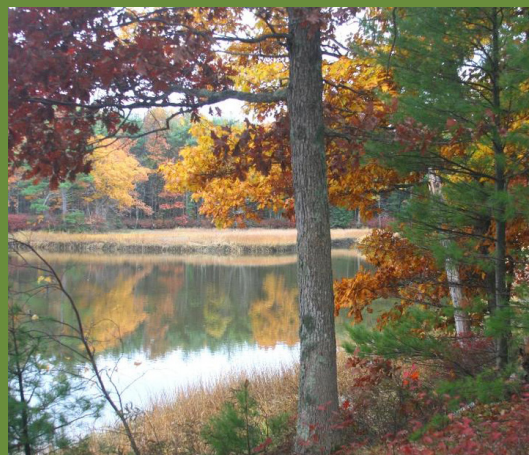


# PRESERVING NATURAL DOVER

A Framework for Conservation and Open Space in Dover



City of Dover  
Master Plan  
Adopted January 14, 2025



# ACKNOWLEDGMENTS

Thank you to all the people who have contributed to the creation of this Master Plan chapter, especially the Conservation and Open Space Steering Committee. Their contribution and commitment to the future of open space protection and conservation in Dover is applaudable. Special thanks are also given to City staff and the consulting team for providing critical support and guidance through the completion of the chapter, as well as the public who further informed the chapter's direction.

## **City of Dover Staff**

- Jackson Kaspari, Former Resilience Manager
- Erin Bassegio, Outreach Coordinator
- Donna Benton, AICP, Director of Planning and Community Development

## **Steering Committee Members**

- Tom Fargo, Former Chair of the Conservation Commission
- Kristen Murphy, Vice-Chair, Open Lands Committee and Conservation Commission Member
- Dennis Shanahan, Deputy Mayor and Chair
- Mark Speidel, Planning Board Member
- Russ Warnock, Conservation Commission Member
- Lindsey Williams, Councilor and Alternate Member

## **Consultant**

- Resilience Planning and Design





# TABLE OF CONTENTS

<b>1. INTRODUCTION</b>	<b>4</b>
Purpose and Definitions	5
Planning Process	6
Vision for Dover's Open Space Network	9
Guiding Principles	10
Opportunities and Challenges	11
Dover's Conservation Legacy	13
What Did Our Community Say?	14
<b>2. FUTURE PRIORITIES</b>	<b>15</b>
Priority Resources	17
Using the Co-Occurrence Results	20
Open Space Investment and Improvements	21
Targeted Areas for Open Space Improvements	22
<b>3. EXISTING OPEN SPACE</b>	<b>24</b>
Conservation Land in Dover	25
Conservation Tools	27
Current Use	28
Public Access	28
<b>4. ACTION PLAN</b>	<b>29</b>
What's Next?	30
Action Matrix	31
<b>APPENDIX</b>	
A. Existing Conditions Analysis	
B. Co-Occurrence Analysis Datasets	
B. StoryMap Results	
C. Polco Results	
D. 1999 Conservation Fund Document	





# 1. INTRODUCTION





**Dover's diverse natural resources and conservation lands contribute to the quality of life, health, ecology, and identity of our city. Protecting the forests, fields, rivers, wetlands, and wildlife are an integral part of Dover's efforts to become a more resilient place to live.**

## **PURPOSE**

The Conservation and Open Space Chapter of Dover's Master Plan is meant to guide future land conservation activity over the next 10 years. This chapter will also inform natural resource protection efforts, and steer improvements to existing open space such as enhancing public access, stewardship, and amenities. It reflects the City's evolving land protection and resilience priorities, and incorporates best practices in open space and natural resource management.

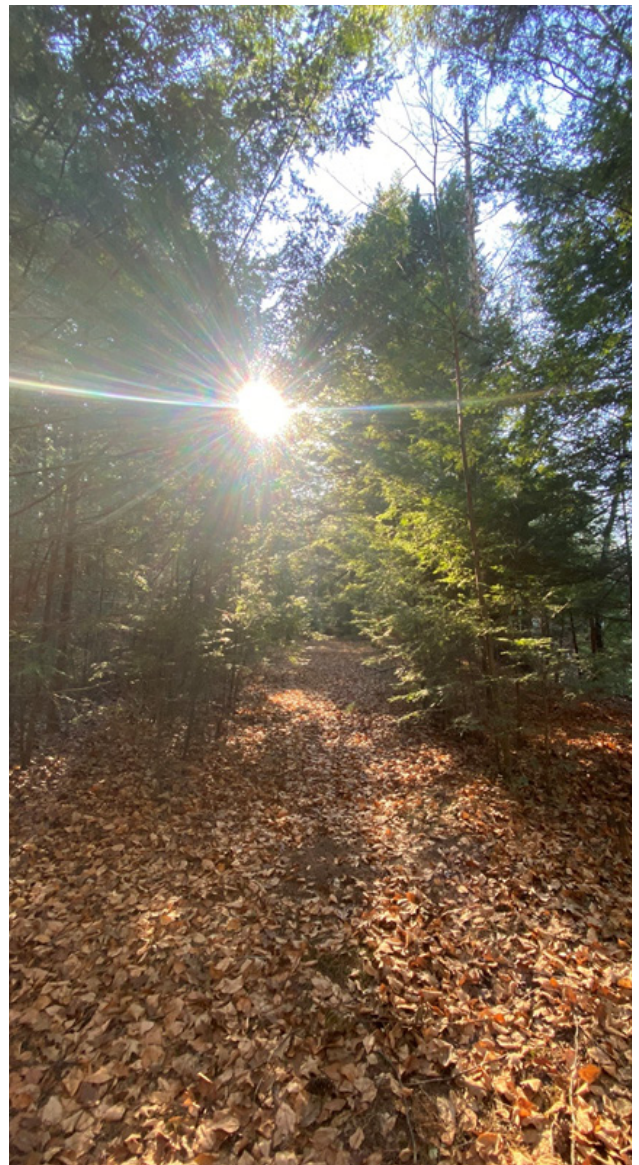
Dover's protected natural lands are some of the most beloved places in the City - the Community Trail, the Cochecho River, Great Bay, Willand Pond, the Bellamy River Wildlife Sanctuary, and various public parks. These are places community members visit, recreate at, and enjoy as part of their day-to-day life. Aside from protected land, there are still tracts of undeveloped land in the city that are not protected with important natural resources present. Dover's natural lands ensure clean water and air, serve as habitat for wildlife, and increase Dover's resilience to natural hazard events. Conserving the most important unprotected land will protect sensitive natural resources from development and other potential impacts. This chapter prioritizes the most significant areas of the city identified for conserving, (informed by an analysis of open space resources and public outreach), and outlines other open space protection and enhancement efforts beyond land conservation to pursue over the next 10+ years.

## **DEFINITIONS**

Conservation land has a clear definition and is strictly guided according to federal and state law, while open space is often a generic term with ambiguous meaning. Although further nuance exists with both terms, the definitions on the following page can be used to help in understanding the broad similarities and differences between them.

**"We are a City with an emerging urban vibrancy, guided by intentional growth to create connected neighborhoods, attractive streetscapes, and accessible open space, while maintaining what makes Dover distinct."**

*A core pillar of the Distinctly Dover Vision*



**OPEN SPACE** broadly refers to undeveloped public and private land offering scenic, natural, recreational, agricultural, or historical benefits. However, open space lands can be developed at any time, which would likely harm or reduce the benefits provided as open space.

**OWNERSHIP** - Open space lands can be publicly or privately owned.

**LEVEL OF PROTECTION** - Open space lands have no legal agreement prohibiting future development.

**CONSERVATION LAND** is property that has a legal agreement prohibiting future development by protecting its conservation values including water quality, wildlife habitat, recreational offerings, scenic views, agricultural resources, and more.

**OWNERSHIP** - Conservation lands can be publicly or privately owned.

**LEVEL OF PROTECTION** - Conservation lands are legally and permanently protected forever.

## PLANNING PROCESS

Dover developed the Conservation and Open Space Chapter with a consultant, Resilience Planning and Design, in a collaborative effort led by City staff and guided by a steering committee. The main phases of this project included:

### ANALYZING EXISTING CONDITIONS

A separate Existing Conditions Summary (Appendix A) was created to summarize what was learned about Dover's existing open space network including primary land holders, types of open space, accomplishments in conservation, and the level of public access of existing open spaces. Many documents were reviewed and researched to compile this summary, which then served as a basis for the creation of this chapter. The Natural Resource Inventory, compiled by the Strafford Regional Planning Commission, informed this chapter greatly, inventorying all natural resources throughout the city. This chapter is focused on the actions associated with land protection and improvements to Dover's open space.

### STEERING COMMITTEE GUIDANCE

The Steering Committee provided input throughout the planning process, including determining the future land protection priorities.

### DEVELOPING A CO-OCCURRENCE ANALYSIS

The areas determined as priorities for conservation were mapped. By overlapping these layers, the City identified areas with greater numbers of co-benefits that connect to the identified priorities the City laid out - **groundwater protection, hazard mitigation, and wildlife habitat**. If multiple priority resources are found in an area, the greater conservation value that area has. This process of mapping the distribution of different resources

*"The bottom line is that conserved land is open space, but open space is not necessarily conserved because it lacks formal protection. There is a chance open space lands get developed and, if so, they are gone forever. The added formal protection of conserved land is critical if we want to keep special open spaces around for the future."*

*- Conservation and Open Space Master Plan Chapter Committee Member*

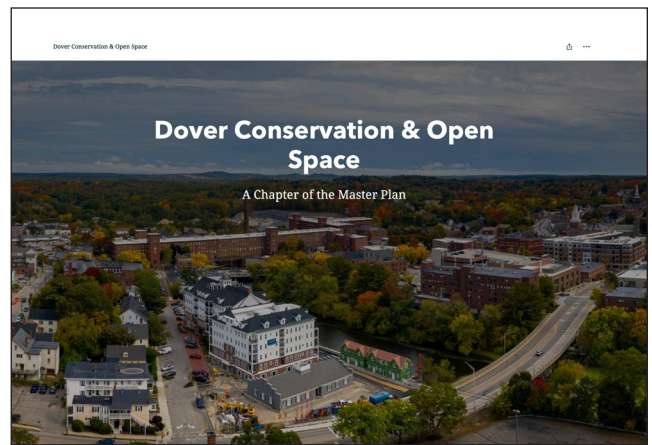


and looking at where they overlap is called a co-occurrence analysis. This type of strategic resource prioritizing is helpful for cities looking to make intentional and targeted conservation efforts.

### REACHING OUT TO THE COMMUNITY

Dover needs public input to ensure that future planning for land conservation and open space protection aligns with community priorities. The city coordinated several outreach activities to ensure residents and community members were able to give input on future conservation efforts including

- **In-Person Outreach Event**  
This event was coordinated in conjunction with Strafford Regional Planning Commission and the Natural Resource Inventory project that was also underway to collect feedback on important open spaces and natural resources to focus protection efforts on.
- **Online StoryMap Survey**  
A StoryMap survey was developed to tell the story of Dover's conservation legacy and get feedback on preliminary conservation focus areas through a short embedded survey.
- **Polco Survey**  
A brief survey hosted on Polco was developed to learn what Dover community members loved about our city's open space.
- **First Five Minutes Announcement**  
A project announcement was read at all municipal board/committee meetings at the start of the project.
- **Physical Display in City Hall**  
A map and poster advertising the project were on display in City Hall.



- **Project Webpage and Advertising Materials**

A project webpage on the City's website provided information on the project. Images were created and shared on social media and printed to advertise all the ways for the public to get involved.

### CREATING AN ACTION PLAN

Guided by City staff and the Steering Committee, an action plan was created to guide future efforts, policy changes, conservation initiatives, and more. This will ensure the chapter does not "sit on a shelf" and that a clear plan for implementing the framework is articulated. These actions, along with the public feedback and the research conducted, informed the creation of this chapter.

The Implementation section outlines these actions in a matrix with categories for responsible parties, level or priority, and others. This will help the city track actions in a coordinated way. The primary implementation teams of this chapter will be city staff, the Open Lands Committee, the Conservation Commission, and the Planning Board in partnership with other land protection agencies and organizations, volunteer groups, and property owners.

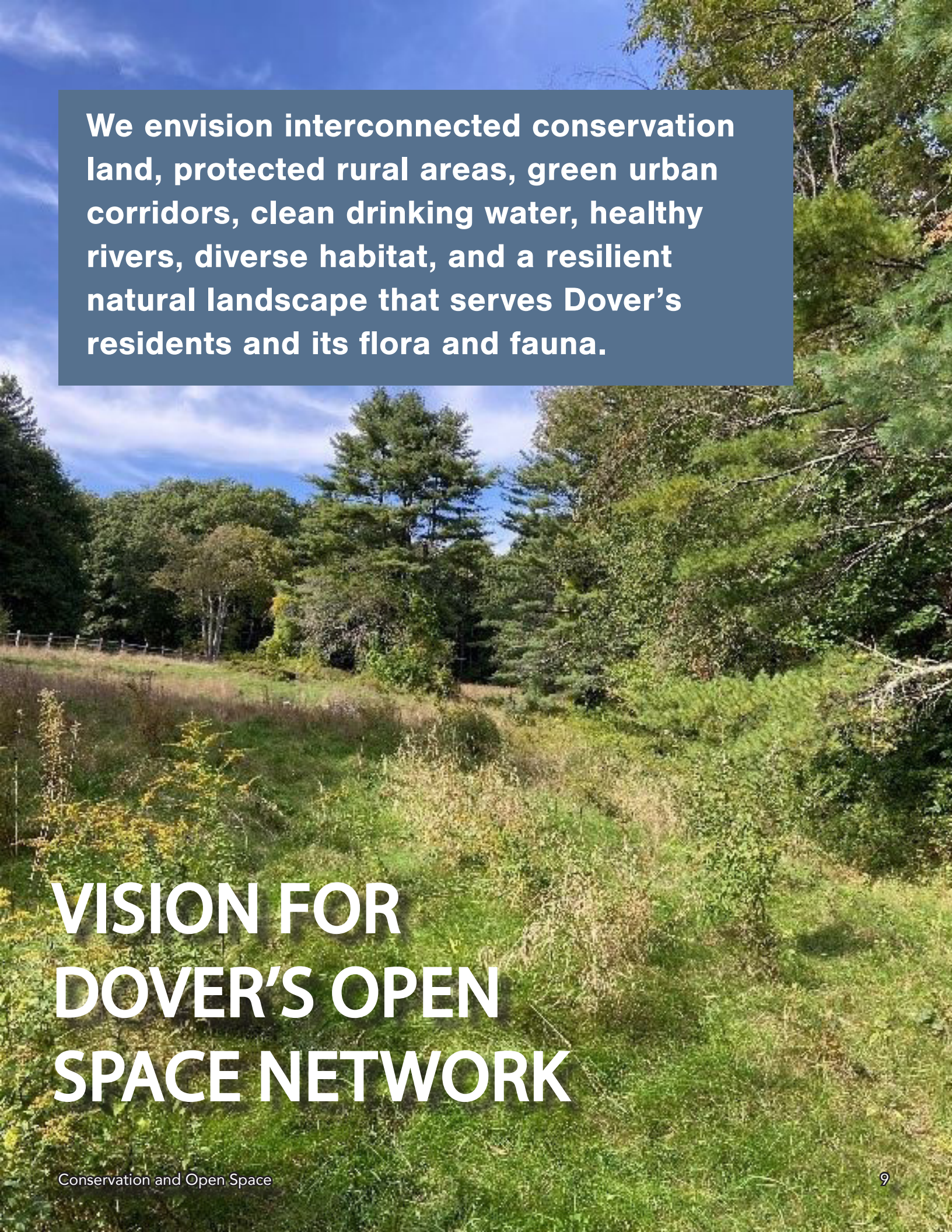
## Dover's Conservation and Open Space Protection Action Plan

To achieve a well-connected open space network in the city, actions fall under the following themes:

- Conservation Priorities
- Connectivity Efforts
- Stewardship and Amenities
- Regulatory Initiatives
- Relationship Building
- Communication
- Data Analysis







**We envision interconnected conservation land, protected rural areas, green urban corridors, clean drinking water, healthy rivers, diverse habitat, and a resilient natural landscape that serves Dover's residents and its flora and fauna.**

# **VISION FOR DOVER'S OPEN SPACE NETWORK**





## GUIDING PRINCIPLES

### Dover will aim to:

**CREATE** a well-connected open space network by conserving parcels adjacent to already protected lands, and protecting river corridors and green roadways to serve as connectors between larger open space areas.

**PROTECT** ecosystems that provide critical services including clean water, clean air, carbon sequestration, flood protection, and habitat.

**ENSURE** every Dover resident can access open space within a 10-minute walk from their home.

**COMMUNICATE** Dover's conservation priorities to the public, property owners, and land protection partners.

**BUILD** public access into future conservation efforts and expand public access at existing open spaces, where appropriate.

**FORGE** strong relationships with conservation partners.

**EXPAND** public knowledge of Dover's existing open spaces to the public to encourage their use, stewardship, and connection to nature.

**INCREASE** our resilience to existing and potential climate change impacts, including flooding, by strategically conserving land.



## OPPORTUNITIES AND CHALLENGES

As Dover plans for strategic land conservation, greater stewardship, and improved public access of its important open spaces, there needs to be a thorough understanding of the opportunities and challenges the city faces to reach this goal.

### INCREASING PUBLIC ACCESS AND KNOWLEDGE OF DOVER'S OPEN SPACES

Public access to protected lands is important. Access to nature is linked with better community health and wellbeing. Dover also needs its residents to truly care about its open space, since its so important to the character and livelihood of the city. A greater connection with these spaces is one way to promote that connection. Currently, one-third of all permanently protected land in Dover allow full public access. Increasing public access will allow more opportunities for community members to utilize the open space assets currently available in Dover. Additionally, some parcels that allow full public access need improvements related to signage, wayfinding, amenities, and public education as to appropriate use of the land.

### BALANCING LAND PROTECTION AND DEVELOPMENT

The tension between protecting open space and allowing development has been a reality in New Hampshire for quite some time. Development is necessary and important to meet the housing, economic development, and human service needs of our community. However, some development can have negative consequences if not well-planned, such as harming the natural ecology of a site or impacting quality of natural resources. There are concerns from community members about Dover's quantity and quality of its groundwater as development continues in the City.

Dover also has pressing affordable housing needs that will have to be addressed now and in the future. The increase in homelessness across New Hampshire, including Dover, has been driven by rising housing costs, limited affordable

housing options, and a number of other issues. These issues do not need to work against each other. Well-coordinated development backed with appropriate land use regulations and in conjunction with strategic land conservation is a balancing act, but can ensure that all goals are met in a way that preserves the rural character of the city and its environmental resources.

