



TOWN OF CONCORD
NATURAL RESOURCES COMMISSION
141 KEYES ROAD, CONCORD, MASSACHUSETTS 01742
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September 29, 2017

Gary Kleiman and Elise Woodward, Co-Chairs
Concord Comprehensive Long Range Plan Committee
141 Keyes Road
Concord, MA 01742

Re: NRC Input to Concord Long Range Plan (CLRP)

Dear Mr. Kleiman and Ms. Woodward,

The Natural Resources Commission (NRC) offers the following input to the Town's CLRP. This feedback includes input from the Conservation Restriction Stewardship Committee, the Heywood Meadow Stewardship Committee, and the Trails Committee.

The NRC has, for over 30 years, regularly developed and gained approval of the Town's Open Space and Recreation Plan, incorporating significant public input and contributions from key non-governmental conservation and environmental organizations in Town. The NRC's input to you is based in large part upon the priorities and action items identified in the 2015 Open Space and Recreation Plan.

The primary focus of our input is threefold:

1. Advocate for keeping protection of open space and natural resources a high priority in the CLRP.
2. Suggest approaches the CLRP and Town should consider to protect our open space and natural resources and meet other important strategic goals.
3. Outline the American Planning Association (APA) Best Practices not already identified in the Strengths/Weaknesses/Opportunities/Threats (SWOT) that can be achieved by protecting open spaces and natural resources.

Why continue to protect open space and natural resources

1. **Maintain the Town's character**--Concord is blessed with extraordinary natural resources and a strong culture and long history of preserving and protecting these natural resources. Our open space and natural resources are a critical part of Concord's town character. They have real economic value in continuing to make Concord a desirable town to live in and to visit. Many of Concord's historical and cultural institutions are linked as closely with open spaces and natural resources as they are with buildings. For instance, Heywood Meadow, witness to the march of

the Minutemen on April 19, 1775, stands as a welcome reminder of Concord's rural nature as one enters the heart of Concord Center. This evocative landscape has been successfully protected against several development proposals over the past 70 years. Protection of Concord's open spaces, including both larger parcels and smaller green spaces in the built areas of Town, is crucial to ensuring that the character of the Town is retained.

2. **Protect water resources and biodiversity**— With three nationally recognized Wild and Scenic Rivers that run through Concord, and numerous associated streams and brooks, Concord is endowed with a wealth of water resources that provide many public benefits to its residents and contributes to its high biodiversity. Concord is approximately 20 miles from Boston yet contains some of the Commonwealth's highest biodiversity and extensive protected wetland resource areas - a main reason people choose to live here.
3. **Improve recreational access and connectivity**—Concord's trail network is impressive. Through its Trails Committee, the NRC has developed off-road access to neighborhoods, schools, and natural resources throughout Town. Trail connectivity enhances the public's appreciation for land conservation, provides opportunities for better stewardship of the land, and underscores the importance of acquiring Conservation Restrictions. Providing connectivity through open spaces will also allow for less car-dependence and help reduce the Town's carbon-footprint.
4. **Protect agricultural land, including fields, meadows, and orchards**—The Town has long identified the importance of agricultural land preservation, both in active farmlands as well as small, connecting, neighborhood and community parks and commons. Residents want to protect farmland in Concord not only because of its scenic and historical importance, but also because of a desire to produce food locally.
5. **Open space and natural resources are irreplaceable**— Land is a finite resource and as it becomes scarcer, development pressures become more intense. It is critical that the Town continue efforts to protect land for conservation purposes, and guide development outside wetland resource areas to ensure that the quality and quantity of protected land remains high. Using the 2015 Open Space Framework (Attachment 1) as the overall guiding structure for protecting open spaces and natural resources as it relates to the development and implementation of the CLRP will ensure that Concord protects our valuable and irreplaceable natural resources.

Approaches to Protect Open Space and Natural Resources

Overall, the NRC recommends to the CLRP that the 2015 Open Space and Recreation Plan serve as the primary roadmap to protecting these resources. Key highlights from this plan that the CLRP should consider include the following recommendations.

