CHAPTER II: NATURAL RESOURCES

Introduction

Wilton's natural resources – forests, fields, open space, rivers, ponds, reservoirs, aquifers, its geologic setting and wildlife - provide a healthy environment, recreational and economic opportunities, and most importantly, define Wilton's rural character. For all these reasons, the Town must protect them from inappropriate development and competing uses.

Vision

Wilton's natural environment will thrive, nurturing a diversity of wildlife flora and fauna, supporting agriculture activities, offering recreational opportunities, providing a healthy living environment to its residents, and maintaining the rural character of the Town. Development and land use activities will respect, enhance and leverage Wilton's natural resources through thoughtful planning and implementation. Wilton will protect its natural resources through regulation, oversight, enforcement and conservation.



View from Carnival Hill Park Image credit: Wilton Planning Board / NRPC

Overview

Natural resources can be used for productive purposes, but they also have, in their undeveloped state, an intrinsic value that cannot be easily calculated. The air, water, soil and terrain of an area dictate its natural habitats and therefore, the types of wildlife that live there. Wilton's natural resources define its distinctive rural character, which Wilton residents wish to preserve.

Conversely, the degradation of its natural resources would, among other things, undermine certain opportunities for economic development, diminish Wilton's ability to attract new residents and visitors, and undermines the quality of life here. Many mechanisms, including laws and regulations, are already in place to preserve and protect Wilton's natural resources. However, ongoing and new threats may warrant additional protective efforts and approaches.

This Chapter is informed by the following:

- 1. Natural Resources Inventory (NRI), managed by the Wilton Conservation Commission (WCC), which describes, in detail, Wilton's natural resources, particularly soils, terrain, water resources and natural habitats,
- 2. WCC's 2016 Wilton Conservation Plan (Conservation Plan), which evaluates Wilton's natural resources and sets out recommendations to preserve and protect them, and

3. *Souhegan River Watershed Management Plan,* published in 2006 (SRWMP), which identifies long-term management and protection strategies for the Souhegan River and its watershed, which includes Wilton.

The Conservation Plan is appended to this Chapter and its recommendations are summarized under "Tools for Protection of Natural Resources" below, where the SRWMP strategies are also enumerated. In addition, from time to time in the future, updated maps and data on natural resources, from the NRI and otherwise, will be appended to this Chapter.

General Conditions

With clean air, acres of forest, miles of pristine rivers and streams and scenic views, Wilton has plenty of nature-based recreational opportunities and is generally recognized as having a healthy natural environment. Nevertheless, like many New Hampshire (NH) communities, it is at risk of increasing water, soil and air contamination, destruction or fragmentation of its natural habitats and the erosion of its rural character.

Air Quality

According to the NH Environmental Public Health Tracking Website:

Air quality refers to the degree to which the ambient or outdoor air in our surrounding environment is pollution-free. It is typically measured near ground level, away from direct sources of pollution.

The National Ambient Air Quality Standards (NAAQS) established by the U.S. Environmental Protection Agency (EPA) limit concentrations of six air pollutants: Carbon Monoxide (CO), Lead (Pb), Nitrogen Dioxide (NO2), Ozone (O3), Particulate Matter (PM), and Sulfur Dioxide (SO2).

There are 14 air quality monitoring stations located throughout the state. Ozone (O3) and fine particulate matter (PM2.5) are the primary pollutants of concern in New Hampshire.¹

Hillsborough County air quality currently meets Federal standards. According to the NH 2020 Air Quality Update, Hillsborough County had about 95% good air quality days between 2018 and 2020, whereas the remaining 5% were days with moderate air quality (which is still acceptable but may create some concerns for a small number of unusually sensitive people).²

The pollutants regulated by the EPA are normally associated with vehicular and industrial emissions, which are more pronounced in urbanized areas with a denser population and more vehicle traffic than those found in Wilton. According to the New Hampshire Department of Environmental Services (NHDES)

¹ NH Environmental Public Health Tracking. "Environmental Topics, Air Quality". Dated 2018 and accessed July 20, 2022. <<u>https://www.nh.gov/epht/environmental-topics/air.htm</u>>.

² NH Department of Environmental Services. *State of New Hampshire 2020 Air Quality Update*. Published in December 2021. Available via <<u>https://www.des.nh.gov/sites/g/files/ehbemt341/files/documents/r-ard-21-05.pdf</u>>.

OneStop Data Mapper, Souhegan Wood Products, Inc. in downtown Wilton is the only Town enterprise requiring a state-permitted air facility system regulated by the NHDES.³

However, a potential source of local air pollution is wood smoke, which contains significant particulate matter. The use of wood for residential heating typically increases when the price of fuel oils rises. When fuel oil prices spiked in the winter of 2011, particulate matter concentrations across the State increased notably. Residents heating with wood should consult the EPA's BurnWise program <<u>https://www.epa.gov/burnwise</u>> to improve efficiency and potential air pollution.

Other circumstances, however rare, can exacerbate local pollution, including weather patterns (e.g., smog-trapping temperature inversions, airborne pollution from urbanized areas) and extraordinary events (e.g., massive wildfires, the smoke from which can blow across the country). Unfortunately, other than tackling climate change (which increases the likelihood and severity of these events), there are limited remedies for these situations.

Soils and Terrain

Agricultural Soils

As is evident from its once vibrant agricultural industry (see Chapter VI – Historical and Cultural Resources), Wilton has good soil for agriculture. While some local natural soil is sandy and gravelly due to pre-historic glacial movement, early settlers and later farmers cleared many fields over the years, stacking the fieldstones into bordering stonewalls.

Since the decline of agriculture as a major industry in Wilton, many fields and facilities have been abandoned and comparatively few acres of farmland remain in active production today – some on a commercial or community scale and others on a residential scale. Many abandoned fields have since been reclaimed by nature, while some have been developed for residential uses.

The NRI includes the US Department of Agriculture (USDA) soil classifications found in Wilton, which can identify land that is or could be most productive for farming.

Soil Contamination

According to the EPA:

Land contamination can result from a variety of intended, accidental, or naturally occurring activities and events such as manufacturing, mineral extraction, abandonment of mines, national defense activities, waste disposal, accidental spills, illegal dumping, leaking underground storage tanks, hurricanes, floods, pesticide use, and fertilizer application.

Contaminated lands can pose a variety of health and environmental hazards. Some contaminated sites pose little risk to human health and the environment because the level of contamination is low and the chance of exposure to toxic or hazardous contaminants is also low. Other contaminated sites are of greater concern because of the chemicals that may be present and their propensity to persist in or move through the environment, exposing humans or the environment to hazards.

³ NH Department of Environmental Services. "NHDES OneStop Data Mapper". Accessed July 20, 2022. The webbased mapping application can be accessed via

<<u>https://www4.des.state.nh.us/onestopdatamapper/onestopmapper.aspx</u>>.