One of Dover's regulatory strategies used to protect valuable open space, such as wetlands, groundwater recharge zones, forested areas, and farmland, is called Transfer of Development Rights (TDR). The purpose of the TDR Ordinance is to promote more intensive development in areas served by public infrastructure that do not possess significant conservation features, and to permanently protect lands possessing significant conservation features. In its current form, the provisions of the TDR Ordinance are broadly applicable throughout the City, including in areas identified as Rural Residential. Due in part to growing awareness of the ordinance, the





City has seen an increase in development proposals within these rural areas, resulting in growing resident concern about the effects of intensification in areas beyond the walkable limits of the downtown area. Periodic review and analysis of the TDR Ordinance in relation to addressing both open space protection and development needs will be necessary to ensure its continued effectiveness over time. There is also an opportunity to strategically designate more yield (potential units/density) in some areas and less yield (potential units/density) in others through the use of a TDR.

**“Resilient lands not only benefit plants and animals—they ensure clean air and water, protect communities from extreme storms and flooding, and provide open green spaces for nearby communities.”**

*- Markelle Smith, The Nature Conservancy*

### CLIMATE CHANGE

As an inland coastal community, Dover is particularly susceptible to flooding in low-lying areas along the Bellamy River, Piscataqua River, at the confluence of the Cochecho River and the Salmon Falls River, and along the shores of Little Bay. Natural hazards, especially flooding, are only increasing as the impacts of climate change continue to shape our weather patterns in the

northeast. Climate change is also presenting new challenges such as salt water intrusion impacting underground sources of drinking water, loss of important natural resources, and species migration. More frequent, higher volume precipitation events are occurring annually. Dover’s natural lands, especially its flood protection areas, shorelines, riparian zones, and wetlands, and are critically important for their flood storage services.





## DOVER'S CONSERVATION LEGACY

The history of local environmental protection, land conservation, and stewardship is well documented in Dover. In 1973, the first Open Space and Recreation Plan was developed to preserve the rural character of Dover and subsequent policies were put in place to guide development from that point. Today's network of open spaces and recreational offerings is a testament to the level of forward-thinking, dedication by the city's residents and staff for more than 50 years. This rich network of public open spaces, conservation lands, sensitive habitats, and recreational offerings sit just below the surface of people's general understanding of Dover and they are waiting to be sought out and expanded.

One of the most consequential items in Dover's 50+ years of conservation efforts was the 2000 Open Space & Recreation Chapter of the Master Plan. Among the many recommendations, some of the most significant included:

- Establish a standing Open Space Committee,
- Develop clear criteria for open space acquisition and protection,
- Prepare a detailed open space acquisition plan,
- Create a mechanism for the funding of and acquisition of property, and
- Complete an accurate inventory of currently protected open space parcels.

Between 2000 and 2012, more than 1,000 acres of conserved land was added to Dover's protected landscapes through conservation easements alone. The amount of permanently conserved land in Dover has increased 22% between 2012 and 2024. Nearly all the 672 acres added since 2012 expand on already existing conserved land and much of it is overseen by the City of Dover. Also, nearly all the land conserved since 2012 is within a quarter mile of the main stem and tributaries of the Cochecho and Bellamy Rivers, which displays the focus on those natural resources. Appendix D discusses the 1999 Conservation Fund, which played a major role in funding city conservation efforts over the last few decades.





## WHAT DID THE COMMUNITY SAY?

Dover residents and community members weighed in and shared their thoughts on the future of open space protection in the city. Highlights of what we heard from the StoryMap survey and the Polco survey are outlined below. Appendix B and C include the raw results collected.

### FUTURE PROTECTION

Survey respondents ranked their highest priorities for future open space protection. The highest priority was important wildlife habitat; the second highest priority was groundwater quality and quantity; and the third highest priority was hazard mitigation land (or land that contributes hazard mitigation functions, like flood storage).

### FAVORITE EXISTING OPEN SPACES

Survey respondents identified favorite open spaces in the city. These included the Community Trail, Bellamy River Wildlife Management Area, trails along the Cochecho River, Willand Pond, Barbados Pond, Bellamy Wildlife Preserve, and the Garrison Tower area.

### EXISTING OPEN SPACE IMPROVEMENTS

Survey respondents identified Bellamy Park, Bellamy River Wildlife Management Area, the athletic fields, the Community Trail, and the Berry Brook Watershed as needing improvements.

Survey respondents indicated specific improvements are needed to enhance Dover's existing conservation lands. These include: better parking, forest management, more communication about the city's conserved lands to the public, better trail maintenance, invasive species management, better wildlife assessments, and more river access for kayaks and canoes.

### ACCESSIBILITY IMPROVEMENTS

Survey respondents also identified areas in the city that need increased public accessibility. These included the northwest areas of the city, County Farm, Berry Brook Watershed, and the Community Trail. Noted accessibility improvements include better winter maintenance of trails, paths and trails of higher condition, more paved paths for mobility devices, and better parking and signage.





## 2. FUTURE PRIORITIES





Dover's conservation landscape is changing. The dramatic expansion of protected open spaces in the late-1980's and early-1990's, and again in the mid-2000's, combined with busy periods of development activity, have forever altered the remaining land available for future conservation efforts.

At this point, Dover needs to begin taking steps to adapt to this new landscape and to protect the remaining connections between resources and open spaces that are still available. Instead of exclusively looking for large swaths of intact habitat, the City needs to be forward-thinking, creative, and deliberate in identifying the projects to focus on. To develop a targeted and strategic land conservation strategy, the City completed a co-occurrence mapping analysis to identify priority resource areas and focus future conservation efforts. This type of strategic resource prioritizing can be a helpful exercise for cities looking to make intentional and targeted conservation efforts.

The Dover Open Lands Committee, composed of local volunteers and City staff, is dedicated to protecting open space in the City of Dover and, where appropriate, making it accessible to the community. The Committee partners with willing landowners to conserve ecologically and culturally significant resources for current and future generations to enjoy. The Committee conducts regular monitoring to ensure compliance with conservation easements and address any issues. They work to balance accessibility with environmental protection by developing appropriate public access, such as trails or educational signage. The Committee also secures and recommends funding for conservation projects and infrastructure improvements and fosters community engagement by hosting events and training and coordinating volunteers.

## A co-occurrence analysis maps and layers high priority natural resources to identify areas that have the greatest concentration of ecological value.

Three conservation priorities were identified based on public input, City staff, Dover's 2024 Natural Resource Inventory, and the existing priority checklist the Open Space Lands Committee uses when evaluating and ranking potential properties to protect. The determined areas of greatest conservation importance to help direct efforts over the next 8-10 years are:

### GROUNDWATER QUALITY AND QUANTITY



Protecting the quality and quantity of groundwater resources, including aquifers and wellhead areas

### HAZARD MITIGATION LAND



Protecting people and property from natural hazards, including sea level rise and erosion

### IMPORTANT WILDLIFE HABITAT



Protecting resources that sustain wildlife populations and movements, including forests and corridors



## PRIORITY RESOURCES

### GROUNDWATER QUALITY AND QUANTITY

It's crucial for public health to protect the quality and quantity of Dover's existing and potential drinking water sources, particularly as the population grows over time and development continues. The co-occurrence analysis examined groundwater resources by mapping stratified drift aquifers and wellhead protection areas (which are areas under which groundwater flows to a producing well).

### HAZARD MITIGATION LAND

Hazard mitigation land includes lands that are important for Dover's resilience to natural hazards including flooding, sea level rise, and erosion. As a coastal city, Dover has demonstrated its commitment to resilience. Conservation of natural lands also play a significant role when increasing resilience.

The co-occurrence analysis examined hazard mitigation land by mapping predicted sea level rise extent (6 feet), the 100-year flood zone, a model of sea level rise projections affecting marshes, poorly drained soils, and steep slopes.

### IMPORTANT WILDLIFE HABITAT

There is a desire to ensure wildlife has adequate habitat to exist in Dover, and for providing habitat for wildlife movement within Dover. This strategy requires areas of large, in-tact habitat for populations and green corridors that facilitate their movement. The co-occurrence analysis examined wildlife habitat by mapping New Hampshire Fish and Game's Wildlife Action Plan priorities, prioritized habitat blocks, wildlife corridors, forested land, conservation land, and conservation focus areas.

The conservation focus areas are prioritized below:

GROUNDWATER  
QUALITY AND  
QUANTITY



→ 1ST PRIORITY

HAZARD  
MITIGATION  
LAND



→ 2ND PRIORITY

IMPORTANT  
WILDLIFE HABITAT

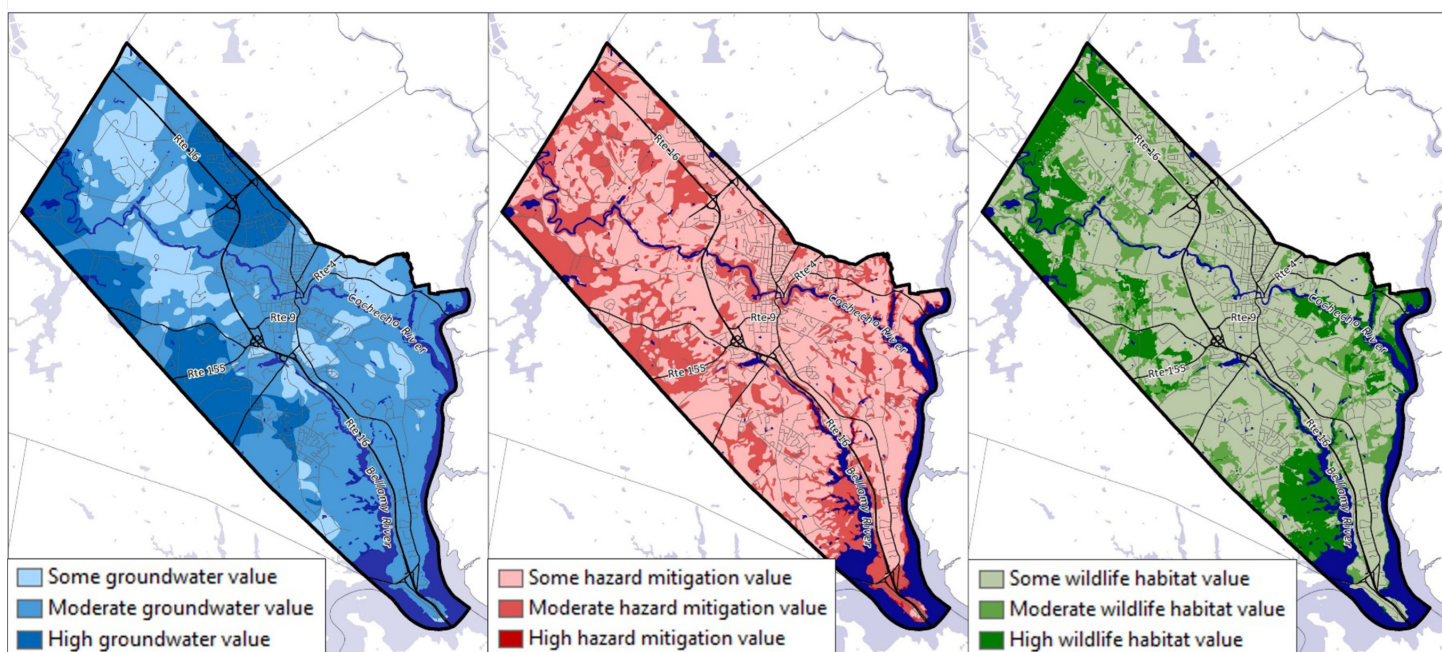


→ 3RD PRIORITY

Groundwater Resources

Hazard Mitigation Land

Important Wildlife Habitat

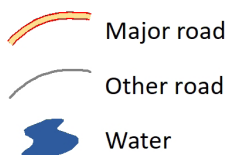




The priority resources were then overlaid on top of each other. By overlapping these layers, the city can identify areas with greater numbers of co-benefits that connect to the priorities identified— groundwater quality and quantity, hazard mitigation, and wildlife habitat. If multiple priority resources are found in an area, the greater conservation value that area has. This process of mapping the distribution of different resources and looking at where they overlap results in the refined co-occurrence analysis shown on this map.

## CO-OCCURRENCE RESULTS

### CONSERVATION VALUE





The City of Dover has a total of 18,600 acres within the municipal boundary. Of that, two-thirds of that acreage is either conserved, developed, or water. This leaves one-third of all land in Dover still available for future conservation or development. More than 40% of the remaining available land in Dover has moderate conservation value based on the three priority areas identified. Eleven percent (670 acres) of the remaining undeveloped land available has high conservation value.

## CO-OCCURRENCE RESULTS WITH DEVELOPED AND CONSERVED LAND

### CONSERVATION VALUE



- Conserved land
- Developed area
- Community Trail
- Major road
- Other road
- Water

*Note: The Community Trail as shown includes the proposed Phase IV expansion of the trail.*



## Some key takeaways from this co-occurrence analysis are:

- There is a high amount of high conservation value land that is already protected, which is a testament to Dover's past conservation efforts.
- Most – about 70% – of the high conservation value land that remains available is northwest of Routes 155 & 4. This shows that the most significant high value conservation land exists in this part of Dover.
- Much of the high conservation value land that is southeast of Routes 155 & 4 is predominantly located within ~500 feet of the Cochecho, Bellamy, and Piscataqua Rivers.
- Two-thirds of the high conservation value land is within a quarter of a mile of the main stem and tributaries of the Cochecho and Bellamy Rivers. This shows just how significant these natural resources are for future conservation efforts in Dover.
- About 90% of the high conservation value land is also within 500 feet of existing conserved land. This provides Dover with a lot of opportunity to expand and connect existing protected areas.
- More than 40% of the remaining available land in Dover has moderate conservation value based on the three priority areas identified. Eleven percent (670 acres) of the remaining undeveloped land available has high conservation value.

## USING THE CO-OCCURRENCE RESULTS FOR FUTURE CONSERVATION EFFORTS

The co-occurrence analysis is meant to serve as a tool to help guide future conservation and land investment efforts. The map and data can be used to identify areas for future conservation efforts that have the greatest potential for multiple benefits based on the three priorities set. These can be broad areas that expand or connect the existing network to achieve Dover's long-term conservation goals. From there, understanding which priority resource categories underlie the co-occurrence result will help tailor improvements and identify funding sources to make a project a reality. Determining whether the area is valuable for groundwater protection, hazard mitigation, wildlife habitat, or more than one priority conservation value, will help in this and later steps. The City should communicate these co-occurrence areas to the public to generate interest among landowners in strategic conservation and to highlight the places rich in natural resources in the city.





## OPEN SPACE INVESTMENT AND IMPROVEMENTS

Dover's existing open spaces are varied and diverse. Some need improvements to be more accessible to the public, to enhance the user experience, or to meet land management objectives. Broadly, improvements for future conservation efforts fall into several categories:



**Accessibility improvements** ensure residents and visitors can access the properties safely and easily. Examples include publicizing lesser-known locations, developing and installing appropriate signage, ensuring sufficient parking, and ensuring the properties are physically accessible to those that visit. This might also include inventorying trail surfaces and, where appropriate, making sure they are safe and usable for all, or removing barriers for populations with varying abilities.



**Amenity improvements** include infrastructure to support the visiting of a property. Examples could range from large-scale restroom facilities at more popular destinations, to installing kiosks at specific trailheads or adding more trash receptacles at appropriate locations.



**Recreation improvements** include enhancing visitor enjoyment on properties supporting recreation. Examples include connecting and expanding trail networks, re-routing or elevating a trail above a wetland or developing trails that are safe for users to existing resources.

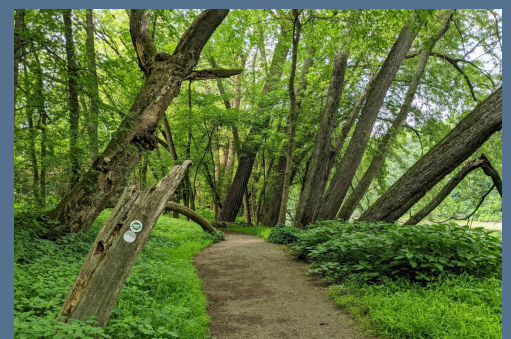


**Stewardship improvements** include enhancing land management techniques to promote healthy ecosystems and increase nature-based climate solutions. Examples include invasive species management, sustainable trail design to mitigate erosion, planting native vegetation, reducing mowing frequency, and sustainable forest management.

Dover's existing conserved lands and open spaces may need improvements in one or more of these categories. Developing a comprehensive improvement inventory of existing conserved lands and open spaces would be a good first step towards prioritizing projects. This should build upon the inventory of recreation facilities outlined in the Recreation Master Plan chapter. These improvement categories can also be applied to future conservation efforts, in conjunction with the co-occurrence results.

## CASE STUDY: BURLINGTON WILDWAYS

The following case study is meant to inspire future wayfinding and branding efforts around Dover's open space network. **Burlington Wildways** is a partnership that operates out of the Burlington area of Vermont that connects and protects wild places and paths. As a collective, they strive to create a world-class shared trail network, conserve the plants and diverse animals of the area, and provide equitable and inviting access to the many natural areas in the city and adjacent communities. The partnership includes the city's parks and recreation department, local conservation board, city council, and key open space holders including the Intervale Center and Rock Point. The Burlington Wildway trail is a 5.5 mile trail that traverses the city and connects multiple conserved parcels. Its well-marked with personalized Burlington Wildways logo blazes and maps for easeful wayfinding and to create a cohesive personality around Burlington's shared sense of place. A unified brand for Dover's trails has the potential to cultivate community around Dover's conservation land and outdoor recreation.





## TARGETED AREAS FOR OPEN SPACE IMPROVEMENTS

The following open space assets were identified for potential open space improvements. The icons that correspond to the improvement categories on the following page illustrate the types of improvements needed at each location.

### BELLAMY RIVER WILDLIFE MANAGEMENT AREA

The Bellamy River Wildlife Management Area (WMA) represents a tremendous open space resource with important wildlife habitat. It also provides moderate groundwater and hazard value, and provides exceptional recreational value to the community with over 3.5 miles of walking/hiking trails. With 400 acres of contiguous, publicly accessible natural land less than 5 miles from downtown Dover, there is a lot of opportunity for the City to invest in this resource, and improve the communities' knowledge of it.

In addition to a lack of awareness of the Bellamy River WMA, it is difficult to find, and can be challenging to navigate for buses looking to bring groups. Two gates also exist on the property – one at the parking area and another ~400 feet down the gravel road. If closed, these gates offer a significant barrier to those unable to navigate around or under them to access the property. Publicizing Bellamy River WMA, increasing signage and adequate parking, and ensuring easy access around the gates are ways of improving and increasing accessibility to the property. The Bellamy River WMA is owned by NH Fish & Game; because of that, the City of Dover would need to approach the agency with any proposals for changes.

### STRAFFORD COUNTY FARM

The Strafford County Farm complex consists of over 200 acres of contiguous conserved land abutting the Cochecho River. The property offers high groundwater and wildlife habitat



value relative to the identified conservation priority categories, and untapped recreational opportunities. The properties are owned by Strafford County with easements held by the Society for the Protection of New Hampshire Forests (SPNHF). Both interest holders have expressed willingness to improve the land. Although some walking/hiking trails exist, they could be expanded. There is also a little-known canoe/kayak launch offering exceptional public access to the Cochecho River; however, the launch point is both difficult to find and uncomfortable given it is accessed through the County Complex parking areas behind institutional-looking buildings. Because of the limited public boat launches on the Cochecho River, providing a well-signed and safe access route to the canoe/kayak launch could be a unique opportunity for Dover. Like the Bellamy River WMA, the City of Dover does not maintain a legal interest in these properties and, thus, would need to approach Strafford County and SPNHF with proposed improvements.