1. **Work with other Town Committees and Departments to expand implementation of Transferrable Development Rights (TDR) and Conservation Restrictions (CR)**—TDR is a development tool that restricts growth in certain areas (sending districts) by transferring the development rights for those areas to more suitable locations (receiving districts). Use of TDRs could be an important way to achieve several best practice topics, such as land-use mix, job clusters, infill development, transit oriented development, housing, and economic growth and development, while maintaining the essential rural aspect of the Town's character and protecting natural resources. The CLRP should review the role CRs can play in protecting open space and natural resources and task appropriate Town committees to implement strategies to expand their use.
2. **Increase financial resources available to protect open space and natural resources**—The Town should continue to protect key areas for their ecological, agricultural, and recreational values through the use of tax funds, Community Preservation Act (CPA) funds, public-private partnerships, and bonds. Increasing financial resources to the Division of Natural Resources is highly recommended to improve management of conservation land and open space. This includes funds for an additional staff person and monies to survey, certify, and inventory the existing natural conditions of conservation land. In addition, the Division must have sufficient staff to address Conservation Land and Conservation Restriction violations, provide education to the public regarding the value of our natural resources and wetlands, and the threats to the landscape that are posed by invasive species. It is critically important that the Town provide the financial resources to protect its open spaces from degradation and encroachment that occurs on these lands from development pressures and increased human activities.
3. **Actively pursue the use of Agricultural Preservation Restrictions to protect agriculturally productive land through permanent restriction.**
4. **Identify lands of conservation interest using the criteria laid out in the OSRP Seven-Year Action Map (Attachment 2)**—This allows the Town to monitor such properties and develop strategies to protect these lands if and when they become available for acquisition. Additional efforts should include increasing the CPA annual allocation to open space and recreation to enhance the Town's ability to purchase and/or protect these invaluable resources and further developing partnerships with other local conservation organizations.
5. **Continue to connect trails and open spaces both within Town and with adjoining communities**—Connecting open spaces can increase walking and bicycling (where appropriate) leading to improved health and a reduction in carbon emissions from driving automobiles. The development of a program to provide accessible trails to people with disabilities would increase access to Town-owned open space for this population. In addition, responsible regionalism should include expanding open space and connecting trails across Towns to improve the mobility of both wildlife and people and to protect valuable wildlife habitat.

6. **Climate Change Resiliency:** Healthy forested ecosystems, wetlands, and floodplains buffer the Town from the increasing effects of stronger storms events, higher intensity flooding, and more frequent droughts. Protection of these areas contributes to lower costs associated with storm damage and flooding. Development within flood-prone areas should be avoided.

The Benefits of Best Practices Protection of Open Space and Natural Resources:

Open space and natural resource protection can contribute to achieving the following BP not already identified.

1. Livable Built Environment

- a. BP 1.1—Connecting trails and open space
- b. BP 1.2—Use of Transfer of Development Rights
- c. BP 1.4—Trails can supplement and connect to complete streets
- d. BP 1.5—Use of trails to encourage walking and TDRs to free up land for new mixed-use developments
- e. BP 1.6—Use of TDRs
- f. BP 1.7—Include Conservation Restrictions as part of design standards for individual houses, planned residential developments, and industrial/business development to help maintain Concord’s rural town character
- g. BP 1.8—Use of mobility devices on conservation land trails
- h. BP 1.9—Include open spaces and natural resources as part of Town’s historic resources (such as Emerson-Thoreau Amble trail)

2. Harmony with Nature

- a. BP 2.6—Role of protecting open space and natural resources in adapting to climate change

3. Resilient Economy

- a. BP 3.1—Use of TDRs

NRC 2016/17 Key Accomplishments

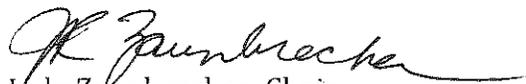
The NRC’s key functions include the implementation and enforcement of the Wetlands Protection Act (WPA) and Town Bylaw and the acquisition, preservation, and management of Town-owned Conservation Land and Conservation Restrictions. Notable accomplishments over the past two years include:

1. Timely hearings and issuance of decisions under the WPA and Bylaw. This includes working with applicants to find solutions that meet the requirements of the WPA and Bylaw and that take into consideration the goals of the applicants. This work also includes educating both applicants and the public on the value of the wetlands resource areas.