These sites must be carefully managed through containment or cleanup to prevent hazardous materials from causing harm to humans, wildlife, or ecological systems, both on- and off-site.⁴

While the vast majority of the Town's soil is uncontaminated, NHDES has identified about 35 sites within Wilton potentially requiring some level of remediation, ranging from leaking residential/commercial oil tanks to a small area containing entombed hazardous substances. Most of these sites are located in or around downtown Wilton or in the industrial zoning district along Route 101. Remediation is underway or in the planning stages.

NHDES has also identified potential contamination sources in Town, such as above or underground fuel storage tanks, businesses that generate regulated substances, and auto salvage yards. These sources are regulated, permitted and monitored by NHDES. Further information can be found online via the NHDES OneStop Data Mapper: <<u>https://www4.des.state.nh.us/onestopdatamapper/onestopmapper.aspx</u>>.

Soil Erosion

Erosion can lead to loss of fertile topsoil, water and air quality issues, and, in extreme cases, landslides. Steep terrain, abundant in Wilton most notably along the Souhegan River, Stony Brook, and Blood/Temple Brook are especially prone to erosion caused by stormwater runoff.

Soil can erode when development or extraction activities disturb or remove the vegetation anchoring it. Proper measures, including best management practices for development and excavation, as well as adequate management of stormwater runoff, are essential to prevent soil erosion.

Water Resources

Wilton has many water resources. They include both surface water (rivers, streams, reservoirs, and ponds) and groundwater (aquifers).

Chief among surface waters in Wilton, the Souhegan River runs across the Town from southwest to east. Most of Wilton falls within the Souhegan River watershed, which covers 220 square miles, 34 river miles from Ashburnham, MA to the Merrimack River, and 347 miles of tributaries – including Stony Brook and Temple Brook. These surface waters contribute to Wilton's distinctive rural character, nurture its lush riparian habitats and wildlife and have supplied drinking water, powered mills and industries, and produced electricity for the Town. Wilton's rivers and streams, other than Mill Brook, are designated Class B water sources, which means they can support a healthy aquatic habitat and in-water recreational uses. Mill Brook, on the other hand, is a Class A water source, of high enough quality to qualify as a potential source of drinking water, as well as supporting uses appropriate for Class B waters.

The Souhegan Watershed Association (SWA) conducts a comprehensive summer testing program on the Souhegan River and its tributaries. Elevated levels of E-coli have been intermittently observed in the Souhegan River and Stony Brook, likely due to animal waste in stormwater runoff. When they occur, the elevated levels of E-coli and their possible sources are reviewed and addressed, if necessary. Although previously tested levels have not been high enough to have any lasting impact in Wilton, there are times when contact with the river waters should be avoided.

⁴ U.S. Environmental Protection Agency "Contaminated Land". Last updated on September 28, 2021 and accessed July 20, 2022. <<u>https://www.epa.gov/report-environment/contaminated-land</u>>.

The groundwater aquifer underlying Wilton is a primary source of Southern New Hampshire's drinking water. The geological characteristics of the soil at the confluence of rivers and streams create stratified drift aquifers, which are particularly productive and prime sources of high-quality potable water. Wilton currently extracts its public drinking water from the aquifer via two municipal wells. Annual testing and reporting have not identified any significant contaminants, acceptable levels of which are set by the EPA under the 1974 Safe Drinking Water Act.⁵ In addition, Monadnock Mountain Spring Water also has two active water extraction wells in Wilton. Bottled water is regulated by the U.S. Food and Drug Administration (FDA), with water quality standards compatible with EPA standards for public drinking water.⁶

However, per- and polyfluoroalkyl substances (PFAS) have been detected in small amounts in Wilton at the Transfer Station, along the bank of the Souhegan. A sample collected on October 26, 2019 contained 36.18 ppt total PFAS.⁷ Regionally, concern about PFAS is presently focused on sites in Merrimack, Bedford and Amherst. This is further discussed in the "Threats to Natural Resources" section.

Natural Habitats

Notwithstanding the impact of human activities, including agriculture, logging, excavation and dambuilding, Wilton's wildlife populations have adapted and thrived. Forested and wetland habitats are the most supportive, but grasslands, including hayfields and recently abandoned crop fields, also sustain a diversity of wildlife.

The condition of Wilton's natural habitats is generally good. However, they, and identified wildlife corridors through portions of the Town, are under threat of destruction, interruption or fragmentation by new and predominately residential development. Larger animals in particular require larger undeveloped areas to flourish. Moreover, land clearing, which frequently accompanies other development, can significantly alter the terrain and landscape, disrupting wildlife breeding, nesting and feeding behaviors and patterns.

Endangered Species / Rare Plants and Animals

Endangered and threatened species are listed and protected at the Federal and state level. Generally, possession, sale, importing, harming, or harassing listed species is illegal.

At the state level, the NH Department of Fish and Game (NHF&G) defines "endangered" species as those in danger of being extirpated from the state, while "threatened" species face the possibility of becoming "endangered." An additional "special concern" list contains species that could become "threatened' in

⁵ Water quality testing statistics of Wilton's public drinking water can be found in the Wilton Water Works Consumer Confidence Report and Table, which are available on the Wilton Water Commission's website: <<u>https://www.wiltonnh.gov/government/boards_and_committees/water_commission</u>>. For more information on EPA's drinking water regulations, visit <<u>https://www.epa.gov/dwreginfo/drinking-water-regulations</u>>.

⁶ U.S. Food and Drug Administration. "Bottled Water Everywhere: Keeping it Safe". Last updated on April 22, 2022 and accessed August 24, 2022. <<u>https://www.fda.gov/consumers/consumer-updates/bottled-water-everywhere-keeping-it-safe</u>>.

⁷ NHDES PFAS Sampling. Station Number 50731. Sample Date 10/26/2019. Activity ID L1951474-01. Accessed January 3, 2023.

<<u>https://nhdes.maps.arcgis.com/apps/View/index.html?appid=66770bef141c43a98a445c54a17720e2&extent=-73.5743,42.5413,-69.6852,45.4489</u>>

the foreseeable future. Lastly, NHF&G lists as "rare" certain biologically rare species which do not meet the criteria for another protected status.

According to *Rare Plants and Animals* published in July 2020 by the NH Natural Heritage Bureau, part of the NH Department of Natural & Cultural Resources, Wilton is not home to any species listed Federally as endangered or threatened. It is, however, home to three species so listed by the state: the giant rhododendron (Threatened), wood turtle (Special Concern), and American eel (Special Concern).⁸ In addition, Wilton residents have observed the marbled salamander (Endangered) and spotted turtle (Threatened) in Town.