### DOVER COMMUNITY TRAIL

The Community Trail is Dover's most well-known stretch of open space. Since the 1990's, the City has acquired rights-of-way providing opportunities for both recreation and alternative transportation for residents and visitors. Following a former railroad bed along sections of the Cochecho and Bellamy Rivers, the Community Trail is a popular greenway linking conservation and open space lands with the urban downtown and other key locations





such as the Transportation Center Lot. Future plans for the Community Trail are already underway. These plans include exploring expansion of the trail into more rural parts of Dover and eventually connecting with trail networks in surrounding communities. A natural first step could be to extend the trail's northern terminus from its current location at the Watson Road Trailhead adjacent to the Seacoast Charter School to the Strafford County Farm complex less than 1 mile away. Other improvements could include developing a cohesive and unifying signage program for all access points along the Trail, and inventorying the trail surface quality to ensure it's safe and accessible for all residents including seniors and/or anyone requiring a mobility device. Because the City maintains the Trail and road crossings, these are actions the City could move more quickly with.

As is seen through the Community Trail, recreation can be a significant player in conservation and open space efforts. Because the Community Trail is so well-respected, it can be used as a catalyst for future conservation efforts. Finding ways to expand the trail network linearly is one approach, while developing spur trails is another. For example, the southern extent of the Community Trail terminates on Route 155 on a property the City of Dover holds a conservation easement on – New Meadows conservation easement. From that property, a more than 350-foot-wide corridor of high conservation value heads directly west to another conserved property owned by the City of Dover. Based on the resource inputs for the

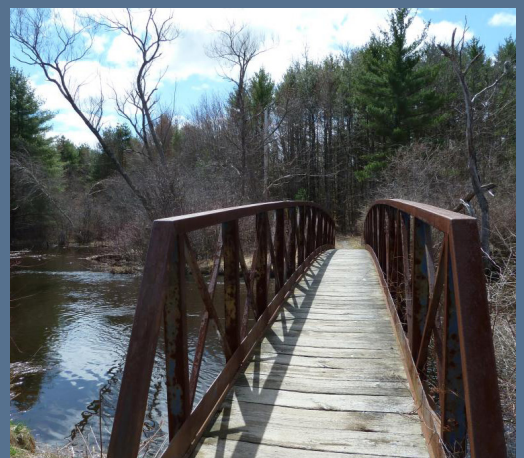


co-occurrence, this area consists of high groundwater value, moderate hazard mitigation value, and moderate/high wildlife habitat value. Knowing that, funding sources could be tailored to fit the priority resource categories to expand and connect these existing conserved lands.

In the same area, north of the Community Trail trailhead on the north side of Route 155 lies a ~160-acre block of mostly moderate conservation value land according to the co-occurrence results. This has the potential to expand the network of existing conserved lands. Additionally, it is natural to consider extending the Community Trail through this area to Littleworth Road.

## CASE STUDY: EXETER TRAIL PASSPORT

The following case study is meant to inspire future wayfinding and branding efforts around Dover's open space network. **The Exeter Trail Passport Program** is a way for local youth in Exeter to experience the trails in town. The passport is a booklet that highlights four short-distance trail areas to explore. Passport rubbing stations are set up at each of the trails that can mark where you have been in each person's passport. Completing at least three sites makes you eligible for a prize that can be picked up at the Planning Department. This is a program that could be replicated in Dover to engage youth and promote Dover's trail system.







### 3. EXISTING OPEN SPACE





**Dover’s existing open space network consists of many types of properties including traditional conservation land, subdivision set aside land, current use land, farms, pocket parks, and green roadways planted with street trees. While not all are technically conserved, each of these open spaces, whether small or large, contribute to the natural ecology and resilience of Dover.**

## CONSERVATION LAND IN DOVER

There are approximately 3,700 acres of permanently conserved land in Dover. This is 22% of Dover’s land area. The City of Dover oversees nearly half of all existing conserved lands. Other conservation organizations oversee the remaining lands (see Table 1). About two-thirds of conserved lands are northwest of Routes 4 and 155, in the more rural parts of our city. Nearly 90% of all conserved lands are within a quarter of a mile of the main stem and tributaries of the Cochecho and Bellamy Rivers. Dover’s conservation lands include wildlife management areas, subdivision set aside land, and state-owned open space, among others. Map 1 on the following page shows the distribution of conserved land throughout the city by primary protection agency. The primary protection agency is the entity that is most directly responsible for management and protection of the property.

Between 2000 and 2012, more than 1,000 acres of conserved land was added to Dover’s protected landscapes through conservation easements alone, expanding Dover’s conservation profile significantly. The City of Dover, along with many partners – including City of Portsmouth, Strafford County, the State of New Hampshire, the US Government, Strafford River Conservancy, the Audubon Society, the Society for the Protection of NH Forests, and the Southeast Land Trust – played vital roles in orchestrating a deliberate and effective campaign to dramatically expand the conservation and open space network in Dover during this time period. Since 2012, the amount

of permanently conserved land in Dover has increased by 22%. Nearly all the 672 acres added since 2012 were adjacent to already existing conserved land, and many of them are overseen by the City of Dover. The Conservation Commission and Dover’s Open Lands Committee have been vital to much of this progress

Since 2012, the City has also dramatically expanded and linked recreational offerings. This was primarily through the Community Trail that the City began actively planning and acquiring rights-of-way for in the mid-1990’s. Following a former railroad bed through much of the City, it provides public access to protected greenways along the Cochecho and Bellamy Rivers. Currently, the Trail’s northern terminus is at the Watson Road Trailhead adjacent to the Seacoast Charter School. Heading south along the Cochecho River, the Trail connects to the Whittier Street Trailhead before connecting to Beckwith Park nearby. Phase IV of the Trail is in the design phase and will connect from the current Rutland Street trailhead to the middle and high school campuses and out to Knox Marsh Road through Bellamy Park. Expansions beyond that are only in the idea phase but could include connections with surrounding communities.

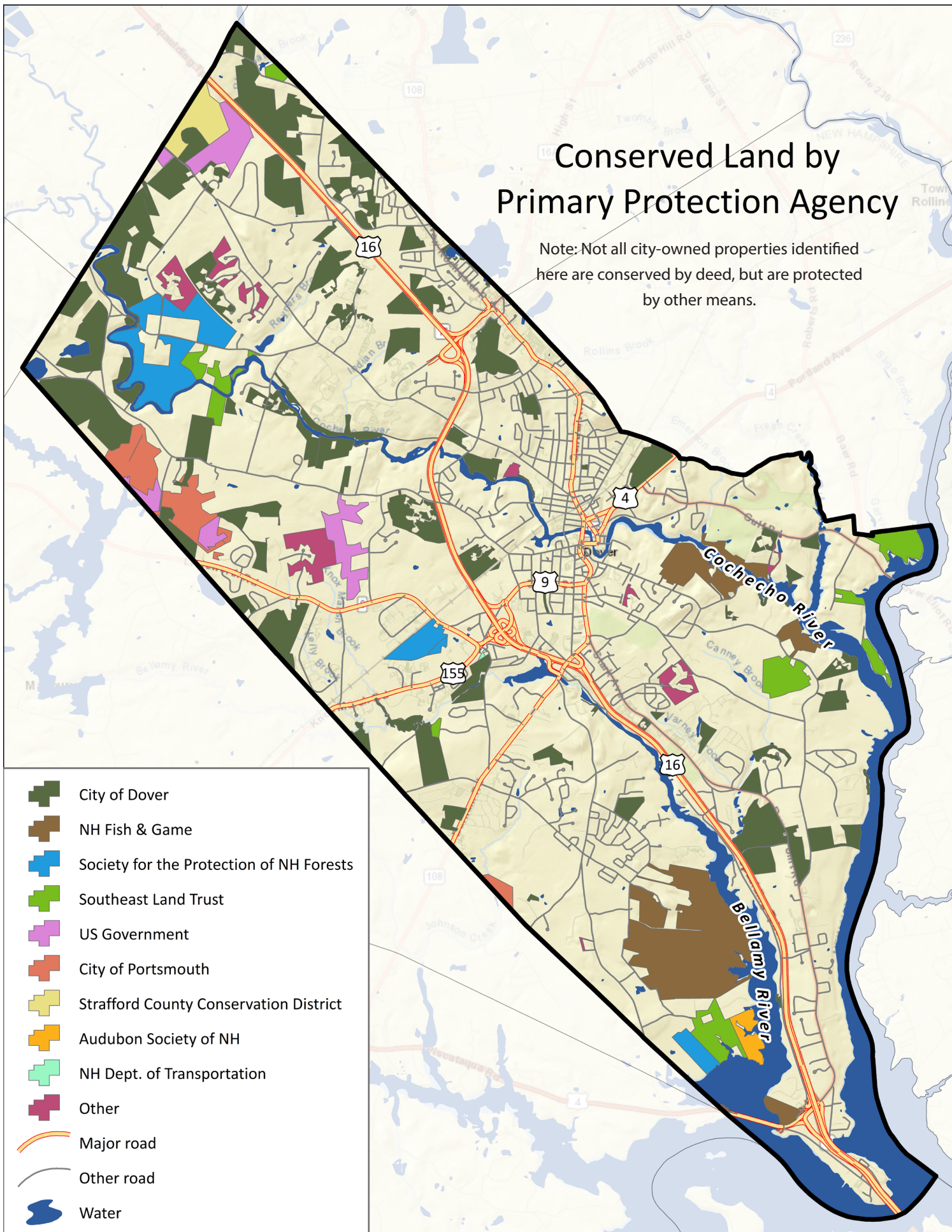
**TABLE 1 - Conserved Land by Primary Protection Agency**

Organization	Acres	Percent of Conserved Land
City of Dover *not all of city-owned land is conserved by deed	1,805	49%
NH Fish & Game	607	17%
Society for the Protection of NH Forests	299	8%
Southeast Land Trust	273	7%
City of Portsmouth	189	5%
US Government	205	5%
Strafford County Conservation District	82	2%
Audubon Society of NH	38	1%
NH Dept of Transportation	1	0.03%
Other	174	5%
<b>TOTAL</b>	<b>3,673</b>	



# Conserved Land by Primary Protection Agency

Note: Not all city-owned properties identified here are conserved by deed, but are protected by other means.



- City of Dover
- NH Fish & Game
- Society for the Protection of NH Forests
- Southeast Land Trust
- US Government
- City of Portsmouth
- Strafford County Conservation District
- Audubon Society of NH
- NH Dept. of Transportation
- Other
- Major road
- Other road
- Water



## CONSERVATION TOOLS

Nearly 90% of conserved lands in Dover are protected through conservation easements and fee ownership – these are by far the most common types of conservation mechanisms in New Hampshire and throughout New England. Other conservation tools include flowage rights and protective easements which help protect water supply resources, while set asides and deed restrictions provide other creative regulatory ways of building the network of conservation and open spaces. The open space subdivision set aside areas are common lands overseen by the City of Dover, while being part of privately owned developments. The following conservation mechanisms are used to conserve land in Dover:

### CONSERVATION EASEMENT

A conservation easement is a legally binding agreement between a landowner (the Grantor) and an eligible conservation organization or agency (the Grantee) that permanently restricts future development of a property. In total, 1,723 acres are conserved by a conservation easement.

### FEE OWNERSHIP

This is when a conservation organization or public agency purchases the land outright from a seller. In these situations, the land and all rights transfer to the conservation organization or public agency, which becomes the landowner. In total, 1,518 acres in Dover are conserved by fee ownership.

### FLOWAGE EASEMENTS

Flowage easement land is non-federal land on which the United States Government has acquired certain perpetual rights, including the right to overflow, flood and submerge the land, the right to prohibit structures for human habitation, and the right to approve all other structures proposed for construction within the flowage easement. In total, 116 acres are conserved by flowage easements.



### PROTECTIVE EASEMENT FOR WATER SUPPLY LANDS

These are protective easements specific to primary wellhead protection areas. There are three protective easements for water supply lands overseen by the City of Dover. In total, 11 acres are conserved by protective easements.

### SET ASIDE OPEN SPACE AREAS

Open Space Subdivisions (OSS) are required to set aside areas for open space and habitat protection. These lands play an important role in Dover's open space network by codifying the development community's involvement and inclusion in conservation efforts. The amount of OSS set aside lands has increased 64% since 2012 to a total of 342 acres.



## DEED RESTRICTION

A deed restriction is a legally binding restriction placed on the use of the property that limits certain activities on the property. These can vary widely and can be used to accomplish diverse goals including land conservation and open space protection. Example conditions include a requirement that the parcel be left as open land in perpetuity, or that usage of all or a portion of the land be restricted to certain uses such as forestry, wildlife habitat, or passive recreation. 56 acres are conserved by deed restriction.

## TRANSFER OF DEVELOPMENT RIGHTS

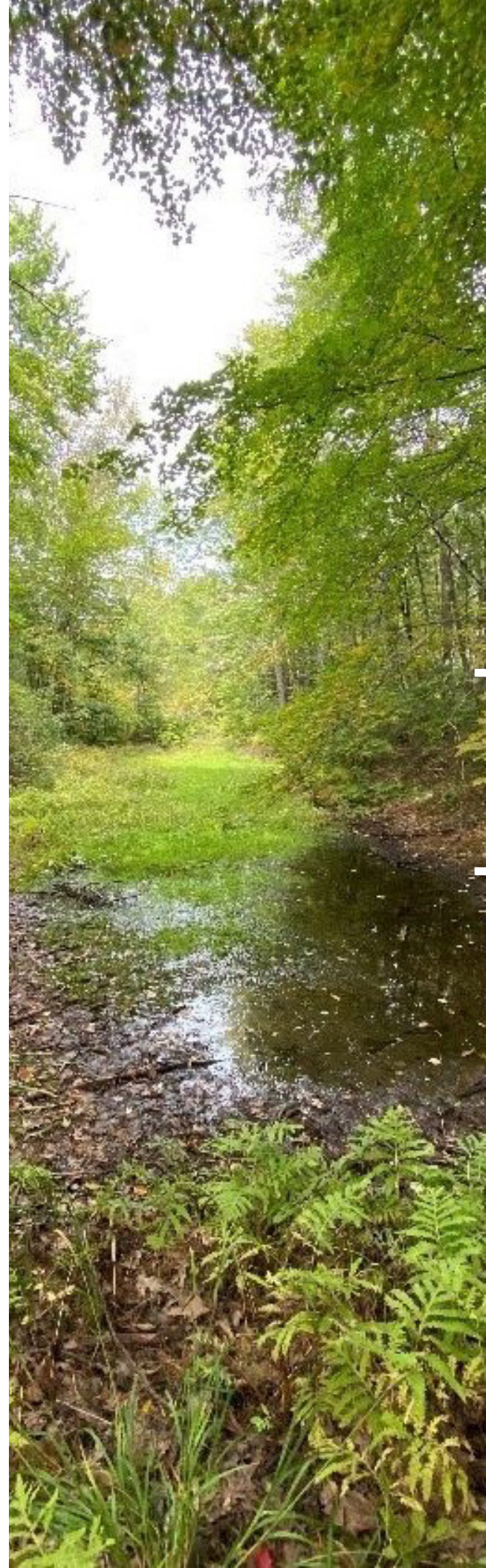
The purpose of the Transfer of Development Rights Ordinance is to promote more intensive development in areas served by public infrastructure that do not possess significant conservation value. This increased intensity can be granted in exchange for real property or monetary contributions to support the City's conservation and resilience goals. Since amending the ordinance in 2018, the City has collected over \$1.7 million for the Conservation Fund, with nearly \$1 million more anticipated from projects at various stages of approval. Since 2018, these funds have allowed the City to secure 62 acres in Conservation Easements.

## CURRENT USE

This is privately owned, undeveloped land that the owner has committed to leaving in its current use as farm or forest land, and in doing so, the state taxes the land at a much lower rate. If the landowner decides to remove the land from current use, they must pay a Change of Use fee, which the City of Dover puts directly into a fund for financing conservation efforts. According to city data, 4,297 acres are in current use as of 2024, which is a ~200 acre decrease since 2012.

## PUBLIC ACCESS

One-third of all permanently protected lands in Dover allow full public access. Another 16% allow restricted access, which means that over half of all conserved lands allow for some type of public access. The amount of restricted access and lands with no access has remained consistent since 2012. Restrictions vary considerably from property to property and the deed should be consulted for specifics. Expanding safe, public access and recreation opportunities of city-owned conserved land as much as possible, including as a criteria for new land acquisitions, is a significant future priority for Dover.







## 4. ACTION PLAN





## WHAT'S NEXT?

The following action plan will help Dover implement the vision and priorities of this Master Plan Chapter over the next 8-10 years. The action matrix includes a set of actions organized under six themes. Each action has a responsible party(s) assigned to it, identifies the level of priority, and a timeframe. These actions were developed collaboratively with City staff and the Conservation and Open Space Chapter Steering Committee, and informed by the general public.

The action plan themes include:

- **Conservation Priorities**  
Actions that guide future conservation and land protection efforts in the city.
- **Connectivity Efforts**  
Actions that support a well-connected open space network for people and wildlife.
- **Stewardship and Amenities**  
Actions that promote greater stewardship of Dover's open spaces and identify where amenity improvements are needed.
- **Regulatory Initiatives**  
Actions that assess and amend land use regulations to better protect open space in Dover.
- **Relationship Building**  
Actions that promote collaboration between Dover and other land protection organizations to build capacity and leverage resources.
- **Communication**  
Actions that focus on communication to the public about Dover's open space assets.
- **Data Analysis**  
Actions that support an ongoing inventory and database of conservation land and open spaces in the city.

The City will steward a trackable excel version of the action matrix that will be updated regularly. Updates will be shared with the public.