2. Protection of over 50 acres of land throughout Town for conservation purposes in fee interest, with an additional 69 acres protected through Conservation Restrictions. Much of this protection was accomplished through the purchase of the 80-acre October Farm Riverfront off Ball's Hill Road, with 22 acres dedicated as Town conservation land, and CRs over the remaining 58 acres of conservation land owned by the Concord Land Conservation Trust (CLCT), and water supply land managed by the Concord Public Works Commission. Additional land was protected at Black Birch as CR and conservation land off Forest Ridge Road, conservation land along Baptist Brook off Commerford Road, and a CR to be created at Junction Village off Winthrop Street. Protection was achieved through public/private partnering with CLCT, CPA funding, development agreements, borrowing, and, in the case of the October Farm Riverfront land, a \$400,000 state LAND grant spearheaded by the Division of Natural Resources.
3. Concord's trail network was expanded by creating new trails on the Baptist Brook conservation land, connecting to existing trails on Annursnac conservation land, a new trail connecting conservation lands between Second Division Brook and Harrington Park, new trails at Black Birch, connecting to existing trails in the Thoreau Hills neighborhood, and new trails at the October Farm Riverfront. Trail maps and brochures have been created to provide the public with information on the natural and historic values of these lands, and kiosks constructed at many trailheads to house this information.
4. The Rogers land off Harrington Avenue was returned to agricultural production in 2016, with the development of a community garden to expand the community gardening program in West Concord. A bedrock well was installed to provide irrigation to this land and nearby Marshall Farms.

The NRC thanks you for the opportunity to offer feedback into the development of Envision 2030.

Sincerely,



Judy Zaunbrecher, Chair
Natural Resources Commission

2015 Open Space Framework

The 1992 and 2004 *Open Space and Recreation Plans* established an objective and ecologically-based approach called the Open Space Framework (OSRP 1992, 2004). The town as a whole was examined to identify both overall land use patterns and specific sites of special interest. Two major town-wide landscape types, which are further broken down into constituent parts, combine to create an overall pattern: **Large Intact Areas** (“patches”) and **Major Corridors**. In addition, **Special Sites** are scattered across the town. These are small, but uncommon or important open spaces, such as rare species habitat or scenic views. The 2015 Open Space framework expands the natural areas to include Biomap2 core habitat, expands the agricultural areas to include adjacent Chapter 61A land, and adds an additional built area.

Three types of **Large Areas** with similar characteristics and function are present in Concord:

- Natural-vegetation areas
- Agricultural areas
- Built areas

Also three types of **Major Corridors** are present, namely those for:

- Wildlife movement
- Water protection
- Human use

For more information on the framework, see *Section 5*.

Large Agricultural Areas:

- A1. Nine Acre Corner
- A2. Lexington Road
- A3. Monument Street
- A4. Williams Road / Sudbury Road / Route 2
- A5. Reformatory Farms / Barrett’s Mill Road

Large Natural Areas:

- N1. Estabrook Woods Area
- N2. Great Meadows / Ball’s Hill Area
- N3. Walden Woods / Town Forest
- N4. Second Division Brook Area
- N5. Virginia Road Woods
- N6. Annursnac Hill / Strawberry Hill Road
- N7. Jennie Dugan Kames
- N8. Hanscom
- N9. White Pond

Large Built Areas:

- B1. Concord Center / Bedford Street
- B2. West Concord / Elm Street
- B3. Annursnac Hill / Barrett’s Mill Road
- B4. Peabody / Sanborn Schools
- B5. White Pond Area
- B6. Garfield Road
- B7. Thoreau School
- B8. Hillside Ave / Sorrel Road
- B9. Second Division Brook

Major Wildlife and Water-protection Corridors:

- C1. Assabet River
- C2. Sudbury River
- C3. Concord River
- C4. Saw Mill Brook
- C5. Spencer Brook
- C6. Second Division Brook
- C7. Jennie Dugan Brook
- C8. Second Division Brook / Jennie Dugan Kames to Assabet River
- C9. Virginia Road Woods Area to Walden Woods / Town Forest
- C10. Town Forest to Walden Reservation via railroad underpass and school land
- C11. Nashoba Brook / Warner’s Pond
- C12. Annursnac Hill / Strawberry Hill Road Area to Estabrook Woods Area
- C13. Virginia Road Woods to Great Meadows / Ball’s Hill Area