Giant Rhododendron (Rhododendron maximum)

While giant rhododendron is abundant in other geographies, it is naturally rare in New Hampshire, which is at the edge of its range. Aside from maintaining its presence in New Hampshire, protecting wild giant rhododendron helps promote the genetic diversity of the species. Wild giant rhododendron is typically found near swamps and the shores of rivers and lakes.

Wood Turtle (Glyptemys insculpta)

Wood turtles require intact floodplains, uninterrupted stream flows and undisturbed nesting areas adjacent to flowing streams to thrive. They are at risk of mortality from vehicular traffic, habitat loss and fragmentation (including from haying near rivers and damming), human collection and an abundance of predators.

American Eel (Anguilla rostrata)

The damming of many fresh waterways greatly reduced the range of the American eel. While eels migrate past these obstructions where possible, hydropower turbines are a major cause of mortality as adult eels move downstream. Ongoing conservation efforts are designed to facilitate both upstream and downstream passage past dams and hydroelectric projects.

Moreover, eels are a culinary delicacy and elvers serve as seed stock for aquaculture facilities. Commercial harvest of eels is regulated by the Atlantic States Marine Fisheries Commission and elver fisheries are illegal in all states except South Carolina and Maine.

Marbled Salamanders (Ambystoma opacum)

The marbled salamander is a state-designated endangered species in greatest need of conservation. Marbled salamanders are at risk of upland and vernal pool habitat loss, as well as loss of habitat connectivity between populations. In particular, vernal pools are critical to the marbled salamander's reproduction cycle.

Spotted Turtle (Clemmys guttata)

Spotted turtles move around different aquatic and wetland habitats seasonally, wander across terrestrial habitats and roads, and often use human-altered sites for nesting. Consequently, besides habitat loss and fragmentation and changes to wetland habits, spotted turtles are vulnerable to road mortality, human disturbance and illegal collection, as well as predators.

⁸ NH Natural Heritage Bureau, part of NH Division of Forests and Lands. *Rare Plants, Rare Animals, and Exemplary Natural Communities in New Hampshire Towns*. Published in July 2020. Available via <<u>https://www.nh.gov/nhdfl/documents/town-lists.pdf</u>>.





Images (clockwise from top left): Blooming flowers of a giant rhododendron plant (Threatened); a wood turtle (Special Concern); a marbled salamander (Endangered); an American eel (Special Concern); a spotted turtle (Threatened)

Image credits: Giant Rhododendron: John Lynch (c) Native Plant Trust Wood Turtle & American Eel: NHF&G Marbled Salamander: Shannon Coffey Spotted Turtle: Peter Howd

Rural Character and Scenic Views

As noted above, most of Wilton is defined by its rural character, which is treasured by the Town's residents and visitors.

Scenic Views

Wilton offers some spectacular scenic views exemplary of a rural New England town, including along its wooded roads, its rivers and ponds, through open fields and from overlooks. In addition, Wilton's historic town center offers attractive landscaped views, which are described in the Historic and Cultural Resources Chapter.

Rural roads in Wilton are characterized by stone walls and large trees that provide a shade canopy over them. Early settlers built most of the stone walls along property lines when they cleared the land for agriculture. Historic houses, barns and sheds also abound along Wilton's roads.

Wilton's varied terrain provides dramatic views from hillsides and hilltops. Identified in the NRI, four elevated areas around Wilton are among the many sites, public and private, offering such scenic views:

- The south side and summit of Pead Hill, along Pead Hill Road
- Carnival Hill (the southern slope of Whiting Hill), off Hillside Road
- The western slope of Abbott Hill, along Abbot Hill Road, Isaac Frye Highway, and Gage Road, including the overlook over Frye Field
- The north side of an unnamed hill on the Heald Tract (opposing Fisk Hill), off McGregor Road



Images (clockwise from top left): View at the peak of Pead Hill; view toward Carnival Hill; view across Abbott Hill; view toward Fisk Hill on Heald Tract.

Image credits: Pead Hill, Abbott Hill, & Fisk Hill: Wilton Planning Board / NRPC Carnival Hill: Town of Wilton

Nature-based Recreational Opportunities

Wilton's natural resources offer a variety of nature-based recreational opportunities.

For example, the Town maintains a series of public trails for hiking and nature observation, including:

- The largest network of trails, extending from the Sheldrick Forest to Heald Track on the west side of Wilton
- A smaller loop of trails from Abbott Hill to the conserved land under Frye Trust
- A small trail into Frog Pond
- A small trail system at the Sand Hill Reservoir



Images (clockwise from top left): Sheldrick Forest; Frog Pond; Frye Field; Heald Tract

Image credits: Sheldrick Forest & Frog Pond: Town of Wilton Frye Field & Heald Tract: Wilton Planning Board / NRPC

These networks are increasingly connected, through the efforts of the WCC, by a series of conserved lands and easements on private lands, especially alongside rivers and streams.

The Wilton-Lyndeborough Winter Wanderers Snowmobile Club also maintains a series of snowmobile trails across both private and public land.

On- and in-water recreational opportunities such as swimming, fishing and kayaking abound in Wilton's rivers, ponds and reservoirs, among them, the Sand Hill Reservoir, Goss Park, Frog Pond, the Souhegan River and local brooks. The Town (and the WCC) continuously seeks to increase recreational opportunities in Wilton; it created the Sand Hill Reservoir Advisory Committee in 2020 to make recommendations for the recreational use of the Sand Hill Reservoir and its surrounding area. Since then, parking at the site has been enhanced and other recommendations from the Committee's report have been implemented. Wilton's recreational facilities are further addressed in the Town Facilities and Services Chapter.



Images (clockwise from top left); Parking area at the Sand Hill Reservoir; Swimming facility at Goss Park; Snowmobiles on a winter trail maintained by the Winter Wanderers Club; Stony Brook

Image credits:

Sand Hill Reservoir, Goss Park, & Stony Brook: Wilton Planning Board / NRPC Snowmobiles on a winter trail: Wilton-Lyndeborough Winter Wanderers Snowmobile Club

Threats to Natural Resources

Natural resources are fragile and can be degraded, fragmented, damaged or destroyed by a variety of threats, including human activity, severe weather events, and pollution originating in Town or elsewhere.

Insensitive Development

Since Wilton's earliest days, pressure for different types of development has continuously threatened its natural resources. While development seems largely inevitable, proper planning and implementation of best practices can limit adverse environmental impacts and protect natural resources.

Insensitive development or use of a property – including use incompatible with the local environment, inappropriate siting, size or density, failure to manage properly stormwater runoff, lack of erosion control, inappropriate timbering or excavation, and insufficient buffers – can be devastating to natural

resources. Whether due to a lack of awareness, technical expertise or regard for the value of natural resources, the consequences of insensitive development are irremediable. Although they can discourage future harmful activity, penalties after the fact cannot reverse damage to the environment.