## ACTION MATRIX FOR DOVER'S CONSERVATION AND OPEN SPACE CHAPTER

#	Organization	Priority (High, Med, Low)	Timeframe (Long, Med, Short, Ongoing)	Responsible Party
<b>1. Conservation Priorities</b>				
1.1	Continue permanently protecting lands with conservation value through available methods including but not limited to conservation easements, fee ownership, deed restrictions, agricultural preservation restriction, and protective easement for water supply lands.	High	Ongoing	Planning/ Open Lands Committee
1.2	Prioritize Conservation efforts that address at least one of the three priorities identified in this Chapter: <ul style="list-style-type: none"> <li>• Groundwater Quantity and Quality Lands</li> <li>• Hazard Mitigation Lands</li> <li>• Important Wildlife Habitat Lands</li> </ul>	High	Ongoing	Planning/ Conservation Commission
1.3	Use the co-occurrence analysis to inform and guide future conservation efforts, including: <ul style="list-style-type: none"> <li>• Identifying potential natural resource or recreational connections between existing conserved lands. This could include smaller and more targeted parcels to achieve connectivity.</li> <li>• Identifying larger blocks of remaining land and preventing further fragmentation.</li> <li>• Identifying lands with the greatest conservation value and advantageous co-benefits.</li> </ul>	Medium	Ongoing	Planning/ Conservation Commission/ Open Lands Committee
1.4	Review and update scoring criteria used by the Open Lands Committee for potential conservation projects which could include: <ul style="list-style-type: none"> <li>• Develop a goal for the amount (or percentage) of conservation land to secure within ¼ mile of the Cochecho and Bellamy Rivers and tributaries.</li> </ul>	Medium	Medium	Planning/ Open Lands Committee
1.5	Evaluate Transfer of Development Rights fees to ensure they are appropriate.	High	Short	Planning
1.6	Continue utilizing the conservation fund toward the mission of conserving more land in addition to maintaining the already protected land.	High	Ongoing	Planning/ Conservation Commission
1.7	Develop a long-term, sustainable funding strategy to fund future land conservation and stewardship of conserved lands. Investigate existing and potential funding mechanisms and how they work together to fund conservation in the city. Forecast what will be needed in the future.	Medium	Medium	Planning
1.8	Identify opportunities for future conservation of city-owned land.	Low	Long	Planning



#	Organization	Priority (High, Med, Low)	Timeframe (Long, Med, Short, Ongoing)	Responsible Party
<b>2. Connectivity Efforts</b>				
2.1	Create a well-connected open space network by establishing new greenway connections that provide safe and accessible multi-modal transportation and recreation connections.	Medium	Long	Planning
2.2	Ensure that public access is a major focus in all future land acquisitions.	Medium	Ongoing	Planning
2.3	Use the 2024 Natural Resource Inventory, Existing Conditions Analysis (found in Appendix A), and other Master Plan Chapters to inform the planning for conservation and trail connectivity across the open space network.	Medium	Ongoing	Planning
2.4	Continue efforts to provide access and increased connectivity to the Community Trail while extending it and creating regional connections with neighboring communities including Rochester and Somersworth.	Medium	Long	Planning
2.5	As Dover's trail system expands, ensure all future intersections with the existing road/transportation network are well-marked and safe for pedestrians, bicycles, and vehicles.	Low	Long	Planning/ Community Services
2.6	Continue to use the current Transportation Chapter of the Master Plan to assist in guiding Dover's alternative transportation connectivity. Creating a pedestrian and bicycle friendly network that is integrated into the City's transportation system will also help meet the connectivity goals related to Dover's Conservation and Open Space network.	Medium	Ongoing	Planning/ Community Service
2.7	Connect Dover's open spaces and conservation lands to existing neighborhoods to ensure all residents have safe access, can enjoy the health benefits of these lands, and have an opportunity to contribute to community building. Enabling residents to get to where they need to go through pathways other than roads can also alleviate stress on existing transportation infrastructure and improve recreational opportunities within the City.	High	Ongoing	Planning
2.8	Encourage the Planning Board to promote set aside areas on open space plans that align with neighboring protected land.	Medium	Medium	Planning/ Planning Board



#	Organization	Priority (High, Med, Low)	Timeframe (Long, Med, Short, Ongoing)	Responsible Party
<b>3. Stewardship and Amenities</b>				
3.1	Leverage more volunteers to assist City staff with monitoring of conservation lands overseen by the City of Dover including conservation easements, fee owned land, and Open Space Subdivisions when applicable.	Low	Medium	Planning/ Open Lands Committee
3.2	Develop a monitoring program that could include creating an educational handbook, and organizing volunteers to assist with monitoring lands overseen by the City of Dover.	Low	Medium	Planning
3.3	Leverage more volunteers and/or staff resources to conduct essential maintenance like trail grading and water management on existing trails, developing new trails, managing vegetation, restoring habitats, and managing productive working lands like farms and forests.	Low	Medium	Planning
3.4	Utilize City owned properties to demonstrate new land management approaches that increase nature-based climate solutions, restore habitat, and inspire land management innovations on privately held open space parcels. This could include no mow areas, pollinator habitats, tree planting, food production, ecological stormwater management, and other practices.	Medium	Ongoing	Planning/ Community Services
3.5	Inventory all the publicly accessible open space parcels and determine priority projects for infrastructure or amenity improvements. These may include parking, improved access, signage, wayfinding, trail construction or repair, bathrooms, waste receptacles, and other needed amenities that will improve the quality of the user's experience. Examples of properties with demonstrated accessibility needs include the County Farm Cross Area, the Bellamy River Wildlife Conservation Area, and at open space within the northwest areas of the city.	Low	Long	Planning



#	Organization	Priority (High, Med, Low)	Timeframe (Long, Med, Short, Ongoing)	Responsible Party
<b>4. Regulatory Initiatives</b>				
4.1	Review the Site Plan Regulations to identify potential changes that would assist in the retention of open space areas and increase connectivity between parcels.	Medium	Short	Planning
4.2	<p>Conduct a thorough review of Open Space Subdivision regulation, Transfer of Development Rights ordinance, and other related regulations against the Master Plan to ensure requirements and incentives will deliver the caliber of development that reinforces the conservation and open space vision for Dover. This should include:</p> <ul style="list-style-type: none"> <li>Consider a reduction of the minimum project area required for an open space subdivision.</li> <li>A review of the required open space set aside for subdivisions, including projects utilizing Transfer of Development Rights.</li> <li>Consider requirements for full or limited public access to the open space created.</li> <li>Explore the use of deed restrictions as a conservation approach if fee ownership or easement purchasing becomes more challenging.</li> </ul>	High	Short	Planning
<b>5. Relationship Building</b>				
5.1	Continue to increase representation of all community members in conservation efforts by engaging in relationship building with members of underserved communities, and through the identification of conservation projects that provide co-benefits that address unmet community needs (ex. Food production, gathering spaces, etc.).	Medium	Ongoing	Planning/ Conservation Commission/ Open Lands Committee
5.2	Collaborate with the surrounding communities on land protection and connectivity efforts.	Low	Ongoing	Planning
5.3	Develop an educational program to inform landowners of Dover's conservation priorities and value of conserving land, and pathways for private land conservation.	Medium	Medium	Planning/ Open Lands Committee
<b>6. Communication</b>				
6.1	Develop and publish an inventory of all conservation properties including level of public access and recreational offerings	Medium	Long	Planning
6.2	Publicize and encourage visitation to lesser-known conservation and open space lands. This could include a publicity campaign to spread awareness of these properties.	Low	Ongoing	Planning



#	Organization	Priority (High, Med, Low)	Timeframe (Long, Med, Short, Ongoing)	Responsible Party
<b>6. Communication</b>				
6.3	Work with partner organizations to organize trail days and engage new volunteers.	Medium	Ongoing	Planning
6.4	Develop a cohesive and unifying signage program to promote all publicly accessible natural lands in Dover, and to build awareness of future conservation and connectivity initiatives. Incorporate this signage program into Dover's existing wayfinding.	Low	Long	Planning
6.5	Educate the public on appropriate use of open space and protected lands such as carry in and carry out policies/leave no trace behind/watershed education, foraging, etc.	Medium	Ongoing	Planning
6.6	Determine how the Community Trail should be publicized in relation to the rest of the conservation and open space network. This may provide an opportunity to promote connectivity, access, and other priorities related to the open space network.	High	Medium	Planning
<b>7. Data Analysis</b>				
7.1	Review the inventory of all conservation properties and determine the access status of the 732 acres of land within unknown access information in the GIS data.	Medium	Long	Planning/IT
7.2	Assess the availability of GIS data to the public and review for accuracy.	Low	Medium	Planning/IT
7.3	Update the new conservation lands shapefile and send it to GRANIT regularly to ensure it reflects the date recorded, level of public access, protection type, primary protection agency, and other important information.	Low	Ongoing	Planning/IT
7.4	Coordinate with the Community Services Department and property owners for the potential of additional groundwater studies to identify potential locations for subsurface wells and to inform the protection of the corresponding lands.	High	Ongoing	Planning/ Community Services
7.5	Identify the most effective way for the City to classify Open Space Subdivision set aside lands (common areas) in the GIS data. It is possible that these parcels can be classified differently for internal use versus updates to GRANIT.	Low	Medium	Planning/IT
7.6	Monitor the current use numbers annually to gauge the rate of current use land conversion versus the increase in conserved lands.	Low	Ongoing	Planning/ Assessing



## CITY OF DOVER, NEW HAMPSHIRE

### EXISTING CONDITIONS REPORT

#### DATA SOURCES

- 2024 SRPC Draft Natural Resources Inventory
- 2024 SRPC Draft List of Maps for Natural Resources Inventory
- 2023 Vision Master Plan Chapter
- 2022 The Great Bay Shoreline Project Phase 2 – Roadmap
- 2021 NH Coastal Watershed Conservation Plan
- 2020 SRPC Pathways to Play: A Roadmap for Active Recreation
- 2020 Culture and Recreation Master Plan Chapter
- 2019 Dover Open Lands Committee Criteria Rating Sheet
- 2016 Stewardship of Resources Master Plan Chapter
- 2016 Transportation Master Plan Chapter
- 2015 Land Use Master Plan Chapter
- 2012 Open Space and Conservation Master Plan Chapter
- 2011 Conservation Lands Audit and Online Inventory
- City of Dover Website: Recent Projects in City
- City of Dover Website: Community Trail
- City of Dover Subdivision Regulations
- The Great Bay 2030
- NH GRANIT, Conservation/Public Lands
- Website & Programs: Piscataqua Region Estuaries Partnership
- Website & Programs: The Nature Conservancy
- City of Dover Transfer of Development Rights Fact Sheet

#### KEY FINDINGS

- The City of Dover is the primary protection agency on nearly half of all existing conserved lands. This directly displays the City's involvement and emphasis it places on active resource protection, conservation, and recreation.
- Of the nearly 3,700 acres of conserved land in Dover, about 2/3<sup>rd</sup>s are northwest of Routes 4 and 155. Conserved lands southeast of Routes 4 and 155 are predominantly large parcels directly abutting the main stem of the Cochecho, Bellamy, and Piscataqua Rivers. These points are in line with the history of Dover's development pattern with most growth occurring south and east of Routes 4 and 155.
- Nearly 90% of all conserved lands are within ¼ mile of the main stem and tributaries of the Cochecho and Bellamy Rivers.



- Of the 1,805 acres of conserved land owned/managed by the City of Dover, 84% are within ¼ mile of the main stem and tributaries of the Cochecho and Bellamy Rivers.
- Several large contiguous blocks of conserved land exist near the mouths of the Cochecho and Bellamy Rivers and are held by entities including NH Fish & Game and Southeast Land Trust
- Nearly 90% of conserved land in Dover is done so through conservation easements and fee ownership – these are by far the most common types of conservation mechanisms in New Hampshire and throughout New England.
- According to city data, 4,297 acres are in current use as of 2024 – this is a ~200 acre decrease since 2012. The 200 acres removed from current use was subjected to the change of use fee, which helps to fund land protection efforts in Dover.
- The amount of permanently conserved land in Dover has increased 22% since 2012. Nearly all the 672 acres added since 2012 expand on already existing conserved land and many of them are overseen by the City of Dover. These two points show how significantly Dover’s Open Lands Committee considers proximity to existing conserved lands when prioritizing future efforts. Also, nearly all the lands added since 2012 are within ¼ mile of the main stem and tributaries of the Cochecho and Bellamy Rivers, which displays the focus on those natural resources.
- One-third of all permanently protected lands in Dover allow full public access. Although the numbers show a slight decrease in the amount of publicly accessible land since 2012, it is unclear how 2012 numbers were calculated. With an additional 700+ acres of land with unknown access status in 2024, there is a high likelihood that fully accessible land has increased since 2012.
- Open Space Subdivisions (OSS) require certain large subdivisions to set aside areas for open space and habitat protection – these lands play an important role in Dover’s open space network by codifying the development community’s involvement and inclusion in conservation efforts. The amount of OSS lands has increased 64% since 2012 to a total of 342 acres.

## INTRODUCTION

The history of local environmental protection, land conservation, and stewardship is well documented in Dover. In 1973, the first Open Space and Recreation Plan was developed. Today’s network of open spaces and recreational offerings is a testament to the level of forward-thinking and dedication by the city’s residents and staff for more than 50 years. This rich network of public open spaces, conservation lands, sensitive habitats, and recreational offerings sit just below the surface of people’s general understanding of Dover and are waiting to be sought out and expanded.

Water plays a dramatic role in Dover and is at the core of the city’s development pattern and conservation efforts. Brackish tidal water flowing up through the Piscataqua River Basin from the Atlantic Ocean mixes with freshwaters from the Cochecho and Bellamy Rivers. Starting well north of Dover, more than 350 miles of upland streams and rivers make up the main stem of the Cochecho River and its tributaries before meeting the Piscataqua River. Add in the more than 60 miles of the Bellamy



River and associated tributaries, and Dover is part of the only significant river system flowing out directly through New Hampshire's coastline. The confluence of these freshwater river systems and the tidal-influenced Piscataqua River influenced Dover's development pattern from its European settlement in the early-1600's and, to this day, act as the backbone of its open space and recreation network. These waters also hold significant value for the original inhabitants, the Abenaki people, of Dover's lands who revered them as important travel ways, for their associated soil fertility, for fishing, and for spiritual connection. These delicate water systems are the veins and capillaries of the city's lifeblood, livelihood, and lifestyle.

This Existing Conditions Report will inform the Dover 2024 Conservation & Open Space Chapter of the Master Plan, an update of the 2012 chapter. This Report provides the City with an understanding of the current state of conserved and open spaces, and aspects of related existing recreation offerings. This Report will also highlight key findings and observations from a thorough review of related studies and plans culminating with takeaways from a thorough co-occurrence analysis of natural resource data layers identified in the 2024 Natural Resource Inventory. This co-occurrence analysis provides preliminary spatial findings and areas for future conservation consideration.

The image below visualizes how this Existing Conditions Report is organized. This process provides a straightforward approach to synthesizing 12 years of information since the last Conservation and Open Space Chapter.



## WHERE WERE WE?

Over the course of Dover's 50+ year history of land conservation, two primary objectives motivated the city's efforts:

- (1) preserving the changing rural character of Dover, and
- (2) slowing the rate of residential development to manage the increasing costs of providing municipal services.

These goals were driven directly by the development boom of the late-1980's, which put significant pressure on Dover's natural resources limiting the city's ability to conserve land in perpetuity for any purpose.

However, the Planning Board adopted critical zoning ordinances designed to protect the city's natural resources that have proved monumental since their inception. These ordinances included:

- Groundwater Protection Ordinance (1985)
- Conservation District Ordinance (1987)
- Wetlands Protection District Ordinance (1988)



State funding from the Land Conservation Investment Program (LCIP) also helped perpetuate the conservation push in the late-1980's and early-1990's. Additionally, state and regional partners including NH Fish & Game and The Audubon Society began directing efforts along the Piscataqua River including areas in Dover.

In 1999, following another increase in development pressure in Dover, the City Council, at the urging of the Conservation Commission, altered the deposits from the land use change tax (LUCT) into the General Fund to instead fund land protection efforts. Change of Use fees are placed on lands removed from the Current Use Program.

Perhaps the most consequential item in Dover's 50+ years of conservation efforts was the 2000 Open Space & Recreation Chapter of the Master Plan. Among the many recommendations, some of the most significant included:

1. Establish a standing Open Space Committee
2. Develop clear criteria for open space acquisition and protection
3. Prepare a detailed open space acquisition plan
4. Create a mechanism for the funding of and acquisition of property
5. Complete an accurate inventory of currently protected open space parcels

Another valuable recommendation was to amend the subdivision regulations to offer mechanisms to give the City more authority to "create permanent, useable open space and recreation areas in and near new subdivisions." This suggestion, which has been used effectively in many municipalities that have adopted them, welcomes private developers into the conversation, a group that is often seen as being at odds with conservation advocates.

Proving the City's dedication, municipal staff and residents moved quickly on these recommendations.

- A. In August 2000, an Open Lands Committee (OLC) was established, which is an advisory group to the Conservation Commission.
- B. In 2004, criteria for open space acquisition were established.
- C. In 2004, a detailed open space acquisition plan was prepared.
- D. In 2004 and 2005, the City passed bond bills of more than \$2 million dedicated for conservation efforts. Additionally, the Conservation Commission produced more than \$5 million in grant funds from several agencies including The Nature Conservancy, the Federal Farm and Ranchland Protection Program, and the State Land and Community Heritage Investment Program (LCHIP).
- E. In 2011, an inventory of conserved land in Dover was completed.

Additionally, in 2003 the renamed Open Space Subdivision (OSS) required open space and habitat protection as mandatory for certain large subdivisions. This codified the development community's participation in open space efforts.

---

The 2000 Master Plan provided the framework the City used to guide conservation efforts over the following 12 years until the updated 2012 Conservation and Open Space Chapter was completed. As of 2012, there were 280 parcels of conservation land totaling more than 3,000 acres. The City of Dover, along with many partners – including City of Portsmouth, Strafford County, the State of New Hampshire,

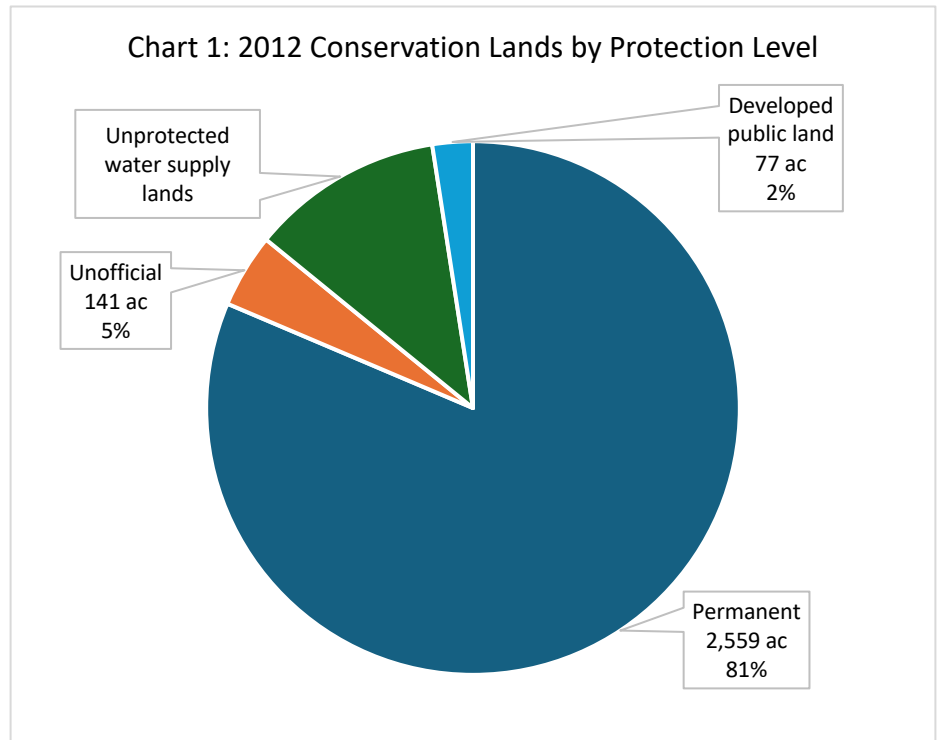


the US Government, Strafford River Conservancy, the Audubon Society, the Society for the Protection of NH Forests, and the Southeast Land Trust – played vital roles in orchestrating a deliberate and effective campaign to dramatically expand the conservation and open space network in Dover between 2000-2012.

