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2025



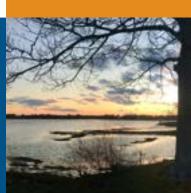














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ACKNOWLEDGEMENTS



The following community members, organizations, boards, & committees contributed to the creation of this 2025 Eliot Comprehensive Plan.

Comprehensive Plan Committee

(current and past members) Overall guidance on the plan's development, idea generation, development of the Vision and Regional Role statements, content review, help with public involvement, and more Christine Bennett, Co-Chair Kari Moore, Co-Chair Carmela Braun, Vice Chair Ellen Lemire, Secretary Ellen Ceppetelli Maureen Clark Peter Eaelston **Emily Flinkstrom** William Hamilton Jenny Isler James Latter Jeffrey Leathe Ann Lukegord Representative Michele Meyer Heather Muzeroll-Roy **Brigham Pendleton Casimir Pendleton** Nedra Sahr Jim Schliestett Megan Shapiro Ross Leslie Stevens Michael Sullivan Eva Therrien B. Cabot Trott Sarah Turner Lisa Wise Gene Wypyski **Non-Committee Members** (attended meetings & contributed ideas)

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Agriculture and Food Security

Commission: Agriculture and Forest Resources suggestions, ideas, and review Leslie Stevens Sarah Plocharczyk Norman Owens James Waters

Eliot Historical Society: Co-author of the Archaeological and Historic Resources inventory; main author of the Archaeological and Historic Resources goals, policies, and strategies; technical and mapping assistance Rosanne Adams Paul Johnson Eric Christian Tracey Graffam-Dickson Jan Cerabona Budget Committee, Comprehensive Plan Subcommittee: Review and ideas for the Fiscal Capacity and Capital Investment section Gene Wypyski, Chair

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Town Staff: Assistance with public involvement, administrative assistance, contributions of data and content, plan review Michael Sullivan, Town Manager Melissa Albert, Assistant to Town Manager Kim Tackett, Land Use Administrative Assistant Shelly Bishop, Code Enforcement Officer Don Ferrara, Assessor Wendy Rawski, Town Clerk Lauren Small, Deputy Town Clerk Kylie Gordon, Asst. Town Clerk Samantha Sands, Asst. Town Clerk Heather Muzeroll-Roy, Recreation Director Norm Albert, Public Works Manager Elliott Moya, Police Chief Jay Muzeroll, Fire Chief Kristin McNulty, Treasurer

Land Use and Housing

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Stormwater

Content review related to stormwater in the Water Resources section

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Thacher Carter, Municipal Policy Associate

MFT's Cultivating Maine's Agricultural Future (2nd edition) municipal guide

Business/Stakeholder Interviewees

Alchemy Jewelry Bondgarden Farm Eliot Agway **Eliot Connects** Happy Home Jake Rodden, State Farm Agency Jenny O'Dell, LMT Maine Market Maine Pine Yard Chair **Pike Industries** Salty Boats of Maine Sandy Hill Farm Seacoast Airfield Sweet Dirt White Heron Maine (now Chickadee Café)

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Others Who Volunteered:

Eliot 2025 Comprehensive Plan logo design, contributing author for the Archaeological and Historic Resources and Natural Resources sections Eve Southworth

Review of People of the Dawnland: Present-day Eliot Before European Contact, in the Historic and Archaeological Resources section Anne Jennison

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Unless noted, photos by Claudia Kaerner and Jeff Brubaker

This plan encompasses a wide range of ideas, perspectives, and visions from many community members and stakeholders. The content may not fully represent the views of all contributors mentioned above.

INTRODUCTION



Fostering Community. Creating Connections. Building our Future.

The Comprehensive Plan guides our community's growth and quality of life for the next 10 to 15 years. It has been over 15 years since we adopted our last plan (2009). The 2009 plan was created by a group of active and engaged citizens and included some ambitious goals and strategies, some of which have since been implemented. That plan laid the foundation for town planning and provided much needed resource inventories. The current update builds upon this foundation while providing new and revised policies and strategies that better align with current times and community input. Realistic and attainable goals are included that will guide us into the next 10 years and beyond.

We intend for this plan to not sit on a shelf but be steadily implemented. That will require concerted, collaborative, and careful effort from the community.

We began this effort to update the Comprehensive Plan in late 2022. The update has been guided by a Comprehensive Plan Committee (CPC) made up of citizens, Town advisory committee representatives, and Town staff. The Select Board created the CPC and appointed its members. The CPC includes subcommittees that focused on specific topics: land use, transportation, housing, economic development, environment and open space, and parks and public facilities. The CPC also includes a Youth Advisory Group with one middle school student and one high school student who helped inform the early stages of the update.

The Eliot Planning office managed overall plan development, public input, and content. The Southern Maine Planning and Development Commission (SMPDC), as plan consultant, provided content contributions, mapping, data, and technical assistance. CPC members, several Town boards, stakeholder groups, and Eliot residents provided ideas, inspiration, and content. Therefore, this plan has many authors and many building blocks. It is built from the ground up and rooted in the values expressed by community members in the many public input opportunities.

Opportunities for public input included:

- > CPC and Subcommittee meetings open to the public
- > A Community Survey with over 700 respondents
- > A Youth Survey with over 100 respondents
- > A Community Visioning Session in March 2023
- > The Future Zone, an extended public input drop-in station over the course of several weeks in May-June 2024
- > 15 business/stakeholder interviews
- > 3 Eliot Festival Day tables and a table at an Eliot Connects event
- > Input and review from several Town boards and committees, including

the Planning Board, Conservation Commission, and Agriculture and Food Security Commission

- > A Comprehensive Plan web page
- > A Public Showcase of the draft plan in February 2025
- > 2 Planning Board public hearings on the draft plan
- > A Community Info Session on the plan in May 2025
- > An opportunity for Eliot voters to adopt the plan at the June 2025 Municipal Election and Referendum

GROWTH MANAGEMENT ACT CONSISTENCY

The State of Maine encourages Maine communities to have comprehensive plans that are consistent with the state's Growth Management Act (Title 30-A MRSA §4301 et seq.). Although consistency is not required, it has several benefits. Without a consistent plan, a community has less flexibility to make some zoning changes, establish impact fees, or manage growth in ways the community might want to manage it. Having a consistent plan may make a community eligible for some grants or loans. The Maine Department of Agriculture, Conservation, and Forestry (DACF) reviews plans for consistency.

We have developed the new Eliot Comprehensive Plan to achieve consistency.



Comprehensive Plan Committee Meeting April 8, 2025

OUR VISION & BIG IDEAS

Our Vision for Eliot

We seek to create and maintain a vibrant, sustainable, and connected community that celebrates our rural heritage and history, protects and conserves our valuable natural resources, and provides a high quality of life for people of all ages and backgrounds.

To achieve this, we will encourage community members to be engaged and active, create a flourishing local economy, sustain local farming, preserve and expand open space and natural resources, support excellence in our schools, diversify housing choices, improve multimodal transportation options, invest in our infrastructure, prioritize resilience to climate change, and connect neighbors through community services, programs, and resources.

WE WILL WORK TO ENSURE THAT OUR COMMUNITY IS INCLUSIVE, SAFE, AND WELCOMING TO ALL.

Our Role in the Region

Eliot is a primarily residential community, with many residents working within a 10mile radius. Our contributions to the regional economy reflect being centered in key regional transportation networks, deep water access to the Piscataqua River, and prime agricultural soils. Today, commerce and business are concentrated along the state arterial, Route 236, and provide critical inputs to the region's agricultural and maritime economy.

Eliot collaborates with communities throughout York County to exchange information, assets, and cost sharing. With our neighboring communities, we share a sense of responsibility to serve the needs of residents, businesses, and visitors across the region. We will contribute to regional initiatives to improve housing choices and affordability. We share vital ecological connections that extend beyond our town borders, and we will continue to partner with conservation organizations to protect and conserve these important connections – especially as we all face the challenges of a changing climate.

Big Ideas

Big Ideas are highlights of the goals, policies, and strategies within this plan.













Promote orderly growth and development in designated areas to protect Eliot's rural character, efficiently use public services, and prevent sprawl.

- Maintain the character of the rural parts of town
- Create a new Mixed Use zone along Route 236
- Create a Village Transition zone between Route 236 and the Village
- Extend water and sewer along
 Route 236 and in the Village
- Create Critical Resource Overlay districts
- Improve efficiency of permitting procedures
- Update the land use regulations to make them clearer
- Coordinate with neighboring communities on regional land use planning topics

Town of Eliot, Maine

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Promote affordable, decent, diverse housing opportunities for all.

- Allow single-family dwellings to be converted into duplexes (subject to certain standards)
- Maintain the current flexibility on ADUs
- Allow cottage clusters
- Consider an inclusionary housing standard (certain % of units affordable in larger subdivisions)
- Promote more housing types within the proposed new Mixed Use zone
- Support regional affordable housing efforts
- Encourage and promote housing for seniors to help them age in place and stay in the community
- Create and publish a housing data dashboard
- Consider establishing a housing trust fund

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Update zoning, extend infrastructure, strengthen business-community relationships, and foster regional collaboration to promote economic growth and development in Eliot.

- Update the zoning on Route 236, including mixed use zoning
- Clarify and simplify home-based business land use regulations
- Invest in infrastructure on Route 236 (water, sewer, traffic/safety, and electrical capacity)
- Create formal communication channels between the Town and businesses
- Coordinate with regional economic development organizations to support economic development
- Make the Village area more of a place where people love to gather and small businesses thrive

Town of Eliot, Maine 2025 COMPREHENSIVE PLAN

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ELI AGRICULTURE & FORESTRY

Promote and protect agriculture and forestry by removing regulatory barriers, encouraging sustainable practices, and integrating local food production into Eliot's economic and community identity.

- Remove regulatory barriers and provide tax incentives for high-tunnel greenhouses
- Start a local farmers market
- Establish a community garden
- Connect farmers with food security organizations (e.g. food pantries)
- Allow active farms to have a second accessory dwelling unit (ADU)
- Contribute land conservation funds to preservation of local farmland
- Streamline rules for farm stands and stores

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Maintain a safe and efficient transportation system through regular upkeep, strategic traffic and safety improvements, and expanded transportation options.

- Keep the roads and their stormwater facilities in good condition
- Zero traffic crashes that are fatal or cause a severe injury
- Improve traffic and safety on Route 236
- Create a traffic calming request program to manage speeds on Town roads
- Advocate for more frequency on the COAST 100 route and expanded social services transportation
- Extend active transportation (walking and bicycling) facilities in and around the Village
- Support and advance the vision for the Eastern Trail and East Coast Greenway
- Encourage the use of electric and fuel-efficient vehicles

2025 COMPREHENSIVE PLAN

Town of Eliot, Maine



ELIOT RECREATION & OPEN SPACE

Develop and enhance inclusive, safe, and accessible parks and recreational options that foster community engagement, support conservation efforts, and improve connectivity.

- > Adopt the Open Space Plan Update
- Extend walking trails to create a network within conserved land
- Improve access to the Town Forest
- Improve our existing parks
- Create a welcoming gathering space in the area next to Town Hall
- Support the vision of the Eastern Trail and East Coast Greenway
- Study the creation of a community center and a new park

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Big Ideas | 11





Foster thriving natural habitats by removing barriers to wildlife passage, conserving critical natural resources, enhancing zoning protections, and engaging the community in stewardship efforts.

- Improve stream crossings so they can facilitate fish passage
- > Update the Open Space Plan
- Build Eliot's Land Bank
- Communicate with conservation partners and landowners to encourage more land conservation
- Improve natural resource protections in the zoning ordinance
- Engage community members to steward Eliot's natural resources

Town of Eliot, Maine







Enhance and protect the quality and quantity of surface and groundwater in Eliot through improved regulations, conservation efforts, pollution reduction, and community engagement.

- Update shoreland zoning to better protect water resources
- Increase water quality protections in the York River and other watersheds
- Establish local wetlands protections and disincentivize their alteration
- Reduce stormwater runoff pollution and promote Low Impact Development (LID)
- Reduce the risk of pollution discharges from septic systems
- Protect drinking water systems

2025

Town of Eliot, Maine





Maintain healthy marine life and water quality in the Piscataqua River and its tributaries.

- Support implementation of local and regional harbor and bay management plans
- Create and implement a plan to improve water quality in the Spinney Creek watershed
- Permanently conserve land that provides benefits to the marine environment
- Foster water-dependent land uses and balance them with other complementary land uses
- Support small-scale marine and water-dependent businesses
- Protect waterfront access and explore the creation of additional points of access
- Make our shoreline more resilient to the impacts of climate change

Town of Eliot, Maine

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ELIOT HISTORIC & ARCHAEOLOGICAL RESOURCES

Protect the significant historic and archaeological resources in the community to the greatest extent practicable.

- Map, survey, and update information on Eliot's historical and archaeological resources
- Provide informational programming on Eliot's historical and archaeological resources
- Amend the land use regulations to require historical/archaeological resource protection
- Ensure historical compatibility for Town-owned building changes or transportation improvements
- Develop a preservation easement program
- Establish adaptive reuse and density incentives to encourage preservation of historic buildings

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POPULATION **& DEMOGRAPHICS**



In 2023, according to the American Community Survey, Eliot's population was about 7,300. Eliot is a desirable community in a growing region.

	DN: PAST TRENDS				
Location	2000	2010	2020	% Change 2000-2020	% Change 2010-2020
Eliot	5,954	6,204	6,717	13%	8%
South Berwick	6,671	7,220	7,467	12%	3%
York	12,854	12,529	13,723	7%	10%
Kittery	9,543	9,490	10,070	6%	6%
York County	186,742	197,131	211,972	14%	8%
Maine	1,274,923	1,328,361	1,362,359	7%	3%

Source: Population trends in Eliot, surrounding communities, York County, and Maine, 2000-20. Source: U.S. Census

ELIOT'S RECENT GROWTH

ELIOT'S PROJECTED GROWTH

FROM

2020-2040

GROWTH IN

POPULATION

FROM 2000-2020 **GROWTH IN** POPULATION

That is nearly double the state's growth rate, a faster growth than our three neighboring communities, & slightly slower than York County

Source: U.S. Census

growth among Maine municipalities with 5,000+ population

That is the third-fastest projected

Source: Maine State Economist Demographic Projections

%

Eliot's Population: Past and Future Trends CONTRIBUTING FACTORS AND IMPLICATIONS

 Eliot is a desirable residential community within commuting distance of major employment centers and close to services, beaches, shopping, and entertainment

> Many long-time residents seek to stay in the community and age in place, but they may not be able to stay in their homes, or may wish to move or downsize within the community. Local housing options that fit this life transition are limited

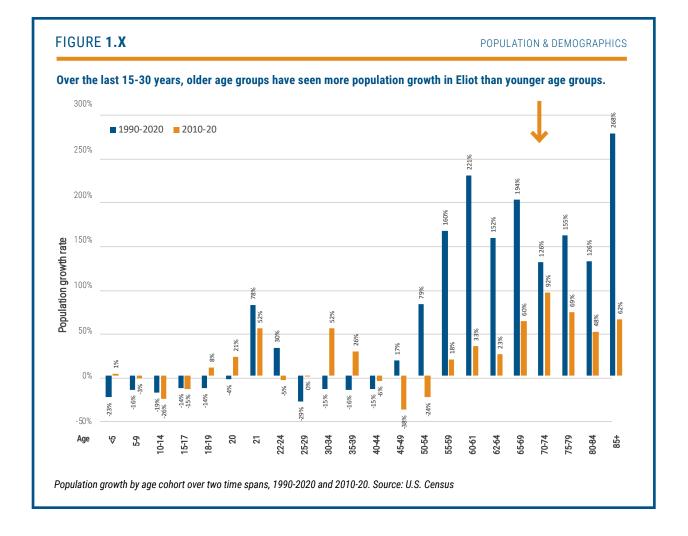
Some people move to Eliot specifically to retire here

> The quality of schools in MSAD 35 is a draw for families or those hoping to start a family. Many families may find it challenging to find a house they can afford in Eliot with the space they need > Some people move to Eliot after finding a new job in the region. Besides the Portsmouth Naval Shipyard, Eliot is close enough to other job centers for commuting to either a full-time, in-person job or a hybrid in-person/remote job

> Eliot, like elsewhere in Maine, saw growing demand for housing during the COVID pandemic. The state has a housing supply shortage. Strong demand and not enough supply have put upward pressure on housing prices

> People cherish Eliot's rural character, as indicated by the Community Survey and other public input

> Eliot can accommodate these growth pressures while continuing to preserve the community's character by concentrating growth in already mostly-built-up, but underdeveloped areas along Route 236 and through gentle, modest density in other growth areas, like the Village, while boosting open space, agriculture, and natural resource protections in other areas of town



Eliot's Population: Average Household Size

> From 2010 to 2020, Eliot grew by 513 people and 283 households, meaning that our community added an average of 1.81 new persons for each new household

 Average household size went down from 2.47 to 2.41

> Two-person households increased from 37.4% to 41.5% of all households, while shares of three- to six-person households decreased

> The largest drop was in the share of threeperson households, from 18.4% to 14.5%. These changes suggest a continued decline in households with children – something noted in the 2009 Comprehensive Plan

See Housing for further discussion on this topic.

Meeting the Demand: Housing, Municipal Services, and School Services

Strong growth projections to 2040, access to employment centers, and the desirability of the community and region suggest that housing in Eliot will continue to be in demand through this plan's horizon.

If historical trends continue, Eliot will see continued brisk growth in older age cohorts. However, we also need to play a role in improving opportunities for younger individuals and families to find homes that they can afford and that meet their space needs.

The school district, proximity to employers and amenities, and high quality of life are likely to continue to buoy housing demand among younger age cohorts and young families, but since they tend to have less savings and income, more homes in Eliot may be unattainable for them – unless we act to encourage more housing options that fit their budget and needs.

Schools in the district are generally not near capacity. A frequent concern in many communities is whether projected growth will overburden local schools. For Eliot and its neighboring communities, a more pressing concern may be how a sustained lack of housing that is attainable for families of PreK-12 children may continue or exacerbate downward school enrollment trends, which could present its own set of challenges for the district.

TABLE 1.X

POPULATION & DEMOGRAPHICS

AVERAGE HOUSEHOLD SIZE Size of Ava. Location Population Households Household Eliot 6,717 2,792 2.41 Kittery 10,070 4,511 2.23 South Berwick 7,467 2,871 2.60 York 13,723 5,906 2.32 York County 211,972 88.924 2.38

FROM 2010-2020 ELIOT GREW BY:

PEOPLE

HOUSEHOLDS

Eliot added approx. 1.81 new persons for each new household

FROM 2010-2020 ELIOT EXPERIENCED:



These changes suggest a continued decline in households with children-something noted in the 2009 Comprehensive Plan.

2020 population, households, and average household size for Eliot, neighboring communities, and York County. Source: U.S. Census.

TABLE 1.X

POPULATION & DEMOGRAPHICS

HOUSEHOLD	2010		2020		
Household Size	#	%	#	%	
1-person household	586	23.4%	656	23.5%	
2-person household	939	37.4%	1,158	41.5%	
3-person household	462	18.4%	406	14.5%	
4-person household	344	13.7%	381	13.6%	
5-person household	126	5.0%	136	4.9%	
6-person household	37	1.5%	31	1.1%	
7-or-more-person household	15	0.6%	24	0.9%	
Total	2,509		2,792		

Number and percentage of households by household size, 2010 and 2020. Source: U.S. Census.

By matching designated growth areas with infrastructure investments, this plan envisions locationefficient growth whose demand for municipal services can be met. Growth is directed to areas that mostly already have municipal water and sewer service, or are proposed to get them within this plan's horizon.

Both water and sewer capacity are expected to well exceed demand for at least the next 10-15 years, and likely further in the future.

The renovated, expanded Town Hall will have almost double the interior space as before, putting it in a position to serve a growing population in the coming decades.

See Public Facilities for further discussion on this topic.

Seasonal Housing

In 2020, according to the U.S. Census, only 2.4% of housing units in Eliot were vacant due to seasonal or recreational use. Over 94% of housing units were occupied.

Seasonal housing is not nearly as major a factor in Eliot's economy as some other communities in York County and Maine, particularly coastal ones.

Supporting the Region's Major Employer

Eliot does not have a major regional employer. However, as a bedroom community to the region's major employer, the Portsmouth Naval Shipyard, we continue to collaborate with Kittery, other neighboring communities, and the Shipyard on good planning practice to accommodate the Shipyard's growing workforce.



About 300 Shipyard workers live in Eliot. Photo: Jon Winslow.

EXISTING LAND USE

Eliot is mostly a residential community. The Village area is our civic center, Route 236 hosts most of the community's commercial uses, and our suburban and rural areas abound with small farms, forests, and mostly large-lot residences.

How We Have Grown

Eliot's recent annual residential growth has been well under our growth cap. New subdivisions approved in the last 5+ years have been small (8 units or less). Individual lot residential construction has continued. Some seasonal camps have been replaced by yearround houses.

Growth has not necessarily reflected the vision in our 2009 Comprehensive Plan, because many land use recommendations in that plan were never implemented. However, some of the recommendations that were implemented have probably shaped growth in a way that aligns with the community's vision, although perhaps not in the way fully intended. For example, the Town established a Critical Rural Overlay within which subdivisions must be open space developments (i.e. cluster or conservation subdivisions). This has not actually yielded any built open space developments, but it does serve to prevent new conventional subdivisions in the Critical Rural Overlay.

Starting in 2021, the Town has progressively relaxed accessory dwelling unit (ADU) rules, addressing another 2009 Plan recommendation as well as the requirements of LD2003. From 2022 to 2024, there were 26 ADU building permits approved – over 8 per year.

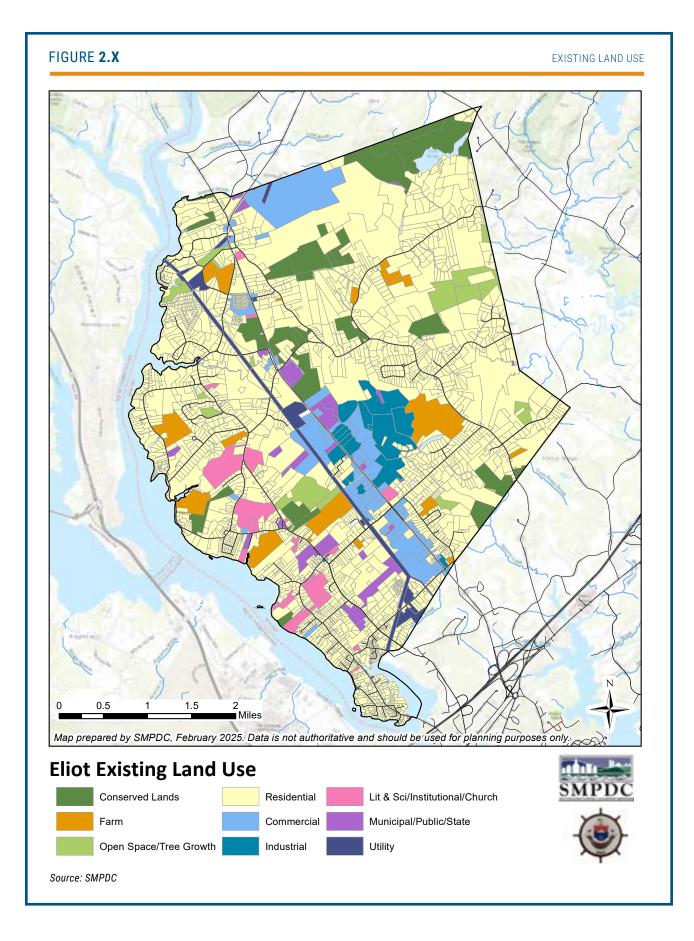
Land Needed for Growth Within this Plan's Horizon

There is generally expected to be enough land to accommodate institutional uses within the plan horizon. In the shorter term, it is not expected that the Town will need to acquire significant tracts of land for municipal operations or civic and recreational uses. However, this might change based on the timing and nature of implementation of certain plan recommendations. If so, land needs would be considered on a project-specific basis.

See Public Facilities and Recreation and Open Space for further discussion.



Map of residential growth permits and ADU permits in the IWorQ online permit database, 2022-present.







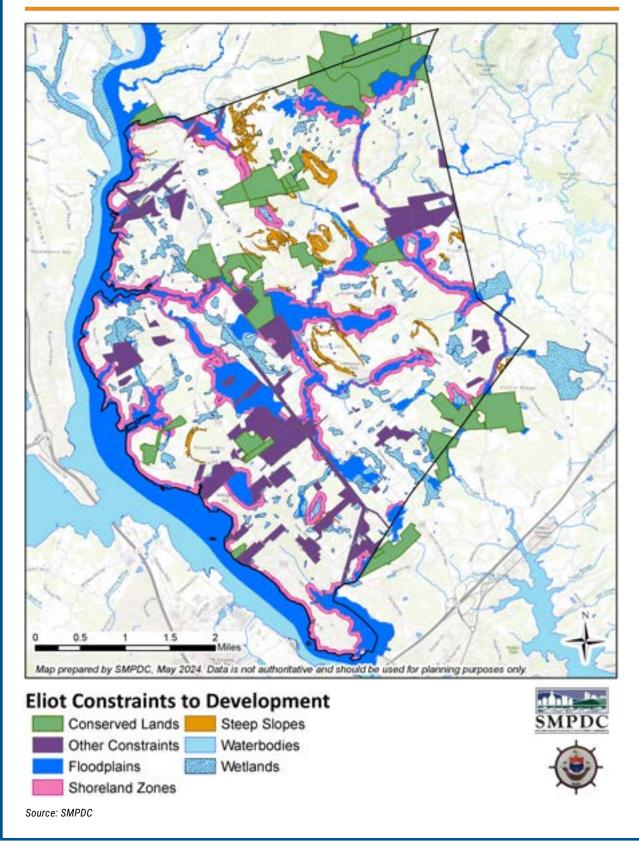
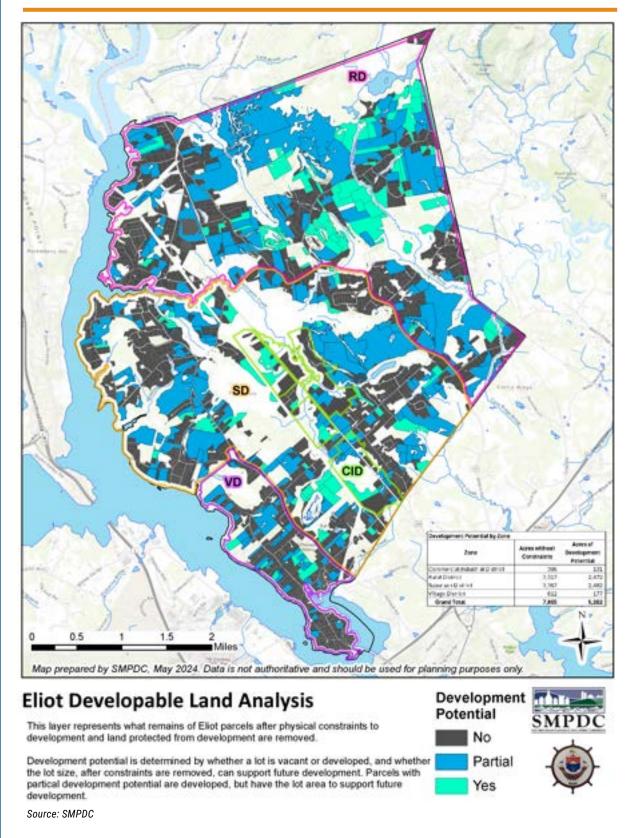


FIGURE 2.X

EXISTING LAND USE



INDUSTRIAL

There is expected to be enough land to accommodate industrial uses in the future in the existing C/I zone, even after the carve-out of the Mixed Use zone. The community generally does not favor an expansion of industrial uses. Today, industrial uses are concentrated in the C/I zone from Beech Rd. to the Compressor Station (south of Depot Rd.), and this is where we expect to accommodate any proposed new industrial

TABLE **2.X**

uses within the next 10 or so years. No new land is recommended to be zoned for industrial uses.

This does not account for small-scale, very light industrial uses with limited impacts that may be allowed in other zones or allowed by right, such as local food production, home-made items sold by a home business, or some very light industrial operations that may be compatible uses in the Mixed Use zone.

EXISTING LAND USE

District	Rural	Suburban	Village No water or sewer ^w	Village Water & sewer ^w	C/I	MHP
Min. lot size, acres (ac) or square feet (ft ²)	3 ac	2 ac	1 ac	½ ac	3 ac	6,500 ft2ª 12,000 ft2ª 20,000 ft2ª
Min. street frontage (ft.) ¹	200	150	100	75	300	50/75/100 ⁿ
Min. street frontage: back lots	m	m	m	m		
Min. area per dwelling uni	t, acres (ac):					
1 unit	3 ac	2 ac	1 ac	½ ac	-	0
2 units	б ас	4 ac	2 ac	1 ac	-	-
Each additional unit	3 ac	2 ac	1 acg	½ ac	-	-
Accessory dwelling unit	u	u	u	u	u	-
Assisted living facility	-	S	S	S	s	-
Elderly housing	-	g	g	g	g	-
Life care facility	-	t	t	t	t	-
Min. yard dimensions (ft.))					
Front yard	30	30 ^p	30 ^p	25 ^p	50 ^{a,p} 30	20°
Side yards	20	20 ^p	20 ^p	15 ^p	20 ^p 100 ^b	20°
Rear yard	30	30 ^p	30 ^p	25 ^p	20 ^p 100 ^b	10°
Accessory building ^c						
Front yard setback	30	30	30	30	50ª 30ª	5°
Side and rear yard setback	10	10	10	10	20 100 ^b	5°
Accessory dwelling unit	u	u	u	u	u	-
Max. height (ft.)	35	35	35	35	55 ^d	35
Max. lot coverage (%)	10	15ª	20 ^q	20 ^q	50ª	50°
Setback-normal high water mark (feet)	75	75	75	75	75	75

Source: Abridged version of the dimensional standards table in Section 45-405(a) of the Town Code, as of early 2025. Visit Municode via www.eliotmaine.org/320/Charter-Ordinances to read the full table and footnotes.

COMMERCIAL

There is expected to be enough land to accommodate commercial development within the plan horizon. Commercial uses will continue to be concentrated along Route 236, both in the proposed new Mixed Use zone and in the remaining C/I zone, after the Mixed Use zone carve-out. In fact, commercial development opportunities should increase in these zones with new water/sewer infrastructure coming on line and the zoning made more flexible (e.g. smaller minimum lot sizes). The Village and proposed Village Transition zones are expected to continue to host limited small-scale, context-sensitive businesses.

Other small pockets of commercial development along Route 236 are expected to continue, including along Cedar Rd. where it fronts Route 236, around Ambush Rock Rd., and around Route 101 (Goodwin/ Dover Rds.). The latter is where this plan proposes a Rural Crossroads overlay to encourage more business development appropriate for its context.

TABLE **2.X**

EXISTING LAND USE

Planning Board (PB) Site Plan Review	Planning Board (PB) Subdivision Review
 Sketch plan and full site plan review Public hearing Required site plan application contents Traffic study if required by PB Standards for traffic, vegetative buffering, noise, etc. Standards for specific activities Option for minor site plan amendments Performance guarantees (e.g. bonds) if required by PB Site plan phasing and expiration provisions Site walk at PB's discretion 	 Three phases of review: sketch plan, preliminary plan, final plan Public hearings for prelim plan (required), final plan (at PB's discretion) Required subdivision application contents Standards for lots, soil suitability, water quality, wastewater disposal, traffic, vegetation, preservation of landscape, aesthetics, recreation/park space, etc. Third-party review at PB's discretion Performance guarantees (e.g. bonds) if required by PE Site walk at PB's discretion Subdivisions must be open space developments (i.e. cluster subdivisions) in Critical Rural Overlay; elsewhere, can be conventional or open space
Zoning	Shoreland Zoning
 Four base zoning districts with use limitations and dimensional standards for each Standards for traffic, noise, glare, vegetative buffering, preservation of landscape, hazardous waste, water quality, wastewater disposal, solid waste, etc. Standards for specific activities Parking requirements Signage requirements Provisions for nonconforming situations Variance and administrative appeal provisions (Board of Appeals) 	 Shoreland zoning intended to be consistent with DEP guidelines Structure setbacks from normal high-water line (NWHL) Use limitations by zone Provisions for nonconforming situations Land use standards Standards for piers, docks, and other structures over the NHWL Standards for lots, over and above base zoning (e.g. shore frontage) Protections for vegetated buffers next to shoreland resources Public hearing, if required by PB

RESIDENTIAL

We expect to need between 460 and 940 new housing units by 2040 to accommodate projected growth. (<u>See</u> <u>Housing for further discussion on this</u>.) With many of these new units accommodated in the proposed Mixed Use growth area, and through modest unit increases in the Village and proposed Village Transition growth areas, we can channel growth pressures away from the areas of town where substantial growth is discouraged, maintaining the existing character of the Rural and Suburban areas. Preliminarily, we expect the proposed Mixed Use growth area to accommodate at least 100-200 new units.

While some growth will continue to occur in the Rural and Suburban areas, we expect that growth to be very modest, as it is today – for example, individual house builds on vacant lots, ADUs, some two-family dwellings, or large-lot or open space/cluster subdivisions proposed with a small number of units. At the same time, this plan recommends that we increase protections for open space, important natural resources, farmland, and rural landscapes to further discourage sprawl and overdevelopment in these areas.

Affordable Housing Developments

Based on LD2003 requirements, affordable housing developments (AHDs) are allowable, subject to Planning Board Site Plan Review, in the Village and Suburban zones. They can have up to a 2.5-times density bonus over what is allowed by the base zoning.

Measures to Promote Growth According to Our Vision

This plan recommends several regulatory and nonregulatory measures to promote development of a character consistent with the Vision Statement in this plan. To name just some examples:

- > A new Mixed Use growth area and a Village Transition area
- Designated growth areas aligned with infrastructure investment
- > A differential growth cap that continues to cap growth in non-growth areas but does away with the cap for growth areas

- > Upgraded shoreland zoning beyond the minimum standards required by the state
- > A local wetland protection program
- > A wildlife habitat conservation overlay
- > A Density Transfer Charge (DTC) to shift development pressure away from the Rural area and into the Mixed Use area
- Increased funding for the Town's Land Bank to enable us to better partner on permanent conservation of land and stewardship of already conserved land
- Continued regulatory streamlining of farm uses, such as farm stands and stores and greenhouses

For further discussion of the Town's administrative capacity to adequately manage its land use regulation program, including its planning and code enforcement staff, see Public Facilities.



A banner in Hammond Park, with the park's gazebo in the background

FUTURE LAND USE PLAN



The community can use this Future Land Use Plan, plus the strategies offered throughout this Comprehensive Plan, to concentrate growth in growth areas and limit growth in rural areas.

Introduction

The Future Land Use Plan identifies areas of the community where we want to grow and areas of the community where we do not want substantial growth.

The growth areas are well suited for future development in various forms. Depending on the growth area, this includes residential, commercial, industrial, or institutional development. While modest, incremental growth will occur outside the growth areas, this land is prioritized for maintaining rural character and preserving natural resources, agriculture and forest resources, and open space.

The community can use this Future Land Use Plan, plus the strategies offered throughout this Comprehensive Plan, to concentrate growth in growth areas and limit growth in rural areas.

Connecting Land Use with Our Vision Statement

The Future Land Use Plan is one way to work toward our community vision. It aligns with our Vision Statement by:

making our growth areas more vibrant,
 with more opportunities for social connection,
 through zoning changes, infrastructure investment,
 and placemaking

- > calling for our rural area to stay rural
- > expanding the critical rural overlay
- channeling most growth into already built-up, but underdeveloped, areas
- unlocking new housing and small business opportunities in growth areas
- > matching growth with infrastructure investments, such as water and sewer service and multimodal transportation improvements

Identification of Growth and Non-Growth Areas

This Future Land Use Plan proposes the following areas:

Growth Areas: Areas where future strategies, regulations, and planning should aim to direct growth, primarily residential, commercial, or mixed use

Rural and Suburban Areas: Areas where future strategies, regulations, and planning should discourage substantial growth

Critical Rural Area: Area where high-value natural resources should be prioritized for conservation and protected from future growth

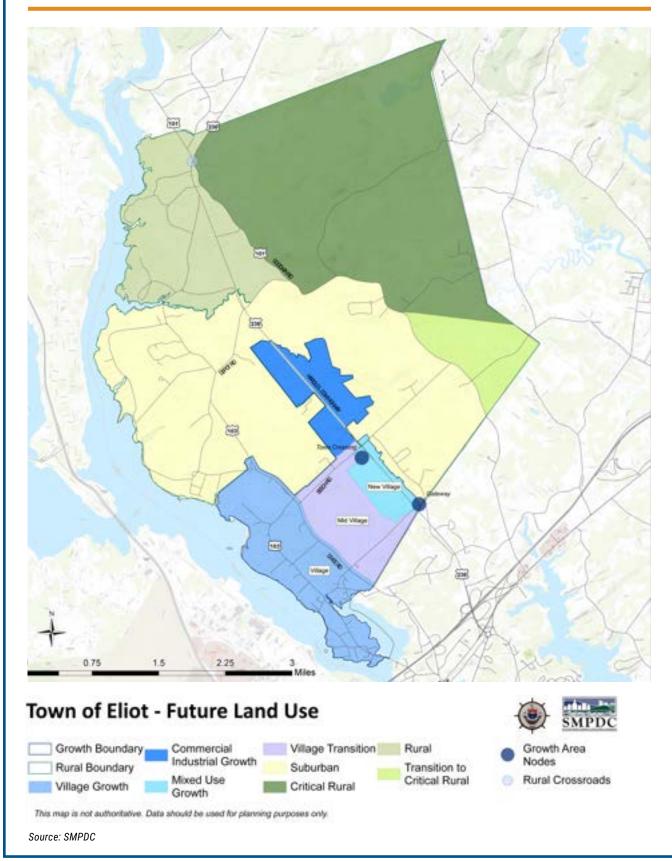
Transitional Area: Area where the community should consider expanding growth in the future, with public investment recommended to support that future growth



Rural view at beautiful Sturgeon Creek Farm

FIGURE 3.X

FUTURE LAND USE PLAN



Growth Area: Village

The Village growth area has the same boundaries as the current Village zoning district, which is Eliot's designated growth area.¹

RESIDENTIAL GROWTH IN THE VILLAGE: GENTLE DENSITY

Smaller Lots

Ordinance amendments enacted in November 2023 to comply with LD 2003 addressed an unfulfilled 2009 Plan recommendation to reduce minimum lot size from 1 acre to ½ acre for Village lots served by both public water and public sewer service. The changes also relaxed minimum acreage per dwelling unit, minimum street frontage, and setbacks.

This should spur some, but not much, growth. Many of the older lots are smaller than 1 acre, the lot size needed to split a lot into two conforming lots. Some lots are not on municipal sewer. Others have shoreland zoning that may restrict additional units. Some property owners will not be interested in building another principal unit even if the zoning now enables it.

Accessory Dwelling Units (ADUs)

Accessory dwelling units (ADUs) are allowed townwide. ADUs are likely to contribute some, but not much, growth in the Village zone. While the town has flexible ADU regulations, not many households have a desire or the financial capital to build one.

One possibility is to create a revolving loan fund to help residents build an ADU. Adequate staffing would be needed to manage such a fund.

Affordable Housing Developments

The LD 2003 amendments made affordable housing developments (AHDs) allowable in the Village zone subject to Planning Board site plan review. AHDs are eligible for a 2.5-times residential density bonus. More than half of the units must stay affordable for at least 30 years. It remains to be seen if an AHD will be proposed in the Village zone within the horizon of this plan.²

Duplex Conversion

The Planning Board has proposed a duplex conversion concept where single-family homes within growth areas can be converted into two-family homes without needing additional land area, as is otherwise required in Section 45-405 for adding principal dwelling units. This duplex conversion strategy, strongly supported at the Future Zone, is recommended in this plan. Such conversions should be in keeping with the architectural integrity of the existing neighborhood, preserve historic buildings as much as possible, and be limited in how much they expand the building footprint (e.g. up to 15% footprint expansion to allow for a stair tower or other duplex elements).

Gentle Density

The above factors comprise the type of growth we expect to see in the Village: moderate growth that is limited by the buildout of the zone and scarcity of large parcels of developable land, where the small-town residential character of the Village is maintained. We sometimes refer to this type of growth as the addition of "gentle density".

SMALL BUSINESSES, RECREATIONAL USES, AND ACTIVE TRANSPORTATION

People go to the Village in part because of its small businesses, parks and recreational uses, and institutional uses. With Eliot Elementary School, summer day camps, the Boat Basin, the Library, seasonal events like Festival Day, and a popular café and market, the Village has something for people of all ages but is an especially important place for kids.



Maine Market, a context-sensitive small business in the Village that offers a place to meet and gather

A Residential Growth Area with Context-sensitive Small Businesses

The Village zone will continue to be primarily residential, as it is today. However, a limited number of context-sensitive small businesses can, and do, add to its character. Commercial building types should be calibrated to the architectural character of the Village.

Institutional and Recreational Uses

The Village includes many of the town's civic landmarks. The renovated and expanded Town Hall will open in 2025.

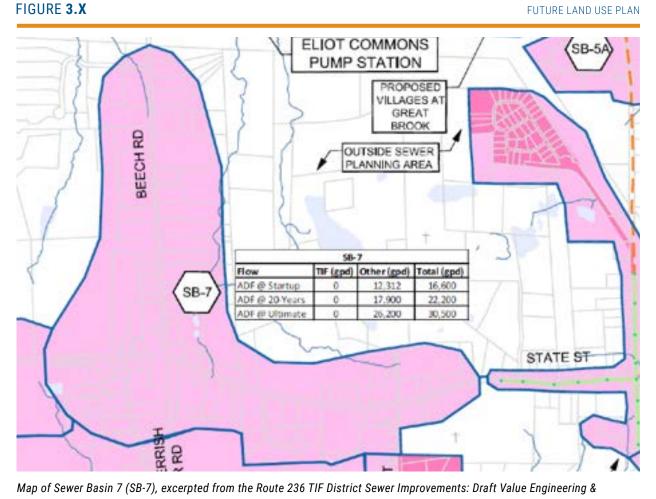
The Boat Basin and Hammond Park are the two public parks within the Village zone, while Frost-Tufts Park is just outside of it. Improvements to the Boat Basin and Frost-Tufts Park are recommended in <u>Recreation</u> <u>and Open Space</u>. We should also begin planning and developing a welcoming gathering place on Townowned land next to Town Hall. We should improve active transportation (walking and bicycling) connections among these civic and recreational destinations.

New recreational amenities suggested by public and stakeholder input include a community pavilion, memory walk (interpretive trail designed for people with memory loss), and a linear arboretum.

Sewer Service

Sewer service should be extended within the Village, including at least to the Elementary School and Town Hall, within the plan horizon.

Sewer service to the Village was recommended in the 2009 Plan and has been studied in detail as far back as 2012, when the Town's sewer consultant completed the "Route 236 TIF District Sewer Improvements: Draft Value Engineering & Preliminary Design Report". One of the identified sewer basins in that report, Sewer Basin 7 (SB-7), covers this area (Figure _).



Preliminary Design Report

Domestic sewer service in SB-7 (which is outside the TIF District) was ultimately not recommended as part of the Route 236 Water-Sewer Project. Only a pressurized sewer force main was installed, in 2023, along Beech Rd. and State Rd. to convey TIF District sewerage from the future Beech Rd. pump station location to the existing system.

A feasibility memo written by a separate consultant in 2023 found that it would cost \$8 million to design and build domestic sewer service in SB-7. This cost includes domestic sewer lines on State Rd. from Town Hall to Mount Pleasant Cemetery, including service on some side streets branching off State Rd. and a small pump station near Town Hall; 450 ft. down Moses Gerrish Farmer Rd.; and about 3,500 ft. down Beech Rd. to the pump station.³

The memo notes that the Town could expect a minimum of three years in design before the project would be ready to be built. Construction of active transportation improvements (sidewalk and bike facilities) on Beech Rd. could occur in 2027 or later, subject to construction funding. While there would be an efficiency to installing a domestic sewer line on Beech Rd. in conjunction with the active transportation improvements, since the active transportation project is in design, the window of time to decide to pair the two priorities, or not, likely will have closed by the time this plan is adopted.

Growth Area: Mixed Use

We propose a Mixed Use growth area along Route 236 generally between Beech Rd. and Bolt Hill Rd. This area is now zoned Commercial/Industrial (C/I). This growth area should be implemented by rezoning that part of the C/I zone to a new Mixed Use zone. It would also include two additional corner parcels at the Beech Rd. intersection, now zoned Suburban. Over time, we envision the building up of this zone as a mixed-use district primarily with residential and commercial (retail and office) uses. The district should have a Village feel that fits Eliot's character.

We want the Mixed Use growth area to be a place where more people can live, where more small businesses can locate, and where more people can visit to walk around and shop, find essential goods and services, dine out, and meet neighbors.

A DENSER, WELL-DESIGNED MIX OF USES AND MORE HOUSING TYPES

We envision the Mixed Use growth area, more than any other part of town, to see the most pronounced land use change. It would become denser and more intensely developed than what exists today.

Expanding Housing Opportunities, Encouraging Well-designed Mixed Use Development

The C/I zone bans most housing types. The Mixed Use zone should allow most housing types, fulfilling an important need in our region. The C/I zone has few design standards. The Mixed Use zone should have design standards and guidelines to encourage attractive and cohesive-looking areas and streetscapes that accord with Eliot's historic and architectural character and serve as notable gateways into town. The C/I zone allows several industrial uses and highway-oriented commercial uses, such as big box stores. The Mixed Use zone would prohibit or limit these types of uses to achieve the Village feel, with provisions allowing legally nonconforming uses to continue.

For density and affordability purposes, housing types in the Mixed Use zone should focus on multi-family housing, including two-family dwellings, townhomes, apartments, and dwelling units above shops. Singlefamily housing should be limited – for example, to small units such as cottages in a cottage cluster and elderly housing.

Development Nodes and The Wetland

The large wetland complex in the center of this zone should be preserved as an environmental asset for the growth area. A perimeter walking trail or boardwalk could enhance public enjoyment of the wetland. If any wetland impacts are necessary, they should be minimized, mitigated, or compensated via preservation of wetlands in other parts of town.

At each end of the growth area, near major cross streets, bracketing the wetland, we see the greatest potential for new development and redevelopment. These two development nodes are:

- > **Gateway at Bolt Hill Rd:** the first part of Eliot people experience as they enter from Kittery
- > Town Crossing at Beech Rd: which threads together Eliot's rural, suburban, and village areas as it crosses Route 236

An Updated Design of Route 236

Route 236 as it passes the Mixed Use zone should see design changes that tamp down traffic speed while continuing to accommodate current and future traffic flow, including peak commute times. A leading candidate is a boulevard design with a design speed of 35 mph or similar.⁴ It would continue to have one through lane in each direction but would have a center turn lane to give left turners a haven outside of the through lane, which would also keep through traffic flowing. Where a turn lane is not necessary, the boulevard could have planted medians.

There is an opportunity to make these changes with the Route 236 corridor improvement project led by MaineDOT, informed by recent corridor studies and public and stakeholder input. As of this writing, the project is currently in a two-year design phase. The Towns of Eliot and Kittery and SMPDC have a partnership role in the project.⁵

The Mixed Use zone can better orient development to Route 236. Right now, many buildings are set back 50 ft. or more and have parking lots in front. Updated zoning standards could allow for buildings to be placed closer to Route 236 while still providing room along the site frontage for trees and landscaping, multimodal improvements, wetland pockets, stormwater management facilities, and other beneficial site elements. The overall goal is to create a semi-enclosed feel along the road.

Internal Streets and Pedestrian-friendly Streetscapes

Where there is sufficient lot size and depth, major developments and redevelopments should be served by pedestrian-friendly internal streets or accessways branching off or paralleling Route 236. For all developments, new driveway cuts on Route 236 should be minimized, and existing ones should be consolidated where practicable.

The Mixed Use zone should require building fronts to be consistently close to, and aligned with, internal streets. One way to implement this is with build-to lines or buildto zones, meaning that all or most of the building façade must be placed exactly along that line or in that zone, with some design exceptions. Of similar effect, the zone could establish maximum, instead of (or in addition to) minimum, front setbacks. The goal is to have a sense of enclosure, an "outdoor room" streetscape that welcomes people with sidewalks, storefronts and store windows, small plantings, warm lighting, building façade variety and visual interest, and public art.

Trail-oriented Development and Civic Spaces

The Mixed Use growth area should incorporate the future Eastern Trail (ET) route. The ET route can benefit businesses by inviting customers without added car traffic. In turn, the Mixed Use growth area can benefit ET travelers by offering a place to stop with shops and services.

The Mixed Use growth area should also be considered for small public squares or pocket parks.

Form-based Code and Expedited Development Review

This plan envisions that the Mixed Use zone will incorporate elements of a form-based code. Form-based code seeks to prioritize regulation of design, or form, of development, more than uses. The Mixed Use zone could be a hybrid, which has elements of a form-based code (form-based code "light") but retains use regulation.

Another tool for this zone is to define pre-approved building typologies or architectural styles that contribute to a Village-like feel and could see expedited Planning Board review.



People who participated in the visual preference survey at the Future Zone favored this small civic space and pedestrian-friendly street in a mixed use environment. **Green dots:** like, **Red dots:** dislike. Photos: Sarah Turner/Maine Design Workshop

TABLE 3.X

FUTURE LAND USE PLAN

Characteristic	What Exists Today	What We Envision
Road type	Highway	Boulevard
85th percentile speed (what exists today)	50-51 mph	
Target speed (what we envision)		35 mph
Posted speed limit	35-45 mph	35 mph
Average annual daily traffic	18,000	18,000-20,000
Vehicles per hour (vph) in peak traffic hours	1,600-1,800	1,700-2,000
Driveways and access management	Most abutting lots have their own driveway	Limit new driveways/access points and consolidate them where feasible with shared access points, lot cross-access, and internal streets
Look and feel of the road	Open, feels like a highway	Mix of buildings, landscaping, and multimodal facilities closer to the road; semi-enclosed feel
Turn lanes and medians	Not many turn lanes; fast traffic swerves around left-turners stopped in the through lane; no planted medians	Center turn lanes where needed and planted medians
How the road works for businesses	Businesses raised traffic speed concerns in stakeholder interviews	A steady, but slower, flow of traffic where it is easier to notice and access businesses
Traffic light at Bolt Hill Rd.	Did not meet signal warrants when last studied	Could potentially meet signal warrants in the future, especially in conjunction with Gateway node redevelopment

What exists today vs. what this plan envisions for Route 236 (Harold L. Dow Hwy.) between Beech Rd. and Bolt Hill Rd. Notes: 85th percentile speed is the speed which is exceeded by 15% of drivers. It is a common gauge of how the design of a road influences how fast people drive, regardless of the posted speed limit. Sources: Route 236 Corridor Study (2019), Institute of Transportation Engineers: Designing Walkable Urban Thoroughfares: A Context Sensitive Approach (2010).



A concept from the Route 236 Corridor Study (2019) showing a center turn lane and planted median on Route 236 northwest of Bolt Hill Rd.

TALE 3.X

This draft Eastern Trail Study concept from study consultant VHB shows how the trail could be installed alongside Route 236 near Beech Rd. to improve walking and bicycling access for homes and businesses and accommodate longer-distance bicycle trips on the East Coast Greenway. Note the study is in draft form as of this writing. Another option could be to weave the trail through the Mixed Use area as it develops: trail-oriented development



Trail-oriented development in Topsfield, MA (2013). This building fronts the Topsfield Linear Common, a trail that is part of the larger Border-to-Boston Trail and East Coast Greenway

WHY THIS GROWTH AREA

The Mixed Use growth area is the gateway into Eliot on Route 236, the closest part of the corridor to I-95, Kittery, Portsmouth, and the Portsmouth Naval Shipyard, which has advantages for both business and residential location.

The area is zoned C/I with no shoreland zoning. It has less existing industrial uses than the parts of the C/I zone northwest of Beech Rd., where there may be challenges for interspersing housing and commercialresidential mixed use development. It matches growth with infrastructure investment, like new water and sewer lines and multimodal transportation improvements. It is connected to the Village growth area by two major cross-streets: Beech Rd. and Bolt Hill Rd. It includes Eliot's only transit stop and a new MaineDOT park-and-ride in Eliot Commons. It is located near services but will also unlock opportunities for new businesses and services of a scale and character that respond to community input for this plan.

The Mixed Use growth area concentrates growth in an already mostly built-up, but underdeveloped, commercial area along our major roadway, reducing suburban and rural sprawl pressures.

TABLE **3.X**

FUTURE LAND USE PLAN

Mixed Use Growth Area	What Exists Today	What We Envision
Min. lot size	3 ac.	No min. lot size, or at most ¼ ac. (lots served by water + sewer)
Min. street frontage	300 ft.	No min. street frontage, or at most 50 ft. (lots served by water + sewer)
Max. lot coverage	50%	>50%
Setbacks	Prescribed setbacks from 20 ft. to 100 ft., depending on lot line and abutting use	Relaxed side and rear setbacks; replace min. front setbacks with build-to lines or zones or max. setbacks (lots served by water + sewer) Retain or increase rear setback for new commercial or mixed-use developments abutting existing residential uses outside the zone
Location of parking	No standards for placement as long as out of setbacks	Parking screened from the road or street (e.g. in rear of the building or on the side with a screen between the parking and the street)
Design standards and guidelines	Virtually none	New design standards and guidelines



Cottage cluster favored at Future Zone, Kittery Foreside Landing & Mashpee Commons. Green dots: like. Photos 1&3: Sarah Turner/Maine Design Workshop

Growth Area: Village Transition

Bridging the Village and Mixed Use growth areas, we envision the Village Transition area. This area is generally arranged between and including Beech and Bolt Hill Rds., the connecting corridors between the Village and Mixed Use zone. We recommend this as our transitional area. It is the basis for the recommended Village Transition zone in Land Use Goal 1, Policy 1, Strategy 3.

In recent years, multiple bills in the Maine Legislature have proposed to update the state's Growth Management Law (30-A MRSA Chapter 187). They have introduced the concept of "place types" that should be recommended in comprehensive plans. LD 1976 introduced a place type called an "adjacent neighborhood", defined in part as "a primarily residential area located within walking distance to a village center..." While LD 1976 ultimately failed, the definition is useful. The Village Transition area fits well into both the transitional area and adjacent neighborhood definitions because it is next to and between two growth areas and centers of activity.

A RESIDENTIAL AREA WITH CONTEXT-SENSITIVE SMALL BUSINESSES

This zone should continue to be primarily residential with a mix of housing types and allowance for a limited amount of smaller-scale, context-sensitive commercial uses that are primarily on Beech and Bolt Hill Rds., such as adaptive reuse of residential buildings, live/ work units, and-or accessory commercial units. Homebased businesses are broadly allowable and could continue to contribute small-scale commercial activity in the Village Transition as in other zones.

The benefit of these context-sensitive businesses is that they provide destinations and points of interest while traveling between the Village and Mixed Use areas. For Beech Rd., this "bridging" of activity will be augmented when Beech Rd. becomes a "complete street" with a sidewalk and bike facilities. As of the writing of this plan, design for these facilities is in progress and, subject to securing funding, construction could occur as early as 2027.

Smaller Lots

Minimum lot size in this zone should be reduced from 2 acres. This could be done incrementally, with short- or mid-term reductions to 1.5 acres or 1 acre and a longerterm consideration for further reduction. This carries over a similar, but never implemented, recommendation from the 2009 Plan, whose Future Land Use Plan recommended a "Village Expansion" zone. Minimum street frontage should be reduced from the current 150 ft.

Connecting Our Growth Areas

We do not only want to identify contiguous growth areas but emphasize their connection. Even smaller towns typically do not just have one focal point of activity. One of the themes heard from committee member and community input is that Route 236 is not as "connected" to the community in the same way as other parts of town. It is, after all, a higherspeed state highway and interregional route where many travelers are just passing through and many businesses are owned by people who do not live in Eliot. With limited crossroads, the corridor is missing interactive points with the rest of Eliot.

In the past, there were community debates about what the Town's "center" should be. Rather than picking just one center, we recognize the interconnectedness between the Village, Village Transition, and Mixed Use zone, which we can define with a transect concept: Village, Mid Village, and New Village. In a small town setting, the transect describes how different settlement patterns fit next to each other in a continuum from more village-like to more rural.



Growth Area Name: Village Transect Name: Village

Growth Area Name:

Village Transition

Transect Name:

Mid Village





Growth Area Name: Mixed Use Transect Name: New Village

Water and Sewer Service

Sewer service should be extended down Beech Rd. within the plan horizon. This is discussed further in the Village growth area section above.

Growth Area: Remaining Commercial/Industrial

The remainder of the Commercial/Industrial (C/I) zoning district (after the establishment of the new Mixed Use zone) should be maintained as a growth area similar to what it is today, but with changes to help business development.

The zone should continue to host commercial and light industrial uses, while protecting natural resources. In this zone, for lots that are served by public water and sewer, minimum lot size and minimum street frontage requirements should be reduced.

WATER AND SEWER SERVICE

Water and sewer service are being extended down Route 236 from Passamaquoddy Ln. to Julie Ln. as part of the Route 236 Water-Sewer Project. The project was to initially go to Arc Rd. but was abridged due to project costs. This plan recommends, within the plan horizon, completing this deferred Julie Ln.-Arc Rd. section and then extending further to Marshwood Middle School.

Non-Growth Areas

RURAL

The Future Land Use Plan envisions the Rural area to stay mostly the same as it is today. It would have same boundaries as the Rural zoning district today. The most substantial change, enlarging the Critical Rural Overlay, would increase rural land use protections and is discussed more below. Other strategies in this plan



People who participated in the visual preference survey at the Future Zone favored this rural, agricultural setting. **Green dots:** like, **Red dots:** dislike. Photo: Sarah Turner/Maine Design Workshop

also serve to improve protections for agriculture, open space, natural resources, and rural character.

In the Rural area, minimum lot size and area per dwelling unit should remain at 3 acres, and minimum street frontage should remain at 200 ft. Implementing the shoreland zoning upgrade strategies in this plan will further discourage development in the Rural zone that would be close to important water resources.

The Rural area is not a growth area: substantial growth and sprawl here is not consistent with the community's vision and should be discouraged. However, limited, incremental growth is expected within the plan's horizon through:

- Individual single-family or two-family homes, where allowed by lot size/area
- > Accessory dwelling units
- > Subdivisions with a limited number of units due to:
 - Large minimum lot sizes for conventional subdivisions
 - > Standards for open space developments (i.e. cluster subdivisions), such as the requirement that they have no more units than what could be built in a conventional subdivision
 - > Shoreland zoning provisions

There are some large tracts in the Rural area where a subdivision could be proposed that is large enough to be at odds with the community's vision for the Rural area and our emphasis on maintaining rural character. It is important to emphasize that implementation of this plan's recommendations will help to reduce the likelihood of sprawl. If this plan just sits on a shelf, the Town will not have as many tools in the toolbox of development review to proactively address the vulnerability of these tracts to this large-scale development.

With a greater investment in the Land Bank, as recommended in this plan and the Open Space Plan, the Town will be in a better position to contribute to acquisition of land for permanent conservation when and where the opportunity arises.

DIFFERENTIAL GROWTH CAP

Ch. 29 of the Town Code is our Growth Management Ordinance, which includes a rate of growth ordinance that is based on the Growth Management Law. Commonly known as the "growth cap", it limits how many new residential building permits can be issued in the calendar year. Major changes to the Growth Management Law have been proposed in the State Legislature. The growth cap has not come close to being reached in recent years (new home permits are well below the cap). It is time to repeal, overhaul, or otherwise revise Ch. 29. We propose to replace it with a differential growth cap that maintains limits for the non-growth areas (Rural and Suburban) but eliminates the cap for the growth areas. This is already allowed by the current Growth Management Law.

The differential growth cap should simplify the local growth management program and align it better with our community vision while playing a role in addressing the housing crisis by encouraging more housing opportunities in growth areas. This means one less step for new dwelling units in growth areas and Town staff time saved processing growth permits.

The differential growth cap could be implemented as a single cap for the entire non-growth area or as one cap each for Rural and Suburban. The limit(s) should be set at an appropriate level based on past growth trends in those areas and in a way that aligns with the community vision. Elderly housing units, assisted living units, and ADUs should continue to be exempt from any cap. AHDs are allowable in the Suburban zone and will need to be accounted for in the new cap in a way that accords with LD 2003.

Critical Rural

The Critical Rural area was recommended in the 2009 Plan and subsequently added to the zoning map. It exists today mostly northeast of Goodwin Rd., except that it omits a triangular area between Frost Hill Rd. and Beech Ridge Rd. As documented in the resource sections of this plan, the Critical Rural area contains some of the highestvalue natural resources and important habitat in town.

Subdivisions within the Critical Rural area must be open space developments (i.e. conservation or cluster subdivisions).

Transition to Critical Rural

The triangular area northeast of Goodwin Rd. is proposed to be added to the Critical Rural Area. This does away with the arbitrary boundary that strays from Goodwin Rd. The result will be that all land northeast of Goodwin Rd. will be in the Critical Rural area.

This is also important because the omitted triangular area contains Cutts Ridge Brook, which is now part of the York River Partnership Wild and Scenic River designation and an important habitat for Eastern Brook Trout. <u>See Water</u> <u>Resources and Natural Resources for further discussion.</u>

Rural Crossroads

We envision a Rural Crossroads overlay zone within the Rural zone, centered on the intersection of Route 236 and Route 101 (Goodwin Rd./Dover Rd.) to foster a small commercial node at the northern gateway into town. It is not intended as a growth area, but it should allow additional flexibility of uses and dimensional standards for smaller-scale businesses that are not otherwise allowed on Rural zone properties abutting Route 236, fit within a rural context, and can be appropriately screened from abutting residential uses. The term Rural Crossroads derives from a new definition proposed by state legislation.

Public water and sewer service is not expected to extend to this area within the foreseeable future, so development within the Rural Crossroads will be limited to what can be served by wells and septic systems. The location makes sense because of the intersection's position as a northern gateway into town, incoming traffic from both South Berwick and Dover, and its spacing between the Mixed Use zone and downtown South Berwick. It is left to an implementing ordinance to define the specific boundaries of the overlay zone.

TRANSPORTATION IMPROVEMENTS

Both the Route 101 and Route 103 intersections are in the design phases of MaineDOT projects to improve traffic and safety.⁷ The Rural Crossroads is along the Eastern Trail (ET) on-road route, with an opportunity for a sidepath being built, as part of the MaineDOT project, to get the ET off-road. The Rural Crossroads could serve as a stopping point for ET travelers.



Businesses near the intersection of Route 236 and Route 101 (Goodwin Rd./Dover Rd.). This area, historically referred to as Gould's Corner, has long had a cluster of small businesses.

Suburban

The Future Land Use Plan includes a Suburban area, which, except for the Village Transition, has boundaries that match the present-day Suburban zoning district.