Inappropriate or Illegal Timbering and Extraction Activities

Thanks to Wilton's abundance of forestland and its geological development, commercial timber harvesting and gravel extraction have a long history in Town. In the absence of compliance with State and local laws and best management practices, however, these activities can destroy natural habitats and wildlife, pollute air, water, and soil, and alter the Town's rural character and scenery.

Historically, there are two concentrated areas of gravel extraction in Wilton – east of Forest Road in the northeastern part of Wilton, and west of



Post-timber-harvest landscape
Photo credit: Wilton Planning Board/NRPC

Greenville Road (NH Route 31) in central Wilton. Timbering occurs throughout the Town. Incidental clearing and excavation activities take place continuously in Wilton in connection with proposed residential and other development, frequently without regard to applicable State and local requirements that could otherwise limit their negative impact.

Watershed and Aquifer Contamination

Contamination of clean water is an existential threat.

According to the EPA, water contamination originates from either a point source or a nonpoint source.⁹ A point source of pollution is easily identified and confined, such as a discharge pipe, drainage ditch, municipal wastewater treatment plant or contaminated stormwater runoff from a specific property. Nonpoint source pollution emanates from diffuse sources that are harder to pinpoint and address, including general use of agricultural or residential fertilizers or pesticides, oil or toxic chemicals in stormwater runoff, erosion (both natural and exacerbated by construction or excavations activities), and bacteria from faulty septic systems.

Water pollution does not respect political boundaries. Therefore, threats to Wilton's water resources come not only from within the Town but also from surrounding communities, especially those upstream of Wilton. Activities in those towns, as well as their efforts to protect their natural resources, inevitably affect Wilton.

Given the location of Wilton's municipal wells near Route 31, contamination of the Town's water supply from road salt or a chemical spill is a possibility. Moreover, a stretch of industrial-zoned land along Route 101 is located directly on top of the aquifer; its development could pose similar concerns.

⁹ EPA "Basic Information about Nonpoint Source (NPS) Pollution". Last updated on July 7, 2022 and accessed July 20, 2022. <<u>https://www.epa.gov/nps/basic-information-about-nonpoint-source-nps-pollution</u>>.

There are, in addition, three major categories of emerging threats to surface water quality in the Souhegan Watershed that will require close monitoring over the next several decades and perhaps beyond. The most well-publicized of these are PFAS, of which a small amount has been discovered in Wilton, as noted earlier. Exposure to PFAS chemicals has been linked to harmful health effects in humans and animals. See the EPA website <<u>https://www.epa.gov/pfas/pfas-explained</u>> and NHDES website <<u>https://www.pfas.des.nh.gov</u>> for general information about PFAS and their monitoring in New Hampshire.

A second category of emerging water quality threats is harmful algal blooms. These are typically the result of excess nutrients in surface waters, leading to an explosive growth of single-celled organisms, cyanobacteria. While toxic blooms have not been reported in Wilton, Baboosic Lake in Amherst, NH has been the subject of a cyanobacteria advisory as recently as September 2022.¹⁰ Cyanotoxins, released when the bacteria die, can cause liver, kidney and central nervous system damage in both humans and wildlife. See the NHDES website <<u>https://www.des.nh.gov/water/healthy-swimming/harmful-algal-blooms</u>> for more information.

The third emerging threat to water quality is microplastics. These are small particles of plastic that have now been found globally, distributed both in the atmosphere and in water. The particles are small enough to be ingested or inhaled and have been identified in samples of human blood. The impact of microplastics on human and ecosystem health is the subject of ongoing study. The EPA has a website on microplastics research: <<u>https://www.epa.gov/water-research/microplastics-research</u>>.

Failure to Enforce Protective Requirements

Even if a town adopts comprehensive regulations and other measures, natural resources will remain at great risk if these requirements are not enforced. Moreover, failure to enforce regulations consistently can create a precedent that will cripple future enforcement efforts or the Town's ability to recover mitigation expenses.

The Wilton Select Board is responsible for enforcing applicable laws and regulations and has delegated to the Building Inspector authority to enforce certain land use requirements and the building code. The Wilton Police may enforce Town ordinances and certain State Laws, such as RSA-212-A and 217-A with respect to Endangered Species and Native Plants. New Hampshire statutes also authorize a range of enforcement mechanisms, from cease-and-desist orders to court proceedings and awards of attorneys' fees.

Adequate monitoring and inspection are prerequisites to effective enforcement. Allocating resources to these efforts is essential, along with enlisting the assistance of the general public and enhancing environmental awareness in Town.

Lack of Awareness

When members of a community do not appreciate the value of its natural resources and the importance of protecting them, the resources are unlikely to be preserved, by regulation or otherwise. While environmentally-conscious developers can significantly mitigate their own impact on natural resources,

¹⁰ NHDES. "State Removes Cyanobacteria Advisory for Baboosic Lake in Amherst, NH". Posted November 30, 2022 and accessed January 3, 2023. <<u>https://www.des.nh.gov/news-and-media/state-removes-cyanobacteria-advisory-baboosic-lake-amherst-nh-1</u>>.

a young student planting a rain garden can make an equally important contribution. Residents enjoy Wilton's rural character but may not be knowledgeable about how it is threatened. Likewise, builders – residential, commercial or industrial – may be unaware of local land use requirements designed to protect Wilton's natural resources.

Climate Change

The recently released *New Hampshire Climate Assessment 2021*¹¹ includes statistical predictions of changes in temperature and precipitation for 11 physiographic regions of the State. These include both changes to the mean temperature and precipitation on annual and seasonal time scales, as well as changes to the extreme values, highs and lows for temperature, floods and droughts for precipitation.

Based on the Assessment's analysis, the trends in summer temperatures and precipitation are of greatest concern for Wilton. Average summer maximum and minimum temperatures over the time period 2009-2039 are expected to increase 2.0 to 2.4 °F from those in the 1980-2009 period, leading to "hotter days and warmer nights during the summer season."¹² The average number of days with a maximum temperature over 90 °F is expected to double from 9.1 to 18.5-19.5.¹³



Exposed riverbed of the Souhegan River during the summer drought of 2022. Photo credit: Peter Howd

However, summer precipitation is not

predicted to increase. The combination of higher temperatures (more evaporation), without increased amounts of precipitation, is expected to set the stage for "more frequent, short-term warm season drought."¹⁴ This will result in extended periods of low flow in the Souhegan River and its tributaries, putting additional pressure on the aquatic and riparian ecosystems they support.

¹¹ Lemke-Stampone, Mary D., Wake, Cameron P., and Burakowski, Elizabeth. 2022. *New Hampshire Climate Assessment, 2021*. The Sustainability Institute, University of New Hampshire. 71. Available: <<u>https://scholars.unh.edu/sustainability/71/</u>>.

¹² *Ibid*. Page 28.

