

Norwell Conservation Commission
2019 Annual Report

The Conservation Commission is responsible for:

- **Protection and management of Norwell's conservation lands and**
- **Regulatory administration of the Massachusetts Wetlands Protection Act and The Norwell Wetland Bylaw.**

Please click on any links embedded in this report or please visit the Conservation Web Page and use the posted report located there.

The primary purposes of the Conservation Commission are to:

- Plan for Natural Resource Protection
- Acquire important land and water areas
- Manage these areas for conservation and passive public recreation
- Administer and enforce the Massachusetts Wetland Protection Act, the Norwell Wetland Bylaw, and any associated regulations
- Conduct outreach and education relative to Norwell's natural resources and environmental issues

The Conservation Commission protects and manages:

<u>2000+ Acres Total Land Under Conservation Care</u>	<u>Jacobs Woods-1950</u>	<u>Donovan Farm/Wildcat - 1997</u>
15 Boardwalks, Bridges, Docks and View Decks	<u>Fogg Forest – 1972</u> <u>Valley Swamp - 1973</u>	<u>Betzold and Assinippi parcels 1999/2001</u>
<u>25+ Miles Public Trails</u>	<u>Hatch Wood Lots - 1977</u>	<u>Cuffee Lane - 2012</u>
<u>10 Fields Active Farming</u>	<u>Cuffee Hill - 1982</u>	<u>Simon Hill - 2013</u>
12 Conservation Restrictions Monitored	<u>Miller Woods - 1983</u>	Masthead - 2013
9831 Feet Scenic Stone Walls	Jacobs Farm - 1989	<u>Grove St Wompatuck Entry – anticipated fall 2020</u>

Accomplishments, Projects and Goals

1. Continually increase awareness and utilization of Norwell's Open Spaces and Greenways by its residents.

The residents of Norwell have continued to invest in open space in order to preserve the beauty and environmental quality of the town. This dedication on behalf of the voters also comes with a responsibility to protect essential ecological communities while also allowing recreational access to the land that taxpayers have purchased. The Commission, along with its staff and volunteers, work cooperatively with all town departments to provide safe community access to green space.

The Norwell Conservation Commission manages over 2,000 acres of open space within the town and 25+ miles of trails. The Commission collaborates closely with other town offices, commissions, schools, and citizens in the management of the property under its jurisdiction. These collaborative efforts have led to an expansion of use and access to Norwell's Open Spaces through the provision of extensive recreational opportunities for all generations.

A common aspect of all of the commission projects is they all foster a sense of community and purpose. The Norwell Conservation Commission is a steward not only for the lands placed under it's

protection but of the funding sources that have been dedicated to support public access and use. Since the adoption of hte

Clean air, water, and a healthy environment are the key values we are all charged with in protecting and preserving Norwell's landscape. Residents are provided the opportunity to walk, hike, bike, camp, fish and enjoy the protected natural areas, all just minutes from home. Preserving open space also protects watersheds, improves air and the water quality of rivers, lakes, streams, and drinking water.

Losing Ground 2020– Natures Value in a Changing Climate

By Mass Audubon – sixth edition

Real estate development and property values -

“Studies have shown that the value of property adjacent to either public or privately owned open space is measurably higher than that of comparable properties without this amenity. The value is even greater when the adjacent open land is permanently protected.”

Fiscal health -

“land conservation saves Commonwealth communities money through avoided costs on expensive infrastructure and other municipal services required by residentially developed areas such as schools, police and fire protection, and others. ...Residential land .. requires \$1.10 in services for every \$1 generated in tax revenue.”

Restore Ecological Function -

“There are many opportunities to restore the natural capacity of land and water resources across the Commonwealth. Projects include converting abandoned or repeatedly flooded coastal shoreline and inland waterway buffers into reforested areas or parks; removing obsolete dams and upgrading undersized

culverts; restoring abandoned cranberry bogs to natural wetlands; incorporating rain gardens, trees, and other green features into existing urban areas; and many others.

Culverts -

There are more than 25,000 culverts and small bridges across the state, averaging one every half-mile of stream. Since the majority of these structures are significant or moderate barriers to the passage of fish and wildlife, improving undersized crossings is essential to providing habitat connectivity. These upgrades will also reduce the threat of local floods and road washouts.

2. Open space and recreation plan.

The Open Space and Recreation Plan is currently undergoing a 7-year update. Anyone wishing to participate should contact the Conservation Office.

3. Open space land improvements and promoting multi-purpose use.

The Commission continues to work with many collaborative partner groups to create publically accessible parking and trailhead access, trail improvements, picnic areas and to keep the many lands in trust available and open to the public.