In that time period, more than 1,000 acres of conserved land was added to Dover’s protected landscapes through conservation easements alone. Other mechanisms also contributed to a noticeable increase in conserved land acquisitions including 3 protective easements for water supply lands overseen by the City of Dover. Worth noting are also the many open space subdivisions that were constructed and are privately owned and overseen by the City of Dover.

Below are a list of conservation mechanisms used in Dover:

- Conservation easement
- Deed restriction
- Flowage rights
- Fee ownership
- Protective easement for water supply lands
- Set aside open space areas of development
- Current use



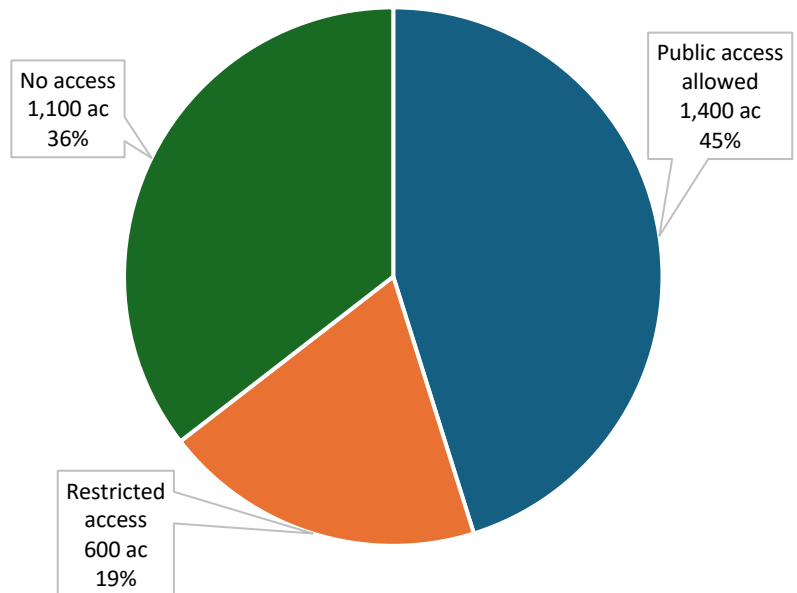
The array of mechanisms used for conservation and open space in Dover is representative of a skilled and nimble municipal work- and volunteer-force. With no single way dictating how land is conserved, the city’s staff, committees, and boards understand a variety of strategies are needed to meet the conservation objectives.



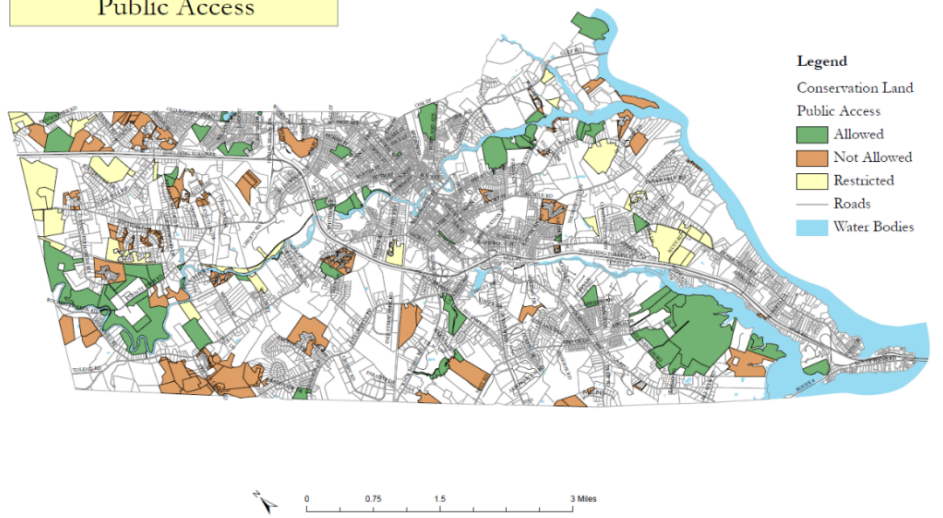
Given the mechanisms used, varying levels of protection have been provided across these different lands. Chart 1 shows the amount of conserved land by level of protection as of 2012. In a later section of this report, these levels of protection will be updated with numbers from 2024. Definitions of these protection types can be found at the end of this report.

However, another conservation mechanism is used extensively in Dover but not featured in Chart 1 – current use. As of 2012, approximately 4,500 acres of land was enrolled in the current use program. This is privately owned, undeveloped land that the owner has committed to leaving in its current use as farm or forest land, and for doing so the state taxes the land at a much lower rate. If the landowner decides to remove the land from current use, they must pay a Change of Use fee, which the City of Dover decided to put directly into a fund for financing conservation efforts starting in 1999. It should be noted that permanently conserved land can also be enrolled in current use, so there is likely some duplication in the amount of conserved land and current use land.

Chart 2: Access on Conserved Land: 2012



Dover Conservation Tracts  
Public Access



A common misunderstanding of conserved land is that it is entirely open to the public and allows recreation. Although that is not usually the case, some areas do offer those elements. Chart 2 shows the distribution of access in Dover as of 2012.

Also worth noting is the fact that most publicly accessible land in Dover, as of 2012, was along the Cochecho and Bellamy River waterfronts. While some of this is due to public agencies that conserved the lands including NH Fish & Game, there are also many properties owned/managed by the City that allow public access along these waterbodies. This point directly shows the value the City and its residents place on ensuring those critical waterways are both protected from further development and are open to the public. The map here is from the 2012 Conservation and Open Space Chapter showing the distribution of publicly accessible lands.

## WHERE ARE WE NOW?

To understand what has happened since the 2012 Conservation and Open Space Chapter, it is important to review the goals and objectives set forth in that document, which are outlined here:

1. Identify and pursue permanent legal protection of key open space areas based upon a systematic inventory and evaluation of Dover's natural resources.
2. Where possible, link open space areas and recreation facilities in an effort to establish an integrated network of resources.
3. Improve, protect, and encourage public access to Dover's natural resource areas.
4. Encourage all new developments to protect and where possible, enhance valuable natural and open space resources.
5. Encourage public/private partnerships between the City and land protection groups such as state and federal agencies and private land trusts.

Once these goals are examined, this section will dive deeper into the state of Dover's existing network of conserved lands. However, the 2024 Natural Resource Inventory should be reviewed for the current state of Dover's natural resources.

### Goal 1 of the 2012 Conservation and Open Space Chapter:

Identify and pursue permanent legal protection of key open space areas based upon a systematic inventory and evaluation of Dover's natural resources.

The 2012 report suggested emphasizing future properties that meet one or more of the following criteria:

1. Tracts adjacent to existing [conserved] tracts.
2. Tracts fronting rivers or ponds.
3. Tracts which would assist in filling in the community trail.

These elements have been incorporated into the Open Lands Committee's (OLC) scoring system to rank potential acquisitions. Although a formal scoring system exists, the OLC typically uses it as a conversation piece for which to discuss potential properties rather than a black-and-white score.



As of 2012 there were 3,000 acres of conserved land. Since then, another nearly 700 acres have been added to Dover's open space network culminating in 3,672 acres of permanently conserved land. This represents a 22% increase since 2012.

Nearly all lands conserved since 2012 expand upon other areas already conserved. Additionally, most of the land conserved since 2012 has been done so with the City as the primary protection agency. These two points show how significantly Dover's Open Lands Committee considers proximity to existing conserved lands when prioritizing future efforts. Nearly all of these lands are within ¼ mile of the main stem and tributaries of Cochecho and Bellamy Rivers and displays the focus on those natural resources.

## **Goal 2 of the 2012 Conservation and Open Space Chapter:**

Where possible, link open space areas and recreation facilities in an effort to establish an integrated network of resources.

The City has dramatically expanded and linked recreational offerings primarily through the Community Trail that the City began actively planning and acquiring rights-of-way for in the mid-1990's. Following a former railroad bed through much of the City, it provides public access to protected greenways along the Cochecho and Bellamy Rivers. Currently, the Trail's northern terminus is at the Watson Road Trailhead adjacent to the Seacoast Charter School. Heading south along the Cochecho River, the Trail connects to the Whittier Street Trailhead before connecting to Beckwith Park nearby.

Continuing in the same direction, the Fourth Street Trailhead at Downeast Energy is the connection point between the rural and urban portions of the trail – this formal connection was finalized in 2021. These sections of multi-use trail in the downtown provide pedestrian and bicycle-friendly connections and are planned to connect to the Dover Middle and High School campuses and Bellamy Park. The trailhead at the City's Transportation Center also serves as a rail hub for Amtrak's Downeaster service and the Wildcat and COAST bus service which includes COAST's FastTrans intra-city bus route.

South from there, the Trail connects to the Fisher Street Trailhead, which is ~300 feet from Woodman Park and Woodman Park Elementary School. From this section of the Trail, the City is in the design and engineering phase of expanding further to connect the trail to the Dover Middle and High School campuses and Bellamy Park. This work has been made possible with funding from the NH Department of Transportation (NHDOT) Transportation Alternatives Program (TAP).

Other City plans to increase access and use of the Trail have also recently been completed. At the northern end, the City worked with the NH Department of Transportation (NHDOT) Turnpike Bureau to get approvals for a grant funded connection that passes along an underpass under the Spaulding Turnpike connecting the Whittier Falls Way portion of the Measured Progress/Liberty Mutual Portion of the trail. Towards the southern section of the Trail, the City has plans for expanding the Community Trail including the recently completed Rutland Street Trailhead located at a former site of McIntosh College. Additionally, the City would like to expand trails north further into the rural parts.

Phase IV of the Trail is in the design phase and will connect from the current Rutland Street trailhead to the middle and high school campuses and out to Knox Marsh Road through Bellamy Park. Expansions beyond that are only in the idea phase but include connections with surrounding communities.

The Community Trail actualizes aspects of three elements in the 2023 Vision Master Plan Chapter:

- We are a city with an emergency urban vibrancy, guided by intentional growth to create connected neighborhoods, attractive streetscapes, and accessible open space, while maintaining what makes Dover distinct.
- We have a robust transportation system that encourages safe and appealing pedestrian transit, and other alternative transportation options that connect us to the broader region.
- We are leaders in incorporating innovation to create resilient and environmentally focused infrastructure, energy, and utility systems to responsibly steward our resources and cherished environment.

Although the Vision Chapter also identifies transportation as one challenge for the City in the future, opportunities exist for the Community Trail to be a catalyst for developing an even more robust alternative transportation network. Connecting rural and urban parts of the city while also encouraging a more walkable and safer downtown are all considerations for the Community Trail.

### **Goal 3 of the 2012 Conservation and Open Space Chapter:**

Improve, protect and encourage public access to Dover's natural resource areas.

As of 2012, 1,300 acres of conservation land was publicly accessible. However, it was recognized that it was challenging for most members of the public to identify those resources and, therefore, take advantage of them. With that said, the City has worked to improve public access in certain areas.

As stated above, the Community Trail has dramatically improved public access to some of Dover's natural resources, primarily lands along the Cochecho and Bellamy Rivers. Both the breadth of the Trail and proximity to many desirable destinations (schools, public art, transportation hubs, parks, etc.), gives it visibility that far exceeds other public areas.

In terms of encouraging public access, although the City maintains information relevant to some publicly accessible lands on the website – a suggestion from the 2012 Chapter – there is an underlying sentiment from city staff that Dover's network of public natural lands is still underused. This leads to long-term management questions for the City:

Would the City like to see a more even distribution of public use throughout the network of accessible natural lands?

Or would the City like to encourage heavier public use in certain accessible natural lands, which would reduce or limit the impact on others?

Depending on what the City would like to see, the Community Trail could be an opportunity to increase recreational use and access while reducing the impact on other lands. If, however, the City would like to see a more even distribution of public use, it will be critical to find ways to publicize and encourage visitation to the lesser-known properties. Ways in which the latter could be accomplished include, but are not limited to:

- Decreasing investment in the Community Trail and distributing that among other publicly accessible natural lands.



- Increasing accessibility, infrastructure, and amenities at lesser-known natural lands including parking, trash cans, kiosks, and wayfinding signage.
- Developing a publicity campaign to spread awareness of lesser-known natural lands.
- Work with partner organizations to organize trail days on lesser-known natural lands.
- Develop a cohesive and unifying signage program to promote all publicly accessible natural lands in Dover.

Ultimately, the Community Trail is a unique recreation resource that should not take the place of other recreational offerings including meandering hikes along tidal influenced waterways or upland forests. With that said, the City should be clear on exactly how the Trail is publicized in relation to other properties and recreational options.

#### **Goal 4 of the 2012 Conservation and Open Space Chapter:**

Encourage all new developments to protect and where possible, enhance valuable natural and open space resources.

Since the inception of the Open Space Subdivision (OSS), which was renamed in 2003, it has provided an opportunity for the development community to participate in natural resource protection. As of 2012, about 220 acres of land had been protected by OSS easements. That number has grown to 342 acres as of 2024, a 64% increase. However, these OSS easements are difficult to parse out precisely because of the way they are classified in the available data. GRANIT, which is New Hampshire's clearinghouse for spatial data, maintains the most comprehensive information on conservation lands throughout the state. The available GRANIT data has been amended with the help of City staff to provide the most up-to-date data. With that said, considering the classification difficulties, the City should decide the most appropriate way to classify OSS lands for (1) internal use and (2) when submitting data updates to GRANIT.

Many recognize these OSS lands as a significant benefit to the overall open space and conservation network in Dover. One limitation to these lands is that none of them allow for public access at this point. However, most privately-owned conserved land also does not allow public access, which puts OSS lands in line with these others. Generally, recreation is not required on OSS lands, but is an allowed use that is often limited to residents/tenants of the developed land. Limitations and restrictions vary considerably on OSS lands; deeds should be consulted for specifics.

Rather than viewing the lack of public access as a shortcoming of OSS land, they should be considered in the same regard as most privately-owned land with conservation easements as benefitting natural resource protection and increasing green space.

#### **Goal 5 of the 2012 Conservation and Open Space Chapter:**

Encourage public/private partnerships between the City and land protection groups such as state and federal agencies and private land trusts.

The City of Dover has historically done a great job developing and maintaining positive working relationships with conservation organizations including state and federal agencies and private land

trusts. The array of land managers in Dover is a testament to that. The table below shows the distribution of conservation organizations operating in Dover:

Table 1: Conserved Land by Primary Protection Agency		
Organization	Acres	Percent of Conserved Land
City of Dover	1,805	49%
NH Fish & Game	607	17%
Society for the Protection of NH Forests	299	8%
Southeast Land Trust	273	7%
City of Portsmouth	189	5%
US Dept. of Agriculture, NRCS	164	4%
Strafford County Conservation District	82	2%
US Government other	41	1%
Audubon Society of NH	38	1%
NH Dept of Transportation	1	0.03%
Other	174	5%
Total 3,673		

The above list of partners represents public/private land protection groups with active interest in land in Dover – it is important for the city to continue maintaining and stewarding these relationships.

However, as the conservation landscape evolves in Dover, so too will the partners. Given the limited remaining land available for conservation in Dover, the city will need to think about creative new partnerships to forward land protection goals. Likely, gone are the days of large-scale, generational land acquisitions – that is the case for all organizations with active land interests in Dover. Instead, the city will likely need to adjust future conservation and open space goals to align with the reality of existing



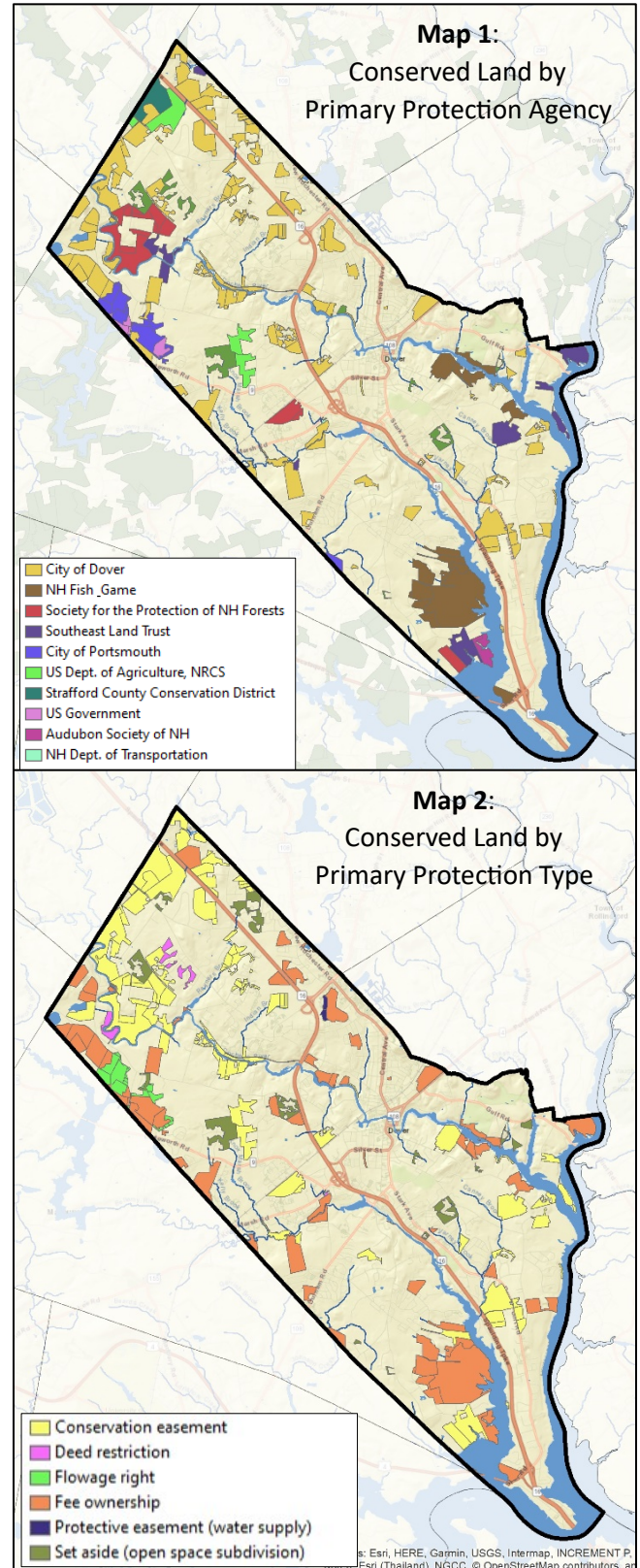
land ownership – that is smaller properties owned by private individuals and organizations. This does, however, represent two significant opportunities:

1. Identifying community needs where conservation efforts can be a co-benefit. This can come in the form of increasing open space and access efforts in parts of town that have been overlooked, marginalized, or excluded in previous decision-making. Examples could include senior/youth centers, substance abuse counseling, disability services, workforce housing, and others. Partnering in opportunities like these has the potential to dramatically increase the impact of open space and conservation on Dover's residents.
2. Identifying connections between existing conserved lands will be critical in future efforts, which lends nicely to smaller properties. Natural resource or recreational connections between larger blocks of conserved land do not need to be large, but they do need to exist. While the days of large-scale conservation acquisitions may be in the past, the days of smaller, more deliberate connections may be here.

