is intended to include site walks with stakeholders and staff, negotiating and securing landowner agreements, consideration for parking, bridges, or other infrastructure needed, preparation of a budget, obtaining permits that may be required, and obtaining approval from the Conservation Commission.

The process is also intended to include abutter outreach and public hearings to help address issues before a trail is approved for construction. Copies of the New Trail Procedure and Trail Criteria Checklist can be found in the appendix.

While the procedure is now being used, abutter outreach and neighborhood participation has in the past been inconsistent, and a more technical



review of how a proposed trail meets the checklist criteria would be beneficial. Involving the Planning Board to assist with outreach, community decision making, and infrastructure review, and involving technical staff in the criteria review are two recommendations of this plan. The Planning Board could be consulted for issues pertaining to new parking, increases in motor vehicle traffic, or other matters deemed to be relevant to the community. Communication between municipal bodies can bring an important multidisciplinary perspective and long-range view to trail projects.

Consistency with the trail network recommendations of the plan should be used as part of the project selection. In general, the process could be improved by encouraging a more holistic approach, including how any new trail would contribute to the larger whole of the trail network envisioned.

## **NEW TRAIL CONNECTIONS AND ACCESS TO TRAILS**

Part of the public outreach for this plan included discussions for where new trails are desired. A number of new trail concepts were discussed at meetings and mentioned in the survey. Some trail concepts have been in other City plans for years but have not yet been implemented. Having this list will help trail advocates and volunteers choose where to focus their trail building efforts, and will help planners determine whether a new trail proposal fits into broader goals for the trail network. It will also help enable trails to be integrated into larger projects, such as road construction and private development.

Further review of any of the following trail network ideas is warranted before any trail building is to move forward. Environmental, neighborhood, and other issues described elsewhere in this plan should be thoroughly evaluated to confirm the location is appropriate.

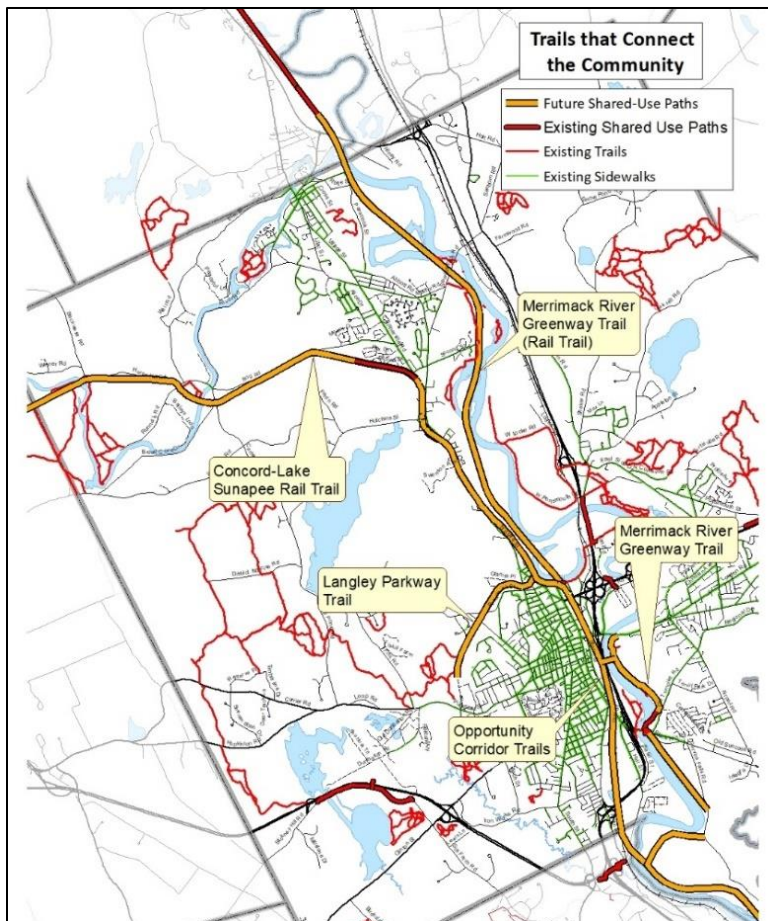
## **TRAILS THAT CONNECT THE COMMUNITY**

There are a number of planned trails in Concord that are envisioned to be designed in a way such that they can be excellent non-motorized transportation corridors. These trails, which may be referred to as greenways, rail trails or shared use paths, can connect neighborhoods to each other, can provide important connections from urban areas to open spaces, and even act as commuter routes. They would become an important part of the non-motorized transportation network in the city, integrating with streets, bike lanes, and sidewalks. In the context of the larger trails network, they can provide safe and inviting bicycle and pedestrian access to natural trail areas and enhance options for active lifestyles. In addition to these transportation benefits, they offer opportunity for users with mobility needs, users with strollers, traditional on-road cyclists, and users who are just more comfortable on an improved path.

**MERRIMACK RIVER GREENWAY TRAIL:** The proposed Merrimack River Greenway Trail (MRGT) was cited multiple times during public outreach as helping to fill a need for a specific trail type. The first .3 miles of the MRGT has been built in Terrill Park, but the rest remains a vision. The trail is planned as a 10 foot wide shared use path traversing the north-south length of Concord, roughly following the Merrimack River. If completed, it would provide a trail spine connecting Downtown Concord, Penacook, multiple hiking and biking trails, and natural areas.

The Trail would be an accessible trail, serving bicyclists, wheelchairs, walkers, and joggers of all abilities. It would also fill a long-standing desire for Concord to better connect to the Merrimack River, and provide a non-motorized transportation route connecting Penacook, Downtown, and other areas of Concord.





The MRGT would be part of the proposed Granite State Rail Trail (GSRT), extending from Salem on the Massachusetts border to Lebanon on the Vermont border. There are connecting regional trails in the Lakes Region and Manchester area, making the GSRT a trail of statewide significance. A trail of this scale can promote tourism and attract visitors to Concord and its downtown.

Proponents of the MRGT describe the trail in two parts; the rail trail portion and the river trail portion. The rail trail would utilize an abandoned railroad corridor extending from Downtown Concord to Penacook. The route passes farms, forests, wetlands, multiple oxbow lakes, and has multiple views of the Merrimack River. It also provides connections to existing trails and trail networks, including the popular Sewall's Falls trails and Morono Park trails.

The Trail would continue north into Boscawen at the Hannah Duston Park and monument, and

connect to the Northern Rail Trail. The Northern Rail Trail has a 10 foot wide smooth stone dust surface for 53 miles to Lebanon, using the historic Northern Railroad bed. Extending the Northern Rail Trail into downtown Concord would be beneficial for both the Trail and for the City. As of this writing, the City has entered a Purchase and Sale agreement to purchase the abandoned railroad property for the rail trail.

The river trail portion of the MRGT would extend from Downtown south to Pembroke (and possibly Bow). There are no abandoned railroad beds for most of this route, requiring new trail to be blazed. This includes trail between Loudon Road and Manchester Street on the east side of the Merrimack River, with a boardwalk spanning wetlands north of Terrill Park and trail along the Merrimack River and agricultural fields. South of Manchester Street the trail could be built in association with future development on land zoned for mixed use. Approaching the Concord/Pembroke line, an historic railroad grade exists on land currently owned by Eversource in the Garvin's Falls area. This railroad grade could one day host the MRGT.

#### **CONCORD-LAKE SUNAPEE RAIL TRAIL:**

Another trail of regional significance is the proposed Concord-Lake Sunapee Rail Trail. This trail is also proposed to be an accessible trail, with a 10 foot wide smooth hard packed surface. The route intends to follow the abandoned Concord to Claremont railroad bed where possible, from where it meets the MRGT near downtown at the Pierce Manse, northwest to the Hopkinton line at Mast Yard State Forest and beyond. In between, it passes the Jim Hill Riverwalk & Lehtinen Park Trails, the O'Reilly-Fleetham Trails, and would provide views and access to the Contoocook River at multiple points. The first stretch of trail has been built



*Concord-Lake Sunapee Rail Trail*



*The City of Keene has stitched urban trails into new infill redevelopment. Concord can do the same as it redevelops the "Opportunity Corridor" along I-93 near Downtown.*

along Bog Road, starting at a trailhead off Fisherville Road

The trail is planned to continue into Hopkinton, Contoocook Village, Warner, Bradford, and end at Lake Sunapee in Newbury. Several miles of

trail are completed along its proposed 34 mile length. This trail, in combination with the Granite State Rail Trail, would be a unique facility that would serve locals and attract tourists.

The lead organization building the trail is a non-profit group the Friends of the Concord-Lake Sunapee Rail Trail. The City has entered into license agreements with the Friends group to allow them to build and maintain the trail on City property or easements. Council as entered into a purchase and sale agreement for land that may be used for the trail. Otherwise, the City plays an oversight supporting role in the development of the CLSRT with support from City Council.

### **DOWNTOWN AND STORRS STREET OPPORTUNITY CORRIDOR TRAILS:**

If Downtown is the center of activity in Concord, it would only make sense for the trail network to tie into it. Many of the mark-up maps at the public visioning sessions were filled with markings and notes describing ideas for trail connections in and around the Downtown area. This includes the "opportunity corridor," described in various planning documents as an area of under-developed land from Horseshoe Pond, down through the Storrs Street area, and south to the South End rail yard off Langdon Ave. The vision is to encourage and enable enjoyable active transportation and recreation throughout this built-up portion of Concord, and also connect it to nearby open spaces. The Merrimack River Greenway Trail would be a probable backbone for this trail system. A pedestrian bridge spanning I-93 and the Merrimack River in the immediate Downtown area appeared to be the most popular concept, as were improved connections through the Opportunity Corridor, to the Heights, the South End, Horseshoe Pond, the Route 3 north corridor (Fisherville Road area), East Concord, and the Concord Hospital campus. Such trails would provide non-motorized transportation options and enhance the livability of the Downtown area



and adjacent neighborhoods.

Opportunities for implementing such trails may arise through a range of private and public development. The I-93 Bow-Concord Improvement Project can and should incorporate bicycle and pedestrian traffic along and across the corridor, likely in the form of trails. Private development in the opportunity corridor can (through the Planning Board process) accommodate trails within their sites and extending into future redevelopment zones. Incorporating trails into development in this way has been known to have economic development benefits for the community, and enhance the quality and value of new development.

**LANGLEY PARKWAY:** The proposed extension of the Langley Parkway from the Concord Hospital campus northeast to North State Street would have an impact on existing trails. While opinions varied on the roadway project, it was agreed that the existing trails there are valued, and that those trail connections should be maintained. New trail connections and a new trailhead location were also suggested, as were trail connections into nearby residential areas as deemed appropriate. If constructed, a shared use path type trail paralleling the new roadway could enhance walking and bicycling choices for both recreation and transportation. Tying this trail in to other shared use paths, like the MRGT, CLSRT, or Downtown Opportunity Corridor trails would enhance its connectivity from the Hospital Campus to Downtown and other parts of Concord. It would also help maintain trail access from the West End to the Winant trails.