Like the Rural area, the Suburban area is not a growth area: substantial growth and sprawl here is not consistent with the community's vision and should be discouraged. This does not mean that this plan advocates no growth in the Suburban area. We expect similar conditions for modest growth that exist today. This growth may be brisker than in the Rural area since the Suburban zone has minimum lot sizes of 2 acres and subdivisions are not required to be open space developments. There are some larger tracts of land in the Suburban area (e.g. along State Rd.) that may be proposed for subdivision within the plan horizon. However, the growth outlook for the Suburban Area is not expected to substantially change solely because of this plan.

DIFFERENTIAL GROWTH CAP

As discussed above, the Rural and Suburban areas should continue to have a cap on growth permits under a differential growth cap. For the purpose of the relevant state statute [30-A MRSA 4360(2)], given its character, sensitive natural resources, farmland, and classification as a non-growth-area, the Suburban area should be considered a "designated rural area" eligible for a cap.

SMALL-SCALE BUSINESSES AND SCENIC VIEWS

The Suburban zone has three parts that abut Route 236, centered on Beech Rd., Bradstreet Ln., and Depot Rd., which have a mix of commercial, institutional, and residential uses. No zoning changes are recommended for the Depot Rd. and Bradstreet Ln. areas; the Beech Rd. part (corner properties) is proposed to be included in Mixed Use, with Village Transition southwest of there.

Properties in the Suburban zone that abut Route 236 have today, and should continue to have, more commercial development flexibility than those off Route 236, where the impacts of an abutting commercial development are likely to be greater.

Cedar Rd. south of Sturgeon Creek, where it parallels Route 236, has a mix of homes and businesses, including a multi-unit commercial building that currently has a landscaping company and adjacent storage yard, a real estate office, and a child care facility. It is recommended that a technical clarification be made to the zoning that cements in writing a policy interpretation the Planning Board has made in recent years: that the properties on this part of Cedar Rd. are considered to have the same allowability as properties directly abutting Route 236.

There are also pockets of small, context-sensitive businesses scattered about the Suburban area, including farms, farm stands, and agritourism. These small-scale or farm-based businesses make an important contribution to the character of the Suburban area.

The Suburban area is not monolithic. Parts are quite rural, with bucolic farm fields. Parts have smaller-lot subdivisions, like Riverview and Cole-Brown Estates. From River Rd. to Goodwin Rd., the Suburban Area also has many scenic viewsheds that should be preserved.

SEACOAST AIRFIELD

Most of Seacoast Airfield, formerly Littlebrook Airpark, is in the Suburban zone. It was sold to a new owner in 2021, who has indicated an interest in preserving it as an airport and has made several investments to improve its condition. It is a private airport but occasionally hosts events that are open to the public.

While some zoning maps have airport overlay zones, one is not proposed for Seacoast Airfield in this plan. If the need arises, such an overlay could be proposed in the future. The airport is a presumptive legally nonconforming use in the Suburban zone. Legally nonconforming uses can generally continue and see limited expansions subject to Chapter 45, Article V. Official interpretations on nonconformance would come from the appropriate review authority (e.g. Planning Board, Code Enforcement Officer, Board of Appeals) on a case-by-case basis.



The newly paved runway at Seacoast Airfield (2022)



Wetlands by York Pond. Photo: Lisa Wise

Other Strategies for Directing Growth and Protecting Natural Resources

Other strategies help us implement our Future Land Use Plan, direct growth where we want to see it, and deprioritize growth in our Rural and Suburban areas.

- Infrastructure investment, such as water and sewer extensions and multimodal transportation improvements, aligns with our growth areas
- > Land conservation prevents sprawl and natural resource impacts by permanently conserving land primarily in our rural and suburban areas. Land conservation can be guided by the updated Open Space Plan, Beginning with Habitat data, landowner interest, and other factors

> A local wetland mitigation program and natural resource overlay zone could help protect higher-value wetlands and wildlife corridors, which are especially prevalent in our Rural and Suburban areas. These areas have some of the highest species cooccurrence values in Beginning with Habitat data.

Policies and strategies that help farms, such as farm housing and high-tunnel/greenhouse incentives, a farmers' market, and promoting the Current Use Tax Program, help farms reduce costs, expand production, and sell products. <u>See the Agriculture and Forest Resources</u> <u>section for further discussion.</u>

How the Future Land Use Plan Relates to Recent Development Trends

Eliot's recent annual residential growth has been well under the growth cap. The growth is there, but the new subdivisions approved in the last 5+ years have been small (8 units or less). The story is that there has not been enough housing built.

The Future Land Use Plan will change that, but in a way that aligns with the community vision, by inviting more housing opportunities but channeling growth into the more centrally-located and already mostly built-up, but underdeveloped, Mixed Use growth area, with moderate but meaningful growth contributions in the Village and Village Transition areas. The differential growth cap will remove an administrative step for new housing units in the growth areas while applying appropriate growth limits in the Rural and Suburban areas.

Development Outlook Without the Future Land Use Plan

RESIDENTIAL

Under current regulations, development trends, and population projections, we estimate that there will be about 15-25 new residential units per year. In the 10-year period from 2015 to 2024, the annual average of new dwelling units is 31, but this is weighted toward earlier in the period. The last five years (2020-24) have seen the annual average drop to 20.

These new homes will probably be scattered throughout town, wherever there happens to be a buildable lot, or where the property owner has an interest and financial capital to build one or more additional units. As noted above, these new homes are mostly expected to be individual single-family home builds, small-scale subdivisions or lot splits, ADUs, and perhaps some two-family dwellings.

There could be some medium-sized or larger-scale developments. As discussed above, there are some large tracts in the Rural and Suburban areas where a large subdivision could be proposed that may be of a scale and character that are inconsistent with the community's land use vision. There could be one or more mediumsized or larger senior housing developments, assisted living facilities, or life care facilities, as have been built in Eliot in the last 20 years. These developments have the advantages of a density bonus and allowability in the C/I zone, where other housing types are prohibited.



There could also be one or more AHDs proposed in the Suburban or Village zones that use the LD 2003 density bonus to scale up their total units. It is difficult to predict how many such development proposals we will see within the plan horizon and where they might be located. That is dependent upon several factors, including but not limited to the current zoning constraints, available land, regional and national economic trends, and the potential return on investment.

What we do know is that the current land use regulations do not do enough to manage and concentrate growth in location-efficient areas or protect critical natural resources. Adoption of this Comprehensive Plan, including this Future Land Use Plan, will change the residential growth outlook for the better (based on what we have heard from community input) by:

> Unlocking more housing opportunities in the Mixed Use area, channeling growth into an already built-up, but underdeveloped, area along our major highway corridor, which is close to our Village and connected to it along two transportation corridors (Beech Rd. and Bolt Hill Rd.)

Supplementing this more substantial residential growth in the Mixed Use area with moderate, contextsensitive growth and gentle density in the Village growth area and Village Transition area

 Implementing the natural resource protection strategies included in this plan and the updated Open Space Plan

Commercial and Industrial

Most commercial and industrial development will continue to be within the Route 236 corridor, especially between the Kittery town line and Arc Rd.

This plan does not propose any wholly new commercial/industrial areas. The Mixed Use zone is proposed to have nearly the same, boundaries as the current patch of C/I zone between Beech Rd. and Bolt Hill Rd. The remaining C/I zone northwest of Beech Rd. would keep the same boundaries. The Rural Crossroads concept is proposed where there is already a cluster of existing or dormant commercial uses. The Village and Village Transition areas are envisioned to see only limited, context-sensitive, small-scale businesses while staying primarily residential.

The plan does propose several strategies to boost business opportunities and advance economic development in a way that fits with the community vision. Under the status



Small business spaces in a mixed use environment in Newmarket, NH. Photo credit: Sarah Turner/Maine Design Workshop

quo, Eliot businesses face several challenges, including those articulated by the public, business owners, and Comprehensive Plan Committee members.

Implementing the Future Land Use Plan

Implementing the Future Land Use Plan, when paired with other strategies (e.g. Economy, Agriculture and Forest Resources) and growth-related infrastructure investment, will:

- Foster new business opportunities along Route 236, by helping existing businesses looking for more space and new businesses trying to find land or space, including those emphasized by community input, such as a grocery store, essential goods and services, etc.
- Facilitate a range of business space sizes, for example, new vertical mixed-use buildings that can accommodate small retail or office tenant spaces, so small businesses can find right-sized spaces that fit their needs
- > Create a more inviting Route 236, which can become more of a destination, a place to "park once" and visit multiple businesses or chain errands, a place to meet neighbors, a place where passersby (e.g. Shipyard commuters, weekend travelers, or Eastern Trail users) can stop along the way

Institutional

Institutional uses are not expected to have a substantially different pattern than today. The Village will continue to be the "seat" of Town government, with civic improvements either in-progress or recommended in this plan, such as the Town Hall renovation/expansion and recommended community gathering place. No major changes for the elementary or middle school are anticipated within the plan horizon. Religious uses are located throughout town.

Public Input for Preserving Our Rural, Small-town Character

The Town of Eliot began the effort to update the Comprehensive Plan in late 2022 and there have been many different opportunities for the public to give input. <u>See Introduction for more information</u>.

How This Plan Listens to the Most Desired Approaches

> Keep town about as is: All the rural area is planned to stay that way, with additional protections recommended for rural character, natural resources, and open space. Most of the suburban area is planned to stay suburban. Village and Village Transition growth areas are proposed for modest growth in keeping with their characters

> Balance higher density areas with low density areas: Concentrating more pronounced growth into the Mixed Use growth area, with modest growth in the Village and Village Transition, is balanced with continuance of suburban and rural areas as low-density

> Concentrate growth where it is now: As it stands today, growth is more haphazard and spread around town. This plan seeks to concentrate growth primarily in an area along Route 236 that is already mostly built up, but underdeveloped, with the Village area continuing to be a designated growth area by receiving modest growth

> Encourage growth along Route 236: This is where the most substantial growth is recommended: Mixed Use growth area, continuation of existing Commercial/ Industrial zone/growth area northwest of Beech Rd. (as it exists today), but allowing smaller lot sizes for lots served by the new water and sewer

> Encourage more commercial development in specified areas of town: Commercial development is recommended to continue to be primarily along Route 236, as it is today, but with opportunities to (over time) make Route 236 more aesthetically preferable and have more of the commercial services prioritized by public feedback. The proposed Rural Crossroads overlay at Route 236 and Goodwin/Dover Rds. presents a unique opportunity for a context-sensitive small-scale commercial hub in the northern side of town

> Limit most growth to areas with public water &

sewer: This plan recommends that most growth occur where there is already public water and sewer, or where new water and sewer service extensions are under construction (as of this writing)

COMMUNITY SURVEY FEEDBACK

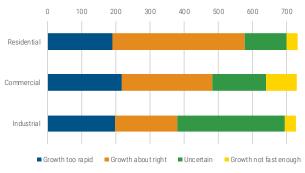
PUBLIC INPUT ON COMMUNITY GROWTH AREAS



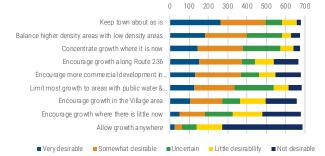
The vast majority drew preferred growth areas on Route 236 between Bolt Hill Rd. and Arc Rd. with some additional support for growth within our Village area



Respondents drew on the map where they would like to see conserved land



Community Survey opinions about the rates of residential, commercial, and industrial growth over the past 10 years



Community Survey opinions about desired approaches to growth. Chart is ranked from most to least desirability (very desirable + somewhat desirable responses)

YOUTH & COMMUNITY SURVEY FEEDBACK

Small town or rural atmosphere was the #1 reason respondents cited for why they enjoy living in Eliot

2025 PUBLIC SHOWCASE FEEDBACK

Topic: Mixed Use Zone

"Concerned about additional stop light on 236...Important to keep the traffic moving on 236 to prevent backups during peak hrs"

"Impressed with the work the Committee has done & responsiveness to the public input. The mixed-use [area] for 236 is great"

"I support mixed [use] zoning along 236 & building housing there. Would love to see more affordable housing aimed at people who work in the area (not vacation)...duplexes, single houses, small apartments"

"It would be awesome to have [a] small grocery store or food co-op (like Golden Harvest) in the area by the Post Office. Also support more small business like Maine Market in town"

"New Village [mixed use area]: In support"

"Mixed use zoning change: 100% Agree"

"Improving aesthetic in mix[ed] use: Yes-100%"

"Commercial District: Hannaford or other grocery store would be great"

Topic: Village Transition "Potential change from 2 ac. lot to 1 ac.: do have a concern about this [...] may not be in favor of this"

Topic: Small Local Business "Space for a market where small business & restaurants can be"

Topic: Art "Places for community to make art & connect"

FUTURE ZONE FEEDBACK

SUMMARY OF VERBAL PUBLIC COMMENTS

"Consider making more of north Route 236 a commercial area (e.g. for lots abutting Route 236 north of Depot Rd.)"

"Preferences to add commercial buildings to existing dilapidated buildings or empty buildings as opposed to clearing tree lots"

"Preference for NO big box stores"

"[in the Suburban area] Keep acreage in[tact] for building no less than 2 [acres]..."

"Encourage small businesses in single shopping area (park once and walk around)"

BUSINESS/STAKEHOLDER FEEDBACK

What can the Town of Eliot do to promote economic development and business opportunities?

"Not a lot of land left for business; zoning to increase density; sewer to middle school..."

"Loosen up restrictions for certain businesses on 236. Now zoning is 3 ac. Needs to [be] more [like] 0.5 or 1 ac. Need is for small business commercial/industrial space...Allow putting commercial business into residential zoning"

"Live work play developments would be beneficial. Bring in different kinds of business – small professional offices. Must combat a history of the Town not being receptive to new or bigger companies. Hard to bring business here to compete with sales tax free New Hampshire..."

"Fewer cannabis shops, more kinds of businesses. New grocery store."

Route 236 is Eliot's commercial corridor. Do you think it needs any changes to better serve businesses, and if so, what are those changes?

"Making this district start to feel like a village, e.g. Route 1 in Scarborough (Lois's, On the Vine, cluster of businesses. It feels different.)"

"Discussion of trails and how they promote business opportunities. Trails as a place for people to recreate. If there were some trails in Eliot, it provides another set of opportunities for people."

"Would like to see more retail businesses – for example, small restaurant – breakfast place [...] even something along the lines of Golden Harvest in Kittery. Businesses that would attract more activity on Rt. 236"

2023 VISION SESSION FEEDBACK

Where do you want to see growth?

"Keep commercial/industrial regulated for pollution mitigation and kept within already designated commercial/industrial districts, stay with route 236 corridor (other than small scale)"

"The Eliot Commons is such a large commercial space that could be better utilized for common use – small restaurants/ cafes/place to sit"

"Designate low-growth areas..."

"Beautify Route 236 somehow"

TABLE **3.X**

FUTURE LAND USE PLAN

Challenge	What We Have Today	How We Can Improve What's in-progress What's recommended in this plan
Lack of water & sewer infrastructure along Route 236	No public sewer lines; water lines stopped at Beech Rd. prior to 2024 Businesses must rely on well and septic	Route 236 Water-Sewer Extension Project has extended water lines to Julie Ln. and is extending new sewer lines from Bolt Hill Rd. to Julie Ln.
		This plan recommends further extensions, first to Arc Rd. and then to Marshwood MS within this plan's horizon
		When complete, most Route 236 businesses will have an opportunity to tie into public water & sewer and retire wells and septic systems
Minimum lot size and street frontage requirements in C/I zone	3 ac. min lot size 300 ft. frontage	Reduce min. lot size and min. street frontage in the new Mixed Use zone and in the remaining C/I zone, for lots that are served by both public water and public sewer
Land use allowability in the "one size fits all" C/I zone	The C/I zone is made up of four "patches" scattered along Route 236. Each patch has different contexts and existing land uses, from senior housing developments to the Compressor Station, from waste management to retail, from cannabis to boat repair and storage, etc.	The Mixed Use zone will make new land uses allowable while prohibiting others now allowable in the C/I zone, toward creation, over time, of a commercial-residential mixed use village, and prohibiting or limiting industrial and cannabis uses, while allowing legally nonconforming uses to continue in accordance with nonconformance standards in Ch. 45.
		The remaining C/I zone should generally continue the use allowability it has today, continuing to offer opportunities for light industrial uses and more intensive commercial uses than in the Mixed Use zone
Route 236 traffic going too fast	Traffic speed on Route 236 is a concern for several businesses	Pair Mixed Use zone with a "boulevard" concept on Route 236 from Beech to Bolt Hill, seeking to achieve a 35 mph design speed while still accommodating daily and peak traffic demand (slower flow)
Finding employees who can afford to live locally	Zoning limits new housing opportunities	Growth and transition areas that will provide more housing opportunities (including different housing types) that are near services and transportation options
Concern that new housing units are all expensive single-family units	Single-family units are allowed in all districts that allow residential use	Single family units in Mixed Use zone allowed but limited to smaller house styles, for elderly residences, or other limited exceptions; many new housing type opportunities compared to current, restrictive zoning

FUTURE LAND USE PLAN ENDNOTES

¹ Subsection 45-288(d) of the Town Code. It was designated as the Town's growth area as part of ordinance amendments to comply with LD2003.

² See the Housing chapter for more discussion of AHDs

³ Stantec. "Sewer Basin 7 Domestic Sewer Service Feasibility Analysis". December 19, 2023. This was a "desktop analysis" only, which is a very basic feasibility study. Therefore the cost estimate should be seen as very preliminary.

⁴ For design speed of a boulevard, see: Institute of Transportation Engineers: Designing Walkable Urban Thoroughfares: A Context Sensitive Approach (2010), Table 4.2.

⁵ MainDOT Project WIN 26600.00. See the Transportation inventory chapter and Goals, Policies, and Strategies for further discussion.

⁶ See Water Resources Goal 1, Policy 1

⁷ MaineDOT Project WINs 027132.00 and 027134.00

Goal, Policy, or Strategy	Description	Responsibility or Partnership	Implementatio Timing
Goal 1	Orderly growth and development in appropriate areas of the commun the town's rural character, conserves natural resources, makes effici prevents development sprawl		
Policy 1	Maintain the Village zone as a growth area, establish a new mixed use growth an a transitional area between them, and designate the remainder of the existing C commercial/light industrial growth area		
Strategy 1	Maintain the Village zone as a designated growth area. It should continue to be primarily residential with a limited amount of smaller-scale, context-sensitive businesses. In this zone, maintain and improve existing institutional uses (e.g. municipal, educational), recreational uses (e.g. parks and gathering spaces), and conditions for people to walk and bike to destinations. Maintain the historic, small-town New England character of the Village while engaging in placemaking to make it even more welcoming and vibrant. Adopt building types, street designs, and lot and yard standards which support the best examples of village streets	Planning Board, Select Board, Town Manager, Planning Office, Recreation Department, Aging in Place Committee, Eliot Historical Society, DOT	Ongoing
Strategy 2	Create a Mixed Use zone along Route 236 from Beech Rd. to Bolt Hill Rd., based on the Mixed Use growth area shown on the Future Land Use Map. In this zone, encourage residential-commercial mixed use development, prohibit big box development, and allow more housing types. For lots in this zone that are served by public water and sewer, relative to the existing zoning: Eliminate the minimum lot size and minimum area per dwelling unit requirements or reduce them to no greater than 1/4 ac. Eliminate the minimum street frontage requirement or reduce it to no greater than 50 feet. Reduce lot line setbacks and consider build-to lines, build-to zones, and-or maximum setbacks. Increase maximum lot coverage above 50%.	Planning Board, Planning Office, Select Board, DOT	2025
	In this zone generally: Require parking to be placed behind buildings or otherwise screened from streets and roads. On Route 236 adjacent to this zone, encourage a roadway design that adequately serves travel demand, but at more moderate speeds than exist today. New driveway cuts onto Route 236 should be minimized, and existing driveway cuts should be reduced or consolidated where feasible. Existing and future streets and consolidated driveways should provide direct access to most individual lots. Prioritize this zone for future Eastern Trail segments to which future development can be oriented. Preserve most of the large wetland complex in the center of this zone as an environmental asset and placemaking amenity, with any impacts to it minimized, mitigated, or compensated by preservation of other wetlands. Develop clear performance standards addressing parking, multimodal connections, landscaping, building facade, signage, and other topic areas as needed. Develop street and building layout standards and design guidelines to encourage attractive and cohesive-looking areas and streetscapes that accord with Eliot's historic and architectural character and serve as notable gateways into town		
Strategy 3	Create a Village Transition zone based on the Transitional Area/Adjacent Neighborhood growth area shown on the Future Land Use Map. In this zone in the short- or mid-term: Reduce minimum lot size and minimum area per dwelling unit to between 1 and 1.5 acres. Reduce minimum street frontage from the current 150 ft. to as low as 100 ft. In this zone in the mid- or long-term: Consider further relaxing these and other dimensional standards.	Planning Board, Planning Office, Select Board	Short-Mid-Long
	This zone should continue to be primarily residential with a mix of housing types and allowance for a limited amount of smaller-scale, context-sensitive commercial uses. Context-sensitive commercial uses that are generally larger or potentially more impactful than mere home-based businesses – such as adaptive reuse of residential buildings, live/ work units, and-or accessory commercial units – should primarily front on Beech Rd. or Bolt Hill Rd., while home-based businesses should continue to be broadly allowable throughout this zone, as they are in other zones		
Strategy 4	Maintain the remainder of the Commercial/Industrial (C/I) zoning district (after the establishment of the new Mixed Use zone) as a growth area that encourages commercial and light industrial uses that are desired by the community, while maintaining protected natural resources. In this zone, for lots that are served by public water and sewer: Reduce the minimum lot size and minimum street frontage requirements	Planning Board, Planning Office, Select Board	2025

Goal, Policy, or Strategy	Description	Responsibility or Partnership	Implementation Timing		
Goal 1 continued	Orderly growth and development in appropriate areas of the com the town's rural character, conserves natural resources, makes e prevents development sprawl				
Policy 2	Support the level of financial commitment necessary to provide needed inf	rastructure in growth ar	eas		
Strategy 1	Include in the Capital Investment Plan anticipated municipal capital investments needed to support proposed land uses, including continued use of TIF funds. Direct a minimum of 75% of new municipal growth-related capital investments into, or serving, designated growth areas described above and identified in the Future Land Use Plan	Town Manager, CIP Committee, Planning Office	Ongoing		
Strategy 2	Conduct a feasibility and preliminary engineering study for extending domestic water and sewer service within the Village Growth and Transitional Areas, including service to the Elementary School and Town Hall area, identifying conceptual alternatives, cost estimates, and funding strategies. Subject to the results of the study, design and build the Village Growth and Transitional Area water and sewer service extensions	Town Manager, Select Board, CIP Committee, Planning Office, Consultant, Contractor	Short (Study/ Prelim Engineering Mid-Long (Final Design/ Construction)		
Strategy 3	Extend water and sewer service along Route 236 from Julie Ln. to Arc Rd., completing a deferred portion of the Route 236 Water-Sewer Expansion Project	Town Manager, Select Board, Consultant, Contractor	Short		
Strategy 4	Conduct a feasibility and preliminary engineering study for extending water and sewer service along Route 236 from Arc Rd. to Marshwood Middle School, serving the Commercial-Industrial growth area and the school, identifying conceptual alternatives, cost estimates, and funding strategies. Subject to the results of the study, design and build this extension	Town Manager, Select Board, CIP Committee, Planning Office, Consultant, Contractor	Short (Study/ Prelim Engineering Mid (Final Design/ Construction)		
Cross- reference	See Transportation Goal 2, Policy 1 for strategies focusing on Route 236 transportation investments and Transportation Goal 3 for strategies focusing on transit and active transportation investments in growth areas				
Cross- reference	See Economy Goal 1, Policy 2 for additional infrastructure investment strategies				
Policy 3	Support the level of financial commitment necessary to provide needed inf	rastructure in growth ar	eas		
Strategy 1	Maintain the Rural zone and most of the Suburban zone as non-growth areas, as shown on the Future Land Use Map. While modest growth may occur in these areas, significant growth should be disincentivized by maintaining larger minimum lot sizes and minimum area per dwelling unit, low lot coverage maximums, use restrictions, and land conservation. Land use in these areas should mostly consist of lower-density residential, agriculture, sustainable forestry, and open space. Off Route 236, commercial uses should be primarily limited to farm, home-based, and a limited number of context-sensitive small businesses. Other commercial uses should be concentrated on lots abutting Route 236 with vegetative buffering from abutting residential uses and access management strategies	Planning Board	Ongoing		
Strategy 2	Expand the Critical Rural Overlay zone consistent with the expanded Critical Rural Area on the Future Land Use Map	Planning Board	Short		
Strategy 3	Create Critical Resource overlay districts that have additional protections for critical natural resources and wildlife habitat, informed by Beginning with Habitat data, Focus Areas of Statewide Ecological Significance, and other environmental information. These overlay districts should include provisions to prevent, minimize, mitigate, or compensate for disturbance to large unfragmented habitat blocks or wildlife corridors	Planning Board, Conservation Commission, Planning Office	Short-Mid		
Strategy 4	Maintain wooded buffers along streetscapes whenever new subdivisions are proposed in rural and critical rural parts of town	Planning Board	Ongoing		
Strategy 5	gy 5 In the Mixed Use zone, allow additional residential density in exchange for a developer contribution to protect critical natural resources and habitat, farmland, and-or historic areas and buildings from future development and adverse impacts. A Density Transfer Charge (DTC) that contributes to the Town Land Bank should be prioritized because of its simplicity to manage. However, Purchase or Transfer of Development Rights (PDR/TDR) could be considered in the future if it is cost-effective Planning Office, Planning Board, Consultant, Consultant, Consultant, Conservation				

Goal, Policy, or Strategy	Description	Responsibility or Partnership	Implementation Timing
Goal 1 continued	Orderly growth and development in appropriate areas of the communi the town's rural character, conserves natural resources, makes efficie prevents development sprawl		
Policy 3 continued	Support the level of financial commitment necessary to provide needed infrastruc	cture in growth areas	5
Strategy 6	Create a Rural Crossroads overlay zone within the Rural zone, centered on the intersection of Route 236 and Route 101 (Goodwin Rd./Dover Rd.) to foster a small commercial node at the northern gateway into town. It is not intended as a growth area, but it should allow additional flexibility of uses and dimensional standards for smaller-scale businesses that are not otherwise allowed on Rural zone properties abutting Route 236, fit within a rural context, and can be appropriately screened from abutting residential uses	Planning Board, Planning Office, Select Board, Town Meeting	Mid
Cross- reference	See Natural Resources Goal 1, Policy 2 and Water Resources Goal 1, Policies 3-5 for strategies on financial commitment to land and habitat conservation in rural areas		
Cross- reference	See Agriculture and Forest Resources Goal 1, Policy 2 for strategies on financial commitment to conserving farms and forests		
Goal 2	Ongoing regional coordination on land use matters		
Policy 1	Coordinate Eliot's land use strategies with other local and regional land use plann	ning efforts	
Strategy 1	Continue to meet with neighboring communities to coordinate land use designations and regulatory and non-regulatory strategies	SMPDC, Kittery, S. Berwick, York	Ongoing
Strategy 2	Continue to participate in the Joint Land Use Study (JLUS) implementation efforts with JLUS partners	PNSY, SMPDC, DOT, KACTS	Ongoing
Goal 3	Efficient land use review and permitting procedures with levels of rigo location, scale, and impacts of development	or appropriate for	the type,
Policy 1	Improve the efficiency of permitting procedures, especially in growth areas		
Strategy 1	Provide the code enforcement officer with the tools, training, and support necessary to enforce land use regulations, and ensure that the Code Enforcement Officer is certified in accordance with 30-A M.R.S.A. §4451	Town Manager, Select Board	Ongoing
Strategy 2	Budget for and hire additional Code Enforcement/Planning workforce, such as a full-time land use/code technician, an Assistant Code Enforcement Officer, or a similar position	Town Manager, Select Board	Short
Strategy 3	Develop publicly-available information sheets, interpretation policies, FAQs, and similar resources to summarize land use regulations and offer uniform responses to common inquiries	Planning Office	Ongoing
Strategy 4	Continue to streamline permitting procedures, including, but not limited to, maintaining and enhancing the Town's online permitting system	Planning Office	Ongoing
Policy 2	Update land use standards to make them clearer, more flexible where warranted, protect the community and environment from significant impacts	or more rigorous wh	ere needed to
Strategy 1	Assess the zoning regulations for opportunities to streamline review for some uses that have presumptively lesser impacts on abutting properties or the environment, especially in growth areas. In the Mixed Use zone, create a streamlined review process for developments that	Planning Office, third-party design review consultant, Planning Board	Ongoing
	use pre-approved architectural forms – for example, administrative design standards review followed by expedited discretionary review by the Planning Board – while maintaining more rigorous review for developments that are of larger scale or greater complexity		
Strategy 2	followed by expedited discretionary review by the Planning Board – while maintaining more	Planning Office, Planning Board	Short

Goal, Policy, or Strategy	Description	Responsibility or Partnership	Implementation Timing
Goal 4	A Comprehensive Plan that does not just sit on a shelf but is active	ely implemented	·
Policy 1	Evaluate progress on implementation of this plan at least annually		
Strategy 1	Maintain a working document or database, or publish an annual report, with updates on the implementation status of each strategy in this plan	Planning Office, Comprehensive Plan Implementation Committee	Ongoing
Strategy 2	Convene an annual meeting that includes multiple boards and committees and other plan stakeholders to discuss plan implementation	Planning Office, Comprehensive Plan Implementation Committee	Annually
Strategy 3	Track the percent of municipal growth-related capital investments that serve growth areas	wth Planning Office, C Comprehensive Plan Implementation Committee	
Strategy 4	Strategy 4 Track the location and amount of new development in relation to the designated growth areas, transitional areas, and rural areas		Ongoing
Strategy 5	Take responsibility for implementing the adopted Comprehensive Plan, including the Future Land Use Plan and growth-related capital investments and conservation strategies in non-growth areas. Seek to continue the Comprehensive Plan Committee as an Implementation Committee after plan adoption	Various boards, committees, Town staff, and agency/ organization partners	Ongoing

HOUSING

Eliot is a desirable place to live, but, as with the Seacoast region, affording to buy or rent a home in Eliot is becoming less attainable for most people.

Households in Eliot

From 2010 to 2020, Eliot grew by 513 people and 283 households, meaning that our community added an average of 1.81 new persons for each new household. Average household size went down from 2.47 to 2.41, which was close to the countywide average (Table ___). Average household size matters when projecting how many new housing units will be needed in Eliot to accommodate projected growth.

The reduction in average household size over the decade was due to an increase in the proportion of 2-person households, from 37.4% to 41.5%, and corresponding decreases in the proportions of 3- to 6-person households (Table __). The largest drop was in the share of 3-person households, from 18.4% to 14.5%. These changes suggest a continued decline in households with children – something noted in the 2009 Plan. Census data also show a decrease in the percentage of the population aged 19 or younger.¹

Housing Units

From 2010 to 2020, the number of housing units in Eliot grew by 11% (Table ___). The increase in occupied housing units logically matches the increase in households, paired with a small increase in the number of vacant units. The vacancy rate – which the Census data attributes almost entirely to rentals – is under 6%. The very low owned housing vacancy rate suggests a continued strong residential real estate market in Eliot, with supply not being able to keep up with demand.

York County saw a similar increase (10%) in occupied housing units over the decade, but the vacant units dropped by 6%. The total number of units grew by only 6%, but the housing stock became more efficiently used with a lower vacancy rate.

ELIOT HOUSING GOAL



Affordable, decent housing opportunities for all

See the end of this section for the full table of goals, policies, and strategies.

TABLE **4.X**

HOUSING

HOUSEHOLDS IN NEIGHBORING COMMUNITIES

Jurisdiction	Population	Households	Avg HH Size
Eliot	6,717	2,792	2.41
Kittery	10,070	4,511	2.23
South Berwick	7,467	2,871	2.60
York	13,723	5,906	2.32
York County	211,972	88,924	2.38

Table ____ Population, households, and average household size for Eliot, neighboring communities, and York County. Source: 2020 Census

HOUSEHOLDS	20	10	2020		
Household size	#	%	#	%	
1-person household	586	23.4%	656	23.5%	
2-person household	939	37.4%	1,158	41.5%	
3-person household	462	18.4%	406	14.5%	
4-person household	344	13.7%	381	13.6%	
5-person household	126	5.0%	136	4.9%	
6-person household	37	1.5%	31	1.1%	
7-or-more-person household	15	0.6%	24	0.9%	
TOTAL	2,509		2,792		

Table ___. Number and percentage of households by household size, 2010 and 2020. Source: US Census Bureau



	Housing units	2010	2020	Change, 2010-2020	% change
Eliot	Occupied	2,509	2,792	283	11%
Ξ	Vacant	160	174	14	9%
	Total	2,669	2,966	297	11%
y	Housing units	2010	2020	Change, 2010-2020	% change
County	Occupied	81,009	88,924	7,915	10%
York C	Vacant	24,764	23,274	-1,490	-6%
\sim	Total	105,773	112,198	6,425	6%

TABLE **4.X**

TABLE 4.X

HOUSING

HOUSING

HOUSING

HOUSING TYPES	2000		20	06	2023		
Туре	Units	% of total	Units	% of total	Units	% of total	
Single-Family Dwelling [a]	1,980	82%	2,267	84%	2,316	79%	
Mobile Home	161	7%	167	6%	252	9%	
Two-Family Dwelling [b]					216	7%	
Multifamily Dwelling (3+ units)	277	11%	277	10%	160	5%	
TOTAL	2,418		2,711		2,944		

Table _____. Number and percentage of dwelling units in Eliot by housing type, comparing 2000, 2006, and 2023. Source for 2000 and 2006 data is the 2009 Comprehensive Plan. The 2023 data is based on assessing data as of April 1, 2023, but needed to be manually adjusted for certain dwelling units not disaggregated, e.g. rental apartment units. The data was also manually adjusted to differentiate between single-family, two-family, and multi-family condominiums. This comparison should be considered approximate due to differences in data and categorization of units. **Notes:** [a] 2006 data combines single-family dwelling units (2,191; 81%) and ADUS (76; 3%); these were not broken out in the 2000 data and the total number of ADUs is not clear in the 2023 assessing data. [B] Two-family dwellings are not broken out in the 2000 and 2006 data; it is assumed these fell under "multifamily".

FIGURE 4.X

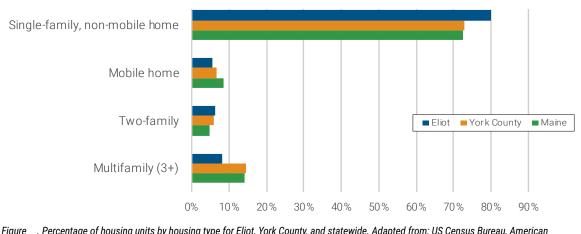


Figure __. Percentage of housing units by housing type for Eliot, York County, and statewide. Adapted from: US Census Bureau, American Community Survey, 2021 5-year-estimates, "Units in Structure" (B25024). "Single-family, non-mobile home" includes units listed as both "1, detached", and "1, attached". A small amount of "Boat, RV, van, etc." units in the ACS data are excluded. Note that this data has a margin of error, especially for a municipality of Eliot's size, though the percentages are close to the 2023 assessing data in Table __.

COMMUNITY SURVEY FEEDBACK

RESPONDED THAT THEY LIVE IN SINGLE-FAMILY HOMES



Hallway at Baran Place: senior community apartments



Village at Great Brook: a 55+ community



The Residences at Eliot Commons: senior community apartments

Housing Types Housing types in the assessing data

Eliot's housing stock is almost entirely composed of single-family homes. Table ___ above shows the number percentage of units by housing type. It compares the 2000 and 2006 data reported in the 2009 Plan with estimates based on assessing data as of April 1, 2023. To match the 2009 Plan categories, the 2023 data separate mobile homes from single-family dwellings.

As the data shows, when combining foundation-built homes and mobile homes, almost 9 of 10 Eliot homes are single-family dwellings. However, the proportion of single-family homes has dropped slightly as more two-family and multifamily units have been built since the completion of the 2009 Plan. These units include The Residences at Eliot Commons and Village at Great Brook (which includes primarily two-family dwellings). Cole Brown Estates has added mobile home units. All three of these developments are senior housing (55+) communities.

Compared to the county and state, Eliot has a greater percentage of single-family housing and a lower percentage of multifamily housing, while our share of two-family housing is about the same. Eliot has a slightly lower share of mobile homes than the county or state (Figure __).

REGIONAL HOUSING NEEDS ASSESSMENT

Eliot has a greater percentage of single-family homes than many nearby communities, as shown in Regional Housing Needs Assessment data in Figure __. Only the Town of York has a greater percentage of single-family homes (87%), though North Berwick, South Berwick, and Wells have similar percentages and may be within ACS data margins of error.

PORTSMOUTH NAVAL SHIPYARD WORKER SURVEY: SINGLE-FAMILY VS. MULTI-FAMILY HOUSING TYPE PREFERENCES

The strong preference for single-family homes in the Eliot Community Survey is echoed in a survey of Portsmouth Naval Shipyard workers conducted for the JLUS (Figure __). This question asked about housing preference if the respondent were to move closer to the Shipyard. It did not factor in price sensitivity or housing availability.

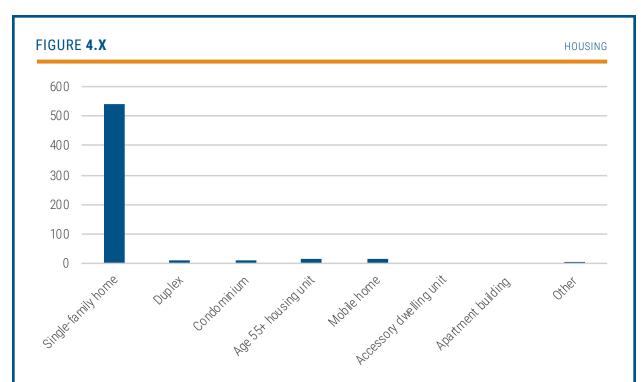


Figure __. Question 19 from the Community Survey indicating what type of home the respondents live in

TABLE 4.X

HOUSING

				Total	Housing	Units				
Town							County			
Berwick	Biddeford	Eliot	Kittery	Lebanon	North Berwick	Sanford	South Berwick	Wells	York town	York County
3,765	10,350	2,963	5,367	2,558	2,070	9,806	3,063	9,092	9,082	111,552

Source: 2021 ACS 5-year Estimate (DP05 County Subdivision Level tables)

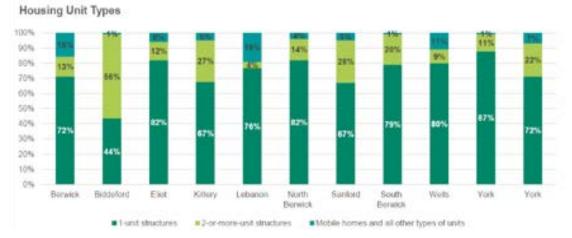


Figure ___. Housing types in various York County communities and countywide (rightmost column). Source: Presentation by Jeff Levine, AICP, Levine Planning Strategies, LLC and AECOM; Housing Subcommittee Meeting #2; Joint Land Use Study (JLUS) Housing Needs Assessment; May 8, 2023²

COMMUNITY SURVEY FEEDBACK

HOUSING TYPE PREFERENCES IN ELIOT

Single-family homes: were very desirable (43%) or somewhat desirable (37%)

ADUs and two-family attached homes: nearly 50% desirable – more than the percentages of respondents that found them undesirable, since some people responded with "uncertain"

Age 55+ affordable housing units: were popular, garnering more than 60% desirability compared with 20% undesirability

Open space developments (conservation subdivisions): were similarly popular at 57% desirability

Townhomes, cottage clusters, and mixed-use commercialresidential structures: were in the 50-45% desirability range, but because of the "uncertain" responses, their desirability also slightly outpaced their undesirability, showing that they have net favorability

Three- and four-family attached homes (triplexes/ fourplexes), apartment buildings, and mobile homes: all had greater undesirability than desirability

OTHER/WRITE-IN RESPONSES:

WRITE-IN ANSWER (NO RATING)

"A diversity of housing options that are linked and integrated with a community plan of support services is highly desirable. Subdivisions scattered about in former farm fields or forests are highly UNdesirable."

"Development projects that include parks or walkable community space within the development"

FIGURE 4.X

VERY DESIRABLE

"Allowing smaller lots. Change zoning from 2 acre to 1 so we can split land to afford to live here or build for family to move here."

"General affordable housing (i.e. not just 55+)"

"Eco-friendly design"

"Do you have design guidelines or zoning 'overlays' for 'cottage clusters'?"

"I feel there is a huge need for affordable housing for younger adults as well as older citizens—I'm not sure which format is best: multi-unit dwellings or individual dwellings in a 'village' or 'cottage' format. as some other Maine communities have done. But something needs to be done, and I'm not sure that mobile homes are the answer, structurally."

"Co-housing developments"

"Affordable housing is a must. Housing costs have skyrocketed and we have no affordable housing options. So single family affordable housing developments need to be made too...not just 55+. When developments go in, it should be made mandatory that a percentage are low income or affordable housing... beyond the mobile home communities."

"Affordable housing for first time homebuyers."

"Work/Live housing for the creatives & makers"

UNCERTAIN

"I'm not sure that Eliot needs growth development. I like it just the way it is."

NOT DESIRABLE

"This town has grown too much, too fast with too many people and too much traffic. We don't need any more of either one."

"Nothing other than single family homes!! Keep Eliot small!"

HOUSING

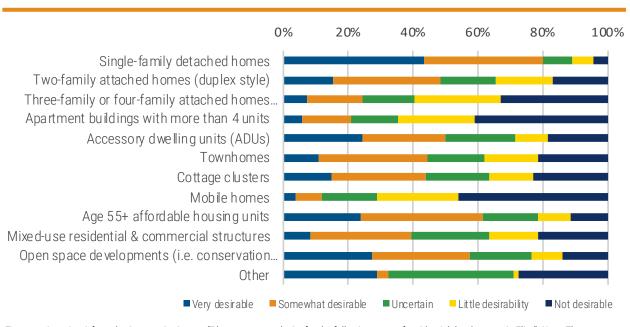


Figure __. Question 8 from the Community Survey: "Please rate your desire for the following types of residential development in Eliot". Note: The Community Survey's respondents skewed older. Only 9% of respondents who answered the question about their age range are under 35 years of age, compared to 35% of Eliot's population.

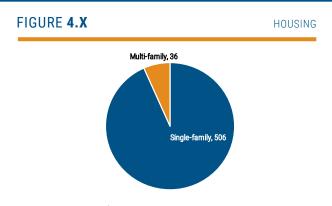


Figure ___. Housing preference question in JLUS Shipyard worker survey. Source: Presentation by Jeff Levine, AICP, Levine Planning Strategies, LLC and AECOM; Housing Subcommittee Meeting #2; Joint Land Use Study (JLUS) Housing Needs Assessment; May 8, 2023³

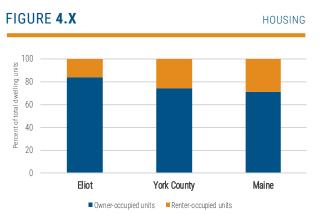


Figure __. Housing tenure in Eliot, York County, and statewide. Source: 2020 Census

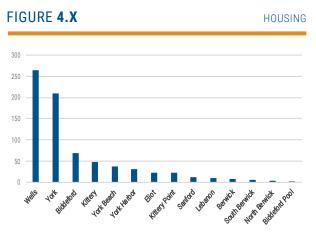


Figure __. Active short-term rentals in selected York County communities and neighborhoods, 2023, by location. Source: AirDNA data from: Presentation by Jeff Levine, AICP, Levine Planning Strategies, LLC and AECOM; Housing Subcommittee Meeting #2; Joint Land Use Study (JLUS) Housing Needs Assessment; May 8, 2023

Home Ownership

Homeownership in Eliot remains high. For every six homes, five are owner-occupied and one is renteroccupied. Eliot's 84% homeownership rate is well above York County's (74%) and Maine's (71%) (Figure __).

SHORT-TERM RENTALS

According to AirDNA data cited in a 2023 JLUS presentation, Eliot had 23 active short-term rentals (STRs, Figure __), equivalent to less than 1% of the total housing units in town. However, a more recent look at AirDNA data suggests Eliot may have more STRs, in the 25-50 range.

The pros and cons of STRs relative to housing supply and affordability have been hotly debated in recent years. Consider the following hypotheses:

 The use of an entire housing unit for an STR precludes that unit from being purchased or rented long-term by a person or family in need of housing (supply constraint)

> On a property with more than one dwelling unit (e.g. with an ADU or rented duplex unit), the use of one unit as an STR may provide enough income to allow the property owner, who lives in the other unit, to afford the costs of homeownership (affordability benefit)

Because of the low number of STRs in Eliot, they likely do not have a major negative influence on affordability locally. However, that could change if the number ramps up in the coming years, especially if those units would otherwise be available for ownership or long-term rental. The effect on the region may be more substantial, with over 600 units being STRs in just those York County communities included in Figure __.

Age and Quality of Housing Stock

According to ACS data, about two of every three Eliot homes was built in about the last 50 years – since 1970. Only 22% were built in 2000 or later – similar to the percentage of homes built before World War II (20%).⁴ While the data has margins of error, it suggests an aging housing stock with the 1970s and 1980s growth periods contributing more homes existing today than more recent decades (Figure __).

Average or median age of homes does not necessarily suggest anything about the quality of the housing stock. Whether older or newer, a home's condition is dependent on the owner's financial ability and determination. Proper upkeep can help a home stay comfortable and enjoyable for generations. On the other hand, older, unimproved units might not meet the needs or preferences of prospective homebuyers or renters today. For example, they may not be designed for universal accessibility or ease of use for people with mobility challenges. They may only have one bathroom. A prospective home buyer or renter who might otherwise be able to afford the home might be dissuaded by the added cost of upgrades to meet their needs.

Compared to other York County communities (Figure __), Eliot's share of houses built in 2010 or later is higher than all but two communities and the county, but only slightly. Our share of the oldest homes (pre-WWII) is middle-of-the pack. Eliot's distribution of houses by year built closely resembles the countywide distribution.

HOUSING CONDITIONS

Almost all housing units in Eliot appear to have complete plumbing and kitchen facilities, according to the ACS data,⁵ suggesting that substandard housing continues to be very rare. Occasional reports or suspected instances of substandard housing are tracked by Town staff and may become the subject of code enforcement actions. Depending on the situation, social service/general assistance interventions may be implemented to help the residents. Seasonal home conversions are not common and have negligible impact on the housing stock.

New Housing Unit Construction

Eliot maintains a growth management ordinance (Ch. 29 of the Town Code) that caps the annual number of building permits for new dwelling units. Elderly housing, assisted living facilities, ADUs, and repair or replacement of an existing dwelling unit are exempt from the cap. ADU permits were capped at 12 per year elsewhere in the land use regulations (Section 45-459), but, as required by LD 2003, the cap was eliminated by June 2023 ordinance amendments.

The cap is managed using growth permits, which are antecedents to new home building permits. The cap in any year cannot be less than 105% of the average number of non-exempt dwelling unit permits issued over the last 10 years. (Affordable housing units are excluded from this calculation.) The minimum number of permits allocated for affordable housing units cannot be less than 10% of the overall dwelling unit cap. The cap for the upcoming year is recommended by the Planning Board and placed on the June warrant for voter approval. The Planning Board's recommendation is informed by a

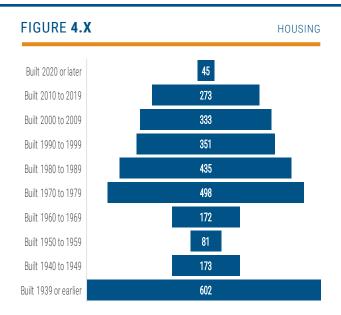


Figure ___. When homes in Eliot were built. Source: ACS 5-year estimates, 2021, US Census Bureau. B25034, "Year Structure Built". Note that each decade has a sizable margin of error

TABLE **4.X**

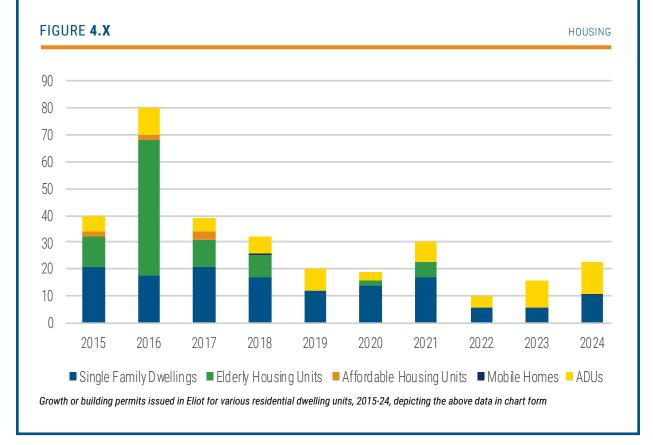
HOUSING

GROWTH OR BUILDING PERMITS ISSUED								
Year	Single Family Dwellings	Elderly Housing Units	Affordable Housing Units	Mobile Homes	ADUs			
2015	21	11	2	0	e			
2016	18	50	2	0	1(
2017	21	10	3	0	Ę			
2018	17	8	0	1	6			
2019	12	0	0	0	8			
2020	14	2	0	0	:			
2021	17	6	0	0	-			
2022	6	0	0	0	4			
2023	6	0	0	0	1(
2024	10	0	0	1	1:			
10-year total	142	87	7	2	7'			
10-year average	14.2	8.7	0.7	0.2	7.1			

Table ___. Growth or building permits issued in Eliot for various residential dwelling units, 2015-24. Source: Code Enforcement Officer records (2015-21) and IWorQ online permitting data (2022-24). The latter are preliminary data



Figure __. Percent of housing units by year built for York County communities. Source: Presentation by Jeff Levine, AICP, Levine Planning Strategies, LLC and AECOM; Housing Subcommittee Meeting #2; Joint Land Use Study (JLUS) Housing Needs Assessment; May 8, 2023



report from the Town Planner and the results of a survey of Town staff meant to gauge the impact on Town services of certain residential growth scenarios. Over the past two years, the cap has been set at 28.

From 2015 to 2024, according to records from the Code Enforcement Officer and online permitting database, 142 permits were issued for new single family dwelling units, 87 were issued for elderly housing units, 71 were issued for accessory dwelling units, 7 were issued for affordable housing units, and 2 were issued for mobile homes (Table __). The data include new homes where there were none before, so they exclude teardown/ rebuilds, painting a picture of residential growth by year. For single-family dwellings, the table shows growth permits.

The data shows that new home construction has generally been lower the last five years (2020-24) than in the previous five (2015-19). Elderly housing unit construction in the 55+ communities Cole-Brown Estates and Village at Great Brook boosted overall numbers in 2015 through 2018.

In recent years, the growth permits issued have not come close to meeting the cap. See the Future Land Use Plan for a discussion of overhauling the Ch. 29 growth management ordinance and replacing it with a differential growth cap.

Housing Affordability

No matter what the geographic scale – Eliot, York County, the Seacoast region, Maine, or the United States – housing affordability is one of the biggest community quality-of-life challenges we face today.

Maine State Housing Authority (MaineHousing) maintains housing affordability data for the state, counties, and municipalities. The figures that follow are from the data dashboard on their website. The data paint a picture that Eliot, like many other York County and Seacoast communities, has become increasingly less affordable in recent years.

AFFORDABILITY INDEX

The last year Eliot had affordable housing was 2015, and since then there has been a trend towards unaffordability. From 2020 to 2022, when the COVID-19 pandemic began to fuel strong demand and higher home prices, affordability declined by 30% as the median home price grew by more than \$100,000.

COMMUNITY SURVEY FEEDBACK

HOUSING TYPE PREFERENCES IN ELIOT

Respondents said that affordable housing is important: (68%)

- > Very important (38%)
- > Somewhat desirable (28%)

Respondents said the need for affordable housing is a serious challenge facing Eliot in the next 5 years: (61%)

- > Strongly agree (38%)
- > Somewhat agree (28%)

Out of approximately 700 responses, 17 respondents selected affordable housing as one of the top three reasons they enjoy living in Eliot.

YOUTH SURVEY FEEDBACK

HOUSING TYPE PREFERENCES IN ELIOT

Most respondents felt that Eliot has ENOUGH housing and commercial buildings.

More respondents indicated they were NOT planning to live in Eliot when they are an adult, compared to those who ARE planning to live here.

In Eliot, the affordability index dropped to **0.41** in 2023, its lowest level (least affordable) since at least 2000 – nearly a quarter-century.

How MaineHousing Calculates Affordability Index

The affordability calculation is based on the ratio of area median home prices and median twobedroom rent costs to area median household and rental household incomes. A ratio of 1 or above indicates affordability.⁷

	index	Median Home Price	Median Income	income Needed to Afford Median Home Price - Annual	Home Price Affordable to Median Income	Households Unable to Afford Median Home (%)	Total Households	Percentage of Homes Sold Unaffordable at Median Income	Total Homes Sold
Year 2023	0.41	\$599,500	\$85,765	\$208.024	\$247,164	92.1%	2,859	100.0%	59
2022	0.59	\$532,500					2,738	95.5%	66
2021	0.75	\$459,500			\$343.577		2,723	90.6%	96
2020	0.84	\$422,250	\$94,189		\$352,905		2,701	72.5%	91
2019	0.75	\$380,000	\$81,541	\$109,109	\$283,987		2,666	82.5%	80
2018	0.88	\$350,000	\$91.064		\$306,752		2,607	76.9%	104
2017	0.83	\$340,000	\$80.043	\$96.587	\$281,763		2,571	72.0%	107
2016	0.92	\$316.829	\$82,400	\$89,120	\$292,939		2,576	56.6%	99
2015	1.05	\$277,000	\$80,366	\$76,556	\$290,786	47.5%	2,544	47.5%	99
2014	1.09	\$285,000	\$87,193	\$79,779	\$311,485		2,561	40.2%	82
2013	0.95	\$254,000	\$68,682	\$72,666	\$240,074	52.9%	2,549	66.7%	66
2012	0.98	\$258,150	\$68,723	\$69,968	\$253,556	50.9%	2,545	52.4%	63
2011	0.97	\$256,950	\$68,642	\$71,033	\$248,301	51.8%	2,539	53.4%	58
2010	0.76	\$292,500	\$71,432	\$93,421	\$223,654	66.1%	2,481	81.5%	54
2009	0.84	\$263,000	\$70,150	\$83,999	\$219,640	60.3%	2,501	62.2%	45
2008	0.80	\$257,500	\$69,574	\$86,660	\$206,731	62.6%	2,572	77.6%	49
2007	0.56	\$362,000	\$67,759	\$121,829	\$201,338	73.4%	2,640	96.3%	54
2006	0.78	\$249,950	\$65,638	\$84,119	\$195,035	63.4%	2,595	84.2%	57
2005	0.62	\$325,000	\$64,585	\$103,801	\$202,216	75.8%	2,569	91.9%	74
2004	0.69	\$276,000	\$62,109	\$90,294	\$189,847	70.5%	2,547	90.5%	12
2003	0.68	\$264,750	\$59,274	\$87,027	\$180,320	71.3%	2,460	90.5%	63
2002	0.69	\$253,000	\$59,741	\$86,617	\$174,498	82.7%	2,395	89.7%	58
2001	0.84	\$189,770	\$56,589	\$67,676	\$158,681	71.6%	2,212	76.0%	50
2000	0.76	\$190,750	\$52,606	\$69,051	\$145,321	77.6%	2,205	77.0%	61

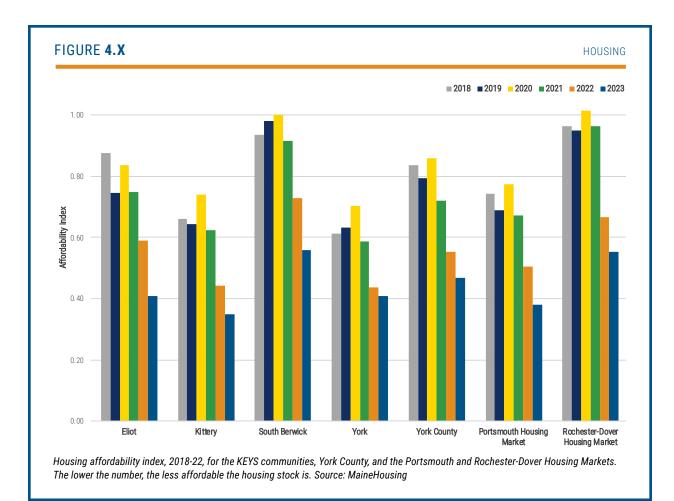
HOW MAINEHOUSING CALCULATES AFFORDABILITY INDEX

Affordability is not a new issue in Eliot. The years of data leading up to the 2009 Plan, which can be seen in Figure _, show affordability indices between 0.56 and 0.84. The 2009 Plan was also adopted at the cusp of the national housing market crash and Great Recession, which created their own challenges for prospective homeowners and renters even if the data nominally suggest that homes became somewhat more affordable in Eliot.

2014 and 2015 look like anomalies – an inverse of the other years – with their higher percentages of affordable homes and affordability indexes above 1.0. As discussed above, this is when several senior housing units were completed. This suggests that even just one or two developments with affordable units coming online can make a big difference for affordability in Eliot in a given year.

In the most recent six years of data (2018-23), Eliot has stayed more affordable than Kittery but less affordable than South Berwick and York County (Figure _). Our affordability index matches that of the Town of York. Eliot has been more affordable than the Portsmouth regional housing market but less affordable than the Rochester-Dover housing market.

The implication is that housing supply, demand, and affordability are tied together at a regional level. Each community has a role to play in expanding housing opportunities to accommodate the region's diverse workforce. This is discussed further below.



MEDIAN HOME PRICE

Eliot's median income was less in 2023 than in 2014 – in nominal dollars. During that ten-year period, the median home price in Eliot more than doubled.

In 2023, the annual household income needed to afford the median home price skyrocketed to \$208,024. If an Eliot household has two MSAD 35 teachers, each earning among the highest salaries possible according to the Maine Education Association⁸, their household income would fall well short of this threshold.

More than 9 in 10 Eliot households can no longer afford a home at the median price. In the six years from 2018 to 2023, 1 in 6 homes sold (75) was affordable, while 5 in 6 (421) was unattainable. In 2023, all 59 homes sold were unattainable, the first year that has happened within the data period (2000-23).

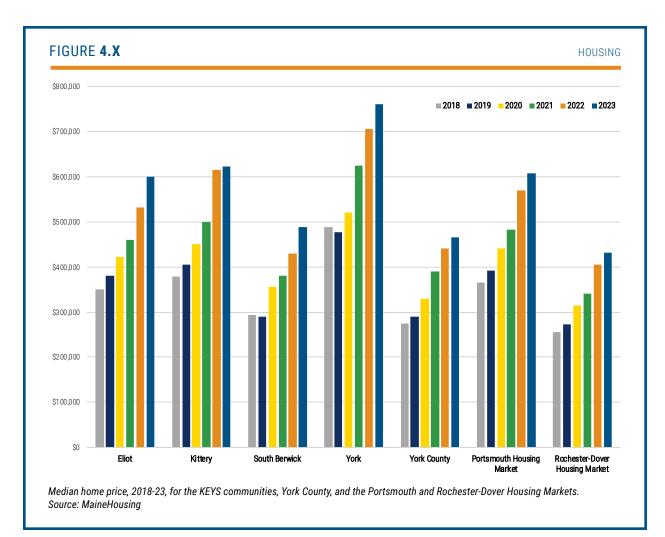
Eliot's median home price in the past six years is in a similar position relative to surrounding communities as its affordability index – lower than Kittery and York but

higher than South Berwick, similar to the Portsmouth regional housing market but higher than the Rochester-Dover market (Figure _).

AFFORDING THE MEDIAN HOME

The percent of households that are unable to afford the median home has increased dramatically in the region. Eliot now leads the KEYS communities, the County, and the two area housing markets in having the largest percentage of households unable to afford the median home. Figure __ clearly tells the story that most households in the region cannot afford to buy most homes on the market.

The lack of housing affordability in one community has ripple effects across the region. Few homes on the market in recent years in the region have been attainable for households making the area median income. If job openings for teachers, nurses, police and fire personnel, restaurant workers, and many other positions are to be filled, a big question is: where will they live?



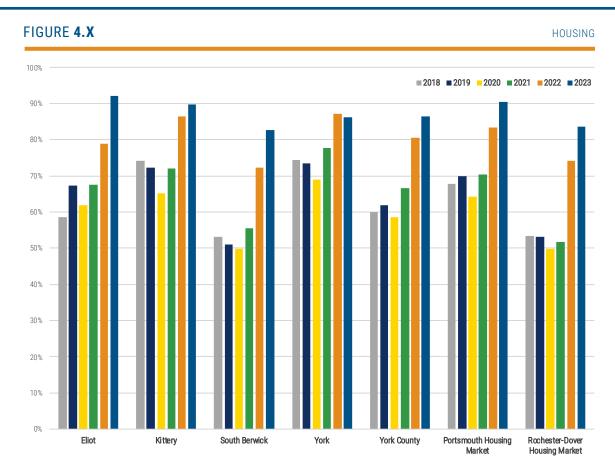
RENTAL AFFORDABILITY

Although only about 15% of Eliot's homes are rental units, we can see evidence of affordability challenges in the local rent market. In 2020, the median monthly rent for a two-bedroom unit in Eliot was about \$1,800, which requires an annual household income of \$72,000 – for example, one full-time job that pays about \$35/ hour. Almost 60% of Eliot households cannot afford that rent (Table _).

HOUSING + TRANSPORTATION

When we talk about housing being affordable, we often use the assumption that it is affordable to a household without spending more than 30% of their income on housing costs. We can add another big household cost to the equation: transportation. A planning principle that emerged nationally just before the 2009 Plan was adopted states that housing is affordable if the household spends no more than 45% of its income on housing and transportation costs. This emerged because it became clear that housing costs alone were not sufficient to understand the cost burden on households. Less expensive housing tended to be further from jobs and other destinations, necessitating longer trips, more trips taken by car, and more household income spent on vehicle costs.

The idea has been championed by the nonprofit Center for Neighborhood Technology, whose website has an online data tool to look up the housing plus transportation index (H+T Index) for any community. While the data may not be precise for Eliot, our H+T Index is 54%.⁹ Even with some margin of error, it is likely that local housing + transportation costs are greater than the 45% guideline for most households. With minimal transit service and walking or bicycling facilities right now in Eliot, most trips are only practical in a car.