¹³ Ibid. Table A3-6A.

¹⁴ Ibid. Page 28.

Moreover, the warm season precipitation will be delivered over fewer days, with a 16-17% increase in days with greater than 1" rain in 24 hours, and a 25-63% increase in storm events delivering greater than 4" rain in 48 hours predicted for the Monadnock region.¹⁵ These "flushing events" may create stress through rapid variability of flow and decreased water quality, resulting in high levels of E. coli. These events may also challenge the design limits of private and municipal stormwater management systems.

Illegal Dumping, Littering and Illicit Discharge

Improper disposal of waste, especially hazardous waste, can contaminate water, soil and air, degrade scenic views and kill or dislocate wildlife.



Tannery Brook flowing through a culvert beneath Main Street during heavy rain

Photo credit: Wendy Cheney

Water and air pollution originating in Wilton or other communities can contaminate resources across borders, affecting areas far from the source. Furthermore, cleanup can be extremely expensive.

Litter may ultimately be easier to remove than other pollutants, but it is a particularly visible stain on Wilton's clean, rural environment.

Tools for the Protection of Natural Resources

Many tools are available to safeguard natural resources and protect the environment, including governmental regulation, federal grant opportunities, industry best practices, public awareness and education, land conservation and hazard mitigation plans. Nevertheless, they will not be effective in the absence of consistent enforcement, implementation, review, execution and planning.

Federal Environmental Protection Regulations

Over the years, the Federal government has enacted a series of laws to protect the environment. The Clean Air Act of 1963, Clean Water Act of 1972, Resource Conservation and Recovery Act of 1976 and Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (also known as the Superfund law) are the most prominent examples. The EPA has established safety standards for soil, water and air contaminants and has worked with the 50 states to prevent or mitigate pollution while cleaning up formerly polluted sites. The NHDES is responsible for enforcing State and Federal laws in New Hampshire, but enforcement also requires cooperation from local governments and agencies, including monitoring and reporting unlawful activities.

Worth mentioning are two Federal permits with which Wilton must comply – its Municipal Separate Storm Sewer System (MS4) permit and its National Pollutant Discharge Elimination System (NPDES) permit, both issued under the Clean Water Act.

¹⁵ *Ibid*. Table A3-6B.

- **MS4 Permit:** The Souhegan River and Stony Brook have been designated as "impaired waterways." All municipalities along impaired waterways and within Census Bureau-defined urbanized areas are required to mitigate pollution in them under the terms of their MS4 permits. The MS4 permit program is intended to ensure that water directly or indirectly entering impaired waterways via municipal stormwater infrastructure or otherwise is as clean as possible. Permitted communities test water quality, educate stakeholders, work with builders and maintain internal mitigation programs on municipal properties. Wilton's MS4 permit requires ongoing self-monitoring, including inspections and annual reporting to the EPA.
- NPDES Permit: The Wilton Recycling Center is designated as a "junkyard" under State law and, because of its proximity to the Souhegan River, requires an NPDES permit. NPDES permit requirements are intended to mitigate potential stormwater pollution specifically from the site and include self-inspections and reporting.

Federal Grants

Aside from regulations, the EPA and other Federal agencies sponsor various grant programs and funding opportunities, covering a wide range of environmental and natural resources activities. Programs most relevant to Wilton include:

- EPA Brownfields Program Provides direct funding for brownfields assessment, cleanup, revolving loans, environmental job training, technical assistance, training and research. The program awarded the Nashua Regional Planning Commission (NRPC) grants in 2019 and 2022 to fund environmental assessments on qualifying brownfield sites to help facilitate their clean-up and redevelopment into economically viable uses. Among other projects across the region, the 2019 grant funded the assessment of a brownfield site in Wilton.
- EPA Environmental Education Grants: Eligible non-profit organizations, educational institutions and education agencies can obtain grants to fund projects to help the public make informed decisions affecting environmental quality. Recently funded projects ranged from K-12 adopt-a-stream programs to urban garden projects, and from youth programs to green job career development programs.
- **EPA Research Grants:** Support the study and development of novel approaches to tackling natural resources and environmental issues.
- **Grants from other agencies:** Environment-oriented grants from other agencies, such as the Department of Transportation and Department of Energy, geared largely to addressing climate change (including electric vehicle charging infrastructure, fleet (e.g., school bus) electrification, and energy conservation). The Department of Agriculture has various programs to help small and mid-sized farmers and rural communities like Wilton.

State Laws

Most Federal environmental protection regulations are administered by the State through various agencies, such as the NHDES and the NHF&G. State laws also address air and other pollution control programs in RSA Chapters 125-C/I/J/M/N/O; fuel and oil discharge and underground storage facilities requirements in RSA Chapters 146-A/C/D/E/F; hazardous waste management and clean up in RSA Chapters 147-A/B; fish and game and endangered species conservation in RSA Chapters 212/-A;

rivers/lakes/shoreland protection in RSA Chapters 483/-A/-B; wetland protection in RSA Chapter 482; and groundwater and drinking water protection in RSA Chapters 485/-A/-C. Moreover, State laws regulate timber harvesting (RSA Chapter 227-J) and gravel extraction (RSA Chapter 155-E).

Local communities play a key role in the enforcement of State environmental laws, but, of course, if they are not consistently enforced, State laws may have limited effect.

Regional Monitoring and Conservation

The State also supports regional planning efforts to better manage natural resources at State and regional levels, especially those resources that cross political boundaries, like the Souhegan River. The State's Rivers Management and Protection Program (RSA Chapter 483) creates local river management advisory committees (LACs), comprising representatives from State agencies, local communities and the regional planning commission, to plan and coordinate the management and protection of designated rivers.

The Souhegan River Local Advisory Committee (SoRLAC), to which Wilton representatives actively contribute, is the LAC for the Souhegan River. SoRLAC works closely with the NHDES, the NRPC, local communities and nonprofit groups such as the SWA to plan for and implement management and conservation efforts, including through the SRWMP, which was prepared by NRPC on behalf of SoRLAC, the *Souhegan River Protected Instream Flow Study* conducted between 2005 and 2008, and the *Souhegan River Water Management Plan* published in 2013 (SR Water Plan) (see discussion below).

Moreover, SoRLAC regularly reviews applications for development along the Souhegan River Corridor and participates in the Souhegan River Water Quality Monitoring Program conducted by the SWA each summer.

The NRPC, aside from supporting SoRLAC, also collaborates with communities in grant-writing and planning activities – including assisting in updating NRIs and conservation plans.

Local Ordinances and Regulations

Municipalities have the power to enact and enforce local ordinances and regulations that are stricter than applicable State requirements to protect their natural resources.