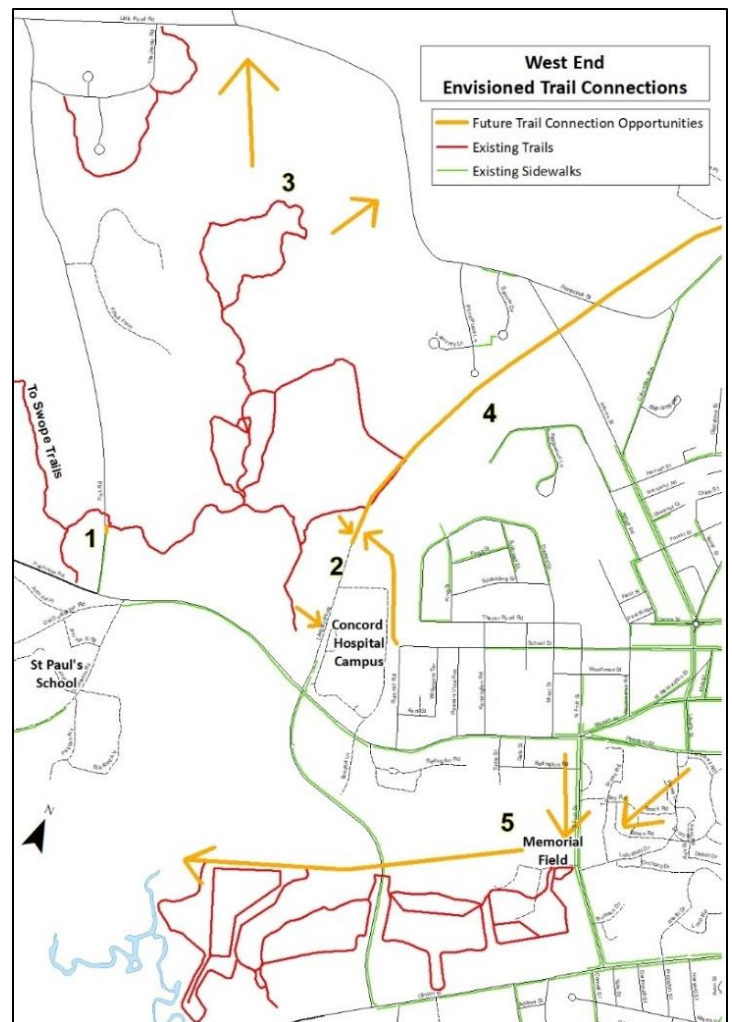
## CONNECTIONS TO NEIGHBORHOODS

**WEST END:** The Winant trails are among the most popular in the City. They are located west of Concord's West End and the Hospital campus and are much closer to Downtown and populated areas than most other trails in Concord. The Winant trails also connect to the

popular Swope trails, via the Swope-Winant Connector. From there, one can traverse many miles of trail using the Carter Hill Connector and West End Farm Trails. Several options exist for improving connectivity between the West End area and the Winant trails.

**1. Fisk Road Sidewalk:** The primary trailhead to the Winant Trails is off Fisk Road. There is a sidewalk on Fisk Hill road that ends only about 100 feet shy of the Winant trailhead. Extending this sidewalk or enhancing a walkable gravel shoulder could improve access to the popular trailhead. The Fisk Road sidewalk connects to sidewalk on Pleasant Street and extends to the entire city sidewalk system and St. Paul's School.

**2. Trails to Concord Hospital Campus:** A pair of unsanctioned trails currently connect the Winant Trails to the Concord Hospital area near the Granite Ledges of Concord (at the present northern end of Langley Parkway) and also the





Concord Unitarian Universalist Church of Concord on Pleasant Street. Although these trails are well used, they have never been formally sanctioned through use agreements with the property owners. Doing so would let the trails appear on trail maps, and official trailheads with kiosk maps could be placed on or near the Hospital campus. This would increase access to the Winant trails for employees at Concord Hospital, enabling lunch break walks that do not require a trip in a car to the trailhead. Additionally, informal trails connect the end of School Street to trails north and east of the Hospital campus. Formalizing these already well-used trails would increase awareness of trail access for West End residents.

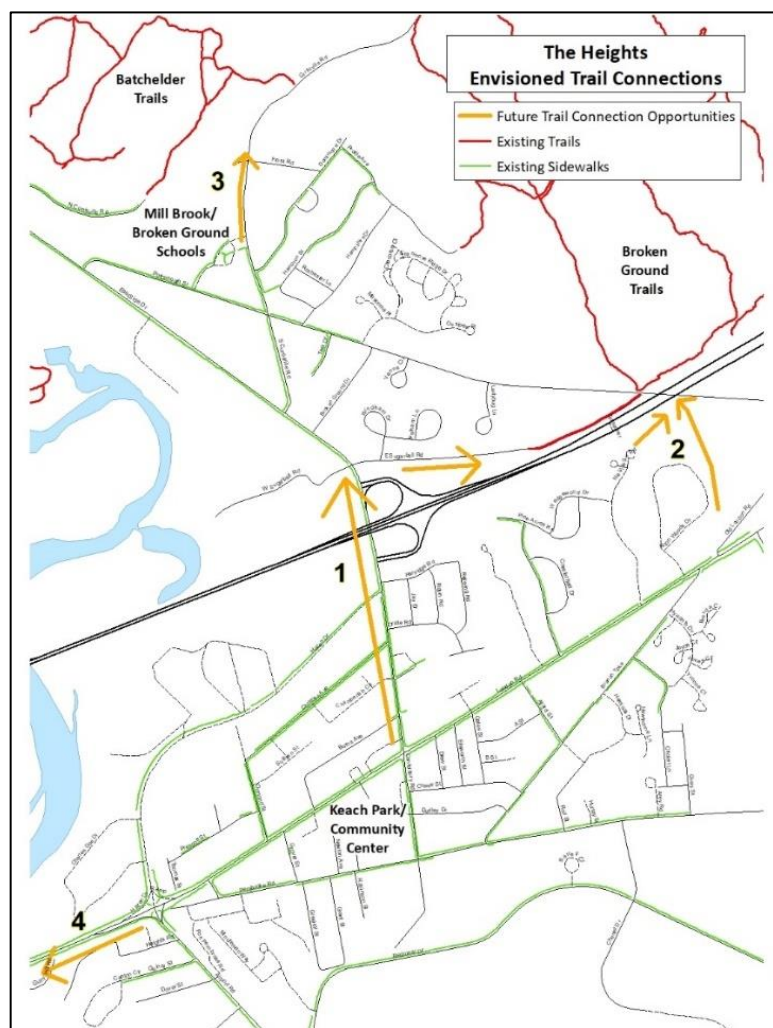
**3. Trail to Little Pond Road and Areas North:** A maze of unsanctioned trails currently exist to the north of the Winant trails, some of which connect to Little Pond Road. Efforts have been made to create and formalize a trail that would create a connection from Winant to Little Pond Road and nearby neighborhoods. The first result of this effort is a blazed loop trail from Winant to the border of Walker State Forest, which enabled the closure and discontinuance of some unauthorized trails in the area. Options should continue to be explored to formalize new trail that connects to Little Pond Road.

**4. Langley Parkway:** Formalizing a trail along the Langley Parkway Extension route will ensure trail access is maintained along the corridor. As noted previously, trail needs should be considered and provided for when or if the Langley Parkway extension is built. Appropriate trail connections to adjacent residential areas should be considered. When the first phase of the Langley Parkway was built between Clinton Street and Pleasant Street, the design included an underpass to maintain a safe crossing for the existing trail system, including the cross-country ski trails. This precedent should continue.

**5. Memorial Field:** The West End is also relatively accessible to Memorial Field. Options for connecting trails into Memorial Field, and perhaps further westward, are evaluated in the South End discussion.

**THE HEIGHTS:** The Heights neighborhood is relatively close to the Broken Ground trails, but access is inhibited by I-393. Access to trails is particularly important to the Heights in part because of economic disparities and lower rates of car ownership compared to other areas of the City.

**1. East Side Drive:** Access to trails could be improved by improving the sidewalk connection from East Side Drive to East Sugarball Road, which leads to the Broken Ground Trailhead. The sidewalk over the I-393 bridge is particularly unpleasant. The route lacks bicycle lanes, and an extended left turn lane onto I-393 from East Side Drive is especially unfriendly to bicycling.



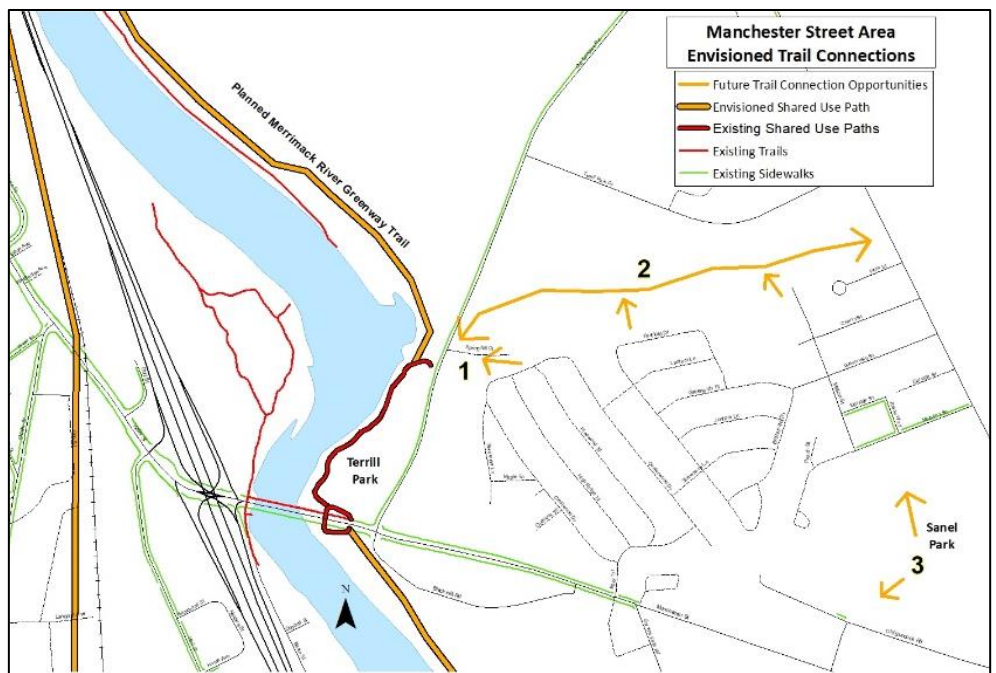
Improved walking and bicycling conditions throughout the neighborhood would have a range of benefits, including access to trails.

### 2. Connection to Portsmouth Street:

A new connection to the Broken Ground trails may be possible with a new trail from near Alton Woods and/or NE Village Road to the Portsmouth Street underpass under I-393. The Broken Ground trailhead is only a few hundred feet from this bridge, with wide shoulders along the road. This connection could enable a walking loop to and from the trailhead, and be a much more direct route for many residents. A new trail here would likely require property owner agreements.

**3. Curtisville Road:** The Batchelder Mill Road Trails in East Concord are nearly as close to the Heights as the Broken Ground trails. The East Side Drive sidewalks are the logical route to these trails (in addition to the Broken Ground trails). Sidewalk or improved gravel shoulder on Curtisville Road to just past Mill Brook Elementary School would also improve access to the Batchelder Mill Road Trails from the Heights.

**4. Loudon Road “Gully Hill”:** The MRGT is planned to be built just down the hill from the Heights neighborhood. While it is close in proximity, the roadways to get there have heavy motor vehicle traffic. An enhanced sidewalk or bike route down the “Gully Hill” section of Loudon Road would improve access to the MRGT, Terrill Park, and other future Downtown connector trails. It would also enhance biking and walking options between the Heights and Downtown.