Percent of households unable to afford the median home, 2018-23, for the KEYS communities, York County, and the Portsmouth and Rochester-Dover Housing Markets. Source: MaineHousing

TABLE 4.X

Name	Benetok	Biddeford	Elot	Kittery	North Benvick	Senford	South Berwick	Wells	York	Lebanon
Year	2017	2020	2020	2020	2017.	2020	2011	2020	10011	N/A
Median 2BR Rent (with utilities)		\$1,210	\$1,806	\$1,999		\$1,223		\$1,800		N/A
Income Needed to Afford Median 2BR Rent – Annual		\$48,397	\$72,221	\$79,960		\$48,917		\$72,000		N/A
Income Needed to Afford Median 2ER Rent - Hourty		\$23.27	\$34.72	\$38.44		\$23.52		\$34.62		N/A
2BR Rent Affordable to Median Income		\$1,178	\$1,514	\$1,577		\$908		\$1,205		N/A
Households Unable to Afford Median 2BR Rent		2,279	264	947		1,929		550		N/A
Households Unable to Afford Median 2BR Rent (%)	10.16	51.1%	58.7%	61.7%		62.5%		68.5%		N/A

Median two-bedroom rental unit affordability across select York County communities. (Communities with older, 2017 data are greyed out.) Source: Presentation by Jeff Levine, AICP, Levine Planning Strategies, LLC and AECOM; Housing Subcommittee Meeting #2; Joint Land Use Study (JLUS) Housing Needs Assessment; May 8, 2023

HOUSING

HOUSING + UTILITIES

In Eliot and in Maine, the cost of utilities has been a much-discussed issue in recent years. The Community Survey asked respondents to estimate their average monthly costs of a mortgage or rent, plus utilities (Figure __). The high percentage of <\$1,000 responses suggests respondents who own their homes outright and no longer have a mortgage. About 10% of respondents pay more than \$3,000 in combined mortgage/rent costs and utilities, and about one-third of respondents pay more than \$2,000.

COMMUNITY SURVEY FEEDBACK

HOUSING AND UTILITIES IN ELIOT

In Eliot and in Maine, the cost of utilities has been a muchdiscussed issue in recent years.

Respondents were asked to estimate their average

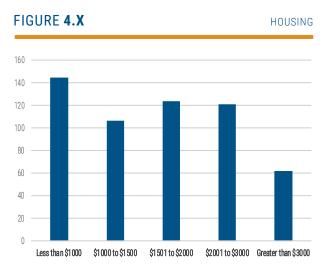
monthly costs of a mortgage or rent, plus utilities:

> Under \$1000 (26%)

The high percentage of <\$1,000 responses suggests respondents who own their homes outright and no longer have a mortgage.

> More than \$2000 (33%)

> More than \$3000 (10%)



Question 18 from the Community Survey indicating monthly costs of mortgage/rent plus utilities.

HOUSING + OTHER COSTS

Other housing costs also affect affordability. Home insurance, mortgage insurance and homeowners' association fees for some owners, municipal property taxes, and home maintenance needs are just some examples.

AGING IN PLACE

Eliot's Aging In Place (AIP) Committee has made housing for Eliot's seniors a priority. That priority is reflected in the committee's name and Goal #1 of their Action Plan: "To financially assist people to remain in their homes in Eliot as they age." The AIP Committee has also promoted ADUs as a strategy for seniors to remain in Eliot.

Local, Regional, and Statewide Housing Needs

Housing unaffordability is influenced by several factors, but a basic premise is that the supply of houses is not keeping up with demand. This results in a local housing need. Housing need is not just about the quantity of units. It is also about the quality, variety, and affordability of the units to accommodate our workforce, families, and people aging in place.

Housing need can be estimated in several ways. One way is to divide the projected population growth by an assumed average household size. Another is to determine housing need for the region and then each municipality's role in fulfilling that housing need. SMPDC has done the latter with the Regional Housing Needs Assessment.

HOUSING NEEDED TO ACCOMMODATE POPULATION GROWTH

In 2025, our community has over 7,000 people. By 2030, according to the State Economist, our population is projected to exceed 8,000, and by about 2035, it should pass 9,000.

In round numbers, the additional 1,100 to 1,600 people will need a place to live. If the average household size stays at 2.41, we will need between 460 and 680 additional dwelling units by 2040. However, if the average household size continues its downward trend, we will need between 700 and 940 additional dwelling units (Table _). This means that annual new housing need will be between about 30 and 60 units.

Homes for Shipyard Employees: The Joint Land Use Study (JLUS)

A JLUS is a collaborative planning effort between communities and adjacent military installations to identify and address land use challenges as well as plan for compatible uses. The Town of Kittery, the Portsmouth Naval Shipyard (PNS or Shipyard), and the Southern Maine Planning and Development Commission (SMPDC) initiated the JLUS in 2019 and have since produced various studies and implementation strategies to enhance community quality of life and support the military mission. Key studies and strategies include: JLUS Phase I Final Report, JLUS Phase II Implementation Plan, Joint Communications and Coordination Manual, Microtransit Design Pilot Plan, and a Housing Needs Assessment. Many of the JLUS studies and strategies involved all Maine communities with strong ties to the PNS, as stakeholders and as areas of analysis. For example, Eliot's staff and their communication lines are documented in the Joint Communications and Coordination Manual from 2021. Most recently, Eliot was one of the ten Maine communities included in the recently completed Housing Needs Assessment.

REGIONAL HOUSING NEEDS ASSESSMENT

The JLUS Housing Needs Assessment analyzes the availability and affordability of housing in the region within the context of the housing needs of the PNS. The Assessment forecasts potential discrepancies between housing needs and projected housing supply. It is informed by regulatory frameworks, transit options, the impact of recent legislation, and the potential of the Housing Opportunities Program in promoting new housing supply. By leveraging localized insights and regional/state data, housing gaps and proactive measures to address them are identified.

The Assessment's balanced local and regional approach is critical as employees at the Shipyard live throughout the region, yet each city or town has unique conditions, opportunities, and constraints. Of the ten Maine communities with the highest number of PNS employees, Eliot has the third-smallest total population size yet ranks fifth in total number of PNS employees, at 304. This is likely due to Eliot's geographic proximity to the Shipyard. Eliot should expect an additional 24 workers with the planned hiring growth at PNS.

The short commute distance between Eliot and the PNS would make Eliot an attractive place to live for new PNS employees and their households; however, Eliot's housing stock has a high occupancy rate and a high percentage of single-family homes with current sale prices that far exceed median income levels. How Eliot approaches housing supply, particularly housing targeted for Shipyard employees, could impact the Town in different ways. For example, if more PNS employees could live closer to the Shipyard, the demand on the transportation network in Eliot generated by the PNS could change. Providing more housing within walking or biking distance of the Shipyard could lead to lower rates of vehicle traffic and higher rates of walking, biking, or rolling. If fewer PNS employees live near the Shipyard, Eliot may experience higher rates of pass-through vehicle traffic.

The Assessment includes recommendations tailored to each community. As Eliot's ordinances have been updated to comply with LD2003 and thus reduce restrictions on multi-family housing and ADUs, the main recommendation stated is to expand water and sewer services around Route 236.



TABLE 4.X

POPULATION 1950-2020 Year Population 1950 2,509 1960 3,133 1970 3,497 Population 1980 4,948 1990 5,329 2000 5,954 2010 6,204 2020 6,717

PROJECTED POPULATION TO 2040						
ted tion	Year	8.3% Growth Rate	12.8% Growth Rate			
rojec	2030	7,272	7,533			
Po	2040	7,828	8,349			

Because these projections are uncertain, we can make two estimates, one with a lower growth rate and one with a higher growth rate (Table _). One scenario uses Eliot's growth rate from 2010 to 2020 (8.3%) to calculate population projections for 2030 and 2040; the other scenario uses the growth rate from 2000 to 2020 (12.8%).

Table produced by SMPDC using US Decennial Census data, 1950-2020

TABLE 4.X

HOUSING

Population	Change	8.3% Gro	wth Rate	12.8% Growth Rate			
2010 (Actual)	2020 (Actual)	2030 (Projected) 2040 (Projected)		2030 (Projected)	2040 (Projected		
6,204	6,717	7,272	7,827	7,533	8,349		
Population Change (2020-2040)		1,110 Addition	al Population	1,632 Additional Population			
TOTAL OCCUPIED	HOUSING UNIT	S IF HOUSEHOLD	SIZE STAYS THE	SAME			
Avg Household: Sta	ay at Same Size	8.3% Gro	wth Rate	12.8% Growth Rate			
2010 (Actual)	2020 (Actual)	2030 (Projected)	2040 (Projected)	2030 (Projected)	2040 (Projected		
2.47 2.41		2.4	11	2.41			
2,509	2,792	3,023	3,254	3,131	31 3,47		
Household Size Cha	ange (2020-2040)	462 Additional Units		678 Additional Units			
TOTAL OCCUPIED	HOUSING UNIT	S IF HOUSEHOLD	SIZE DECREASES	S			
Avg Household: Decrease in Size		8.3% Grov	8.3% Growth Rate		12.8% Growth Rate		
2010 (Actual)	2020 (Actual)	2030 (Projected)	2040 (Projected)	2030 (Projected)	2040 (Projected		
2.47 2.41		2.34		2.24			
2,509	2,792	3,109	3,496	3,221	3,729		
Household Size Cha	ange (2020-2040)	704 Additi	onal Units	937 Additional Units			

Table _. New housing need projections using two the two population growth scenarios. Table produced by SMPDC using US Census data

State of Maine Housing Production Needs Study

In October 2023, MaineHousing, GOPIF, and DECD published the State of Maine Housing Production Needs Study, which analyzes housing supply and affordability issues in Maine.¹⁰ Highlights from the study include:

 There is a housing shortage nationwide, particularly at more affordable price points.
 This is primarily due to a precipitous decline in housing production after the Great Recession

 Maine used to have a relatively affordable housing market, but it has become a lot less affordable in recent years – just before and during the COVID pandemic

 Diversity of housing types is important for meeting Maine's housing needs

- Policy priorities include:
 having enough homes on the market to meet demand
 - having enough affordable homes in the locations where they are needed to accommodate the workforce and support Maine's economy

 Annual housing production need statewide is between 8,500 and 9,300 homes – to address historic underproduction and future need
 5,100 to 5,500 in the Coastal region

> There is a future need for 38,000 to 46,000 additional units statewide by 2030

> There is a future need for 10,100 to 11,100 homes by 2030 in York County



Meeting Housing Need

Eliot can play our role in meeting the projected regional housing need. We can do this in a way that fits our community's vision statement and goals, policies, and strategies. The following concepts and policies will shape how we accommodate these new homes.

LD 2003 AND LD 1706

LD 2003 is Maine's signature housing legislation in recent years. In broad terms, it focused on increasing housing affordability by requiring Maine communities to implement certain changes to zoning and land use regulations. The changes require municipalities to increase allowability of principal and accessory dwelling units as by-right uses in residential zones. They require affordable housing developments to be allowable, with a 2.5-times density bonus, wherever multifamily dwelling units are allowable.

LD 2003 was clarified and updated with technical amendments via LD 1706.

SMALLER LOT SIZES

Ordinance amendments enacted by voters in November 2023 reduced the minimum lot size in the Village zone, the Town's current designated growth area, from 1 acre to ½ acre for lots and dwelling units served by both public water and public sewer. They concurrently reduced the minimum acreage per dwelling unit from 1 acre to ½ acre for such units/ lots. This addressed a longstanding policy and recommendation of the 2009 Plan.

This may not result in a dramatic increase in dwelling units, for a few reasons. First, only part of the Village zone is served by both public water and public sewer service. Second, many Village lots are already legally nonconforming lots that are smaller than 1 acre – not enough lot area for a conforming lot split or second principal unit. Third, shoreland zoning may restrict additional dwelling units or lot splits on lots that otherwise have the acreage and water/sewer connections. Finally, some property owners who have the acreage and water/sewer connections, and are outside of the shoreland zone, may prefer to keep their property as is.

While this is a modest, incremental change, it will nonetheless be meaningful for encouraging additional housing in Eliot's growth area.

TINY HOMES AND LD 1530

Tiny homes have been cited recently as a piece of the puzzle, serving as affordable places to live for people at life stages where they do not need or prefer much living space. Tiny homes are typically 400 square feet or less, and they can easily fit as an accessory structure on many house lots.

In Maine, tiny homes are discussed in two broad categories: tiny homes on wheels and foundation-built tiny homes. Tiny homes on wheels are sized such that they can be legally towed on a roadway. Foundationbuilt tiny homes, other than their size, are much like any home, though the International Residential Code and Maine's building code grant them some code flexibilities.

LD 1530, codified in state statute in 30-A M.R.S.A. §4363, requires that municipalities "permit a tiny home to be placed or erected on an individual house lot where single-family dwellings are allowed or as an accessory structure, subject to all applicable land use requirements as single-family dwellings or as an accessory structure". The state law definition of "tiny home" in 29-A M.R.S.A. §101(80-C) describes a typical tiny home on wheels, such that it:

- > is designed for use as permanent living quarters
- > is permanently constructed on a frame or chassis
- > is sized so that it can be legally towed on a roadway
- > is deemed a "vehicle without motive power" in the statute
- > complies with plumbing, propane, fire, and life safety standards for recreational vehicles and
- > requires a motor vehicle title.

In June 2023, Eliot voters enacted ordinance amendments to comply with LD 1530, allow tiny homes as principal or accessory dwelling units, and establish tiny home regulations.

ACCESSORY DWELLING UNITS

With ordinance amendments in recent years, Eliot's ADU regulations are now among the most flexible in the state. ADUs are allowed by-right in the three residential zoning districts, and they can be up to 1,000 sq. ft., or half the size of the principal dwelling unit, whichever is less. This is up from the previous hard cap of 650 sq. ft. The amendments removed parking requirements, removed the hard prohibition on having more than two people per bedroom, and decreased lot line setback requirements. Some of these changes were made to comply with LD 2003. ADUs do not need additional lot area, as would be the case for adding additional principal dwelling units on a lot.

ADUs are strongly supported by the Planning Board and AIP Committee. They can provide an aging in place option and allow three generations to live on the same property. A property owner can move into one and rent out their house. An ADU can be rented for additional income. Or an ADU can serve as a place for occasional visiting family and friends.

ADUs are an important part of the housing affordability toolbox in Eliot. However, a challenge is that people may not have the savings or access to credit needed to build one. The lower-cost enclosed ADU option (e.g. a basement apartment) may be not be practical given the existing space in some houses.

DUPLEXES

Duplexes can fit nicely into single-family neighborhoods and along roads with single-family houses without changing the character. They can be found all over York County, in villages and along suburban and rural roads. Like ADUs, duplexes have a history of serving as an affordable housing option. A duplex owned by a single owner who can rent the other unit provides a place to live for the renter and rental income for the homeowner. Duplexes have a net favorability rating in the Eliot Community Survey.

Unlike ADUs, building a two-family dwelling requires double the acreage of a single-family dwelling. However, duplex units are not restricted by the size limits of ADUs. Incentives for single-family-to-duplex conversion have been proposed by the Planning Board Chair and discussed by the Board, and they are recommended in this plan.

2022 FESTIVAL DAY FEEDBACK

HOUSING VISION IN ELIOT

My housing vision...

"Additional middle housing [and] affordable housing for all"

"Workforce housing [and] housing for our kids as they become adults"

MISSING MIDDLE HOUSING

Coined by architect Daniel Parolek, Missing Middle Housing refers to "house-scale buildings with multiple units in walkable neighborhoods...such as duplexes, fourplexes, cottage courts, and courtyard buildings". These housing types sit in the middle of the spectrum from single-family detached homes to mid- and high-rise apartment buildings.¹¹

Missing Middle Housing might have an Eliot-sized application for adding dwelling units without changing the character of neighborhoods, e.g. adding cottage clusters to our zoning regulations, as the Town of Kittery has.

INTERGENERATIONAL AND ACCESSIBLE HOUSING

Intergenerational housing is adaptable for people as they age, and accessible housing is built to be comfortable and navigable for people with mobility challenges. A variety of housing types is also important to accommodate the different life situations of homebuyers. For example, larger families and households with a remote worker will be dissuaded by dwelling units with few bedrooms and now usable home office space.

SUBDIVISIONS

Eliot can expect some growth to occur by conventional or cluster residential subdivisions. Land use context, environmental features, soil suitability, minimum lot size, and many other factors influence the suitability of a subdivision. Because these constraints can be expected to limit the number of approved subdivisions in the future, subdivisions will play a role, but other housing approaches – like those described in this section – will be needed to fulfill a substantial portion of the housing need.

IDENTIFYING ADDITIONAL GROWTH AREAS

This plan designates additional growth areas to accommodate additional housing units. The priority is to update the zoning along Route 236 in the C/I district. Currently, only elderly housing subdivisions, life care and assisted living facilities, and certain accessory residential structures are allowed in C/I. With the completion of the Route 236 Water & Sewer Extension Project in 2025, new opportunities for development will come to Route 236 property owners and businesses. The zoning needs to catch up. Allowing more housing types and mixed-use development will help us fulfill our housing need and create a more vibrant commercial corridor in an already built-up area close to destinations.

See the Future Land Use Plan for further discussion.

TOWN-OWNED PROPERTY

The opportunity may arise for the Town to use Townowned property to promote workforce or affordable housing. In such a scenario, the Town could seek a developer through a competitive process where the type of development is laid out in the request for proposals. This would allow the Town to define what it wants to see and ensure that any development is appropriate for its context. This scenario may necessitate a change in Town land-holding policy.

AFFORDABLE HOUSING DEVELOPMENTS

Affordable housing developments (AHDs) are now allowable, subject to Planning Board site plan review, in the Village and Suburban zones – a change made by the LD 2003-required ordinance amendments. Another tool in the toolbox is requiring that a certain percentage of units in larger developments be made affordable. The Town can continue to discuss with affordable housing organizations potential opportunities to advance affordable housing in Eliot.

Area nonprofit organizations promote affordable and workforce housing in the region. Fair Tide (Kittery) addresses homelessness by providing transitional housing and support services. The Housing Partnership in Portsmouth developed Post Office Drive apartments in the Village. Avesta Housing has done projects in neighboring communities.

ELIOT HOUSING GOAL, POLICIES & STRATEGIES

Goal, Policy, or Strategy	Description	Responsibility or Partnership	Implementatio Timing
Goal 1	Affordable, decent housing opportunities for all		
Policy 1	Create additional housing opportunities by maintaining or amending the a diversity of housing choices, including high-quality workforce and affer owner-occupied and renter-occupied housing		
Strategy 1:	Maintain the current flexibility in the Town Code for construction of accessory dwelling units (ADUs), and consider ways to expand that flexibility	Planning Board, Select Board, Planning Office	Ongoing
Strategy 2:	Amend the land use regulations to allow, subject to site plan review, single-family dwellings in growth areas to be converted into duplexes without the need for additional acreage. Such conversions should be in keeping with the architectural integrity of the existing neighborhood, should preserve historic buildings as much as possible, and should be limited in how much they expand the building footprint	Planning Board, Select Board, Planning Office	Short
Strategy 3:	Continue to allow mobile home parks and manufactured housing, as provided in Chapter 41 and Section 45-290 of the Town Code, and ensure that such allowance remains consistent with 30-A M.R.S.A. §4358	Planning Board, Select Board, Planning Office	Ongoing
Strategy 4:	Allow cottage clusters in residential growth and transitional areas, consider allowing them in other areas of town as an option for the developed portion of an open space development, and establish associated performance standards. Allow manufactured housing units to be used in cottage clusters	Planning Board, Select Board, AIP, Planning Office	Mid
Strategy 5:	Consider a requirement for a percentage of all new dwelling units within a subdivision or other development of ten or more dwelling units to be affordable to low- or moderate-income families	Planning Board, Select Board, Planning Office	Mid
Strategy 6:	Exempt affordable housing units from any future impact fee ordinance, and consider reducing land use review and building permit fees related to provision of affordable dwelling units	Planning Board, Select Board, Town Manager, Planning Office	Mid
Cross reference	Future Land Use G1, P1, S1 – Village zone as designated growth area		
Cross reference	Land Use G1, P1, S2 – New Mixed Use zone as designated growth area		
Cross reference	Land Use G1, P1, S3 - New Village Transition zone as designated growth area		
Cross reference	Agriculture and Forest Resources G2, P3, S2 – Allow up to two ADUs on certain farm properties		
Policy 2	Encourage and promote workforce housing to support local and regiona	l economic developme	nt
Strategy 1:	Support and participate in regional committees and working groups that advance affordable/workforce housing, such as the JLUS partnership	Planning Office, Town Manager	Ongoing
Strategy 2:	Support the efforts of local and regional housing coalitions in addressing affordable and workforce housing needs	Planning Office, Town Manager, Select Board	Ongoing
Strategy 3:	Seek to have at least 10% of all new residential units be affordable at 80% of area median income (AMI)	Planning Office, Planning Board	Long
Policy 3	Encourage and promote housing for seniors to help them age in place and	nd afford to stay in the	community
Strategy 1:	Maintain the Town Code's existing, broad allowability for elderly housing, assisted living, and life care facilities.	Planning Office, Planning Board	Ongoing

ELIOT HOUSING GOAL, POLICIES & STRATEGIES

Goal, Policy, or Strategy	Description	Responsibility or Partnership	Implementation Timing
Goal 1 continued	Affordable, decent housing opportunities for all		
Policy 4:	Use municipal resources in other ways to contribute to this goal		
Strategy 1:	Contribute to a regional housing data dashboard (or maintain a local version) that tracks new dwelling unit construction, the type of units constructed, their sale price or rents, and other pertinent information	Planning Office, SMPDC	Ongoing
Strategy 2:	Explore the feasibility of a housing trust fund to be used as seed money or gap funding for workforce housing developments in town, and implement such a fund if feasible	Planning Office, Town Manager, Select Board	Mid
Strategy 3:	Create a policy for Town properties, including tax-acquired property, with criteria and procedures for using a property for workforce and affordable housing, accounting for legal limitations, such as those established by state legislation and court precedent. Subject to this policy, seek partnerships to advance workforce or affordable housing on suitable properties	Town Manager, Select Board, Legal Counsel	Short
Strategy 4:	Promote and-or support energy efficiency in Eliot homes and workforce development related to residential energy efficiency upgrades	Planning Office, Energy Commission (if restarted), Efficiency Maine	Ongoing
Strategy 5:	Create a revolving loan fund to assist residents with limited incomes in creating ADUs	Planning Office, Town Manager, Select Board	Mid

HOUSING ENDNOTES

¹ 23.5% in 2010, using 2010 American Community Survey 5-year estimates, vs. 19.7% in the 2020 Census.

² Data can be found in the Final Housing Needs Assessment Report available via: <u>smpdc.org/jlus</u>

³ See above link

⁴ US Census Bureau. 2021 ACS 5-year estimates, B25034, "Year Structure Built". The ACS data comes with the caveat of having sizable margins of error.

⁵ US Census Bureau. 2021 ACS 5-year estimates, S2504, "Physical Housing Characteristics for Occupied Housing Units". The percentages are 98.5% having complete facilities, with a margin of error of 2.3%.

⁶ Available via: <u>www.mainehousing.org/data-research/housing-data</u>

⁷ See MaineHousing link above

⁸ maineea.org/mea-salary-guide/2022-mea-salary-guide/

9 htaindex.cnt.org/map/

¹⁰ mainehousing.org/docs/default-source/default-document-library/state-of-maine-housing-production-needs-study_ full_final-v2.pdf

¹¹ missingmiddlehousing.com/about

ECONOMY

Eliot is a primarily residential community, with many residents working within a 10-mile radius. Our contributions to the regional economy reflect being centered in key regional transportation networks, deep water access to the Piscataqua River, and prime agricultural soils. Today, commerce and business are concentrated along the state arterial, Route 236, and provide critical inputs to the region's agricultural and maritime economy.

Economic Development in the Comprehensive Plan

A comprehensive plan helps develop a community's policies and priorities for future economic development while aiming to preserve the community's character, environmental features, and workforce depth. An economic development plan embedded within the comprehensive plan provides indepth review of the local and regional economy; identifies strategies, programs, and projects to improve the economy; and establishes policy direction for economic growth. The various elements of a comprehensive plan support and complement the economic development plans developed for Maine, York County, and our region. Maine's businesses, communities, and regions rely on supporting land uses, transportation, and infrastructure to sustain existing companies and industries and to further economic development programs and initiatives. Together the comprehensive plan and its economic development component should serve as a "strategy for tomorrow" and reflect a community's desired physical, economic, and social growth.

Understanding our local and regional economy helps us assess the community's current and future needs. The number of local jobs, the sectors in which those jobs are located, and access to employment within the wider region will impact our community and affect Eliot's future growth.

ELIOT ECONOMY GOALS

GOAL 1 Incentives for business development that encourage commercial activity serving the interests of Eliot residents, increase job opportunities, and promote overall economic well-being



A formal relationship between the Town of Eliot and individual commercial entities in town



The Village area as a place where people love to gather and where small businesses thrive

See the end of this section for the full table of goals, policies, and strategies.



Eliot Commons. Photo by Brookelyn Gingras, SMPDC





Our Economic History and Context

Before European contact, Abenaki, Pennacook, and Wabanaki peoples in this area maintained a traditional economy based on agriculture, fishing, and trade. Early European settlement began along the Piscataqua River, with forests inland providing valuable timber. Large farms were located throughout the town in the 17th through 19th centuries.

The Piscataqua River and waterways provided a means of transportation. Saw and grist mills were established, initially, at the mouths of the creeks, followed by those inland on the York River. Shipbuilding was important to our economy through the middle of the 19th century – and brickyards in the late 19th century, with more than a dozen located along the Piscataqua River. The last brickyard closed in 1965.

<u>A more detailed Eliot prehistory and history is in</u> <u>Historical and Archaeological Resources.</u>

Farming and food continue to be important parts of our economy. The Agriculture and Food Security Commission promotes local farms and farm products, which are sold at farm stores and roadside farm stands, Eliot Festival Day, other events, and in retail settings. As of this writing, the Commission is organizing a farmers' market. Route 236 has two farm and garden supply stores. Restaurants dot Route 236, and there are three local businesses two on Route 236 and one in the Village – that sell coffee, prepared breakfast/ lunch meals, and more. At the time of this writing, we no longer have a dedicated grocery store, but limited grocery items are available at some retail stores.

As a primarily residential community, we have many workers commuting elsewhere. Commerce and business are concentrated along Route 236. The development of Eliot Commons in the early 1980s added various retail uses, and highway-oriented retail, office, and industrial uses have arisen along different parts of the highway.

Eliot's maritime economy continues to be important. A working marina and boatyard and a private boat club are along the river, and Route 236 has several businesses involved in boatbuilding and repair, boat storage, and boat hauling.

Other areas of town have smaller nodes of commercial activity, such as Eliot Village, Cedar Rd. near Route 236, and parts of State Rd.



Local products are sold at farm stores & roadside stands



Boatbuilding, repair, boat storage, and boat hauling in Eliot

Since the late 2010s, as cannabis began to be legalized in Maine and Eliot began allowing and licensing them, several cannabis establishments have been opened. By mid-2024, there were cannabis retail operations (adult use or medical). Several buildings have been built or repurposed for cannabis cultivation, including Maine's largest cannabis greenhouse. Other uses include cannabis manufacturing (i.e. the making of edible cannabis products) and a cannabis testing facility that opened in 2020. In 2022, voters approved a cap on the number of cannabis establishment licenses.

TABLE 5.X

	LABOR FORCE AND EMPLOYMENT RATE								
Eliot	Local Unemployment Statistics	2003	2013	2023	2003-2013 # Change	2003-2013 % Change	2013-2023 # Change	2013-2023 % Change	
	Labor Force	3568	3912	4490	344	9.6%	578	14.8%	
	Employment	3416	3741	4400	324	9.5%	660	17.6%	
	Unemployment	152	171	90	20	12.9%	-81	-47.5%	
	Unemployment Rate	4.2%	4.4%	2.0%	-	-	-		
	LABOR FORCE AND EMPLOYMENT RATE								
٩N	Local Unemployment	2003	2013	2023	2003-2013	2003-2013	2013-2023	2013-2023	

AMJ r	Local Unemployment Statistics	2003	2013	2023	2003-2013 # Change	2003-2013 % Change	2013-2023 # Change	2013-2023 % Change
liot nouth	Labor Force	6.7%	7.0%	7.4%	-	3.6%	-	6.6%
ortsm	Employment	6.7%	7.0%	7.4%	-	4.2%	-	6.0%
Ч %	Unemployment	6.8%	6.2%	7.5%	-	-9.1%	-	21.3%

	LABOR FORCE AND EMPLOYMENT RATE								
Eliot York County	Local Unemployment Statistics	2003	2013	2023	2003-2013 # Change	2003-2013 % Change	2013-2023 # Change	2013-2023 % Change	
	Labor Force	3.3%	3.5%	3.9%	-	7.0%	-	11.6%	
% Yorl	Employment	3.3%	3.6%	4.0%	-	8.7%	-	10.0%	
~	Unemployment	2.9%	2.4%	3.0%	-	-17.9%	-	25.2%	

Table ___. Eliot's average annual labor force and employment rates (not seasonally adjusted) by decade between 2003 – 2023, compared to the Portsmouth, NH-ME Metropolitan LMA* and York County. *Portsmouth, NH-ME Metropolitan Labor Market Area (LMA) includes Eliot, Kittery, and York in Maine, and Portsmouth, Rye, Newfield, Newington, New Castle, Newmarket, Epping, Stratham, Exeter, North Hampton, Hampton Falls, Greenland, and Brentwood in New Hampshire. Source: Maine Department of Labor, Center for Workforce Research and Information¹

EMPLOYMENT BY INDUSTRY & SECTOR	Eliot			Portsmouth LMA				
Industry Employment	2010 #	2010 %	2020 #	2020 %	2010 #	2010 %	2020 #	2020 %
Total, All Industries	1101	100%	1219	100%	15,301	100%	17,578	100%
Construction	143	12.99%	133	10.91%	415	2.71%	601	3.42%
Manufacturing*	61	5.54%	64	5.25%	-	-	-	-
Wholesale Trade	57	5.18%	86	7.05%	274	1.79%	310	1.76%
Retail Trade	50	4.54%	110	9.02%	2,187	14.29%	1,904	10.83%
Transportation and Warehousing	73	6.63%	63	5.17%	132	0.86%	147	0.84%
Finance and Insurance	25	2.27%	25	2.05%	200	1.31%	182	1.04%
Real Estate and Rental and Leasing	6	0.54%	59	4.84%	153	1.00%	148	0.84%
Professional, Scientific, & Technical Services	47	4.27%	9	0.74%	658	4.30%	930	5.29%
Administrative, Support, Waste Management & Remediation Services	185	16.80%	208	17.06%	418	2.73%	522	2.97%
Health Care and Social Assistance	77	6.99%	98	8.04%	1,754	11.46%	1,793	10.20%
Accommodation and Food Services	97	8.81%	48	3.94%	1,834	11.99%	1,692	9.63%
Agriculture, Forestry, Fishing and Hunting	-	-	32	2.63%	-	-	67	0.38%
Information	-	-	14	1.15%	-	-	52	0.30%
Other Services (except Public Admin)	29	2.63%	21	1.72%	313	2.05%	242	1.38%

Table __. Average annual employment by industry in Eliot compared to the Portsmouth LMA. Source: Maine Department of Labor, Center for Workforce Research and Information.² *Note: Goods-Producing and Service-Providing Supersector totals are no longer calculated.

ECONOMY

Our Economy and Labor Force LABOR FORCE AND EMPLOYMENT RATE

Eliot has a low unemployment rate, 2%, less than half of the 4.4% of a decade ago. Our labor force has also increased by over 500 people since the 2009 Plan, making up about 4% of the county's labor force.

EDUCATIONAL ATTAINMENT

According to American Community Survey (ACS) data, levels of educational attainment in Eliot are mostly comparable to York County and statewide levels. Eliot likely has a greater share of adults who have a bachelor's degree or a graduate degree compared to the county and the state. However, ACS data margins of error make this a tentative conclusion.

LARGE EMPLOYERS

Eliot continues to be a small business/employer community, with only one employer, Marshwood Middle School, topping 50 employees (Table _).

COMMUNITY SURVEY FEEDBACK



RESPONDED THAT HAVE THE ABILITY TO EARN A LIVING WITHIN THE COMMUNITY **IS IMPORTANT IN THE FUTURE**

Very Important: 24% Somewhat Important: 28%

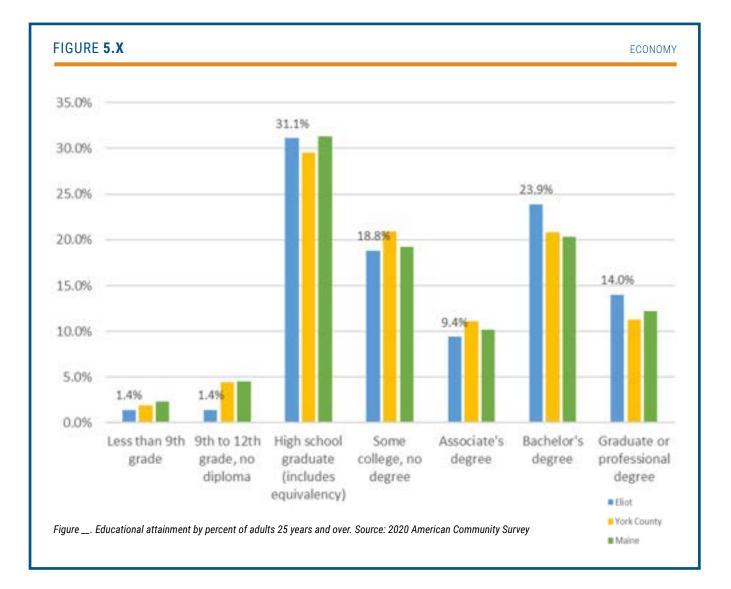


TABLE 5.X

ECONOMY

Local Unemployment Statistics	Employer Size	Year Established	Industry Group
Marshwood Middle School	50-99	1999	Educational Services
Dunkin'	20-49	2004	Accommodation and Food Services
East Coast Cannabis	20-49	2022	Retail Trade
Eliot Agway	20-49	2020	Agriculture, Forestry, Fishing and Hunting
Eliot Elementary School	20-49	2012	Educational Services
Eliot Fire Department	20-49	1994	Public Administration
J P's Shellfish Co	20-49	1986	Wholesale Trade
Jacquelyn Nooney Landscape Inc.	20-49	1984	Administrative Support & Waste Management & Remediation Services
JDD	20-49	2014	Administrative Support & Waste Management & Remediation Services
Maine School Administrative District No. 35	20-49	2019	Educational Services
National Wrecker Service	20-49	1931	Transportation and warehousing
Piscataqua Landscaping Co	20-49	1979	Administrative Support & Waste Management & Remediation Services
Riverside-Pickering Marine Contractors	20-49	2008	Construction

Table ___. Employers in Eliot who employ 20 or more employees. Source: Maine Department of Labor, Center for Workforce Research and Information

Portsmouth Naval Shipyard

Portsmouth Naval Shipyard (PNSY or Shipyard) is the largest employer in Southern Maine by a wide margin. Employment at the Shipyard can fluctuate but has increased in recent years – 1,300 added jobs from 2016 to 2020 – and its workforce now stands at over 7,600. The next largest employers in Southern Maine – Southern Maine Health Care in Biddeford, University of New England, and York Hospital – all employ between 1,000 and 1,500 workers. Most of the Shipyard's jobs are at the Shipyard itself, but over 1,000 are part of other functions on the naval base.

Eliot is one of the closest communities to the Shipyard. We are home to over 300 Shipyard employees, making Eliot the sixth largest source of Shipyard employees coming from Maine towns, and ninth largest when considering towns in New Hampshire and Massachusetts. About half of these workers make less than \$90,000 and about half make more, showing that the Shipyard supports a wide range of jobs and salary tiers. Eliot can support the shared economic development priorities of the Shipyard and region through the ongoing Joint Land Use Study (JLUS) process. One set of priorities encourages workforce and mixed-income housing to provide more housing options for Shipyard and other workers (see JLUS Polices 29 and 30). We fulfilled another JLUS (and 2009 Comprehensive Plan) policy in November 2023 by changing our zoning to allow commuter park-and-ride lots in the Commercial/Industrial (C/I) district and along Route 236.

RETAIL SALES ACTIVITY IN ELIOT AND THE REGION

Consumer retail sales topped \$1 billion in the Kittery Economic Survey Area (ESA) in 2022 (Table __). While all sectors in the table saw annual increases in the Kittery ESA from 2021 to 2023, substantial sales

TABLE **5.X**

increases can be seen in the building supply, other retail, restaurant, and lodging sectors.

COMMUTING PATTERNS

For more on commuting patterns in Eliot, see Transportation.

ECONOMY

	RETAIL SALES ACTIVITY IN	NELIOT AND THE REGION		
	Retail Sales	Kittery ESA	York ESD	Maine
	Building Supply	\$66,726,000	\$513,613,000	\$4,123,834,000
	Food Store	\$90,057,000	\$525,289,000	\$2,756,164,000
	General Merchandise	\$106,434,000	\$471,469,000	\$4,408,959,000
2021	Other Retail	\$143,979,000	\$508,915,000	\$6,117,588,000
7	Automotive	\$31,744,000	\$692,004,000	\$6,899,251,000
	Restaurant	\$298,038,000	\$799,743,000	\$3,176,167,000
	Lodging	\$192,438,000	\$404,403,000	\$1,592,224,000
	Total Consumer Retail	\$860,673,000	\$3,853,945,000	\$29,074,186,000
	Retail Sales	Kittery ESA	York ESD	Maine
	Building Supply	\$95,017,000	\$432,197,000	\$4,539,419,000
	Food Store	\$94,864,000	\$410,783,000	\$2,885,052,000
	General Merchandise	\$110,085,000	\$441,479,000	\$4,575,973,000
2022	Other Retail	\$178,268,000	\$433,025,000	\$6,325,698,000
~	Automotive	\$44,368,000	\$623,154,000	\$7,124,363,000
	Restaurant	\$312,410,000	\$690,891,000	\$3,547,261,000
	Lodging	\$219,953,000	\$389,162,000	\$1,803,207,000
	Total Consumer Retail	\$1,054,964,000	\$3,399,665,000	\$30,800,973,000
	Retail Sales	Kittery ESA	York ESD	Maine
	Building Supply	\$97,089,000	\$424,982,000	\$4,606,289,000
	Food Store	\$97,060,000	\$424,764,000	\$2,950,865,000
	General Merchandise	\$111,891,000	\$445,294,000	\$4,568,520,000
2023	Other Retail	\$186,303,000	\$451,252,000	\$6,506,982,000
	Automotive	\$45,211,000	\$631,171,000	\$7,508,489,000
	Restaurant	\$324,537,000	\$723,424,000	\$3,789,330,000
	Lodging	\$221,031,000	\$389,370,000	\$1,844,082,000
	Total Consumer Retail	\$1,083,123,000	\$3,478,636,000	\$31,774,556,000

Table ___. Consumer retail sales broken down by economic activity compared across the Kittery Economic Survey Area, York Economic Survey District and Maine from 2021 through 2023. Source: Maine State Planning Office, Maine Revenue Services

Geographic Focus Areas of our Local Economy

ROUTE 236

Route 236 is Eliot's main commercial corridor. Businesses are concentrated in the C/I zoning district between Marshwood Middle School and the Kittery line. There are smaller commercial nodes north of the school. Housing directly on the corridor is limited to senior apartments, a few single-family homes, and legally nonconforming accessory residential uses. Other noncommercial uses include the school and several churches.

Most commercial lots are three acres or larger, reflecting minimum lot size requirements. Lots southeast of Julie Ln. can access municipal water. Most lots are currently on septic systems, though Eliot Commons has a private sewer system that also serves some other developments along its route to connect to the municipal system. Wetlands along the road further constrain development.

In 2022, the Town began to extend water and sewer lines along Route 236. The Route 236 Water and Sewer Extension, paid for with TIF revenues and financed by a Clean Water State Revolving Fund Ioan, is expected to be fully operational at the end of 2025 and provide sewer to commercial lots between Julie Ln. and Bolt Hill Rd. The water line extension is already complete and turned over to Kittery Water District (KWD). The project was to extend all the way to Arc Rd., but due to project cost, the Town's engineering firm recommended deferring the Julie Ln.-Arc Rd. segment to the future.

Table __ below summarizes the current, in-progress, and recommended water and sewer infrastructure along Route 236. The recommended extensions would reach Marshwood Middle School in this plan's horizon.

ROUTE 236 TAX INCREMENT FINANCING (TIF) DISTRICT

In early 2009, established the Route 236 Tax Increment Financing (TIF) District.

Sewer service extension has always been the central infrastructure focus of the TIF. After TIF approval, a TIF Committee and engineering consultants began preliminary study and design of the Route 236 Sewer Expansion Project (referred to in this plan by similar names). However, it was not until 2020 that Eliot voters approved the borrowing authority to finance the construction.

TABLE **5.X**

ECONOMY

WATER AND SEWER INFRASTRUCTURE PROGRESS						
Route 236 Water-sewer Infrastructure	Current	Future				
Municipal water service	Kittery line to Julie Ln.	Julie Ln. to Arc Rd.: deferred part of Route 236 Water-Sewer Project), to be extended as funding allows: recommended in the short term				
Municipal water service	No municipal sewer service Private sewer system serves Eliot Commons and some other properties	Bolt Hill Rd. to Levesque Dr. and Passamaquoddy Ln. to Julie Ln.: Contract 1 of Route 236 Water-Sewer Project – sewer lines installed, expected to be operational at the end of 2025 Julie Ln. to Arc Rd.: deferred part of Route 236 Water-Sewer Project), to be extended as funding allows: recommended in the short term Arc Rd. to Marshwood Middle School: recommended in this plan's horizon				

Table __. Water-sewer infrastructure projects and plans for Route 236

ECONOMIC DEVELOPMENT PRIORITIES FOR ROUTE 236

Complete the Route 236 Water-Sewer Extension
 Project (current and future phases)

- Make zoning changes to encourage a wider mix of land uses and foster economic development
- > Establish basic design standards and guidelines in the land use regulations to improve the look and feel of the corridor over time
- Streamline land use/permitting review for commercial development applications that meet the land use regulations and have limited impacts on abutting properties, traffic, and the environment, while maintaining comprehensive standards for more impactful proposals
- > Maintain a license cap for cannabis establishments
- Improve traffic safety, multimodal conditions, and vehicular access. Continue to encourage park-and-ride options for Shipyard and other commuters

BUSINESS/STAKEHOLDER FEEDBACK

Does Route 236 need changes to better serve businesses? If so, what are they?

"Sewer line is helpful, but where it ends limits the benefit of it – needs to run the length of 236. Took too long – 10 years – to make it happen..."

What can the Town of Eliot do to promote economic development and business opportunities?

"Loosen up restrictions for certain businesses on 236. Now [minimum lot size] is 3 ac. Needs to [be] more [like] 0.5 or 1 ac. Need is for small business commercial/industrial space...Allow putting commercial businesses into residential zoning."

What challenges do you face running the business? Your ideas about what the community could implement to address those challenges?

"These properties [along Route 236] have all paid into the TIF and don't have the benefit of access to the sewer. No water line keeps [my] insurance rates high."

"Make 236 a "friendlier place" to drive. Don't need an extra lane to make a racetrack. Restaurant, breweries up this way maybe? Bring in other customers to Eliot businesses."

What can the Town of Eliot do to promote economic development and business opportunities?

Live work play developments would be beneficial. Bring in different kinds of businesses – small professional offices.

Must combat a history of the Town not being receptive to new or bigger companies.

Hard to bring business here to compete with sales tax free New Hampshire. Do not have the infrastructure to attract business, TIF notwithstanding.



York Woods Tree & Products on 236 in Eliot

Now that the project is underway, it is unlocking economic development potential, but zoning and environmental constraints remain limiting factors.

Encouraging additional development and a greater mix of uses along Route 236 can grow Eliot's tax base. Tax revenue in the TIF district will stay with the TIF until it sunsets, when the revenue will start flowing into the general fund. The expansion of the Eliot Compressor Station in 2020 significantly augmented TIF revenue. A 2013 Select Board fact sheet noted that there are several non-TIF parcels amongst the TIF parcels. It continued: "Should there be new development on a non-TIF parcel, the resulting increment (increase) in property value would go to increase the Town's valuation, and the resulting increase in property tax would go to the Town's General Fund, where it could help to reduce taxes."³

Eliot Commons has its own, separate TIF that includes a 95% credit enhancement clause, meaning that almost all tax revenue goes back to Eliot Commons instead of the Town.

CANNABIS

The prevalence of the cannabis industry along Route 236 is a major change since the 2009 Plan. That plan was finalized the same year the Maine Medical Marijuana Act was approved by Maine voters. Since that nascent stage, the industry has boomed across the state. Eliot opted into medical and adult use cannabis in the late 2010s, and a burgeoning of cannabis businesses followed.

While there continue to be new cannabis establishments licensed in Eliot, there are signs that the industry may be contracting. Community sentiment is also mixed. While voters approved ordinance amendments that allowed cannabis uses subject to land use and licensing regulations, they also approved a cap on the number of licenses (2022) and a series of amendments tightening land use standards. A significant number of Community Survey respondents had an unfavorable opinion on the presence or scale of cannabis uses on Route 236.

To balance community input, accommodation of existing cannabis businesses, and opportunities for cannabis operations to transition to other commercial activity that is desired by the community, economic development priorities for the cannabis industry include:

> Maintain the existing license cap on cannabis establishments. This cap is set up to allow existing cannabis businesses to continue operation but also to be reduced over time as licenses are voluntarily terminated or revoked

"The future of Eliot could include a village area where a community center, municipal buildings and small businesses could co-exist along with increased density of housing. A village where citizens of all ages could meet each other, sit down to chat, have a cup of tea, watch the kids play games, visit the Library, or participate in their government..." - from the 2009 Comprehensive Plan Vision Statement

supporting small businesses

establishments.

Establish incentives for cannabis establishments
seeking to transition to another use that has
community support

 Maintain performance standards that prevent or mitigate negative impacts from cannabis

ELIOT VILLAGE

One way to understand our village center is through its contrasts. It is served by water but not sewer. It has a traditional small town New England character, in contrast to the highway-oriented commercial character of Route 236. It has a sidewalk, but it does not extend to adjacent neighborhoods or nearby destinations. It is less dense than the other half of the village zoning district – South Eliot. It wants to be a place to gather, and it is in some ways, but community members have long suggested ways that it could be better.

When the community was debating the creation of a TIF district, there were differing opinions and proposals on where to put it – Route 236 or the village. The TIF ultimately went to Route 236. There does not need to be, and there rarely is, one exclusive economic center of gravity. The Village has many strengths already, like the Elementary School, Town Hall and the Police/Fire Stations, Hammond Park, the Library, Maine Market, and annual events all help make it an activity hub.

It also has room for improvement. Town Hall is being renovated to better serve the community and municipal operations. The Grange Hall is used for events now but the building and grounds are in disrepair and its future is uncertain. Improvements for people to walk and bike to, and within, the village are in design. It could be better as a gathering place, something discussed in depth in Recreation and Open Space.

Economic development priorities for the Village include: > Develop a Village Plan to recommend recreational,

civic, and infrastructure improvements and ideas for

ALINE MARKET III

Maine Market in the Village offers breakfast, lunch, coffee, and some grocery items. Photo by Brookelyn Gingras, SMPDC

> Improve the Village's role as a gathering place, for example:

- Continued role as an events hub–
 Festival Day, Christmas Tree Lighting, Eliot
 Connects Give Warmth, Wreaths Across America
- > Renovated, expanded Town Hall (in-progress)
- > Dixon Rd. Rec Area placemaking
- > Community pavilion
- > Community garden
- > Maintain the historic, small-town New England feel
- > Support context-sensitive small businesses

> Support context-sensitive "gentle density" in the Village zone, especially for lots served by water and sewer

> Extend facilities for people walking and bicycling out from the Village center on Beech, State, Old, and Moses Gerrish Farmer Roads (and Main St.) to make the Village center more accessible – both for the neighborhoods adjacent to the Village center and for those in other parts of town who can ride their bikes or drive their cars and "park and walk"

- > Seek opportunities for new walking paths, bicycle-pedestrian paths, or other transportation connections, where there are willing landowners, to improve the connectivity, accessibility, and experience of the Village
- > Extend municipal sewer service to the Village center and vicinity, including parts of Beech Rd., State Rd., and Moses Gerrish Farmer Rd./Main St.

SMALLER COMMERCIAL NODES

While Route 236 - particularly the southern section between Marshwood Middle School and the Kittery line - is expected to continue to be Eliot's primary commercial corridor, other areas and nodes contribute context-sensitive commercial activity and provide services for the community. These include:

- > Eliot Village area
- > Route 236-Depot Rd.-Cedar Rd.
- > Route 236-Ambush Rock Rd.
- > Route 236-Route 101 (Goodwin Rd./Dover Rd.)

The Route 236-Route 101 intersection is not a proposed growth area in this plan, but it could be a future enhanced northern gateway into Eliot. It is unlikely that water and sewer service would be extended to the area in the short term, but its future as a "rural crossroads" has promise. Two corners of the intersection have active office uses, and one corner has a former longtime restaurant building that, as of this writing, has a new tenant, Enzo Benzo, a local donut and coffee shop.

Challenges, Issues, and Trends for Our Local Economy

HOUSING AFFORDABILITY

Lack of housing affordable to the workforce in different economic sectors makes it more difficult for some sectors to find workers. Where will teachers, nurses, police officers, firefighters, restaurant workers, and others find a place to live that is within their budget?

ELECTRICAL POWER

In recent years, some businesses have reported that only limited electrical capacity is available to them from CMP. As of this writing, CMP has proposed a new substation along Bolt Hill Rd. to replace the existing Bolt Hill Rd. and Beech Rd. substations and improve reliability and capacity. CMP and SMPDC are collaborating on planning for electrical grid resilience.

ACCESS TO ESSENTIAL GOODS

The Community Survey showed that some people in Eliot do not mind driving to neighboring communities for essential goods, while others wish we had more in town. On balance, though, essential goods are a "Top 5" desired commercial activity in the survey. By updating our zoning and extending infrastructure, we can unlock more opportunities for essential goods retailers and suppliers to locate within Eliot.

2025 PUBLIC SHOWCASE FEEDBACK

Topic: Economy

"Space for a market where small business and restaurants can be"

COMMUNITY SURVEY FEEDBACK



RESPONDED THAT HAVING PLACES TO SHOP AVAILABLE TO THEM LOCALLY IS IMPORTANT

Very Important: 16% Somewhat Important: 35%

COMMUNITY SURVEY FEEDBACK



RESPONDED THAT ACK OF GOODS & SERVICES AVAILABLE LOCALLY IS A SERIOUS CHALLENGE

Strongly Agree: 17% Somewhat Agree: 29% Disagreed: 34%

COVID-19 PANDEMIC

The COVID-19 pandemic dramatically affected every level of the economy: global, national, regional (Northeast/New England), state, metropolitan, and local. Its effects will continue to ripple in the coming years and decades. Some implications for Eliot include:

- > Work location: the increase in the number of remote or hybrid jobs means more flexibility in living choices for some of those workers
- > Supply chain: for Eliot's manufacturers, contractors, wholesalers, and retailers, what does the near future look like for getting the products, materials, and equipment they need in a timely manner for their business to thrive? Will there continue to be supply chain disruptions like the major ones that resulted from the pandemic?

BROADBAND INTERNET

In the wake of the guarantine lockdowns brought about by the COVID-19 pandemic, it has become clear that broadband, or high-speed internet service, is an essential commodity for full participation in modern life. Fast and reliable internet connection provides opportunities ranging from telehealth and remote work to receiving education and maintaining connections with family, friends, and community events. Broadband is defined by the Federal Communications Commission (FCC) as download speeds of at least 100 megabits per second (Mbps) and upload speeds of at least 20 Mbps; however, the Maine Connectivity Authority (MCA) defines broadband as at least 100/100Mbps upload and download speeds. Using a video conference call as an example, your internet download speed affects how well you can see and hear other people in the call and the content they are sharing, while your upload speed affects how well the other call participants can see and hear you and any content you are sharing. Broadband availability in a community has been shown to bolster

economic prosperity, raise real estate values, attract and retain young families, promote civic engagement, and support aging in place.

According to MCA data, 56% of Eliot's connection locations are served with broadband internet, which is provided by either high-speed cable or fiber infrastructure. By comparison, only 25% of internet service locations statewide meet the state standard for broadband internet connectivity. Another 43% of locations in Eliot are considered underserved, which are connected using cable, satellite or fixed-wireless services that provide internet speeds between 10/10Mbps and 100/100Mbps. The remaining 1% is made up of 13 locations that are considered unserved due to having speeds less than 10/10Mbps, and 38 locations that are not connected to any internet service. These unserved and underserved locations are primarily concentrated in Eliot's northwestern geography, between Route 236 and the Piscataqua River north of Sturgeon Creek.

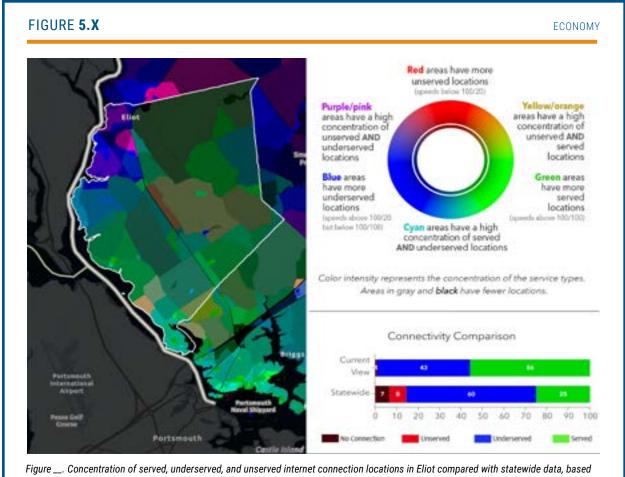


Figure ___. Concentration of served, underserved, and unserved internet connection locations in Eliot compared with statewide data, based on June 30, 2022 FCC Broadband data collection. Source: Maine Connectivity Authority Public Viewer4; spatial data provided by Esri, TomTom, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, EPA, NPS, USDA, USFWS

Commercial and Industrial Land

LAND SUITABILITY FOR COMMERCIAL AND INDUSTRIAL DEVELOPMENT

Route 236 is likely to continue to be Eliot's main commercial corridor for the foreseeable future.

Constraints include:

> Wetlands along Route 236 limit development. Small alterations of wetlands to facilitate commercial development might be more palatable if the Town adopts a local wetland regulation program, where the alteration is minimized to the extent possible and mitigation or compensation for those wetland impacts might be directed toward preserving wetlands in other parts of town

 Several parcels are already built out – but through zoning updates and infrastructure investment, commercial space can grow through more intense development and redevelopment > Traffic safety is a concern for access to businesses on Route 236, with no center turn lane and higher speeds of traffic. The recent Route 236 Corridor Studies' traffic safety improvements are discussed further in <u>Transportation</u>

> The current **zoning** in the C/I district prohibits most housing and requires large lot sizes (3 acre minimum) and frontage (300 ft. minimum)

> Lack of public water and sewer infrastructure has constrained development on Route 236, though new water and sewer lines from Bolt Hill Rd. to Julie Ln. are, as of this writing, expected to come online by the end of 2025

> There are no known or suspected brownfield sites identified in Eliot at this time, but potential candidate sites include derelict gas stations, automotive repair shops, or other likely sources of ground contamination.⁵ SMPDC offers brownfield planning and cleanup assistance, should that be needed

ECONOMY

FIGURE **5.X**



Figure _. Land zoned commercial-industrial (C/I zone) in Eliot. The light blue (southeasternmost area) is in the C/I zone and approximately the proposed new Mixed Use growth area. The dark blue (northwest of Beech Rd.) is in the C/I zone and is proposed to remain that way.

COMPATIBILITY OF COMMERCIAL AND INDUSTRIAL DEVELOPMENT WITH SURROUNDING USES AND LANDSCAPE

The zoning and site plan review standards seek to ensure that commercial development is compatible with the surrounding landscape and adequately buffered from residential uses. They include:

- > A longer, 100 ft. setback for commercial uses in the C/I district abutting residential uses
- > Standards for preventing or minimizing glare, noise, and odor
- Standards for site access, driveway location, etc.
 The Planning Board may require a traffic study
- Restrictions on commercial and industrial development in the shoreland zone
- Specific additional standards for uses such as cannabis establishments, earthmoving operations, and large-scale solar arrays

Economic Development Priorities

By tying together community input gathered for this plan, local economic development efforts already underway, and regional economic development strategies, we arrive at some key economic development priorities for Eliot within the horizon of this plan. These are just highlights; they and other priorities expanded upon in the Goals, Policies, and Strategies.

BUSINESS COLLABORATION & INFORMATION SHARING

The Town can help businesses by establishing a formal relationship with them and facilitating information sharing. A business license program and business directory could help promote businesses to the public and help the Town send uniform communications to businesses on topics of interest.

LOCAL FARMS, LOCAL PRODUCTS, AND FOOD

We can build on our local food assets to make local farms, local farm products, and food a pillar of our economy. Our food and farm economy also includes restaurants, food trucks, farm and garden supply stores, a specialty ingredient supplier, and limited groceries offered at convenience stores and markets. A future farmers' market and community garden would blend local food with a sense of community. Bringing back a grocery store is a desirable element expressed by public input, though it is uncertain what type of grocery store could be sustained by the local market. A food cooperative – especially one that includes local and regional farm products – is one grocery store model that might be favorable for the community.

BUSINESS/STAKEHOLDER FEEDBACK

What can Eliot do in the future to promote economic development and business opportunities?

"One of the biggest things is measures to slow speeds in this section of Route 236...What customers complain about more than anything is how dangerous it can feel pulling in and pulling out of the lot."

"Streamlining the permitting process would make things easier."

"Make Eliot more of a destination."

2025 PUBLIC SHOWCASE FEEDBACK

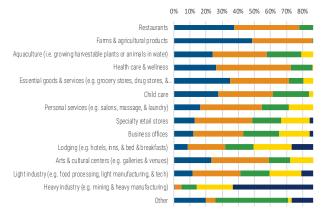
Topic: Economy

"It would be awesome to have a small grocery store or food co-op (like Golden Harvest) in the area by the Post Office. Also support more small business like Maine Market..."

"Hannaford or other grocery store would be great"

COMMUNITY SURVEY FEEDBACK

TYPE OF COMMERCIAL DEVELOPMENT IN ELIOT



■ Very desirable ■ Somewhat desirable ■ Uncertain ■ Little desirability ■ Not desirable

Top 5 responses (% desirable):

- > Farms & agricultural products (86%)
- > Restaurants (78%)
- > Health care & wellness (73%)
- > Essential goods & services (71%)
- > Child care (62%)

Figure _. Responses to Community Survey Question 7: "Please rate your desire for the following types of commercial development in Eliot." (see Appendix for write-in responses to "other")

OUR WATERFRONT

The Piscataqua River has always been important to our local economy. While its economic role has changed over time, the river today continues to foster economic and community activity, such as aquaculture, boating, boat maintenance and storage, fishing and lobstering, waterfront events, and tourism.

NEW INFRASTRUCTURE

We can increase economic development opportunities in our commercial zone with ongoing and future phases of the Route 236 Water and Sewer project. The Route 236 transportation improvement project now in design, managed by DOT with the Town as a stakeholder/ partner, is an opportunity to improve the traffic flow, safety, and aesthetics of the corridor. Properties on and near Route 236 can replace wells and septic systems with municipal water and sewer service. Turn lanes and multimodal improvements can improve access to businesses while maintaining mainline traffic flow. Planted medians can make the corridor more attractive for visitors and encourage less speeding.

MIXED USE ZONING

Upgrading our zoning by carving out a Mixed Use zone in part of the existing C/I zone (from Bolt Hill Rd. to Beech Rd.) will increase development opportunities, add muchneeded housing, promote small businesses, improve the look and feel of the corridor, generate new property tax revenue, and shape the form of development to bring about, over time, a vibrant mixed use district that serves the community and is an attractive place to visit. It also concentrates growth into an area that is mostly already built up, but underdeveloped.

See the Future Land Use Plan for further discussion.

VILLAGE PLACEMAKING AND INFRASTRUCTURE

Creating a Village Plan can channel the enthusiasm in the community about placemaking ideas, such as a community pavilion, memory walk, and community center. Extending sewer service to the Town Hall/Fire Station/Police Station complex and Elementary School can help the Village thrive long-term, as can improving walking and bicycling connections. With its smalltown, New England character, context-sensitive small businesses, and gentle density, the Village can maintain and augment its role as a gathering place, events and activity hub, and an asset for economic development.

See Recreation and Open Space and the Future Land Use Plan for further discussion.

BUSINESS/STAKEHOLDER FEEDBACK

What can Eliot do in the future to promote economic development and business opportunities?

"Better communication with businesses that could be impacted by road [construction] or other development in the immediate area...Promote communication with Town businesses from Town Hall.."

What other input or comments do you have for the Eliot Comprehensive Plan Update?

"Encourage a weekly summer farmers' market at Hammond Park"

"Survey local farms in Eliot and again provide publicity for their offerings"

"Help retain and develop our local agricultural base"

"We love Eliot and would like to be a part of the community long term. We give it a 4 out of 5. We need more patronage if we can continue to do business here."



Boats stored at Safe Harbor Marina (formerly Kittery Point Yacht Yard). Photo by Brookelyn Gingras, SMPDC

COMMUNITY SURVEY FEEDBACK



RESPONDED THAT ENCOURAGING COMMERCIAL DEV. IN SPECIFIED AREAS OF TOWN IS DESIRABLE

Somewhat Desirable: 34%

CONNECTING OUR MIXED USE ZONE WITH OUR VILLAGE

We can bridge the complementary energies of the Village zone and the planned new Mixed Use district by recognizing that their connecting roads – Beech Rd. and Bolt Hill Rd. – are assets. The idea is to rezone this area as a transitional area, with gently increased density (reducing the current 2-acre min. lot size); maintain the primarily residential character while allowing context-sensitive small businesses (home businesses, accessory commercial units, etc.) and delivering the project (now in design) to install bicycle and pedestrian infrastructure on State and Beech Rds.

See the Future Land Use Plan for further discussion.

A PLACE TO STOP ON THE WAY

By accomplishing the above priorities, we can make Eliot a more appealing stop for people passing through. This could be for commuters getting coffee in the morning or stopping for dinner or groceries on the way home. Or it could be for weekend travelers stopping for food or other provisions. These stops might involve new turning movements or detours into the Village, but they are generally not adding overall traffic to the community, since they would be passing through anyway.

PORTSMOUTH NAVAL SHIPYARD

As the region's largest employer by far, PNSY will continue to be central to the economy of the region. That means that solving land use, housing, and economic development issues related to the Shipyard involves regional coordination. As a community with about 300 Shipyard workers, we can continue to play a role in that regional effort, guided by the JLUS partnership.

SMALL BUSINESSES

Community input and the Economic Development Subcommittee pointed to the importance of encouraging small businesses in Eliot, including land use regulations that encourage a variety of sizes of business space to accommodate the needs of different small businesses. This input favors smaller business spaces along Route 236 and disfavors big box stores.