With this said, land ownership changes regularly over time. City staff and volunteers should stay vigilant for larger properties that, although may not have been available for conservation in the past, may have changed ownership and are more open to possible transactions.

## State of Dover's existing network of conserved lands

Understanding the state of existing conserved lands in Dover starts with the distribution of them within the city and the primary protection agency that holds these lands, which are shown here in Map 1. Two items are quickly apparent: (1) the City of Dover oversees nearly half of all existing conserved lands; and (2) of the nearly 3,700 acres of conserved land, about 2/3<sup>rd</sup>s are northwest of Routes 4 and 155. These points emphasize how directly involved the city is in conservation efforts and how developed the eastern/southern portions of the city are.

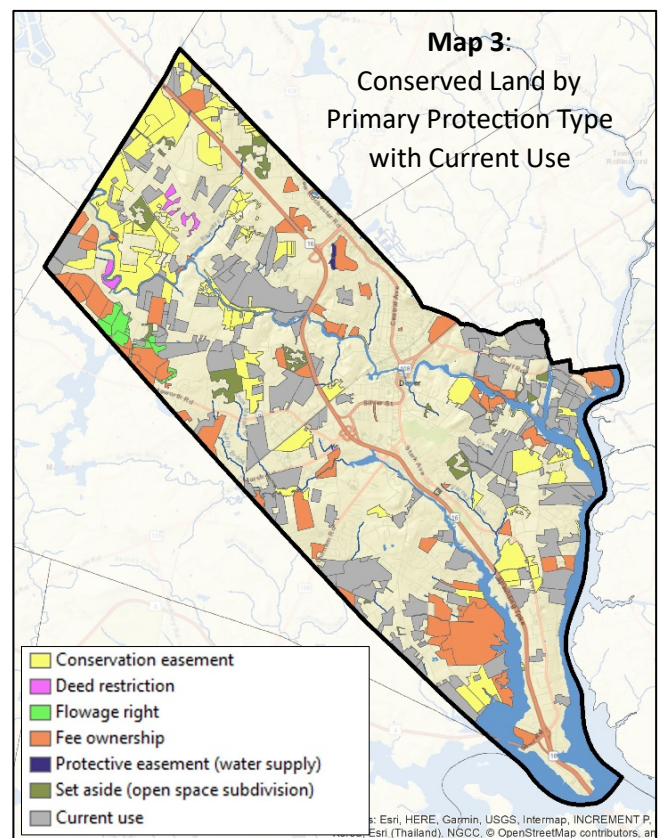


Upon deeper examination, a few other takeaways present themselves: (1) Several large contiguous blocks of conserved land exist near the mouths of the Cochecho and Bellamy Rivers and are held by entities including NH Fish & Game and Southeast Land Trust; (2) nearly 90% of all conserved lands are within ¼ mile of the main stem and tributaries of the Cochecho and Bellamy Rivers. (3) Of the 1,805 acres of conserved land owned/managed by the City of Dover, 84% are within ¼ mile of the main stem and tributaries of the Cochecho and Bellamy Rivers. These three points display just how much emphasis is placed on conserving these resources for the City of Dover and the broader region.

Map 2 shows the primary mechanism used for the protection of the property. Nearly 90% of conserved land in Dover is done so through conservation easements and fee ownership – these are by far the most common types of conservation mechanisms in New Hampshire and throughout New England. However, worth noting are the other strategies deployed in Dover. Flowage rights and protective easements help protect the water supply resources, while set asides and deed restrictions provide other creative ways of building the network of conservation and open spaces.

Another open space mechanism is the current use program, which is privately owned and undeveloped land that the owner has committed to leaving in its current state. According to city data, 4,297 acres are in current use as of 2024 – this is a ~200 acre decrease since 2012. (The 200 acres removed from current use was subjected to the change of use fee, which helps to fund land protection efforts in Dover.) It is common for land to be removed from current use for development, so a 200-acre decrease over 12 years is nothing to be concerned about. Map 3 shows current use properties along with existing conserved lands by protection type.

However, staff, boards, and committees should continue to revisit these numbers periodically. Current use can be a powerful conservation tool; once a landowner enrolls their property in current use, they are incentivized to keep it in current use by





avoiding the change of use fee. It should also be noted that a property that is formally conserved through an easement, fee ownership, or other mechanism, can still be enrolled in current use. In fact, many properties in Dover that are formally conserved are also enrolled in current use. It is important to note that lands cannot be removed from current use if they are formally conserved.

Map 4 shows the distribution of public access to conserved lands. One-third of all permanently protected lands in Dover allow full public access. Another 16% allow restricted access, which culminates in over half of conserved lands allowing for some type of public access.

The amount of restricted access and lands with no access has remained nearly identical since 2012. Restrictions vary considerably from property to property; the deed should be consulted for specifics.

Although the numbers show a slight decrease in the amount of publicly accessible land since 2012, it is unclear how 2012 numbers were calculated. With an additional 700+ acres of land with unknown access status in 2024, there is a high likelihood that fully accessible land has increased. These numbers are shown in Chart 3.

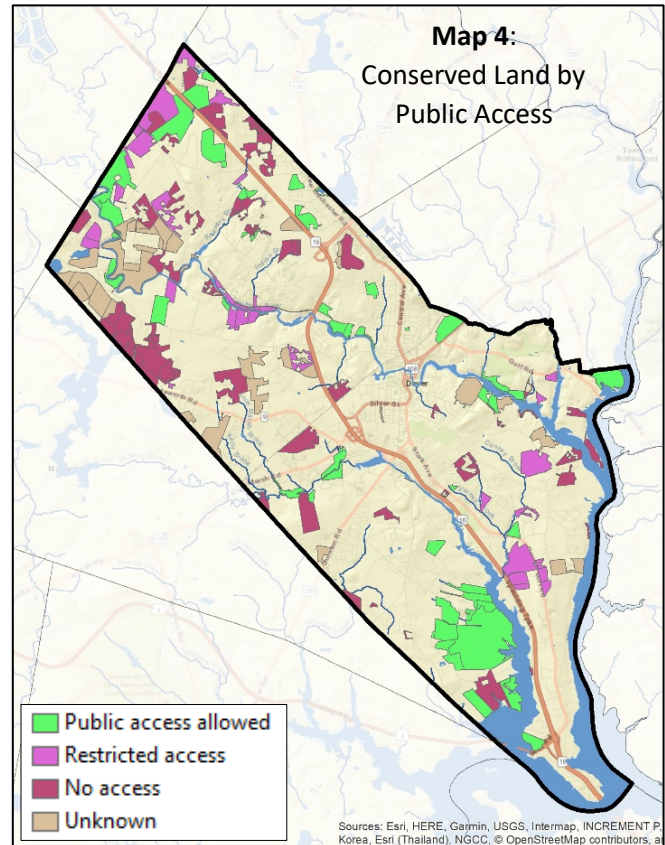
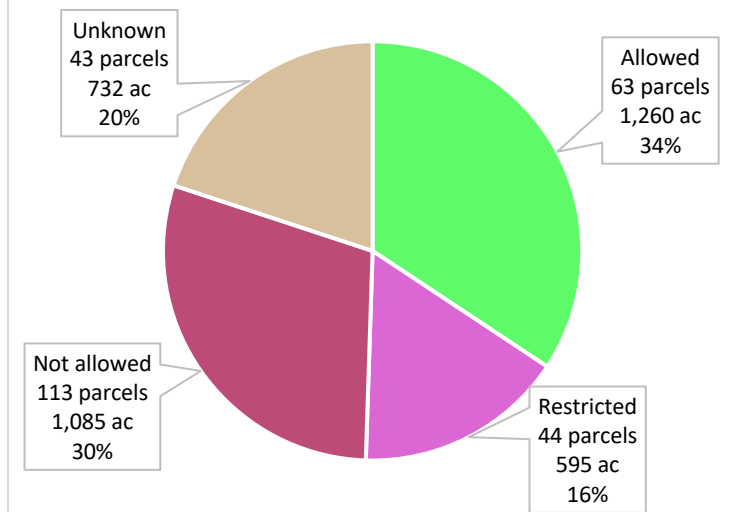


Chart 3: Access on Conserved Land



**Significant Regulatory Item:**

One of Dover’s regulatory strategies the city uses to protect valuable open space, such as wetlands, groundwater recharge zones, forested areas, and farmland, is called the **Transfer of Development Rights** (TDR) tool. The purpose of this tool is to promote intensive development on the developable lands that possess the least conservation value, and to permanently protect lands possessing significant conservation features. This tool, historically, has not been used in the rural areas of the city as much. However, there have been some development proposals in the rural areas where the TDR tool has been considered, creating concern among residents that this intensification of development in the outskirts of the city will change its rural character. As the city works to address open space protection needs and development needs, examining this tool and its application regularly will need to be part of the path forward.

At this point, it is unclear how much land has been conserved because of the TDR tool, but it is commonly understood as one of the most powerful and most used conservation mechanisms in Dover. To that point, between 2018-2022, more than \$2,000,000 were raised by the TDR tool to fund conservation efforts.

## WHERE DO WE GO FROM HERE?

Dover’s conservation landscape is changing. The dramatic expansion of protected open spaces in the late-1980’s and early-1990’s, and again in the mid-2000’s, combined with busy periods of development activity, have forever altered the remaining land available for future conservation efforts. At this point, Dover needs to begin taking steps to adapt to this new landscape and to protect the remaining connections between resources and open spaces that are still available. Instead of looking for large swaths of intact habitat, the city needs to be forward-thinking, creative, and deliberate in identifying the projects it focuses on.

With that in mind, the Strafford Regional Planning Commission was tasked with providing a Natural Resource Inventory (NRI) that was completed in 2024. As part of that process, city staff and committees identified 21 data layers to incorporate into a co-occurrence analysis with the goal of prioritizing future conservation efforts.

As mentioned earlier in this report, a formal scoring system exists for the Open Lands Committee (OLC) to rank potential conservation projects, which has historically been used as a conversation piece rather than a formal score determining whether the city should proceed. Criteria included in the 2019 Dover OLC Criteria Rating Sheet include:

- |   |                                 |
|---|---------------------------------|
| - Relation to existing conserved lands    | - Agricultural soil quality     |
| - Relation to 2006 Coastal Watershed Plan | - Historic or cultural features |
| - Climate change impacts                  | - Public access allowed         |
| - Drinking water protection               | - Scenic viewshed               |
| - Surface water quality                   | - Agricultural features         |
| - Habitat quality                         | - Size of property              |



- Development threat
- Stewardship
- Reserved rights
- Presence of forest management plan
- Funding/financial considerations
- Likelihood of success

While the elements from the scoring system should continue to be used as discussion points, they should not necessarily be used as the defining metrics when deciding to pursue a project. Other variables have been built into the City's co-occurrence, which is intended to act as the primary system for prioritizing and focusing conservation efforts in the future.

The Conservation and Open Space Chapter further refined the NRI co-occurrence by weighting the inputs and, thus, providing a more usable output to focus efforts. This weighted co-occurrence process and outcomes occurred following the development of this existing conditions report. Because of this, consult the Conservation and Open Space Chapter for the process and results from the weighted co-occurrence.

=====

#### Level of Protection Definitions:

Permanent Conservation Land: This is land permanently protected from development through legally enforceable conservation easement, deed restriction, or outright ownership by an organization whose mission emphasizes protecting land in perpetuity.

Unofficial Conservation Land: This land is not permanently protected through legal mechanisms. It is owned or controlled by a public institution, public agency or other organization whose mission may not be focused on conservation, but whose clear intent is to keep land for conservation, recreation or educational purposes and in mostly natural land cover.

Unprotected Water Supply Land: This land is not permanently protected through any legal mechanisms. It is owned or controlled by suppliers of public drinking water, including unprotected supplies owned by municipalities, subdivisions of municipalities, and private water systems serving 500 people or more.

Developed Public Land: This land has no known institutional or legal mandates to prevent conversion of natural land cover to human uses. It includes public land having, or expected to have, developed infrastructure on more than 50% of its area (e.g., beaches, picnic areas, ball field, boat ramps, and municipal wellfields).

# Co-Occurrence Analysis Datasets

## PRIORITY RESOURCES

While a formal scoring system exists for the Open Lands Committee (OLC) to rank potential conservation projects, it has often been used as a conversation piece rather than a formal score determining whether the City should proceed. Criteria included in the 2019 Dover OLC Criteria Ranking Sheet include:

- Relation to existing conserved lands
- Relation to 2006 Coastal Watershed Plan
- Climate change impacts
- Drinking water protection
- Surface water quality
- Habitat quality
- Agricultural soil quality
- Historic or cultural features
- Public access allowed
- Scenic viewshed
- Agricultural features
- Size of property
- Development threat
- Stewardship
- Reserved rights
- Presence of forest management plan
- Funding/financial considerations
- Likelihood of success

With that in mind, the Strafford Regional Planning Commission (SRPC) was tasked with providing a Natural Resource Inventory (NRI) that was completed in 2024. As part of that process, City staff and committees identified 21 data layers to incorporate into a co-occurrence analysis with the goal of prioritizing future conservation efforts.

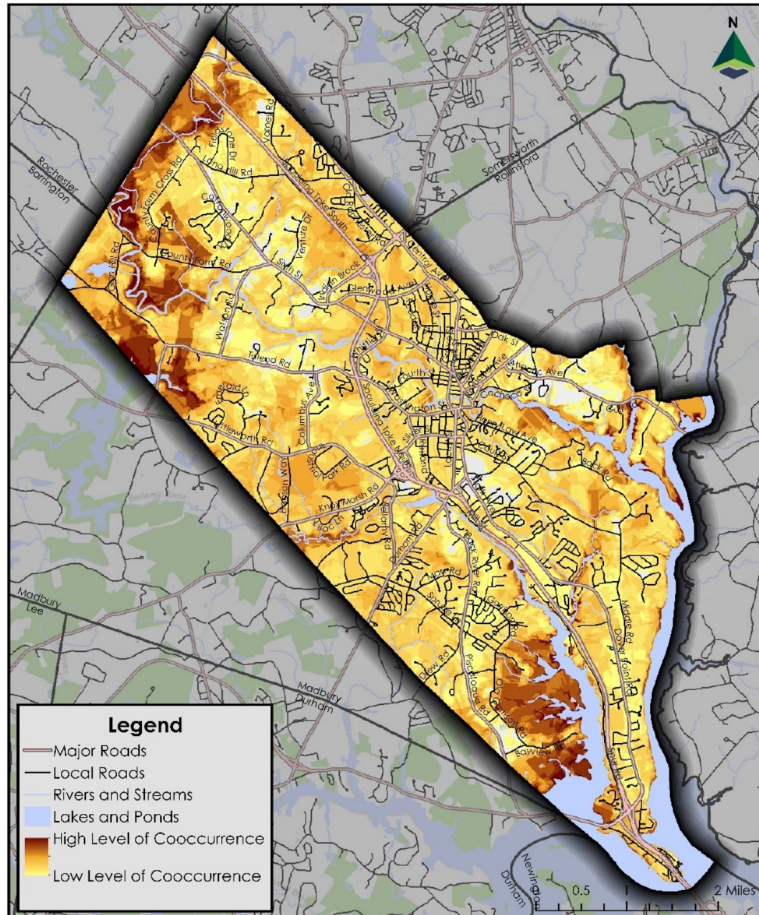
- Agricultural land
- Aquiculture
- Farmland soils
- Oyster habitat
- Aquifers
- Wellhead protection areas
- Sea level rise
- Flood zones
- Salt marsh migration
- Soil drainage
- Steep slopes
- Rivers & streams
- Waterbodies
- Wetlands
- Tier 1 wildlife habitat
- Tier 2 wildlife habitat
- Prioritized habitat blocks
- Wildlife corridors
- Forested lands
- Conservation focus areas
- Existing conserved lands

Map #1 displays the co-occurrence results with Map #2 overlaying existing conservation lands in the City demonstrating co-occurrence areas that remain unprotected. However, this preliminary co-occurrence weighs all data inputs equally without accounting for explicit Town priorities. These results present two issues: (1) most high co-occurrence values are in areas that have already been conserved; and (2) with no clear priorities, the conclusion is homogenous without clear focus. The latter issue is best

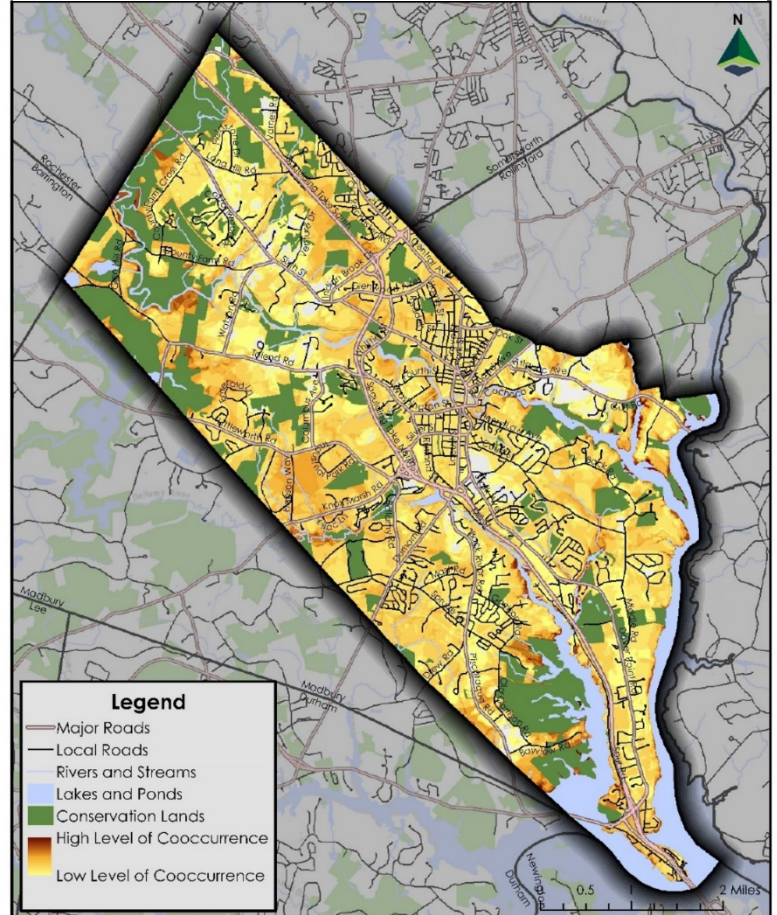


summarized by the adage “if everything is a priority, nothing is a priority” – if all 21 data inputs are weighted equally, there is no clear focus resulting in a homogenous output.