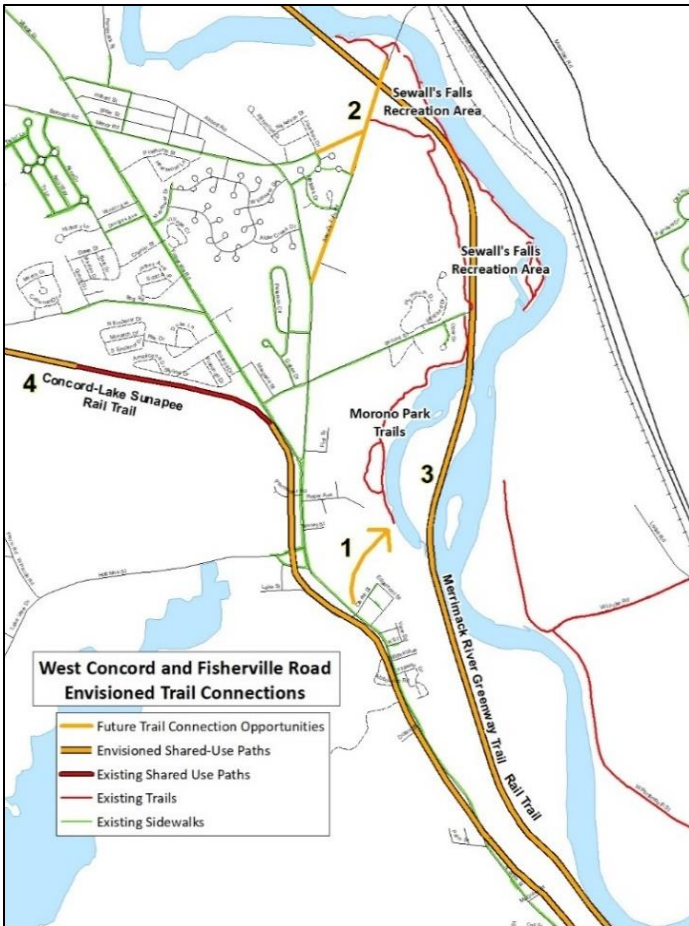
**MANCHESTER STREET:** Manchester Street may be known primarily as a commercial corridor, but a multitude of housing exists behind the businesses on the north side of the street. Similar to the Heights, these neighborhoods may also be vulnerable to trail access inequalities. Trail access may be improved through improved routes connecting to the planned MRGT and Terrill Park.

**1, 2. Connection to Terrill Park:** A connection to Spring Hill Drive across Old Turnpike Road may help improve access for some residents and create an alternative route to Manchester Street sidewalks. A trail running east west along the bottom of a bluff would also serve local residents and could connect across Old Turnpike Road to Terrill Park.

**3. Sanel Park:** The area of Sanel Park may be an area that could host local walking or biking trails that connect directly into the neighborhood.

### WEST CONCORD AND FISHERVILLE ROAD CORRIDOR:

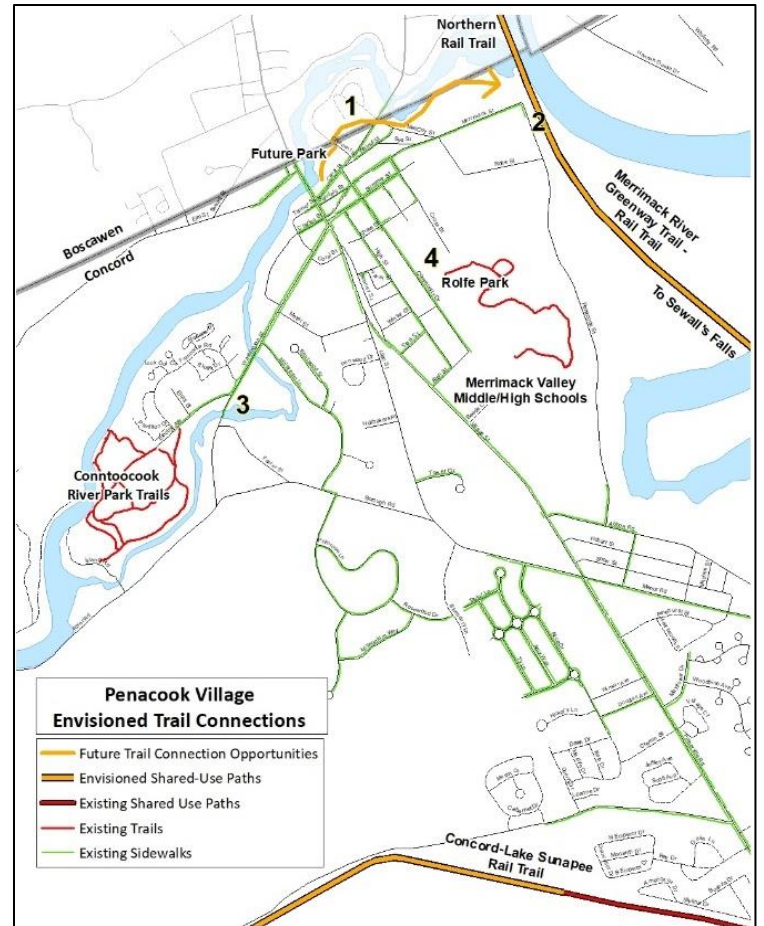
The Fisherville Road corridor between Downtown and Penacook is host to a wide range of housing types and businesses. Residents along this corridor are not far from trails along the Merrimack River, however enhanced connections at a few locations would improve access.



**1. Clarke Street to Morono Park:** One such connection recently completed is a trail from Clarke Street to Morono Park. A City utility easement exists here, with an informal trail that has been improved and formalized to connect this neighborhood to Morono Park and Sewall's Falls Park trails. It could also connect to a future MRGT rail trail.

**2. Sewall's Falls Road Sidewalk:** A second improvement would be to construct sidewalk to fill a gap along Sewall's Falls Road and Manor Road. This would connect a relatively large and dense neighborhood to the popular trails at Sewall's Falls and a future MRGT rail trail. The sidewalk would have the additional benefit of connecting over Sewall's Falls Bridge to the Concord Monitor property and Whitney Road, which is zoned for future development.

**3. Merrimack River Greenway Trail:** The future rail trail portion of the MRGT would parallel the Fisherville Road corridor to the east, enhancing



options for connecting trails and completing loops.

**4. Concord-Lake Sunapee Rail Trail:** To the west of this corridor, the extension of the Concord-Lake Sunapee rail trail would connect to trail systems further west into rural parts of Concord. The CLSRT could be extended farther south, paralleling Fisherville Road from near Bog Road to the Pierce Manse, where it would meet the MRGT. This stretch of the CLSRT would be a desirable alternative to walking and biking along the high-traffic Fisherville Road and North State Street.

## PENACOOK:

**1. Riverfront Park Trail:** Penacook Village has aspirations for a trail along a new riverfront park at the former Tannery site on Canal Street, as described in the Penacook Vision Plan and other sources. The vision has been to link this to trail eastward to the Merrimack River and the MRGT rail trail. A trail in this alignment could have



access points or views of the Contoocook River in places.

**2. MRGT Connection:** Another connection to the MRGT could be near the corner of Merrimack and Penacook Streets, perhaps at the entrance to the water treatment plant. The MRGT will help connect Penacook Village to Sewalls Falls and the Merrimack River, as well as into Boscawen and on to Downtown.

**3, 4. Existing Neighborhood Trail Access:** The Contoocook River Park trails on Electric Avenue connect to the existing sidewalk system and quiet local streets. A sidewalk also leads to the trail at Rolfe Park. These are a notable cases of good neighborhood trail connections. Wayfinding or community events may improve on it further.

## **SOUTH END:**

**1. Memorial Field to White Farm:** Memorial Field to White Farm, and potentially further westward: Memorial Field and White Farm are reasonably well connected to the South End neighborhood using the existing sidewalk network and local streets. Better trail connectivity here could enhance local trail options. The trails at White Farm are largely used in winter for cross country skiing, but not

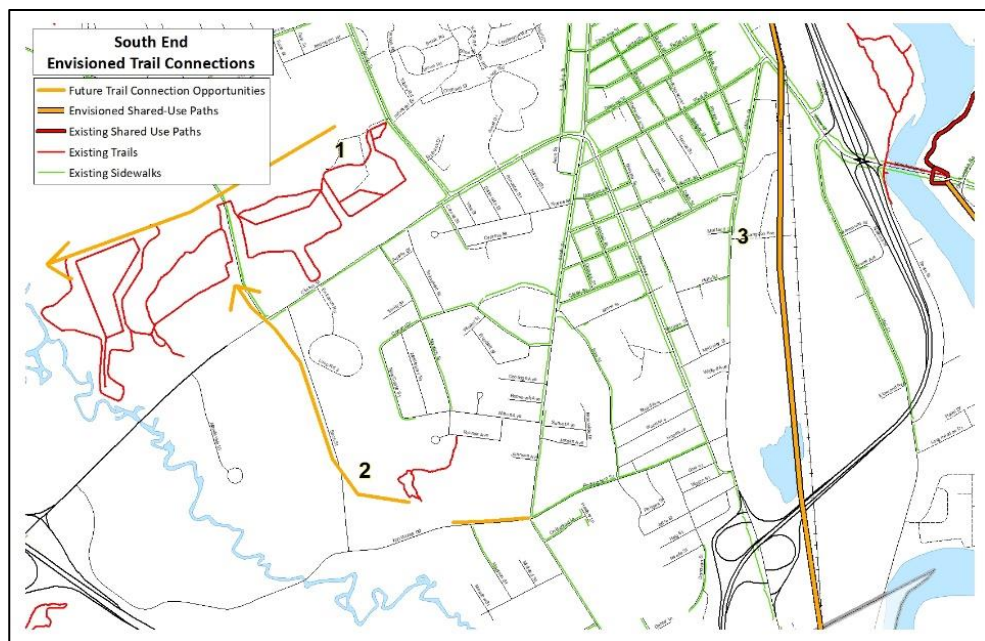
available for summer use as many of these trails are on active agricultural land. There may be an opportunity to link a corridor of trails from Memorial Field westward and continuing to the Audubon Society. This connection would need further investigation and the requisite coordination and permission from property owners. A bridge across the Turkey River would be needed.