YOUTH SURVEY FEEDBACK

What would you like to see more of in Eliot? (Check all that apply) "Places to shop, restaurants and cafes. Sidewalks and bike trails. Places to gather."

HOME-BASED BUSINESSES

As a primarily residential community, it is important to continue to allow, and incentivize through more streamlined permitting, people to run businesses out of their homes. Home-based businesses tend to have low startup costs and cost efficiencies. However, it is also important to limit the scale and impact of home-based businesses so that they accord with their residential context. Home-based businesses are discussed further below.

LOCAL ECONOMIC DEVELOPMENT CAPACITY

This could be in the form of a renewed Business Development Committee, partnership with a nonprofit or other external organization, or creating Town staff capacity that focuses on economic development.

Local and Regional Economic Development Plans

Eliot is in the federal Economic Development District administered by the Southern Maine Planning and Development Commission (SMPDC), which uses a framework established by the U.S. Economic Development Administration. Every five years, SMPDC drafts a Comprehensive Economic Development Strategy (CEDS), setting forth policies and action items intended to help grow the region's economy and strengthen its economic competitiveness. The most recent CEDS, drafted in 2022⁶, includes several actions relevant to Eliot's local economy:

- > Strategy 3: Forge Strategic Partnerships with Major Employers
- > **Action 4.1:** Support Efforts by Municipalities to Revitalize Downtowns and Commercial Districts
- > Action 5.3: Improve the Region's Public Transit and Alternative Transit System
- > Action 8.2: Support Alternative Tourism Businesses

The Maine Department of Economic and Community Development (DECD) adopted a ten-year economic plan in 2020 that includes several applicable strategies, such as Action B5: Promote quality of place investments, and Action E3: Expand production of workforce housing in Maine.

This comprehensive plan's recommendations align with the above strategies. For example, the proposed Mixed Use zone seeks to revitalize part of our commercial district, promote quality of place, and expand housing opportunities. The proposed Village plan and recreational amenity ideas seek to enhance placemaking in Eliot Village. Transportation recommendations include the improvement of public transit and social services transportation.

Visiting and Tourism

IMPORTANCE TO THE LOCAL ECONOMY

Eliot is part of a county, region, and state where tourism is an economic pillar. Tourism is focused on the coastal communities in York County, but the inland communities have plenty of places of interest for visitors. Beach trippers may pass through the inland communities or look to them for lodging or dining options. People employed in the Leisure & Hospitality sector need affordable places to live.

While Leisure & Hospitality may not be the top economic driver in Eliot, because we are in a region where it is one of four core sectors, it is still important for our economy.

LODGING IN ELIOT

Eliot does not have any commercial hotels. Green Acre has its own 21-room Sarah Farmer Inn and several guest houses. There used to be at least two traditional bed and breakfasts on Goodwin Rd. In 2011, the Planning Board approved a site plan amendment for a 68-room hotel at Eliot Commons, but it was never built. The region has several hotel clusters, not surprisingly located in areas attractive for lodging, such as the beaches, downtown Portsmouth, and along Route 1. Understandably, given the market pull towards those tourism-heavy areas, inland York County has few hotels (primarily boutique establishments).

Bed and breakfasts and other lodging businesses are allowable, subject to Planning Board site plan review (SPR), in all zoning districts, though in some zones they must be home-based businesses. Motels are allowable SPR uses in only the Commercial-Industrial zone.

SHORT-TERM RENTALS IN ELIOT

AirDNA, the subscription-based analytics platform that tracks short-term rentals (STRs) for STR companies AirBNB and VRBO, can provide insights into the STR market in Eliot. The data was accessed in Summer 2024. AirDNA groups Eliot and Kittery in the same "submarket".

The Town does not have comprehensive short-term rental regulations. However, some STR limitations are embedded in other regulations (Table __).

TOURISM IN MAINE, 2019

Total visits to Maine: 37 million

- > Total visits to Maine beaches: 13 million
- > Total Maine beach visits with overnight stay:
- 5 million (40% of visits)

Total spending by category related to Maine beach visits

- > Retail sales: \$436 million
- > Restaurant/lodging: \$906 million
- > Gasoline transport: \$125 million
- > Recreation: \$163 million
- > Total: **\$1.6 billion**
- > Share of state spending: 25%

Jobs supported by Maine beach visitation: 27,659

Source: Maine Office of Tourism, reported in SMPDC 2022-26 CEDS, Figure 12



"...the Leisure & Hospitality sector is one of the four core components of the Southern Maine economy. While parts of this sector are influenced by the yearround residential population, its hotels are entirely dependent on tourism, as are many restaurants, retailers, entertainment, and cultural businesses. Seasonal/tourism activity is most concentrated in coastal communities, particularly Old Orchard Beach, Kennebunkport, Wells, Ogunquit, and York." - CEDS

TABLE **5.X**

SHORT-1	SHORT-TERM RENTAL REGULATIONS						
Town Code Section	Subject	STR regulation					
45-459	Accessory dwelling units (ADUs)	Requires greater setbacks for new detached ADUs to be used as STRs compared to those that won't be used as STRs					
45-464	Affordable housing developments (AHDs)	Prohibits affordable units in AHDs from being STRs					
45-137	Tiny homes on wheels	Prohibits tiny homes on wheels that are principal dwelling units, or that have temporary residential occupancy, from being used as an STR					

Table ___. Selected STR land use regulations in Eliot

ECONOMY

ECONOMY

STR MARKET INDICATORS AS OF SUMMER 2024: KITTERY + ELIOT SUBMARKET

Data accessed in early August 2024, reflecting July 2024 data

177 total listings in the Kittery-Eliot submarket

- > Approximately **50** are in Eliot
- > **121** are considered "active", a 5% year-over-year increase from July 2023

The STR submarket is performing poorly

> with a **37 out of 100 score** driven by poor scores on revenue growth and seasonality (i.e. how consistently bookings occur throughout the year instead of only peak seasons)

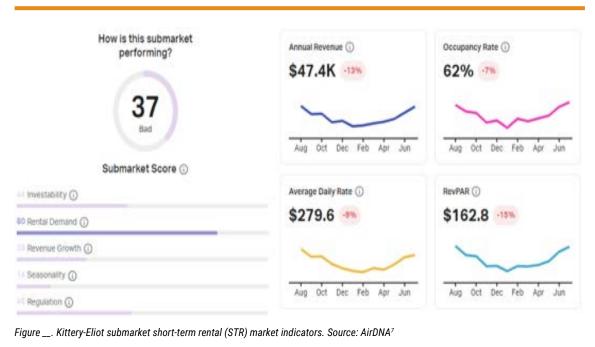
Median annual revenue, occupancy rate, average daily rental rate, and average daily revenue per available rental (RevPAR)

- were all down over the past 12 months, relative to the previous 12-month period
- > Each indicator, not surprisingly, shows a **dip during the winter months**

The occupancy rate

- > peaks above 75% in the summer
- > falls below 50% in the winter

FIGURE **5.X**



Supporting the Tourism Economy YORK REGION CHAMBER OF COMMERCE

Eliot is a participating member of the York Region Chamber of Commerce, which publishes a visitors' guide and dining guide.⁸ The guide includes the following Eliot destinations:

> Boat Basin/Dead Duck for boating access

 Sandy Hill Farm for its fruits, vegetables, flowers, and light shows – the largest fall and winter light shows in New England

- > #8 Schoolhouse Museum
- > William Fogg Library
- > Green Acre Baha'i Center of Learning
- > Houses of famous residents
- > Scenic views on River Road
- > Walking trails in Douglas Woods

Eliot's charm extends beyond its scenic riverside byways. The area once known as Kittery's Upper Parish became the Town of Eliot in 1810. Farming, brickmaking, and ship building employed many residents in the 1800's. The world's fastest clipper ship, the Nightengale, was built at Hanscom Shipyard in Eliot in the 1850's. The Town's rich history is seen at attractions like the #8 Schoolhouse Museum, William Fogg Library, Green Acre Baha'i Learning Center, and the Eliot Boat Basin. Homes of famous residents dot the Town (John Hill, Maine governor and Moses Gerrish Farmer, electrical inventor.) Visitors enjoy scenic views of Dover Point, NH from River Road near Sandy Hill Farm, site of the Shapleigh family settlement, and walking trails like Douglass Woods in Eliot's center.

Today Eliot is a thriving residential community of over 7,000. Harold Dow Highway (State Route 236), the gateway to York County's Lake Region, runs through Town. -York Region Chamber of Commerce, 2024 Visitors' Guide



Green Acre Baha'i Learning Center

BUSINESS/STAKEHOLDER FEEDBACK

BUSINESS OWNER IS IN ELIOT BUSINESS PARK What do you dislike? [about having a business in Eliot] "Tremendous lack of walk-in traffic even though business is on Route 236..."

What challenges do you face running the business? Your ideas about what the community could implement to address those challenges? "Rent tripled to \$1800/mo. in four years."

"Lack of walk-in traffic. Road construction didn't help."

"Many long-term tenants leaving this business complex."

What can the Town of Eliot do to promote economic development and business opportunities? "...it's all about affordable housing."

BUSINESS IS ON ROUTE 236

What challenges do you face running the business? Your ideas about what the community could implement to address those challenges?

"Challenges are marketing and networking. If we had a chamber of commerce that would help [me] networking..."

Does Route 236 need changes to better serve businesses? If so, what are they? "Lower the speed limit – [my mailbox was] taken out 5 times this past summer."

"Thanks the Town of Eliot re: construction. Thankful for the work that was done."

"Looking forward to sidewalks on Beech Rd."

What can the Town of Eliot do to promote economic development and business opportunities? "Fewer cannabis shops, more kinds of businesses, new grocery store."



Chickadee (formerly White Heron Maine) on 236

PLACES TO STOP ON ROUTE 236

The Visitors' Guide points to another role of Route 236. In addition to its importance for the Shipyard commute, it is a route for vacation travel. This can be an economic asset. If Route 236 had more places to stop on the way to the lakes or other destinations north (e.g. restaurants, essential goods, outdoor provisions, etc.), it would bring business and tourism dollars to the local economy. Such stops do not add traffic to Route 236; the traveler would have driven through anyway.

AGRITOURISM

Agritourism has brought people to Eliot for memorable farm-based activities, like the annual Antique Tractor & Engine Show at Raitt Homestead Farm Museum or Winter Wonders at Sandy Hill Farm. <u>Agritourism is</u> <u>discussed further in Agriculture and Forest Resources</u>.

Promoting Home-based Businesses in Eliot

As Eliot is a primarily residential community that values small businesses, home-based businesses are an important part of our economy and character. Commercial space is limited to Route 236 and some smaller nodes of commercial activity. Buying commercial property or renting business space may be cost-prohibitive.

Our land use regulations related to home-based work are outdated and confusing. There are three permit categories: home office, home occupation, and home business.

> Home offices require Code Enforcement Officer approval, but the home office regulations were developed in 2001, and the nature of working from home has changed since then. The Town could reduce the regulatory burden by getting out of the business of municipal land use regulation of simple employee work-from-home environments

> Counterintuitively, the zoning only allows home occupations on properties in the Rural or Suburban district that about Route 236 (Section 45-290). This seems self-defeating, since relatively few of Eliot's homes meet those criteria. Home occupations are prohibited in the Village district, where the greatest residential density is

> Planning Board site plan review is required for every home business, but a one-size-fits-all review requirement may not reflect the wide variety of impacts of different home business types. Less impactful home business proposals should be considered for expedited review

SECTION 10-32 OF THE TOWN CODE (AGRICULTURAL TOURISM)

The purpose of this article is to promote the viability of farms and ranches while protecting and maintaining the town's rural character and preserving farmland. Agritourism presents a unique opportunity to combine aspects of tourism and agriculture to provide a number of financial, educational and social benefits to tourists, producers and communities. Agritourism gives producers an opportunity to generate additional income and an avenue for direct marketing to consumers. In addition, agritourism provides educational experiences that connect visitors to scenic landscapes and the local community. Farmland and forestland preservation ensures that future generations will have the opportunity to visit local farms, learn more about agriculture, participate in recreational activities and enjoy a local food supply. Furthermore, agritourism provides incentives for producers to remain in agriculture. Agritourism operations are unique, local businesses, which cannot later be "outsourced" to other communities.



As of this writing, the Planning Board is working on an overhaul of these regulations.

Using our Community Assets for Economic Growth

Community and Youth Survey respondents picked our small-town character, quality of life, proximity to larger towns and the ocean, and open space and wildlife areas as top reasons for living here. Schools, proximity to employment, and friendly people also received a sizable number of votes (each had over 100 in the Community Survey).

Investing in community assets can help to maintain and enhance quality of life. Quality of life is a good by itself, but it is also a driver of economic growth. It makes people want to live here and visit here, sustaining a strong real estate market and a draw for visitors. Here are some ways we are using community assets for economic growth. These are detailed further in other parts of this plan.

- > We are renovating William Murray Rowe Park and envisioning improvements to our other parks
- > We are updating our Open Space Plan and augmenting the Town's Land Bank reserve

> We hold Festival Day each September, where people run a road race, watch a parade, play games, buy food and products from local businesses, and visit the tables of community organizations

- > We hold gatherings around the holidays, like the Wreaths Across America truck convoy and the Christmas Tree Lighting
- > We have farm stands and stores and farm-based events (agritourism)

 We promote and educate about our historic buildings and places, primarily through the efforts of the Eliot Historical Society

 > We are investing in infrastructure and proposing a Mixed Use zone to incentivize more economic development on Route 236

> We are participating in the Eastern Trail Feasibility Study to plan an off-road route for the Eastern Trail and East Coast Greenway through Eliot

> We are designing an extension to our Village area's walking and bicycling network

 Last but certainly not least, we help community members in need thanks to the efforts of many community and regional organizations and Town programs

COMMUNITY SURVEY FEEDBACK

WHAT DO YOU LIKE ABOUT LIVING IN ELIOT

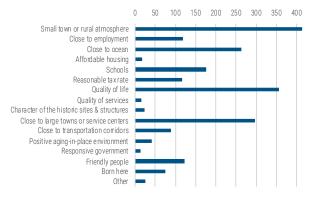


Figure ___. Responses to Community Survey Question: Why do you enjoy living in Eliot? Select your top three reasons.

YOUTH SURVEY FEEDBACK

What do you like about living in Eliot? (Check all that apply) Write-in response excerpts under "Other":

"There are no good places to shop. No grocery store. More churches than anything else."

"Easy access to convenient stores"

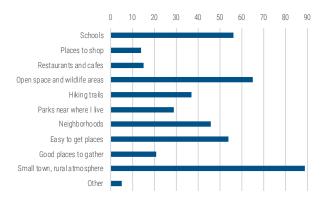


Figure __. Responses to Youth Survey Question: What do you like about living in Eliot?



ELIOT ECONOMY GOALS, POLICIES & STRATEGIES

Goal, Policy, or Strategy	Description	Responsibility or Partnership	Implementatio Timing					
Goal 1	Incentives for business development that encourage commer of Eliot residents, increase job opportunities, and promote ov							
Policy 1	Update obsolete zoning regulations to promote economic development							
Strategy 1	Update the zoning along Route 236 as described in Land Use Goal 1, Policy 1, which includes allowing mixed-use development and more residential uses	Planning Office, Planning Board, Select Board, Town Meeting/Election	2025					
Strategy 2	Update the zoning regulations concerning commercial activity in the suburban and village districts	Planning Office, Planning Board, Select Board, Town Meeting/Election	Short					
Strategy 3	Update the zoning regulations to clarify and simplify the Town's zoning and performance standards for home offices, home occupations, and home businesses	Planning Office, Planning Board, Select Board, Town Meeting/Election	Short					
Policy 2	Invest in infrastructure improvements to battle back the general disli	ce of Route 236	1					
Strategy 1	Extend water and sewer service along Route 236 to Marshwood Middle School as described in Land Use Goal 1, Policy 2	Town Manager, Select Board, CIP Committee, Public Works, Planning Office, Consultant, Contractor	Short-mid-long					
Strategy 2	Continue to partner with MaineDOT on its current projects to improve Route 236 traffic flow and safety, as described in Transportation Goal 2, Policy 1, seeking public input on the design of road improvements and providing updates to the community on these efforts	Town Manager, Planning Office, Public Works, DOT, KACTS	Short-mid					
Strategy 3	Communicate to residents the efforts underway to beautify the road	Town Manager, Public Works, Planning Office	Ongoing					
Strategy 4	Work with CMP to increase electrical capacity and reliability serving the Route 236 corridor and other parts of town	Town Manager, Planning Office, CMP	Mid					
Strategy 5	Identify the methods to finance economic-development-related public investments. Candidate sources of financing include, but are not necessarily limited to: TIF funds, bonds, grants, loans, impact fees, and budget reserves	Town Manager, Finance Director, Select Board, Budget Committee,	Ongoing					
Goal 2	A formal relationship between the Town of Eliot and individua	l commercial entities	in town					
Policy 1	Maintain a database of information about commercial entities in town	<mark>, for analysis, health, and</mark>	l safety					
Strategy 1	Develop and maintain a database of commercial/business applications to the Planning Board	Planning Office	Ongoing					
Strategy 2	Create and maintain a directory of businesses and commercial entities for the public	Citizen volunteers, nonprofits, York Chamber of Commerce, Town staff	Ongoing					
Policy 2	Create formal communications channels with commercial entities							
Strategy 1	Implement a business license program	Town Manager, Town Clerk, Planning Office	Short					
Strategy 2	Implement tools on the Town website for businesses to find information	Town Manager, Planning Office	Short					
Strategy 3	Identify a local entity to focus on economic development in Town and provide sufficient financial commitment for that entity. This could include re-establishing a Business Development Committee, working with a local nonprofit organization, or creating and budgeting for a Town staff economic development position	Town Manager, Select Board	Mid					

ELIOT ECONOMY GOALS, POLICIES & STRATEGIES

	Goal, Policy, or Strategy	Description	Responsibility or Partnership	Implementation Timing
GOAL 2	Goal 2 continued	A formal relationship between the Town of Eliot and individua	l commercial entities	in town
	Policy 4	Coordinate with regional economic development organizations to sup	port economic developm	ent
	Strategy 1	Encourage the efforts of the York Region Chamber of Commerce to recruit Eliot businesses	Town Manager, Select Board	Ongoing
	Strategy 2	Participate in regional economic development planning efforts through the work of Southern Maine Planning and Development Commission or other organizations, including, but not limited to, the ongoing Joint Land Use Study (JLUS) coordination to support the Portsmouth Naval Shipyard	Planning Office, Town Manager	Ongoing
GOAL 3	Goal 3	The Village area as a place where people love to gather and w	vhere small businesse	s thrive
	Policy 1	Make the Village area more of a gathering place		
	Strategy 1	Develop a Village Plan to recommend recreational, civic, and infrastructure improvements and ideas for supporting small businesses	Planning Office, Town Manager, Recreation Department, Planning Board, Aging in Place Committee, Select Board	Short
	Strategy 2	Extend municipal sewer service into the Village center, as described in Land Use Goal 1, Policy 2	Town Manager, Select Board, CIP Committee, Public Works,Planning Office,Consultant, Contractor	Mid
		Recreation & Open Space Goal 1, Policy 2, regarding a gathering place next	1	1

ECONOMY ENDNOTES

¹ <u>https://www.maine.gov/labor/cwri/</u>

²See link above

³The fact sheet and other information are available at: <u>https://www.eliotme.gov/331/TIF-District-Route-236</u>

⁴<u>https://www.maineconnectivity.org/public-viewer</u>

⁵ Potential sites were noted in a 2020 report conducted by a team led by SMPDC. The report is available from the Planning office upon request

⁶ Available via: <u>https://smpdc.org/economic</u>

⁷ <u>https://www.airdna.co/</u>. A subscription is required to access some data. This was the latest data available at the time an active subscription was temporarily obtained to retrieve this data.

⁸Available at: <u>https://www.gatewaytomaine.org/</u>

AGRICULTURAL & FOREST RESOURCES

Agriculture is central to our community's identity and character. We support small farms, locally grown and locally processed products, and agritourism.

Farms in Eliot, York County, and Maine

In 2017, there were 19 farm operators in Eliot, according to the Census of Agriculture.¹ This is three more than the number reported in the 2009 Plan, which used 2002 Census of Agriculture data.

While 2017 is the most recent year for which data is available at the geography of the ZIP code, where we can zoom in on Eliot, the Census of Agriculture has 2022 data at the County level, so we can look at how farming has changed in York County in that five-year period (Table __). Farms and farmland decreased, while the market value of farmland increased by almost 50%. Farms have gotten smaller, on average, but average farm sales are up.

The county statistics paint a picture of farmland loss, and risk of loss, to development. Maine Farmland Trust (MFT) articulates this at a statewide level:

Farmland in Maine is at risk. The 2022 Census of Agriculture showed that in the decade spanning 2012 to 2022, Maine lost almost 230,000 acres of farmland and more than 1,100 farms.

Maine is losing farmland to all types of development... one of the most significant threats to farmland in Maine is low-density residential development, which fragments the agricultural land base and limits the production and marketing options for an area's remaining working farms.²

MFT outlines the challenges facing Maine farms and farmers³:

- > Farmland loss to development
- Increasing difficulty of access to the land, especially for beginning, small-scale, low-income, and historically underserved producers
- Limited agricultural infrastructure and processing capacity

ELIOT AGRICULTURE & FOREST RESOURCES GOALS



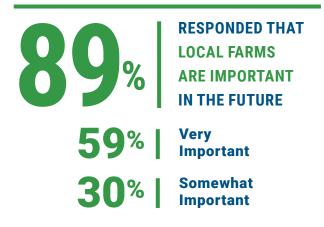
Farms and forests that are protected from development and other threats



A local farming economy that continues to thrive and is a central part of Eliot's economic identity

See the end of this section for the full table of goals, policies, and strategies.

COMMUNITY SURVEY FEEDBACK





- Increasing frequency of extreme weather events caused by climate change
- > Irregular and dramatic price changes for commodity crops due to national and global market forces
- > PFAS contamination of soils and water systems

AGRICULTURE AND FOOD SECURITY COMMISSION FARM GUIDE

The Eliot Agriculture and Food Security Commission (AFSC) has produced a guide with a map and list of active farms in Eliot, including their products. The farms are spread out over town and collectively offer a variety of products to Eliot residents and visitors (Table __). Thirteen farms are listed in the guide. Most have social media presences, and a few have websites.

Current Use Tax Program Enrollment

Eliot has 1,868 acres in the state's Farmland, Open Space, and Tree Growth Current Use Property Tax Programs.⁴ This is an increase of 100 acres (6%) from the 1,768 acres reported in the 2009 Plan. Of this acreage, 1,394 is in Farmland (Figure __), and 1,421 is in Farmland or Open Space, 15 acres less than reported in the 2009 Plan. 447 is in Tree Growth (Figure __), a 35% increase from the 332 acres reported in the 2009 Plan.

96 of the acres removed from Farmland (in 2019) are on a parcel that is now part of the conserved Goodwin Forest, which is owned by Great Works Regional Land Trust (GWRLT).

The Current Use Tax Program in Eliot

- > Total acres in Farmland Tree Growth: 913
- > Total assessed value in Farmland Tree Growth: \$390,100
- > Total acres in Farmland (non-Tree-Growth): 481
- > Total assessed value in Farmland (non-Tree-Growth): \$168,500
- > Total acres in Tree Growth: 447
- > Total assessed value in Tree Growth: \$169,600
- > Total acres in Open Space: 27
- > Total assessed value in Open Space: \$88,900
- > Total acres in Farmland/Tree Growth/Open Space Current Use Property Tax programs: 1,868

TABLE 6.X

AGRICULTURAL & FOREST RESOURCES

FARMING CHANGE IN YORK COUNTY							
York County Statistic	2017	2022	Change	Percentage Change (2017-22)			
Farms	735	689	-46	-6%			
Land in farms (ac)	61,039	50,741	-10,298	-17%			
Avg. size of farm (ac)	83	74	-9	-11%			
Est. per-acre market value of land (includes buildings)	\$5,120	\$7,643	\$2,523	49%			
Market value of agricultural products sold, avg. per farm	\$38,846	\$45,892	\$7,046	18%			

Select farm statistics for York County, 2017-2022. Source: U.S. Census of Agriculture, 2022 Census Volume 1, Chapter 2: County Level Data; York County; Tables 2 and 8.

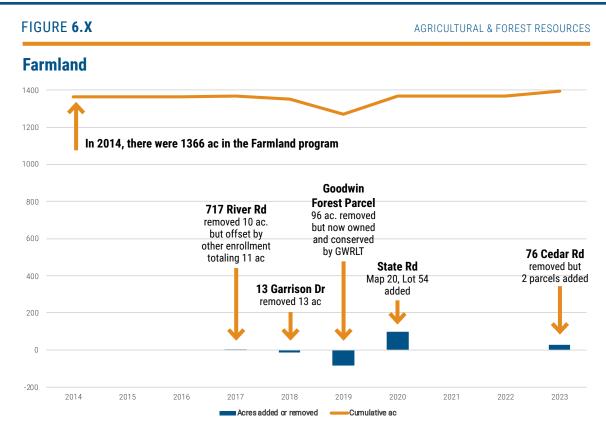
TABLE **6.X**

AGRICULTURAL & FOREST RESOURCES

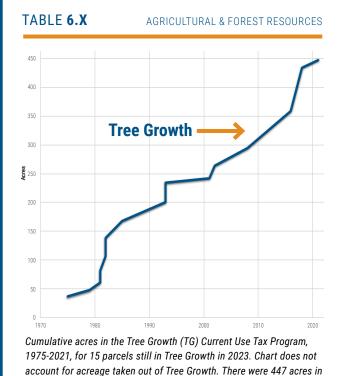
ACTIVE FARMS IN ELIOT

Farm	Location	Types of Sales Products Sold
Back Fields Farm	online only	Maple syrup
Sandy Hill Farm	34 Sandy Hill Ln.	Farm stand, agritourism (light show)
Shilo Farm	88 Beech Rd.	Produce, yoga, herbal products
John Bartlett Farm	218 Brixham Rd.	CSA, farm stand
Shipmast Farm	88 Worster Rd.	Honey
Sturgeon Creek Farm	1651 State Rd.	Farm stand, agritourism (visit lambs)
Backyard Garlic	1336 State Rd.	Garlic grinders, refills
Greenlaw Gardens	110 Wilson Rd. (Kittery and Eliot)	Farm stand
Bondgarden Farm	255 Depot Rd.	Beef
Walker Keay Farm	111 Hanscom Rd.	Farm stand, CSA
Spinney Creek Shellfish	27 Howell Dr.	Oysters, clams
Birds and Bees Farm	139 Brixham Rd.	Farm stand Soap, jam, eggs, honey, produce
King Tut's Cider	815 Goodwin Rd.	Seasonal farm store

Eliot farm information in the AFSC guide. CSA = Community Supported Agriculture (see description later in this chapter)



Cumulative acres in the Farmland (F) Current Use Tax Program, 2014-2023, including additions and removals. There were 1,394 acres in Farmland in 2023. Source: Town Assessor.



Tree Growth in 2023. Source: Town Assessor.

OPEN SPACE			
Location	Acreage	Value	Year enrolled
99 Frost Hill Rd	6.0	\$22,800	2017
Dover Rd	2.0	\$4,000	2019
River Rd	4.4	\$31,200	2014
Sargents Ln	14.3	\$30,900	2016
Total	26.7	\$88,900	

Source: Town Assessor. Parcels and acreage in the Open Space (OS) Current Use Tax Program, 2023, and the year they enrolled. There were about 27 acres in Open Space in 2023.



Farm and Forest Land Threatened by Development

Eliot has maintained and enhanced our reputation as a great place to live. Preserving rural landscapes and local farms in Eliot is a top priority for the community. Farmland is one of the focus areas of the 2010 Open Space Plan, now being updated. While housing growth has been slow in recent years, the market is inviting for subdivisions.

Approved or proposed new subdivisions in the last five years have been small: Surrey Ln. (4 lots), 771-787 Main St./Clover Farm (8 lots), and 76 Cedar Rd. (5 lots).

Clover Farm Subdivision is being developed on the site of the historic farm of the same name. It is in the Village zone, which is a designated growth area, and is surrounded by small residential lots. *The Historic and Archaeological Resources section* details the efforts to preserve part of the Clover Farm barn and conduct a historical recordation of the farm house before it was demolished.

The 76 Cedar Rd. subdivision was proposed on land in the Rural district outside of the critical rural overlay. It is next to land conserved with an agricultural easement. The subdivider took the property out of the Farmland Current Use Tax Program and paid the associated tax penalty before applying for subdivision review. In fall 2024, the Planning Board disapproved the application; as of this writing, the applicant has indicated they will reapply.

GOODWIN ROAD

Goodwin Rd. (Route 101) is a notable corridor with abutting agricultural parcels that are likely to be threatened by future development. It has an abundance of prime farmland and farmland of statewide importance. Route 101 directly connects Kittery, Eliot, and Dover, providing convenient transportation access to jobs and destinations. The corridor has several large, unprotected parcels that are, or were historically, used for agriculture. The size of these parcels would be attractive for achieving a larger subdivision. The south side of Goodwin Rd. is primarily in the Suburban district, allowing two-acre lots, and the north side is primarily in both the Rural district and Critical Rural Overlay, where subdivisions must be Open Space Developments (i.e. cluster subdivisions) with a net density of no greater than one unit per three acres. There are at least two parcels along the corridor known to be of local concern for development risk.

BRIXHAM ROAD

Brixham Road also has several larger farm and forest parcels that may be vulnerable to development. Except for the Stream Protection overlay where the York River crosses the road, none of the parcels along the road have shoreland zoning. The only permanently conserved parcel directly on the corridor is 5 Brixham Rd. (Map 74, Lot 5), which has a conservation easement conveyed to Great Works Regional Land Trust. A cluster of parcels around Bartlett Ln., which comprise working farmland greater than 10 acres, are in the Farmland Current Use Tax Program.

COMMUNITY IMPACT

The impact to the community of larger residential subdivisions on prime agricultural land in the Rural district would be substantial. As the results of the Community Survey show, the community cherishes the rural nature of Eliot. Sprawl would erode this rural character and negatively affect scenic views. Prime farmland and forests would be reduced. The options for purchasing locally-grown or locally-produced products may be diminished. The Town's growth strategy and Future Land Use Map seek to preserve this rural character by channeling growth into the Route 236 corridor, the Village district, and the connecting corridors between the two.

COMMUNITY SURVEY FEEDBACK



RESPONDED THAT MAINTAINING RURAL CHARACTER IS A CHALLENGE FACING ELIOT

Strongly Agree: 53%

Somewhat Agree: **30%**

YOUTH SURVEY FEEDBACK

RESPONDED THAT SMALL TOWN RURAL ATMOSPHERE was the TOP reason selected why young people enjoy living in Eliot RESPONDED THAT MAINTAINING RURAL CHARACTER was the FOURTH reason selected as a serious challenge facing Eliot

FESTIVAL DAY 2022 FEEDBACK

"My Land Use Vision... Farms, Fields, & Forests Forever (conserved)."



PROTECTING FARMING AND FORESTRY LANDS

Current regulatory measures that support farming include the Local Food and Community Self-Governance Ordinance, the Agritourism Ordinance, and the zoning regulations that give by-right status to agriculture, animal husbandry, and seasonal sales of locally grown food. Non-regulatory measures include the creation of the AFSC by the Town Manager and Select Board and the AFSC's work promoting local farms. The Town staff and AFSC have a working relationship with Maine Farmland Trust, whose resources and guidance have informed this plan's policies and strategies.

More can be done. The goals, policies, and strategies outline several regulatory and non-regulatory ways to bolster local support for farming. These include the streamlining of land use regulations, property tax incentives, additional farm-supportive development options, continuing to support agritourism, helping promote Eliot's agricultural resources to the community, and promoting the Current Use Tax Program to potentially interested property owners.

Agritourism

Agricultural tourism (agritourism) has flourished in Eliot. The annual Antique Tractor & Engine Show at Raitt Homestead Farm Museum started in the 1990s. Sandy Hill Farm's agritourism is centered on seasonal light displays. Its Winter Wonders holiday light display – a one-mile walk through the farm's hardwood forest – is the largest in New England. Sturgeon Creek Farm has "Visit a Lamb" days.

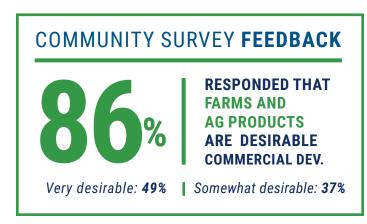
In 2019, voters approved an agritourism ordinance that permits many agritourism activities by right if they occur on a farm that has been in operation for at least three years and remains engaged in farming or farming education.

Farming, Forestry, and Nearby Homes

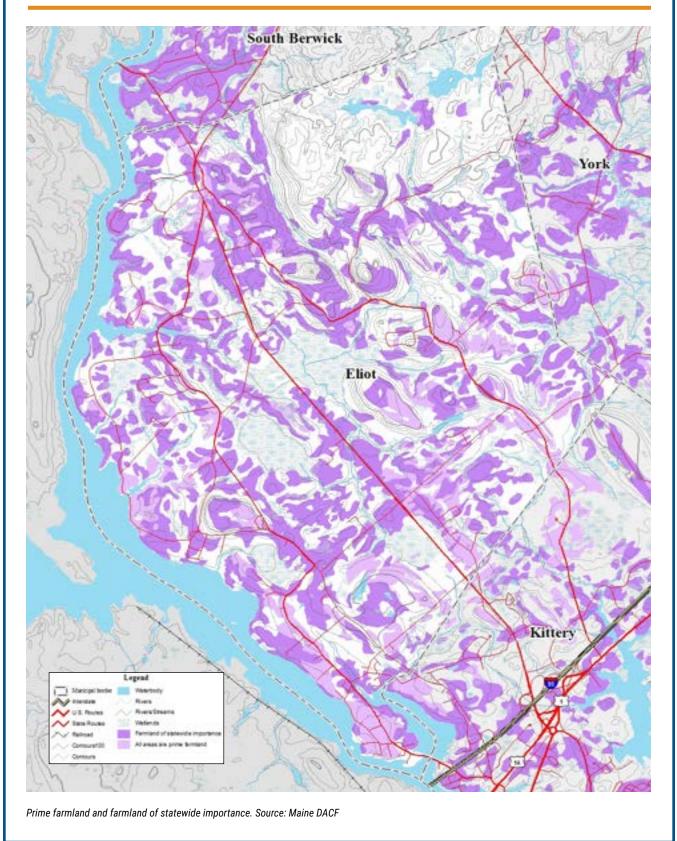
Farms sometimes face nuisance complaints from nearby homeowners. Maine's "Right to Farm" law provides some legal protections for farms from such complaints. In Eliot, there seems to be community acceptance of some potential unfavorable effects of farming because they are greatly outweighed by the benefits of supporting a strong local farming economy and maintaining Eliot's rural character.

One recent example of this tradeoff involved roosters. Some residents concerned with nearby rooster crowing encouraged the Town to adopt ordinance amendments to restrict roosters. In response, Town staff proposed amendments to Chapter 7 of the Town Code (Animal Control) to increase and clarify restrictions on rooster noise. Eliot residents strongly rejected this warrant article.

The Town does occasionally get inquiries about logging activity, but the Town is typically not the permitting authority for this activity. Timber harvesting in the shoreland zone is under the authority of Maine Department of Agriculture, Conservation, and Forestry (DACF), and non-shoreland timber harvesting (e.g. on tree growth tax program parcels) does not require a land use permit.







COMMUNITY FARMERS' MARKETS				
Town	Market	Location	Frequency, Season & Times	
Kittery	Kittery Community Market (includes large variety of products besides local produce)	Post Office Square	Every Sunday, 10am to 2pm, June through November	
South Berwick	South Berwick Farmers' Market	Central Elementary School	Every Monday, 3pm to 6pm, June through September	
York	Gateway Farmers' Market	York Region Chamber of Commerce	Every Saturday, 9am to 1pm, late May to early October	

Sales of Farm and Forest Products

FARM STANDS

Table __ lists the farm stands in Eliot, based on the AFSC guide. One way for the Town to promote farm stands is to define them as a by-right use in the zoning regulations and clarify lot line setbacks.

2023 VISION SESSION FEEDBACK

What would you change about Eliot? "We need to identify a community space outside or inside – Farmers markets weekly by the Town Hall would be great – winter farmers markets at the Grange Hall. Bring people together more..."



New Riverside Music & Market has prepared foods and non-food products for sale at the Boat Basin Tuesday evenings in the summer.

FARMERS' MARKET

Eliot does not have a farmers' market. Each of our neighboring communities has a weekly farmers' market during the warm months (Table __). There are also occasional winter markets.

Starting in 2024, the Town added a community market to our existing Summer Concert Series at the Boat Basin. The new event name is Riverside Music & Market. The market primarily has prepared foods and non-food products for sale.

The AFSC envisions a future farmers' market in Eliot. Their idea includes the following⁵:

- The market should take place once a month.
 The competition from neighboring markets may prevent a weekly market from attracting enough vendors
- The market should start small, with about 10-15 vendors

> Planning for the market needs at least a year's lead time

> As of this writing, the AFSC is planning a pilot farmers' market in Eliot Commons

COMMUNITY GARDEN

Eliot does not have a community garden. The AFSC also envisions a community garden in Eliot's future, with a priority location being near Town Hall. Establishing a community garden is an unfulfilled strategy in the 2009 Plan, one that is re-emphasized in this plan.

COMMUNITY-SUPPORTED AGRICULTURE (CSA)

Community-supported agriculture (CSA) typically involves a farm offering a subscription to consumers to get regular deliveries of the farm's produce and products. The AFSC guide lists two farms with CSAs: Walker Keay Farm and John Bartlett Farm.

LOCAL FOOD SOVEREIGNTY ORDINANCE

In 2017, voters enacted the Local Food and Community Self-Governance Ordinance, now Chapter 14, Article II of the Town Code. This ordinance exempts from Town licensure or inspection:

- > Direct-to-consumer sales of food that occur on the farm where the food was raised, or at the home where homemade food was produced, or at the home of the consumer
- Products prepared for, consumed, or sold at a community social event
- > Exchanging of seeds

TREE FARMS

Eliot does not have a retail tree farm where trees grown on-site are advertised and sold to the public. York Woods Tree & Products and a roadside stand – both on Route 236 – sell holiday trees and wreaths grown elsewhere.

SMALL WOODLOTS

Eliot's 15 parcels in the Tree Growth Current Use Tax Program are generally large in area. Only four of 15 are under 20 acres, and only one is under 10 acres.

Building our Local Food Economy and Increasing Food Security

We can see community food security in several lights:

 Everyone has access to quality food, even if they are struggling financially

> The community has access to an adequate food supply, even during economic or environmental shocks or other difficult times

 Community members have the knowledge, skill, and experience to grow, process, store, and prepare food

In addition to thriving local farms, there are other ways we can increase community food security.

COMMUNITY KITCHEN

Footprints Food Pantry has a commercial kitchen at Mainspring, the social service resource hub serving Kittery, Eliot, and surrounding communities. (See Public Facilities for more on Mainspring.) The kitchen is expected to be used for cooking/nutrition classes, prepared meal programs, food waste mitigation, culinary job training, and community use.⁶

FOOD COOPERATIVE

Eliot used to have grocery stores, from small corner stores to a chain store in Eliot Commons. Some residents have wished that we would one day get one again. Today, limited groceries can be found in the community's three gas station convenience marts, discount store, and community deli and market. Probably most of us do our major grocery shopping in Portsmouth/Newington, Dover, or York.

Like any business site location decision, grocery store companies need to see clear economic incentives to set up shop where a store can thrive. A food cooperative model is one we should consider. A food cooperative can take several forms, but, in general, it could focus on produce – including locally-grown and locally-produced farm products – that is supplemented by other grocery items. A food cooperative may have an ownership structure allowing store patrons or others to own a stake in the store.



Eggs are offered by a lot of local farms and small farm stands.

FIGURE 6.X AGRICULTURAL & FOREST RESOURCES Tran Re Legend **Town Forest** The Eliot Town Forest Map

TOWN FOREST MANAGEMENT

In 2009, the Conservation Commission, with consultant assistance, completed the "The Eliot Town Forest Woodlands Report and Management Plan", funded by a U.S. Forest Service grant. It includes an inventory of forest resources on the Town Forest parcels and "a plan for the sustainable, long term growth and harvest of forest products".⁷ The plan includes the long-term goals and objectives in Table _).

The plan includes research into the record of ownership, along with parcel maps, to help readers visualize the parcels that comprise the two Town Forest tracts: Punkintown Rd./York Pond and Johnson Ln. Since 2009, the Town has acquired at least one additional parcel near Johnson Ln.⁸ While it affirms that "The properties have been surveyed by Maine Licensed Surveyors and plats of the survey work are available at the Eliot Town Hall", it also flags a few title conflicts.

As far as the present Conservation Commission is aware, the plan was not much implemented. The amount of timber harvesting that has been done in the timber stands described in the plan is uncertain. It is coming up on two decades since the Forest Management Plan was initiated, and the plan's selfimposed update deadlines have long passed. Therefore, the Town should update the plan and commit to its implementation. This update should be informed by this Comprehensive Plan, the Open Space Plan, public input, and natural resource conservation best practices and guidance.

As needed, the plan update could, among other things:

- > Update the title research
- > Update the long-term goals and objectives
- Conduct additional land surveying and potentially recommend locations for property markers or signage to inform Town Forest visitors of its boundaries
- Recommend rules and regulations for use of the Town Forest
- Reexamine opportunities to improve public access and build low-impact walking trail connections
- > Collect new environmental information

See the Natural Resources, Water Resources, and Recreation and Open Space chapters for further discussion and recommendations regarding natural resources, wildlife habitat, conservation, and passive recreation in this area.

AGRICULTURAL & FOREST RESOURCES

TOWN FOREST MANAGEMENT			
Long-term Goals	Long-range Objectives		
 Protection of the natural beauty and esthetic quality of the Town Forest 	 Seek and obtain unlimited and/or limited public access to land and determine any associated improvements 		
 Development of recreational opportunities for the townspeople 	 Acquire ownership of parcels of land adjacent to the town forest properties 		
 Sustainable growth and harvest of commercial forest products to produce 	 Develop a network of low impact trails through the town forest parcels 		
 Protection of water quality on the properties downstream 	 Improve public access with inclusion of handicapped access Encourage plant and wildlife diversity with 		
 Protection and enhancement of wildlife habitat for species known to inhabit and that may inhabit the land 	low impact projects > Utilize low impact harvesting alternatives to		
 Expansion of the Town Forest thru acquisition of other properties 	 v office for impact high county and the formative to the create more diverse wildlife and plant habitat v Utilize low impact timber harvests to 		
 Cooperative agreements with abutting 	accomplish other goals		
landowners to expand the opportunity for people to enjoy the out-of-doors > Update and improve the plan at five year intervals	 Develop sustainable financial income from timber harvests to fund projects 		
	 Update the town forest plan annually to report accomplishments and revise goals 		

TABLE **6.X**

AGRICULTURE & FOREST RESOURCES GOALS, POLICIES & STRATEGIES

Goal, Policy, or Strategy	Description	Responsibility or Partnership	Implementation Timing	
Goal 1	Farms and forests that are protected from development and other threats			
Policy 1	Ensure that the Town Code does not have undue burdens or barriers to agriculture and local food production			
Strategy 1	Review the Town Code to identify and revise ordinances that unduly restrict sustainable agriculture and forestry operations	Planning Office, Planning Board, Select Board, Ag & Food Security Commission	Short	
Strategy 2	Consider making the lot line setback for animal husbandry buildings (currently a uniform 100 ft. throughout town) more flexible – for example, a reduced setback for some buildings based on the size of the building, number and type of animals housed, context, and other factors, where the closer placement of those buildings would not be expected to significantly impact abutting residential properties	Planning Office, Planning Board, Select Board, Ag & Food Security Commission	Short	
Strategy 3	Amend the home business regulations to clarify how they apply to farm businesses and home-based businesses involving locally-raised and locally- processed food, exempting many from Planning Board review. Maintain a by-right zoning allowance for agriculture, animal husbandry, and seasonal sales of produce or plants raised locally, while continuing Planning Board review for potentially more impactful (based on defined thresholds) home- based businesses in primarily residential areas	Planning Office, Planning Board, Select Board, Ag & Food Security Commission	Short	
Strategy 4	Define high tunnels and greenhouses that could be reasonably relocated or removed without material damage to the soils on the property as temporary structures for the purpose of land use review, permitting, and tax assessing. Streamline land use and permitting review and lower permit fees for these structures if they are outside the shoreland zone, if their total area is under a set threshold, and if they follow soil and watershed protection best practices	Planning Office, Tax Assessor, Planning Board, Select Board, Ag & Food Security Commission	Short	
Strategy 5	Define farm stands in the Town Code as a by-right use and reduce lot line setbacks for farm stands below a certain size	Planning Office, Planning Board, Select Board, Ag & Food Security Commission	Short	
Policy 2	Seek to increase enrollment in working lands conservation tax incentive programs and permanent farmland protection			
Strategy 1	Educate landowners about the benefits of the Farmland, Open Space, and Tree Growth current use tax programs – for example, mail informational materials to potentially qualifying landowners or organize a public forum	Town Assessor, Ag & Food Security Commission, Conservation Commission	Ongoing	
Strategy 2	Continue to work with land trusts, non-governmental organizations, and governmental programs in preserving farms and forests	Ag & Food Security Commission, Conservation Commission, Select Board, Planning Board, Town Manager, Planning Office, land trusts, governmental agencies	Ongoing	
Strategy 3	If a density transfer charge (DTC), purchase of development rights (PDR), or transfer of development rights (TDR) program is established, allow farms to benefit as eligible receiving areas	Planning Office, Planning Board, Select Board	Short-Mid	
Strategy 4	Explore the possibility of a Voluntary Municipal Farm Support Program (VMFSP) to lower the property tax burden on farmers in exchange for protecting farmland for at least 20 years, considering potential benefits, disadvantages, level of interest from farmers, budget impact, and staffing needs to manage such a program. If warranted, consider implementation of the program in the mid or long term	Ag & Food Security Commission, Town Manager, Town Assessor, Planning Office, Planning Board, Budget Committee, Select Board	Mid-Long	
Policy 3	Protect and improve the health of forests in Eliot	· 	·	
Strategy 1	Update the Town's Forest Woodlands Report and Management Plan (2009) and commit to implementing it	Conservation Commission, consultant, Select Board, Town Manager	Short (plan update); Mid-Lou (implementation)	

ELIOT

AGRICULTURE & FOREST RESOURCES GOALS, POLICIES & STRATEGIES

Goal, Policy, or Strategy	Description	Responsibility or Partnership	Implementation Timing		
Goal 2	A local farming economy that continues to thrive and is a central part of Eliot's economic identit				
Policy 1	Help Eliot farmers and food processors market and sell locally grown and locally processed food and other agricultural products				
Strategy 1	Start a local farmers' market that is held at least once a month	Ag & Food Security Commission, nonprofits, farmers, Recreation Department	Mid		
Strategy 2	Encourage opportunities for local farm stands and farm stores	Ag & Food Security Commission	Ongoing		
Strategy 3	Promote Eliot's farms, farm stands and stores, local food sovereignty, and other agricultural resources on the Town website (such as an interactive map) and through other communications tools	Ag & Food Security Commission, Town Manager, Planning Office	Ongoing		
Policy 2	Use local food production to build community and food security				
Strategy 1	Start a community garden in Eliot on public land available to all community members who would like to garden or learn about gardening	Ag & Food Security Commission, Recreation Department	Mid		
Strategy 2	Help connect local farms with food pantries and nonprofits that provide food to those in need to incorporate local produce into the food assistance provided by these organizations	Ag & Food Security Commission, nonprofits, farmers	Ongoing		
Strategy 3	Build community knowledge and capacity around local food processing, storage, and preparation, such as promoting or supporting K-12 or adult education courses or community kitchens in or near Eliot	Ag & Food Security Commission, Town Manager, nonprofits, educational institutions	Depends on the approach (some may be short-/mid- while others long-term		
Policy 3	Allow and encourage alternative commercial uses on farms that are maintain the land in active farming	compatible with and help			
Strategy 1	Maintain the agritourism ordinance and continue to educate Eliot farmland owners about it	Select Board, Town Manager, Planning Office	Ongoing		
Strategy 2	Allow active farm properties with permanently conserved farmland, or that have been enrolled in the Farmland Current Use Tax Program for a certain amount of time, to build a second accessory dwelling unit (ADU)	Planning Office, Planning Board, Select Board, Ag & Food Security Commission, Aging In Place Committee	Short		
Policy 4	Encourage economic development related to local food security and	d sustainability			
Strategy 1	Explore local incentives for conversion of cannabis cultivation and manufacturing uses to other cultivation or local food production uses	Planning Office	Short		
Strategy 2	Assess the vulnerability of local farms to climate change impacts through the Climate Change Vulnerability and Resilience Assessment	Planning Office, Conservation Commission, Ag & Food Security Commission, SMPDC	Short		
Strategy 3	Informed by the recommendations of the Climate Change Vulnerability and Resilience Assessment, seek funding to study, design, and implement projects that make Eliot farms more resilient to climate change and severe weather	Planning Office, Ag & Food Security Commission, Conservation Commission, Select Board	Long		

ELIOT

AGRICULTURAL & FOREST RESOURCES ENDNOTES

¹ U.S. Department of Agriculture Census of Agriculture: <u>https://www.nass.usda.gov/AgCensus/</u>. Data selection is: 03903 ZIP code: Farm Operations: Total Number of Farm Operations = 19.

² Maine Farmland Trust. Cultivating Maine's Agricultural Future: A Policy and Planning Guide for Towns (2nd ed.). Available at: <u>https://www.mainefarmlandtrust.org/future/policy-and-planning-resources-for-towns</u>

³See previous citation

⁴Based on data shared by the Town Assessor in April 2024

⁵ April 1, 2024, AFSC meeting

⁶Adapted from email from Footprints Food Pantry Executive Director Megan Shapiro Ross, August 1, 2024

⁷ www.eliotmaine.org/DocumentCenter/View/846/Town-Forest-Woodlands-Report-and-Management-Plan-PDF

⁸ Map 96, Lot 5. Property records show a sale date of 8/8/2019 (Book 18014, Page 919).

TRANSPORTATION

Eliot's transportation network provides residents, business owners, and visitors with access to the goods, services, and resources that support commerce and quality of life.

Our transportation system is an indispensable asset. Due to the cost of maintaining, preserving, and enhancing the transportation network, it is important to consider all users and different modes of transportation when making transportation-related investments. We must emphasize safety, invest in improvements that are sensitive to the land use context, and seek to increase the network's resilience to a changing climate.

Roadway network and classifications

Eliot's transportation network consists of approximately 50 miles of public roadways, including State Routes 236, 103, and 101. A short segment of Route 91 also crosses through the edge of town. The major state routes traverse Eliot in a generally northwest to southeast orientation, with limited roads running perpendicular to connect them. Most of Eliot's roads are local roads, providing access to state highways, and service roads and private ways for abutting property owners that accommodate little or no through traffic.

STATE CLASSIFICATION

In the early 1980s, the Maine Legislature authorized and directed MaineDOT to classify all public roads throughout the state. The basis of this classification system was that primarily regional or statewide needs should be the State's responsibility and roads serving primarily local needs should be of local responsibility. The State uses this system as part of the Local Road Assistance Program (LRAP)¹, which provides formula funding to Maine municipalities based on state-aid and town way lane miles. Annual LRAP payments to the Town of Eliot are in Figure 1.

The State's classification system includes the following:

State Highways form a system of connected routes throughout the state that primarily serve intraand interstate traffic. The state is responsible for reconstruction and maintenance on the 5.6 miles of Route 236 in Eliot.

ELIOT TRANSPORTATION GOALS



A well-maintained, safe, and efficient transportation system that accommodates anticipated growth and economic development



Zero traffic crashes that are fatal or cause a severe injury



Better transportation options

for the diverse transportation needs of residents – including, but not necessarily limited to, children, older adults, people with disabilities, people who cannot or prefer not to drive, and people who struggle to afford transportation costs – in a way that minimizes increases in vehicle miles traveled (VMT)



A transportation system that generates less air pollution and greenhouse gas emissions

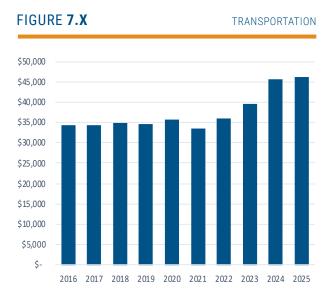


Fiscal prudence in maintaining and improving the transportation system



State-Aid Highways connect local roads to the State Highway System and generally serve intracounty rather than intrastate traffic movement. State-Aid Highways are usually maintained by MaineDOT in the summer and by the municipalities in the winter pursuant to state law (23 MRSA §1003). The State-Aid Highway category generally corresponds with the federal 'collector' classification. State-Aid Highways include Routes 101 and 103, and parts of Beech Rd., State Rd., and Beech Ridge Rd., totaling 15.4 miles.³

> Town ways are all other streets and public ways not included in the State Highway or State-Aid Highway classifications that are maintained by municipalities or counties. These roads are classified as 'local' roads. There are approximately 32.3 miles of local roads in Eliot.



Annual Local Road Assistance Program (LRAP) payments from MaineDOT to Eliot, FY2016-25. Source: MaineDOT²

FEDERAL FUNCTIONAL CLASSIFICATION

The federal functional classification system complements the State's classification system and is based on the type of service that is intended to be provided by the roadway. The federal classifications relate to traffic capacity and volume and are divided into rural and urban systems. While state classification designates maintenance jurisdiction, federal functional classification creates a hierarchy of roads and determines which roads are eligible for federal highway funds. There are four functional classes represented in Eliot:

> Minor Arterials link and support the principal arterial system. Minor arterials are roads that place a greater emphasis on land access than a principal arterial and therefore offer a lower level of mobility. They serve as links between larger and smaller towns or as connections between collectors and the principal arterials. Route 236 is Eliot's only Minor Arterial and is eligible for federal aid.

> Major Collectors differ from arterial roadways due to size and general service area. Collectors serve traffic in a specific area, whereas arterials generally serve traffic moving through an area. Thus, average trip lengths on collectors are shorter than trips on arterials. Furthermore, collectors gather traffic from local roads and streets and distribute them to the arterial. Major collectors are eligible for federal aid. In Eliot, they include Route 101 (Goodwin Rd./Dover Rd.), State Rd./Route 103, and a short segment of Route 91 (York Woods Rd.).

> Minor Collectors are like major collectors and typically provide access to smaller communities within a geographic area or economic region. They often link locally important trip generators, such as shopping centers, to surrounding rural areas and serve as links between major collectors and arterials. Minor collectors are eligible for federal aid when located in urban areas, but ineligible for some federal aid when located in rural areas. In Eliot, minor collectors include Beech Rd. (State Rd. to Route 236), Beech Ridge Rd., and Moses Gerrish Farmer Rd./Main St. (Route 103). Both this portion of Beech Rd. and Moses Gerrish Farmer Rd./Main St. are in Censusdesignated urban areas, while Beech Ridge Rd. is not.

> Local Roads serve primarily to provide access to residential areas. They are designed for low-speed travel and to carry low volumes of traffic relatively short distances. Local roads are generally not eligible for federal-aid funding for improvements or maintenance, except for certain projects, such as active transportation (bicycle and pedestrian) improvements.

A road's functional classification is one factor in planning for possible future growth. A balance of arterials, collectors, and local roads can help ensure the transportation system is efficient and less costly to maintain and upgrade.

Pavement Condition

As part of MaineDOT's asset management methodology, pavement condition data is collected every two years on all State highways and State-aid roads. MaineDOT uses the Pavement Condition Rating (PCR), a 0-5 scale that is composed of International Roughness Index, rutting, and two basic types of cracking. The A-F scale (A being great condition) varies by Highway Corridor Priority.

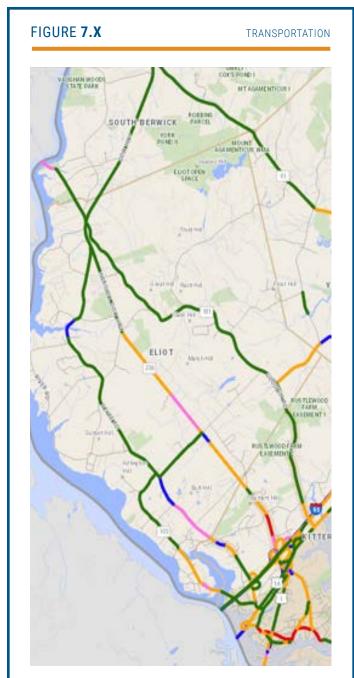
In 2022, less than 11% of Eliot's State maintained roads fell into the C and D categories, with no segments of road falling into the F category.⁴ In 2024, parts of Route 236 were rated in the C and D categories. State Rd. southeast of Beech Rd. also received C and D ratings, though it received a new overlay in 2024. Route 101 (Goodwin Rd./Dover Rd.), Route 103 (State Rd. and Moses Gerrish Farmer Rd./Main St.), and Beech Rd. (State Rd. to Route 236) – all having had recent overlays – were mostly in the A categories Figure 2.

Almost 90% of Town-maintained roads are in good and great condition (A or B), which is well above the statewide percentage. Although this data changes as sections of roads deteriorate and receive new pavement, it gives a general idea of the condition of State roads in Eliot and provides a benchmark for Customer Service Level (CSL), a measure MaineDOT uses to determine what level of service users can reasonably expect. Maine Local Roads Center offers software that can be used to assess and prioritize local roads for improvements, including cost estimates used for developing a local road maintenance plan.

The Town's Public Works Department reviews and evaluates municipal road conditions annually for maintenance and repaving needs. Evaluation factors include road condition, use, and location. For example, if there is a cost advantage to clustering several connecting streets in the same pavement project, that is considered. This annual evaluation informs the Town Manager's paving budget request for the upcoming fiscal year, which is reviewed by the Select Board and Budget Committee before being placed on the warrant for the Town Election and Referendum.

Roadway Design

Design choices for roadway projects typically depend upon their functional classification, safety considerations, and land use context. For example, arterials – which primarily serve through traffic and



Excerpt from MaineDOT pavement condition report (PCR) map viewer.⁵ Grade Color Key: A: green B: orange C: blue D: pink F: red

often carry heavy vehicles – will typically have thicker pavement, wider lanes and shoulders, increased sight distance, minimal horizontal and vertical curves, and limited access points or curb cuts. Local roads tend to be narrower, windier, and more accessible from abutting property.

COMMUNITY SURVEY FEEDBACK

RESPONDED THAT WELL-MAINTAINED ROADS ARE IMPORTANT IN THE FUTURE

(answers were very important/somewhat important)

In recent years, there has been a growing emphasis among transportation stakeholders in proactively designing streets and roads for improved safety. This is sometimes called "systemic safety" or a "safe system" approach. This approach looks for physical characteristics within the transportation system that contribute to a higher risk of severe crashes. It evaluates whether a certain roadway or intersection is similar in design to other roadways or intersections that tend to be higher risk. Crash data remains important but is not the only piece in the puzzle. The question, "How many crashes does this roadway have?" is paired with the question, "Is this the type of roadway that tends to have a greater frequency of crashes, including severe ones?"

Land use context is also an important consideration. Local streets and collectors that serve destinations should be designed to factor in all modes of transportation likely to be used to access those destinations, such as driving, taking transit, walking, and bicycling.

DESIGN STANDARDS FOR NEW ROADS AND STREETS

Chapter 37 of the Town Code provides design standards and specifications for street and road layout and construction. The chapter outlines the procedure for the Town to accept a private way as a town way and therefore assume ownership and maintenance duties. Dead-end roads are restricted to 1,000 ft. in length [Section 37-69(f)]. The chapter has sidewalk design standards but no standards for bikeways.

Chapter 41 regulates the design, location, and construction of subdivision roads. Topics such as the road alignment, intersection design, pavement structure, performance guarantees, sidewalk requirements, vegetative buffering, and more are covered during Planning Board subdivision review. The subdivider may be required to reserve sufficient land for a future right-of-way where their proposed subdivision abuts vacant land [41-221(b)(5)]. If it is in a designated growth area, a subdivision must have sidewalks along its street [41-221(a)(4)].

Bridges

Bridges are a key component of the roadway system. Bridges are the most expensive sections of roads, and a lack of adequate bridges can create transportation bottlenecks, which are often difficult to remedy. MaineDOT inspects all bridges and culverts with a span of greater than 10 feet on public ways, regardless of ownership, every two years. Inspection reports are available online and include detailed information on all aspects of the structure which can be used to plan for preservation, rehabilitation, and reconstruction.

MaineDOT maintains an inventory of all cross culverts along State roadways. This includes a detailed inventory of large culverts.⁶ There are four large culverts along Route 236, including two in fair condition – one over Great Creek and one over Sturgeon Creek, a mortared stone arch. A fifth large culvert is located on Beech Ridge Rd., a State-aid road, over Cutts Ridge Brook. The Beech Ridge Rd. culvert was inspected in 2022 and was also found to be in fair condition.

<u>See Natural Resources and Water Resources for</u> more about culverts and wildlife.

RATING BRIDGE CONDITIONS

Bridge condition can be measured based on the National Bridge Inventory Federal Sufficiency Rating (FSR). Each FSR has a numeric indicator of the overall value of the sufficiency of the bridge. A rating will be from 0-100 (0 indicates the worst and 100 indicates the best). FSR is computed with a federally supplied formula using an array of condition and inventory data. The formula is used to identify bridges eligible for federal funding. The FSR includes both structural deficiencies as well as functional obsolescence. This rating gives an overall value of the sufficiency of the bridge. Since functional obsolescence (i.e. too narrow, or low weight capacity) may account for a large portion of the rating, one should not assume that a low sufficiency rating means the bridge could fail.



TRANSPORTATION

BRIDGES AND CULVERTS (SPANNING MORE THAN 10 FEET) INSPECTED BY MAINEDOT							
Location	Location	FSR	Owner	AADT	Year built reconstructed	Span Type	
Oldfields Road over Shorey's Brook	5/22/2023	22*	Municipality	553	2015	Culvert	
Route 101 (Dover Rd.) over Shorey's Brook	6/14/2022	60	MaineDOT	5242	2014	Culvert	
Route 103 (Main St./Eliot Rd.) over Spinney Creek	6/14/2022	79	MaineDOT	2510	1982	Bridge	
Route 103 (State Rd.) over Sturgeon Creek	3/25/2024	69.6	MaineDOT	1615	1940	Bridge	

Selected MaineDOT inspection data available for Eliot bridges and culverts. Source: Maine DOT.⁷ FSR: Federal Sufficiency Rating. AADT: Average Annual Daily Traffic. *Note that while the FSR for the Oldfields Rd. culvert (built in 2015) appears low, this could be due to the FSR calculation methodology. The report describes it as having "No noticeable or noteworthy deficiencies" and that its "Banks are protected".