Wilton's Land Use Laws and Regulations include the Zoning Ordinance (ZO), which regulates different types of development in the Town and which, along with regulations adopted by the Planning Board, provides the standards by which development will be reviewed and allowed. The Planning Board reviews, updates and applies to individual cases the Land Use Laws and Regulations, many of which were adopted to protect the Town's natural resources, including, without limitation, the following:

- **Overlay Districts:** In addition to base zoning districts that regulate the use of land throughout the Town, the ZO establishes a series of overlay districts with additional restrictions and requirements designed to protect specific natural resources, especially water resources and natural habitats, from inappropriate or insensitive development.
 - Wetlands Conservation District (ZO Chapter 11): Imposes setbacks, buffer requirements and other limitations on construction and certain other activity,

including the use of fertilizers, pesticides and herbicides, in and around defined wetlands and water bodies.

- Aquifer Protection District and Wellhead Protection Area (ZO Chapter 12): Imposes restrictions upon uses of land located above stratified drift aquifers as identified by the U.S. Geological Survey Aquifer Delineation Study in 1987, as well as additional limitations in the Wellhead Protection Area, where the two Wilton municipal water production wells are located.
- Watershed District (ZO Chapter 14): Imposes restrictions on the use of land which, by seepage or flow, introduces, directly or indirectly, water into the old and new reservoirs of the Town, including additional timbering requirements.
- Gravel Extraction District (ZO Chapter 9B): Designates the only areas in Town, based on availability, ease of extraction, topography, and surrounding development patterns, where commercial gravel extraction is permitted; together with the Excavation Site Plan Review Regulations, these sections impose restrictions, operating standards and permitting requirements, as well as reclamation planning, to minimize the detrimental effects of large-scale excavation in Town.
- Sanitary Waste Disposal Requirements (ZO Chapter 4, Section 4.2): Regulate the placement of private septic systems and address compliance with NH Department of Health and Welfare standards, as well as those established by the NH Water Supply and Pollution Control Division.
- Performance Standards (ZO Chapter 4, Section 4.10): Impose restrictions on activities, or the byproducts thereof, that can contaminate the environment or otherwise pose a threat to the health or safety of the community or reduce the value of its properties (including, without limitation, vibration, noise, odors, smoke, release of hazardous materials, lighting and glare, signage, electromagnetic radiation, fire and other hazards).
- Solar Ordinance (ZO Chapter 15B): Guides and facilitates the construction of photovoltaic collection systems for various uses in Town.
- Stormwater Management Regulations (Wilton Land Use Laws and Regulations Section H): Establish requirements and procedures to control stormwater runoff and erosion resulting from identified activities, including clearing, construction and demolition.
- Subdivision and Site Plan Review Regulations (Wilton Land Use Laws and Regulations Sections B and D): Set out review standards and requirements for Planning Board approval of subdivision applications and subsequent development thereof, or development or changes of use of other properties in Town.
- Cluster Development Requirements (Wilton Land Use Laws and Regulations Section C): Set out review standards that mirror Subdivision and Site Plan review requirements and impose significant open space/common land and other requirements on any proposed cluster development.

In addition, the Town has, in accordance with its MS4 permit, adopted an **Illicit Discharge Detection and Elimination Ordinance (IDDE)** to protect its MS4 infrastructure and State waters, including the Souhegan, from the effects of illicit and contaminating discharges.

Of course, regulations and requirements are not effective, and cannot serve their purposes, unless they are consistently enforced by officials with the authority to do so.

NRI, the Conservation Plan and the SRWMP

Although not having the force of law, the NRI, the Conservation Plan and the SRWMP are tools that can be used to help protect Wilton's natural resources.

<u>NRI</u>

A natural resources inventory compiles and describes important, naturally occurring resources within a given locality. It has two basic purposes: to support comprehensive land use and conservation planning, and to provide natural resource information for local planning and zoning efforts.¹⁶

For the 2006 update to Wilton's NRI, the Society for the Protection of NH Forests created a series of local maps, including a "Natural Resource Co-occurrence Value" analysis that assigned point values to each parcel of land within Wilton, based on the presence of various natural resources (e.g., surface waters and riparian zones, wetlands, valuable wildlife habitats, productive soils, aquifer and drinking water resources). Parcels with ample and diverse natural resources have the highest co-occurrence value.

The NRI, as it may be updated from time to time, is an important source of additional information about Wilton's natural resources.

Wilton Conservation Plan

The Conservation Plan was adopted by the WCC to help the Planning Board and other Town Boards fulfill their responsibilities in connection with the protection of Wilton's natural resources. The Plan recommends a series of actions in five categories:

- A. Local Land Use Controls: Support proposed ZO amendments and means of enhancing their application.
- B. **Federal and State Regulations:** Publicize relevant regulations and propose means to facilitate compliance with them and report violations.
- C. Land Acquisition: Support long-term protection of valuable natural resources, particularly agricultural land, through acquisition.
- D. **Education:** Increase public awareness of conservation issues and public support of conservation efforts.
- E. **Organizational Involvement:** Involve the WCC, Planning Board, and other Wilton Boards and groups in the implementation of the Conservation Plan.

¹⁶ Cornell University College of Agriculture and Life Science; Conservation Planning in the Hudson River Estuary Watershed in partnership with the New York Department of Natural Resources and the Environment; "Natural Resources Inventory"; <<u>https://hudson.dnr.cals.cornell.edu/conservation-planning/inventory-and-planning/natural-resources-inventory</u>>; last accessed July 20, 2022.

Souhegan River Management Plans

The objectives of the SRWMP mirror Wilton's goals in connection with the protection of its essential water resources. The SRWMP focuses on the ongoing development of a watershed management plan, encouraging land conservation in the watershed, preventing the loss of wetlands, stormwater management, erosion and sediment control, maintaining and restoring vegetated buffers and adopting site design practices that protect aquatic resources. Moreover, the SWRMP recommends expanded water quality monitoring efforts.

Chapter 6 of the SRWMP sets out its implementation strategies, many of which are intended to be adopted by communities in the watershed. The SRWMP is expected to be updated in the near term.

The SR Water Plan is a more technical plan that prescribes actions during periods of low flow in the Souhegan River and its tributaries, as well as focusing on dam management and the impact of extractive use. This plan is becoming more frequently relevant as seasonal temperatures rise and precipitation remains static.

Industry Best Practices

Industry leaders, trade groups, academic institutions and government agencies have developed and published best practices, typically referred to as Best Management Practices (BMP) in land use, resource and stormwater management contexts, to describe approaches that could prevent or reduce the impact of human activity on the environment. BMP are often cross-referenced in local regulations, under which their use can be required and enforced. Some development-related BMP include Dark Sky Friendly Light Fixtures and the NH Stormwater Manual; UNH publications establish BMP for forestry activities. Federal agencies establish BMP for agricultural and other activities.

Wilton Land Use Laws and Regulations require adherence to relevant BMP in the Town's Zoning Ordinance and in the Excavation and Stormwater regulations, among others.