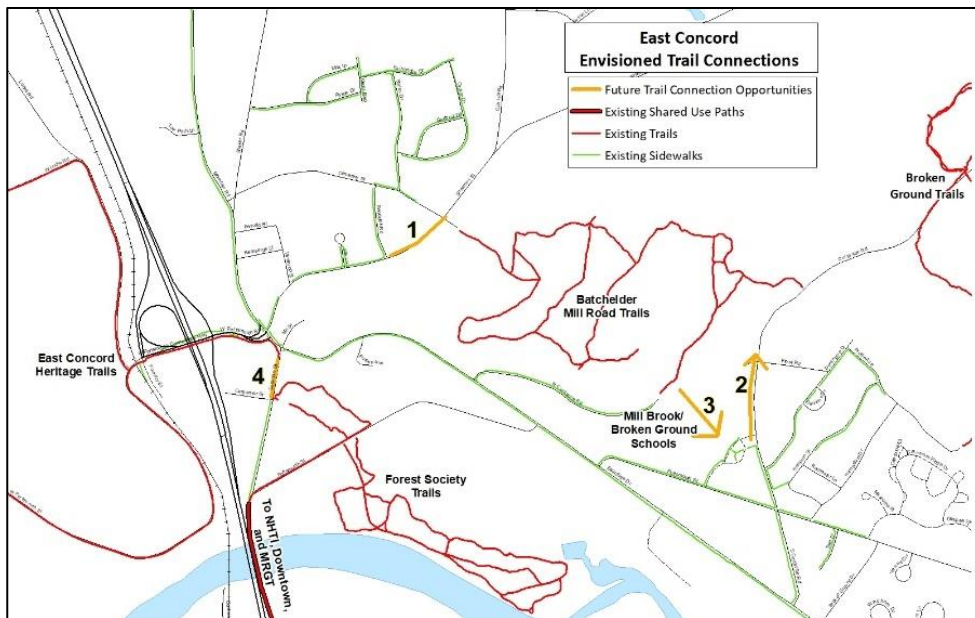
**2. Russell Martin Park and Trails:** These short trails could be extended beyond the park boundaries to near the community gardens on Birch Street and continue to the trails of White Farm. Trail connections here would help create loop options for walkers and joggers in the South End neighborhood, and offer another connection onto the trail network. A sidewalk or improved gravel shoulder along Iron Works Road would improve access.

**3. South Opportunity Corridor:** The Opportunity Corridor extends into the South End Rail Yard. Trails in this area could connect the South End to Downtown and beyond. Shared use paths or bike paths would be a suitable trail typology for this area.

**EAST CONCORD:** East Concord arguably has the best existing connections to trails of any

neighborhood in Concord. The East Concord Heritage Trails, Merrill Park Trails, Forest Society Trails, Batchelder Mill Road Trails, and even Broken Ground Trails are all in close proximity and can be connected with relatively short walks on streets or sidewalks. Even Downtown and NHTI trails are accessible using the I-93 Bike Path from Portsmouth Street/Eastman Street to Delta Drive.





**1. Shawmut Street:** Sidewalk on Shawmut Street ends about 820 feet shy of the entrance to the Batchelder Mill Road Trails. Extending the sidewalk or widening a smooth gravel shoulder would improve access.

**2. Curtisville Road:** Extending sidewalk or creating a wide gravel shoulder on Curtisville Road to just past Mill Brook Elementary School would improve access to the Batchelder Mill Road Trails from the south, including the Heights. The route also leads to the northern end of the Broken Ground trails, which would enhance options for walking or jogging a loop.

**3. N Curtisville Road to Schools:** Formalizing a short trail from North Curtisville Road to the Mill Brook/Broken Ground elementary schools would provide both a walking route to the schools as well as better school access to the Batchelder trails.

**4. Eastman Street Sidewalk:** A gap in the sidewalk network exists at the north end of Eastman Street. This street connects multiple trail systems as well as many other non-trail trips.

**DOWNTOWN:** Combining elements of a lively cultural scene with access to outdoor recreation is an incredibly valuable opportunity for

Concord. It is a possible attraction for recreation tourists, an amenity for existing and new residents who want access to active lifestyles that don't rely on vehicles, and is likely to generate increased business for downtown owners. Trail access to and from Downtown would likely be best served by the shared use pathways of the Merrimack River Greenway Trail (MRGT), Concord-Lake Sunapee Rail Trail (CLSRT)

and a connection to trail along the future extension of Langley Parkway (or it's alignment if the roadway is not built), and the I-93 Bike Path that connects Delta Drive to East Concord. Refer to the "Trails that Connect the Community" map.



*Trail in the fall*



## CONNECTIONS BETWEEN TRAIL NETWORKS – LONG DISTANCE TRAILS

**BROKEN GROUND TO OAK HILL TRAILS:** A trail connecting the Broken Ground trails to the Oak Hill trails would create a new long distance trail in East Concord similar to the West End Farm Trail. It would allow trail users to traverse a large portion of the eastern half of Concord, passing through one of the most remote areas of Concord. A snowmobile trail currently maintained by the Canterbury Snow Shakers exists in the area. The snowmobile trail could be

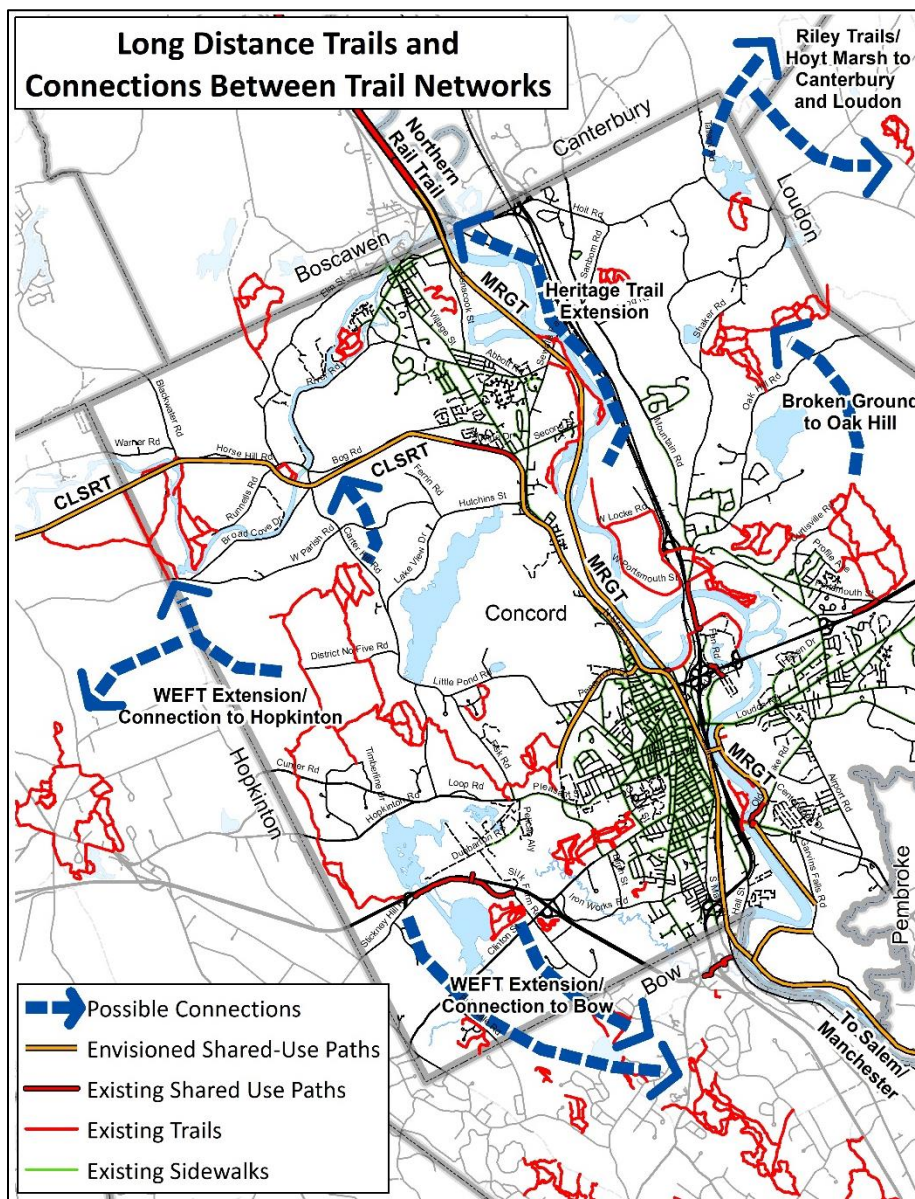
repurposed for year round use (with permission from landowners and coordination with the snowmobile club), or a new trail could be cut. Special consideration should be made for potential impacts to wildlife in this area, as described in Chapter 6.

### CONTINUATION OF HERITAGE TRAIL – EAST BANK OF MERRIMACK RIVER:

The east side of the Merrimack River is largely undeveloped from East Concord to Penacook. The potential exists for a long distance trail in this corridor in the vein of the West End Farm trail. A Trail currently exists at West Portsmouth Street in East Concord. A trail running north would reach Sewall's Falls Road near the bridge and Sewall's Falls Recreation Area on the west side of the river. The area north of Sewall's Falls Road in the vicinity of Concord Monitor is zoned for commercial development, but trail could be built here in the interim, or located near the river bluffs where development is unlikely. If Whitney Road is extended north to the development at Exit 17, a trail connection should be considered.

### WEST END FARM TRAIL EXTENSIONS AND CONNECTIONS:

The West End Farm Trail (WEFT) is among the most beloved trails in the City. Some of the trails' advocates propose extending the trail both to the north and south. To the north, the trail could connect to the Concord-Lake Sunapee rail trail. To the south, the City could explore opportunities to extend this trail into Bow, and perhaps eventually connect through the Bow High School land to the popular Knox School Forest trails. These additions would extend the West End Farm Trail an additional 3-5



miles at either end and connect to neighboring town's trails.

If landowner permission or future easements allow, a connection to Mast Yard State Forest and Hopkinton could be created. Formalizing a trail along the discontinued section of District 5 Road west into Hopkinton, across the Hopkinton town line onto Class VI Buzwell Corner Road, would lead north directly to Mast Yard State Forest. This road in Hopkinton is heavily used by cyclists and runners, as well as snowmobiles in winter (snowmobile Route 11). There is also potential for a trail leading from the discontinued portion of District 5 Road southwest to connect to the West End Farm Trail farther south via the snowmobile trail. Coordination with Hopkinton would be required for any trails that cross the municipal boundary.

**CONNECTIONS TO HOPKINTON:** The above concept to connect the WEFT into Hopkinton brings the Concord trail network close to the popular Hopkinton Village Greenway. Trail advocates in Hopkinton could very well use these trails to tie the two communities' trails together. The planned Concord to Lake Sunapee Rail Trail would also connect the communities' trail systems.

**CONNECTIONS TO BOW:** Landowner permissions for trails and new trail building may allow for formalized trail connections from the area of the Audubon trails into Bow. Some trails do exist in this area, however not all are formalized for public use and some may have been built without landowner permission. An organized effort by trail advocates could help stitch together trail connections with landowner permission and eliminate or reduce the use of unsanctioned trails. Possibilities may exist in Bow to link Concord's network to trails at Knox/School Forest, Hammond Forest, and beyond.

## **CONNECTIONS TO CANTERBURY AND LOUDON:**

In the northeast corner of Concord, there are possibilities for connecting trail in and around Hoyt Marsh to a series of class VI roads in Canterbury, as well as to the historic Maxfield Monument in Loudon. Trails here may also be connected to the Lovejoy trails in Loudon, which have become popular after opening in 2019. Possibilities may also exist for extending the Oak Hill trails into Loudon. The summit of Oak Hill is actually located just over the City line in Loudon. Cross-border trails would require coordination with the towns of Canterbury and Loudon, particularly with the established Loudon Trails Committee. Any trail project would of course need to be done with permission or landowners.



*An accessible trail near Concord Orthopedics.*

## **POSSIBLE TRAIL SYSTEM**

### **EXPANSIONS AND NEW TRAIL AREAS**

#### **SPEARS PARK TRAILS AND RICHARDS**

**COMMUNITY FOREST:** The Spears Park Trails could be expanded to include the informal trail system in Richards Community Forest, which would be improved to meet City guidelines and provide safe wetland crossings. The area is known to be popular with equestrians, so special care should be taken to make the trails friendly to horses. It may also be possible to find a route to connect these trails to the popular Oak Hill trails.