Carlisle

Bedford

Acton

Lincoln

Maynard

Sudbury

Wayland

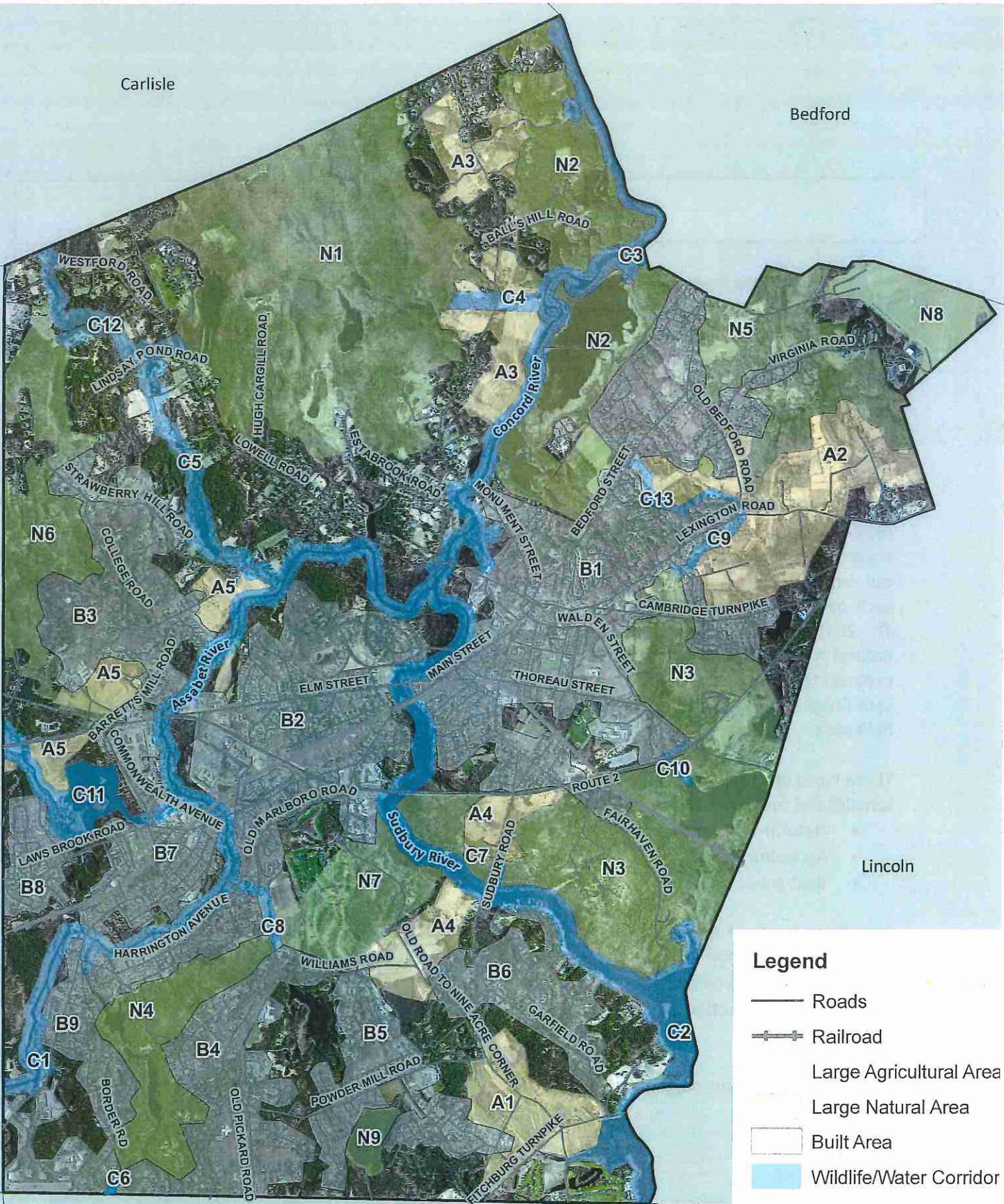
We

2015 Open Space Framework

Legend

-  Roads
-  Railroad
-  Large Agricultural Area
-  Large Natural Area
-  Built Area
-  Wildlife/Water Corridor