**Map # 1: Natural Resource Inventory Preliminary**  
**Co-occurrence**



**Map # 2: Natural Resource Inventory Preliminary**  
**Co-occurrence with Existing Conserved Land**



The Conservation and Open Space Chapter further refined the NRI co-occurrence by weighting the inputs and, thus, providing a more usable output to focus efforts. The first step was for the Conservation & Open Space Chapter Steering Committee to identify broad conservation priority categories before allocating the specific datasets to them. The Committee feels the areas of greatest conservation importance to help direct efforts over the next 8-10 years are:



Datasets included in the groundwater quality and quantity category are:

- **Stratified-drift aquifer:** A rough measure of the aquifer material's ability to allow water to flow to a well in any given location<sup>1</sup>. Data created by New Hampshire Department of Environmental Services.
- **Wellhead protection areas:** The area under which groundwater flows to a producing well.<sup>2</sup> Data created by New Hampshire Department of Environmental Services.

Datasets included in the hazard mitigation land category are:

- **Sea level rise 6':** Predicted sea level rise extent. Data based on Digital Flood Insurance Rate Maps (DFIRMs) for Rockingham and Strafford Counties.
- **Flood zone:** 100-year flood zones. Data created by Federal Emergency Management Agency.
- **Sea level affecting marshes model (SLAMM):** Tidal marshes are susceptible to climate change, especially sea level rise. The model simulates the dominant processes involved in wetland conversion and shoreline modification under different scenarios of sea level rise.<sup>3</sup> Data created by New Hampshire Fish & Game and the Great Bay National Estuarine Research Reserve.
- **Poorly drained soil:** Identifies poorly drained natural drainage conditions of the soil and refers to the frequency and duration of wet periods. Data created by the Natural Resources Conservation Service.
- **Steep slope:** Identifies areas of slope greater than 15% at potentially greater risk of erosion. Data created by Strafford Regional Planning Commission.



Datasets included in the important wildlife habitat category are:

- **Wildlife Action Plan – Tier 1 Habitat:**
- **Wildlife Action Plan – Tier 2 Habitat:**
- **Prioritized habitat blocks:**
- **Wildlife corridors:**
- **Forested land:**
- **Conservation focus areas:**
- **Existing conserved land:**

## RP&D Team Meeting

### Dover StoryMap Outreach Summary

#### - **QUESTION 1: HOW DO YOU USE DOVER'S OPEN SPACE?**

Of the 62 responses (as of August 6, 2024):

- 90% identified walking/running/hiking
- 32% identified bicycling
- 23% identified field activities (soccer, etc.)
- 15% identified court activities (basketball, etc.)
- 27% identified other
  - o Kayaking, wheel chairing, picnicking, viewing wildlife, frisbee/disc golf, hunting/fishing

#### - **QUESTION 2: OF THE PRIORITY AREAS MENTIONED ABOVE, PLEASE RANK THEM IN ORDER OF IMPORTANCE TO YOU.**

From the numbers below, it's evident to see important wildlife habitat and groundwater quality & quantity are the greatest priorities for respondents with nearly identical values in the highest ranking with wildlife habitat being slightly higher.

Equally clear is that hazard mitigation land was the dominant choice for third priority accounting for half of all responses for that category.

Given those two clear items, it is reasonable to pull the following rankings from respondents:

- Highest priority area: Important wildlife habitat
- Second priority area: Groundwater quality & quantity
- Third priority area: Hazard mitigation land

Priority area	First ranking		Second ranking		Third ranking	
	Raw count	Percent	Raw count	Percent	Raw count	Percent
Important wildlife habitat	30	48%	17	27%	15	24%
Groundwater quality & quantity	28	45%	18	29%	16	26%
Hazard mitigation land	4	6%	27	44%	31	50%



- **QUESTION 3A: WHAT EXISTING CONSERVATION OR OPEN SPACES NEED INCREASED ACCESSIBILITY?**

- Specific areas
  - Northwest areas
  - County Farm Cross area
  - Fish and game property
  - Berry Brook Watershed
  - Connecting Broadway to the outdoor pool
- More broadly
  - Off road bike trails
  - Community trail
  - More rural conserved areas north of downtown have no way for public to access for recreation
  - The community trail is perfect for me. Are there any other conserved lands in Dover that are wheelchair accessible?
  - Intown community trail

- **QUESTION 3B: WHAT KIND OF IMPROVED ACCESS IS NEEDED?**

- Safety
  - All/safety to cross the train bridge or some other adaptation
  - Needs safer cyclist connection across Rt 108 towards Back River Road which is an under-connected section of Dover
  - Plowing and maintenance during winter so it is safe to use. People use the trail to cross town and with winter ice it is not safe to use. The trail off Watson is suitable for recreational use and does not need to be plowed.
- Trail specific
  - Trails, particularly extending the rural end of the community trail further
  - Better paths and more trees
- Parking & Wheelchair access
  - Paved paths with adjacent parking for wheelchair access. Packed dirt, gravel, grass and wood chips aren't wheelchair accessible.
  - What about for those with walking disabilities?
- Signage
  - Better signage of where the public can recreate
  - Sign to indicate when it's safe to hike
  - Parking and signage

- **QUESTION 4A: WHAT EXISTING CONSERVATION OR OPEN SPACES NEED IMPROVEMENT?**

- Specific areas
  - Bellamy Park, Bellamy River wildlife conservation area
  - Athletic fields
  - Community trail
  - Berry Brook Watershed
  - End of the community trail from the start of the planets to Rutland
- More broadly
  - Maintain and expand community trail, access to the Cochecho river from it for swimming and boating
  - Downtown areas
  - Mapping and promotion of public access/parking/hours/etc.

- **QUESTION 4B: WHAT KIND OF IMPROVEMENTS ARE NEEDED?**

- Signage & Parking
  - More friendly entrances/signage. Entrance in the back is corner of the train stop parking lot is very unfriendly to pedestrians and unless you already plan on going to that corner of the parking lot you wouldn't know it was there.
  - Paved pathways suitable for wheelchair access and adjacent handicapped parking
  - Signage
  - Parking, more trees along trail (shade, aesthetics), wider trail mowed more often
  - Signs and awareness – that has improved SO MUCH with the new signs. Well done!
- Safety
  - Bike racks downtown, refreshing Henry law park playground, making all of Henry law park safe for young children
  - More police supervision. It is often not safe to traverse alone due to homeless camping on both intown and Watson Road end.
- Additional comments
  - Boat “launch”, repaving of urban portion of trail that needs it, and continued drainage improvements on rural portion
  - Better playing surfaces



- **QUESTION 5: WHICH AREAS DO YOU BELIEVE ARE IMPORTANT TO CONSERVE? (USE THE MAP BELOW.)**

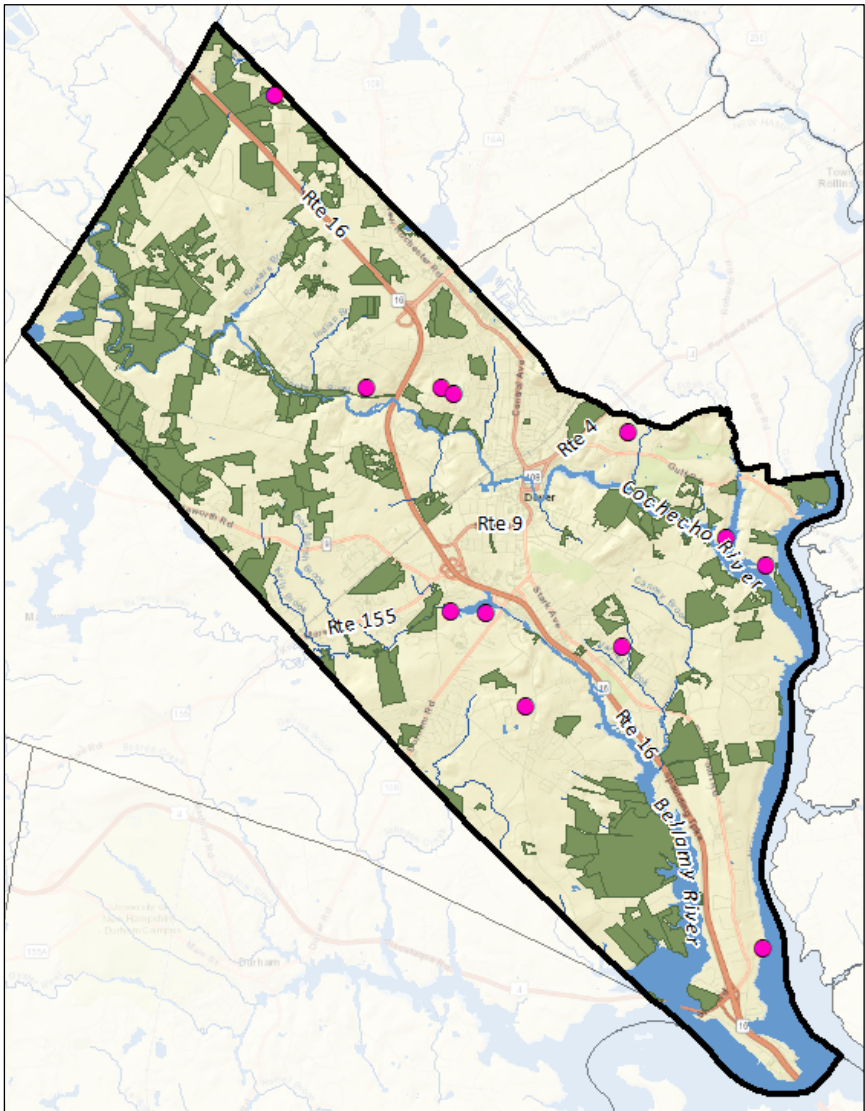
A few broad patterns appear when responses are examined.

First, nearly 2/3<sup>ds</sup> (62%) of responses are east/south of Routes 4 and 155. This shows respondents value and would like to see more conserved land in areas of Dover that are heavily developed. This could be an opportunity for smaller, more targeted parcels in these areas. Incidentally, about 2/3<sup>ds</sup> of existing conserved lands is north/west of Routes 4 and 155, which reiterates how much respondents would like to see more conserved land around the more developed parts of Dover.

Second, nearly 2/3<sup>ds</sup> (62%) of responses are within ¼ mile of the main stem and tributaries of the Cochecho, Bellamy, and Piscataqua Rivers. This is in line with a high percentage of existing conserved land (90%) within ¼ mile of those same surface waters.

Worth noting are several specific identified locations:

- Two points were placed adjacent to the Bellamy River Reservoir, which could be a good place to focus for drinking water purposes. This is in line with the high interest from respondents to focus on groundwater quality and quantity (from question 2).
- One point was placed on property owned by Liberty Mutual Insurance Co. While the 220-acre property is partially developed with 3 or 4 relatively large corporate buildings, there is also a significant amount of land that appears forested. This Community Trail crosses the property, which also has significant frontage along the Cochecho River. The property is enrolled in current use.
- Two points were placed in the lower stretches on the north side of the Cochecho River near the confluence with the Piscataqua River. This area could be an opportunity to expand and connect several existing conserved properties including Three Rivers Farm, Davis Easement, and Woodwind Farms. Many non-conserved properties in this area are enrolled in current use.



- One point near Dover's northern boundary is close to the city-owned property containing Guppy Park, the Ice Arena, Thompson Pool, and skate park. The location is east of Oak Street and several of the properties appear to be predominantly hayed fields enrolled in current use. However, the city's property database shows it is owned by Chinburg Development and may already be subdivided – it's unclear to tell. Worth exploring is, if the property is to be developed, whether it could be a candidate for an open space subdivision.
- Two points placed north of the Cochecho River and just east of Route 16 are surrounded by several existing conserved lands including Horne Street School/Park, Whittier Hill, Cassily-Cochecho Park, and the Smith Well conservation easement and Prunier-Tamposi protective easement for water supply lands. The City of Dover has an interest in all these existing conserved properties and could be an opportunity to explore expansions and connections. Several non-conserved properties in this area are owned by Sniper Holdings LLC, are predominantly forested, and are already enrolled in current use.





**Conservation Land and Open Space- Master Plan  
Feedback Form**

Survey Results  
FINAL

10/04/2024

**What conserved or undeveloped properties do you appreciate and enjoy in Dover?**

All conserved properties but primarily those allowing public access and passive recreational uses

The areas along the community trail, the Bellamy wildlife area.

Community Trail

Unsure.

Bellamy River Wildlife Sanctuary; Dover Community Trail

Community trail

Joe parks garden

Dover trail, Bellamy woods

community trail

the community trails

rabbit road

The community trail, trails along the Cocheco River, Bellamy Wildlife preserve

Cocheco game preserve off Henry Law Ave. Willand Pond. Dover Community Trail. Bellamy Wildlife and Game Preserve and wildlife sanctuary.

Walking trail

I live at the base of Garrison Hill and appreciate the natural beauty and attraction to birds and wildlife.

I appreciate any green spaces that provide a place for wildlife. The walking trails along the river and open spaces behind Back River Road are an amazing natural resource.

Dover trail

Bellamy Wildlife Management Area, County Farm Road Courthouse open area, Fresh creek right of way (i.e. the class six road between oak street and sligo rd (rollinsford)).

Conservation Easements are critical to avoiding the sale of privately owned, habitat-rich parcels to developers, who are “riding the wave” of housing shortage and affordability issues in order to get approval for highly profitable, high-density subdivisions, particularly in R-40 areas.

Community trail

The Community trail and the conservation park down by the Bellamy River and Great Bay

the wetlands at Emerald Lane as well as the walking trail from Emerald Lane (Tot Lot park) over to the Ezra parking area

Dovwr owned land around Willand Pond

Barbados Pond

Bellamy River Preserve

Community trail, Bellamy Reserve, Garrison Tower area

used to enjoy Willand but don't feel safe to walk alone anymore. Do enjoy the trails near Riverside Rest home



**What improvements are needed to enhance the use of Dover’s existing conservation lands and publicly accessible open spaces?**

Parking access, trails, forest/grassland management

Increased solid waste cleanup

More communication about them

Safety from citizens living or camping near the trail behind the Dover train station. We walk a lot in nice weather, but do so on city sidewalks due to the concern of that trail.

Sidewalks, trails and other non-motorized access points

Wayfarer signage and better publicity

Don't know no idea

Trash removal

fences along highway at the end of silver street

they need to be graded, paved and plowed in the winter as they are muddy and rocky and icy. They are getting worse as more people use them, and dangerous with roots, and rocks. The winter is the worst!

A link on the city website to our conservation lands and publicly accessible sites.

Maybe larger obvious signs regarding carry in/carry out trash. I sadly see a lot of trash on my walks especially off trail.

Parking

I have noticed invasive species increasing their stronghold at Garrison Hill.

Number one would be knowing where they are. Have a campaign of sharing this information.

Knowledge of where these lands are

I wish it was easier to learn more about the conservation lands and their history.

More thorough processes are needed to assess the irreversible impacts of subdivisions on wildlife habitats and corridors. These wildlife and environmental assessments must be mandated, and be independently completed early in the design process, steering developers towards acceptable design plans.

Safety for users. More awareness of conservation spaces in Dover, where they are etc

Additional parking, especially Down at the conservation park

Assure that "forever wild" designations can not be changed

That land needs to have official trails to improve recreation quality and keep homeless out.

Make sure as Dover develops, conservation spaces are upheld.

The control of invasive plant species (mainly oriental bittersweet, multiflora rose, Japanese barberry, Japanese knotweed, etc.)

More access to the river for kayaks and canoes!

to ensure citizens are safe

**Are you aware of specific parcels of land or areas within the City in need of protection? If so, let us know where those are and why they should be protected.**

Along water's edge/shoreline

No. The Open Lands Committee does a very good job identifying them.

The parcel of land between Quail Drive and Production Drive is full of wetlands and should have been protected. Instead it was sold to the storage place on Sixth Street for storage to be built on. This land divided the businesses from the residential but was rezoned from residential to facilitate the sale.

The area behind Bellamy Woods extending to 155

No ideal

No

No

210 Tolend Rd. This property ranks in the top fifteen percent in the state for it's quality of wildlife habitat, according to New Hampshire Fish and Game. It also has received federal funds for assistance in creating habitat for the threatened New England cottontail. The property owner is currently requesting an increase in the density of TDR units which will threaten not only the habitat of the New England Cottontail but other species as well. I believe that the area that received federal funding to create habitat should be forever protected from development and that the additional TDR units should not be approved.

Back Road has a lot of wooded property, not sure if some of this land is privately owned or not but it would greatly affect wildlife and the ambience of the area if it were to be developed.

The old pedestrian walking bridge opposite Chestnut Street

Along Abby Sawyer Lane there is a healthy growth of Japanese Knotweed. This site explains what it is: [https://www.ci.durham.nh.us/boc\\_landstewardship/knotweed-project](https://www.ci.durham.nh.us/boc_landstewardship/knotweed-project) There is also a growing amount of Garlic Mustard going up the old Carriage Road path, especially across from the back of the HighRidge Apartments. This site explains what it is: <https://www.nature.org/en-us/about-us/where-we-work/united-states/indiana/stories-in-indiana/garlic-mustard/> There is also a great deal of erosion from the heavy rains we have had. Dirt, stones and debris wash down the pathway all the way to the intersection of Brick and Floral. There are ways to make a nice looking conservation path that discourages the erosion. Perhaps UNH Cooperative Extension could take a look at it.

No, I am not aware of any. I would have to think about it.

????

Ambrose Woods, located at 210 Tolend Road, is a 56 acre property with irreplaceable wildlife habitat and wildlife corridor characteristics. The property owner/developer is proposing to clear the habitat lands and build a high density of housing, using the TDR process.

No

There's a big parcel Of land across from the industrial park on 155 that I think was going to be used for a sports. That would be a perfect spot for an additional extension of the Community Trail.

The wetlands between Emerald Lane and Tolend Road dodged a bullet, so to speak, last month. Thank goodness. There is significant wildlife in that region including sizable life (bear, deer, coyote, turkey, rabbit). Preservation of this area is critical for the successful lives of these animals.

Dover owned land around Willand Pond

There are a concerning number of invasive plants along the community trail and behind Woodman Park Fields- knotweed, garlic mustard, bittersweet, locust, burning bush. It would be great to see more remediation of these areas.



**Is there anything else about Dover's Conservation Lands and Open Spaces that you would like to share?**

Dover has been proactive in these areas and well served by Conservation Commission, Open Lands Committee and staff

The OLC had done tremendous work.

Happy to know that there are still citizens who work with OLC to conserve their land.

Our wildlife is disappearing due to the destruction of natural spaces for them. We need to conserve whatever we can, for their sake, as well as our own.

Keep Old Garrison Road accessible to ALL!

Connectivity is very important and would be a nice goal for future conservation

I am afraid to go to areas like Willand pond and the community trail due to the homelessness issue

Is there a map showing all the conservation lands and open spaces in Dover and in which are the public allowed ?

NO

I would like to know where these are, and if they are available for dogs to run and play on?

I served on the Open Lands Committee for three years and really appreciate the town's commitment to identifying properties that should be protected for habitat, water quality protection, and future generations to enjoy.

No.

Better access to these locations.