- On-going projects include a connector [Boardwalk between Hatch and Bowker St/Simon Hill](#) with the over-arching goal of connecting the pathway to the Wompatuck Trail System.
- A [Wompatuck Access](#) on Grove Street in Norwell is being created by the Pathway Committee in coordination with the Conservation Commission. The hope is that this new State Park Entry will be available in late 2020.

- Trail improvements, boardwalks, kiosks, resting areas and other projects are worked on yearly in collaboration with both Norwell High School and The South Shore Vocational Technical High School. The Commission also coordinates many projects with participants in the Eagle Scout and Venture Scout programs.
- In 2019 both the Donovan Parking and Donovan connector to the Pathway were completed. Tree and Grounds and Highway went above and beyond by rebuilding the beautiful stone wall that borders the connector.
- In 2020, the Commission will be working in collaboration with the Beautification Committee, Norwell Garden Club and Norwell High School on a Wildflower field with public paths. Structural art contributions from the Norwell High School Art Program may be ready and available for installation in the fall. More to follow... come check out this dynamic new project and see how it evolves over the years.
- So many more projects are planned and pending. Stop by one of the Commission meetings during the public comment session for more information.

Ecopsychology: How Immersion in Nature Benefits Your Health

A growing body of research points to the beneficial effects that exposure to the natural world has on health, reducing stress and promoting healing. By [Jim Robbins](#) • January 9, 2020

“In a [study](#) of 20,000 people, a team led by Mathew White of the European Centre for Environment & Human Health at the University of Exeter, found that people who spent two hours a week in green spaces — local parks or other natural environments, either all at once or spaced over several visits — were substantially more likely to report good health and psychological well-being than those who don’t.”

“Two hours was a hard boundary: The study, published last June, showed there were no benefits for people who didn’t meet that threshold”

“Time in nature — as long as people feel safe — is an antidote for stress: It can lower blood pressure and stress hormone levels, reduce nervous system arousal, enhance immune system function, increase self-esteem, reduce anxiety, and improve mood. Attention Deficit Disorder and aggression lessen in natural environments, which also help speed the rate of healing.”

4. Hunting

The Commission strives to preserve the rights of individuals, families (and their dogs, if you take the bagged waste out!) to enjoy the trails and open spaces safely, year-round. This also includes the hunters who enjoy the preserved areas in Norwell, away from the trails, with respect for the safety of all trail users. The Commission manages over 1200 acres of land that is available to hunters during Massachusetts-specific mandated hunting seasons away from trails. We do not require any permits or impose regulations beyond those of the state. A map is available through the Commission that shows the trail system as well as extensive areas of open land for hunting.

5. Trail maintenance

The Commission gratefully acknowledges the Senior Trail Crew –Dave Hill, Paul Legere, Mark Aigan, Steve McViney, and Barry Tilles along with significant assistance from the Tree and Grounds and Highway staff. Their dedication to the conservation lands and trails in Norwell is much appreciated!

Proper maintenance and repairs to Norwell’s trails results in greater and improved access to the many conservation-managed lands in town. As long as trails are properly cared for, they will continue to provide families, walkers, bikers, and skiers, the capability to enjoy and explore the

endless beauty of Norwell. Please help us keep the properties clean by taking out your trash and dog waste and disposing of it at home in your own trash.

The Commission will continue to work with the Pathway Committee to look at all neighborhoods within each open space trail system to prioritize future connectivity projects.



Leaving bagged dog waste in public areas has become a Town-wide problem. It disrupts public enjoyment of public lands, creates an additional cost to taxpayers, and pollutes public open spaces and recreation areas. It puts volunteers and trail crew at risk of disease and infection to clean up someone else's bagged dog waste.

Together we will stop this polluting habit. The environment and the public are better off if pet owners push the unbagged waste into the nearest wooded area. Please do not leave it anywhere near the trail. Responsible pet owners and caring trail users will honor the carry-in, carry-out concept. Take the poo bag home, and throw it away correctly along with any other trash. Do not leave your pet's bagged waste for someone else to pick up.

Thank you!

6. Continue coordination with Norwell Highway and Tree/Grounds Department.

The Commission appreciates the time and effort that both the Norwell Tree and Grounds crew and Highway Crew have contributed to improving usability and accessibility of conservation areas throughout Norwell. The assistance of the fantastic crew in both these Departments, led by Glenn Ferguson and Joe Conlon, is instrumental in keeping trails and parking areas open and in good condition.

7. Grant funding.

The Norwell Fire Department (Jeff Simpson) and the Conservation Commission wrote two grants to create one overlapping program designed to create both a Municipal Vulnerability Plan and a Hazard Management Plan for the Town of Norwell.

The focus is on resiliency planning

- Understanding risks from natural hazards and projected future climate change.
- Evaluating the strengths and vulnerabilities of our residents, infrastructure, and natural resources.
- Identifying actions we can take to improve our resilience to future extreme weather events.