0 0.25 0.5 1 1.5 2 Miles



Seven-Year Action Map

Seven-Year Action Map

The map on the next page identifies actions for the Town of Concord:

- Key areas to protect for their ecological, agricultural and recreational values (green numbers and areas);
- Potential Agricultural Overlay districts to be implemented (black polygons previously identified by the Town and proposed additional Agriculture Overlay based on current analysis in blue);
- Potential Transfer of Development Rights to within one-half mile of train stations;
- Potential vernal pools that should be surveyed and certified;
- Proposed trail improvements on publicly accessible protected land, making recreational resources more available throughout Town (dark orange and yellow lines).

Additional criteria that could be used to prioritize the identified lands of conservation and recreation interest include:

- Presence of prime or statewide importance agricultural soils;
- Proximity to identified Special Sites;
- Land that could be used for trails or to connect trails; and
- Current Use Program Lands (Chapter 61, 61A, and 61B).

Agricultural Preservation Restriction (APR)

APR is a state funded preservation tool that seeks to protect agriculturally productive land through permanent deed restriction. Towns can apply for, and sometimes match, state funds in order to purchase the restriction which limits use in order to maintain agricultural potential.⁴⁶

Transfer of Development Rights (TDR)

TDR is a development tool that restricts growth in certain areas (sending districts) by transferring the development rights for those areas to more suitable locations (receiving districts). In this way open space, agricultural land, sensitive habitats, and areas with some form of recreational potential may become permanently protected by focusing growth

in urban centers, areas near public transportation lines, or underutilized properties in town. For example, development rights might be transferred to areas within one-half mile of commuter rail stations. This would foster walkability in town and a decreased dependence on automobiles, thereby reducing carbon emissions in the town. In this way, important open space land is protected, economic growth and development is allowed to continue, and climate change issues are also addressed (see Appendix B for full discussion of TDR).⁴⁵

Transfer of development rights has had limited application in Concord. The 1992 Town Meeting adopted Zoning Bylaw Section 6.3.4 "Dedication of Land to the Town of Concord for Municipal or Other Public Uses," which allowed only property owners in the Limited Industrial Park District (Forest Ridge Road) to transfer development rights within the District. One property owner subdivided a 25-acre parcel into two parcels equal in land area; he then transferred the development rights from the land he gave to the Town as open space (creating a buffer between the StarMet site and other land in the Forest Ridge development) to the land he continued to own.

Transfer of development rights on a broader scale requires significant investment in community outreach and education to understand and agree upon the value of the land to be protected, the extent of development possible and the increased development potential of the land receiving the development rights. Concord has frequently found simpler and easier solutions to protect land that is valued for open space, agriculture, historic preservation, or recreation purposes.

Agricultural Overlay District

First discussed in the 2005 Comprehensive Long Range Plan, an agricultural overlay district essentially limits development in areas deemed agriculturally important through the assessment of certain key characteristics including: availability of prime agricultural soils, proximity to major blocks of farmland, the size of the parcel, the degree of development, and other risk factors. If a special Agricultural Overlay District were created, then the regulations of the underlying residential district would be modified by stricter controls and/or the provision of additional development options for use of the property.⁴⁰



Carlisle

Bedford

Acton

Lincoln

Maynard



Seven-Year Action Map

- Proposed Wildlife Passages
- Invasive Species Management
- Implement Watershed Management Plan
- Proposed Overpasses
- Train Station
- Evaluate Potential Vernal Pools for Certification
- Selected 2004 Lands of Conservation Interest
- New Proposed Trails
- Develop Assessed Trails
- Trails to Assess for OPDMD
- Portion of Bay Circuit Trail to Re-route
- Ponds/Rivers
- Revised Lands of Conservation Interest
- Railroad
- New Proposed Ag Overlay District
- Proposed Ag Overlay Districts
- Proposed TDR Receiving Area
- Proposed Bruce Freeman Rail Trail
- Roads
- Monitor Town Conservation Restrictions