I especially like what you have done with Bellamy River Wildlife Sanctuary. Thank you for conserving this area for birds and wildlife and all you have done to educate people here. Could we do more for Garrison Hill to build respect for this small area...please leave the dead trees and wild areas. I have seen Red Bellied Woodpeckers and Pileated Woodpeckers and they need these untouched areas.

Create more public/private/community engagement opportunities.

As housing construction pressures increase in Dover, the Planning Board, Conservation Commission, and the Open Lands Committee are literally the last line of defense against wholesale loss of high-priority habitat areas. Please ensure that processes are in place to weigh each subdivision application against irreversible loss of the remaining habitat lands. The draw of Dover to many many homeowners is the rural and natural beauty...

I like that you are planning for these critical spaces, thank you!

This may not be the forum, but it would be nice if we had a bicycle trails that connected from Portsmouth to existing paths further north

not at this point

**Dover Conservation Commission**  
**Proposal to the City Council for Re-Allocation of**  
**the Change of Use Fees to a Conservation Fund**

Dover City Council Workshop Session  
September 29, 1999

**Why should Dover establish a Conservation Fund based on the Current Use Change Fees?**

The impetus for the Conservation Commission's "Open Space Initiative" was the controversy which resulted from the recent loss of public access to Barbados Pond. It is our understanding that the developer of the Garrison Woods subdivision approached the City to inquire whether Dover had any interest in purchasing land to provide permanent public access to Barbados Pond. The developer was told that the City had no funds available to undertake such a project. The developer then proceeded with the residential development under the protests of many abutters. The Planning Board also applied pressure to the developer to accommodate the public's requests for continued access to the pond. In the end, public access to Barbados Pond was lost.

The Dover Conservation Commission recognizes that the State of New Hampshire's intent in creating the Current Use Change Tax was to provide a mechanism for funding open space protection activities. Under this statute a penalty is assessed on lands that are being converted from woodlands or agricultural use, to commercial or residential use. The Current Use change fee is now collected by City of Dover and is placed in the general fund. These fees are not considered part of the City's annual budget, since the amount generated by Current Use change fees varies due to the ups and downs in the real estate market. Dover is currently experiencing very high level of residential development. Citizens are very concerned about how this development will impact the quality of life in Dover. By allocating the Current Use change fees to their intended purpose, the Dover City Council will enable the public to preserve a portion of the scenic and rural character that makes Dover a great place to live.

This document outlines the reasons why the Dover City Council should create a Conservation Fund based on the Current Use change fees. These reasons are grouped into the following subheadings:

- **Authority** - A list of applicable statutes, codes, and recommended codes to be drafted.
- **Motivations and Justifications** - Why the re-allocation of the funds should be made.
- **Open Space Implementation Plan** - How the Dover Conservation Commission proposes to prioritize and protect open space with the Conservation Fund.

This document is intended to serve as an outline for discussions at the City Council Workshop Session, September 29, 1999. It presents many points that will be detailed by the Conservation Commission members and other concerned individuals who may be present.



## Authority

The Current Use Fee or tax was created by the State of New Hampshire. Title 5 of the Revised Statutes Annotated (RSA), Chapter 79A details Current Use Taxation. A copy of this statute is attached for reference. The preamble to RSA 79-A states:

79-A:1 Declaration of Public Interest. – It is hereby declared to be in the public interest to encourage the preservation of open space, thus providing a healthful and attractive outdoor environment for work and recreation of the state's citizens, maintaining the character of the state's landscape, and conserving the land, water, forest, agricultural and wildlife resources. It is further declared to be in the public interest to prevent the loss of open space due to property taxation at values incompatible with open space usage. Open space land imposes few if any costs on local government and is therefore an economic benefit to its citizens. The means for encouraging preservation of open space authorized by this chapter is the assessment of land value for property taxation on the basis of current use. It is the intent of this chapter to encourage but not to require management practices on open space lands under current use assessment.

RSA 79-A also specifies how lands can be placed in and taken out of the Current Use designation, and how penalties are to be assessed when parcels are taken out of Current Use. The statute also recommends how the assessed penalty should be used:

§ 79-A:25 Disposition of Revenues. – II. The legislative body of the town or city may, by majority vote, elect to place the whole or a specified percentage, amount, or any combination of percentage and amount, of the revenues of all future payments collected pursuant to this chapter in a conservation fund in accordance with RSA 36-A:5, III. The whole or specified percentage or amount, or percentage and amount, of such revenues shall be deposited in the conservation fund at the time of collection.

New Hampshire RSA, Title 3, Chapter 36A established the responsibilities and authority of Conservation Commissions. A copy of this statute is attached for reference. Section 36-A:4 of this statute outlines the powers of Conservation Commissions and states, in part:

Said commission may receive gifts of money and property, both real and personal, in the name of the city or town, subject to the approval of the local governing body, such gifts to be managed and controlled by the commission for the purposes of this section. Said commission may acquire in the name of the town or city, subject to the approval of the local governing body, by gift, purchase, grant, bequest, devise, lease, or otherwise, the fee in such land or water rights, or any lesser interest, development right, easement, covenant, or other contractual right including conveyances with conditions, limitations or reversions, as may be necessary to acquire, maintain, improve, protect, or limit the future use of or otherwise conserve and properly utilize open spaces and other land and water areas within their city or town, and shall manage and control the same.

Section 36-A:5 of this statute outlines how money may be maintained in a Conservation Fund:

I. A town or city, having established a conservation commission as authorized by RSA 36-A:2, may appropriate money as deemed necessary for the purpose of this chapter. The whole or any part of money so appropriated in any year and any gifts of money received pursuant to RSA 36-A:4 may be placed in a conservation fund and allowed to accumulate from year to year. Money may be expended from said fund by the conservation commission for the purposes of this chapter without further approval of the town meeting.

II. The town treasurer, pursuant to RSA 41:29, shall have custody of all moneys in the conservation fund and shall pay out the same only upon order of the conservation commission. The disbursement of conservation funds shall be authorized by a majority of the conservation commission. Prior to the use of such funds for the purchase of any interest in real property, the conservation commission shall hold a public hearing with notice in accordance with RSA 675:7.

Dover City Code, Chapter 14, Section 5 lists the Powers and Duties of the Dover Conservation Commission. This section is reproduced below:

The Commission shall have the following duties and perform the following functions:

A. The Commission shall prepare a program of conservation and a program of watershed and open space protection for the City of Dover and, in undertaking this program, shall conduct research into local natural resources, watershed areas and open spaces, along with evaluation of the uses thereof. It shall keep an index of the open areas, swamps, wetlands and areas of unique natural value of ecological importance within the city. The Commission shall coordinate its efforts with the activities of other official or unofficial bodies conducting studies, research and evaluations for similar purposes.

B. The Commission shall prepare, adopt and, from time to time, review and amend a conservation and open space plan and shall submit said plan to the Planning Board for consideration as part of the Comprehensive Plan for the City of Dover. In preparation of said plan, the Commission shall also obtain information pertinent to the proper utilization of open areas in the city, including any lands owned by the city and by the state, and shall make recommendations for the better promotion, development or utilization of said natural resources and open areas in the city.

C. The Commission shall inform itself of the ways and means by which its plans and programs may be achieved and shall advise municipal agencies, the City Council, private interests and the public of the manner in which these objectives may be accomplished. It may accordingly advertise, prepare, print and distribute books, maps, charts, plans and pamphlets which in its judgment, it deems necessary for its work as defined herein.

D. The Commission shall adopt bylaws and shall keep accurate records of its meetings and actions and shall file an annual report with the City Council which shall be included in the annual city report.

E. The Commission may receive gifts of money and property, both real and personal, in the name of the city, subject to approval of the City Council; such gifts to be managed and controlled by the Commission for the purposes of this section. It may also, subject to approval of the City Council, acquire by gift, purchase, grant, bequest, devise, lease or otherwise the fee in such land or water rights or any lesser interest, development right, easement, covenant or other contractual right, including conveyances with conditions, limitations or revisions, as may be necessary to acquire, maintain, improve, protect or limit the future use of or otherwise conserve and properly utilize open spaces and other land and water areas within the city. The Commission shall manage and control such property in accordance with the purpose of this chapter, subject to the review of the City Council.

F. Any moneys received by the Commission shall be placed in a conservation fund and allowed to accumulate from year to year, and such moneys may be expended from said fund for purposes consistent with this chapter. The city may also make appropriations to the Conservation Fund. All moneys maintained or expended by the Commission shall be recorded in accordance with city accounting procedures, and any matters relating to personnel shall be governed in a manner consistent with the pertinent requirements of the City Charter and appropriate city ordinances.

We, the Dover Conservation Commission, feel that the statutes and codes outlined above not only authorize us to secure a permanent source of funding for open space protection, but they actually compel us to pursue this effort. Attached is a copy of our resolution regarding the disposition of revenues from the land use change tax.

If provided the means to establish viable Conservation Fund, through re-allocation of the Current Use change fees, the Conservation Commission will work with the City Council and City



Attorney to establish a set of guidelines and procedures for authorizing disbursements from the Conservation Fund. Preliminary guidelines that we have established include:

- The Conservation Fund will be used to protect land of significant value. Prioritization of open space land protection activities will be as outlined in the “Implementation Plan” section below. Protections will be from purchase of development rights through Conservation Easements, or if necessary, fee simple or full ownership of specific parcels.
- The Conservation Fund may be used to facilitate voluntary protection by landowners willing to donate development rights or land ownership to the City of Dover or other private land trusts. Disbursements from the Conservation Fund may be used to cover legal fees for developing deed restrictions (i.e., Conservation Easements), if the person making the donation of land or development rights requests the City to cover the costs of legal services. This is a reasonable incentive to encourage voluntary land preservation within Dover.
- The Conservation Fund may be used to facilitate the formalization of protections on City-owned parcels not permanently protected. The City can (and has in the past) sold lands it owns with significant natural resources and ecological value. The Dover Conservation Commission, through its natural resource inventory efforts, may identify a City-owned property which should remain permanently protected. With the City Council’s approval, disbursements from the Conservation Fund may be used to cover legal fees for instituting formal deed restrictions on City-owned land.
- The Conservation Fund may also be used for appraisals and studies that may identify the conservation values on a parcel prior to purchasing an easement or purchase.

At this point, the Conservation Commission does not envision using Conservation Funds for other activities such as trail building, financial support for scientific studies, or administrative functions (filing, record keeping, etc.) The costs for these activities, if worth undertaking, should be supported by an annual budget established for the Conservation Commission, or through grants and donations from outside sources.

### **Motivation and Justification**

The following is a brief review of the reasons why the Conservation Commission is requesting a change in the disposition of revenues generated by the Current Use change tax to a Conservation Fund to protect and preserve open spaces within the City of Dover.

- Open space contributes to the rural and scenic character of Dover. This character is and will continue to be threatened by pressures of commercial and residential development. Protecting open space helps fight sprawl.
- Open lands also tend to benefit the environment in providing buffers to pollution runoff. Land preservation efforts of others have focused on areas surrounding the Great Bay Estuary system. Dover is in the Great Bay watershed area.
- When linked together, protected open space provides corridors of opportunity for the benefit of wildlife. Efforts focused on protecting unfragmented lands will promote wildlife’s continued existence in Dover.

- The maintenance of open lands offer residents the benefits of recreational enjoyment of nature in it's sights and sounds as they walk, snowshoe, or cross-country ski. With targeted areas of open-land protection in all city wards, the benefits are spread throughout the city's neighborhoods and the facilities are available proximal to city residents irregardless of ward residence.
- Protecting land from development reduces increased costs of services which the City is obligated to provide. To reiterate a portion of the preamble to RSA 79-A: "Open space land imposes few if any costs on local government and is therefore an economic benefit to its citizens". A variety of economic models have shown that "Open Space Pays". Some NH communities have actually started to include open space protection in their Capital Improvement Programs, preferring to protect now to save later.
- By establishing a Conservation Fund, the City of Dover will be able to compete for matching grants for open space protection offered the federal, state, or private programs. Without the ability to come up with matching funds, Dover will likely be left out of consideration. Use of grant funding allows the City to leverage its funds. Grants usually require from 20 to 50 percent match. A 50 percent match will double the purchasing power of the City of Dover and a 20 percent match will increase the purchasing power five times.
- The Conservation Fund will facilitate the implementation of Dover's Conservation and Recreation Master Plan. This chapter of the City's Master Plan is currently under revision. The draft plan calls for active open space preservation.
- Individual's property rights would be promoted by enabling the City of Dover to properly compensate a land-owner for development rights, or the land itself, as opposed to the present practice of trying to coerce developers into ceding lands without any compensation
- Open space preservation is in the public interest. It's what the citizens of Dover were concerned about during the recent hearings regarding the City-wide zoning amendments.

### **Implementation Plan**

The Dover Conservation Commission has discussed how we propose to inventory and prioritize our open-space preservation activities. Most of these steps are also echoed in the Conservation and Recreation Chapter of the Master Plan currently under revision.

Our objective is to protect land of significant value. Wetlands have high ecological value and most of the Conservation Commission's activities are already aimed at protecting wetlands from development pressures. However, wetlands are not the primary focus of our open-space protection efforts. Wetlands are intrinsically protected from development by the fact that they can not be dredged or filled without regulatory scrutiny at the local, State, and Federal level. Upland open spaces, such as forests and agricultural lands, are much more susceptible to be impacted by commercial or residential development. Such upland areas will be given priority in our protection efforts.



The following is a brief outline of how the Conservation Commission would accomplish our open space protection goals:

- A standing Open Space Committee will be created. The Open Space Committee will consist of representatives from the Recreation Department, Conservation Commission, Planning Board, City Council and others with specific areas of relevant expertise. The diligence of the Conservation Commission would be expected to wax and wane as its membership changes with time. An Open Space Committee, comprised of members of other boards and City professional staff, would provide an enhanced degree of continuity to the open space protection initiative. The Open Space Committee would establish policy, broad goals and coordinate the activities of smaller working groups pursuing open space protection on behalf of the City of Dover. Section 2 of RSA 36-A authorizes the Conservation Commission to establish sub-committees to accomplish its goals. The standing Open Space Committee would be a subcommittee of the Conservation Commission. The responsibility for determining how Conservation Funds are to be used is given to Conservation Commissions, by RSA 36-A and RSA 79-A.
- The Conservation Commission will continue its efforts to inventory existing conservation lands and also identify potential future open-space parcels. This effort will include the completion of Natural Resource Inventories (NRIs) of conservation lands within the City. Currently two NRIs are underway as class projects for University of New Hampshire Natural Resource students. Ideally, the inventory data generated from these efforts will be maintained in the City's Geographic Information Systems (GIS) database.
- Ward-by-ward open-space working groups will be established to accomplish two tasks: 1) identification of parcels to be protected; and 2) establishing priorities for protection. Two target areas for the efforts of the working groups will be an assessment of lands presently under current use designation and identification of areas with high potential for development, so-called "Critical Lands". The latter is the subject of a research project recently completed by the Complex Systems Research Center at UNH. Examples of these data will be presented.
- Management Plans will be completed for individual conservation land parcels. The management plans will identify appropriate usages for each parcel based on physical characteristics and legal protections. Some parcels may have significant habitat value and should be managed for primary use by wildlife. Other parcels may be better used as recreational facilities. The management plans would specify and promote appropriate usage. The management plans will also specify stewardship requirements. Land stewards will need to conduct routine site visits, perhaps annually, to ensure that inappropriate activities are not taking place within the conservation areas.

## **Conclusions**

The Conservation Commission is actively pursuing open space protections which would be enhanced by a permanent source of funding. Re-allocation of the Current Use Fees to their intended purpose of establishing a Conservation Fund would benefit all the citizens of Dover and future generations. The Conservation Commission will continue to seek opportunities to

encourage land owners within Dover to consider voluntary preservation of family farms and woodlands as permanently protected open spaces.

Land presently placed in Current Use represents a limited resource. While being maintained under this status, the landowner is being compensated, by a reduced tax burden, to leave these spaces open and undeveloped. According to the City Assessors Office there are 222 parcels consisting of 5,236.92 acres of land in Current Use in Dover:

- 1,990.06 acres in Agriculture
- 2,924.21 acres in Forest
- 163.56 acres in Unproductive
- 159.09 acres in Wetland

The Current Use Assessment on the land in Current Use is \$1,035,800. When property comes out of Current Use a 10% of market value penalty is paid to the city. Market value today is anywhere between 4 and 10 times the Current Use assessed value. Assuming an average of 7 times assessed value if all the land in Current Use were to come out in today's market, it would generate approximately \$700,000 in penalties. This is a best guess, as actual market values used to assess Current Use penalties are determined by a complex set of formulas and circumstances. In 1998, 87.3 acres came out of Current Use.

The intent of the Current Use fee is to allow communities to offset or mitigate the loss of the open spaces which have been previously protected by tax incentives. To continue to use the Current Use funds to offset a very small portion of the City's operating budget would be a disservice to the citizens of Dover.

**Note:**

**This proposal was unanimously approved by the Dover City Council on November 10, 1999. A Conservation Fund has been established and is to be administered the City of Dover Conservation Commission. The fund receives 100% of the Current Use Change Penalties with no annual cap.**



CITY OF DOVER  
**PROPOSED**  
RESOLUTION RE: THE DISPOSITION OF REVENUES FROM THE LAND  
USE CHANGE TAX

WHEREAS: The Conservation Commission of the City of Dover is charged with the protection and promotion of the natural resources of Dover (RSA 36-A and Chapter 14-3 of the Dover Code);

WHEREAS: The New Hampshire General Court has provided that revenues received under the Land Use Change Tax may be placed in a conservation fund (RSA 79-A:25 II);

WHEREAS: Chapter 14-5-F of the Dover Code provides for a Conservation Fund to be used for purposes consistent with the Conservation Commission duties;

WHEREAS: The Dover City Conservation Commission has recommended that the City Council dedicate all revenues received from the Land Use Change Tax to the Conservation Fund for the purposes of the preservation and protection of natural resources, open space, and conservation land.

NOW THEREFORE BE IT RESOLVED BY THE MAYOR AND CITY COUNCIL THAT:

The City of Dover hereby adopts the provisions of RSA 79-A:25 II which reads as follows:

The legislative body of the town or city may, by majority vote, elect to place the whole or a specified percentage, amount, or combination of percentage or amount, of the revenue of all future payments collected pursuant to this chapter in a conservation fund in accordance with RSA 36-A:5. The whole or specified percentage or amount, or percentage and amount, of such revenues shall be deposited in the conservation fund at the time of collection.

The City Treasurer is hereby authorized and directed to place all revenues collected under the Land Use Change Tax into the Conservation Fund to be used by the City as directed by the Conservation Commission and with the approval of the City Council for acquisition, preservation, maintenance, accessibility and linkage of open space as provided in the Open Space section of the City's Master Plan, natural resources, water resources, and for the administration of its programs to accomplish these purposes.

This resolution shall take effect upon its final passage.

Approved to form  
George Wattendorf  
Legal Division

Sponsored by  
Mayor Wil Boc, by request

Recorded By:  
Judy Gaouette  
City Clerk