Public Awareness and Education

Wilton can enhance awareness of environmental issues and the existence of protective ordinances, regulations and approaches with different methods of providing public information and education, including:

- Flyers and publications in Town Hall and postings on the Town website, addressing local ordinances and other requirements for developers and applicants to the Planning Board, including permitting processes relating to activities that could affect the environment; homeowners' responsibility and resources for septic system inspection and maintenance; and homeowners' responsibility and resources for stormwater management facilities inspection and maintenance (e.g. materials from UNH Stormwater Center¹⁷, NHDES/UNH "Soak up the rain" website and homeowner's guide¹⁸)
- Sponsored lecture series
- Information packet for newly elected and appointed Town officials
- Information for visitors to public areas and trails, e.g., Carry-in, carry-out policy

¹⁷ <<u>https://www.unh.edu/unhsc/</u>>

¹⁸ <<u>https://www4.des.state.nh.us/SoakNH/</u>>

• Signage and visuals promoting environmental awareness



Images (clockwise from top left): Souhegan River – NH Protected River sign on Isaac Frye Highway, Sponsor-A-Highway sign on Forest Road, storm drain mural near Florence Rideout Elementary School; Carry-In Carry-Out Sign on the Wilton Riverwalk

Image credit:

NH Protected River Sign, Sponsor-A-Highway Sign, & Carry-in Carry-Out Sign: Wilton Planning Board / NRPC Storm drain mural: Town of Wilton

Moreover, Wilton can sponsor educational programs that promote:

- Awareness, knowledge and understanding of the environment and environmental challenges
- Improvement or maintenance of environmental quality
- Skills to identify and help resolve environmental challenges
- Participation in activities that lead to the resolution of environmental challenges

The National Environmental Education Foundation (NEEF) was chartered by Congress in 1990 to complement the work of the EPA. It provides leadership, educational resources, and grant funding opportunities in environmental education. For more information, see the NEEF website: <<u>https://www.neefusa.org/</u>>.

Scenic Roads and Byways

State law enables a community to designate any road as scenic unless it is a Class I or II highway. A scenic road designation protects trees and stone walls from certain actions by the municipality, utilities or others working in the public right-of-way. After designation as a scenic road, repairs, maintenance, reconstruction or paving work, or tree or stone wall removal, in connection with such work cannot take place without the prior written consent of the local Planning Board or other municipal body. The designation of a road as "scenic" does not affect the Town's eligibility to receive State aid for road construction, nor does it affect private landowners' rights with respect thereto, unless the town adopts more stringent requirements.

A scenic byway, on the other hand, is a designation established through the NH Scenic Cultural Byways Program under RSA 238:19 and administered by NHDOT. Scenic byways are protected because they create a system of roads that feature the beauty, culture and history of New Hampshire. While the designation does not impose substantial restrictions, the State does regulate billboards and other offpremises advertising along a designated byway.

The criteria for scenic byways are set by the State Scenic and Cultural Byways Council:

- 1. A unifying theme based on the intrinsic quality(s) for which the route is being nominated archaeological, cultural, historic, natural, recreational, and/or scenic;
- 2. A meaningful traveler experience; and
- 3. Regional significance and uniqueness.

Any municipality may nominate a state or local road for the scenic byways network. As part of the application, the municipality must develop a corridor management plan, organize public hearings and demonstrate local, private, and public support.

Land Conservation

Acquisition of land by or on behalf of a town, or the creation of legal restrictions on its use, can be a powerful tool to limit development or use that could damage the environment. In addition, the significant tax advantages of designating all or a portion of a lot as in current use under RSA Chapter 79-A provide private landowners a strong incentive to limit development thereon.



LCHIP Land Conservation Program

RSA Chapter 227-M establishes the Land and Community Heritage Investment Program (LCHIP) to

preserve New Hampshire's natural resources through municipal acquisition. LCHIP grants can often be supplemented by grants under various programs administered by the USDA or non-profit organizations.

Temple-Wilton Community Farm at Four Corners Farm. The property is under both a land conservation and historic conservation.

Photo credit: Wilton Planning Board / NRPC

Four Corners Farm and Frye Farm are Wilton's most notable sites in conservation with LCHIP. Together with several other fields in Wilton, they also made use of USDA grants and thus are subject to the agency's monitoring program, with periodic inspections to ensure they remain in approved use.

The WCC identifies properties to be conserved, including tracking land under current use. Conservation opportunities may also arise out of efforts to encourage contributions by private landowners. While the LCHIP provides grant assistance, the WCC evaluates properties for potential acquisition and conservation and makes decisions relating to purchases and/or arranging and accepting conservation easements. Unless these efforts involve Town land or a donation, however, permanent conservation protection is costly and competition with other buyers can increase that cost.

<u>Town Land</u>

The Town of Wilton owns several local parcels, totaling approximately 400 acres. In the absence of a conservation easement, the Town may elect to develop its land or place it in formal or informal conservation. At this time, 117 acres (29%) owned by the Town land are permanently conserved; about 64 acres (16%) are related to water supply and about 106 acres (27%) are parks (including cemeteries) – all of which are protected from development even though they are not under formal conservation.

Public facilities, including the Town Hall & Theatre, Public Library, Police Station, Fire Station, Highway Department Facility, and Recycling Center, are located on about 18 acres (4.5%) of Town land. The remaining approximately 93 acres (23.5%) are undeveloped but not permanently protected.

Private Land Conservancy

Various private natural land conservancies like the Nature Conservancy, the Society for the Protection of New Hampshire Forests and the New England Forestry Foundation own and manage conserved lands across Wilton. Depending upon the conservancy's policy landowners may donate either fee simple ownership of land or the right to develop it (or not) via an easement. Donations are typically taxdeductible. Conservation groups may also own land without implementing formal protection.

Current Use

Current Use Taxation, commonly referred to as "current use," is authorized by RSA Chapter 79-A. According to *A Layperson's Guide to New Hampshire Current Use*¹⁹ published by the Statewide Program of Action to Conserve our Environment (SPACE), "Current use is a taxing strategy aimed at making it easier for landowners to keep their open space undeveloped. Instead of being taxed at market value, land is taxed on its income-producing capacity. In other words, land is taxed as a woodlot, or a farm, not

¹⁹ Statewide Program of Action to Conserve Our Environment. *A Layperson's Guide to New Hampshire Current Use*. 2007. <<u>https://newenglandforestry.org/wp-content/uploads/2016/04/CurrentUseLaypersonsGuide.pdf</u>>.

as a potential site for houses. Current use keeps property taxes at a lower, more predictable rate." Thus, current use offers landowners an incentive to preserve open space and protect it from development. Landowners must apply to their town to enroll their land in current use. The Town's assessor then appraises it based on criteria established by the NH Current Use Board. Current use status runs with the land when sold or transferred. If land in current use is developed, a conversion tax is levied (currently 10% of the full market value of the land that is no longer in current use) at the time the change occurs.