**GARVIN'S FALLS:** The Garvin's Falls area is a peninsula at the southernmost portion of Concord bordered by the Merrimack River to the west and Soucook River to the east. This large area of land covering 700 acres or more is almost completely undeveloped, save for some utility lines, a hydroelectric dam, and some homes along the dead-end Garvin's Falls Road. A few informal trails currently exist, notably an abandoned railroad bed that runs from the Pembroke line at the Soucook River east to the Merrimack River where it used to cross into Bow at the Blue Seal plant. The piers and abutments of a massive railroad bridge can still be seen today. A scattering of other trails exist across the vast property.

The property feels vast and remote even though it is very close to bustling areas, and hosts scenic views of the Merrimack and Soucook Rivers. The area is zoned commercial, with a master plan for future development. Trails that take into account the location's unique natural surroundings would be a valuable amenity for any use and should be incorporated into future planning or site development.

**ACCESSIBLE TRAILS:** As noted in Chapter 3, there are relatively few trails in Concord that are accessible to people with different mobility needs, including people who use wheelchairs or seniors. Completing trails as described in the "Trails That Connect the Community" section above would help meet the needs of accessible trail users. Other areas for improving accessibility may be at the Batchelder or Riley trails that once hosted accessible trails.

## TRAIL AMENITIES

**MAPS AND WAYFINDING:** Trail maps, trailhead kiosks, and wayfinding are all valued by Concord's trail users and appeared to be the highest priority in terms of trail amenities. Directional signs at intersection are also helpful to first-time trail users. Continually updating and

posting maps at trailheads and maintaining trail blazes and colors can help people enjoy their trip and reduce the risk of becoming lost or disoriented.

**OTHER AMENITIES:** Trail users had a strong preference for minimal or no trail amenities on natural trails. It was felt that amenities can detract from the natural experience and require additional maintenance. Seating at overlooks or scenic locations were seen as appropriate. Urban trails, transportation routes, and trails in parklike settings were seen as locations more appropriate for trail amenities. Providing adequate parking and bicycle parking were other comments that received some attention.



## CHAPTER 5

# MAINTENANCE AND STEWARDSHIP RESOURCES

Public input on the plan indicated a large majority of trail users feel that the trails in Concord are reasonably well maintained. The result is achieved through continuous efforts of both volunteers and City resources. Minor trail cleanup such as trimming brush or removing litter are taken on by volunteers, with larger trail related projects involving heavy equipment or materials often requiring city resources. Maintenance and stewardship goes beyond simply maintaining the trails themselves. Accessory facilities like parking lots, gates, and kiosks must be provided and maintained, and a host of human issues like abutter relationships and user conflicts must be addressed when they arise.

As the trail system grows in complexity and use, the type and level of resources needed to manage them have also grown and evolved. This growth has occurred over the course of many years, including a recent growth of 625 acres (19 properties) of conservation land over the last 5 years, and a comparable increase in trails of 14 miles in the past 5 years, with another 3.5 miles under construction. This chapter will evaluate

current practice and identify opportunities for improvement, and identify challenges the future might bring.

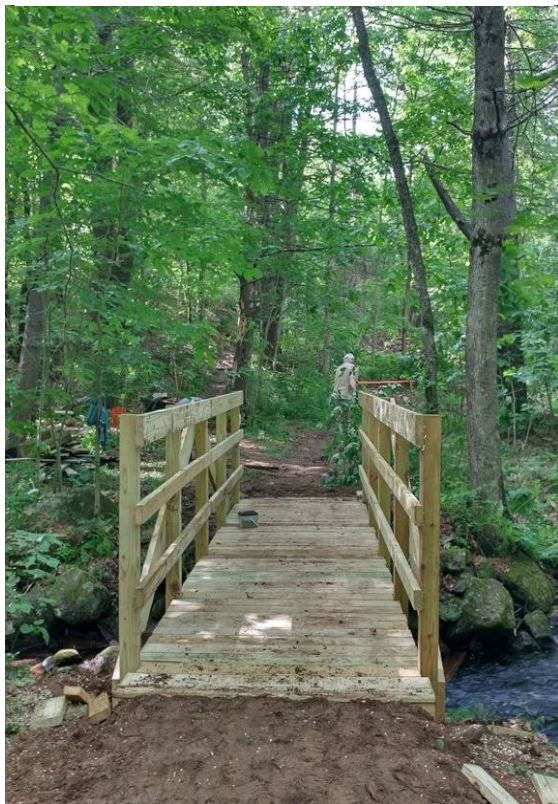
Of note is an apparent preference for volunteers to continue to play a significant role in trail maintenance and stewardship. This can be done through the City's Trails Subcommittee and other active volunteer groups, such as NEMBA and others. Volunteerism strengthens community ties and ownership of the trails, and can help reduce the burden on taxpayers. There is also a recognition that volunteer efforts require support and oversight, and there are some activities and issues that must be managed by City or other government efforts. City resources are needed to support even the most robust volunteer efforts. Volunteers cannot respond to the wide range of issues that arise; they are also not always available to address concerns in a timely manner.

This chapter primarily refers to maintenance and stewardship on trails that are managed by the City of Concord.





*Minor trail cleanup with a hand saw.*



*The bridge at Batchelder Mills, newly built.*

## ROUTINE MAINTENANCE

A guide for trail maintenance practices was developed in collaboration with the consulting City Forester. This guide has not yet been finalized or formally adopted, but doing so is recommended.

In addition to reports from the trail stewards, maintenance concerns from the public and volunteers are reported to City Planning staff and the consulting City Forester. Trail users can report any issues or concerns via the City's public reporting portal "See Click Fix". On occasion, staff will receive reports about trails and properties not under the city's purview, and the concern is forwarded to the appropriate contact.

Reported issues and concerns on City trails are discussed and addressed by City staff in coordination with the trail volunteers and the consulting City forester, depending on what the concern is. A list of ongoing projects is discussed at the Trails Subcommittee meetings.

Trails are re-blazed by volunteers or the summer Trails Intern periodically as needed. Volunteers, Planning staff, and the consulting City Forester also repair and replace signage on the City's trails.

The consulting City Forester monitors the trails for any changes in drainage patterns or erosion/compaction issues, and will make recommendations for either re-routing the trail or constructing a plank-walk or bridge.

**BRUSH REMOVAL:** Much of the minor trail maintenance can and does get done by volunteers or the summer Trails Intern. Small tools such as clippers and hand saws can maintain vegetation and small blowdowns across the trail, and blue bags can be used for small litter.

**DOWNED TREES:** Chainsaw use is typically performed by the consulting City Forester. However, a limited number of volunteers who



*An example of wayfinding signs at the Batchelder Mills trails.*

have formal training such as classes offered to the public by New Hampshire Timberland Owners Association (NHTOA), and using proper personal protective equipment (PPE) can perform small maintenance projects requiring chainsaw use after signing an Indemnification Agreement and under the guidance of the consulting City Forester.

## STRUCTURES

**BRIDGES:** Bridges and crossings of water or wet areas are among the most labor intensive and costly elements of trail maintenance. They require a degree of organization and planning, permitting, funds, and a specific skill-set. They also need to be monitored and maintained. The consulting City Forester at present does a majority of the work building and maintaining

bridges, with some assistance from volunteers and/or the summer Trails Intern.

**KIOSKS:** Most of the kiosks are purchased prefabricated and installed. Some have been provided through local Eagle Scout projects. Planning staff and the consulting City Forester have keys to the kiosks. The Trails subcommittee is working on a standard list of content for the kiosks. To date, Planning staff has primarily managed this task.

**PARKING LOTS:** Most parking lots began as logging yards for forestry operations. The consulting City Forester does most of the pothole filling and minor lot maintenance work. General Services occasionally provides heavy equipment if more serious work is required; however, the Conservation Commission property management budget must reimburse them for fill material used.

## LITTER CLEANUP AND DUMPING

Much of the small litter can be taken care of with volunteer efforts. At present, this appears to be a minimal problem as most trail users are respectful and carry out their trash. Trail users are also known to carry out pieces of litter they may encounter along the trail.

Larger issues of dumping can be a problem that is too large or hazardous to be handled by volunteers. This requires assistance from the General Services Department who occasionally are called to address dumping at trailhead parking lots. Trash and tents from homeless camps have become a larger issue over the past several years. Due to health concerns associated with human waste and needles, it is the City's practice to hire an outside contractor that has the proper equipment and protection for clean-up for encampments. The larger cleanup work is either paid for by the Conservation Commission's operating budget or cost shared with other city departments.



## POLICING AND ENFORCEMENT

The survey results indicated that most people feel safe on trails in Concord. There are however isolated incidents where people feel unsafe or witness unlawful activity. While the Police Department does have jurisdiction in policing, the remoteness of the trails means police patrols or a regular presence cannot realistically be provided.

Most acts of vandalism or illicit behavior on the trails have occurred at trailhead parking areas. Dumping trash and vandalizing or breaking kiosk glass regularly occurs. There have been occasional acts of vandalism or illicit behavior on the trails including graffiti on several bridges and an overlook, and occasional campfires. Attempts to catch vandals using trail cameras have been unsuccessful.

**MOTORIZED USES:** Illegal use of ATVs on City property is often an issue that arises on or near Concord's trails. This falls under the jurisdiction



*A group hike*

of New Hampshire Fish and Game (NHFG), which will send officers to investigate upon receipt of complaints. NHFG patrollers cover wide sections of the State and do not, and cannot reasonably be expected, to have a regular presence on the many miles of trails in Concord. Public outreach indicated strong support for trails continuing to be non-motorized in the summer months. Winter snowmobile use does occur on some Concord trails (with permission from the Conservation Commission when on City Conservation land). This did not draw any negative attention during public input. This may be due in part to responsible stewardship by the local snowmobile clubs and responsible riders.

**HOMELESS POPULATION:** The City of Concord does not have a year-round shelter; therefore, many homeless either build encampments on City property, or live in cars. Trail users have reported homeless persons either camped in the vicinity of the trails, or in their cars in the trailhead parking lots. Homelessness is primarily a community issue, not a policing or enforcement issue, as the police are limited to enforcing violations of laws. If the person is not committing a crime, the police cannot remove them from city property because they are homeless. Any responses to homelessness on City trails should be approached at a holistic, community-wide level.

**OFF LEASH DOGS:** Under the current City Ordinance for Conservation Lands, dogs are not required to be leashed on trails located on City conservation land, but off leash dogs must be under the control of their owner. There are trails that cross private property where dogs are required to be on-leash. Off leash dog conflict has become a larger issue as more people use the trails. While it is currently not an enforcement issue, future ordinance changes or increased user conflict may require policing or other forms of enforcement to ensure safety for all users.

## LEAVE NO TRACE PRINCIPLES AND USER CONFLICTS

As the use of Concord's trails continues to grow, the pressures on the landscape that visitors can bring have also risen. While most people use trails respectfully, there are occasional issues with dogs, litter, vandalism, and general trail user conflicts. A "Leave No Trace" philosophy

### LEAVE NO TRACE AREAS OF CONCERN

Five primary areas of concern were identified in Concord. Leave No Trace education and implementation should focus on these issues.