- Upon completion of the workshop the Town of Norwell will be eligible to apply for funding to implement the actions we identify.

If you are interested in participating, please stop in to the Conservation Office or consider attending one of the upcoming Public Listening and Input sessions.

8. [Adopt-A-Trail Program Volunteers needed.](#) – if you see trash, please take it out.

Please help us keep the trails maintained and accessible for all Norwell residents to enjoy by [volunteering to help monitor and report on trail conditions](#). You may already be walking the trails and can participate simply by downloading the link and form. Your feedback is essential in assisting our amazing trail team to target problems and issues as quickly as possible. If you are interested, please contact the Commission office today! If you happen to be walking a trail and see something that needs attention, [please report it to us!](#)

9. [Implement community outreach and education programs.](#)

We continue to collaborate with regional non-profit educators such as the [North South Rivers Watershed](#), the [South Shore Natural Science Center](#), the Norwell Public Library, and others to create new outreach and educational programs. They will include additional outdoor seasonal, family-oriented nature programs. One Conservation goal is to facilitate family-friendly outings to the many Open Spaces and Greenways.

The Commission continues to support school-based environmental education programs. In 2019, we worked with Vinal School to support an upgrade on their woodland trail. In 2020, we will be working with Cole School to rehabilitate the Hatch Pond Outdoor Classroom Area.

[NSRWA](#) sponsored several walks in Norwell lead by Brian Taylor at Stetson Meadows, Jacobs Trails and others.

The Commission pledges to continue the support of these amazing public programs.

The Commission hosted a Sunday – Fun Day event. Volunteers Jean Valicenti Mederos and Judy Enright brought together great programming for an educational hands on family adventure day at Jacobs Pond. We look forward to more great programming in 2020. The many generous sponsors including WATD,

10. [Participate in The Second Climate Change Symposium 2019.](#)

[A Climate Change Educational Symposium with regional partners was a great success.](#) A regional Climate Change Network was created in response and meets quarterly in the Norwell Town Hall. The effects of climate change are widespread and will continue to influence rainfall levels, storm water impact, and wetland resources. Please contact us if you would like to participate. The Norwell Conservation Commission looks forward to continuing as a sponsoring member. Videos of some of the presentations from the day-long symposium can be found on the NSTV – Norwell Public Education Channel under the heading “Norwell Nature Watch”.

11. [Preparing Norwell’s Resources and Infrastructure for Climate Change](#)

Beyond Climate Change outreach and Education, Conservation worked with other departments, (Planning, Highway, Health, Selectmen, NSRWA, private developers and others) to come up with a solution to ongoing unauthorized impacts to Town Resources.

Climate change and rainfall intensity changes over the past ten years have combined to create situations where drought alternates with significant flooding. Recent storms that generate high-intensity rainfall are dumping substantial volumes of water and causing flooding of wetland

resources, private lots, roads, stormwater systems etc., Many residents have reported and documented flooding and groundwater issues during normal spring seasonal storms in areas not previously mapped as flood hazard. Norwell has significant tree coverage and these woodlands suffer from alternating drought/torrential rain. Tree falls on woods, private properties, trails and structures have exponentially increased taking a significant toll on municipal and private budgets.

Beyond natural events, unregulated projects often result in direct and significant alteration to wetland resource areas during the course of development, due to Norwell's unique combination of high groundwater, soil conditions, hydrogeology and topographic/grade changes. The removal of canopy and mature trees necessary to work within buffer zones to resource areas also results in thermal and shading alteration of the resource area before any other work or use begins.

12. The team worked to rewrite the [Town's Stormwater, Erosion Control and Illicit Discharge Bylaw](#) to

1. Ensure that private and municipal resources are protected.
2. Ongoing severe impacts from development are controlled.
3. Town taxpayers as an overall group do not continue to pay for unnecessary private developmental impacts.

We hope to bring this to a successful vote at Town Meeting 2020.

13. School and Municipal projects

The Conservation Commission supports many school and municipal based public programs. If you are a school, municipal public organization and could use support or information for projects that involve the environment or conservation, consider reaching out to the Commission for information, support and collaboration. Current partners include...