RECENT CULVERT IMPROVEMENT PROJECTS

Recent culvert improvement projects include a new culvert conveying Great Creek under Beech Rd., installed by MaineDOT in 2022, and a new culvert on Tidy Rd. near State Rd., installed by the Town. In 2023, DOT programmed a \$40,000 project to repair the tidal gate on the Route 103 causeway over Spinney Creek. As of this writing, DOT's Three-Year Work Plan (2024) includes \$80,000 for preliminary engineering to replace the Sturgeon Creek stone arch culvert under Route 236. In 2021, Town staff wrote a letter to DOT expressing concern for this culvert's stability.

Traffic Volumes

MaineDOT maintains 91 permanent traffic recorder sites across the state, monitoring traffic volumes 365 days per year on an hourly basis. MaineDOT also conducts thousands of short-duration traffic counts throughout Maine, including 54 locations in Eliot, typically collected on a three-year rotating schedule. The data from the short-duration counts is adjusted using the state's permanent counter data to develop average annual daily traffic (AADT) volumes.

Looking at 24 rotating count locations across Eliot between 2013 and 2022 (Table __), average annual

traffic growth was moderate, at 6.6% over the 10 years. During this time, statewide AADT also increased. Although some roads recorded negligible changes, other roads experienced more significant changes. Local roads and state-aid roads acting as minor collectors such as Bolt Hill Rd., Depot Rd., Old Rd., and River Rd. all experienced increases in AADT. Depot Rd., however, saw the most significant growth rate between 2013 and 2022 at an average of over 6% per year.

In the past three years, Eliot roads experienced moderate growth (9.8%). This somewhat contrasts with earlier trends. For example, between 2013 and 2016, Route 101 (Goodwin Rd./Dover Rd.), Cedar Rd., and some locations on Route 236 saw declines in traffic.

MAJOR TRAFFIC GENERATORS

- Portsmouth Naval Shipyard
 During morning and afternoon commutes
- > Schools during drop-off and pick-up times
 - Marshwood Middle School
 - Eliot Elementary School
 - Seacoast Waldorf School

TABLE **7.X**

TRANSPORTATION

Location	2013	2016	2019	2022	2013-22 % chng	2013-16 % chng	2016-19 % chng	2019-22 % chng
BEECH RIDGE RD NE/O SR 101	1,900	2,190	2,310	2,420	27.4%	15.3%	5.5%	4.8%
BOLT HILL RD NE/O SR 103 (MAIN ST)	650	700	540	790	21.5%	7.7%	-22.9%	46.3%
CEDAR ST NW/O DEPOT RD	850	660	630	690	-18.8%	-22.4%	-4.5%	9.5%
DEPOT RD NE/O SR 236	950	940	1,010	1,620	70.5%	-1.1%	7.4%	60.4%
DEPOT RD SW/O CEDAR ST	1,580	1,600	1,300	1,830	15.8%	1.3%	-18.8%	40.8%
OLD RD W/O PINE AVE	1,070	1,030	1,020	1,200	12.1%	-3.7%	-1.0%	17.6%
RIVER RD W/O SR 103	560	570	490	650	16.1%	1.8%	-14.0%	32.7%
SR 101 NW/O BEECH RD	2,940	3,060	3,030	2,870	-2.4%	4.1%	-1.0%	-5.3%
SR 101 NW/O DEPOT RD	1,980	2,210	1,940	1,590	-19.7%	11.6%	-12.2%	-18.0%
SR 101 NW/O SR 236	5,050	5,820	5,900	5,590	10.7%	15.2%	1.4%	-5.3%
SR 101 SE/O SR 236	1,760	2,280	1,870	1,640	-6.8%	29.5%	-18.0%	-12.3%
SR 101 SW/O BRIXHAM RD	2,350	2,500	2,290	1,890	-19.6%	6.4%	-8.4%	-17.5%
SR 103 (MAIN ST) NW/O BOLT HILL RD	1,390	1,400	1,290	1,530	10.1%	0.7%	-7.9%	18.6%
SR 103 (MAIN) SE/O PLEASANT ST (N JCT)	1,260	1,520	1,340	1,710	35.7%	20.6%	-11.8%	27.6%
SR 103 (STATE RD) NW/O SR 103	3,650	3,920	3,560	3,000	-17.8%	7.4%	-9.2%	-15.7%
SR 103 (STATE RD) S/0 SR 236	1,600	1,630	1,550	1,680	5.0%	1.9%	-4.9%	8.4%
SR 103 NW/O GOV HILL RD	1,680	1,840	1,510	1,680	0.0%	9.5%	-17.9%	11.3%
SR 103 NW/O PINE AVE	2,170	2,520	2,230	2,290	5.5%	16.1%	-11.5%	2.7%
SR 103 SW/O STATE RD	1,320	1,250	1,180	1,440	9.1%	-5.3%	-5.6%	22.0%
SR 236 NE/O SR 101	12,530	12,980	11,560	11,810	-5.7%	3.6%	-10.9%	2.2%
SR 236 SW/O SR 101	15,330	16,220	15,340	16,240	5.9%	5.8%	-5.4%	5.9%
SR 236 (NWB) NW/O BEECH RD	8,130	7,960	7,810	8,180	0.6%	-2.1%	-1.9%	4.7%
SR 236 (SEB) NW/O BEECH RD	8,760	8,380	9,060	9,250	5.6%	-4.3%	8.1%	2.1%
STATE RD SE/O BEECH RD	2,750	3,220	2,920	2,710	-1.5%	17.1%	-9.3%	-7.2%
TOTAL/AVG. CHANGE	84,223	88,416	83,699	86,322	6.6%	5.7%	-7.3%	9.8%

Average annual daily traffic (AADT) at MaineDOT count locations in Eliot, 2013-22. Counts are typically done every three years.

With the completion of most capacity improvements along the Spaulding Turnpike and ongoing population and job growth in southern Maine and New Hampshire's Seacoast region, traffic volumes on Eliot's major roads are expected to rise.

The COVID-19 pandemic significantly disrupted commuting, school trip, and other traffic patterns across the nation. During the first year of the pandemic, approximately a third of households teleworked more often than before, with the impacts varying across socioeconomic groups. Many employers have shifted to hybrid work models, blending remote and in-office arrangements. While this shift has reduced peak-hour commuting, the effects on overall traffic volumes remain nuanced.

In the Seacoast region, population and job growth have continued to drive increased travel demand, potentially counterbalancing any reductions in commuting trips due to teleworking. Additionally, the return of in-person events, activities, and tourism has contributed to a rebound in traffic levels. These competing factors suggest a complex interplay between emerging work patterns and the region's ongoing development, underscoring the need for adaptive transportation planning to accommodate evolving trends.

DATA INSIGHTS (2013-2022)

> Beech Ridge Rd. experienced continued growth, maintaining its position as a key local route, with an average increase of about 5%

> Minor collector roads, including Bolt Hill Rd., Cedar Rd., Depot Rd., and Old Rd., showed mixed trends. While some routes like Depot Rd. saw notable increases, others remained stable or experienced slight declines

> Route 103 and Route 236, critical state routes connecting Eliot to neighboring towns and highways, showed slight traffic increases, reflecting regional population and economic growth

REGIONAL CONTEXT

> Following the completion of significant upgrades to the Spaulding Turnpike in Newington and Dover, traffic volumes on Route 236 have begun to recover as local and regional traffic patterns stabilize

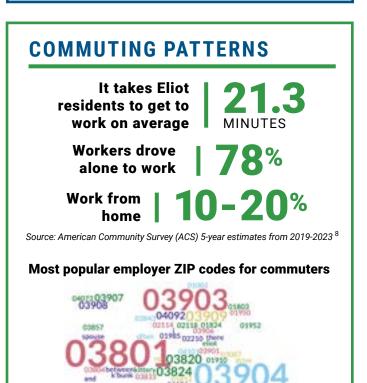
> Southern Maine and the Seacoast region have experienced continued population and job growth, driving increased travel demand on major routes

Pandemic Recovery: While the COVID-19 pandemic initially disrupted traffic patterns, with shifts to remote work and reduced commuting, 2022 data suggest a gradual return to pre-pandemic travel behavior TABLE **7.X**

TRANSPORTATION

WHERE ELIOT RESIDENTS WORK				
Location	Jobs	Share		
Portsmouth	392	13.9%		
Kittery	163	5.8%		
Dover	137	4.9%		
York Harbor	123	4.4%		
Portland	96	3.4%		
South Eliot	93	3.3%		
South Berwick	74	2.6%		
South Portland	49	1.7%		
Durham	43	1.5%		
Somersworth	38	1.3%		
All Other Locations	1,616	57.2%		

Source: The Longitudinal Employer-Household Dynamic (LEHD) program⁹, part of the US Census Bureau, provides data on where employees live and work. The most recent LEHD data available (2022) show that a about quarter of workers who live in Eliot work in either Portsmouth, Kittery, or Dover. It is not known the extent to which Portsmouth Naval Shipyard workers are spread between Portsmouth, Kittery, and All Other Locations.



Source: Comprehensive Plan Community Survey respondents

Safety

MaineDOT obtains crash reports from state and local police to develop Critical Rate Factors (CRF) on every section of road (link) and intersection (node) across the state. The CRF is a comparison of the actual crash rate on a link or at a node to the expected crash rate based on road type, vehicle miles of travel, and the average statewide crash rate. A CRF greater than 1 on a link or at a node indicates a crash rate higher than should be expected at that location when based on statewide averages. Crash data is further analyzed to identify High Crash Locations (HCL). Road segments and intersections that have had at least eight crashes in a three-year period with an overall average CRF greater than 1 are considered HCLs.

Twenty-two times between 2015 and 2024, nodes and links in Eliot have made the annual MaineDOT High

Crash Location (HCL) list. For the most recent threeyear period (2022-2024), one node and four links were classified as HCLs.

While Eliot previously had multiple locations meeting the HCL criteria, recent data show a decline in the number of HCLs. However, when comparing two five-year periods (2015-19 and 2020-24), total crashes increased slightly, with two crash types (rear end/sideswipe and went off road) accounting for more than half of the total (Table __). During the previous ten years, crashes involving injury, or possible injury, occurred on average about once every 11 days. A crash involving a person walking or bicycling occurred on average more than four times a year. (This only includes crashes that are reported to police, so it is likely an undercount of total crashes.) Continued monitoring is necessary to work toward long-term reductions in crash frequency and severity.

TRANSPORTATION

TABLE **7.X**

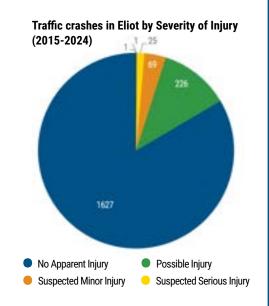
While the majority of crashes had no apparent injury (also known as "property damage only" crashes), a crash causing an injury or possible injury occurred approximately once every 11 days during the time period. A crash causing a fatal injury only occurred once. Crashes causing serious injuries occurred about two to three times per year (25 total).

MAINEDOT HIGH CRASH LOCATION (HCL) LIST					
Intersection (node) or Road Segment (link)	CRF	Total Crashes	HCL Year(s)		
Route 101 (Goodwin Rd.) between Brixham Rd. & Rollingwood Rd.	1.71	10	2023, 2022		
Route 236 (Dow Hwy.) between Bradstreet Ln. & Beech Rd	1.03	33	2023		
Route 101 (Goodwin Rd.) between Depot Rd. & Brixham Rd.	1.34	8	2022		
Int. of Route 236 (Dow Hwy.) & Route 103 (State Rd.)	1.59	8	2022		
Route 236 (Dow Hwy.) between State Rd. & Ambush Rock Rd.	1.03	22	2022		

Recent MaineDOT High Crash Locations (HCLs) in Eliot. Source: Maine Public Crash Query Tool

CRASH TYPE	
Statistic	Value
Total crashes in Eliot, 2015-19	534
Total crashes in Eliot, 2020-24	536
Total crashes in Eliot, 2015-24 (10-year period)	1,070
Increase in crashes, 2020-24 to 2015-19	0.4%
Most common crash type, 2015-24	# (% of total)
1 Rear End / Sideswipe	316 (30%)
2 Went Off Road	296 (28%)
3 Deer	221 (21%)
4 Pedestrian and bicycle crashes	46 (4%)

Selected Eliot traffic crash statistics. Source: Maine Public Crash Query Tool



KACTS REGIONAL SAFETY ACTION PLAN

In 2023-2024, KACTS developed a Regional Safety Action Plan. The purpose of the plan is to improve roadway safety by significantly reducing or eliminating roadway fatalities and serious injuries through the development and implementation of plans that focus on the needs of all users: pedestrians, bicyclists, motorists, public transportation users, micro-mobility users, and commercial vehicle operators.

The plan identifies strategies to improve safety outcomes in communities across the KACTS region. It has a prioritized list of safety projects that will be eligible for implementation and supplemental planning funds through the Federal Highway Administration's (FHWA) Safe Streets for All (SS4A) and other federal grant programs. As part of the planning process, the project team collected input from residents, business owners, and daily commuters to understand their experiences and concerns.

In Fall 2024, the plan was finalized and endorsed by the KACTS committee. Two roadways in Eliot are on the Prioritized Project List:

- > Route 236 (Dow Hwy.) from the I-95 ramps in Kittery to Route 9 (School St.) in Berwick, including all of Eliot and most of South Berwick
- Route 101 (Goodwin Rd.) from Rollingwood Rd. to Depot Rd.

Other Eliot roadway segments, such as Ambush Rock Rd. and State Rd. in the vicinity of Beech Rd., are included in the Priority Network, which prioritizes roadways that are among the highest risk for fatal and serious injury crashes.

MAINEDOT STRATEGIC HIGHWAY SAFETY PLAN

Periodically, MaineDOT releases updates of its Strategic Highway Safety Plan (SHSP). Recent updates occurred in 2017 and 2022. The SHSP emphasizes that fatal and serious injury traffic crashes "are almost always preventable". This is a motivating principle behind the state's overall transportation safety goal, Toward Zero Deaths, and the national Vision Zero movement. The SHSP identifies focus areas addressing the most pressing safety concerns in the state (Table _).

TABLE 7.X

TRANSPORTATION

MAINE 2022 STRATEGIC HIGHWAY SAFETY PLAN (SHSP) FOCUS AREAS		
Lane Departure	Motorcycles	
Illegal/Unsafe Speed	Winter Crashes	
Occupant Protection	Intersection Crashes	
Young Drivers (16-24 Years Old)	Large Trucks and Commercial Buses	
Impaired Driving	Pedestrians/Bicycles	
Distracted Driving	Large Animals	
Mature Drivers (65+ Years Old)	Work Zones/Traffic Incident Management	
Emergency Medical Services		

Vision Zero and Toward Zero Deaths

Vision Zero and Toward Zero Deaths are a shift in how we think about transportation safety. The table is adapted from the Vision Zero Network.

TRADITIONAL APPROACH	VISION ZERO
 > Traffic deaths are inevitable > Humans should never make mistakes on the road > We should prevent crashes > We should focus on individual responsibility > Saving lives is expensive 	 > Traffic deaths are preventable > Humans occasionally make mistakes on the road > We should prevent fatal and severe crashes > We should focus on making the whole transportation system safer > Saving lives is not expensive

TRUCK WEIGH STATIONS

In 2022, MaineDOT installed two truck weigh stations alongside Route 236, one near Marshwood Middle School and one near Bolt Hill Rd. These paved waysides help Maine State Police (MSP) enforce tractor trailer weight restrictions on Route 236, addressing one of the SHSP priority areas.

TRAFFIC CALMING

Traffic calming reduces traffic speeds by altering the design, configuration, or appearance of the street. Traffic calming can involve physical controls (e.g. bumps, barriers, curves, narrowing, etc.) or passive controls (e.g. signs and traffic regulations). Typically, traffic calming is most appropriate on lower-volume collector roads and neighborhood streets, rather than on arterial roadways, whose purpose is to facilitate through traffic flow. Traffic calming measures can also fit well in village settings and on walkable commercial streets. They contribute to safer and quieter streets and roads that are more accommodating to pedestrians and cyclists. The potential benefits of traffic calming include reduced traffic speeds, reduced traffic volumes - by discouraging "cut-through" traffic on residential streets - and improved aesthetics of the street and neighborhood.



"Slow: Pedestrian Traffic" signs on River Rd., a passive traffic calming measure. The 2021 plan, "Improving Conditions for People to Walk and Bike in Eliot", recommends traffic calming on this part of River Rd. in the form of a "yield roadway".

Implementing traffic calming measures should involve citizen participation. Local traffic calming programs commonly involve a petition process to ensure that there is a degree of consensus among neighbors that there is a speeding problem and that traffic calming is a desired mitigation. To avoid unwanted negative impacts, safety concerns, ineffective design features, and unsuccessful projects, traffic calming measures should be installed after thorough analysis and supporting technical data. Some municipalities have implemented traffic calming trials, where they install low-cost, easily removable measures, such as plastic delineator posts or modular speed humps; collect before-and-after data on speeding and resident opinions; and then decide whether to install a permanent version of the measure.

The Public Works Department has installed traffic calming measures on a few Town-maintained streets, but the Town does not have a formal traffic calming request program.

Transportation and Land Use Planning REGIONAL TRANSPORTATION PLANNING

The US Census Bureau designates urbanized areas following each 10-year Census. Portions of Eliot belong to the Portsmouth Urbanized Area which spans across New Hampshire and Maine. The Kittery Area Comprehensive Transportation System (KACTS) is the federally designated Metropolitan Planning Organization (MPO) covering the Maine portion of the Rochester-Dover and Portsmouth Urbanized Areas. Typically, three to four years after the decennial census is completed, cities and towns like Eliot work with the MPO and MaineDOT to refine the urbanized area boundaries and federal functional roadway classifications. KACTS is responsible for planning and programming federally funded transportation projects within the urbanized areas.

In addition to project-based planning, the MPO is required by federal law to develop a Long-Range Transportation Plan (LRTP) and a Transportation Improvement Plan (TIP) for the region. The most recent LRTP was developed in 2019 and anticipates transportation needs and investments through 2045. It considers projected growth in population, employment, and residential and commercial development as the basis for new policies and projects to facilitate all modes of transportation, including roads and highways, rail, public transit, and biking and walking. KACTS is now updating the LRTP. The updated plan, Southern Maine in Motion, is expected to be completed in 2025. The TIP is a short-term capital improvement program developed every two years in collaboration with MaineDOT. Municipalities can submit candidate projects to be scored, ranked, and prioritized into the list of transportation projects that are submitted for federal, state, and local funding. Eliot should continue to work closely with KACTS to update the TIP, and LRTP, and participate in census-designated urbanized area discussions.

SMPDC is the regional planning entity for southern Maine. SMPDC staff support regional transportation committees and groups, including KACTS, as well as assist municipalities in project planning and management.

JOINT LAND USE STUDY (JLUS)

In 2019, SMPDC completed the Town of Kittery + Portsmouth Naval Shipyard Joint Land Use Study (JLUS), which included collaboration from communities in the region, including Eliot. The JLUS focused on transportation, workforce housing, and land use issues in the area surrounding the Shipyard. The study made recommendations to improve traffic congestion, climate and economic resiliency, and workforce housing challenges associated with the Shipyard, the region's largest employer. In 2020, the next phase of the JLUS began: implementation of the study's recommendations. In 2022, the third phase began: partnership.

The JLUS found that Shipyard employment increased steadily between 1998 and 2018, when it reached 7,000. At the same time, increased housing costs mean more and more employees must live in communities further away, increasing commute distance and time. On Route 236 at the Eliot-Kittery Town line, during the morning peak hours for the Shipyard commute, Shipyard traffic can exceed 40% of overall traffic, and it is over half (51%) of all traffic during the peak PM commute hour of 3pm to 4pm.

With an estimated 300 Shipyard employees, Eliot should continue to participate in the regional JLUS implementation and partnership phases on transportation topics including, but not necessarily limited to, public park-and-ride facilities; vanpooling and carpooling; regional transit coordination; Route 236 improvements; bicycle and pedestrian connectivity improvements; and facilitating more workforce housing options for Shipyard employees.

OTHER PLANS AND STUDIES

Other local and regional plans and studies are referenced throughout this chapter.

Improving our Transportation System for All Users

ROUTE 236

Route 236 is an important regional corridor, a major commuting route, and the conduit for Eliot's commercial and industrial land uses. Route 236 also acts as a barrier, effectively splitting the town in half.

COMMUNITY SURVEY FEEDBACK

INVESTING TO IMPROVE OUR TRANSPORTATION SYSTEM

Respondents who agree that the following is a serious challenge facing Eliot in the next 5 years:

Traffic congestion and safety: (67%)

- > Strongly agree: 35%
- > Somewhat agree: 32%

Bicycle and pedestrian safety: (70%)

- > Strongly agree: 44%
- > Somewhat agree: 26%

Need for transit options: (39%)

Respondents who believe the following is important for investing their tax dollars:

Road maintenance: almost everyone (96%)

- > Very important: 62%
- > Somewhat important: 34%

Road improvements for traffic and safety (84%)

- > Very important: 52%
- > Somewhat important: 32%

Sidewalks and paths for walking and bicycling: (73%)

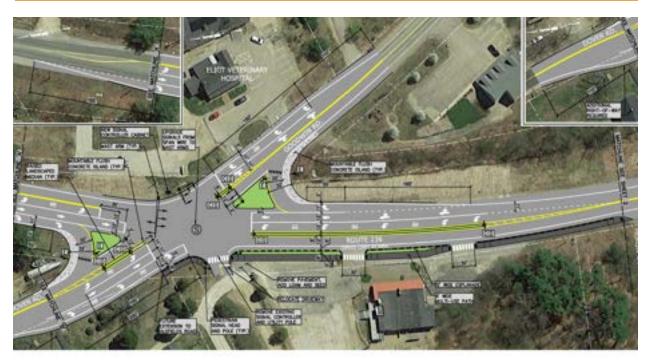
- > Very important: 45%
- > Somewhat important: 28%

Public transportation: (38%)

- > Very important: 11%
- > Somewhat important: 27%

FIGURE 7.X

TRANSPORTATION



Source: Excerpt of the 2022 Route 236 Corridor Study's conceptual improvement at the Route 236-Route 101 (Goodwin Rd./Dover Rd.) intersection

CORRIDOR STUDIES

In recent years, KACTS funded and led two corridor studies that recommended improvements to the safety and mobility of intersections and road segments on Route 236 in Kittery and Eliot for people driving, walking, or riding a bike. The first study (2019) covered Stevenson/Martin Rd. in Kittery to Beech Rd. The second study (2022) covered Beech Rd. to Route 101 (Dover Rd./Goodwin Rd.). Balancing mobility, safety, and accessibility, the studies recommend turn lanes, a center two-way left turn lane, existing signal equipment upgrades, and access management. The studies include extensive data analysis of existing and future traffic level of service (LOS), systemic safety and crash data analysis, and conceptual layouts of improvements.

ACCESS MANAGEMENT

Access management involves coordination and management of access to land development while simultaneously preserving traffic safety and mobility on the surrounding roadways. It is the practice of coordinating the location, number, spacing, and design of driveways, medians, median openings, and intersections to minimize conflicts and maximize the capacity for all users of the transportation system.

Opportunities for access management include possible connections between existing and future subdivisions, the consideration of shared driveways when possible, and consistent coordination and communication between the Town and MaineDOT when considering driveway access applications on State Highways.

The land use regulations include several access management provisions. Section 45-406 requires that safe access to and from all developments by assured "by providing an adequate number and location of access points, with respect to sight distances, intersections, schools, and other traffic generators". The section limits curb cut width and establishes driveway/ access sight distance requirements based on the posted speed limit of the intersecting road. Site plan review standards for access management are in Ch. 33, including Section 33-179 for commercial establishments and 33-183 for multifamily dwellings. Other access management standards are provided for new streets in Section 37-69 and for subdivision streets in 41-221.

IMPROVEMENTS RECOMMENDED BY THE ROUTE 236 CORRIDOR STUDIES: 2019 AND 2022

Route 236 and Bolt Hill Rd.

> Left turn lanes on Route 236 and a right turn channel on one Bolt Hill Rd. approach

> The 2019 Study found that this intersection did not meet traffic signal warrants – formulas related to traffic volume, crashes, and other factors that quantitatively determine if an intersection should have a traffic signal, subject to further engineering study. However, the data suggested it may be close to meeting at least one traffic volume warrant, suggesting that new development around this node could prompt one or more warrants being met

Route 236 and Beech Rd.

> Signal equipment upgrades and better signal timing

Route 236, Depot Rd., and Cedar Rd.

 Reconfigured signalized intersection and roundabout alternatives studied, but no preferred alternative recommended

> A supplemental study (2023-24) using updated traffic data recommended the "no build" option, which would leave the intersection as is, except for potential minor upgrades to equipment, signage, and pavement markings

Route 236 and Route 103 (State Rd.)

> Turn lanes, upgraded intersection alignment, possible signalization. The 2022 Study found that this intersection met a signal warrant. It has been a MaineDOT high-crash location more than once

Route 236 and Route 101 (Goodwin Rd./Dover Rd.)

> Access management, geometric improvements, new and extended turn lanes, extended and improved median islands, pavement marking and signal upgrades, better incorporation of a private road/ driveway into the signalized intersection, a sidepath for walking and bicycling that would serve as part of the Eastern Trail. The 2022 Study found that this skewed intersection met one of two criteria for it to be deemed a MaineDOT high-crash location, and that inadequate turn lane storage contributes to traffic congestion during busy times

Between Intersections

 Center turn lanes where there are driveways, planted medians where space allows, access management (e.g. consolidation of some driveways, narrowing of overly wide driveway cuts)

IN-PROGRESS PROJECTS

As of this writing, MaineDOT is leading the design phase of three significant traffic and safety improvement projects involving Route 236 in Eliot. They are listed below with their MaineDOT work identification number (WIN). We expect the designs to be informed by the recommended improvements in the corridor studies, input from the community, and input municipal boards and staff.

- > WIN 027132: Route 236 and Route 103 (State Rd.) intersection improvements
- > WIN 027134: Route 236 and Route 101 (Goodwin Rd./Dover Rd.) intersection improvements
- > WIN 026600: Route 236 corridor improvements, Dana Ave. (Kittery, near I-95) to Depot Rd. in Eliot

The Town is contributing 10% of the cost of the two intersection project designs and 50% of the cost of the corridor project design for the Eliot portion. The Town of Kittery is also a stakeholder in the corridor project. Construction funding is yet to be programmed for each of these projects.

A collaborative design phase that seeks input from many stakeholders, offers opportunities for community input, seeks to balance the needs of all transportation users and trip types (e.g. commuting, truck trips, local trips, regional trips), and is sensitive to the existing and planned land use context will be important toward ensuring that Route 236 will continue to be a successful corridor and valuable transportation asset in the decades to come. Construction of WIN 026600 will allow for the Route 236 pavement to be restored within the project limits.

PUBLIC AND SOCIAL SERVICES TRANSPORTATION

The Cooperative Alliance for Seacoast Transportation (COAST) operates fixed route transit in Eliot via COAST's Route 100. The service runs from Somersworth to the Portsmouth Naval Shipyard in Kittery twice per day including a morning southbound and evening northbound trip, primarily supporting workers traveling to and from the Shipyard. There is one stop in Eliot at Eliot Commons.

COAST also provides complementary ADA paratransit services for each of these fixed routes. Although it serves as a Shipyard commute option, Route 100's lack of frequency does not offer a viable means for Eliot residents looking to make trips entirely using bus transportation. The Shipyard also supports vanpools, some of which stop or meet in Eliot. York County Community Action Corporation (YCCAC) offers a range of transportation services in York County. In Eliot, YCCAC offers a demand response service for shopping and non-medical trips. Reservations are required, and riders are typically picked up at their homes with a return trip an hour or more later.

In 2022, SMPDC completed the Southern Maine Transit Assessment to guide future public transportation investments. The assessment evaluated regional population growth, socioeconomic data, employment patterns, travel patterns, and existing transit service levels and ridership (and how the COVID-19 pandemic impacted them). Municipalities, including Eliot, provided input through stakeholder interviews. Highlights of the report's recommendations particularly relevant to transit in Eliot are included in Table __.

TAE	BLE	7.X

TRANSPORTATION

Area of Focus	Action	Time Horizon	Responsibility
Expand Transit Service	Add more frequency, longer hours, and weekend service: For example, provide expanded transit service hours for the hospitality workers in Kittery and increase frequency through Eliot to attract ridership.	Short-Term	Transit providers; Municipalities
Expand Transit Service	Provide Microtransit options. Design and operate microtransit service between the Sanford area and the Shipyard in Kittery, with future expansion to other zones throughout the region. Eliot named microtransit as a service it hoped to see develop.	Short-Term	Transit providers; Municipalities
Improve Connectivity for Transit Dependent Populations	Identify communities with the greatest need and focus efforts on addressing mobility needs. Focus on providing transit service to communities with the highest propensity to ride. In the region, the most transit dependent populations include low-income, older adult, people with disabilities, and zero-car households.	Short-Term	Transit providers; Municipalities
Improve Connectivity for Transit Dependent Populations	Expand volunteer driver programs. Establish/expand existing programs to provide rides to essential services like grocery stores and medical appointments, especially in the more rural areas where other transportation is not available.	Short-Term	Transit providers; Municipalities
Improve Connectivity for Transit Dependent Populations	Provide information about transit on multiple platforms that reach disadvantaged communities. Municipal interviews identified that marketing/outreach was lacking. Investing in and prioritizing outreach in disadvantaged communities can improve equitable access and service reach.	Short-Term	Transit providers; Municipalities
Improve Connectivity for Transit Dependent Populations	Prioritize multimodal connectivity and infrastructure to provide affordable, accessible connections that complement transit. Maintain existing pedestrian and bike infrastructure and add new facilities where needed.	Short-Term	Municipalities
Promote Sustainable and Accessible Development	Employ Transportation Demand Management (TDM) strategies to improve efficiency. Align TDM strategies with the GoMaine Program and other microtransit efforts.	Short-Term	Municipalities; Transit providers; Large employers; GoMaine/MaineDO
Promote Sustainable and Accessible Development	Implement local land use policies that support robust transit. This could include revisions to zoning and other codes to facilitate the use of transit.	Long-Term	Municipalities

Transportation Needs for Seniors

Eliot has an active Aging-In-Place (AIP) Committee that meets monthly. The AIP Committee's Action Plan sets a goal, objectives, action steps, and progress measures for improving transportation options for seniors.

Goal #1:

To increase the number of transportation options available as well as developing partnerships with other organizations and communities around transportation.

Objective 1:

To expand the number of affordable, reliable and convenient transportation options

Action Steps:

- > Explore software support to organize volunteer drivers
- Recruit committee members from volunteers who have expressed interest in providing rides to neighbors
- Explore and communicate number of grocery stores offering home delivery
- > Explore volunteer driving programs
- > Explore ways to connect neighbors interested in helping their neighbors

 Identify resources in the community providing transportation to medical appointments and shopping shuttles

Measurable progress:

- > Creation of a Transportation Subcommittee
- > Creation of an Eliot volunteer transportation service
- Partnership with other communities to create a volunteer transportation service

As noted above, there are some ADA, paratransit, and demand-response services available to Eliot seniors, but there are also unmet transit needs. While the COAST 100 stop at Eliot Commons is within walking distance of two senior housing communities (Baran Place and Eliot Commons Senior Housing), its peak-hour, Shipyard-oriented service significantly limits its utility for other trips. Despite the short distances, as the crow flies, between these two communities and the bus stop, they lack a direct sidewalk or path. Residents must either walk alongside Beech Rd., walk a roundabout route through a parking lot, or cut through a wooded area to get to the bus stop.

AIP COMMUNITY ASSESSMENT

A community assessment conducted by the AIP Committee included a survey with over 300 responses, primarily from residents aged 50 and older. Here are some highlights from the survey relevant to transportation:

Please rate the following when thinking about civic buildings and parks in Eliot:

The answer choices were "satisfied", "no opinion", or "not satisfied", and survey respondents could write in additional comments.

- "Well-lit, safe streets and intersections for all users" had the highest level of dissatisfaction
- Sidewalks that are in good condition, safe for pedestrian" had the second highest level of dissatisfaction.
- > The 50 write-in comments were tallied by theme. Two most popular themes were:
- Additional sidewalks beyond the center of town (17)
- Need wider shoulders to walk and bike safely (9)
- Need bike paths (6)
- Poor street lighting (6)

Walk or Exercise:

> Three-quarters of respondents said they walked or exercised at least once a week, and about two-thirds did so at least 3 times per week

Medical Appointment:

> Two-thirds of respondents said they went to a medical appointment at least once a week

Mixed results regarding the need for transportation services:

- > Only about a quarter of respondents said that it is very likely (9%) or likely (17%) that they will need transportation services over the next 5 years
- If they needed to move over the next few years, about the same percentage of respondents said that a need for public transit would not factor into the decision to move (41%) as the percentage of respondents that said that it would factor (44%)
- > Only about 5% of respondents cited "Lack of transport" as something that prevents them from socializing more
- > 50% of respondents said that "Availability of Transportation (inconvenient)" was either a very important (30%) or somewhat important (20%) factor in their ability to travel in Eliot.
- The most important factors were weather and darkness.

COMMUNITY SURVEY FEEDBACK

82%

RESPONDED THAT SIDEWALKS, WALKING TRAILS, AND BIKE PATHS ROADS ARE IMPORTANT IN THE FUTURE

(Over half 52% of respondents say it is very important)

Active Transportation (Walking and Bicycling)

Active transportation, such as bicycling, scootering, walking, and using a wheelchair, is important to Eliot's transportation system, economic development, and the health of the community. The infrastructure, the presence and behavior of motor vehicle traffic, and the surrounding land uses all contribute to how conducive an area is to walking or biking. Sidewalks, sidepaths, bike lanes, and shared use paths are either limited or nonexistent in Eliot.

Eliot has approximately 2/3 of a mile of sidewalk, located on State Rd. between Beech Rd. and the William Fogg Library. In many places throughout Eliot, sidewalks may not be feasible, cost effective, or context-sensitive. In those places, pedestrians must walk along the side of the road. Bicycle infrastructure is limited in Eliot, and along most roads, people on bicycles share the road with people driving. Because of their prevailing traffic speeds, these roads would probably be given a rating of higher stress by an analysis of Bicycle Level of Traffic Stress (LTS), a common numerical rating system for the bikefriendliness of streets and roads. (For more on Bicycle LTS, see the Appendix.) In some cases, such as parts of State Rd. in the Village Center, shoulders are present and offer some separation from vehicular traffic.

IMPROVING CONDITIONS FOR PEOPLE TO WALK AND BIKE IN ELIOT (2021)

In 2021, the Select Board approved the active transportation plan, "Improving Conditions for People to Walk and Bike in Eliot" (the 2021 Walk-Bike Plan). While this was an in-house planning effort that was less thorough than many comprehensive active transportation plans, it nonetheless assessed the state of walking and bicycling in Eliot and prioritized corridors for immediate-, short-, mid-, and long-term bicycle and pedestrian (bike-ped) improvements. The plan was informed by public input and stakeholder feedback. It emphasizes the many benefits of bike-ped infrastructure and "complete streets" (streets that are designed for people using many different modes of transportation), including:

- > Improving safety
- > Contributing to an age-friendly community
- > Promoting Safe Routes to School (SRTS)
- > Encouraging physical activity
- > Growing a sense of community
- > Reducing air pollution and greenhouse gas emissions

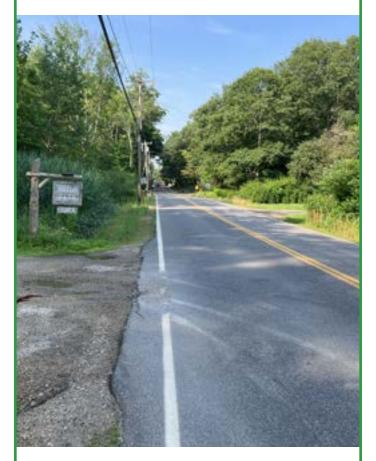
The plan's geographic focus is on connecting destinations around the Village area, where several of the immediate- and short-term projects are. It offers detailed infrastructure improvement recommendations at, and along, a variety of locations and roads in town, as well as non-infrastructure improvements such as investigating bike share programs, regular maintenance, enforcement, and encouragement activities.



A person riding a bicycle in the travel lane of Main St. near Bolt Hill Rd. Deteriorated roadway edges can present a hazard for people on bike.

FUTURE ZONE FEEDBACK

"Here are the things that I would love to see in Eliot in the coming years: Sidewalks on Beech Road from Goodwin to State. So many people love to walk around here but there's barely a shoulder and it's frankly very dangerous much of the time due to high traffic of trucks and speeding cars."



Beech Rd. looking toward State Rd. (July 2023). The road, which connects the Village area with Eliot Commons and Route 236, lacks a sidewalk and shoulders, meaning people must walk on the dirt shoulder, in the ditch, or in the travel lane.

STATE-BEECH ACTIVE TRANSPORTATION AND INFRASTRUCTURE PROJECT

In 2022, shortly after the Walk-Bike Plan was approved, the Town began to implement some of the plan's highest-priority recommendations, beginning the first expansion of our walking and bicycling network, beyond just one segment of one road. The State-Beech Active Transportation and Infrastructure Project was inaugurated. The project will build a sidewalk and shoulders for people walking and bicycling on State and Beech Roads in and near the Village area, connecting to Eliot Commons and Route 236. These facilities will help more people access the Village area and Eliot Commons on foot, with a wheelchair or other assistive mobility device, or on bike. They will improve Safe Routes to School for Eliot Elementary, an on-road segment of the Eastern Trail and East Coast Greenway, and recreation options for Eliot residents.

The Town hired a consultant for the initial design phase, funded by American Rescue Plan Act (ARPA) funds, including surveying, initial public engagement and abutting property owner notification, initial environmental and utility coordination, and the development of 10% plans. As these are Statemaintained roads, the Town coordinated the work with MaineDOT.

After completing 10% plans in mid-2023, the Town sought additional funding to carry the project through the design and right-of-way phases and get it shovelready. The Town received a \$304,000 MaineDOT Bicycle and Pedestrian Program grant, matched with additional ARPA funds. As of this writing, design is continuing. The project is expected to be ready for construction in 2027 or 2028. Additional grant funding and local match investment will be needed to build the project.

MOSES GERRISH FARMER RD. AND MAIN ST.

In 2024, a Town consultant completed a planning study to explore the feasibility of potential active transportation (walking and bicycling) improvement options for Moses Gerrish Farmer Rd. and Main St. The Moses Gerrish Farmer Road and Main Street Active Transportation Feasibility Study was funded by a \$7,500 grant from MaineDOT's Village Partnership Initiative (VPI) matched with American Rescue Plan Act (ARPA) funding. This was one of the top corridors mentioned by the public in the 2021 Walk-Bike Plan, citing connections to destinations such as the Village, Boat Basin, and Green Acre (main campus and Fellowship House).

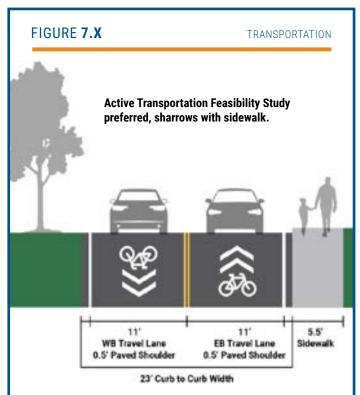
The study considered several alternatives, informed by public feedback. It settled on a recommendation to build a 5.5 ft. sidewalk and paint shared lane pavement markings (sharrows) for bicycling. The study found that this alternative "best meets the study purpose and

2023 VISION SESSION FEEDBACK

"Support safe transportation/recreation for youth by creating [a] system of sidewalks/paths that connects safe spaces for them and families [e.g.] Boat Basin to Eliot Elementary to Frost-Tufts."



Main St. near Green Acre (June 2021). The road, which connects the Village area with the Boat Basin and Green ACre, lacks a sidewalk and shoulders, meaning people must walk on the dirt shoulder, in the ditch, or in the travel lane.



Alternative 3 (preferred, sharrows with sidewalk) from the Moses Gerrish Farmer Road and Main Street Active Transportation Feasibility Study. Study and image created by Stantec. need while minimizing property impacts, environmental & cultural resource impacts, and construction costs". It also suggested that an 8 ft. side path, instead of just a sidewalk, could be evaluated early in a future design phase. As of this writing, funding has yet to be identified to move forward with design.

EASTERN TRAIL, EAST COAST GREENWAY, AND US BIKE ROUTE 1

Eliot is on the route of Maine's Eastern Trail, which is envisioned to be an off-road, shared-use, walking and bicycling path between South Portland and Kittery. The Eastern Trail has over 20 miles of off-road path already built. It is part of the 3,000-mile East Coast Greenway stretching from Calais, Maine, to Key West, Florida. The East Coast Greenway is a mix of shared use paths (about one-third of the route) and on-road segments (about two-thirds), with a goal of adding more shareduse paths over time.

The section of the Eastern Trail and East Coast Greenway through Eliot is entirely on-road (Figure _). Wayfinding signage directs trail users along State, Old, River, Worster, and other roads that make up the designated route.

An extension of the Eastern Trail of over 10 miles from where the path currently ends in Kennebunk, along a utility corridor, to North Berwick is currently in design, and federal RAISE grant funding has been secured to build part of it. In fall 2023, a partnership including Eliot, neighboring towns, SMPDC/KACTS, MaineDOT, and the Eastern Trail Alliance began a feasibility study to explore options for continuing the existing Eastern Trail from North and South Berwick through Eliot and Kittery to the New Hampshire border. While most of the existing and proposed Eastern Trail is along the abandoned Eastern Railroad corridor, in Eliot, Route 236 was laid out almost entirely on top of the abandoned rail corridor. The study is assessing several route alternatives in Eliot, Kittery, York, and South Berwick, such as utility corridors and Route 236 (as a sidepath).

US Bike Route 1 also passes through Eliot. This longdistance designated bike route has the same endpoints (Calais to Key West) and shares many segments with the East Coast Greenway.

By improving concurrent sections of the Eastern Trail, East Coast Greenway, and US Bike Route 1, Eliot can better realize the economic benefits these routes provide to local communities. Both the Eastern Trail

FIGURE **7.X**

TRANSPORTATION

EASTERN TRAIL AND EAST COAST GREENWAY THROUGH ELIOT



The Eastern Trail on-road route through Eliot as shown in the Eastern Trail Alliance's Trail Guide. Source: Eastern Trail Alliance



A wayfinding sign at the intersection of Houde Rd. and Heron Cove Rd. that guides the on-road route of the Eastern Trail, East Coast Greenway, and US Bike Route 1

Alliance and the East Coast Greenway Alliance have done several economic impact studies suggesting significant economic, tourism, and health benefits. About 50 million people per year walk, run, or ride their bikes along the East Coast Greenway. People using the route visit local businesses without bringing car traffic. Businesses along the greenway can benefit from marketing and promotions that highlight places to stop along the way. Off-road trail segments allow people of all ages and abilities a comfortable recreational experience that is separated from traffic, where they can choose their mode and pace.

Several recommendations in the 2021 Walk-Bike Plan seek to improve the on-road Eastern Trail/East Coast Greenway route with a sidewalk and paved shoulders. An important part of the route is recommended to see a new shared use path.

In the 2000s, Eliot stopped paying dues to the Eastern Trail Management District (ETMD), the entity that manages the construction and upkeep of the trail and includes representatives from Eastern Trail communities. The 2009 Comprehensive Plan recommended that Eliot's support for the Eastern Trail should continue, but the Town did not rejoin the ETMD until 2024.

Parking in Eliot

PUBLIC PARKING

Town-owned public parking is available at Town Hall. The lot is being expanded as part of the Town Hall Renovation/Expansion and is expected to adequately serve typical traffic. During major events in the Village, such as Festival Day, people park at Town Hall, the Police and Fire Stations, the Elementary School, and up and down nearby roads. Festival Day operates satellite parking locations served by shuttles. Elections are expected to be moved from Marshwood Middle School to Town Hall once the renovation project is complete.

Parking for public park users is also available at Frost-Tufts Park (about 45 paved spaces) and William Murray-Rowe Park (space for up to about 20-25 vehicles). In 2024, the Planning Board approved a public park-and-ride facility proposed by MaineDOT at Eliot Commons with approximately 60 spaces.

PARKING REQUIREMENTS IN THE LAND USE REGULATIONS

Parking requirements for private developments are in Article X of Chapter 45 (Zoning) of the land use regulations. Like many communities, Eliot prescribes parking minimums for various land uses. Some parking minimums are strict enough that they may unduly discourage development in the Village or its vicinity. Other minimums give more flexibility. Table __ provides an assessment of these effects. TABLE **7.X**

TRANSPORTATION

Land use category	May be overly strict and discourage development	Less strict or more flexible
Residential uses	All other dwelling units other than AHDs and ADUs: alternately, 2 for the first unit, 3 for the second unit, 2 for the third unit, and so on – meaning a two-family dwelling would need five parking spaces, which would take up 900 sq. ft.	2/3 of a space for affordable housing developments (AHDs), no parking minimum for accessory dwelling units (ADUs) – both provisions set in statute by LD2003
Restaurants	Takeout restaurants – minimum 25 parking spaces plus 1 space for each 50 square feet (or fraction thereof) of floor space in excess of 900 square feet, and 1 space for every exterior table – meaning a 1,500 sq. ft. takeout restaurant with 3 exterior tables would require 40 parking spaces, taking up over 7,000 sq. ft. without accounting for the parking aisle	Other restaurants – 1 space for every 3 seats
Retail sales	1 space per 150 sq. ft. for a retail store (including a grocery store) – thriving walkable retail districts may have rates closer to 1 space per 500 sq. ft., or they may have no parking minimums	
Medical and dental offices	7 parking spaces for each physician, dentist or other medical practitioner – is a one-size-fits-all standard that may be overly strict, especially since medical practitioners may only be part-time at the office, and each can generally only see one patient at a time	
Joint use parking option [45-492]		Allows joint use of parking spaces by two buildings where it is demonstrated that the two uses would have different peak parking demand times

Electric Vehicles and Charging Stations

Electric vehicles (EV), plug-in hybrid electric vehicles (PHEVs), and EV charging stations are a top climate priority for the state. MaineDOT, Maine Turnpike Authority, Maine Department of Environmental Protection (DEP), as well as other agencies and organizations across Maine, are helping to facilitate EV and PHEV deployment.

State and local governments, public utility companies, and private businesses have been working to expand the number of EV charging stations. According to the U.S. Department of Energy, which tracks public charging stations, the nearest charging stations to Eliot are located to the west in Dover, to the south in Kittery, and to the east in York and Ogunquit. There are no public stations in Eliot.

Efficiency Maine Trust, in partnership with the Maine Department of Transportation, is currently

expanding the charging infrastructure in the state to fill in spatial gaps. They have identified and prioritized spatial gaps in southern Maine to be improved in recent years. Maine municipalities can play a crucial role in encouraging EV infrastructure through zoning and other ordinances.

ELECTRIC VEHICLE	S IN MAINE	
Electric vehicles (EVs)	2020: 4,268	
on the road in Maine:	2023: 12,369	
Electric vehicles (EVs)	2018: 151	
charging stations in Maine:	2023: 459	
Source: Maine Won't Wait 2022 and 2023 progress reports. See Section Climate Change for further discussion		

Rail and air transportation

The nearest train station is just five miles away in Dover, NH, and is serviced by Amtrak's Downeaster train, which connects North Station in Boston to Brunswick, Maine, with many additional stops in Maine, New Hampshire, and Massachusetts. C&J Bus Lines, a private intercity coach bus service to Boston South Station and Boston Logan International Airport, has stops in both Dover and Portsmouth.

Passenger air services are offered at Pease Airport in New Hampshire, less than a 20-minute drive from Eliot, as well as the Portland Jetport, which is just under an hour's drive from Eliot.

Seacoast Airfield, formerly Littlebrook Airpark, continues to operate as the community's private airport. The airfield recently repaved its runway. It is mostly in the Suburban zoning district; there is no airport overlay zoning. Airspace protection is addressed on a case-bycase basis in Planning Board reviews of developments near the airport.

Marine Transportation

There are no public marine transportation terminals or regular boat transportation services that dock in Eliot.



Seacoast Airfield, formerly Littlebrook Airpark, continues to operate as the community's private airport. The airfield recently repaved its runway.

New Development and its Transportation Impacts

New development is often phased over years and the impacts of the final development, as well as the initial phase(s), on the transportation system should always be considered. The magnitude of new development determines the traffic impacts, and potential remedies, that the development will have. Depending on existing traffic volumes, distribution patterns, roadway users, safety issues, and road conditions, small-scale as well as large-scale development can often have significant impacts on the surrounding roadway network. By requiring transportation impact studies for new developments of a certain size or for developments located in areas where significant transportation problems are known to exist, the Planning Board can effectively evaluate the effects associated with any new development. Through this kind of analysis, recommendations for project phasing and developer participation in necessary improvements can be implemented and problems of safety, congestion, and expensive upgrades to poorly planned roads can be avoided.

The 2009 Comprehensive Plan's community survey found overwhelming support for requiring developers to pay impact fees to offset costs to the Town. Accordingly, several strategies in the plan recommended impact fees. Impact fees must fund capital costs (not operational costs) of infrastructure improvements made necessary by the development. Under state law , the seven potential uses of impact fees include:

- > Waste water collection and treatment facilities
- > Municipal water facilities
- > Solid waste facilities
- > Public safety equipment and facilities
- > Roads and traffic control devices
- > Parks and other open space or recreational areas
- > School facilities

A transportation impact fee program was never implemented. One of the first steps toward implementing such a program is to conduct an impact fee study. The study could describe transportation needs, estimate the costs of transportation improvements, apportion a reasonable share to be paid by developments (e.g. a per-trip fee), and recommend ordinance amendments to establish the program. The study could also identify how Eliot TIF district revenues would share in those costs.

	Goal, Policy, or Strategy	Description	Responsibility or Partnership	Implementation Timing		
GOAL 1	Goal 1	Goal 1 A well-maintained, safe, and efficient transportation system that accommodates anticipated growth and economic development				
	Policy 1	eep local roads, their stormwater facilities, and public parking in good condition				
	Strategy 1	Continue to maintain a roadway inventory and regularly update the condition of pavement and drainage facilities	Public Works	Ongoing		
	Strategy 2	Maintain a capital improvements plan (CIP) that prioritizes maintenance, repair, and improvement projects for transportation facilities and reflects community, regional, and state objectives	Public Works, Town Manager, Select Board, CIP Committee	Ongoing		
	Strategy 3	Maintain convenient public car and bicycle parking in the Village area	Public Works, Town Manager, Select Board	Ongoing		

	Goal, Policy, or Strategy	Description	Responsibility or Partnership	Implementation Timing
GOAL 2	Goal 2	Zero traffic crashes that are fatal or cause a severe injury		
	Policy 1	Play a central role in improving Route 236 and other state-maintained and safety for all modes of transportation and maximize efficiency	state-aid roads to pric	oritize
	Strategy 1	Continue to partner with MaineDOT on its current project to improve traffic, safety, and multimodal options on Route 236 between Depot Rd. and the Kittery Town Line. Advocate for a corridor design that encourages slower traffic speeds and improves the look and feel of the corridor while maintaining adequate traffic flow. This design should be informed by the recommendations of the Route 236 Corridor Studies (2019-2021) and dovetail with the Future Land Use goals, policies, and strategies	Town Manager, Planning, Public Works, DOT, KACTS, Town of Kittery	Short-Mid
	Strategy 2	Continue to partner with MaineDOT on its current projects to improve traffic, safety, and multimodal options, including an Eastern Trail segment, at the Route 236 intersections with Route 101 (Goodwin Rd./Dover Rd.) and Route 103 (State Rd.)	Town Manager, Planning, Public Works, DOT, KACTS	Short-Mid
	Strategy 3	In the land use regulations and future zoning changes along Route 236, maintain and enhance performance standards or incentives to improve safety for people using all modes of transportation, informed by best practices, proven safety countermeasures, road context, and road classification. Examples include: access management (e.g. shared driveways, frontage road segments, abutting lot cross-access, adequate driveway location and sight distance), multimodal facilities, speed management, and others. Such standards should address or avoid conflicts with policy objectives of the Sensible Transportation Policy Act (23 M.R.S.A. §73); state access management regulations pursuant to 23 M.R.S.A. §704; and state traffic permitting regulations for large developments pursuant to 23 M.R.S.A. §704-A.	Planning, Public Works, Planning Board, Select Board, DOT	Ongoing
	Strategy 4	Work with DOT to implement context-sensitive design changes to state-maintained and state-aid roads, other than Route 236, that address documented traffic speed and safety issues and enhance conditions for people walking and bicycling	Planning, Public Works, Town Manager, DOT	Ongoing
	Strategy 5	Along with other KACTS municipalities, contribute to implementing the recommendations of the regional KACTS Safety Action Plan	Planning, Town Manager, KACTS, DOT, consultant	Short-Mid
	Strategy 6	Advocate for a systemic safety study of Route 101 (Goodwin Rd.) that considers proven safety countermeasures that are consistent with the road's classification and rural context	Planning, KACTS, DOT	Mid

Goal, Poli or Strate		Responsibility or Partnership	Implementation Timing
Goal	Better transportation options for the diverse transportation needs of residents-including, but not necessarily limited to, children, older adults, people with disabilities, people who cannot or prefer not to drive, and people who struggle to afford transportation costs-in a way that minimizes increases in vehicle miles traveled (VMT)		
Policy	1 Work with regional transit providers, social service organizations, and Tox social service transportation options	vn committees to main	tain and improve
Strategy	1 Communicate and educate about existing social services transportation options	AIP Committee, General Assistance, Town Manager, Planning, YCCAC, KACTS	Short
Strategy	2 Support expanded social services transportation options, including, but not limited to, increased trip frequency, additional connections to essential services and other destinations, new routes, and ridehailing	AIP Committee, General Assistance, Town Manager, Planning, YCCAC, KACTS	Mid
Strategy	3 Study the feasibility, costs, and benefits of a locally-managed social services transportation program, including the Town acquisition of one or more vehicles for this program. Consider implementing this program if recommended by the study and if another agency or organization is not providing an equal or better service that meets the social services transportation needs of Eliot residents	AIP Committee, Town Manager, Planning, nonprofits	Short (study); Mi (program start, if recommended)
Policy	2 Collaborate with regional partners to improve public transportation and ri	desharing options	
Strategy	1 Advocate for increased frequency on the COAST 100 route	KACTS, Town Manager, Planning, AIP Committee	Short
Strategy	2 Propose a contribution in the Town's Annual Budget to public transportation operations or matches to grant funding (such as Federal Transit Administration formula funding) commensurate with the level of public transportation service in Eliot	Town Manager	Mid
Strategy	3 Study the feasibility, costs and benefits, and community support for one or more of the following: 1) local bus service in Eliot that would serve Route 236 and the Village area; 2) transit connections from Eliot to other transportation hubs, such as the Dover Amtrak station, C&J bus stations, and others; and 3) a seasonal transit service (such as a rubber tire trolley) that could provide trips for recreational/ leisure destinations, like beaches, parks, and shopping. Introduce at least one of these services, if recommended by the study.	KACTS, Planning	Mid (Study); Long (Implementation
Strategy	4 Support the implementation of one or more public park-and-ride facilities that encourage ridesharing for Portsmouth Naval Shipyard and other employers' commutes	DOT, Planning, Town Manager, JLUS	Ongoing
Strategy	5 Ask that SMPDC/KACTS explore the creation of a regional Transportation Management Agency (TMA) to help coordinate and educate about transportation and ridesharing options and services available to the residents of the region, and to conduct transportation demand management (TDM) work	Town Manager, Planning, KACTS	Mid
Policy	3 Increase the percentage of local trips that use active transportation		
Strategy	1 Improve and extend walking and bicycling facilities on State Rd. and Beech Rd. in and near the Village area. The State-Beech Active Transportation and Infrastructure Project (currently in design, subject to securing construction funding) will make the initial extensions on Beech Rd. to Eliot Commons and on each end of State Rd. to the Grange Hall and Beech Rd. Future extensions on these roads could occur in the mid to long term, with implementation timing informed by the Town's active transportation plan, available funding, and investment priorities in other corridors	Planning, consultant, Public Works, Town Manager, Select Board, DOT, KACTS	Short-Mid (design & right- of-way phases fully funded, construction funding needed)
Strategy	2 Scope, design, and build active transportation improvements on Moses Gerrish Farmer Rd./Main St., Old Rd., and other corridors as appropriate	Planning, consultant, DOT, KACTS	Short (scoping); Mid-Long (Desig Construction)

Goal 3 continued...

Goal 3 continued	 not necessarily limited to, children, older adults, people with disabilities, people who cannot or prefer not to drive, and people who struggle to afford transportation costs-in a way that minimizes increases in vehicle miles traveled (VMT) cy 3 Increase the percentage of local trips that use active transportation 		
Policy 3 continued			
Strategy 3	Improve bicycle parking options at public and community facilities, and update the land use regulations to require or incentivize bicycle parking for developments that may be bicycle trip generators or attractors	Planning, Town Manager, Public Works, DOT, AIP Committee, Planning Board, Select Board	Ongoing
Strategy 4	Develop a comprehensive active transportation plan	Planning, Planning Board, AIP Committee, Select Board, steering committee, consultant, KACTS	Mid
Strategy 5	Through the location and design of improvements, encourage safe and comfortable active transportation for vulnerable road users, such as children, seniors, and people with mobility challenges	Planning, Public Works, Town Manager, AIP Committee, KACTS, DOT	Ongoing
Policy 4	Support and advance the vision for the Eastern Trail and East Coast Green	way in Eliot	
Strategy 1	Maintain full membership in the Eastern Trail Management District (ETMD) and coordinate with neighboring municipalities, the Eastern Trail Alliance, the East Coast Greenway Alliance, and other partners on planning and support for the Eastern Trail and East Coast Greenway	Town Manager, Planning, Select Board	Ongoing
Strategy 2	Play a key role in implementing the recommendations of the Eastern Trail Feasibility Study through the planning, design, and construction of off-road trail segments on the route, and improvements to the interim on-road route	Planning, Town Manager, Select Board, Planning Board, Public Works, KACTS, DOT, consultant	Ongoing

	Goal, Policy, or Strategy	Description	Responsibility or Partnership	Implementation Timing
GOAL 4	Goal 4	A transportation system that generates less air pollution and gr	eenhouse gas emis	sions
	Policy 1	Encourage the use of electric vehicles (EVs) and fuel-efficient vehicles		
	Strategy 1	Encourage COAST, YCCAC, and other transit providers to switch to electric vehicles or more fuel-efficient vehicle fleets	Planning, Town Manager, KACTS, Conservation Commission	Ongoing
	Strategy 2	Study changes to parking requirements in the land use regulations that encourage and incentivize electric vehicle spaces and charging stations, compact car parking, and motorcycle or moped parking	Planning, Planning Board, Select Board, Conservation Commission	Mid
	Strategy 3	Seek partnership opportunities and grant funding for the installation of EV or e-bike charging stations at Town Hall or other public facilities, where such stations are cost-neutral (at minimum) or net revenue generators for the Town Budget, when factoring in net costs for installation, operation, and maintenance, including Town staff time. The Town should consider contracting the installation, operation, and maintenance of any such stations to a responsible entity	Town Manager, Public Works, private businesses, Efficiency Maine, other grant providers	Mid

	Goal, Policy, or Strategy	Description	Responsibility or Partnership	Implementation Timing
IOAL	Goal 5	Fiscal prudence in maintaining and improving the transportation system		
	Policy 1	Exercise cost-sharing and partnership strategies and seek grants to lesse maintenance costs of transportation facilities	n the capital and	
	Strategy 1	Establish a local multimodal transportation advisory committee	Select Board	Short
	Strategy 2	Seek grants through KACTS annual capital projects requests, DOT's partnership funds, special grant programs (e.g. federal discretionary grants), nonprofits (e.g. AARP), and other sources that cover at least half the cost of transportation capital improvements	Planning, Town Manager, KACTS	Ongoing
	Strategy 3	Make use of transportation bonds or loans when appropriate	Town Manager, Select Board	Ongoing
	Strategy 4	Seek opportunities to partner with neighboring municipalities or accomplish multiple objectives when such approaches create economies of scale	Planning, Town Manager, KACTS	Ongoing
	Policy 2	Require that private developments cover a reasonable share of the costs improvements related to their transportation impacts	of transportation	
	Strategy 1	Conduct an impact fee and TIF study that evaluates a local transportation impact fee system and the proportionate contributions of the Town's TIF districts to transportation improvements benefitting the TIF districts	Planning, Planning Board, Town Manager	Short
	Strategy 2	Subject to the recommendations of the impact fee study in Strategy 1, implement a transportation impact fee program and align it with the Town's Capital Improvements Plan (CIP) and TIF investments	Planning, Planning Board, Select Board, Town Manager	Mid
	Policy 3	Use the transportation system to achieve co-benefits, such as improving	habitat and beautifying	the landscape
	Strategy 1	Plant flowers and other plants along transportation corridors, such as at gateways into town and in roadway medians	Garden Club, private businesses, sponsoring entities, DOT	Ongoing
	Strategy 2	Work with applicable state agencies and other stakeholder organizations to make transportation facilities more resilient to the impacts of climate change and severe weather, such as prioritizing, designing, and building roadway stream crossing upgrades with Stream Smart principles and implementing applicable recommendations of the Climate Vulnerability Assessment	Planning, Public Works, Town Manager, Conservation Commission	Short (prioritization); Mid (design); Mid-Long (construction)

TRANSPORTATION ENDNOTES

- ¹ Codified in state law in 23 MRSA §1801-1804
- ² Local Road Assistance Program (LRAP): www.maine.gov/mdot/csd/lrap
- ³ Elsewhere in this chapter, the more informal "state-aid roads" label is used.
- ⁴ Per SMPDC research using MaineDOT data

⁵ Accessible via MaineDOT Asset Management – Highways web page: <u>www.maine.gov/mdot/about/assets/hwy.</u> Data was accessed 1-9-25.

⁶ In this context, large culverts are defined as a pipe or structure with a total span width greater than five feet and less than 10 feet or any collection of multiple pipes, where the clear distance between openings is less than half of the smaller contiguous opening, and the total flow area is between 20 and 80 square feet.

⁷ Maine Public Bridge Structures in the Municipality of Eliot (PDF report) www.maine.gov/mdot/bridges/docs/bridgereports/Eliot.pdf

⁸ Data margins of error are too great to know with confidence the percentages of workers who walked, biked, took transit, or carpooled to work, but each percentage is likely to be small

- 9 lehd.ces.census.gov/data/
- ¹⁰ mdotapps.maine.gov/MaineCrashPublic/
- ¹¹ Available at: <u>smpdc.org/kactssafetyactionplan</u>
- ¹² The SHSP is available via the MaineDOT Transportation Safety web page: <u>www.maine.gov/mdot/safety/</u>
- ¹³ <u>visionzeronetwork.org/</u>
- ¹⁴ smpdc.org/index.asp?SEC={7425B9C5-DD72-4B0D-997F-53CC4A8C95F0}&Type=QUICKFORM
- ¹⁵ Available on the SMPDC website here: <u>smpdc.org/transportstudies</u>
- ¹⁶ Available here: <u>www.eliotmaine.org/228/Multimodal-Transportation-Walking-Bicycl</u>
- ¹⁷ Available here: <u>www.easterntrail.org/eastern-trail-maps/</u>

¹⁸ East Coast Greenway Alliance. "The Big Picture: Impact and Promise".

https://www.greenway.org/about/impact/our-impact-the-big-picture. Eastern Trail Alliance. (2018). The Economic Benefits of the Eastern Trail in Southern Maine. 2nd ed. https://www.easterntrail.org/documents/ ETEconomicImpactStudy2018.pdf.