Although it does not convey permanent protection against development, current use is presently the most extensive land conservation program in the State.

Hazard Mitigation and Emergency Management

Natural hazards and disasters such as drought, extreme temperatures, flooding and severe weather can damage or destroy natural resources. Moreover, climate change is exacerbating the frequency and intensity of natural hazards, including storms, precipitation, heat waves, wildfires, and flooding.

The Federal Emergency Management Agency (FEMA) offers grants to help local communities plan and prepare for natural disasters by developing hazard mitigation plans and updating them every five years. Wilton's Hazard Mitigation Plan was updated in 2021. The Hazard Mitigation Plan recommends, among other things, protecting power lines and encouraging drought-tolerant landscape design.

Protective Action to Date

The Town, its Boards, committees and commissions have undertaken and supported extensive efforts to protect Wilton's environment and the natural resources that make it what it is. In addition to adopting and regularly updating protective ordinances, regulations and policies, implementing public awareness strategies, and supporting regional conservation activities, resource management plans and groups like SoRLAC, the Town has relied on the WCC to oversee the protection of its natural resources and undertake efforts to conserve land in Town.

Wilton Conservation Commission

Under the authority of RSA Chapter 36-A, the seven-member WCC helps to protect and conserve Wilton's natural resources, acting in a range of capacities:

- Advisors: The WCC's members are knowledgeable in many disciplines and are intimately familiar with the Town, its properties and its natural resources. They advise and provide technical assistance to the Town's land use Boards so that conservation concerns are addressed.
- **Coordinators:** Representatives of the WCC attend meetings, sit on Boards and work in concert with SoRLAC, NRPC, the Regional Open Space Team (ROST), NHF&G, NHDES and other conservation-related groups on projects that could benefit Wilton and the region.
- Educators: The WCC sponsors a variety of programs and presentations intended to raise public awareness about conservation issues and efforts, as well as interest in forestry careers, land stewardship, ranger programs, wildlife biology, permaculture and biodiversity research.
- **Protectors:** The WCC identifies properties for strategic acquisition and/or conservation easements.

• Stewards: The WCC provides regular oversight and maintenance of third-party easements, conservation lands and certain sensitive properties to protect wetlands, drinking water and wildlife habitats, including Frog Pond and the Sand Hill Reservoir. Some WCC members are stewards of the Heald Tract and Sheldrick Forest conservation lands.

As noted above, the WCC maintains the NRI and the Conservation Plan.

Conserved Land

According to the NRI, about 3561 acres, or 21.7% of Wilton's land, are under permanent conservation easements or otherwise under formal management. About 298 acres, or 1.8%, are under unofficial conservation. A further 6,193 acres, or 37.7%, are located within lots that are either entirely or partially in current use.

Land under permanent conservation includes:

- Forests/natural habitats such as Russell-Abbott State Forest, Heald Tract, Sheldrick Forest and Stephens Forest
- Parks with recreational facilities, such as Goss Park and Carnival Hill
- Farmland such as Wilton-Temple Community Farm

Designated Scenic Roads

Currently, eight roads are designated as scenic roads in Wilton: Barrett Hill Road, Dwight Road, Heald Road, Kimball Hill Road, King Brook Road, Russell Hill Road, Sand Hill Road, and Wilson Road.

Recommendations

The following recommendations are intended to balance the importance of preserving Wilton's natural resources with its goal of thoughtful growth.

The Town should consider:

- 1. Further leveraging the expertise of the WCC to make land use and other decisions affecting natural resources, including:
 - a. Supporting WCC efforts to update the NRI as new data are released and the conditions of natural resources change in Wilton;
 - b. Supporting WCC efforts to update the Conservation Plan and adopting identified strategies and recommendations from time to time contained therein;
 - c. Requiring the WCC to be involved in identified decisions affecting Wilton's natural resources, including requiring, by regulation, recommendations to the Planning Board on applications that could have more than a minimal impact on the environment, such as those for major subdivision and major site plan review; and
 - d. Requiring the Planning Board to appoint a member of the WCC to act as a conduit for both formal and informal exchanges of information between the two bodies, if a member of the WCC has not otherwise been elected to the Planning Board.

- 2. Identifying, adopting and supporting specific, applicable implementation strategies contained in the SRWMP, as it may from time to time be updated or modified, to the extent those strategies are not already embodied in Town regulation or policy, and coordinating with neighboring towns and regional groups to identify, monitor and address developments and activities that could have a detrimental impact on Wilton's water and other resources.
- Increasing efforts to consistently enforce all applicable laws and regulations protecting Wilton's natural resources, including through monitoring and inspection, cooperation between Town Boards and officials, cease and desist letters, fines and if necessary, court proceedings.
- 4. Continuing to support periodic review and updates of the provisions of the Land Use Laws and Regulations to provide appropriate protection for natural resources, including requiring lowimpact development practices and adherence to best management practices, periodically reevaluating setback and other requirements for development or activity in various natural resource protection overlay districts and, if necessary, suggesting corresponding amendments to the Zoning Ordinance.
- Increasing funding for adequate staffing and resources to administer and enforce the Town's MS4 permit and its Stormwater Management Regulations.
- 6. Supporting testing of the Souhegan River and Stony Brook, and any other identified surface waters, for E-coli, PFAS and other contaminants, as well as efforts to discover, and seek remediation of, their sources.
- Reinstating the position of Town Corder (to be retitled as Tree Warden or Town Forester), to be filled by a licensed forester, to (a) provide timber harvesting, forest management and other related services, (b) respond to public inquiries and complaints, (c) oversee such activities in Town, and (d) coordinate, as necessary, with State resources and personnel.
- 8. Updating Wilton's incident response planning to mitigate the risk of contamination of the municipal wells located along Route 31.
- 9. Expanding environmental awareness and public education programs to increase understanding of Wilton's environmental issues, including, without limitation, climate change.
- 10. Publicizing for developers, businesses and homeowners the local regulations and requirements intended to protect the environment, including zoning district limitations and requirements relating to inspecting, monitoring and maintaining erosion controls, stormwater infrastructure, septic and other systems to prevent detrimental environmental impact on natural resources.
- 11. Adopting and enforcing a litter and illegal dumping ordinance and declaring a Town-sponsored clean-up day each year.
- 12. Continuing to evaluate and seek conservation opportunities, including through acquisitions with funds earmarked for the WCC from land use change taxes and LCHIP, conservation easement and encouraging private conservation and activities. Developing a protocol (e.g., reporting form) for residents to identify and report to the WCC sightings of protected or rare species of plants and animals.

Appendix

2016 Wilton Conservation Plan