1. Reduce dog waste
2. Reduce the number of dogs off leash
3. Reduce the amount of trash – both litter and homeless encampments
4. Dumping at trailheads
5. Rogue trail building- both mountain bike and runners

### THE AUTHORITY OF THE RESOURCE TECHNIQUE (ART)

Leave No Trace is more likely to occur if people understand how their actions affect the areas they are traveling in. Citing rules and laws represent human authorities, like park rangers, police, or know-it-all trail users. In contrast, ART places the resource as the authority by stating how their environment is being effected by their actions. This approach is likely to be more effective, and should be used in the range of educational materials and approaches the City provides. It can also be used by trail users communicating with their neighbors.

applied to trail use can help reduce these problems, and the City and trails advocates have a role to play in educating and encouraging best practices.

The Leave No Trace Center for Outdoor Ethics shares information and resources for anyone to use or adapt for their own trails. The City and Trails Subcommittee have already begun implementing Leave No Trace awareness, including posting trail signage and creating educational videos. These efforts should continue, and will need to adapt as circumstances change.

**DOG WASTE:** Dog walking was one of the most popular and beloved uses for trails, as shown in the survey and outreach, but it was also one of the most commonly cited areas of conflict. The failure of dog owners to pick up dog waste was the most frequent and often passionate concern.

Dog waste is unhealthy for the environment for a number of reasons, primarily because of the harmful bacteria and excess nutrients it introduces into the environment. According to the organization Leave No Trace, the sheer

**Dog food is extremely nutrient dense, and dog waste introduces these excess nutrients into the ecosystem.**

**This can cause algae blooms.**



SOURCE: [HTTPS://WWW.OUTSIDEONLINE.COM/2292736/ITS-TIME-TALK-ABOUT-DOG-POOP](https://www.outsideonline.com/2292736/its-time-talk-about-dog-poop)

*Rather than simply citing rules to pick up dog waste, this clip from a Leave No Trace flier uses the Authority of the Resource Technique, or ART to inform and educate.*



quantity of waste from thousands of annual visitors to popular parks and trails have been found to have a significant impact on water quality and can contribute to algae blooms.

**UNCONTROLLED OFF LEASH DOGS:** While many trail users welcome encounters with friendly dogs, some individuals and small children prefer not to interact with them. Not all dogs are friendly or predictable towards other people or other's pets. Dogs also have the potential to disrupt, stress, harm, and even kill local wildlife. Keeping dogs on leash is courteous to other trail users and potentially safer for wildlife. The City has posted educational materials encouraging good trail manners, one of which frames it well: "Always be courteous. Don't give other trail users any reason to complain. Set an example for others by being a conscientious owner with a well-behaved dog out enjoying the trails."

**RESPECT FOR OTHER USERS:** Most encounters on the trail are positive and friendly, however it is always good to remind people to be aware of how their actions might affect other trail users. Public input indicated some walkers and hikers have been startled by faster trail users like runners or particularly mountain bikers. Education and outreach particularly from organizations like NEMBA can encourage bikers to be courteous to other trail users. Trail privileges come with responsibilities, and being courteous can go a long way.

Snow etiquette has also arisen as an issue. Some have raised the issue of people hiking on snow after rain or warm weather, which makes deep footprints or "post holes" that put the trail in poor condition when it later freezes solid. While it is likely not appropriate to close trails, this may be another matter for improved education and encouragement. Skiers, fat bikers, snowshoers, and walkers share many of the same trails in the



*Uncontrolled off-leash dogs was among the most common complaint of trail users*



*Snowshoeing and skiing are much more enjoyable in good snow conditions, and trail users can help by avoiding trail travel on snow during rain events.*

winter, and being courteous and knowledgeable goes a long way to keeping everybody happy.

**PROPERTY OWNER AND ABUTTER CONCERNS:** Many if not most abutter issues involving trails are concerned with parking and trail access. Trail users have been known to park at trailheads that do not have public parking, or park in unsuitable locations when the existing lot is full.

Other issues involve privacy, particularly when a trail passes close to a residence or other private property. Privacy perceptions hold true for planned trail routing as well.



*A sign near the Back Forest Loop behind the Winant trails*



*The New England Mountain Bike Association can be a good partner to reduce or eliminate rogue trail building. This sign is posted on the Broken Ground trails.*

Property boundary disputes do arise on occasion.

**ROGUE TRAIL CONSTRUCTION:** Rogue trail construction is another concern among property owners. Trail building is to be done only with written permission from the property owner, whether it be a private or public entity. Rogue trail building remains a problem in Concord and elsewhere, although in recent years progress has been made increasing awareness of the issue.

Among a host of issues, rogue trail building erodes trust between trail users and property owners, and in some cases can lead to safety concerns for trail users and abutters. Trail building done without careful planning can lead to chaotic trail networks that are hard to follow and navigate, and increase the difficulty of rescue operations in the event of an incident. Rogue trails that do not go through a thoughtful planning process are unlikely to meet the needs of the community as a whole. In addition, authorized trails are often located to avoid environmentally sensitive areas, including vernal pools and areas of known wildlife use. Rogue trails may have unintended adverse impacts on these areas. Further, once a trail is established, it is very difficult to stop people from using it, even when it may be illegally on private property or environmentally damaging.

Two areas of specific concern for rogue trail building in Concord are the vicinity of the State Prison, and the City's water supply in the watershed of Penacook Lake. Recreational activities do not mix well with the state prison, and the Department of Corrections has strongly objected to trails on their properties or near their facilities. Increased recreation activities in the Penacook Lake watershed increases the risk to the safety and quality of the City's water supply. The watershed is relatively small considering the number of people it serves and may be particularly susceptible to disturbance.





*Dimond Hill Farm*

It is extremely difficult to hinder rogue trail building through enforcement. Fostering a culture of responsible trail building and land stewardship through education and partnerships is the most likely avenue for success. Interviews with trail users and advocates in the Concord area have indicated a shift in attitudes among many people that trails must be built through the proper channels, or trail privileges will be put at risk. People want to have places to hike, run, and mountain bike. They recognize that new and enhanced trail systems cannot happen without positive relationships with both private and public landowners and institutions. Through discussions with trail users, some who may have once quietly welcomed rogue trail building have come to understand the threat they pose to trail privileges. Awareness and advocacy must continue in order to further sway public opinion.

With clearly spelled out avenues and outlets for sanctioned trail building, there may be less temptation or less tolerance for going rogue. Having an active Trails Subcommittee that is known to the public and accessible to the community is one outlet. Other organizations, like the New England Mountain Bike Association (NEMBA) strongly advocate for responsible trail building and should continue to do so. NEMBA works hard to maintain positive relationships with land managers who host trails, and contributes to education and fostering a culture

of stewardship that does not tolerate rogue trail building.

## LANDS MANAGED FOR MULTIPLE USE

The Conservation Commission's Conservation and Open Space Plan Update (June 2017), which includes open space stewardship goals, should serve as a guide for often complex decisions on managing land for multiple users. The Conservation Commission should develop consistent guiding principles on use of City open spaces, and individual trail decisions should be made based on those guiding principles. This is true for a range of issues, including trails, agriculture, forestry, wildlife, and hunting.

**AGRICULTURAL OPERATIONS:** Several trails in Concord pass through or near active agricultural operations, including Dimond Hill Farm, Rossivew Farm, Carter Hill Orchards, and others. Agricultural operations are valued by residents and visitors of Concord, and trail users often enjoy the scenery and experience of passing through farms, fields, and orchards. Care needs to be taken to evaluate any possible negative impacts trails may have to active agricultural operations when siting new trails, and mitigate impacts of existing trails. The health and safety of trail users must also be a consideration. An open line of communication between agricultural operations and the Trails Subcommittee and City Staff have been critical to addressing problems that may arise. To date, there have been few specific issues related to trails or trail users negatively impacting operations.

**CITY FOREST HARVESTS:** Funds for the consulting City Forester, building materials for trails, and the summer intern come from the Forestry Fund, which is funded by annual timber sales on City Forests. Timber harvests have helped support the trail system but have also impacted it in a number of ways. Log yards have

become trailheads and skid trails have been converted to hiking trails. This requires access for future harvests to be rerouted, adding to the expense of logging and reducing revenues. The practice of leaving buffer zones along the trail has also reduced the potential timber sale volumes and associated income. Many trail activities have been included with timber sales such as building separate trailhead parking lots, opening up vistas and removing potential hazard trees. The trail network has had a significant impact on the timber harvesting on City Forests, and these impacts should be weighed.

**HUNTING:** The conservation and open space lands managed by the Conservation Commission may be used for hunting unless hunting is otherwise prohibited by law or the terms by which the property was acquired. On some properties, conservation easements require the land to remain open to hunting, whereas hunting is prohibited on other properties by the terms of the grant or donation of the property to the City. With the continued popularity of trails, and the

expansion of the trail network into previously trail-less areas, consideration must be given to how any future trails can impact hunting. The Conservation Commission has in the past resisted trail closures during hunting season, in part because of the difficulty in enforcing trail closures, a fear of a false sense of security for hunters, and an overall sentiment that City lands are open to all users of the open space. The Commission and the community at large do see a place for hunting on Concord's open lands, and in order to maintain hunting as a viable activity, the needs and wishes of hunters should be considered in trail decisions.

One such option is to identify currently trail free areas that are of particular importance to hunters for special consideration before any new trail development. It would be valuable to establish a line of communication between an interest group representing hunters and the Trails Subcommittee.





## CHAPTER 6

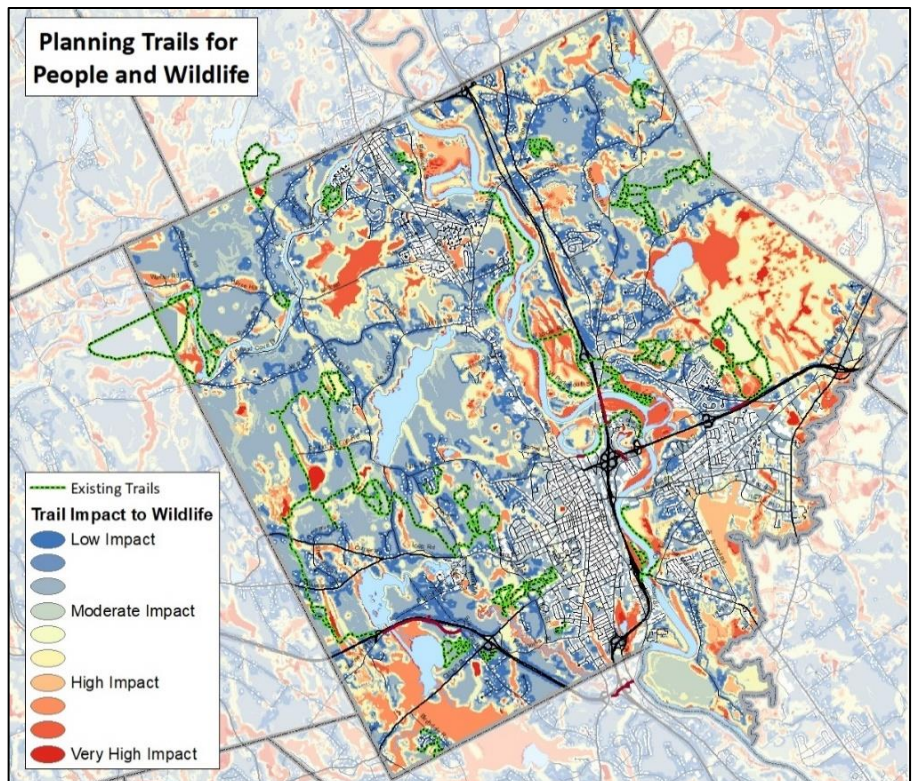
# WILDLIFE HABITAT – TRAILS FOR PEOPLE AND WILDLIFE

Public input has indicated that Concord’s trail users greatly value the environment and wildlife habitat. It was a near unanimous opinion that trail building should consider impacts to the environment. The interpretation of what that means, and how to duly consider environmental and wildlife impacts is a more difficult question to answer. Fortunately, guidance is available for all NH Communities to help plan trails for both people and wildlife. Information on the guidance can be found at <https://wildlife.state.nh.us/trails>.