¹⁹ Outdoor and Active Transportation Resources, Strategy 2.5

²⁰ U.S. Department of Energy. "Electric Vehicles and Chargers". <u>www.energy.gov/energysaver/electric-vehicles-and-chargers</u>

²¹ For example, Transportation Policy 2, Strategy 1: "Develop a transportation impact fee system."

²² 30-A MRSA 4354

RECREATION & OPEN SPACE



Our beloved parks and conserved open spaces give us recreation options, enable healing and invigorating outdoor time, serve as places to meet, and help flora and fauna thrive.

We can build on these assets by permanently preserving more land, habitat, and wildlife corridors; improving our existing parks; contemplating new facilities; forging new recreational trail connections; and getting the word out about recreational amenities in and near Eliot.

Public Parks and Recreational Facilities

PISCATAQUA BOAT BASIN

This 9-acre park, also known as Dead Duck based on a 1950s story about an old camp on the property that became known as the "Dead Duck Inn", includes a boat ramp, beach, walking trail, picnic pavilion, playground, and open grass fields that can host sports and events, like the Recreation Department's Riverside Music & Market in the summer. The boat ramp can be used to launch boats in all tides. A float that runs alongside the boat ramp is used by boaters to help steady the craft out of the water. Some use it for fishing.

The beach is a wading beach that is usable around low tide. In the picnic area and pavilion, individual grills and a large multi-grill are available. There are benches and picnic tables, some of which have shelters over them. The pavilion is ADA-accessible. There is a restroom building next to the parking areas. At the parking area serving the boat ramp, there are flower beds maintained by volunteers, as well as a bench. A short dirt walking trail is near the beach. The entrance to the boat ramp has a station for collecting boat launch fees.

The Boat Basin is owned by the State of Maine through DEP, and it is leased to the Town.

ELIOT RECREATION & OPEN SPACE GOALS



Parks and outdoor recreation options that are enjoyable, inclusive, safe, accessible, convenient, and welcoming to all community members



More conserved open space and protected natural resources



Connected recreational trails



Promote and increase awareness of the parks, open space, and recreation options in our

See the end of this section for the full table of goals, policies, and strategies.

community and region



Bench and plantings at the Boat Basin maintained by the Aging In Place Committee and other volunteers. Photo credit: Nedra Sahr

FIGURE 8.X RECREATION AND OPEN SPACE Parks and conserved lands in Eliot Legend Conserved Lands Parks **Town Forest**

Figure _. Conserved lands, Town parks, and Town Forest parcels

Issues and opportunities facing the Boat Basin include:

> Amenities, fun, and events at the Boat Basin: The Boat Basin is a place for picnics, summer outdoor concerts, and other group outings. Improving its amenities can make it a better gathering place. The Recreation Department's priorities include more picnic tables and benches, an expanded picnic pavilion, and a covered stage or bandshell. The walking trails in the woods need restoration and maintenance

> Boat launch fees and collection: Boat launch fees are well under those of other boat launches in the area and are not providing cost recovery for the Town's expenses to operate the launch. Alternatives to the current fee collection system are starting to be explored, such as an automated fee payment kiosk

Shoreline erosion: Along the beach, some erosion of the river bank is evident. A future shoreline stabilization project should be explored. This could be paired with ideas for restoring and upgrading walking trails

> Layout, recreational amenities, and ownership: The Boat Basin lease agreement with the State was originally approved in October 1972, with at least one amendment (1980). While the Boat Basin has operated as a public park under this lease agreement, the lease agreement grants the Town jurisdiction over its operation, and the Town and State have communicated as needed about park changes, the question remains as to whether any updates to the lease agreement should be made. The 2010 Open Space Plan had at least one public comment on the Town "Regaining control of the Boat Basin or alternatively expanding the space"

> Walking and bicycling access: During the development of the 2021 bicycle and pedestrian plan, "Improving Conditions for People to Walk and Bike in Eliot" ("2021 Bike-Ped Plan"), several public comments centered on extending walking and bicycling facilities on Route 103 (Moses Gerrish Farmer Rd./Main St.) to make it easier for people to walk or bike between the Boat Basin and Village area. The plan lists this corridor as a short-term implementation priority. In 2024, the Town conducted a feasibility study of walking and bicycling improvements in this corridor. The study recommended a sidewalk on one side of the road¹

2023 VISION SESSION FEEDBACK

What would you change about Eliot? "Dead Duck could be better utilized [...] more celebrating/welcoming diversity"



FUTURE ZONE FEEDBACK

"Improved playground infrastructure @ Boat Basin – speaking as a young family (3yo + 1yo) who will have years of use of these types of family-friendly facilities!"

FROST-TUFTS PARK

The 7.5-acre Frost-Tufts Park is the largest Town-owned park, and it has the most athletic facilities. Facilities and amenities include a full-length basketball court, two tennis courts, a large multi-purpose field often used for soccer, a dog park, and two playgrounds. There are also seasonal portable toilets, picnic tables, and a pavilion (available for rental). In the winter, the slope down from Old Rd. is known to be used as a sledding hill. The park is on Town water. Issues and opportunities facing Frost-Tufts Park include:

> **Playgrounds:** The two playgrounds, one for older children and one for younger children, need repair

> **Walking path:** A walking loop around the fields could provide another recreation option for people of all ages

> Walking and bicycling access: During the development of the 2021 Bike-Ped Plan, some public comments centered on extending a sidewalk on Old Rd. to make it easier to walk to the park

> Old Road frontage: The 2021 Bike-Ped Plan recommends a sidewalk along Old Rd. that would eventually extend past the park to Fore Rd. or beyond (down River Rd. to Laurel Ln.). A public comment on the plan noted that kids sled down the park's slope from Old Rd. in the winter, suggesting a seating/ queueing area at the top of the hill. The slope does have a flat area benched in, with a stone retaining wall, which could be incorporated into any frontage improvements. An aesthetically-appropriate (e.g. wooden) guardrail might be considered as well, either in the interim before a sidewalk and curb are built, or paired with a sidewalk

> Pickleball: Pickleball is played on the tennis courts, and pickleball advocates have suggested restriping one or more of the tennis courts for pickleball

As of this writing, \$700,000 has been placed in the Town Manager's FY 26 Budget for renovation of the park, including resurfacing of the tennis and basketball courts, pavilion improvements, and other improvements.

WILLIAM MURRAY ROWE MEMORIAL PARK

This 5.25-acre park on River Rd. includes a Little League baseball diamond and a multi-purpose field. When it was actively used, it had a seasonal portable bathroom and picnic tables.

The park was developed and initially maintained by a volunteer with the understanding that the Town would assume maintenance responsibilities. However, the Town has not kept up with maintenance, and the park has fallen into disrepair. As of 2023, the fields had overgrown and the dugouts and fences were deteriorated. Little League games had relocated elsewhere. In 2023, the Town Manager proposed an investment of \$500,000 from the surplus in the Town's Reserve Fund to repair and restore the park and its fields. The investment was approved by Eliot voters in

FUTURE ZONE FEEDBACK

"Please keep 2 playgrounds at Frost-Tufts separate. Little kids need their own space away from older kids. These structures need improvements/sanding."

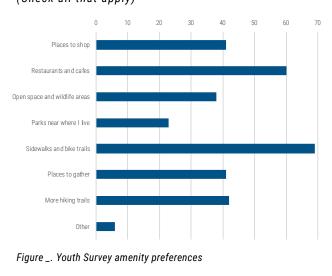


Frost-Tufts Park from Old Rd. (August 2021)



The frontage of Frost-Tufts Park along Old Rd. (August 2021)

YOUTH SURVEY FEEDBACK



"What would you like to see more of in Eliot? (Check all that apply)" November 2023. In 2024, the Town hired a landscape architecture firm to design the restoration and improvements. As of this writing, the project is expected to be substantially completed in 2025.

Issues and opportunities facing Murray Rowe Park include:

> The park's disrepair and restoration: As noted above, 2025 should see the completion of the Town's project to restore the park

> **Water service:** The park does not have public water service, as municipal water lines currently stop south of the park on River Rd.

HAMMOND PARK

This pocket park is in the Village next to the Town Hall complex, taking up a 0.17-acre slice of land between State Rd. and Dixon Rd. The park hosts holiday events, like the annual Christmas tree lighting, and is a focal point for Eliot Festival Day. It has a gazebo, seasonal decorations, and tributes to local veterans. The tree in the center of the park is maintained and decorated by the American Legion. In 2021, Eliot Historical Society (EHS) placed a time capsule in the park, to be opened in 2071.

DIXON ROAD RECREATION AREA

While it is not a formal park, the Town-owned land across Dixon Rd. from Hammond Park, behind the Police Department and next to Town Hall, warrants discussion here. The 2009 Plan describes this land as the "Dixon Road Recreation Area", listing the recreational amenities it had at the time, including a sand volleyball court, horseshoe pits, ice-skating rink, and skate park.

In recent years, some of the amenities have gone away, and the land is dormant more often than it is used. The skate park was removed in 2020. Horseshoes and sand volleyball seem to be rarely played these days. The artificial pond that serves as the ice-skating rink in winter is only used a few days per year, at best, when temperatures are consistently low enough for safe use. When it can be skated on, there are few supporting amenities, such as benches or a warming hut for getting ready to skate or for parents to watch children.

The area is used during Eliot Festival Day, other community events, and the Recreation Department's summer day camp activities. The former Dixon blacksmith shop still stands and is used for storage by the Recreation Department. There is a short walking path that leads from this building toward the pond, then abruptly stops. As part of the Town Hall Renovation



Hammond Park (July 2024). Plantings around the sign and elsewhere in the park are maintained by the Eliot Garden Club



Hammond Park gazebo (October 2024)



Skating a the pond next to Town Hall, facing Dixon Rd. (January 2025)



The Waterhouse Center in downtown Kennebunk is an example of an events pavilion that could inspire a new public pavilion in Eliot (February 2025)

and Expansion Project, underway as of this writing, the Town is seeking to connect a walkway from this walking path, past the pond, to Town Hall, and then up to State Rd.

Issues and opportunities facing Hammond Park and the Dixon Road Recreation Area include:

> The future of the Dixon Road Recreation Area: Ideas have been offered for making this area more usable and inviting. There is a placemaking opportunity here: transforming underused public land into a welcoming gathering space for people of all ages and abilities. The space can be made legible – that is, better defined and visually clear as to its purpose as a gathering space that invites various social activities. The community has an opportunity to coalesce around some of these ideas through a planning process and then pursue more formal conceptual designs and cost estimates to inform a future improvement project. Ideas have included, but are not necessarily limited to:

> Creating a "memory walk", a short trail with interpretive signage and objects that is designed for people experiencing dementia and memory loss

> Benches and a warming hut for ice skating

> A new public pavilion that could include seasonal activities, such as an ice-skating rink in the winter and pickleball in the summer. This could also host events, or parts of events, such as local food sales and Eliot Festival Day vendors, under a roof and protected from rain and snow

WALKING CONNECTIONS IN THE VILLAGE

It is important not just to improve and build new recreational amenities in the Village, but also to improve how they connect and interact with each other, such as walking trails between amenities and wayfinding.

One linear connection suggested during input is a future arboretum, with one possible location being a connection between the Elementary School and Douglas Memorial Woods.

See Transportation for further discussion on improving walkability in the Village.

FUTURE ZONE FEEDBACK

"Arboretum" incorporating Douglas Woods & contiguous open space/woodland/beech forest behind [the Elementary] school, with loop trail connecting to Beech Rd (recreational use only)-100+ year time scale"

"Walking trail next to wetland behind Town Hall, going to shoreline if possible"

2025 PUBLIC SHOWCASE FEEDBACK

Topic: Outdoor Space

"Hiking trails, fishing, boating, kayaking, foraging, natural art, biking, walking dogs"

Topic: Conserving Open Space/Forests/Nature

"Make more town trails, lands, [and] water ways accessible to the public. Invest in bettering our current parks and have them better run. A plan for the ice rink!"

Topic: Open Space Areas

"There are many such areas conducive and important to be kept in a natural state and/or can be used as soft recreational areas"



COMMUNITY SURVEY FEEDBACK



Strongly Agree: 46%



Very Important: 68%

RESPONDED THAT MAINTAINING OPEN SPACE IS A SERIOUS CHALLENGE FACING ELIOT

Somewhat Agree: 33%

RESPONDED THAT OPEN SPACE AND WILDLIFE AREAS ARE IMPORTANT TO HAVE AVAILABLE

Somewhat Important: 25%

Open Space with Publicly Accessible Trails

In addition to public parks and recreation areas, Eliot has open space with trails that are open to the public. This open space is on Town-owned land, land owned by Great Works Regional Land Trust (GWRLT), or privatelyowned land that has a conservation easement granted to GWRLT. The Eliot Conservation Commission (ECC) is spearheading an update of the 2010 Open Space Plan (OSP) with support from Southern Maine Planning and Development Commission (SMPDC). This is being done in conjunction with this Comprehensive Plan Update.

TOWN FOREST AT YORK POND

York Pond and the adjacent Town Forest parcel are magnificent treasures of open space for the Town of Eliot. They can be accessed on foot via a trail in GWRLT's Rocky Hills Preserve, which starts next to the Punkintown Business Park in South Berwick. Since the business park is accessed from the South Berwick side of Punkintown Rd., via Route 236, and the Eliot portion of Punkintown Rd. is a private road, these Town Forest parcels are not directly publicly accessible from Eliot. The topography, terrain, and length of the Rocky Hills Preserve trail may be challenging for some people, especially in icy or muddy conditions. The 2009 Plan noted that York Pond can be accessed through York, but it is not an easy access.

In the late 2000s, the Town purchased a parcel of land, which includes approximately ¾ of what is known to Eliot residents as The Heron Rookery, for preservation. It lies adjacent to York Pond. Around the same time, GWRLT helped the State to purchase 236 acres of shoreline on York Pond. This land is managed by the Maine Department of Inland Fisheries and Wildlife (MDIFW).

In 2019, the ECC worked with a local Boy Scout as part of his Eagle Scout service project to clean up an existing trail on the Town Forest parcel by York Pond, including installing trail signs and wooden benches. The ECC also connected with the county forester from Maine Forest Service to visit the Town Forest parcel and discuss potential forest health concerns and management opportunities. In spring 2024, the ECC worked with GWRLT to hold a trail clean-up event. One trail loop on the Town Forest parcel gets very wet and could likely benefit from trail improvements or re-routing.

Seeking Eliot-side access to the Town Forest has been a priority for the ECC. One of the topics of public comment during the development of the 2010 OSP was "Access to the Town Forest and York Pond besides the access from South Berwick". The plan summarized that "lack of public access" or access via Route 236 that is "not adequate" was a "common thread" of public input for the plan.² The 2010 OSP identifies the York Pond Area as its top-ranked focus area.

Other issues raised about the Town Forest as part of input for this plan include confirming the actual legal lot lines for the Town's property and creating regulations for using the forest. A future planning and engineering effort could tackle several of these priorities, or others articulated in the updated OSP:

- Conduct a boundary survey and deed/title research to confirm legal lot lines
- > Establish use regulations for the Town Forest, such as allowed or prohibited activities
- Study potential vehicular access improvement strategies
- Develop a concept plan for passive recreational trail connections between and near the two Town Forest tracts
- Conduct new water quality data collection for York
 Pond. <u>See Water Resources for more information</u>.

ROCKY HILLS PRESERVE

As mentioned above, Rocky Hills Preserve is in South Berwick and Eliot adjacent to Eliot Town Forest. GWRLT's website describes the preserve as follows:

Rocky Hills is a 200 acre preserve that is a part of a large unfragmented block of conservation land around York Pond. This focus area of conserved land is an effort between Great Works Regional Land Trust, Maine IF&W, and the Town of Eliot. Vernal pools and scrub shrub wetlands are scattered throughout this mixed hardwood forest and an old granite quarry site.

Conserved in 1997, a donation of 100 acres of woodland on the east side of Route 236 across from Marshwood High School up Punkintown Road.3

The trail network in the preserve and surrounding land includes the main trail from Punkintown Rd. in South Berwick and three loop trails.

The Historic and Archaeological Resources chapter has more information about the historic and archaeological importance of this area.

GOODWIN FOREST

Goodwin Forest is new land conserved since the 2009 Plan. With a small trailhead and parking area off of Goodwin Road, trail users can walk a moderate-difficulty loop to Shorey's Brook and back. The land is privatelyowned with a conservation easement held by GWRLT. From GWRLT's website:

Goodwin Forest is an 81 acre preserve that borders a GWRLT farm easement and Eliot Town Forest land creating a large block of conserved land. Shorey Brook meanders through the property and offers great nature observation. 1.74 miles of trails throughout the property will grant you access to the height of land and offers a hike through an old Red Oak and Hemlock stand. Conserved in 2014.4

A new crossing over Shorey's Brook extends the trail closer to the Johnson Lane Town Forest parcels (see below), creating potential for connectivity and improved access.

JOHNSON LANE TOWN FOREST PARCELS

The Town owns a collection of landlocked parcels abutting Goodwin Forest and north of Johnson Lane. Like the Town-owned land next to York Pond, these parcels are also referred to as the Town Forest. Unlike the York Pond parcel, however, they do not have public walking trails, though they are used for recreational purposes by nearby landowners.

Priorities for the Johnson Lane Town Forest parcels include the following, or others articulated in the updated OSP:

- Conduct a boundary survey and deed/title research to confirm legal lot lines
- Establish use regulations for the Town Forest, such as allowed or prohibited activities
- Study potential vehicular access improvement strategies

DOUGLAS MEMORIAL WOODS

Douglas Memorial Woods includes a walking trail looping from near the State Rd.-Old Rd. intersection to the Grange Hall. The Town is designing a sidewalk extension to connect both trailheads and communicating with GWRLT and others about potential enhancements to the Grange Hall trailhead. From GWRLT's website:

Douglas Memorial Woods is a 25 acre preserve located in downtown Eliot. There is a 0.8 mile trail that loops



Goodwin Forest



York Pond Area



Douglas Memorial Woods



Savage Wildlife Preserve

through forested wetlands atop bog bridging on the preserve. Great for young children who can read the Story Walk® that changes seasonally.

Donated to the Trust in 2001 by Susan Fleming of Needham Heights, Massachusetts in memory of her parents who owned and farmed this and adjacent parcels.⁵

It is understood that GWRLT intends to make repairs to the trail surface and has fundraised for that purpose. GWRLT also manages invasive species on the property.

SAVAGE WILDLIFE PRESERVE

This preserve is located mostly in South Berwick, but part of it is in Eliot. It is between Dover Rd. (Route 101) and the Salmon Falls River, straddling Shorey's Brook. From GWRLT's website:

Savage Wildlife Preserve is a 26 acre parcel with a 0.6 mile trail network that intertwines between diverse meadow and forest habitats. The trail comes to a viewshed of the Salmon Falls River and its estuarine wetlands. Keep your eyes and ears peeled for the numerous bird species that inhabit this ecologically important preserve.

Conserved in 2008. The property features a wide variety of habitats, including the impoundment area, a riparian forest zone, tidal inlets and marsh, a grass meadow, and two forested areas comprised of mixed hardwoods and softwoods.⁶

MURPHY PARCEL ON BRIXHAM ROAD

This 32-acre property at the corner of Goodwin and Brixham Rds. had been a family farm for many generations, and it was the longtime home of the late John Murphy, former Eliot Planning Board Chair and Select Board member. In 1990, Mr. Murphy granted a conservation easement over most of the land, which is held by GWRLT. In recent years, it became a taxacquired property owned by the Town. The property is rural and mostly forested, and the easement protects numerous wetlands, swamps, seasonal streams, and natural springs, providing habitat for a multitude of flora and fauna. The property also has historical and scenic values. It is the site of a historic Goodwin family cemetery, and its frontage primarily on Brixham Rd. contributes to the road's scenic rural character.

The conservation easement limits land uses to certain conservation, agriculture/forestry, and passive non-

motorized recreational uses, while allowing a singlefamily dwelling unit in a small building area. It allows for appropriately-sited, unpaved recreational trails, maximum 6 ft. wide, and unpaved woods roads, maximum 12 ft. wide.

Access to Water Bodies

PUBLIC ACCESS

- > Piscataqua Boat Basin: Includes Eliot's primary public boat launch, a beach usable at low tides, and some fishing activity
- > **Pleasant Street:** A launch for small craft usable only during some tides, no public parking
- York Pond: Accessible for hikers via the Rocky Hills Preserve and Town Forest trails

The 2009 Plan also mentioned several streets that end at the Piscataqua River, implying that they may provide limited access to the water: Woodbine Ave., Grover Ave., Park St., and Dixon Ave., though it noted that for Woodbine Ave., "an in-depth title search needs to be done to determine available usage".

2023 VISION SESSION FEEDBACK

What would you change about Eliot? "Dinghy dock to use, more boat moorings"



Pleasant Street launch for small craft only during certain tides

SPINNEY CREEK

The Town also owns several parcels along Spinney Creek that may present opportunities for future access to the water – for example, Map 4, Lot 58, a thin strip of land (about 0.6 acres) between Main St. and the creek. The lot's narrowness and location along the shoreline and in the 100-year floodplain present challenges for creating a suitable public water access. As with the Pleasant St. launch, there is not much room to provide parking or a wayside for unloading large or small craft. The Town of Kittery does not have any public recreation land along its portion of Spinney Creek on the inside of the causeway.⁷ Finally, maintaining good water quality in the creek is an important prerequisite for public recreational access.⁸

Despite these limitations, the Town should keep an open mind to ideas for public access to Spinney Creek and its shoreline. The Main St. causeway has scenic views both toward the Piscataqua River and toward Spinney Cove. The Piscataqua River Bridge adds a vivid perspective to these views. But there is not much room to stand between the road and guardrail to appreciate these views. An even longer view might dream about an active transportation and recreation link across the river into Portsmouth.

PRIVATE ACCESS

> Great Cove Boat Club: Private boat club for members' use only. Slips are available for lease by the public. There is a 30-ton marine railway which can draw vessels into a lighted and heated boathouse. There are 14 heavy-duty moorings available for lease. Boat storage for winter is available, as well as shrinkwrap services. Safe Harbors Marina: Formerly Kittery Point Yacht Yard, this facility, located between Main St. and the river, has long provided private storage and maintenance of boats. In 2023, the Planning Board approved a site plan amendment for the consolidation and renovation of the maintenance buildings into a larger building, allowing more maintenance work to take place indoors. The amended site plan also includes an expanded boat staging area by the water and other site improvements.

> Long Reach Landing: This private marina off Pleasant St. has an approved site plan to renovate their boathouse building and make other site improvements.

Independent Boat Haulers: This company stores boats at its site on Route 236 and provides the service of hauling boats to the Boat Basin.

> Residential piers line the Piscataqua River: Proposals for new or altered piers are reviewed by the Planning Board for shoreland zoning compliance.

Eastern Trail, East Coast Greenway, and US Bike Route 1

Being a part of the Eastern Trail, East Coast Greenway, and US Bike Route 1 is an indispensable recreational, transportation, and "green economy" asset for our community.

For further discussion of the Eastern Trail, East Coast Greenway, and US Bike Route 1, see Transportation.



A Community Center for Eliot

A common topic of discussion in Eliot, a theme of public input on this plan, and even one of the strategies recommended in the 2009 Plan, is the idea of having our own community center. The purpose and need, pros and cons, and costs and benefits of an Eliot community center should continue to be carefully and thoroughly discussed.

Whether it would involve renovating an existing building or building new, it would be a sizable investment that should have strong community support before going forward.

This plan recommends a feasibility study be conducted first, seeking to balance both support for a community center expressed by the public during this planning process and the level of careful deliberation needed for such an investment. If the study recommends it and sufficient funding/financing is secured, consider building the community center in the mid- to long-term.

While this community conversation continues, some of the benefits of a community center can be realized in other ways:

- > The renovation and expansion of Town Hall should offer more and better opportunities for community groups to host meetings and activities. The meeting room is expanding and will be more convenient for community groups to use
- > A community pavilion next to Town Hall could host a range of community activities and events not as varied as an enclosed community center building, but many more than could be held today
- > Several private facilities available for rent or reservation offer places to gather today, such as the Regatta and Shipyard Restaurant. Communities of faith in Eliot also sometimes host gatherings available to the public
- > Eliot residents have access to many amenities a community center would provide through neighboring communities' facilities, as discussed above. However, transportation to some of these facilities may be challenging for some, and the higher non-resident admission fees may be challenging to afford

On the other hand, a community center in Eliot could serve as a recreational and social hub whose benefits for community activity and cohesion cannot be ignored. What is important in this plan's horizon is a respectful, transparent, and judicious community discussion about whether and how to move forward.

2023 VISION SESSION FEEDBACK

What would you change about Eliot?

"We need to identify a community space outside or inside – Farmers markets weekly by the Town Hall would be great - winter farmers markets at the Grange Hall. Bring people together more. Music at Dead Duck was great but it's hard to know where to find the info."

"Community Center for all ages & events."

"Community rec center with town pool. All ages. So many options here."



Eliot Connects 2024 Summer Kickoff at Dead Duck

Recreational Services

The Recreation Department is run by a full-time director and supported by part-time program staff. Programs are summarized in Table __.

Parks and Recreation Service Analysis

The 2009 Plan compared our recreational facilities and services to National Recreation and Park Association (NRPA) standards. NRPA no longer has a set of specific standards, recognizing that different communities have "unique needs, desires and challenges".⁹ Instead

TABLE 8.X

RECREATION AND OPEN SPACE

Program Type	Program
outh Programs	Coyote Club Wildlife Education
	Dance Club
	Jewelry Making Club
	KidsPLAY Before & After School Program
	Snapology Fall Favorites
	STEAM
	Strong Girls – Fall Session
	Run Club
	Vacation Weeks & Summer Camps
Sports	Youth Basketball League
	Youth Soccer League
classes & Activities	Babysitters Training Course with Maine CPR and First Aid
	Line Dancing Class
	Mind Body Soul Yoga
	Zumba
	Riverside Music & Market
Senior Programs	Chair Yoga
Adult Programs	Board & Brush DIY Paint Night & Wine Tasting at Maine Market
	Mind Body Soul Yoga & Zumba

Table ___. A sample of the Eliot Recreation Department programs.Source: Recreation Department web page.

of one-size-fits-all standards, we can compare our facilities and services to median statistics, accounting for community size, in the NRPA Agency Performance Review. Our analysis uses the Census-estimated 2022 community population of 7,162. As of this writing, NRPA's most recent published review is from 2023. It includes data reported from over 1,000 parks and recreation agencies.

Due to length, the full analysis for each facility type is in the Appendix.

SERVICE ANALYSIS SUMMARY AND RECOMMENDATIONS

The Parks and Recreation Service Analysis shows we meet or exceed NRPA median statistics for many athletic facilities and recreational amenities, but building some additional facilities, like a playground, rectangular multi-purpose field, and pickleball courts may be warranted within the plan's horizon.

GETTING TO OUR PARKS AND RECREATION AMENITIES

Our parks are open to all community members, but they are not equally spaced around town. All four are close to the river, and three are in or close to the Village. From Hammond Park, it is almost a mile along the road to either Frost-Tufts Park or the Boat Basin. Murray-Rowe Park is another two miles up Old and River Rds. from Frost-Tufts Park. The large part of Eliot that is landward from State Rd./Route 103 does not have a public park.

Conserved land with publicly-accessible trails is more evenly spaced around town. East Eliot has Goodwin Forest, north Eliot has the Savage Preserve, and Douglas Memorial Woods is at the edge of the Village. However, as important as these preserves are, they do not feature the range of recreational activities that our public parks provide.

SAFE ROUTES TO PARKS

A variation on Safe Routes to School, Safe Routes to Parks means safe and comfortable access, on foot or on bike, to community parks. The 2021 Bike-Ped Plan identifies short-term priorities for connecting the Boat Basin, the Town Hall and Eliot Elementary School, and Frost-Tufts Park with sidewalks and bicycle facilities. The Town's project, currently in design, to extend a sidewalk and bike facilities on State and Beech Rds. will improve access to Hammond Park and Douglas Memorial Woods.



Mt. Agementicus Big A accessible trail for all ages and abilities

TRAIL ACCESSIBILITY

Trails accessible to people with mobility challenges, or who use a mobility assistance device, typically include the following design features¹⁰:

- > Adequate width and clearance from obstructions
- > A firm, stable, and slip-resistant surface
- > Gentle running slopes (the slope parallel to the path of travel)
- > Minimal (max. 2%) cross slopes (the slope perpendicular to the path of travel)
- > Accessible entrances, where there are no obstructions (such as gates or bollards) that hinder wheelchair access
- > An accessible parking space in the trailhead parking lot
- Consistent maintenance to prevent or fix damage (e.g. surface ruts and washouts) that might otherwise hinder passage
- > Trail amenities, if present, that are accessible for everyone (e.g. bathrooms)

Eliot's parks and publicly-accessible conservation land do not currently have an accessible walking trail. We should commit to creating one in this plan's horizon. This could be either a walking loop in a park, a new trail or loop within open space, or a retrofit of a portion of an existing trail. "When most people go out on the trail, they are looking to have fun, be healthy, enjoy nature and bond with friends and family. This is true-regardless of one's age or ability. Accessibility is a crucial aspect of trail development, because it is key to ensuring that trails are available to everyone, including young people, older adults and people with disabilities."¹¹ - Rails-to-Trails Conservancy



COMMUNITY SURVEY FEEDBACK



RESPONDED THAT A PUBLIC PARK CONVENIENT TO WHERE THEY LIVE IS IMPORTANT TO HAVE AVAILABLE

Very Important: 27%

Somewhat Important: 31%

Recreation and Aging in Place

Eliot is committed to being an age-friendly community. Healthy aging and successful aging in place require that independence, health, and social connectivity are supported for individuals aging in place within the 'livable' community. Eliot's Aging in Place Committee focuses on domains of livability in the built and social environments, including this recommendation in the domain of Outdoor Spaces: "Accessible, inviting parks ...affect the independence and quality of life for residents of all ages, but especially older people". Additionally, the domain of Social Participation states that "Connecting with friends and neighbors is good for one's health, no matter one's age", while the Communication domain makes clear that "Staying connected with activities, resources, and people is key to active, engaged aging".

Recreation, community-based recreation spaces, and accessibility to recreational spaces are critical elements for healthy aging. Recreational spaces such as parks, safe walkways, and even open spaces provide opportunities for physical activity, which benefits all individuals regardless of age, but is quite important for older adults who may have less active lifestyles. Not only do these spaces provide opportunities for exercise, but they also hold potential for much-needed socializing, relaxation, and community connections that can help combat social isolation, which older adults may face as they age in place.

Eliot residents of all ages will benefit from the town's commitment to universal design principles in the development and renovation of municipal recreation facilities. These include but are not limited to walking trails or loops that are accessible for the mobility-challenged or assisted; optimized benches and other infrastructure that facilitate rest and gathering for all levels of users; clear, helpful, and sufficient wayfinding or other signage and markings; ADA compliant parking spaces; and ramps that provide close access to recreational spaces.

IMPROVING OUR EXISTING PARKS

The Service Analysis, and the work we are doing now, suggest that our short-and mid-term focus is, and should be, on improving our existing parks. In summary:

- > We are restoring Murray Rowe Park for baseball and other recreational activities, as described above
- > We have budgeted for Frost-Tufts Park improvements, as noted above
- > We should plan for new or improved recreational amenities and public spaces in and around the Town Hall/Hammond Park/Dixon Road area, as discussed above and articulated in Goal 1, Policy 2, Strategy 1.
- Boat Basin improvements are reflected in Goal
 Policy 1, Strategy 3 with a mid- to long-term
 timeframe.

> We can improve access to our parks for people on foot or on bike by building the State-Beech Active Transportation and Infrastructure project and extending the walking/bicycling network along Old Rd. and Moses Gerrish Farmer Rd./Main St.

2023 VISION SESSION FEEDBACK

What would you change about Eliot?

"Better utilization of resources we already have- Eliot Boat Basin, Frost Tufts, area near skating pond. Use these resources to find ways to connect community members"



FUTURE ZONE FEEDBACK

"Please use funds to fix up existing parks before creating new spaces. Like Murray Rowe"

A NEW PUBLIC PARK

While we enjoy our existing four public parks and open space with publicly-accessible trails, we should begin planning for a fifth park. The need is primarily driven by the amenities and location of our existing parks (Figure __). Hammond Park is small and serves more of a ceremonial purpose, e.g. as a site for special seasonal events, decorative plantings, and signs and banners. Murray Rowe Park primarily offers two playfields. The Boat Basin has a playground and picnic pavilion but no formal playfields, and it is not on Town-owned land.

We should eventually plan for a new park on the east side of Route 236 to provide a closer recreational option for residents on this side of town, but with the following planning and timing considerations: > In the short- and mid-term, we are focusing on improving our existing parks

> Planning for a new park should occur within the plan's horizon, with the park being built within the next 20-25 years, but that could be earlier if the right opportunity arises (e.g. donated land, grant funding, opportunity to pair with new conserved open space)

> The priority location for the new park should be east of Route 236. The park should fit the rural context and character of the area. Opportunities to pair an active park with conserved open space, possibly with public trails, should be strongly considered

> A public input process during park planning and design could determine the preferred park features and amenities. While these needs may change by the time the park is being planned, the service analysis suggests that at least a playground and multi-purpose field should be considered

RECREATION AND OPEN SPACE

FIGURE 8.X

Figure __. Half-mile service areas drawn around Eliot's existing parks

Open Space Plan

2010 OPEN SPACE PLAN

A key recommendation of the 2009 Plan was to prioritize those areas in Eliot that contain critical natural resource values of statewide and regional significance but also build in the local assets that are crucial to the townspeople. Shortly after the plan's adoption, the ECC appointed a subcommittee to develop an open space plan, with funding from the Piscataqua Region Estuaries Partnership (PREP).

The 2010 Open Space Plan (OSP) identified focus areas to guide the Town in conserving open space. The areas were given a priority score that factored in community input, committee input, and natural features. These focus areas are:

- > York Pond area
- > Farmland
- > Town Forest area near Johnson Ln.
- > York River area
- > Heath area
- > Spinney Creek area
- > Dead Duck Inn area
- > Frankfurt Island and adjacent shore areas
- > Worster Road area

The OSP includes an implementation plan with goals, strategies, and recommended responsible agencies. There is also a helpful "crosswalk" table showing how the Comprehensive Plan and OSP recommendations relate to each other.

DEFINITION OF OPEN SPACE IN THE 2010 OPEN SPACE PLAN

Undeveloped land that includes:

- > Land with important ecological features
- > Natural resources
- Cultural resources (such as farm lands and water access)
- > Scenic vistas
- > Historic sites
- > Passive recreational resources, such as trails

OPEN SPACE PLAN UPDATE

As of this writing, the ECC and SMPDC are updating the OSP concurrently with this Comprehensive Plan Update, supported by new funding from PREP. The two planning processes have coordinated on public input. There are many synergies between the two plans, with the OSP building on this Comprehensive Plan as a foundation. The updated OSP should be adopted and the community should commit to its implementation.

Open Space Acquisition

LAND BANK

Fulfilling one of the recommendations of the 2010 OSP, the Town now maintains a Land Bank to contribute funding to conserving land and meeting the Town's conservation goals. In recent years, the Annual Budget allocated a small amount (roughly \$5,000) to the Land Bank.

More recently, the ECC has highlighted the need for increased funding to the Land Bank. For example, the ECC recommended – and the Town approved – an increased amount of \$19,000 in the FY25 Budget, citing strong community support in past surveys – and this plan's Community Survey – for setting tax money aside for land conservation.

COMMUNITY SURVEY FEEDBACK

even if there is a potential increase in fees or property

taxes, to acquire and protect more open space, either

Would you support the expenditure of town funds,

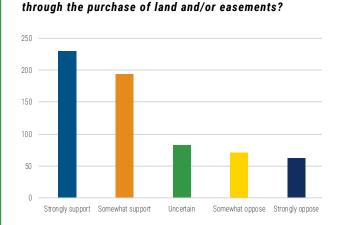


Figure _. Community survey preference for expending Town funds to acquire and protect more open space

"Our citizens overwhelmingly support (1) acquisition/ permanent protection of land for conservation/open space; and (2) improvements to existing conservation and recreational lands. Without permanent protection, Eliot's open spaces and natural resources remain vulnerable to development pressures. Our town forests at Johnson Lane and York Pond are overdue for management actions needed to maintain and improve wildlife habitat, forest health, public safety and recreation. Eliot needs to be strategically positioned to support conservation opportunities to protect our special places in response to community input. As it currently stands, the land bank is funded well below historic levels; at the same time, the cost for land acquisition has increased drastically...

Land protection is one of the best investments that a community can make. A well-funded land bank strategically positions Eliot to support land conservation projects and respond to citizen input." - Excerpt from an Eliot Conservation Commission Annual Budget Request

As of November 2024, the Land Bank balance was about \$67,600. The ECC has proposed additional funding of \$29,000 in the FY26 Annual Budget.

The 2010 OSP recommended an open space impact fee ordinance, based on a model ordinance from SMPDC, that could be levied for new housing units (with some exemptions) and contribute to open space preservation and land conservation, but this ordinance has not yet been established. This plan refreshes that recommendation.

Accessing our Open Space

TOWN FORESTS

Northeast of Goodwin Rd. and northwest of Brixham Rd., we see the confluence of opportunities for rural land conservation, critical natural resource protection, open space, and passive recreation. The challenge is how to provide suitable access to conserved land and hiking trails.

Questions of access can be framed in different ways:

- > How can people get to this open space? How convenient is that access?
- > Are there accessible trail options for people with mobility challenges? (see discussion above)
- Should any open space nodes connect to each other, e.g. via a trail system?

COMMUNITY SURVEY FEEDBACK

How important is it that your local tax dollars be used for the preservation or creation of the following natural or recreational assets?

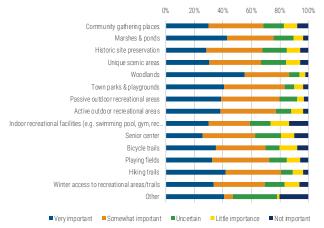


Figure _. Community survey preferences for using tax dollars for natural/recreational assets



YOUTH SURVEY FEEDBACK

How important is it that the Town spend money to preserve or create the following natural or recreational spaces? (Check all that apply)

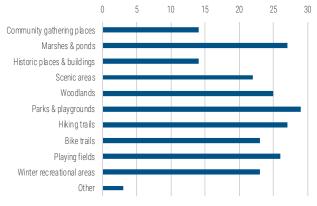


Figure _. Youth survey preferences for spending Town funds for natural/recreational spaces

For Goodwin Forest, the vehicular access is straightforward: a trailhead parking lot directly off Goodwin Rd. GWRLT recently extended the trail across Shorey's Brook, getting it closer to the Town Forest parcels.¹² The most direct roads to access the Town Forest parcels – Punkintown Rd. and Johnson Ln.– are both private roads.

RECREATIONAL TRAIL NETWORK

Considering existing and planned trails, paths, and sidewalks, we start to see passive and active recreation networks emerge in different parts of town. These networks include:

> Our sidewalks and wide shoulders for cycling: discussed above and in <u>Transportation</u>. This network is primarily in the Village area

> Our segments of the Eastern Trail and East Coast Greenway: a future linear shared use bicycle and pedestrian path that will provide a comfortable, off-road active transportation option for people of all ages and abilities, accommodating both local trips and long-distance travelers and linking us to our neighboring communities as well as many other communities up and down the East Coast

> Our hiking trails: unpaved walking trails in conserved open space

Thinking about these network elements, this plan envisions the following improvements:

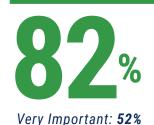
> Expand our Village network of sidewalks and bike facilities, per the 2021 Bike-Ped Plan. Priority segments include State Rd., Beech Rd., Moses Gerrish Farmer Rd./Main St., and Old Rd.

> Build out off-road path segments of the Eastern Trail and East Coast Greenway, replacing on-road segments. This work can be informed by the Eastern Trail Feasibility Study (2025)

> Seek to build networks of walking trails, i.e. greenbelts, in connected open space. A priority is the rural part of Eliot bounded by Brixham Rd., Goodwin Rd., and the Town boundaries with South Berwick and York. These areas are emerging as focus areas in the updated 2025 OSP (draft, as of this writing)

> Explore a new Eliot-side access to the Town Forest next to York Pond

COMMUNITY SURVEY FEEDBACK



RESPONDED THAT SIDEWALKS, WALKING TRAILS, AND BIKE PATHS ARE IMPORTANT IN THE FUTURE

Currently no bike paths or sidewalks in most of Eliot



Trails through Eliot Boat Basin



Eliot Town Forest

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RECREATION & OPEN SPACE GOALS, POLICIES & STRATEGIES

Goal, Policy, or Strategy	Description	Responsibility or Partnership	Implementation Timing		
Goal 1	Parks and outdoor recreation options that are enjoyable, inclusive, safe, accessible, convenient, and welcoming to all community members				
Policy 1	Improve our existing parks and active recreation amenities				
Strategy 1	Strategy 1 Complete the repair and restoration of William Murray-Rowe Park Town Cons		Short		
Strategy 2	Develop and implement a plan for improvements at Frost-Tufts Park	Recreation Department, Town Manager, Public Works, Consultant, Contractor	Short		
Strategy 3	Develop and implement a plan for improvements at the Boat Basin. Improvements the plan should consider should include, but not necessarily be limited to: maintained, restored, or new walking paths; shoreline stabilization and erosion control measures; additional stormwater best management practices (BMPs); more picnic tables and benches; an expanded pavilion; improved playground infrastructure; and a covered stage or bandshell	Recreation Department, Public Works, Town Manager, Planning Office, Maine Department of Environmental Protection, Contractor	Mid-Long		
Strategy 4	Continue to monitor the need for additional senior-citizen-based services as the population grows and as the median age continues to rise	Aging in Place Committee	Ongoing		
Policy 2	Build new parks and active recreation amenities				
Strategy 1	Create a plan for new or improved recreational amenities and public spaces in and near the Village center. Improvements the plan should consider should include, but not necessarily be limited to: a welcoming gathering place on the Town-owned land next to Town Hall, such as a community pavilion; a memory walk trail for those experiencing memory loss; a linear arboretum; new trail connections; and other ideas suggested by the community. Informed by public and stakeholder input, the plan should include conceptual layouts and renderings, preliminary cost estimates, and phasing recommendations. The plan should emphasize how these amenities connect with and complement each other. Seek to implement the Village Plan's short- and mid-term recommendations within this Comprehensive Plan's horizon, with assistance from grant funding and private donations. This strategy could be paired with the overall Village Plan strategies in Economy Goal 3, Policy 1	Town Manager, Select Board, Recreation Department, Public Works, Planning Office, Aging in Place Committee, Eliot Historical Society, Consultant, Contractor, nonprofits, foundations	Short (plan) Mid-Long (implementatio		
Strategy 2	Begin planning for Eliot's next park, with a priority location being northeast of Route 236. Depending on the exact location and context, consider embedding this park within, or locating it next to, a larger tract of conserved open space with passive recreation (e.g. walking trails)	Planning Office, Recreation Department, Town Manager, Consultant	Long (planning phase) Next Comp Pla horizon (desig construction)		
Strategy 3	Consider introducing at least the following recreational amenities within this plan's horizon: dedicated pickleball courts, a new playground, and a new rectangular multi-purpose field	See above strategies	See above strategies		
Strategy 4	Conduct a feasibility study to explore the pros and cons, benefits and costs, community input, and other considerations for building a community center in Eliot, including building a new building or retrofitting an existing building. If the study recommends it and sufficient funding/financing is secured, consider building the community center in the mid- to long-term	Town Manager, Select Board, Recreation Department, Public Works, Planning Office, Capital Improvement Plan Committee, Planning Board, Aging in Place Committee, Eliot Historical Society, Consultant, Contractor, nonprofits, foundations	Short-Mid (Feasibility Stud Mid-Long (Implementatior		
Policy 3	Provide adequate funding for maintaining and improving existing building new parks and recreational facilities	parks and recreational faciliti	es and		
Strategy 1	Review the boat launch fee collection system and fee schedule at the Boat Basin and make upgrades to the system and adjust fees as warranted	Town Manager, Select Board	Short		

ELIOT RECREATION & OPEN SPACE GOALS, POLICIES & STRATEGIES

Goal, Policy, or Strategy	Description	Responsibility or Partnership	Implementatio Timing		
Goal 2	More conserved open space and protected natural resources				
Policy 1	Continue to plan for and prioritize areas of Town for conservation, o	ppen space, and passive recrea	ition		
Strategy 1	Approve the Open Space Plan Update	Conservation Commission, Select Board	Short		
Strategy 2	Prioritize efforts to conserve land as part of a systematic, data-driven approach based on the updated Open Space Plan, open space focus areas, protection of critical natural resources and water resources, proximity to existing conservation land, connections to existing sidewalks and trails that help build a trail and greenbelt network, and proactive communication with landowners about conservation opportunities	Conservation Commission, Planning Board, Town Manager, Planning Office, GWRLT	Ongoing		
Strategy 3	Improve continuity between Town Forest parcels where possible	Conservation Commission, Planning Board, Town Manager, Planning Office	Ongoing		
Policy 2	Work together with conservation organizations and relevant governmental agencies to implement the land conservation recommendations of this plan, the Open Space Plan, and other conservation initiatives				
Strategy 1	Continue to work with the Great Works Regional Land Trust, the MtA2C Coalition, and other groups to advance conservation of focus areas and other resources identified in this plan	Conservation Commission, Town Manager, Planning Office, GWRLT, MtA2C Coalition	Ongoing		
Strategy 2	Continue to seek grant funding and technical assistance resources to assist with implementing the Open Space Plan and the conservation recommendations of this plan	Conservation Commission, SMPDC, Planning Office	Ongoing		
Strategy 3	Strategically invest Land Bank reserves in the conservation of new land and-or stewardship of conserved land, leveraging partnerships and grant funding where feasible	Town Manager, Conservation Commission	Ongoing		
Policy 3	Maintain and grow the Land Bank to fund land conservation and the stewardship of conserved land				
Strategy 1	Continue to set aside funding in the Annual Budget for the Land Bank, and increase this amount beyond historically allocated amounts	Town Manager, Conservation Commission	Short		
Strategy 2	Subject to an Impact Fee Study, consider establishing an impact fee on new residential development for acquisition of land or conservation easements for use as substantially undeveloped open space and the related development of these parcels to facilitate their role and use as open space	Planning Board, Select Board, Planning Office, Conservation Commission	Mid		
Cross- reference	See Land Use G1, P3, S5 regarding a Density Transfer Charge, or similar program, to help fund resource protection				
Policy 4	Maintain and update land use regulations that require some develop	pments to provide open space			
Strategy 1	Maintain open space requirements for conventional subdivisions and open space developments. Dovetail these requirements with an open space impact fee, if established, to exempt dwelling units from the fee if they are in a subdivision/OSD that the PB finds has provided suitable, publicly-accessible open space within the development	Planning Board	Ongoing		
Strategy 2	For subdivision and site plan review, establish standards and-or incentives for the linking of open spaces, including sidewalk and trail networks	Planning Board	Short		

RECREATION & OPEN SPACE GOALS, POLICIES & STRATEGIES

	Goal, Policy, or Strategy	Description	Responsibility or Partnership	Implementation Timing
GOAL 3	Goal 3	Connected recreational trails		
	Policy 1	Plan for and implement recreational trail connections and networks	;	
	Strategy 1	Seek to connect trails for passive recreation and conserved open space into a greenbelt network, especially in the rural area bounded by Brixham Rd., Goodwin Rd., and the South Berwick/York boundaries, including York Pond	Conservation Commission, Planning Office, Town Manager, Public Works, GWRLT	Ongoing
	Strategy 2	Improve public access to the Town Forest	Conservation Commission, Planning Office, Town Manager, Public Works, GWRLT	Mid-Long
	Cross- reference	See Transportation Goal 3, Policy 4 regarding support for the Eastern Trail and East Coast Greenway and implementation of the Eastern Trail Feasibility Study		
GOAL 4	Goal 4	Increased community familiarity with, and enthusiasm about the second seco	out, parks, recreation, and	open space
	Policy 1	Promote and increase awareness of the parks, open space, and rec	reation options in our commun	ity and region
	Strategy 1	Disseminate a map and other information on places to walk, bike, wheel, and hike in our community that are open to the public	Planning Office, Recreation Department	Ongoing
	Strategy 2	Ensure information is available to the public on the state's Tree Growth, Farmland, and Open Space Tax Law programs and benefits and protections for landowners who allow public recreational access on their property	Tax Assessor	Ongoing

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RECREATION & OPEN SPACE ENDNOTES

¹ The study was funded by a MaineDOT Village Partnership Initiative (VPI) grant and American Rescue Plan Act (ARPA) funds. It is available here: <u>https://www.eliotmaine.org/228/Multimodal-Transportation-Walking-Bicycl</u>

² Open Space Plan, pp.

- ³ https://gwrlt.org/rocky-hills-preserve/
- ⁴ <u>https://gwrlt.org/goodwin-forest/</u>
- ⁵ <u>https://gwrlt.org/douglas-memorial-woods/</u>
- ⁶-https://gwrlt.org/savage-wildlife-preserve/
- ⁷ https://www.kitteryme.gov/sites/g/files/vyhlif10031/f/uploads/kittery_open_space_map_0328061.pdf
- ⁸ See the Marine Resources chapter for more information
- ⁹ 2023 report, https://www.nrpa.org/contentassets/3ae6ba685dbf47a1b537af2f15c615d9/2023-agency-performance-review.pdf, p.3
- ¹⁰ https://www.railstotrails.org/build-trails/trail-building-toolbox/design/accessibility/, not necessarily an exhaustive list
- ¹¹ https://www.railstotrails.org/build-trails/trail-building-toolbox/design/accessibility/
- ¹² A trail map is available here: <u>https://gwrlt.org/wp-content/uploads/2023/12/Goodwin_Preserve_Map_2023-10-11.pdf</u>

NATURAL RESOURCES



Eliot's biological diversity within ecologically significant regional natural areas is an indicator of the environmental health of the community and offers educational and scientific benefits to Eliot residents and those concerned with biological and human ecology. Within the town, there are many critical natural resource features that help to define the rural nature of the community and demonstrate its biodiversity.

Habitats in Eliot

BEGINNING WITH HABITAT (BWH)

The Beginning with Habitat (BwH) program, run by the Maine Department of Inland Fisheries and Wildlife (MDIFW), maintains data on wildlife habitat and rare and endangered species locations.¹

Here are some important takeaways from the data:

> The importance of riparian habitat along streams, brooks, rivers, and associated wetlands. These areas function as tremendous travel corridors for wildlife and most importantly contain 75% of all the species diversity in Maine. To some degree, these areas are protected by shoreland zoning. The extent of that protection is much debated. MDIFW considers these riparian areas the backbone of any wildlife preservation effort.

> The wide range of high-value plant and animal habitat within the community. BwH highlights the ecological diversity of the town with mapping of deer wintering areas; assemblages of rare plants, animals, and natural communities; "essential" wildlife habitats that require MDIFW review for endangered animals and their habitat; and significant wildlife habitat, such as high- and moderate-value waterfowl or wading bird habitat.

> Finally, and perhaps most importantly, the identification of large, relatively unbroken blocks of habitat that can support animals with large home ranges (such as moose and fishers), in contrast to more suburban species (such as raccoons and skunks). These unfragmented blocks offer valuable opportunities to preserve a wide range of species in a rapidly developing landscape, particularly important with the impacts of a changing climate. The implications for wildlife diversity in the face of sprawl

ELIOT NATURAL RESOURCES GOAL



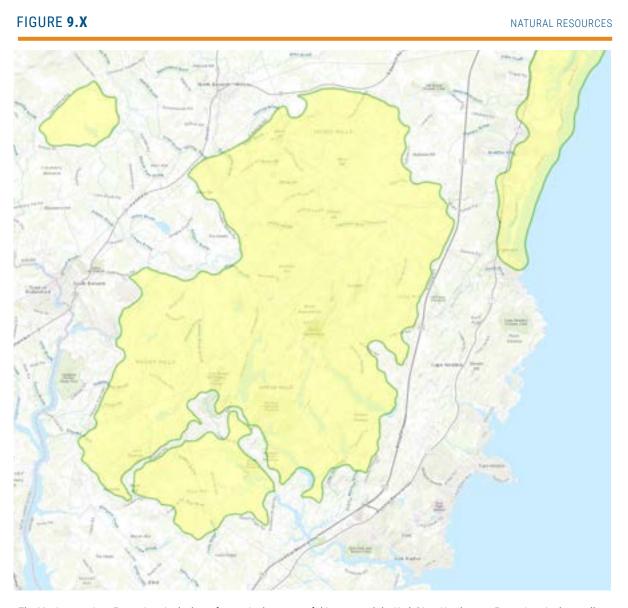
Protection and thriving of the State's critical natural resources, including (without limitation) wetlands, wildlife and fisheries habitat, sand dunes, shorelands, scenic vistas, and unique natural areas

See the end of this section for the full table of goals, policies, and strategies.

in these locations may be an important planning concern. Many of these unfragmented blocks also extend beyond town boundaries.

FOCUS AREAS OF STATEWIDE ECOLOGICAL SIGNIFICANCE

BwH Focus Areas of Statewide Ecological Significance contain several rare and-or endangered plants or animals and their habitats. They are large enough to maintain a diverse population of species. These areas are identified by biologists from MDIFW, the Maine Natural Areas Program (MNAP), Maine Department of Marine Resources (DMR), U.S. Fish and Wildlife Service (USFWS), The Nature Conservancy (TNC), Maine Audubon, and Maine Coast Heritage Trust (MCHT). There are two defined focus areas that are partially within Eliot: Mt. Agamenticus and the York River Headwaters (Figure _).



The Mt. Agamenticus Focus Area is the large feature in the center of this map, and the York River Headwaters Focus Area is the smaller one just below it. Both extend into what is primarily East Eliot. Source: Beginning with Habitat.²

Mt. Agamenticus Focus Area

The following information regarding the Mt. Agamenticus area and York River Headwaters is adapted from BwH resources.

LOCATION AND DESCRIPTION³

The Mt. Agamenticus Focus Area extends from York Pond in Eliot northeast through the Tatnic Hills area in Wells. The greater Mt. Agamenticus area includes rugged terrain, several lakes and ponds, and numerous small wetlands that together comprise the largest contiguous block of lightly developed land in southern York County. Mt. Agamenticus is the most outstanding feature at the site, both topographically and ecologically.

The area's numerous upland and wetland complexes are ecologically significant because they contain plant and animal assemblages that are at their northern range limits. For example, at least three animal and 20 plant species are restricted to this extreme southern portion of Maine, and many other common species in this area occur only sparingly further northward. This pattern extends to natural communities as well. The Atlantic white cedar swamp, hemlock-hardwood pocket swamp, and pitch pine bog that occur in this area are all restricted to southern Maine, and the oak-pine-hickory forest that extends from Mt. Agamenticus north through Third Hill includes the only remaining intact chestnut oak woodland community in the entire state.

PROTECTION STATUS

Approximately 9,000 acres of the greater Mt. Agamenticus area is in public or quasi-public ownership, divided among MDIFW, Town of York, Town of South Berwick, Town of Eliot, York Water District, and Kittery Water District.

TNC, the York Land Trust, and the Great Works Regional Land Trust (GWRLT) also own land and are actively pursuing conservation strategies on additional parcels. While the abundance of protected land affords a significant opportunity for habitat protection, fragmentation is occurring on all sides of the site.

York River Headwaters Focus Area

LOCATION AND DESCRIPTION

The York River Headwaters Focus Area consists of approximately 8,000 acres of uplands and wetlands that comprise the headwaters of the York River. The focus area is located west of I-95 and extends west to York Pond and north to Belle Marsh Reservoir and to Boulter Pond. It includes most of the major tributaries of the York River such as Cider Hill Creek, Smelt Brook, and Rogers Brook.

TIDAL MARSH ESTUARY AND SPARTINA SALTMARSH

The York River Estuary extends about 8.5 miles inland from the coast to the head of tide. The entire estuary is mapped as tidal wading bird and waterfowl habitat and serves as an important roosting and feeding area for several shorebirds. The extensive York River Estuary is one of the Gulf of Maine's least disturbed marsh-estuarine ecosystems and may be the most ecologically diverse coastal drainage for its size in the Gulf of Maine. Diadromous fish, species that use both marine and freshwater habitats during their life cycle, such as alewives and striped bass, are found within the estuary. The estuary's salt marshes provide excellent spawning habitat, and 28 species of estuarine and freshwater fish have been documented in the York River, including rainbow smelt, alewives, eel, bluefish, winter flounder, striped bass, and Atlantic herring. The estuary ecosystem includes a large Spartina salt marsh community, a rare habitat type for Maine. The Spartina salt marshes are dominated by a mix of salt meadow cordgrass, smooth cordgrass, and black grass.

PROTECTION STATUS

The estuary ecosystem is in good condition, although some areas in its immediate vicinity are utilized for residential and agricultural purposes. Most large salt marshes in the state are protected by public or private entities. At approximately 440 acres in size, the Upper York River Salt Marsh is one of the largest unprotected salt marshes in the state.

In addition to the BwH Focus Area initiative, the partners of the Mount Agamenticus to the Sea Conservation Initiative have also identified this area as a conservation priority and are working on protecting the resources within this focus area. The York Land Trust has purchased the Highland Farm Preserve, McIntire Highlands, and Smelt Brook preserve.

In 2022, the York River was designated a National Park Service Wild and Scenic River. *For more information, see Water Resources.*

CONSERVATION CONSIDERATIONS FOR THE FOCUS AREAS

Preserving natural communities and other sensitive features can be best achieved by maintaining the integrity of the larger natural systems in which these features occur. Conserving the larger systems helps ensure both common and rare natural features will persist in this part of the state. Some ways this can be achieved include:

- > minimizing habitat fragmentation
- > increasing funding for permanent land conservation
- > creation of critical resource zoning overlay districts to prevent, minimize, mitigate, or compensate for disturbance to large unfragmented habitat blocks or wildlife corridors
- > using Best Management Practices for forestry and logging especially near wetlands, headwaters, and vernal pools to help prevent erosion and habitat loss
- > removing barriers for diadromous fish
- > enhancing landowners' and motorists' awareness of species habitat, such as "turtle crossing" signs



Salt marshes provide excellent fish spawning habitat and other ecological benefits

TABLE 9.X

NATURAL RESOURCES

EL Code	GRank	SRank	Source	Species
			ETSC Animals	Great Blue Heron
			ETSC Animals	Spicebush Swallowtail
AMAEB01110	G3	S2	ETSC Animals	New England Cottontail
CWCS400000	G3G5	S2	NAP Communities	Pitch Pine Bog
ARAAD04010	G4	S2	ETSC Animals	Rare Animal
PGCUP03030	G4	S2	NAP Plants	Atlantic White Cedar
ABPBXA0050	G4	S3B	ETSC Animals	Saltmarsh Sparrow
IILEPE2130	G5	S1	ETSC Animals	Juniper Hairstreak
PDASTE8530	G5	S1	NAP Plants	Small Salt-marsh Aster
PDFAG05060	G5	S1	NAP Plants	Swamp White Oak
PDFAG050A0	G5	S1	NAP Plants	Scarlet Oak
PMCYP03160	G5	S1	NAP Plants	Awned Sedge
PMCYP03H30	G5	S1	NAP Plants	Muhlenberg Sedge
PDAPI19020	G5	S2	NAP Plants	Lilaeopsis
PDLAU0C010	G5	S2	NAP Plants	Sassafras
PDPYR01010	G5	S2	NAP Plants	Spotted Wintergreen
PMCYP03750	G5	S2	NAP Plants	Spreading Sedge
PMCYP0Q160	G5	S2	NAP Plants	Pendulous Bulrush
PMLEM03030	G5	S2	NAP Plants	Columbia Water-meal
ARAAD02010	G5	S3	ETSC Animals	Rare Animal
CHGT100000	G5	S3	NAP Communities	Salt-hay Saltmarsh
PDAQU010K0	G5	S3	NAP Plants	Smooth Winterberry Holly
PDLAU07010	G5	S3	NAP Plants	Spicebush
PMP0A17060	G5	S3	NAP Plants	Small Reed Grass
PMLEM03020	G5	SU	NAP Plants	Pointed watermeal
PMALI04042	G5T4	S3	NAP Plants	Spongy-leaved Arrowhead
PDPRI09051	G5T5	S3	NAP Plants	Water Pimpernel

Source: Comprehensive Plan Data Package provided by Maine DACF. Rare plants and animals in Eliot.

Table Key

STATE RARITY RANKS

S1 Critically imperiled in Maine because of extreme rarity (five or fewer occurrences or very few remaining individuals or acres) or because some aspect of its biology makes it especially vulnerable to extirpation from the State of Maine.

S2 Imperiled in Maine because of rarity (6-20 occurrences or few remaining individuals or acres) or because of other factors making it vulnerable to further decline.

S3 Rare in Maine (on the order of 20-100 occurrences).

S4 Apparently secure in Maine.

S5 Demonstrably secure in Maine.

SH Occurred historically in Maine, and could be rediscovered; not known to have been extirpated.

SU Possibly in peril in Maine, but status uncertain; need more information. SX Apparently extirpated in Maine (historically

occurring species for which habitat no longer exists in Maine). Note: State Ranks determined by the Maine Natural Areas Program. GLOBAL RARITY RANKS

G1 Critically imperiled globally because of extreme rarity (five or fewer occurrences or very few remaining individuals or acres) or because some aspect of its biology makes it especially vulnerable to extirpation from the State of Maine.

G2 Globally imperiled because of rarity (6-20 occurrences or few remaining individuals or acres) or because of other factors making it vulnerable to further decline.

G3 Globally rare (on the order of 20-100 occurrences).

G4 Apparently secure globally.

G5 Demonstrably secure globally.

Note: Global Ranks are determined by The Nature Conservancy. T indicates subspecies rank, Q indicates questionable rank, HYB indicates hybrid species.

NEW ENGLAND COTTONTAIL

In the last 60 years, the New England cottontail's range has shrunk by over 75 percent. The rabbit is listed as a rare species in Maine and has been considered for Endangered Species Act designation, but never so designated.