- Norwell Cares programs
- SSTHS/SSVoTec – Trail Entry Kiosks
- Vinal School Trail
- Norwell Beautification Committee and Norwell Garden Club – pending public wildflower field with trails.
- We look forward to assisting the Cole School Hatch Outdoor Classroom

14. Farming.

The Commission continues to manage and sponsor active farming on the six Jacobs Farm Fields, two Donovan Farm Fields, Barstow Field, Stetson Meadow, and the Main Street Field. We gratefully acknowledge the dedication of the farmers in helping preserve this cultural heritage. Hornstra Dairy Farm, Norwell Farms, Cross Street Flower Farms and Jon Haskins as well as Beekeeper Luke Lambert provide the dedicated work that keeps the farm fields in active use. Many of these Farm Fields have public trails alongside the fields to connect Public to Agriculture

Permitting - Regulatory

- The Notice of Intent is for larger projects that occur close to or near wetland resources or have a high probability of having a direct or long-term impact on those resources. Orders of Conditions are issued that either permit (with conditions), or deny the project (ex: dam removal, new home construction, subdivisions, work within the highly sensitive 50-foot buffer). The Commission reviewed 31 new applications and issued 29 Orders of Conditions for these projects. Beyond new projects, the Commission reviewed and issued 1 Major amendments to existing Orders.
- Resource Delineation reviews are conducted either under the Notice of Intent process or with an Application for Resource Area Delineation. These are reviewed in terms of location and type of

resource only, with no specific project attached. The benefit of this process is that the natural resource areas can be identified and defined before significant monies are spent on design and engineering. The Commission reviewed 4 and issued 3 Resource Delineation applications.

- The Commission monitors and works to ensure site stormwater and soils are controlled on all projects, with subdivisions and commercial development being more closely monitored. Ten major projects were reviewed or monitored for stormwater control.
- A Request for Determination is used for smaller projects, projects in the outer buffer zone, or projects with minimal likelihood of adversely impacting wetland resource areas. A Determination of Applicability is issued either allowing the project or requiring the filing of a Notice of Intent if the project is more involved (ex: simple septic repair). The Commission reviewed 30 and issued 27 Determinations of Applicability.
- An Administrative Letter Permit is used for projects within the outer reaches of the buffer zone, which are either so minor that there is no chance of adverse impact or for which the physical layout of the project makes it nearly impossible to have an adverse impact on resources. No public hearing or filing fee is required for this permit level (ex: projects with all construction activities 100 feet or more from the closest resource). The Conservation office issued 12 letter permits.
- Inter-Departmental Reviews for projects close to or just touching the buffer zone or for which there is no chance of adverse impact to wetland resources (ex: decks on the opposite side of the home from wetlands and more than 100 feet from the wetland, or hazardous tree removal in buffer areas). The Commission office reviewed 107 Building Department projects.
- Certificates of Compliance are issued when a project is shown to be completed in a manner that protects nearby resource areas and is consistent with the permit issued. The Conservation office reviewed 28 and issued 25 Certificates of Compliance for completion of projects in 2019.

Major Regulatory Notice of Intent – Order of Conditions Projects

Major regulatory project reviews and oversight was conducted in 2019 for the following major projects;

Old Oaken Bucket Estates, Simon Hill Village, Hitchin Post Lane, Hanover Mall Redevelopment and Schooner Estates, Tiffany Hill, Damon Farms, Norwell Estates, the Town Library Reconstruction, among many other projects. This is in addition to the many public land management and public outreach projects as well as the other normal regulatory responsibilities. Please email [Nancy](#) or [Meredith](#) or [call / stop by the office](#) for more information.

Check before you work– Be Conservation Safe!

To better understand the resources on or near your property, please feel free to contact the Conservation Department. Norwell offers assistance with permitting issues, environmental concerns, or just creating a unique GIS map for your property. Assistance is also available regarding the information on public lands or trails. Please be safe and ask the Conservation Office if you have any questions or want information regarding your property, nearby resources or Conservation Lands - We are happy to help!. nhemingway@townofnorwell.net or mschmid@townofnorwell.net. A reminder - we are always looking for volunteers. Please stop by the Conservation Office or call (781-659-8022) if you would like to help.

Conservation Commission Members and Staff

The Conservation Commission is comprised of seven residents who serve three-year terms and are appointed by the Board of Selectmen. The Commission very much appreciates the dedication of Administrative Assistants Meredith Schmid and Tabitha Dosantos, who make certain that both the Conservation and Planning Offices run smoothly and efficiently. Thank you to recording clerk Chris Sullivan for his continued support. The Commissioners spend significant amounts of volunteer time to ensure that the natural resources and Conservation areas in Norwell are protected and cared for. Marynel Wahl continues as the Commission's Chairperson and Bob Woodill as the Vice-Chairperson.

2019 Conservation Commission Members - Appointed by the Board of Selectmen

Marynel Wahl – Chair, 2011

Robert Woodill – Vice Chair, 2011

Bob McMackin, 2016

Justin Ivas, 2016

Ellen Markham, 2018

Roy Bjorlin, 2018

Ron Mott, 2013

Respectfully submitted by Nancy Hemingway, Conservation Agent, Meredith Schmid, Administrative Assistant, and Marynel Wahl, Commission Chair.