### TRAILS FOR PEOPLE AND WILDLIFE

In 2019 the New Hampshire Fish and Game Department released the Trails for People and Wildlife document, which is “a guide to planning trails that allow people to enjoy nature and wildlife to thrive.”

This document was developed through a collaborative effort with NH Fish and Game and a number of wildlife, conservation, and trail agencies.





Activities that seem low-impact like hiking, mountain biking, and bird watching can have a negative impact on wildlife by reducing their abundance, reproductive success, and even survival.

The purpose of the guide is to help communities develop thoughtfully located trail networks that minimize disturbance to wildlife. The guide can help with decisions on where to route new trails, where it may be better to re-route trails, and identify which properties are better suited for trail development versus places left with minimal human impact.

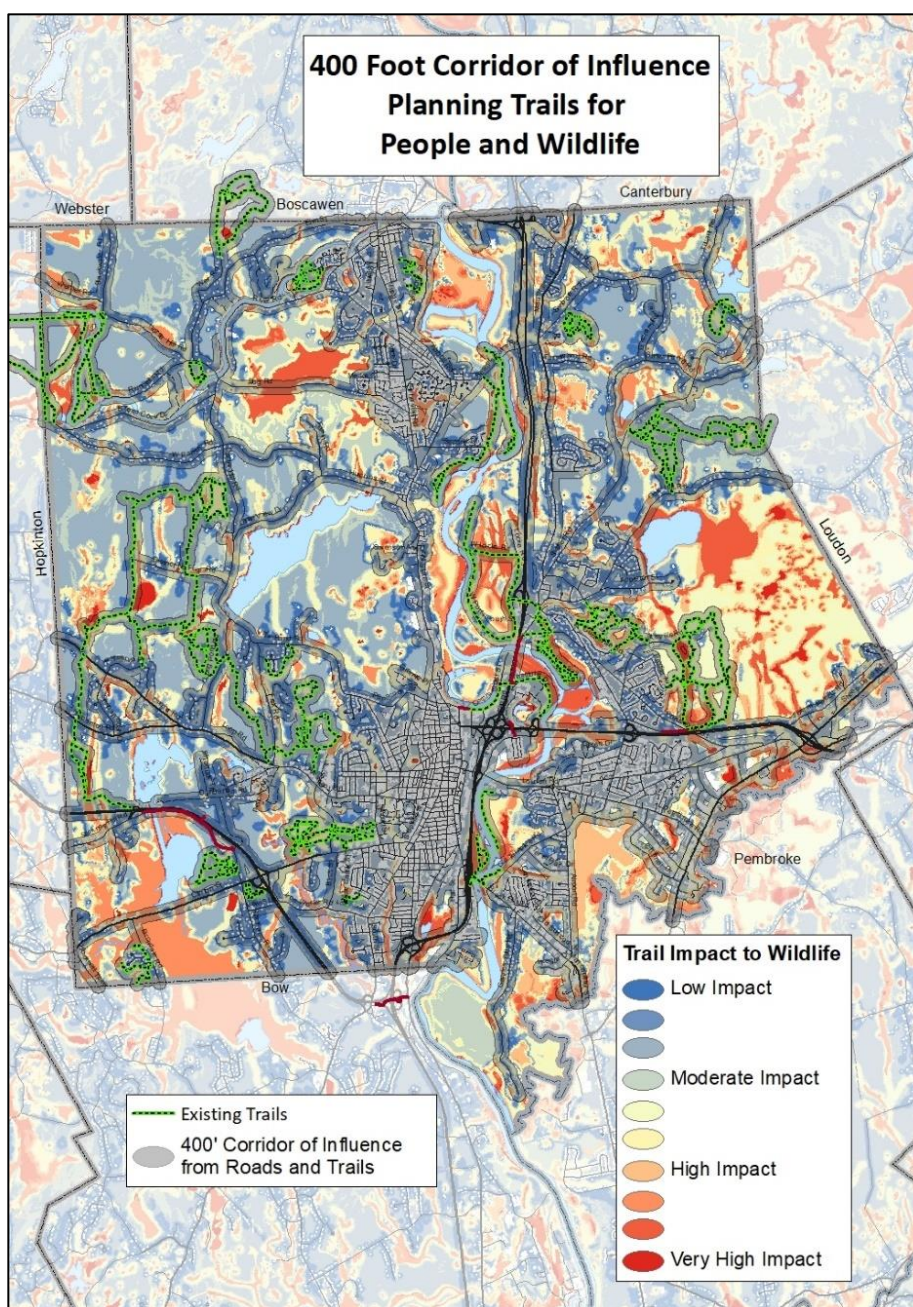
## TRAIL PLANNING FOR WILDLIFE IN CONCORD

One of the primary tools associated with the Trails for People and Wildlife resource is the Impact to Wildlife map layer. On this map, cooler shades of blue represent areas where a trail may have lower impact to wildlife, and are more appropriate for trails. Warmer colors of orange and red have higher potential impacts to wildlife and should be avoided when possible. These maps are provided in this document, are available to Geographic Information Systems professionals at the City and elsewhere, and can be viewed by anyone through NH GRANIT View.

This map should be referenced before any new trail building, looking at existing trails as well as any potential new trails. Close inspection of a trail area may highlight opportunities to reroute, close, or alter the trail system in ways that maintains their public utility but better minimizes impacts to wildlife. A review of the map overlaid with Concord Trails show that most trails

do in fact avoid areas of higher impact. This pattern should continue and be enhanced when possible.

A key premise of the guidance is a trail's "Corridor of Influence," the distance at which a human presence on a trail can affect wildlife. Amphibians and reptiles are impacted up to 60 feet away, birds 150 feet, and mammals from 400 feet away. When applying a 400 foot buffer from all roads and trails in a community, there can be surprisingly little area outside of the





corridor of influence. In Concord, approximately 45% of all conservation land is within 400 feet of a road or trail. This does not take into account any unofficial or unsanctioned trails, meaning this number is likely an underestimate.

When building new trail or evaluating a trail system, this buffer can be applied in order to look for ways to maximize large blocks of land that are outside of the 400' corridor of influence.

### KEY PRINCIPLES:

- ➔ Avoid special habitat types - some are rare or are sensitive to disturbance,
- ➔ Route trails away from wet areas - wetlands provide many ecological services and are important habitat for many species,
- ➔ Route trails along habitat edges - avoid fragmenting large blocks of habitat,
- ➔ Avoid steep slopes - some species raise young here,
- ➔ Avoid known locations of rare species found in the NH Natural Heritage Bureau (NHB) database - wildlife are aware of us even if we think we are going undetected.

The Planning Trails for People and Wildlife map was produced by overlaying the Key Principles outlined above.

Elements of the Plan for People and Wildlife should be incorporated into the new trail building checklist that the Trails Subcommittee has recently adopted. Particular attention should be paid for properties that feature warmer colors on the map, indicating a higher potential impact to wildlife. The recommended step by step procedure is detailed in the Planning for People and Wildlife document, and is summarized in the text box at right.

One way to help plan trails for people and wildlife is to approach it on a property by

property basis. Some properties that are already popular for trails and busy with people could be identified as “ambassador properties” whose primary purpose is hosting visitors. Other properties would be set aside as trail free or trail light. The Conservation Commission should undertake a review of its conservation properties and existing trails and discuss how or if this approach might work for the City.

A review of Concord’s Trails for People and Wildlife map shows the area of Broken Ground in East Concord stands out as the largest area free of trails, and also shows relatively high potential impact to wildlife. This area north and east of the City’s existing conservation area might be set aside for few or no trails, perhaps limiting trail development to a desired trail link from the Broken Ground trails to the Oak Hill trails on or roughly following an existing snowmobile route. Fewer trails with heavy traffic generally has a lower impact on wildlife than more trails with lighter traffic, so one highly traveled trail may have less impact than spreading traffic out on multiple trails.

### STEPS FOR PLANNING TRAILS FOR PEOPLE AND WILDLIFE:

1. Map existing features including: Access (roads, trails, parking) Ecology (wetlands, vernal pools, rare plants) Destinations (viewpoints, historic features)
2. Apply the trail location tool (follow the blue) navigate to “access” avoid “ecology”
  - a. Plan best route for new trails
  - b. Maintain, reroute, or decommission existing trails
3. Overlay Corridor of Influence to Consider Additional Changes - Apply 400' buffer from roads and trails - Maximize large blocks of unfragmented lands
4. Field Verify



## CHAPTER 7

# CONCLUSION AND RECOMMENDATIONS

The vast trail system and open spaces we enjoy in Concord today have come together piece by piece over many years. This is true not just for the trails themselves, but for all the systems, job descriptions, committees, and human infrastructure that is needed to support such a vast undertaking. The trails and open spaces in Concord have grown to essentially become a sizeable parks system in and of itself, and it needs to be managed as such. The City of Concord, including its volunteers and staff already do tremendous work developing, managing, and being good stewards of the community's trails. Most of the recommendations in this chapter are to continue, formalize, or improve on existing practices and procedures. The most significant recommendation in this plan is to create a position within the City of Concord whose sole responsibility is to manage the City's trails and open spaces, funded partly through forestry and conservation funds. At present, these tasks are shared between the Planning Division, consulting City Forester, the Trails Subcommittee, and other volunteers.

Centralizing some of these responsibilities to a single paid position, a Trails and Open Space Ranger, will better provide the services the community has come to expect, and improve results by offering a presence on the trails, spreading awareness on issues as they arise, and clarifying roles and responsibilities currently juggled by multiple groups.



*Hoyt Marsh Trail*



**Table: Current and Recommended Trail Tasks**

	Who Does It? (X is primary, s is supporting)										
Category	City Forester		City Planning		Trails Sub- Committee And other Volunteers		Conservation Commission		Contracted Out		Ranger Position Recommended Jobs
	Current	Recomm.	Current	Recomm.	Current	Recomm.	Current	Recomm.	Current	Recomm.	
Bridges and Structures Construction/Maintenance	X	s			s	s					X
Down Tree Removal (chainsaws)	X	s			s	s					X
Light Trail Cleanup (minor litter and brush removal)	X	s			X	X					X
Dumping Removal	X								X	X	
Bi-Annual Trail Reporting					X	X					
New Trail Construction	X	s			X	X	s	s			X
Whether to Build a new Trail (checklist procedure etc)			X	X	X	X	X	X			
New Trail Layout	X	s			X	X	X	X			X
Trail Erosion/Drainage Maintenance/Re-routing	X	s			X	X					X
Maintenance Requiring Heavy Equipment	s	s							X	X	
Parking Lot Maintenance	X								X	X	
Parking Lot Snow Removal									X	X	
Trail Maps and Trail Guides			X	X	s	s					
Kiosk content	X		X	s	s	s	s	s			X
Trail Signage	X		X	s	X	s	s	s			X
Addressing Abutter Issues	X		X	s			s	s			X
Volunteer Database and Coordination - General			X		X						X
Community Service/School Volunteer Coordination	X	s	X		s						X
Manages Summer Trails Intern	X		X								Replaces
Point of Contact for Addressing Calls/ Concerns	s		X	s							X

## ROLES AND RESPONSIBILITIES, AND HUMAN RESOURCE NEEDS

Because Concord's trails are primarily on City Conservation Land, the Conservation Commission has most of the oversight. The Conservation Commission (and its Trails Subcommittee) are staffed by the Planning Division. As a result, the Planning Division has over the years become tasked with administering this large system of trails. Planning staff is often the recipient of a range of requests, concerns, and issues, and must direct and seek out existing resources to address them. While it is recommended that the Planning Division remain closely involved, the time and resources involved to address the expanding administrative and oversight tasks have extended beyond what they were even a few short years ago. The City would be better served having a designated person rather than continue to use highly skilled technical planning staff for administrative tasks.