According to the US Fish and Wildlife Service, the "New England cottontail prefers early successional forests, often called thickets, with thick and tangled vegetation. These young forests are generally less than 25 years old. Once large trees grow in a stand, the shrub layer tends to thin, creating habitat that the New England cottontail no longer finds suitable."

To protect cottontail habitat in Eliot, conserving tracts of land that include thickets is very important.



New England Cottontail. Photo credit: Wells Reserve at Laudholm via MDIFW⁵

Species Cooccurrence

One method to identify priority conservation areas and areas where development may have greater environmental impacts is to measure species cooccurrence, when multiple species and environmental assets are co-located in the same area.

BwH assigns scores to specific environmental values. A composite score is developed based on the known locations of these values. The map symbolizes the composite score using a green color ramp, with darker green meaning a higher score – a proxy for greater environmental value. The environmental values include:

- > rare and exemplary natural communities
- > rare plants
- > listed animals
- > significant wildlife habitats
- > riparian zones and water resources
- > undeveloped habitat blocks

As can be seen in Figure __, the areas of highest cooccurrence in Eliot include:

- > York Pond and its surrounding lands
- > York River and its adjacent lands, from Brixham Rd. to the York Town Line
- > The area north and east of Goodwin Rd., centered on Shorey's Brook and surrounding lands
- > The wetlands next to Marshwood Middle School and along Sturgeon Creek
- > The large wetland complexes around The Heath and Great Creek

Wetland Wildlife and Fisheries Habitat

Eliot also has several notable waterfowl and wading bird habitat locations as mapped by MDIFW. These areas are fairly spread out through the town and are comprised mainly of larger freshwater wetlands. Nearly the entire length of the Piscataqua River in Eliot is considered tidal and wading bird habitat. Several of these wetlands are included in Eliot's shoreland zoning regulations, updated after the 2009 plan.

The Piscataqua River is discussed further in Marine Resources.

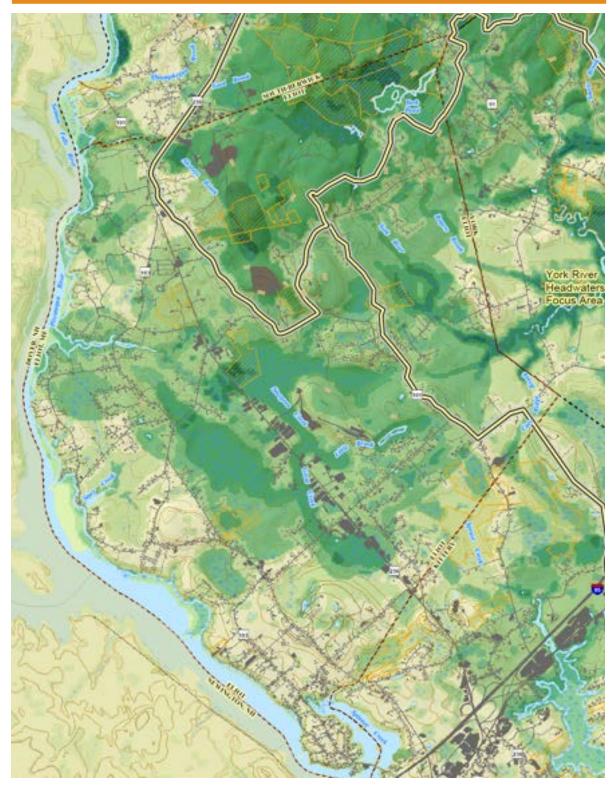
Vernal Pools

Vernal pools can be found in abundance in the Mt. Agamenticus area and in many parts of Eliot. A few significant vernal pools are mapped in the Town's online GIS system. However, others are not mapped due to their small size (often less than an acre) and temporary emergence in the spring. Vernal pools are necessary for the survival and reproduction of wood frogs, mole salamanders, and fairy shrimp. Many amphibians must breed in the same pond they were born in. Due to their ephemeral nature – emerging in the spring and fall – vernal pools lack fish that would otherwise be predators for these species' eggs and offspring. However, as they grow, and as some of these species leave the pool, they do become an important food source for larger animals.

Through the Natural Resources Protection Act (NRPA), MaineDEP regulates activities in, on, or over significant vernal pools and a 250 ft. terrestrial buffer around them, called significant vernal pool habitat. Such activities must avoid unreasonable impacts to the habitat. In summary, DEP requires that the vernal pool depression not be disturbed. In the terrestrial buffer, DEP requires a mostly unfragmented forest, a partly closed canopy of

FIGURE 9.X

NATURAL RESOURCES



The BwH species cooccurrence map for Eliot. The orange cross-hatching shows permanently conserved lands. Source: Comprehensive Plan Data Package provided by the State.

"Vernal pools or "spring pools" are shallow depressions that usually contain water for only part of the year. "Significant vernal pools" are a subset of vernal pools with particularly valuable habitat... significant vernal pool habitat is protected by law under the Natural Resources Protection Act (NRPA)." - MaineDEP



overstory trees, the maintenance of forested corridors between significant vernal pools and wetlands, minimal disturbance of the forest floor, and maintenance of native understory vegetation and downed woody debris. These requirements must be met for an expedited Permit-by-Rule (PBR) approval. If they cannot be met, the proposed activity must seek a more rigorous NRPA Individual Permit.

A larger area than just the 250 ft. terrestrial buffer is important to many species that breed in vernal pools. Maine Audubon notes that salamanders can travel an average distance of 400 ft. and wood frogs an average of 630 ft. between the vernal pool and forested uplands or wetlands. They go on to describe the importance of this additional upland habitat:

The forested uplands surrounding vernal pools are critically important for the survival of vernal pool amphibians. Pool-breeding species travel from the pools to forested and other wetland habitat where they can find abundant food, safety from predators, and places to hibernate. A vernal pool in isolation from these other important habitats will not sustain its amphibian population. To maintain healthy populations of vernal pool wildlife, it is important to maintain relatively undisturbed forest adjacent to pools. It is also important to maintain corridors of habitat among clusters of vernal pools, since amphibians and turtles may use multiple pools as stepping stones on their way to and from other habitats.

TOWN POLICIES FOR PROTECTING VERNAL POOLS

Until 2022, there was no reference in the Town's land use regulations to vernal pools. In June 2022, voters passed comprehensive regulations for larger-scale solar energy systems (SES-LGs). Site plan review applications for SES-LGs (except for those on land that is already developed or polluted) must now include mapped vernal pools on, or within 250 ft. of, the lot to be developed. Applications must provide vernal pool assessment forms and significance determinations, or otherwise treat all vernal pools as "potentially significant" and design the project as if the DEP regulations would apply.

Aside from SES-LGs, the Town does not regulate land use activities specifically for their impacts to vernal pools. What, if anything, can the Town do to supplement DEP's jurisdictions? Considering BwH recommendations, the Town can:

- > Amend our shoreland zoning regulations to protect additional wetland areas over the minimum DEP standards. If done, the presence of a known vernal pool could be factored into these regulations
- > Town staff, the Conservation Commission, and agency and organization partners can seek proactive opportunities to conduct surveys for vernal pools and assessments for vernal pool significance. This would be on a case-by-case basis (for example, on Town-owned land or land proposed to be conserved) as surveying large areas would be beyond the capacity of the Town alone. This could also involve

property owners who are interested in having their own land surveyed for vernal pools. Knowing where additional vernal pools are would inform resource protection policy development and shoreland zoning considerations

> Educate community members about vernal pools, their ecological value, and DEP regulations. Provide DEP contact info to property owners who may wish to have DEP staff visit their property to assess an area or provide feedback on a potential significant vernal pool

> Notify applicants during the site plan review process of DEP vernal pool regulations, where there are indications that the property to be developed might have a vernal pool

COMMUNITY SURVEY FEEDBACK

PRESERVING NATURAL RESOURCES IN THE COMMUNITY

Percent of respondents who say that it is important to have available to them:

Open space and wildlife areas: (93%)

- > Very important: 68%
- > Somewhat important: 25%

Percent of respondents who agree that:

Loss of wetlands or forested areas is a serious challenge facing Eliot in the next 5 years: (71%)

- > Strongly agree: 41%
- > Somewhat agree: 30%

Percent of respondents who agree that their local tax dollars should be used for:

Preservation or creation of woodlands: (86%)

- > Very important: 55%
- > Somewhat important: 31%

Percent of respondents who agree that their local tax dollars should be used for:

Preservation or creation of unique scenic areas (67%)

- > Very important: 31%
- > Somewhat important: 36%

Soils

Eliot's soils are of diverse origin, including dense glacial tills, marine silts and clays and sandy glacial till and outwash. Roughly 50% of the town's soils are marine silts and clays, which at one time were under ocean waters. Most of these soils are hydric, meaning that in their natural state they support wetland vegetation and are saturated to the surface by water at wetter times of the year. Some of Eliot's tills and sands are also included in the hydric category.

Approximately 25 percent of the town consists of excessively drained glacial till and sand and gravel deposits. The 2009 Comprehensive Plan reported that, "As of 1998, eleven (11) gravel pits have been identified in Eliot, nine (9) of which are now inactive." The potential for additional pits exists. The State of Maine regulates only gravel pits that are greater than five acres in size. In addition, these types of soils are potentially important groundwater recharge areas. These soil types are located primarily in the rural zone. Approximately 10% of Eliot consists of soils that are shallow to bedrock, particularly in the Rocky Hills area. These areas are unsuitable for septic systems if shallower than 12 inches.

Eliot does not have any licensed mining facilities.

Eliot contains a small amount of steep slopes, which have limitations for septic systems and are sensitive to erosion problems.

See Existing Land Use for the constraints map that shows wetlands and steep slopes in Eliot.

Scenic resources

As described in the 2009 Plan, residents responding to an informal survey taken by the Natural Resources Subcommittee in 1991 indicated that particularly beautiful areas include, but are not limited to: all of River Road, especially looking over toward Great Bay and Sturgeon Creek; Goodwin Road looking south toward Marshwood Middle School, the view to Mount Pawtuckaway, and to Mount Agamenticus; Frost Hill and along Frost Hill Road; along Route 103 from the marina past Green Acre into the Town Center and then on to Sturgeon Creek; Brixham Road after Third Hill Farm; Old Road and Spinney Creek. Many of these views remain in the same state as they did in 1991.

TABLE 9.X

NATURAL RESOURCES

ELIOT SCENIC INVENTORY	
Area	Description and reason for scenic priority
River Rd.	Piscataqua River, Great Bay, and Sturgeon Creek views, referenced in 2009 Plan
Goodwin Rd. looking south to Marshwood MS	Referenced in 2009 Plan, views of Mt. Agamenticus and Mt. Pawtuckaway
Views of the Bondgarden conservation easements and nearby farmland from Route 236 and Depot Rd., near Marshwood MS	Around the conservation easements, some land is not conserved, potentially affecting scenic views in the future
Goodwin Rd. just west of Beech Rd.	Views of downslope farmfields and woodlands to the south
Frost Hill and Frost Hill Rd.	Referenced in 2009 Plan
Route 103/Main St., Spinney Creek	Referenced in 2009 Plan, views of Spinney Creek and the Piscataqua River, views of Green Acre's campus
Brixham Rd. after Third Hill Farm	Referenced in the 2009 Plan
Old Road	Views of farm fields and Frost Tufts Park to the south, several historic homes
State Rd. near Depot Rd.	Views of the Heath (freshwater wetland complex) and farm fields

Potential candidates for further analysis in a scenic inventory. This list is not necessarily exhaustive.



In short, Eliot has many beautiful landscapes and scenic views. However, the Town does not have a formal designation of scenic areas and views of local importance that are tied to regulatory protections. Preserving scenic views is a statewide goal through BwH and a goal of the MtA2C initiative. The Town should consider conducting a scenic inventory with recommendations for land use regulations to protect scenic areas and views. This inventory could also inform future land conservation projects. The inventory should be carried out by a landscape architect or similar professional who is well versed in scenic viewshed analysis. The Town would need to budget for this and possibly seek grant funding. The Open Space Plan, being updated concurrently with this Comprehensive Plan Update, also recommends conducting an inventory of scenic resources, scenic designations, and regulatory protections.

While Table_ is not a formal scenic inventory, such an inventory may want to place particular focus on these areas. They are based on the areas identified above (from the 2009 Plan) as well as areas that are near or in conservation land.

Regional Cooperation on Natural Resource Protection

Because habitat crosses town lines, the need for regional cooperation on land use and land acquisition strategies between Eliot and surrounding communities cannot be overstated. The Town can work with governmental agencies, nonprofits, and landowners to protect wildlife habitat, especially within the Beginning with Habitat Focus Areas. Some organizations and initiatives include:

The Great Works Regional Land Trust (GWRLT) "works to conserve land for natural resource protection, recreation, and farmland preservation" in Eliot, South Berwick, Berwick, North Berwick, Wells, and Ogunquit.

The Mount Agamenticus to the Sea Conservation Initiative (MtA2C) has a goal to conserve 19,000 acres in York County for the benefit of wildlife and the public. The initiative began in 2002 with 10 member organizations. MtA2C is now guided by a conservation plan created in 2005.

Great Thicket National Wildlife Refuge is dedicated to managing shrubland habitat in the Northeast that provides habitat for endangered wildlife. It consists of 565 national wildlife refuges covering more than 150 million acres. Managed by the U.S. Fish and Wildlife Service (USFWS), parts of Eliot are in the Berwick-York Focus Area. USFWS is actively seeking to conserve additional land within the Focus Area.

The York River Stewardship Committee includes representatives of the four York River Watershed municipalities, the National Park Service (NPS), and Wells National Estuarine Research Reserve (WNERR). The committee, which began meeting in mid-2023, coordinates implementation of the York River Watershed Stewardship Plan.

The Piscataqua Region Estuaries Partnership (PREP) tracks land conservation progress in the Piscataqua-Salmon Falls Watershed through its State of our Estuaries Report, with 18% of total land area conserved as of April 2022. Eliot's conserved land percentage is 7.2%, one of the lowest in the watershed.

The Nature Conservancy (TNC) is one of the world's largest environmental nonprofits. Its New Hampshire chapter has spearheaded two recent conservation planning efforts:

> The Connect the Coast plan (2019) identifies wildlife corridors in the Piscataqua-Salmon Falls Watershed. In Eliot, the plan shows the York River, Shorey's Brook, and the land in between as a wildlife corridor. The plan identifies priority road segments that intersect with the corridor, "places where transportation best management practices should be deployed to facilitate safe and reliable road crossings for wildlife and motorists". The Eliot priority road crossings are Route 236 over Shorey's Brook, and Brixham Rd. and Frost Hill Rd. over the York River.

> The New Hampshire's Coastal Watershed Conservation Plan (2023) shows land around Shorey's Brook as a Coastal Conservation Focus Area. It also depicts Coastal Priority Agricultural Resources scattered around town.



Land trusts are instrumental in permanently preserving land and water resources. Land trust land often has trails and other ways the public can access and enjoy the land through passive recreation, while leaving a light footprint

ELIOT NATURAL RESOURCES GOAL, POLICIES & STRATEGIES

Goal, Policy, or Strategy	Description	Responsibility or Partnership	Implementatio Timing	
Goal 1	al 1 Protection and thriving of the State's critical natural resources, including (without limitation) wetlands, wildlife and fisheries habitat, sand dunes, shorelands, scenic vistas, and unique natural areas			
Policy 1				
Strategy 1	Prioritize stream crossings to be improved or reconstructed to remove barriers for fish and other wildlife passage. Include this prioritization in the Town's Capital Improvements Program (CIP)	Town Manager, Planning Office, Public Works, Conservation Commission, CIP Committee, Select Board, Consultant	Mid	
Strategy 2	Implement at least one improvement project from the priority list within this plan's horizon. Seek funding, partnerships, and opportunities to bundle more than one crossing in the same project or to include a crossing improvement in a larger transportation project	Town Manager, Planning Office, Public Works, Select Board, Consultant, Contractor	Long	
Strategy 3	Endorse the Stream Smart Crossings principles to guide future Town projects or changes to land use regulations	Conservation Commission, Planning Board, Select Board	Short	
Policy 2	Support conservation of priority natural resources			
Strategy 1	Update the Open Space Plan to incorporate the latest data, information, and best practices; report annually on progress	Conservation Commission, SMPDC	Short	
Strategy 2	Continue to coordinate with Great Works Regional Land Trust (GWRLT) regarding conservation priorities	Conservation Commission, Town Manager, Planning Office, GWRLT	Ongoing	
Strategy 3	Continue to build Eliot's Land Bank resources to be able to financially support more robust conservation efforts; assess the Town's Land Bank allocations to determine an adequate level to meet the community's needs	Conservation Commission	Ongoing	
Strategy 4	Explore other funding mechanisms to build resources for conservation, such as development impact fees, grant funding, etc.	Conservation Commission, Planning Office	Ongoing	
Strategy 5	Continue to participate in the York River Stewardship Committee and stay connected with other relevant regional efforts, e.g. the Mt A to the Sea Conservation Initiative and Great Thicket National Wildlife Refuge, to support conservation priorities	Conservation Commission, Planning Office	Ongoing	
Strategy 6	Conduct outreach to landowners about land conservation options	Conservation Commission, Town Manager, Planning Office	Ongoing	
Strategy 7	Connect with neighboring communities around conservation priorities that cross town boundaries	Conservation Commission, Town Manager, Planning Office	Ongoing	
Strategy 8	Prioritize protection of areas that support climate resilience, e.g. connected habitat corridors to support wildlife migration, wetlands that provide flood storage, and areas projected to facilitate migration of salt marshes as sea levels rise	Conservation Commission	Ongoing	
Cross- reference	See Agriculture and Forest Resources Goal 1, Policy 3, Strategy 1 regarding updating the Town's Forest Woodlands Report and Management Plan			

ELIOT NATURAL RESOURCES GOAL, POLICIES & STRATEGIES

Goal, Policy, or Strategy	Description	Responsibility or Partnership	Implementation Timing			
Goal 1 continued	Protection and thriving of the State's critical natural resou (without limitation) wetlands, wildlife and fisheries habita shorelands, scenic vistas, and unique natural areas					
Policy 3	Improve natural resource protections in Eliot's zoning ordinance and development review processes					
Strategy 1	Consult Beginning with Habitat maps in development review	Planning Board, Planning Office, Conservation Commission	Ongoing			
Strategy 2	Conduct an inventory of scenic resources and establish an associated designation process and regulatory protections	Planning Office, Consultant, Conservation Commission, Planning Board, Town Manager, Select Board	Mid			
Strategy 3	Consider expanding vernal pool protections in the land use regulations	Planning Board, Planning Office, Conservation Commission, Select Board	Mid			
Strategy 4	Enact land use standards that incentivize, encourage, or require native plantings, such as in vegetative buffers and erosion-sedimentation control measures	Planning Board, Planning Office, Conservation Commission, Select Board	Mid			
Cross- reference	See Land Use, Water Resources, Agriculture and Forest Resources, and Recreation and Open Space goals, policies, and strategies for additional natural resource protection recommendations					
Policy 4	Engage community members to steward Eliot's natural resources					
Strategy 1	Conduct education about Eliot's local natural resources and actions people can take in their own backyards to protect wildlife habitat	Conservation Commission	Ongoing			
Strategy 2	Connect residents to resources to map/assess vernal pools on their properties	Conservation Commission	Ongoing			
Strategy 3	Develop educational resources and municipal policies and procedures regarding pest management and appropriate removal and disposal of invasive species. These resources, policies, and procedures should, where practicable, discourage use of conventional/synthetic pesticides and encourage revegetation with native species	Conservation Commission, Recreation Department, Public Works	Mid			
Strategy 4	Hold roadside/beach trash cleanups	Conservation Commission	Ongoing			

NATURAL RESOURCES ENDNOTES

¹ Maine Department of Inland Fisheries & Wildlife (MDIFW). Beginning with Habitat. www.maine.gov/ifw/fish-wildlife/wildlife/beginning-with-habitat/index.html

²See link above

³ Text in this section adapted from the BwH Fact Sheet

⁴Text in this section adapted from the BwH Fact Sheet

⁵MDIFW. Rabbit Sightings. <u>www.maine.gov/ifw/fish-wildlife/wildlife/species-information/mammals/rabbit-sightings.html</u>

⁶Maine Department of Environmental Protection (DEP). Significant Wildlife Habitat: Significant Vernal Pool Habitat <u>www.maine.gov/dep/land/nrpa/vernalpools/index.html</u>

⁷Maine DEP. Fact Sheet: Vernal Pools: A Significant Wildlife Habitat www.maine.gov/dep/land/nrpa/vernalpools/fs-vernal_pools_intro.html_

⁸Maine Audubon. "Conserving Maine's Significant Wildlife Habitat: Vernal Pools" www.maine.gov/dep/land/nrpa/vernalpools/fs-vernal_pools_intro.html

9 Maine Audubon

¹⁰ Great Works Regional Land Trust. Who We Are. <u>gwrlt.org/who-we-are/</u>

¹¹ Piscataqua Region Estuaries Partnership (PREP). Conserved Lands (General). www.stateofourestuaries.org/indicators/conservation-land-general

¹² The Nature Conservancy, New Hampshire. Connect the Coast: Linking Wildlife Across New Hampshire's Seacoast and Beyond. <u>www.nature.org/content/dam/tnc/nature/en/documents/nh-connect-the-coast-report.pdf</u>

WATER RESOURCES

From the York River to the Piscataqua River, from York Pond to Spinney Creek, from Shorey's Brook to Cutts Ridge Brook, with streams and wetlands in between, water is central to our community's identity.

Watersheds

YORK RIVER

The York River Watershed covers the rural, northeasternmost part of town and includes the York River, Smelt Brook, Rogers Brook, and Cutts Ridge Brook. Eliot shares this 33-square-mile watershed with all three neighboring communities. 4.7 sq. mi. of it are in Eliot. The watershed includes 109 miles of rivers and streams.¹

SUBWATERSHEDS

- > **York Pond:** Shared with parts of York and South Berwick, centered on York Pond.
- Stoney Brook: Adjacent to York Pond and including a portion of the York River, mostly undeveloped, with a small portion in South Berwick.

SHOREY'S BROOK

The Shorey's Brook Watershed is in the northern part of town, shared with South Berwick, mostly east of Goodwin Rd. but including Shorey's Brook as it flows west to the Piscataqua River from Dover Rd. (Route 101).

PISCATAQUA AND SALMON FALLS RIVER WATERSHED

The Piscataqua and Salmon Falls River Watershed drains to the Piscataqua or Salmon Falls River either directly or via the following subwatersheds.

SUBWATERSHEDS

- > Heron's Cove: Between Route 236 and the Piscataqua River, centered on Heron Cove Rd.
- > **Gould's Point** Creek: Between Route 236 and the Piscataqua River, centered on Worster Rd.

> Tidy Swamp Creek: Between State Rd. and the Piscataqua River, bounded to the north by Stacy Ln. and to the south by Tidy Rd.

> **Hills Creek:** West of State Rd. and situated around the northern stretch of River Rd.

> Stacy Creek: West of State Rd. and Fore Rd. and situated around the southern stretch of River Rd., including Governor Hill Rd. and Shapleigh's Old Mill Pond

ELIOT WATER RESOURCES GOALS



Better quality, managed quantity, and improved protections for the surface waters and groundwater in town



Less discharge of polluted water into the Town's water bodies and groundwater



Sufficient quantity and good quality of water used by the community for drinking through the protection of current and potential drinking water sources



Reduced flood risk to people, property, and the environment

See the end of this section for the full table of goals, policies, and strategies.

> **Nutter's Cove Creek:** Primarily south of Old Rd. and southwest of State Rd.

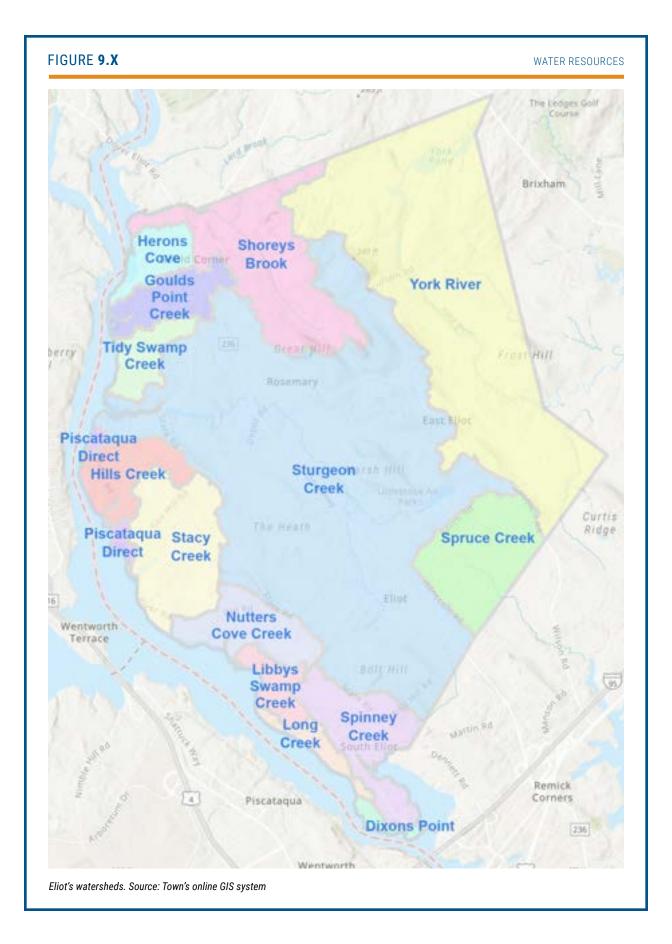
> Libby's Swamp Creek: Between Adlington Rd., Main St., and the Piscataqua River

> Long Creek: In South Eliot, between Main St. and the Piscataqua River

> Dixon's Point: At the far southern end of Eliot, between Pleasant St. and the Piscataqua River







STURGEON CREEK

At nearly 8 sq. mi., the Sturgeon Creek Watershed has the largest area within Eliot. It covers the central part of Eliot from Goodwin Rd. to State Rd., stretching from Kittery to just north of Ambush Rock Rd. The watershed includes Sturgeon Creek, Little Brook, Great Brook, and Raitt Hill Brook.

SPRUCE CREEK

The Spruce Creek Watershed is east of Beech Rd., between Goodwin Rd. and Hanscom Rd., including the headwaters of Spruce Creek as it flows from Eliot to Kittery.

SPINNEY CREEK

The Spinney Creek Watershed is in South Eliot, generally between Main St. and State Rd., flowing into Spinney Creek. DEP has designated Spinney Creek as a Nonpoint Source Pollution Impaired Stream (Marine Waters).

Water Quality Classifications

Maine's water quality standards (WQS) are based on a classification system for freshwater rivers and streams (classes AA, A, B, and C), marine and estuarine waters (classes SA, SB, SC), and lakes and ponds (class GPA). In Eliot, freshwater rivers and streams are class B,

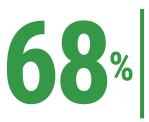
TABLE 9.X

WATER RESOURCES

	WATER QUALITY CLASSIFICATIONS				
	B (freshwater rivers & streams)	SB (marine)	GPA (lakes and ponds)		
Designated Uses	 Habitat for fish and other aquatic life Drinking water after treatment Fishing* Agriculture Recreation in/on the water Navigation Hydropower unless prohibited by 12 M.R.S. Section 403 Industrial process/cooling 	 Habitat for fish and other estuarine and marine life Recreation in/on the water Fishing* Aquaculture Shellfish propagation and harvesting Navigation Industrial process/cooling water Hydropower 	 Habitat for fish and other aquatic life Drinking water after disinfection Fishing* Agriculture Recreation in/on the water Navigation Hydropower Industrial process/cooling water 		
Dissolved Oxygen Numeric Criteria	 7 ppm or 75% saturation From 10/1 to 5/14, 7-day mean concentration not less than 9.5 ppm and 1-day minimum concentration not less than 8.0 ppm in identified fish spawning areas 	> Not less than 85% of saturation			
Bacteria Numeric Criteria	May not exceed geometric mean of 64 CFU/100 ml over 90-day interval or 236 CFU/100 ml in more than 10% of samples in any 90-day interval from 4/15 to 10/31.	Enterococcus may not exceed geometric mean of 8 CFU/100 ml in any 90-day interval or 54 CFU/100 ml in more than 10% of samples in any 90-day interval from 4/15 to 10/31. Not to exceed criteria of National Shellfish Sanitation Program for shellfish harvesting.	 [E. coli] May not exceed geometric mean of 29 CFU/100 ml over 90-day interval or 194 CFU/100 ml in more than 10% of samples in any 90-day interval 		
Habitat Narrative Criteria	> Unimpaired	> Unimpaired	> Natural		
Estuarine and Marine Life Narrative Criteria	Discharges may not cause adverse impact to aquatic life in that the receiving waters must be of sufficient quality to support all indigenous aquatic species without detrimental changes to the resident biological community.	Discharges may not cause adverse impact to estuarine and marine life in that the receiving waters must be of sufficient quality to support all indigenous estuarine and marine species without detrimental changes in the resident biological community. Discharge not to cause closure of shellfish areas.	 No direct discharge of pollutants [limited exceptions apply]; as naturally occurs Stable or improving trophic state Free from culturally induced algal blooms Shoreline and watershed activities must not cause trophic degradation 		

Table__. Designated uses and water quality criteria for Maine river, stream, and pond classifications. Source: Maine DEP³

COMMUNITY SURVEY FEEDBACK



RESPONDED THAT MAINTAINING WATER SUPPLY QUALITY IS A SERIOUS CHALLENGE FACING ELIOT IN THE NEXT 5 YEARS

Strongly agree: 40% | Somewhat agree: 28%

estuarine and marine waters are class SB, and ponds are GPA.² A table showing what the classes mean for water quality and the various uses allowed in these waters is in the Appendix. Table __ above excerpts the classes applicable to Eliot's waters.

Threats to Water Quality and Quantity: General

There are several threats to the guality and guantity of Eliot's water resources. The general threats described in this section are impacting, or could impact, any or all of Eliot's water resources. Each section below on a specific water body also describes threats specific to that water body, if any.

POINT SOURCE POLLUTION

Point source pollution comes from an easily identified and confined place - a discrete point such as a discharge pipe or a leaking fuel tank.

UNDERGROUND FUEL TANKS

In Eliot, underground fuel tanks have been a threat to groundwater. These tanks are monitored by DEP. All tanks not constructed of fiberglass, cathodically protected steel, or other non-corrosive material had to be removed by Oct. 1, 1997. Schools and municipalities had an additional year to accomplish the removal.

In Eliot, there are 25 underground storage tanks or chambers (one tank may have multiple chambers) that are listed in DEP's records as active or planned for installation. The active tanks are associated with Eliot's three retail gas stations on Route 236 or private fueling stations for businesses with vehicle fleets. There is only one nonconforming tank in DEP's records as of June 2023: an out-of-service asphalt-coated steel tank at a property on Old Farm Ln., which is not allowed to have oil delivered to it.4

CLIMATE CHANGE

Maine Won't Wait notes that Maine is experiencing more frequent heavy storms (2-4 inches of precipitation) and that such storms could "degrade water quality in ponds, lakes, streams, rivers, and coastal areas".

Culverts and other infrastructure should be evaluated for their ability to pass and withstand these heavy rain events. Other climate change impacts related to water quality and quantity include increased temperatures (impacting aquatic organisms, potentially contributing to aquatic plant growth/algal blooms etc.) and drought (low water volumes, impacting aquatic organisms).

Water Bodies: York Pond

York Pond is 48 acres in surface area, has over two miles of shoreline, and has a maximum depth of 11 ft.⁵ York Pond is classified as a Great Pond, enabling additional regulatory and shoreland zoning protections. Resource Protection shoreland zoning extends 250 ft. from York Pond and its adjacent wetlands. York Pond is in the Town's Rural zoning district and Critical Rural Overlay (CRO), where any proposed subdivisions must be Open Space Developments (i.e. cluster subdivisions).

The northern shore of the pond is conserved as a State Wildlife Management Area. To the west is Eliot Town Forest: conservation land that includes a hiking trail leading from Punkintown Rd. in South Berwick. The low-density Punkintown residential neighborhood along Eliot's portion of Punkintown Rd. is to the south.

TABLE 9.X

WATER RESOURCES

YORK POND FISH SPECIES		
Common name	Scientific name	
Brook trout	Salvelinus fontinalis	
Brown bullhead	Ameiurus nebulosus	
Chain pickerel	Esox niger	
Golden shiner	Notemigonus crysoleucas	
Largemouth bass	Micropterus salmoides	
Yellow perch	Perca flavescens	

Table__. Fish species in York Pond. Source: MDIFW data from 8/25/2009. The brown bullhead is new since the 2007 inventory.6

ECOLOGICAL VALUE

York Pond and its vicinity feature wildlife habitat with species of concern, unusual plants, and rare and endangered animals. It has a high cooccurrence of significant natural resources. Table __ shows the fish species that can be found in York Pond. York Pond is within the Mt. Agamenticus Focus Area of Statewide Ecological Significance and is also near the York River Focus Area.

The Eliot Conservation Commission made a fact sheet that lists four endangered species habitats in the York Pond Area⁷:

- > Chestnut oak
- > Flowering dogwood
- > Blanding's turtle
- > Ringed boghaunter dragonfly

THREATS TO WATER QUALITY OR QUANTITY

York Pond is surrounded by conservation land and low-density residential development. 97% of its 500-meter buffer is in natural land cover, while less than 1% is impervious surface.8 Shoreland zoning and the Critical Rural Overlay provide some level of development protection. However, some allowable land uses in the Rural zoning district could impact water quality if located close enough to the pond.

DOCUMENTED WATER QUALITY PROBLEMS

York Pond is not an impaired water according to DEP's 2018/2020/2022 Integrated Water Quality Monitoring and Assessment Report.

A data sheet on York Pond is in the Appendix.

COMMUNITY SURVEY FEEDBACK



RESPONDED THAT PRESERVATION OR CREATION OF MARSHES AND PONDS IS IMPORTANT TO USE **TAX DOLLARS TOWARDS**

Very important: 43% Somewhat important: 33%

TABLE 9.X

WATER RESOURCES

Because the York Pond data is nearly 20 years old, the Town should seek to have new sampling and updated data collected.

YORK POND WATER Q				
Water Quality Parameter	Water Quality Parameter Value			
Total phosphorous, epilimnetic core (i.e. sample from the top- most layer of the lake)	26 micrograms/ liter (ug/L)	[to be added]		
Chlorophyll	21 ug/L			
Conductivity	62 micro-siemens/ centimeter (uS)			
рН	6.01			
Total alkalinity	4 milligrams/liter (mg/L)			

Table ___. Lake chemistry data for York Pond. Source: Lakes of Maine9

TABLE 9.X

WATER RESOURCES

YORK POND DISSOLVED OXYGEN					
Data Collection Date	Sample Depth (m)	Temperature (°C)	Oxygen (ppm)	Oxygen	
8/25/1997	0	24.7	6	М	
8/25/1997	1	21.5	5.4	М	
8/25/1997	2	20.6	5.4	М	
8/25/1997	3	19.9	0.9	М	

Table__. Temperature and dissolved oxygen data for York Pond. Oxygen concentration measurement method: meter. Source: Gulf of Maine Council on the Marine Environment¹⁰

TABLE 9.X

WATER RESOURCES

YORK POND INVASIVE SPECIES		
Common name	Scientific name	
Aquatic plants	None documented by DEP or Lakes of Maine ¹¹	
Fish	Largemouth bass has been documented but the extent of the problem today is not known	

Table __. Invasive species in York Pond.

Water Bodies: York River INCLUDING ROGERS BROOK & CUTTS RIDGE BROOK

The York River generally flows southeast from York Pond through Eliot, Kittery, and York and into York Harbor, the Gulf of Maine, and the Atlantic Ocean. The river stretches about 12 miles, about nine of which are tidal. The tidal segment starts in Eliot.¹² In addition to the main branch, tributaries Rogers Brook and Cutts Ridge Brook also partially flow within Eliot.

The York River's ecological value, threats to water quality and quantity, and documented water quality and invasive species issues are thoroughly addressed in the York River Watershed Stewardship Plan (2018), prepared by the York River Study Committee¹³ (hereinafter referred to as the "Stewardship Plan") and the York River Wild and Scenic River Study, prepared by the National Parks Service (NPS)¹⁴, hereinafter referred to as the "WSR Study" – among other resources. The following information is a summary based on these resources.

Table__ shows the species of fish found in York River during the 2017 fish assessment conducted by Wells National Estuarine Research Reserve for the Stewardship Plan, along with their state or federal conservation status. In April 2023, the Maine Department of Inland Fisheries and Wildlife (MDIFW) stocked 200 brook trout in the part of the river in Eliot.

ECOLOGICAL VALUE

The York River watershed is of exemplary ecological value because of the range of habitat it provides, the presence of rare and high-value species, its abundance of clean water, and the larger ecological context of the coastal forest in which it is situated.

The York River crosses under two major roads in Eliot:

- > Brixham Rd. (ID#55482): round metal culvert fish passage barrier
- > Frost Hill Rd. (ID#56100): round metal culvert potential fish passage barrier and tidal restriction¹⁶

Cutts Ridge Brook is noted for hosting wild eastern brook trout.¹⁷ The undersized round culvert conveying the brook under Beech Ridge Rd. is designated as a fish passage barrier by MDIFW.

Two positive steps for the brook's drainage area are:

> An auto junkyard that was located on a large parcel (Map 40, Lot 5) through which the brook flows was removed in 2008

YOUTH SURVEY FEEDBACK



RESPONDED THAT PRESERVATION OF MARSHES AND PONDS IS IMPORTANT THAT THE TOWN OF ELIOT SPEND MONEY ON

This choice was tied for second-most responses.

"[The York River watershed] is one of the most biodiverse regions of Maine, and with continued proactive stewardship and preservation, the watershed ecosystem is likely to provide important habitat functions under changing environmental conditions. The York River Watershed includes part of the largest intact coastal forest in the area between Acadia and the New Jersey Pine Barrens, as well as one of the largest intact salt marsh areas in southern Maine. The presence of both saltwater and freshwater ecosystems and the convergence of those systems in an estuary also contribute to the wide range of species habitats and species that are present." – York River Watershed Stewardship Plan, p. 53





The inlet of the Beech Ridge Rd. culvert at Cutts Ridge Brook. Source: Maine Stream Habitat Viewer¹⁸

TABLE 9.X

WATER RESOURCES

ECOLOGICAL VALUE IN THE YORK RIVER WATERSHED

Feature	Presence in Watershed
State-designated significant wildlife habitats	
Deer wintering areas	460 ac.
Inland wading bird & waterfowl habitat	2,870 ac.
Shorebird feeding and roosting areas	60 ac.
Significant vernal pools	At least 30 ac.
Tidal wading bird and waterfowl habitat	2,490 ac.
Other habitat characteristics	
Salt marsh habitat	About 500 ac.
Species of concern, threatened or endangered species	
Number of Endangered, Threatened, and Special Concern Species (ETSC) in the watershed	185
Number of Diadromous Fish Species of Greatest Conservation Need (SGCN) in York River or tributaries	8
Number of plant species of special concern in the watershed	36

Table_. Highlights of ecological value in the York River watershed. Sources: York River Watershed Stewardship Plan, York River Focus Area of Ecological Significance

TABLE 9.X

WATER RESOURCES

Table__ below shows the species of fish found in York River during the 2017 fish assessment conducted by Wells National Estuarine Research Reserve for the Stewardship Plan, along with their state or federal conservation status. In April 2023, MDIFW stocked 200 brook trout in the part of the river in Eliot.¹⁵

YORK RIVER SPECIES	OF FISH FOUND	
Common name	Scientific Name	Conservation Priority/Status
Alewife	Alosa pseudoharengus	SCGN priority 2, NMFS Species of Concern
American eel	Anguilla rostrata	SCGN priority 2, NMFS Species of Concern
American shad	Alosa sapidissima	SCGN priority 1
Atlantic silverside	Menidia menidia	
Atlantic sturgeon	Acipenser oxyrinchus oxyrinchus	SGCN priority 1, ESA Threatened (Gulf of Maine DPS)
Atlantic tomcod	Microgadus tomcod	
Banded killifish	Fundulus diaphanus	
Blueback herring	Alosa aestivalis SCGN priority 1	
Brook trout	Salvelinus fontinalis	SCGN priority 3
Common sea robin	Prionotus carolinus	
Common shiner	Luxilus cornutus	
Fourspine stickleback	Apeltes quadracus	
Grubby sculpin	Myoxocephalus aenaeus	
Mummichog	Fundulus heteroclitus	
Ninespine stickleback	Pungitius pungitius	
Pumpkinseed sunfish	Lepomis gibbosus	
Rainbow smelt		SCGN priority 1, NMFS Species of Concern
Shortnose sturgeon		SCGN priority 2
Striped bass	Morone saxatilis	
Threespine stickleback	Gasterosteus aculeatus	
White perch	Morone americana	
White sucker	Catostomus commersonii	
Winter flounder	Pseudopleuronectes americanus	SCGN priority 2

Table_. Native fish species in the York River and tributaries, as found by the 2017 Fish Assessment conducted by Wells National Estuarine Research Reserve for the York River Watershed Stewardship Plan; along with their state or federal conservation status. For non-native species, see below. **SCGN**: State-designated Species of Greatest Conservation Need; **NMFS**: National Marine Fisheries Service; **ESA**: federal Endangered Species Act; **DPS**: Distinct Population Segment

ENVIRONMENTAL PROTECTIONS AND CONSERVATION EFFORTS RELATED TO THE YORK RIVER

Wild and Scenic River (WSR) Designation

In 2022, the York River and its major tributaries were given a federal Partnership Wild & Scenic River (WSR) designation. The designation is the culmination of advocacy from the Friends of the York River, an NPS Reconnaissance Survey, legislation introduced by Representative Chellie Pingree and Senator Angus King to authorize a federal WSR Study, the regional Stewardship Plan, resolutions of support from the watershed communities (including a 2018 referendum article approved by Eliot voters), the publishing of the WSR Study by NPS in 2020 recommending designation,¹⁹ and the actual federal WSR designation in an omnibus bill signed by President Biden in December 2022.

WSR designation brings with it additional environmental protections and funding opportunities. The York River was found to be a good fit for the "Partnership" subset of the WSR system (PWSR), which encourages coordination, collaboration, and shared stewardship responsibilities between private landowners, local and state governments, and the federal government – a more bottom-up approach for rivers whose adjoining land is largely privately-owned and where there is a history of local management.²⁰ A WSR designation does not by itself change or affect any local land use regulations. It is up to each community to decide how it wants the designation to inform those regulations. This Comprehensive Plan Update can be a starting point for such decision-making in Eliot.

In addition to the main branch of the York River in Eliot, both Rogers Brook and Cutts Ridge Brook were included in the PWSR designation.²¹

Great Thicket National Wildlife Refuge

The Great Thicket National Wildlife Refuge (NWR) is a program and a vision for permanent conservation of upland forests, estuaries, and salt marshes in various parts of coastal New England, including in the ecologically unique area of Eliot and neighboring communities that includes the meeting of the boreal forest and eastern deciduous forest. This effort is described further in *Natural Resources*. The York River watershed includes lands that may be a focus for Great Thicket NWR conservation.

Focus Areas of Statewide Ecological Significance

The York River watershed includes two Focus Areas of Statewide Ecological Significance:

> 8,750 acres of the watershed are in the York River Focus Area

7,170 acres are in the Mount Agamenticus
 Focus Area²²

The Focus Areas are discussed further in Natural Resources.

Conservation Land and Initiatives

The Stewardship Plan describes how the York River watershed is seen as a priority for land conservation: "There are roughly 5,600 acres of conserved lands, which is about 26 percent of the watershed area", though only about 2,000 acres have permanent protections. Conservation landowners include Kittery Water District (KWD), regional and national land trusts, MDIFW, USFWS, and municipalities. The watershed also includes 930 acres within two State Current Use Tax Programs – tree growth and farmland – encouraging those lands to stay undeveloped or less intensely developed.²³

Shoreland Zoning

Resource Protection, Stream Protection, and Limited Residential shoreland zoning along the York River restrict land use and development intensity near the riverbanks. Cutts Ridge Brook has a Stream Protection buffer along with some Limited Residential. Rogers Brook does not have Stream Protection shoreland zoning in Eliot, but the part that flows through York is protected by shoreland zoning.²⁴

York River Watershed Study: Regulatory and Non-regulatory Recommendations Report

This report from SMPDC is a roadmap for helping municipalities implement the Stewardship Plan's recommendations. The report has land use and zoning recommendations and a matrix that calls out what each watershed community is and is not doing. Highlights of the recommendations include:

- Increasing minimum lot size in the watershed
- > Going beyond the minimum required shoreland zoning
- > A differential growth cap for rural areas
- Net residential density calculations (subtracting wetlands, slopes, etc.)
- > Watershed protection regulations
- > Low Impact Development (LID) standards
- > Uses detrimental to water quality not permitted
- > Fertilizer and-or pesticide ordinance
- > Enhanced vegetative buffer requirements and vegetation cutting standards
- > Stormwater performance standards changes
- > Sea level rise overlay zone
- > Future marsh migration overlay zone
- > Transfer of development rights
- Conservation impact fees
- > Wetland mitigation fund and open space fund
- Fee in-lieu land donation
 - Stormwater utility district
 - > Watershed TIF

 In 2014, Kittery Land Trust closed on the Rustlewood Farm conservation easement, permanently protecting 300 acres adjacent to the brook in Kittery and Eliot

Cutts Ridge Brook is in a part of the Rural zoning district that is outside of the CRO, allowing potential subdividers the option to choose either an open space development or conventional subdivision. Including this area in the CRO better protects the brook by requiring that subdivisions be open space developments.

Rogers Brook flows through a small part of Eliot, southeast of Brixham Rd., before continuing onto York. The area adjacent to the brook is largely undeveloped and in the Critical Rural Overlay, with a few large-lot subdivisions nearby.

THREATS TO WATER QUALITY OR QUANTITY

Much land in the watershed is conserved, taxincentivized to remain less intensely developed, or otherwise within a large undeveloped habitat block. The following factors present different degrees of threats to sustaining the generally good water quality and flow of the river and its tributaries.

Nonpoint Source Pollution: Stormwater runoff pollution from additional development in the watershed is a primary threat to the water quality of the river and its tributaries. Protecting the watershed from this pollution is a high priority of the Stewardship Plan.²⁵ Nonpoint source discharge from agricultural uses is also a potential pollution contributor.

The following land use regulations may help mitigate nonpoint source pollution by keeping development intensity relatively low in Eliot's portion of the watershed:

- Large minimum lot sizes 3 acres in Eliot's Rural district
- > Most of the watershed is in the CRO, where any proposed subdivision must be an open space development
- > New stormwater standards for developments

 New standards and licensing for auto graveyards, auto recycling businesses, and auto hobbyist storage areas

> A solar energy system ordinance that significantly limits the location of large-scale, ground-mounted solar energy systems in Focus Areas of Ecological Significance **Garden and Lawn Fertilizers/Pesticides:** Especially during large rain events, excess fertilizer or pesticides applied to lawns could get in the York River or tributaries.

Climate Change: For more information on the risk of sea level rise and tidal marsh migration on the York River, see <u>Climate Change.</u>

DOCUMENTED WATER QUALITY PROBLEMS

The Stewardship Plan notes that the river and its tributaries "exhibit very good water quality conditions" thanks to the watershed's "largely preserved natural landscape" and lack of impairment by "major industrial or wastewater discharges that often impact rivers of similar size in Maine and New England".²⁶

The York River is not an impaired water according to DEP.27 The river has attained water quality standards acceptable for swimming, fishing, and clamming. As noted in the WSR Study, "Indicators of high water quality include the large diversity of habitat supporting fish, birds, and other species of aquatic life and the availability of surface drinking water supplies in the watershed". The Stewardship Plan reported 2017 preliminary sampling data showing that dissolved oxygen and pH levels "were consistent with a healthy and productive estuarine environment". Maine Department of Marine Resources (DMR) sampling data cited in the Stewardship Plan showed "little impairment from bacteria" that would negatively affect shellfish harvesting. However, many stretches of the river remain prohibited for shellfish harvesting because of concern about potential sources of pollution along the shoreline, though water quality improvements allowed a stretch of the river from Sewall's Bridge to Stage Neck to be conditionally approved for seasonal shellfish harvesting.28

The York River's water quality seems to have improved since the 2009 Comprehensive Plan, which noted that it had an impaired designation from DEP for elevated fecal bacteria and nonpoint source pollutants.



and yellow perch (Table _).
The Stewardship Plan also notes that "Thirty-one invasive species from the four watershed towns have been
identified and mapped in iMap", the interactive web map

YORK RIVER INVASIVE SPECIES

TABLE 9.X

Crustaceans

Fish

Invasive Species Type

Water Bodies: Sturgeon Creek

INCLUDING LITTLE BROOK AND GREAT CREEK

Sturgeon Creek runs from the confluence of Little Brook and Great Creek to the Piscataqua River. It flows past various land uses: industrial, institutional (Marshwood Middle School), conserved wetlands, agricultural, and rural residential before widening out at its meeting with the Piscataqua.

Description

Table _. Invasive species in the York River: Source: 2017 Fish Assessment

DOCUMENTED INVASIVE SPECIES PROBLEMS

Three invasive or non-native species were found in the

2017 Fish Assessment: European green crab, bluegill,

where people can report invasive species occurrences.29

European green crab

Bluegill, yellow perch

WATER RESOURCES

Little Brook flows around Marsh Hill, which includes Seacoast Airfield, and Great Creek flows generally south and parallel to Route 236, before both converge into Sturgeon Creek.

ECOLOGICAL VALUE

The tidal portion of Sturgeon Creek west of Route 103 (State Rd.) is designated as a shellfish growing area by DMR.³⁰ Upstream of Depot Rd., the creek flows through a large wetland complex next to the middle school, which is part of a 256-acre undeveloped habitat block and which includes the 70-acre Bondgarden conservation easement. MaineDOT installed a wildlife crossing under Route 236 here. Rare animal and plant species along the banks or near the creek are mapped by BwH.³¹

Large wetlands adorn stretches of both Little Brook and Great Creek. Little Brook flows from an artificial pond east of the Airfield, which is designated as an Inland Wading and Waterfowl Habitat and buffered by shoreland zoning. USGS maps suggest this pond was a borrow pit until filled in or around 1970.³² BwH maps show endangered species within Little Brook's vicinity.³³

Great Creek flows from a large wetland southeast of Beech Rd., part of a 207-acre undeveloped habitat block. It runs past land with documented endangered species, threatened species, and species of special concern.³⁴ In 2022, MaineDOT upgraded the Great Creek culvert under Beech Rd.

THREATS TO WATER QUALITY OR QUANTITY

Because it is the Town's largest watershed fully within Eliot, the Town has a lot of influence on preserving the water quality of Sturgeon Creek. Potential threats include the following:

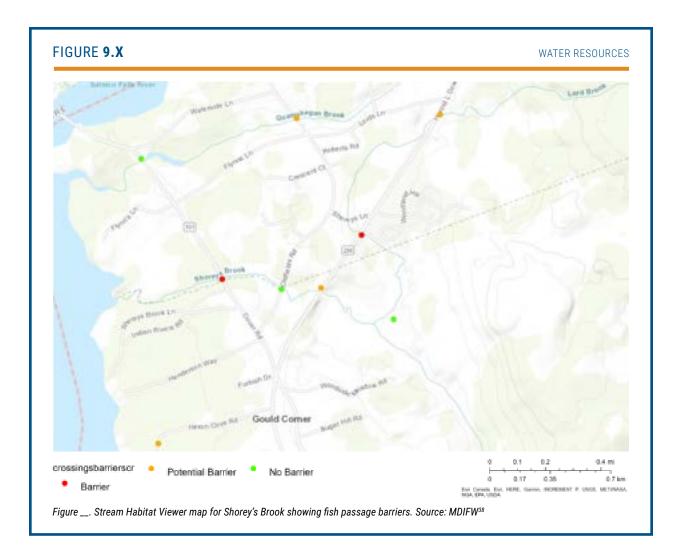
Nonpoint Source Pollution: Stormwater runoff pollution from existing, nearby land uses may be especially of concern for Sturgeon Creek and the two tributaries because some of those land uses are industrial or brownfields, such as the Town Transfer Station, the ARC waste facility, and 276 Harold L. Dow Highway, which used to have an auto recycling operation and had documented water quality issues that needed remediation by DEP. There are also agricultural uses and animal husbandry by the creek near Depot Rd.

Point Source Pollution: Figure _ shows an overboard discharge where the creek crosses Depot Rd. and a wastewater outfall near the Great Creek/Little Brook/ Sturgeon Creek confluence.

TABLE 9.X	WATER RESOURCES	
STURGEON CREEK INVASIVE SPECIES		
Invasive Species Type	Description	
Plants	Autumn olive Common reed Japanese knotweed Purple loosestrife	

Table __. Sturgeon Creek invasive plants. Source: Maine Natural Areas Program $\rm iMap^{36}$





Septic systems: Commercial and industrial uses along Route 236 must use septic systems, whose failure could lead to the discharge of sewage into these water bodies. After completion of the Route 236 Water and Sewer Extension Project, commercial and industrial property owners along Route 236 from Julie Ln. to Bolt Hill Rd., including some side roads, can tie into the municipal sewer system and remove their septic systems. However, other commercial/industrial uses outside the project area will continue to rely on septic systems for the time being. Extension of the sewer lines from Julie Ln. further northwest – for example, to Arc Rd. or to Depot Rd. – would allow more properties, like Marshwood Middle School, to remove septic systems.

DOCUMENTED WATER QUALITY PROBLEMS

Sturgeon Creek, Little Brook, and Great Creek are not impaired waters according to DEP.³⁵

DOCUMENTED INVASIVE SPECIES PROBLEMS

Four invasive plants are documented on iMap along Sturgeon Creek (Table _).

Other Water Bodies

SHOREY'S BROOK

Shorey's Brook flows from Great Hill, between Goodwin Rd. and Brixham Rd., to the Salmon Falls River. Its last ¾-mile is the Eliot-South Berwick line. Near Great Hill, the brook emerges out of a large freshwater wetland. Here it passes newly conserved land, Goodwin Forest, which includes a hiking trail with a bridge over the brook. The brook then passes farm fields, forests, and the Pike Industries quarry. It passes under three roads – Route 236 (Harold L. Dow Hwy.), Oldfields Rd., and Route 101 (Dover Rd.) – before widening and flowing into the Salmon Falls River.

FIGURE **9.X**

WATER RESOURCES

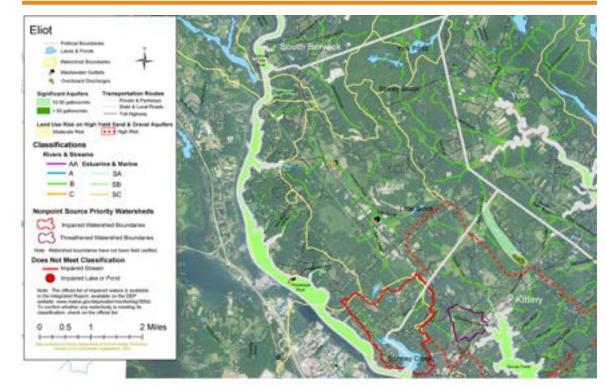


Figure __. Watersheds and stream classifications map. Source: Maine DEP, provided in the Maine DACF Comprehensive Plan Data Package

Between Route 236 and the quarry, Shorey's Brook is surrounded by inland wading and waterfowl habitat. Between Dover Rd. and the river, Great Works Regional Land Trust's (GWRLT) Raymond and Simone Savage Wildlife Preserve is on the northern side of the brook. The brook therefore passes a large variety of land uses and topography in its relatively short span. The two wetland areas have very high natural resource cooccurrence values. It is not known what impacts the two quarry uses – Pike Industries and Great Hill Fill and Gravel – may have on Shorey's Brook's water quality. It is not an impaired water according to DEP.³⁷

The MDIFW Stream Habitat Viewer shows a potential barrier for fish passage at the Route 236 culvert and a barrier at the Route 101 culvert (Figure _). However, this is based on 2012 survey data, and the Route 101 culvert was replaced in 2015. In 2011, GWRLT began a grant-funded project to restore habitat and diadromous fish passage along the tidal part of the brook. The project removed a partially-breached dam and restored the streambed, while MaineDOT replaced a failing culvert in 2014.³⁹

FUTURE ZONE FEEDBACK

"Reduce wetland destruction...so vital to water absorption."



SPRUCE CREEK

Spruce Creek is mostly located in Kittery, where it widens and flows into Portsmouth Harbor. However, the headwaters are in Eliot, southeast of Beech Rd., between Goodwin Rd. and Hanscom Rd. Ten percent of the watershed (611 acres) is in Eliot.⁴⁰

DEP has designated the Spruce Creek watershed as a Nonpoint Source Pollution Impaired Watershed (Marine Waters), because of fecal contamination, and a Threatened Stream and Priority Watershed for bacteria, toxic contamination, and low dissolved oxygen. Wells Reserve notes that the watershed "is one of seven coastal watersheds most at risk from development within the state."⁴¹

While Spruce Creek used to be a shellfish growing area, the impairment designations have meant that shellfish beds have been closed since 2005. To address these water quality issues, the Spruce Creek Watershed-Based Management Plan was first approved in 2008 and updated in 2014. In 2023-24, the Town of Kittery updated the plan, funded by a grant from the State's Coastal Community Grant Program. Successive plan iterations have been guided by numerous stakeholders, including Town of Eliot representatives. A focus of the 2023-24 update was to better estimate nitrogen loading and macroalgae blooms.⁴²

Over the years, the Town of Kittery and the Spruce Creek Association, supported by Section 319 Clean Water Act grant funding, have conducted water quality monitoring and watershed restoration efforts. One of the monitoring sampling sites is in Eliot near Old Farm Ln., where some water quality reports have shown elevated levels of nitrogen and phosphorous, elevated temperature, and low dissolved oxygen – thought to be due to stormwater runoff from paved surfaces and nearby manured hayfields. The reports have accordingly recommended the installation of a stormwater BMP in this area.⁴³

The portion of the watershed in Eliot is characterized by low-density residential development, forests, and farm fields. The headwaters are located mostly on large, undeveloped parcels. The above-described Rustlewood Farm easement conserves over 70 acres of land within the Eliot portion of the watershed, including a part of the creek itself. A large wetland just south of Goodwin Rd. is buffered with shoreland zoning. Habitat for rare species, including the New England Cottontail, have been documented in the watershed, including Eliot locations.⁴⁴



Figure _. Sand and gravel aquifer mostly in Kittery but stretching into Eliot. Source: Eliot online GIS system

PISCATAQUA RIVER AND SPINNEY CREEK

See Marine Resources for further discussion.

Floodplains

Eliot's floodplains can be seen in Figure __, the Constraints to Development map, in *Existing Land* <u>Use</u>. Areas of concern for flooding identified in the 2009 Comprehensive Plan (and for which mitigation funding was sought) include Pleasant St., Frost Hill Rd., and Depot/Cedar Rd. The 2009 plan reported that the previous two major storm events produced some flooding with an estimated \$42,000 in damages in one storm and \$32,000 for the other.

TABLE 9.X

WATER RESOURCES

PUBLIC WA	PUBLIC WATER SUPPLIES							
PWSID#	PWS NAME	PWS TYPE	TOWN	COMMENTS	SOURCE ID#			
ME0092575	DOLLAR GENERAL-ELIOT	NC	ELIOT	No SWA *	92575101			
ME0006735	MARSHWOOD ESTATES	С	ELIOT		6735101; 6736102; 6735103			
ME0094637	RSU 35 MARSHWOOD HIGH SCHOOL	NTNC	ELIOT		94637101			
ME0000216	RSU 35 MARSHWOOD MIDDLE SCHOOL	NTNC	ELIOT		216101			
ME0092503	SEACOAST WALDORF SCHOOL	NTNC	ELIOT	No SWA *	92503101			
ME0094762	STEPPING STONES LEARNING CENTER-ELIOT	NTNC	ELIOT	No SWA *	94762101			

Table ___. Public water supplies in Eliot. PWS TYPE KEY: C=Community NC=Non Community NTNC=Non-Transient, Non-Community. Source: Comprehensive Plan Data Package from Maine DACF

The Town seeks to prevent flood hazards by:

- Participating in the National Flood Insurance
 Program (NFIP)
- Enacting and applying a floodplain management ordinance (Ch. 25) that requires most habitable buildings to:
 - > Generally be at least 2 feet above base flood elevation in special flood hazard areas (SFHAs)
 - > Be designed to prevent flotation, collapse, or shifting during a flood
 - > Use flood-resistant building materials
 - > Use water-resistant electrical, HVAC, and plumbing systems and equipment
 - Obtain a flood hazard development permit for construction within special flood hazard areas (SFHAs)
- Reviewing floodplain extents during shoreland zoning reviews
- > Applying shoreland zoning and stormwater standards that serve to mitigate flood risk

In June 2024, the Town updated Ch. 25 with a new floodplain management ordinance. This update was required for continued participation in the NFIP. The ordinance references FEMA's updated Flood Insurance Rate Maps (FIRMs) and became effective July 17, 2024.

Aquifers

The only mapped aquifer in Eliot is a significant sand and gravel aquifer in the northeast corner of town, mentioned previously in the discussion of Cutts Ridge Brook (Figure _). The aquifer is mostly in Kittery, stretching lengthwise from about I-95 to about Beech Ridge Rd. Part of the aquifer near Route 1 in Kittery is designated by Maine DEP as having a high land use risk, meaning that future development may impair the aquifer's water quality.

"PFAS refer to a group of man-made chemicals known as Perand Polyfluoroalkyl Substances... As early as the 1940's, PFAS (mostly PFOA and PFOS earlier on) became widely used in household products and industrial settings. These chemicals were also historically used in firefighting foams due to their effectiveness at quickly extinguishing petroleum-based fires. Because they have a unique ability to repel oil, grease, water and heat, PFAS are used in many common products that we use regularly. For example, they have been used to make non-stick cookware, stain-resistant carpets and furniture, water-resistant clothing, heat-resistant paper/cardboard food packaging (like microwave popcorn and pizza boxes), and some personal care products. PFAS break down very slowly and are persistent in the environment. This means that PFAS may build up in people, animals, and the environment over time. Health agencies are working to understand more about the health effects of low level, long-term exposure." - Maine DEP47

Municipal Water Sources

South Eliot, Eliot Village, and parts of Route 236 are served by Kittery Water District (KWD), which owns four man-made ponds and dams located in the Town of York: Boulter Pond, Upper Folly Pond, Middle Pond, and the Bell Marsh Reservoir. While outside of Eliot, threats to these ponds could have ramifications for Eliot residents on municipal water.

KWD water service and water quality around the sources is covered in more detail in *Public Facilities*.

Groundwater

Several public water supplies are documented as "high risk" for at least one factor.