On the ground, most of the trails work is done or overseen by the consulting City Forester, which is a contracted position. This is paid for through the Forestry Fund, which comes from revenue of timber sales on City land. The role of the Forester has grown to include tasks well above and beyond the typical role of a forester.

Concord is fortunate to have a dedicated consulting Forester who enjoys and is highly qualified to do this work; however, this setup is not sustainable in the long term. When the Forester retires, the City is unlikely to have the multitude of needs met by another consultant. Planning for a smooth transition when this occurs is a significant concern of Planning staff.

The third piece of the picture are the volunteers, many of which serve on the Trails Subcommittee of the Conservation Commission. These volunteers do great work, and as is typical, paid staff administrate and support their work. While



*A beloved outlook from the Marjory Swope Trails*

smaller trail and open space systems may be entirely volunteer based, the workload, the size and stature of Concord's trail and open space system require paid staff and oversight.

The above table summarizes some of the tasks required to maintain the open space trails system and the roles who are responsible for fulfilling them. It shows that much of the responsibility falls on the Planning Division and the consulting City Forester. As the nature and volume of trail work grows, the need for a position that focuses on trails and open spaces also grows. Such a position will also be better able to maximize volunteer contributions.

**RECOMMENDATION:** The City created a part time Trails and Open Space Ranger position to fulfill a range of roles and responsibilities for the City's trails and open spaces. If proved successful, it should become a permanent full time position, and a decision must be made on whether to pay for it thorough the General fund, Forestry fund, Conservation Fund, or a combination.

**RECOMMENDATION:** The city should hire an on-call contractor to address parking lot maintenance issues, and fund it through the forestry or conservation fund. This would be similar to snow removal contracts that are currently in place for some trailhead parking lots.



## DETERMINING WHERE AND WHETHER TO BUILD NEW TRAIL

The Planning Division, Conservation Commission, and the Trails Subcommittee have recently developed a checklist to use while determining whether to build a new trail. The checklist is described in Chapter 4 and can be found in the appendix.

**RECOMMENDATION:** Formalize the use of the checklist for every new trail proposal, and update the list as needed.

**RECOMMENDATION:** The Planning Division should report its findings to the Trails Subcommittee and Conservation Commission on whether or how the new trail proposal fits into the overall network strategy and goals described in the trails plan. Add to the checklist to discuss how the proposal fulfills the overall trail network strategy and goals, and use staff input in decision making.

**RECOMMENDATION:** At the discretion of planning staff, involve the Planning Board to assist with outreach, community decision making, and infrastructure review, and involve technical staff in the criteria review. Issues relevant to the Planning Board may include new parking, increases in motor vehicle traffic, or other matters deemed to be relevant to the community. Communication between municipal bodies can bring an important multidisciplinary perspective and long-range view to trail projects.



**RECOMMENDATION:** The location of proposed trails should be identified on the Trails for People and Wildlife heat map. It should be added to the checklist for an initial review of the trail's potential impact to wildlife. A more detailed review may be undertaken at a later stage of new trail development

## BUILDING THE DESIRED TRAIL NETWORK

Chapters 3 describes the vision for Concord's trail system. Chapter 4 describes what that network might look like. These chapters show how Concord can serve a wide range of abilities and uses and best serves the diverse needs of the community. The formula includes providing a wide range of trail types, and connecting trails to each other, connecting to places people want to go, and to connecting where people live and work.

**RECOMMENDATION:** The Conservation Commission, its Trails Subcommittee, and Planning Division should be tasked with reviewing the potential new trail and trail connections identified in Chapter 4, and strategically prioritize which to work on at any given time.

**RECOMMENDATION:** The Conservation Commission, its Trails Subcommittee, and Planning Division should evaluate ways to better connect trails to neighborhoods, especially in under-served neighborhoods like the Heights. This should be started by reviewing the neighborhood connections identified in Chapter 4.

**RECOMMENDATION:** The Conservation Commission, its Trails Subcommittee, and Planning Division should evaluate the perceived lack of accessible trails in Concord, and work with organizations who may assist in identifying locations and trail types to improve access to

nature for seniors and people with special mobility needs.

## URBAN TRAILS, SHARED-USE PATHS, AND RAIL TRAILS

There are a number of trail types described in Chapters 3 and 4 that would not fall under the typical Trails Subcommittee activities, including shared use paths, rail trails, and urban trails. The Community Development Department would take the lead on these trail efforts.

**RECOMMENDATION:** Community Development should work to incorporate shared use paths, rail trails, and urban trails into transportation planning projects and efforts city wide, particularly in the Opportunity Corridor, Langley Parkway, Downtown, and the abandoned railroad corridor from Downtown to Penacook.

**RECOMMENDATION:** If the construction of Langley Parkway is funded, it should incorporate the needs of trail and trail users by installing a shared use path along its route, providing trail crossings or underpasses where needed, providing trailhead amenities or parking where suitable, and planning how the project can accommodate the exiting trails in the area.

**RECOMMENDATION:** The City should purchase or otherwise secure trail access to the abandoned railroad property from Penacook to Downtown and convert it to a paved rail trail.

**RECOMMENDATION:** The City should work with the New Hampshire Department of Transportation (NHDOT) to include urban trails and trail connections as an integral element of the I-93 Bow-Concord Improvement Project, and ensure a complete streets approach is used to accommodate non-motorized transportation.

**RECOMMENDATION:** The City should ensure urban trails are incorporated into redevelopment of land in and along the



Opportunity Corridor by working with developers, and the Planning Board should consider codifying trails into zoning or other regulations by referring to the proposed network presented in this document.

**RECOMMENDATION:** Connectivity between any new urban trails and existing trails located on conservation lands should be coordinated between Community Development and the Conservation Commission.

## TRAIL STEWARDSHIP

Chapter 5 discusses Leave No Trace principles and identifies the most pressing areas of Concern in Concord. The discussion in the chapter can lead to a number of implementation efforts in the future to address these issues and other site-specific problems that may arise. A Trail Ranger would assist with implementation of these goals.

**RECOMMENDATION:** The City should continue its Leave No Trace Community Partner membership and take advantage of the assistance, resources, and training the organization offers.



**RECOMMENDATION:** The City should adopt the Authority of the Resource Technique (ART) in its education and awareness efforts.

**RECOMMENDATION:** The Trails Subcommittee should continue its Leave No Trace education efforts and focus on the 5 problem areas that were identified: reducing dog waste and the number of dogs off-leash, reduce the amount of trash, trailhead vandalism, and rogue trail building.

**RECOMMENDATION:** The Conservation Commission should develop consistent guiding principles on use of City open spaces, perhaps specific to individual properties. Individual trail decisions should be made based on those guiding principles. The Conservation Commission's Conservation and Open Space Plan Update should be referred to for such guidance, and the plan should be updated as needed. Established, documented principles may be helpful when potentially thorny trail related issues arise, including dog leash policies, trail closures, permitted trail uses, forestry operations, and hunting.

**RECOMMENDATION:** Partner with outside organizations like New England Mountain Bike Association on a range of activities, including awareness and education on issues like rogue trail building.

**RECOMMENDATION:** Maintain and improve community relationships by being available and responsive to issues that arise. Host property owners, abutters, and other's concerns should be address in a transparent, fair, and timely manner. Additional resources may be needed in order to continue to meet the high standard of service the City sets for itself.

## BI-ANNUAL TRAIL REPORTING AND ROUTINE MAINTENANCE

Twice per year, once in spring and once in the fall, volunteer trail ambassadors hike their

designated sections of trail and report on their condition and any work that may be needed. This is an excellent practice that should continue.

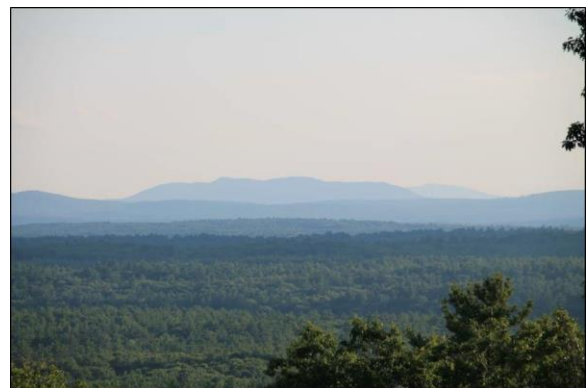
**RECOMMENDATION:** Further develop and refine the checklist for volunteers to conduct their bi-annual review to ensure volunteers know what to look for and ensure that all issues are reported as needed.

**RECOMMENDATION:** Finalize, formally adopt, and put into use the guide for trail maintenance practices that was developed in collaboration with the consulting City Forester.

## TRAILS FOR PEOPLE AND WILDLIFE

Chapter 6 discusses the various ways that trails can impact wildlife, and provides guidance on how to minimize impacts to wildlife. It is important to weigh outdoor recreation and the multitude of benefits it provides with the impacts that people have on the environment. These tools can help the City find a good balance and mitigate impacts.

**RECOMMENDATION:** After the initial review as part of the checklist, new trail proposals should be further evaluated on how trail routing might reduce potential impacts to wildlife. An analysis described in Chapter 6 should be performed at the discretion of the Conservation Commission and Planning staff, based on potential impacts and staff resources.



*The Vista from the top of the Winant Trails*

**RECOMMENDATION:** The Conservation Commission should evaluate its suite of properties to identify “ambassador” properties to host trails and people, and others where disturbances should be minimal.

**RECOMMENDATION:** The Conservation Commission should take careful consideration of impacts to wildlife for any trail development in the Broken Ground area north and east of the existing City conservation property and trails. There is a relatively large trail free area as well as relatively high potential for impacts to wildlife in this area.

### **KEEPING THE FORESTRY FUND SUSTAINABLE, AND OTHER FUNDING SOURCES**

Much of the funding for trails comes from the Forestry Fund, but over the long term, trails may impact the revenues that come in from harvests on City properties. This situation is described in Chapters 1 and 5.

**RECOMMENDATION:** The long term impacts of trails to the Forestry Fund and the relationship between trails and forestry should be evaluated. Plans and strategies may need to be adjusted to ensure that both are sustainable long term.

**RECOMMENDATION:** Outside funding sources such as grants and donations should be better leveraged to support trail activities and reduce the burden on the Forestry Fund and Conservation Fund.

**RECOMMENDATION:** Sponsors and donors should be sought to fund specific trail developments and improvements in order to reduce the reliance on the Forestry Fund and/or to provide a higher level of service that would be otherwise possible.