- > Marshwood Estates: Positive coliform test and lack of legal control of land around the well and wellhead protection area, septic system within 300 ft. of the well
- > Marshwood Middle School: Lack of legal control of entire wellhead protection area⁴⁵

As of this writing, the TIF-funded Route 236 Water and Sewer Project is extending water and sewer service on Route 236 to Julie Ln. Coordinating with MSAD 35, the Kittery Water District, and the Kittery Sewer Department, the Town should evaluate a future project to extend that service to Marshwood Middle School. Water and sewer service has been a stated desire of the school and MSAD 35.

OTHER DRINKING WATER WELLS

Most Eliot residents get their water from wells. Water quality in these wells is especially important for the community. The following is a summary of real and potential issues facing our wells.

ARSENIC

Arsenic can occur naturally in high levels in Maine's bedrock. In 2021 testimony before a state legislative committee in support of drinking water quality legislation, a water quality advocate summarized the health risks of arsenic:

Due to Maine's unique geology, there are areas with high levels of naturally occurring arsenic in the bedrock. Arsenic causes a whole host of health issues including bladder, skin and lung cancer. Maine's bladder cancer rate is 20% higher than the rest of the nation. Like its cousin lead, arsenic also harms children's brains. A 2014 study in Maine showed that

FIGURE 9.X

<figure><figure><figure>

WATER RESOURCES

Figure _. Excerpt from DEP's online PFAS investigation map showing groundwater test locations near the Kittery Resource Recovery Facility, a documented sludge utilization site on Goodwin Rd. and associated test results. Another sludge utilization site is mapped further northwest on Goodwin Rd., off of this map.

20 NANOGRAMS PER LITER (NG/L) / PARTS PER TRILLION (PPT)

Safe drinking water limit for six PFAS contaminants in community water systems and nontransient, noncommunity water systems set by the State Legislature's Resolve 2021, Chapter 82 (SP 64, LD 129) To Protect Consumers of Public Drinking Water by Establishing Maximum Contaminant Levels for Certain Substances and Contaminants. The resolve noted that these substances "are being identified at alarming levels in well water across the State... [and] are increasingly associated with significant health concerns". children with even moderate levels of arsenic – those lower than the current standard – had a decline of average IQ scores, 5 to 6 points lower than their peers drinking clean water.⁴⁶

The testimony included a table showing that in House District 2, which covers Eliot, 50 percent of wells were over the recommended arsenic limit of 5 ppb – the highest percentage of all the house districts that saw well tests.

PER- AND POLYFLUOROALKYL SUBSTANCES (PFAS)

PFAS has become an urgent environmental topic in Maine and in many other states. DEP is taking a lead role in analyzing and mapping PFAS contamination in groundwater and soil. A state-level PFAS task force was formed in 2020 that made several recommendations, some of which led to state legislation.⁴⁸

DEP has tested for PFAS in domestic wells on the east end of Hanscom Rd. and Bolt Hill Rd. Extension – near the Kittery Resource Recovery Facility (Figure _). In 2021, extremely high levels of PFAS were found in sample test wells at a closed landfill on the site, leading to additional testing of nearby domestic wells, one of which exceeded the safe drinking water limit.⁴⁹

PFAS may also be present in soil or groundwater on or under land, such as farm fields, where sludge and septage were applied. DEP has a tiered testing program for these locations and has mapped three locations in Eliot off Goodwin Rd.⁵⁰ Land application sites are organized into four tiers (I, II, III, IV) based on the volume of sludge applied, the proximity of homes, and known sources or contributors of wastewater at certain wastewater treatment facilities. The higher tiers, I and II, were investigated first, beginning in 2022. In August 2023, DEP completed Tier II and began Tier III, which includes sites in Eliot.⁵¹

The Maine Department of Health and Human Services (DHHS) notes: "Testing for PFAS in private wells is usually only performed when there is reason to think there could be water contamination."⁵²

OTHER CHEMICALS

Other harmful chemicals that are not uncommon in Maine wells include radon, lead, and uranium. Some areas tend to have elevated iron and manganese levels. Maine DHHS recommends



Wells near the Piscataqua River, and the tidal portions of creeks feeding it, may face increased risk of saltwater intrusion.

testing well water "once a year for bacteria and nitrates and every 5 years for arsenic, fluoride, uranium, radon, lead, and manganese", and has testing resources on its website.⁵³

SEA LEVEL RISE AND INTRUSION INTO GROUNDWATER

Wells near the Piscataqua River, and the tidal portions of creeks feeding it, may face increased risk of saltwater intrusion in various climate change sea level rise (SLR) scenarios.⁵⁴ This risk is being evaluated further in the Town's climate change vulnerability assessment, which is underway at the time of this writing.

DROUGHT

Drought can cause private wells to run dry. While New England faces less drought risk than some U.S. regions, as recently as 2021, Maine and other New England states faced abnormally dry conditions. In June 2021, 40% of the state was facing moderate drought, as defined by the U.S. Drought Monitor. York County was in the less severe abnormally dry category, but parts of our two neighboring counties to the north were in moderate drought, with dry wells reported in Cumberland County.⁵⁵

See Climate Change for further discussion of these and other impacts.

Shoreland Zoning

MaineDEP publishes uniform standards for local shoreland zoning ordinances, called the "Guidelines for Municipal Shoreland Zoning Ordinances", codified as Chapter 1000 within the DEP section of the Code of Maine Rules (referred to in this plan as the "Ch. 1000 Guidelines"). They are essentially a model ordinance. Local shoreland ordinances must be consistent with the guidelines, but they need not match them word for word. The local ordinances can impose stricter standards than the guidelines.

The Town has had a shoreland zoning ordinance since the 1980s or earlier. Since it is based on the Ch. 1000 Guidelines, our ordinance includes typical shoreland zoning provisions that can be seen in other local ordinances across Maine, including 75-100 ft. resource setbacks for new structures, restrictions on nonvegetated surface, limitations on tree cutting and vegetation clearing, minimum lot size and shore frontage, regulations for piers and similar structures, allowances for legally nonconforming conditions, and shoreland-specific variance options.

Eliot has five shoreland overlay districts: Resource Protection, Limited Residential, Limited Commercial, Stream Protection, and General Development. The Piscataqua and York Rivers, and some streams, have shoreland overlays, but other streams do not. York Pond, large wetlands, and inland wading and waterfowl areas also have shoreland zoning. Only two small General Development overlays exist along the banks of the Piscataqua – one at Safe Harbor Marina (formerly Kittery Point Yacht Yard) and one at Great Cove Boat Club – allowing greater development intensity than the other districts.

When voters approve amendments to Ch. 44 – Shoreland Zoning, those changes must be reviewed and approved by DEP for consistency with the Ch. 1000 Guidelines before they can go into effect in Eliot. DEP must also approve shoreland zoning map amendments.

Our shoreland zoning adheres closely to the Ch. 1000 Guidelines but does not go much beyond them. A shoreland zoning consistency analysis is in the <u>Appendix</u>. The community can take a more proactive, data-driven approach by implementing shoreland zoning upgrades that are informed by ecological value, species cooccurrence, water quality, Beginning with Habitat resources, and other environmental planning data.

STORMWATER MINIMUM CONTROL MEASURES (MCMs)

- > Public Education and Outreach
- > Public Participation
- > Illicit Discharge Detection and Elimination
- > Construction Runoff Control
- > Post-Construction Stormwater Management
- Pollution Prevention/Good Housekeeping for Municipal Operations

Stormwater

MS4 PERMIT

The Town is subject to a Clean Water Act permit to protect waters from stormwater pollution. The General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems ("MS4 Permit"), is issued by DEP and periodically updated, most recently in 2022. The permit requires that municipalities make progress on six minimum control measures (MCMs), which are categories of actions that reduce stormwater pollution. Each MCM includes specific actions, practices, or projects – referred to as Best Management Practices (BMPs).

Through the Southern Maine Stormwater Working Group (SMSWG), the Town coordinates with other Southern Maine communities on stormwater-related issues and permit compliance. SMSWG helps these municipalities write and update stormwater management plans (SWMPs) and ordinances to demonstrate permit compliance and progress on reducing stormwater pollution. An experienced stormwater consultant assists the SMSWG, its member municipalities, and similar working groups and their member municipalities in other regions in Maine, allowing for close coordination and efficient information sharing. With the assistance of this consultant, the Town has created, and periodically updates, our own SWMP. We report on progress annually to DEP.

While the MS4 Permit only applies to Eliot's Censusdesignated Urbanized Area, which only covers a part of Town, voters have adopted ordinance amendments to apply certain MCMs town-wide, such as Construction Runoff Control and Post-Construction Stormwater Management standards. TABLE 9.X

WATER RESOURCES

MCM/BMP	Summary of Progress
MCM 1: Public Education and Outre	ach
1.1: Update and Implement Public Stormwater Awareness Plan	> Overarching message is, "Water that lands on our roads, roofs, and other hard surfaces picks up pollutants and carries them to our local waterbodies without being treated"
	> Message is spread via social media ads, posts and videos, a SMSWG website, and the Town Stormwater web page
1.2: Develop and Implement Municipal/Permit Stormwater	 Planning Board, Conservation Commission, Budget Committee presentations/ discussions ensure town Boards are aware of the MS4 General Permit
Awareness Plan	> Meetings are held to clarify municipal staff responsibilities
1.3: Behavior Change Campaign	 2022-2027 behavior change focus is reduction of cigarette butt and pet waste littering
	> Initial tracking of litter in general showed cigarette butt littering is present throughout the Town, but pet waste littering is not as much of an issue
	> Grants are being pursued to purchase cigarette butt disposal devices
MCM 2: Public Involvement and P	articipation
2.1: Public Notice Requirement	> Posted public notices for review of Stormwater Management Plan, Notice of Intent to comply with the MS4 permit, and any ordinance changes
2.2: Host Public Events	> Litter cleanup events are the focus for the 2022-2027 MS4 General Permit
MCM 3: Illicit Discharge Detectior	and Elimination
3.1: Implement and enforce the Non-Stormwater Discharge Ordinance	> Chapter 31 Ordinance enacted in 2006, updated in June 2023 to require elimination of illicit discharges within 60 days of identification
3.2: Maintain a written Illicit Discharge Detection and Elimination Plan	 The Town's stormwater management plan contains an IDDE Plan which describes how the Town implements MCM 3
3.3: Maintain an updated Watershed-Based Storm Sewer System Infrastructure Map	> The Town maintains its stormwater infrastructure map in GIS. Updates are required whenever the system changes because of public works projects, or whenever the town accepts any roads or stormwater infrastructure
3.4 Conduct Infrastructure Inspections and Monitor	 Outfall inspection and catch basin cleaning are the primary mechanisms for discovery of illicit discharges
Flowing Outfalls	 If outfalls are flowing after 3 days of dry weather, they are sampled for bacteria temperature, pH, optical brighteners, ammonia and chlorine to assess if any pollutants are present
	> By 2027, the Town will need to implement a wet weather monitoring program (sampling and analysis of outfalls during rain events)
3.5 Investigate any potential illicit discharges	> Any potential illicit discharges must be investigated until the source is identified
3.6: Coordinate with the water utility regarding water line and hydrant flushing	 During hydrant flushing, dechlorination procedures must be followed by the Water District to ensure chlorine concentrations are below the acute water quality criteria (0.050 mg/L)

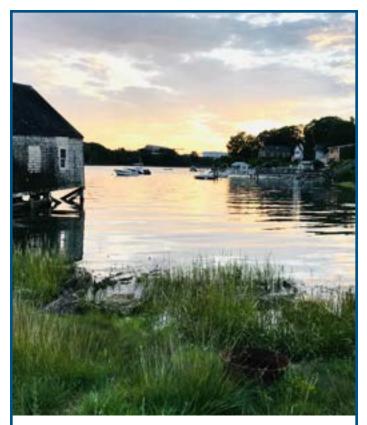
Table ___. Town and SMSWG progress on stormwater Minimum Control Measures (MCMs) and Best Management Practices (BMPs) under our MS4 Permit

TABLE 9.X

WATER RESOURCES

MCM/BMP	Summary of progress
MCM 4: Construction Runoff Contro	l l
4.1 Update requirements for erosion and sedimentation control	> The Town's ordinances were updated in November 2022 to reflect the State regulations for erosion and sedimentation control.
4.2 Site Plan Review Procedures	> The Town has had site plan review procedures in place for many years and no updates were required to address MS4 General Permit Requirements
4.3: Notify construction site developers and operators	> Town notifies via the development and building permit review processes
4.4: Continue documenting every construction activity that disturbs one or more acres within the Urbanized Area.	> Town maintains documentation in the permit database iWorQ.
MCM 5: Post-Construction Stormwa	iter Management
5.1: Promote strategies to prevent or minimize water quality impacts.	> The Town will need to implement Low Impact Development standards in the next few years to address permit requirements
5.2: Maintain Post Construction Sites Ordinance	 Post-Construction Stormwater Management ordinance (Town Code Ch. 35) adopted in 2009 and updated in 2021. Requirements apply Town-wide to developments, including subdivisions, that disturb one or more acres of land Ch. 35 requirements that these sites annually certify, using a qualified third-party inspector, that their stormwater measures are functional. Town has authorit to inspect sites and take corrective actions if needed Documentation is maintained in the Town's building permit system, iWorQ
MCM 6. Pollution Prevention/Good	Housekeeping for Municipal Operations
6.1: Operations at Municipally Owned Grounds and Facilities	 Inventory of municipal operations that have the potential to cause or contribute to stormwater or surface water pollution Operations & maintenance procedures must be reviewed annually
6.2: Training	 Annual municipal employee trainings on operations & maintenance procedures and on Stormwater Pollution Prevention Plan
6.3: Continue Street Sweeping Program	> Street sweeping conducted annually (typically spring/summer)
6.4: Cleaning of Stormwater Structures Including Catch Basins	 Inspection of 50% of catch basins Cleaning of catch basins that accumulate >3 in. of sediment Annual inspections of catch basins if basin sump is more than half full of sediment (annually until sump is less than ¼ full for two years in a row, then return to every two years)
6.5: Maintenance and Upgrading of Stormwater Conveyances and Outfalls	> Maintenance and upgrading of ditches, culverts, catch basins
6.6: Stormwater Pollution Prevention Plans (SWPPPs)	> Creation and occasional updates of the SWPPP

under our MS4 Permit



The Town's Stormwater Program seeks to keep pollutants out of the Piscataqua River and other water bodies

"'Low impact development' or 'green infrastructure' means site planning and design strategies intended to replace or replicate predevelopment hydrology through the use of source control and relatively small-scale measures integrated throughout a site to disconnect impervious surfaces and enhance filtration, treatment, and management of stormwater runoff as close to its source as possible. Low impact development strategies may be either nonstructural or structural, except that low impact development strategies utilizing structural stormwater management techniques shall be limited to an impervious contributing drainage area equal to or less than 1 acre. Low impact development strategies include, but are not limited to: bioretention filters, grass swales and channels, vegetated filter strips, permeable pavements, rain gardens and vegetated rooftops." -from DEP Chapter 500 Stormwater Management Rules

TOWN STORMWATER PROGRAM

Table_ shows the breadth of the Town's Stormwater Program and our responsibilities under the MS4 Permit. We implement 25 BMPs under the six MCMs. The support of the stormwater consultant and the SMSWG is critical, but the Town must look closely at staffing and software needs to effectively run the program. The Stormwater Program budget is reviewed like other budget items and placed on the June Municipal Election & Referendum warrant. Some fees partially offset the costs of the program. The Town should continue to streamline program implementation.

LOW IMPACT DEVELOPMENT (LID) STANDARDS

As required by our MS4 Permit, the Town will eventually need to enact low impact development (LID) stormwater standards consistent with DEP's Chapter 500 Stormwater Management Rules. This is likely to be the next major evolution of our Stormwater Program. Previous expectations were that the LID standards would need to be enacted by 2024, but a successful 2023 appeal of DEP's Model LID Ordinance means that DEP must rewrite it, pushing back the deadline to 2025 or later.

Municipalities can also take the lead on LID projects – for example, a Town of Kittery LID project in the Spruce Creek Watershed in the late 2000s.⁵⁶

What We Are Doing to Monitor and Assess Water Quality

- Requiring larger developments with privately-held stormwater facilities to enter into post-construction stormwater management maintenance agreements and certify annually that the facilities are working properly
- Inspecting, maintaining, and upgrading outfalls, ditches, culverts, and catch basins
- Sampling outfalls that are flowing during dry weather to assess if pollutants are being discharged
- Implementing (by 2027) a wet weather monitoring program (sampling and analysis of outfalls during rain events)
- > Inspecting ditches for illicit discharges; enforcing a non-stormwater discharge ordinance
- Participating in the Southern Maine Stormwater
 Working Group (SMSWG)
- > Participating in regional York River stewardship efforts, including the York River Stewardship Committee
- Participating in the Spruce Creek Watershed-Based Management Plan update. One of the water quality sampling sites is in Eliot near Old Farm Ln.
- Participating in the Piscataqua Region Estuaries Partnership (PREP) Piscataqua Region Monitoring Collaborative

FIGURE **9.X**

WATER RESOURCES





Meet at Eliot Town Hall at 9:45

Rain date April 25 We will supply vests, grabbers, gloves and bags. Bring enthusiasm, tick spray, old clothes and waterproof boots! Sponsored by the Ellot Conservation Commission. Check out our Facebook page for more information

Figure ___. An Eliot Conservation Commission clean-up poster. Source: ECC Facebook page

What We Are Doing to Improve Water Quality

> Maintaining a shoreland zoning ordinance

Extending municipal sewer service along
 Route 236 to reduce commercial and
 industrial properties' reliance on septic systems

- Requiring developments to implement stormwater BMPs, reduce site runoff, and mitigate erosion and sedimentation
- Requiring larger developments to have approved erosion & sedimentation control plans
- > Maintaining a SWPPP for municipal operations
- > Investigating and removing illicit discharges when found
- Inspecting, maintaining, and upgrading ditches, culverts, and catch basins
- > Conducting annual street sweeping
- Helping to distribute stormwater educational materials
- Holding twice-annual cleanup days (led by the Conservation Commission)
- Maintaining the Land Bank and budgeting for land conservation



An Eliot Conservation Commission sponsored clean-up.

ELIOT WATER RESOURCES GOALS, POLICIES & STRATEGIES

Goal, Policy, or Strategy	Description	Responsibility or Partnership	Implementation Timing
Goal 1	Better quality, managed quantity, and improved protectio and groundwater in town	ns for the surface waters	
Policy 1	Revise the shoreland zoning regulations to be fully consistent with and improve the clarity of the regulations	h the minimum DEP standards,	
Strategy 1	Amend the shoreland zoning regulations where needed to achieve consistency with the minimum standards in DEP's Chapter 1000 guidelines and increase the clarity of the regulations and associated definitions	Planning Office, Conservation Commission, Planning Board, Select Board, DEP	Short
Strategy 2	Create resources to improve the clarity, thoroughness, efficiency, or uniformity of the shoreland zoning review process, such as an updated shoreland zoning application, published guidance documents, interpretation policies, frequently asked questions, and other resources	Planning Office, DEP	Short
Policy 2	Establish additional shoreland zoning regulations where warranted	to adequately protect importan	t water resource
Strategy 1	Designate additional inland wetlands as protected resources in the shoreland zone. This could include one or more of the following: designating some or all forested wetlands as protected resources, lowering the 10-acre contiguous wetland size threshold for freshwater wetlands, differentiating wetlands by ecological value, or similar actions	Planning Office, Conservation Commission, Planning Board, Select Board, DEP	Mid
Strategy 2	Evaluate additional streams to be designated as protected resources in the shoreland zone, factoring in habitat, species cooccurrence in the watershed, water quality, continuity with neighboring communities' shoreland zoning, and other factors as appropriate	Planning Office, Conservation Commission, Planning Board, Select Board, DEP	Mid
Policy 3	Increase water quality protections in the York River Watershed		
Strategy 1	Continue to participate in the York River Watershed Committee and the York River Wild and Scenic River Partnership	Committee and Partnership Representatives	Ongoing
Strategy 2	Expand shoreland zoning along the York River and its tributaries to account for projected marsh migration from reasonably likely sea level rise scenarios	Planning Office, Conservation Commission, Planning Board, Select Board, DEP	Short
Strategy 3	Support the permanent conservation of additional land in the watershed	Conservation Commission, Select Board, Town Manager, Planning Office, Planning Board GWLT, resource agencies	Ongoing
Policy 4	Continue to support water quality improvement efforts for other w	atersheds in Eliot	
Strategy 1	Continue to contribute to efforts to improve the water quality of Spruce Creek, including the update of the Spruce Creek Watershed-Based Management Plan and implementation of the plan's recommendations that are pertinent to Eliot	Planning Office, Conservation Commission	Ongoing
Strategy 2	Encourage landowners to protect water quality; support the conservation of land around rivers and streams, especially where the conservation will have likely benefits for both water quality and habitat	Conservation Commission, Select Board, Town Manager, Planning Office, Planning Board, Great Works Regional Land Trust, resource agencies	Ongoing
Strategy 3	Provide public education resources about water quality issues, such as aquatic invasive species, pet waste, fertilizers, importance of buffers, stormwater practices for residents, etc. Share DEP resources on PFAS and PFOA with interested community members	Planning Office, Conservation Commission, Consultant	Ongoing
Strategy 4	Participate in local and regional efforts to monitor, protect and, where warranted, improve water guality	SMSWG, Conservation Commission, Planning Office	Ongoing

ELIOT WATER RESOURCES GOALS, POLICIES & STRATEGIES

GOAL	Goal 1 continued	Better quality, managed quantity, and improved protectio and groundwater in town	ns for the surface waters	
	Policy 5	Establish local wetland protections		
	Strategy 1	Study and, if warranted, establish a local wetland regulation program that dovetails with the Town's shoreland zoning and DEP NRPA regulations. For unavoidable impacts to wetlands, the program should include an in-lieu mitigation and compensation element that contributes to local wetland conservation initiatives	Conservation Commission, Planning Board, Town Manager, Select Board, Planning Office, Consultant	Short
	Strategy 2	Incorporate net residential density into the Town's subdivision regulations such that the area of some or all wetlands is subtracted from the overall parcel area for the purpose of determining minimum lot size compliance and the number of units that may be built on a parcel	Planning Office, Planning Board, Select Board, Conservation Commission	Mid
	Goal, Policy, or Strategy	Description	Responsibility or Partnership	Implementation Timing
^{SOAL}	Goal 2	Less discharge of polluted water into the Town's water bo	dies and groundwater	1
	Policy 1	Reduce stormwater runoff pollution		
	Strategy 1	Continue to comply with the General Permit for Stormwater Discharges from Small Municipal Separate Storm Sewer Systems (MS4 Permit) by updating the Stormwater Management Plan and implementing its minimum control measures (MCMs)	Planning Office, Planning Board, Select Board, Conservation Commission, Consultant	Ongoing
	Strategy 2	Continue to participate in the Southern Maine Stormwater Working Group (SMSWG)	Planning Office, Public Works	Ongoing
	Strategy 3	Enact Low Impact Development (LID) standards in the land use regulations	Planning Office, Planning Board, Select Board, Conservation Commission, SMSWG, DEP	Short
	Strategy 4	Adopt water quality protection practices for construction and maintenance of public roads and properties and require their implementation by community officials, employees, and contractors	Select Board, Town Manager, Public Works	Ongoing
	Strategy 5	When designing a capital project, such as municipal facility, park or recreational area, or transportation improvements, consider opportunities to incorporate stormwater best management practices (BMPs) and LID standards into the project	Town Manager, Public Works, Recreation Department	Ongoing
	Strategy 6	Incorporate projected future precipitation rates, instead of just historical data, in stormwater land use standards and Town capital projects, for example, culverts sized appropriately to accommodate more extreme storms	Planning Office, Planning Board, Consultant	Mid
	Strategy 7	Continue to incorporate and streamline stormwater permit applications, certifications, monitoring, inspections, and enforcement actions into the Town's online building permit system	Planning Office, Consultant	Ongoing
	Policy 2	Reduce the risk of pollution discharges via septic systems		
	Strategy 1	Complete water and sewer line extensions along Route 236, including the in-progress project and the future extensions described in Land Use Goal 1, Policy 2	Town Manager, Select Board, Capital Improvement Plan Committee, Planning Office, Consultant, Contractor	Short-mid
	Strategy 2	Implement additional land use standards for septic systems where warranted, including, but not necessarily limited to, those related to water resource setbacks, soil suitability, anticipated or known changes to groundwater levels from sea level rise or other factors, and documentation of septic system condition and age in shoreland zoning reviews	Planning Board, Select Board, Conservation Commission, Planning Office, DEP	Mid
	Strategy 3	Establish a database of septic systems and provide educational materials encouraging septic system inspection/pump-out at prescribed intervals	Planning Office, Conservation Commission	Ongoing
	Strategy 4	Consider projected groundwater rise impacts on septic systems and other underground infrastructure and associated water quality issues	Planning Office, Planning Board, Conservation Commission	Ongoing
L			l	l

ELIOT WATER RESOURCES GOALS, POLICIES & STRATEGIES

	Goal, Policy, or Strategy	Description	Responsibility or Partnership	Implementation Timing
SOAL 3	Goal 3	Better quality, managed quantity, and improved protectio and groundwater in town	ns for the surface waters	
	Policy 1	Protect current and potential drinking water sources		
	Strategy 1Maintain a cooperative working relationship with the Kittery Water District (KWD) related to the provision of clean and adequate supply of drinking water to Eliot residentsSelect Board, Town Manager, Public Works, Planning Office		Ongoing	
	Strategy 2	Working with KWD and surrounding towns, monitor land use issues and impacts concerning the regional water supply	Planning Board, Planning Office	Ongoing
	Strategy 3	Maintain, enact, or amend public wellhead and aquifer recharge area protection mechanisms, as necessary, and consider other aquifer protection measures for the aquifer shared with Kittery in the northeastern part of town, around Goodwin Rd. and Beech Ridge Rd.	Planning Board, Planning Office	Mid
	Strategy 4	Provide support for residents to make it easier to get their wells tested, especially those who may not be able to afford the costs of testing	General Assistance	Ongoing
	Strategy 5	For future droughts, establish residential water conservation policies and consider ways to support local farmers dealing with water shortages	Town Manager	Mid-Long
	Goal, Policy, or Strategy	Description	Responsibility or Partnership	Implementation Timing
GOAL	Goal 4	Reduced flood risk to people, property, and the environm	ent	
	Policy 1	Improve floodplain management		
	Strategy 1	Continue participation in the National Flood Insurance Program (NFIP)	Planning Office	Ongoing
	Strategy 2	Maintain the Town's floodplain management ordinance (Ch. 25, updated in 2024) based on model language/best practices	Planning Office, Planning Board, Town Manager Select Board	Ongoing
	Strategy 3	Review floodplain extents during shoreland zoning review process	Planning Office, Planning Board, Conservation Commission	Ongoing
	Strategy 4	Apply shoreland zoning and stormwater standards that serve to mitigate flood risk	Planning Office, Planning Board, Conservation Commission	Ongoing

WATER RESOURCES ENDNOTES

¹ York River Watershed Stewardship Plan, p. 19

² For more information, visit: Maine DEP. Classification of Maine Waters. <u>www.maine.gov/dep/water/monitoring/classification/</u>

³ Adapted from: Maine Board of Environmental Protection Recommendations to the Legislature for Certain Changes to Water Quality Classifications and Related Standards: 2021 Triennial Review, Appendix A.

www.maine.gov/dep/water/wqs/2021%20Triennial%20Review%20Recommendations.pdf. The notes in these tables explain the asterisk (*) qualifier for fishing.

⁴List available via: <u>www11.maine.gov/dep/waste/ust/index.html</u>. The records may be out-of-date for the two properties associated with "planned for installation" tanks – 276 Harold L. Dow Hwy. and 857 Main St. – since the records are over 10 years old and the 276 Harold L. Dow Hwy. listing references an auto recycling business that is no longer active on the property. In the mid-2000s, DEP conducted a remediation of contaminated soil associated with this property.

⁵Lakes of Maine

⁶ Lakes of Maine

⁷ www.eliotmaine.org/DocumentCenter/View/840/York-Pond-Area-PDF

⁸ Lakes of Maine

⁹Lakes of Maine. York Pond. www.lakesofmaine.org/lake-chemistry.html?m=9713. While the website states that "2019 data is currently in review", the actual dates associated with the data are in August 1997.

¹⁰ Gulf of Maine Council on the Marine Environment. Maine lakes water quality - temperature & dissolved oxygen profiles. http://www.gulfofmaine.org/kb/2.0/record.html?recordid=9214

¹¹Lakes of Maine. <u>www.maine.gov/dep/water/invasives/index.html</u>

¹² York River Watershed Stewardship Plan, pp. 19-20

¹³ Add link to plan online. Current link has issues. The Committee included two representatives from Eliot.

14 www.rivers.gov/documents/studies/york-study.pdf

¹⁵www.maine.gov/ifw/docs/current_stocking_report.pdf

¹⁶ Maine Stream Habitat Viewer: <u>webapps2.cgis-solutions.com/MaineStreamViewer/</u> and email from Jennifer Hunter, York River Stewardship Committee, 1/8/24

¹⁷ Steve Walker, BwH presentation to ECC, June 7, 2023

¹⁸ www.maine.gov/ifw/fish-wildlife/wildlife/beginning-with-habitat/maps/maine-stream-habitat-viewer.html

¹⁹www.rivers.gov/documents/studies/york-study.pdf

²⁰ For more info on the Partnership model, see the NPS study, pp. 7-8

²¹ NPS Study p. 15

²² Stewardship Plan pp. 53-54

²³ Stewardship Plan pp. 56-57

²⁴ See York's shoreland zoning maps at: <u>www.yorkmaine.org/185/Zoning-and-Ordinance-Map-Gallery</u>

²⁵P. 73

²⁶ P. 68

²⁷ Maine DEP. 2018/2020/2022 Integrated Water Quality Monitoring and Assessment Report. <u>www.maine.gov/dep/water/monitoring/305b/index.html</u>

WATER RESOURCES ENDNOTES

²⁸ Stewardship Plan pp. 69, 72-73 and NPS study pp. 1-2

²⁹ Stewardship Plan pp. 62 and 66

³⁰ BwH Map 1

³¹ BwH Map 2

³²ngmdb.usgs.gov/topoview/

³³ BwH Map 2

³⁴ BwH Maps 2-3

³⁵ Maine DEP. 2018/2020/2022 Integrated Water Quality Monitoring and Assessment Report. <u>www.maine.gov/dep/water/monitoring/305b/index.html</u>

³⁶ www.maine.gov/dacf/mnap/features/invasive_plants/imap.htm

³⁷ Maine DEP (above)

³⁸ www.maine.gov/ifw/fish-wildlife/wildlife/beginning-with-habitat/maps/maine-stream-habitat-viewer.html

³⁹ www.atlanticfishhabitat.org/project/restoring-diadromous-fish-passage-and-habitat-to-shoreys-brphoto-of-perchedculvert-on-shores-brookook-maine/

⁴⁰ www.kitteryme.gov/sites/g/files/vyhlif10031/f/uploads/final_spruce_creek_wbmp_june_2014.pdf

⁴¹ <u>www.wellsreserve.org/conservation/in-your-community/rivers-and-streams/spruce-creek</u>

⁴² www.kitteryme.gov/home/news/kittery-launches-spruce-creek-watershed-based-management-plan-update

⁴³ <u>www.kitteryme.gov/public-works/pages/spruce-creek-watershed-restoration-project-scwrp-section-319-grant</u>

⁴⁴ www.kitteryme.gov/sites/g/files/vyhlif10031/f/uploads/final_spruce_creek_wbmp_june_2014.pdf

⁴⁵ PWS assessments included in the Maine DACF Comprehensive Plan Data Package

⁴⁶ Testimony of Sarah Woodbury, Director of Advocacy, Defend Our Health In Support of LD 1570, "An Act To Protect Drinking Water for Maine Residents" Before the Health and Human Services Committee; May 3, 2021

⁴⁷ Maine DEP PFAS web page: www.maine.gov/dep/spills/topics/pfas/index.html

⁴⁸ DEP PFAS web page

⁴⁹ www.newscentermaine.com/article/news/health/unsafe-levels-of-pfas-found-in-a-private-kittery-well-health-water/97-<u>d1809c6b-35db-4572-bcd1-29ab9f853585</u>

⁵⁰ DEP PFAS web page

⁵¹ DEP PFAS web page

⁵²www.maine.gov/dhhs/mecdc/environmental-health/eohp/wells/documents/PFOA_PFOS_tipsheet.pdf

⁵³ www.maine.gov/dhhs/mecdc/environmental-health/eohp/wells/mewellwater.htm#testing

⁵⁴ www.epa.gov/arc-x/climate-adaptation-and-saltwater-intrusion

⁵⁵ www.maine.gov/mema/sites/maine.gov.mema/files/inline-files/Drought%20Task%20Force%20Report%2006-17-2021.pdf

⁵⁶ www.maine.gov/dep/water/monitoring/tmdl/2009/bacteria_app2.pdf

MARINE RESOURCES

Eliot is a coastal community. The Piscataqua River provides direct access to the Atlantic Ocean, enabling saltwater fishing, shellfishing, and recreation.

Our Marine Water Bodies

PISCATAQUA RIVER

"The Piscataqua River flows 12.25 miles to the Gulf of Maine through the towns of Eliot and Kittery, Maine, and Dover, Newington, Portsmouth, New Castle, and Rye, New Hampshire, functioning as the state border between these two states. The river gets its name from the Abenaki word meaning, "**a river with a strong current.**" - Wells Reserve at Laudholm

The Piscataqua River begins near Eliot's northern boundary, at the confluence of the Salmon Falls and Cocheco Rivers. Passing Great Bay and I-95, it widens into Portsmouth Harbor. The Piscataqua Region Watershed is over 1,000 square miles, almost all in New Hampshire and Maine. This includes the Hampton-Seabrook Estuary; the Piscataqua River Watershed itself is smaller and located entirely in New Hampshire and Maine.

Boats on the Piscataqua

"Shipping along the river is very active, with several million tons of cargo entering each year for New Hampshire, eastern Vermont, and southern Maine. Items include petroleum products, rubber and plastics, iron and steel scrap, salt, limestone, gypsum, and fish products. The harbor is used by submarines from the Portsmouth Naval Shipyard on Seavey Island in Kittery and for fuel deliveries to Pease International Tradeport in Newington. Additionally, Portsmouth Harbor is used extensively by a large lobster fishing fleet, charter fishing vessels, commercial fishermen, excursion boats, and local and transient vessels based at or visiting about 20 boating facilities." - Wells Reserve at Laudholm¹

Eliot has about eight miles of shoreline on the river, plus over another mile of shoreline along Spinney Creek. With that much shoreline, we have a responsibility to be good stewards of the river and help ensure its water is clean.

ELIOT MARINE RESOURCES GOALS



Healthy marine life and clean water quality in the Piscataqua River and its tributaries



A shoreline that people can access for recreation, enjoyment, and commerce



A shoreline and marine environment that is resilient to climate change

See the end of this section for the full table of goals, policies, and strategies.

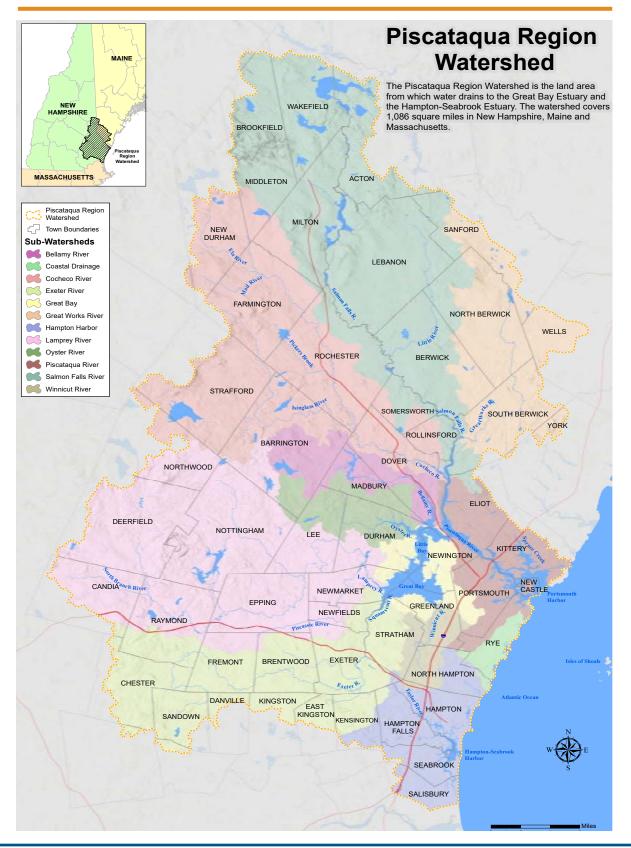


Wells Reserve describes the river's shipping activity: Shipping along the Piscataqua River is very active, with several million tons of cargo entering each year.



FIGURE 9.X

MARINE RESOURCES



SPINNEY CREEK

Spinney Creek is a subtidal creek located just north of the I-95 Piscataqua River Bridge, with shoreline in both Eliot and Kittery. The Route 103 causeway separates Spinney Creek from the Piscataqua River near their confluence.

The causeway includes a tidal floodgate. The gate was rebuilt in 2023 by MaineDOT, and it is operated by the Town. The Town manages the gate to maximize recreational activities on weekends and holidays and manage aggressive widgeon grass (Rupia maritima) growth.²

STURGEON CREEK

Sturgeon Creek runs from the confluence of Little Brook and Great Creek to the Piscataqua River. It flows past various land uses: industrial, institutional (Marshwood Middle School), conserved wetlands, agricultural, and rural residential before widening out at its meeting with the Piscataqua. Its tidal portion extends from the Piscataqua to Route 236. MaineDOT is beginning the preliminary engineering for a project to replace the stone arch culvert conveying the creek under Route 236.³

Sturgeon Creek and its watershed are described in more detail in *Water Resources*.

SHOREY'S BROOK

Shorey's Brook flows from Great Hill, between Goodwin Rd. and Brixham Rd., to the Salmon Falls River. Its last ³/₄-mile is the Eliot-South Berwick line, and its tidal influence extends about ¹/₄-mile in from the river.

Shorey's Brook and its watershed are described in more detail in *Water Resources*.

Marine Water Quality Monitoring

Water quality, fish, salt marsh, and other monitoring in the watershed is documented by the Piscataqua Region Estuaries Partnership (PREP). Monitoring sites documented by PREP that are close to Eliot's shoreline include:

 > Water quality monitoring station in the Piscataqua River at the Sturgeon Creek confluence (Upper Piscataqua River station)

 Fish monitoring stations in the Piscataqua River approximately in line with Houde Rd. and Pleasant St. and at Dover Point

 Mussel tissue toxic pollution monitoring station at Dover Point "Toxic and persistent contaminants, such as PCBs, mercury, and contaminants of emerging concern, can accumulate in the tissue of filter-feeding bivalves (e.g., mussels, clams, and oysters) and other marine organisms, posing health risks to people and nonhuman organisms when consumed" - PREP State of Our Estuaries 2023⁴



Photo from New Hampshire Sea Grant

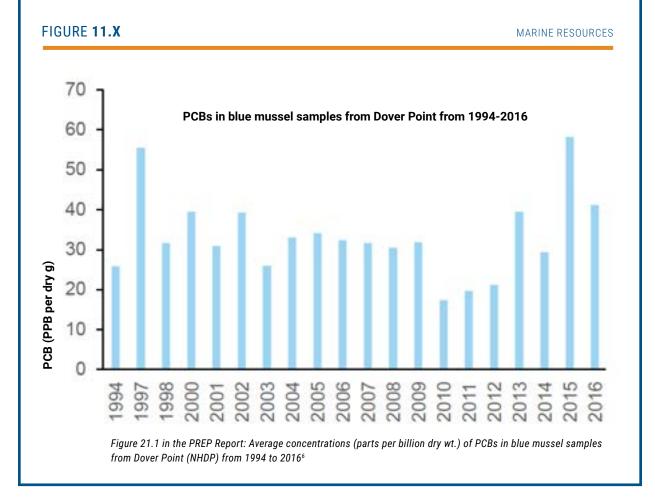
TOXIC CONTAMINANTS IN MUSSEL TISSUE

The PREP State of Our Estuaries 2023 Report ("PREP Report") includes data on these contaminants collected primarily between 1993 and 2016. Contaminant concentrations were found to be generally decreasing or staying the same; none were found to be increasing (Table __). Contaminants are grouped as either inorganic, such as heavy metals, or organic, such as polychlorinated biphenyls (PCBs).

At Dover Point, concentrations of seven heavy metals were found to be decreasing between 1993 and 2014, while PCBs showed no significant trend (Figure __). Additional data collected in 2015-16 did not find any upward trend, but suggested that the concentration of one other heavy metal (mercury) may also be decreasing. Referring to Dover Point, the report concluded that "none of the recent data have exceeded US Food and Drug Administration 'tolerance' or 'action' levels for mercury or PCBs in shellfish and seafood".

Parameter	Period	Trend at 2014	Change with 2015-16 Data
Aluminum	1994-2014	No significant trend	No change
Cadmium	1994-2014	Decreasing	No change
Chromium	1994-2014	Decreasing	Change to no trend
Copper	1994-2014	No significant trend	No change
Iron	1994-2014	Decreasing	No change
Lead	1994-2014	Decreasing	No change
Mercury	2003-2014	No significant trend	Change to decreasing
Nickel	1994-2014	Decreasing	Change to no trend
Silver	2003-2014	Decreasing	No change
Zinc	1994-2014	Decreasing	No change
PAH-Total	1994-2014	No significant trend	No change
PCB-Total	1994-2014	No significant trend	No change

Excerpt from Table 21.1 in the PREP Report: Trends in contaminant concentrations in mussel tissue...1993-2016. The excerpt only includes the NHDP (Dover Point) monitoring station.⁵

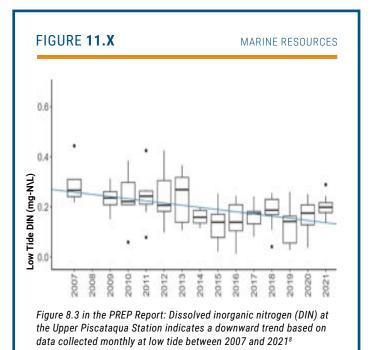


NITROGEN LOADING

"Nitrogen 'loading' involves measurement of the rate at which nitrogen is being added to estuarine water from various sources, such as the land and atmospheric deposition...Nitrogen loading levels that are too high can cause problems in an estuary such as excessive growth of phytoplankton, epiphytes, and nuisance seaweeds. When these organisms die, bacteria and other decomposers use the available dissolved oxygen to break down the dead organic matter, decreasing oxygen availability for other organisms, including fish and shellfish. In addition, excessive phytoplankton, epiphytes, and seaweed growth can have negative impacts on sediment quality, water clarity, eelgrass, and benthic invertebrates."- PREP State of our Estuaries 2023⁷

The PREP Report tracks the two types of nitrogen loading: point source, such as wastewater treatment facilities, and nonpoint source, such as stormwater runoff and septic systems. The report showed mixed results:

- Average total nitrogen load in the Great Bay Estuary
 stayed about the same in 2017-20 relative to 2012-16
 around 900 tons per year
- > Estuary nitrogen load levels are generally lower than they were in the mid- to late 2000s, when our last Comprehensive Plan was developed
- Nonpoint sources contributed to 78% of the 2017-20 nitrogen load



> Point source nitrogen loading has gone down thanks to investments in wastewater treatment upgrades by the watershed municipalities. From 2012 to 2020, wastewater treatment facilities' point source nitrogen loading dropped 64%

> In 2020, the nitrogen load (627 tons) was the lowest on record

Precipitation and nonpoint source nitrogen loading are correlated. Abnormally dry conditions between 2016 and 2020 likely influenced lower nonpoint source loading, suggesting that nonpoint source and total loading could go back up in wetter years, other things equal

> The estuary has seen a drop in average dissolved inorganic nitrogen – one of the three components of total nitrogen load – a positive sign because it could be inhibiting the excessive growth of nuisance seaweeds

Despite trends in the right direction, the report concludes that "nitrogen loading remains higher than the amount recommended by the EPA [U.S. Environmental Protection Agency] in the Great Bay Total Nitrogen General Permit, issued in 2021. To meet that long-term goal, nitrogen loading would have to be further reduced by approximately 39% from the 2020 level"

Focusing on Eliot's part of the watershed, the report found that the Upper Piscataqua River station showed an apparent significant decrease in inorganic nitrogen concentrations (Figure __).



Photo of phytoplankton. Source: NOAA

"In 2020, the nitrogen load (627 tons) was the lowest on record." – PREP State of Our Estuaries 2023

"Fish and many other organisms need dissolved oxygen in the water to survive. Dissolved oxygen levels can decrease due to various factors, including rapid changes in wind, temperature, and salinity, as well as prolonged periods of dense cloud cover. Dissolved oxygen levels can also decrease because of nutrient inputs. When nutrient loading is too high, phytoplankton and seaweed can bloom and then die, after which bacteria and other decomposers use oxygen to break down the dead organic matter." – PREP State of Our Estuaries 2023⁹



Photo from New Hampshire Sea Grant

In summary, there are positive trends in the Piscataqua Region for reduced nitrogen loads. That is tentative good news for fish, shellfish, benthic invertebrates, eelgrass, and water clarity. However, wetter years could lead to increased loading through added nonpoint source pollution from stormwater runoff.

As a PREP municipality, Eliot can play a role in reducing nitrogen loading. Through our shared sewer system and Intermunicipal Agreement (IMA) with the Town of Kittery, we have an avenue for discussing point source nitrogen loading issues (if any) with the Kittery wastewater treatment plant. For nonpoint source nitrogen loading, septic systems and stormwater management are key topic areas. PREP's Municipal Guide, discussed below, has recommendations for each of these.

For more on stormwater management, see Water Resources.

DISSOLVED OXYGEN

The PREP Report sets a dissolved oxygen threshold of 5 mg/L. When it drops below this level, there are negative impacts for aquatic life. The report documents no significant trends in dissolved oxygen levels in the Great Bay Estuary.

While dissolved oxygen levels mostly "remain well above 5 mg/L in the bays and open waters located at the center of the Great Bay and in Portsmouth Harbor", there are mixed results for the Upper Piscataqua River station. The report notes that "low dissolved oxygen events do occur in the Upper Piscataqua River" among other locations, but also that "both the Great Bay and the Upper Piscataqua River Stations remain consistently above the 5 mg/L threshold".

TOTAL SUSPENDED SOLIDS

"Total suspended solids are particles suspended in the water column measured as the dry weight of particles filtered from a known volume of water. They can consist of phytoplankton or pieces of plant matter, but most total suspended solids are generally made up of inorganic particles, such as sediment. Sources of suspended solids include erosion from streambanks, salt marshes, and the upland portion of the watershed. Surface water inflows, stormwater runoff, and wastewater treatment effluent all can deliver total suspended solids to estuaries. In addition to external sources of suspended solids, they can also originate from resuspension within an estuary. Increasing suspended sediments reduces water clarity and light availability for primary producers such as eelgrass, seaweeds, and phytoplankton. High total suspended solid values can also negatively impact oyster feeding and the aesthetic value of our estuaries." - PREP State of our Estuaries 202311

The PREP report finds that total suspended solid (TSS) concentrations are generally higher now than they were in 1989, but "appear to be decreasing in recent years". The Upper Piscataqua River station has seen no significant change in TSS from 2007 to 2021, with the range of median values at this station being generally lower than all other stations except the Lamprey River.¹²

Riverbank erosion has been identified as an issue along various parts of the Piscataqua River in Eliot, such as around the Boat Basin. Future erosion could put upward pressure on TSS concentrations.

BACTERIA

"Activities such as shellfish harvesting and swimming depend on safe water quality, which is tracked by measuring concentrations of bacterial indicators of fecal contamination. These water quality indicators are affected by point and non-point pollution, human (sewage) and non-human (animal) sources of pollution, environmental conditions, and climate change. Tracking these indicator organisms allows for evaluation of water quality relative to potential risks for human illness".- PREP State of our Estuaries 2023¹³

Measurements of fecal indicator bacteria have dropped in the Great Bay Estuary, leading the PREP Report to list it as one of six positive trends. (However, long-term data tracking only occurs at two sites within the Great Bay, so Upper Piscataqua River data is not reported.) The report attributes this positive trend, in part, to "improved stormwater infrastructure and wastewater treatment at all facilities in the watershed".¹⁴

The report notes: "Septic systems constructed too close to waterbodies, poorly maintained, or failing can also introduce harmful bacteria into local waterbodies and contribute to nutrient loading".¹⁵ Accordingly, PREP recommends establishing a 100 ft. septic system setback from water bodies, in addition to recommendations on proper septic system inspection, pumping, maintenance, upgrade, and replacement. (See the Municipal Guide discussion below.)

EELGRASS

PREP tracks the acreage of eelgrass meadows and its biomass (the weight of plant material per area), both indicators of eelgrass health.¹⁷

> The total Great Bay Estuary acreage has not changed notably in recent years (2017 vs. 2021) but is 43% below the 1996 peak of 2,900 acres.

> Total biomass of eelgrass has also increased since 2014 but is still much lower than the peak period in the late 1980s and early 1990s

> Some parts of Great Bay have lost eelgrass while other parts have gained

PREP notes that many factors affect eelgrass health:

"Eelgrass is a plant sensitive to several stressors including wasting disease, temperature, habitat disturbance, and predation. Most commonly, excessive nutrients and sediments contribute to eelgrass decline. Nutrients, such as nitrogen, spur the growth of seaweed, epiphytes (algae growing on eelgrass leaves), and phytoplankton, which then outcompete eelgrass for light. Suspended sediments, too, block light from eelgrass, which needs much more light than most algal competitors...Eelgrass is also sensitive to warming waters, a phenomenon that is occurring all along the US East Coast."

"Eelgrass (Zostera marina) leaves slow the flow of water, encouraging suspended materials to settle, thereby promoting water clarity. Eelgrass roots stabilize sediments and both the roots and leaves take up nutrients from sediments and the water while providing habitat for fish, shellfish, and other small invertebrates, which in turn support other wildlife such as wading birds. Finally, eelgrass is sensitive to pollution – especially nutrients and sediments – and often indicates the status of an estuary's water quality."

- PREP State of Our Estuaries 2023¹⁶



Photo from New Hampshire Sea Grant

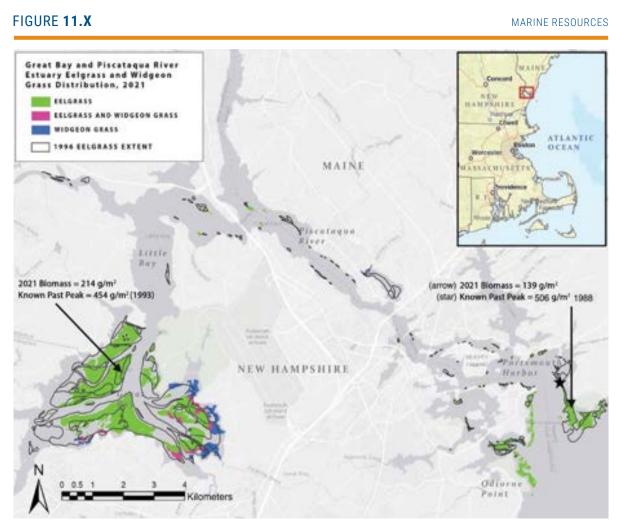


Figure 11.1 in the PREP Report: Seagrass distribution in the Great Bay Estuary in 2021, with biomass values for two sites. Black outlined polygons show the extent of eelgrass in 1996.¹⁸

TABLE **11.X**

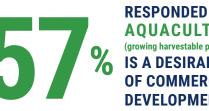
MARINE RESOURCES

THE PREP GUIDE FOR MUNICIPAL LEADERS AND DECISION-MAKERS: FIVE ACTION TABLE

BUFFERS &	LAND	SEPTIC	STORMWATER	CLIMATE
SETBACKS	CONSERVATION	SYSTEMS	MANAGEMENT	RESILIENCE
Buffers are naturally vegetated strips of land directly upslope of a water resource, such as a lake, stream, river, pond, estuary, or other wetland type.	Permanent land conservation is a critical tool used to protect water resources and wildlife habitat.	An estimated 50% of the population in the Piscataqua Region Watershed is served by onsite septic systems.	Stormwater runoff is a signicant source of non-point source pollution that contributes to poor water quality.	Climate change poses an immediate and increasing risk to all aspects of life including public health and safety, natural resources, infrastructure, and more.

Figure __. The five Action Table categories of recommendations from the PREP Guide for Municipal Leaders and Decision-Makers (2023). The full set of recommendations can be found in the guide, which is linked to in the endnotes.

COMMUNITY SURVEY FEEDBACK



RESPONDED THAT AQUACULTURE (growing harvestable plants/animals in water) IS A DESIRABLE TYPE OF COMMERCIAL DEVELOPMENT



Photo from Spinney Creek Shellfish in Eliot.

Plans to Identify and Eliminate Water Pollution Sources

At least two plans guide our efforts to identify and eliminate pollution sources for both freshwater and saltwater resources. The Stormwater Management Plan (*discussed further in Water Resources*), is required under our General Permit for Municipal Separate Storm Sewer Systems (MS4 Permit). It is a local plan, but it is developed through the Southern Maine Stormwater Working Group (SMSWG), of which Eliot is a member, and the recommended actions are similar across all SMSWG community stormwater plans.

The PREP Guide for Municipal Leaders and Decision-Makers ("Municipal Guide")¹⁹ is another regional resource. Designed as "a complementary piece to the full 2023 State of Our Estuaries report", the Municipal Guide provides recommendations for actions and informed decision-making to support the health of our estuaries, rivers, lakes, wetlands, and natural resources across the Piscataqua Region Watershed" (Figure _).

Water Dependent Uses in Eliot

SHELLFISHING

Spinney Creek Shellfish, a local company, operates a clam and oyster farm and shellfish processing

business in Spinney Creek, selling their products to local restaurants and at festivals. Further inland, Atlantic Aqua Farms (formerly J.P.'s Shellfish) operates a distribution facility on Route 236.

There is commercial fishing and shellfishing (such as lobstering, clamming, and oystering) from the Kittery border up into the Salmon Falls River, with the concentration in Eliot's Lower Piscataqua. As of 2020, Eliot had 39 lobster/crab harvester licenses, about half of which were commercial licenses (Figure __).²⁰ Most lobsters are offloaded to private or cooperative docks and, occasionally, at the Boat Basin.

WATER QUALITY FOR SHELLFISHING

According to MaineDEP's latest Integrated Water Quality and Monitoring Assessment Report (2024 Draft), the Piscataqua River is a Category 2 marine waterbody, which means it has attained a shellfish harvesting designated use, except part of it is Category 3 – Estuarine and Marine Waters with Insufficient Data or Information to Determine if Shellfish Harvesting Designated Use is Attained.

Previous reports listed impairment designations and Total Maximum Daily Loads (TMDLs, referring to the maximum amount of pollutant that may enter a water body to meet water quality standards) along different segments of the river, such as:

 Category 4-A: Estuarine and Marine Waters with Impaired Non-Shellfish Harvesting Designated Uses
 TMDL Completed (Dissolved Oxygen); TMDL was approved in 1999

> Category 5-A: Estuarine and Marine Waters Impaired by Pollutants Other Than Those Listed in 5-B Through 5-D – TMDL Required (Nutrient/ Eutrophication, Biological Indicators)²¹

Spinney Creek is Category 5-B-1: Estuarine and Marine Waters Impaired for Shellfish Harvesting Designated Use by Bacteria Only – TMDL Required (fecal coliform). For this category, shellfish harvesting is restricted, needing a special permit from Maine DMR or needing to be done within growing areas.²² Shellfish harvested from the designated growing area in the creek must be depurated before being sold to the public. Spinney Creek Shellfish operates a depuration plant near the shore.²³

Spinney Creek is not individually listed in 2006-2016 MaineDEP Integrated Water Quality and Monitoring Assessment Reports. It first appears under Category 5-B-1 in the 2018/2020/2022 Report.²⁴

COMMERCIAL FISHING

As of 2020, Eliot had seven licensed Commercial Fishing Crews, three licensed Commercial Fishing Singles, and four licensed Commercial Pelagic and Anadromous Crews (Figure _).²⁵

In 2023, commercial fishing landings in York County brought in about 7 million lbs. of fish, shellfish, and seaweed, valued at about \$25 million. That ranks York sixth of Maine's eight coastal counties in weight and value. By comparison, the highest-ranking county for weight, Knox, brought in over 45 million lbs., and the highestranking county for value, Hancock, brought in about \$160 million.²⁶

Maine's commercial fishing industry will continue to face challenges in the years ahead, such as shifting fish and shellfish species distribution, threats from invasive species, and climate change.

RECREATIONAL FISHING

As of 2020, Eliot had 15 registrants in the Recreational Saltwater Registry and six licensed Recreational Saltwater Fishing Operators (Figure _).²⁸ Maine DMR recommends the Boat Basin as an access point for recreational saltwater fishing, noting that it is "easily the busiest boat ramp on the Piscataqua River".²⁹

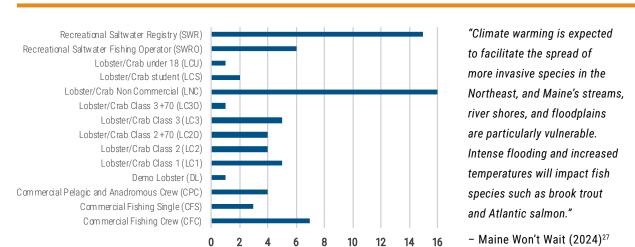
RECREATIONAL BOATING AND BOAT REPAIR

Recreational boats dock at private residential piers and the Great Cove Boat Club. Safe Harbor Marina (formerly Kittery Point Yacht Yard) provides boat repair and storage services. Another business on site makes canvas boat covers and boat accessories, as well as other canvas products.

SHIPPING

Eliot has no port or docking facilities, but shipping occurs in the federally-maintained 35-foot channel located in Eliot's lower third of the Piscataqua River.

MARINE RESOURCES



Harvester licenses in Eliot by type, 2020. Source: MaineDMR



The Piscataqua River Bridge as viewed from Great Cove Boat Club. Photo by Brookelyn Gingras, SMPDC



Recreational fishing on the Piscataqua River

FIGURE 11.X

Land Use Regulations Affecting the Shoreline

The Town maintains a shoreland zoning ordinance (Town Code Ch. 44) regulating land uses and establishing building setbacks near the shoreline. The setback for new buildings is generally 75 ft. from the normal high-water line of rivers, streams, and regulated wetlands. Resource Protection and Limited Residential shoreland zones line most of the Piscataqua River and Spinney Creek, with only a few parcels in the General Development zone. Many riverfront residences have piers. New or expanded pier systems are reviewed by the Planning Board for consistency with shoreland zoning standards.

Other regulations that help protect marine resources, such as stormwater and floodplain ordinance provisions, are discussed in *Water Resources*.

TABLE **11.X**

MARINE RESOURCES

Facility	Location	Access	Use and Capacity	Physical Condition	Improvement Plans
Eliot Boat Basin	63 Junkins Ln.	Public	Paved boat ramp and float allowing smaller and larger boats access to the river	Satisfactory; adequate public parking	Recommendations in Recreation and Open Space to improve amenities, shoreline stability, and stormwater management
Pleasant Street Boat Ramp	Pleasant St near Riverside Ave.	Public	Paved boat ramp allowing smaller boats access to the river	Satisfactory; no public parking available	None
Great Cove Boat Club	225 Main St.	Private	Marina with docks for members, winter storage, amenities	Satisfactory	None known
Safe Harbor Marina	857 Main St.	Private	Marina with boat maintenance and storage	Site, buildings, and boat ramp approved for upgrades	Upgrades approved by Planning Board as part of case PB23-2
Long Reach Landing Marina	213 Pleasant St.	Private	Marina	Bait shop recently rebuilt	Bait shop rebuilt after Planning Board approval in case PB21-21
Greenbriar Estates	Stacy Ln.	Private	Private boat ramp owned by Greenbriar Homeowners Association	Unknown	Unknown
Riverview Subdivision	Crescent Ln.	Private	Private water access and dock owned by Riverview Homeowners Association	Unknown	Unknown

This plan does not recommend any new major access points to the Piscataqua River or Spinney Creek. However, discussion of a possible small Spinney Creek public access point is in <u>Recreation and Open Space</u>.



Harbor and Bay Management Plans

Portsmouth Harbor, comprising the last 8.8 miles of the Piscataqua River, is managed by the US Army Corps of Engineers. The Corps has managed the harbor and conducted navigation improvement projects, such as channel widening, since the 1880s.³⁰

HARBOR ORDINANCE, HARBORMASTER, AND HARBOR COMMISSION

Eliot has a Harbor Ordinance, codified in Chapter 30 of the Town Code. The ordinance governs how moorings are issued, renewed, used, and reassigned. It includes provisions for allowed and restricted activities and for protection of the marine environment.

The Town maintains a Harbormaster position that manages and enforces the Harbor Ordinance, including reviewing and issuing mooring permits. As of this writing, the position is housed within the Eliot Police Department.

BRINGING BACK THE HARBOR COMMISSION

Eliot used to have a Harbor Commission, but it was dissolved several years ago. A reinstated Harbor Commission could advise the Harbormaster and Town on harbor management; play a role in reviewing waiver requests, appeals, and complaints related to the Harbor Ordinance (Sections 30-13 to 30-16); and be a forum for discussing marine topics within the Town's purview, such as good environmental stewardship of the river and tidal waters and ways to support local marine businesses.

ACCESS POINTS AND FACILITIES ALONG THE SHORE

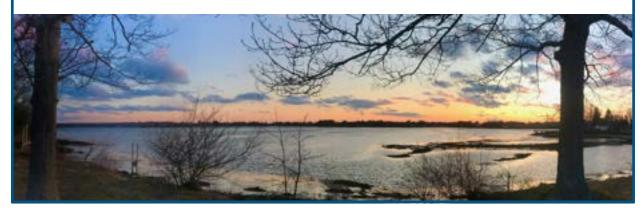
This plan does not recommend any new major access points to the Piscataqua River or Spinney Creek. However, discussion of a possible small Spinney Creek public access point is in <u>Recreation and Open Space</u>.

TABLE **11.X**

MARINE RESOURCES

SCENIC RESOURCES ALONG THE SHORELINE				
Scenic resource	Ownership	Protections		
All of River Road	Road is Town-owned; abutting properties are privately owned, except for William Murray Rowe Park	Shoreland zoning, one conservation easement on the south side of the road		
Route 103 From the causeway to Sturgeon Creek	Road is State-owned; abutting properties are mostly privately owned; Boat Basin is publicly owned	Shoreland zoning		
Spinney Creek Eliot and Kittery	Shoreline parcels are mostly privately owned; some small shoreland parcels are Town-owned	Shoreland zoning		
Shorey's Brook at the Salmon Falls River Border of Eliot and South Berwick	Great Works Regional Land Trust (Savage Preserve); some private residential parcels	Permanent conservation via land trust, shoreland zoning		

Expanding upon the scenic resources listed in the 2009 Plan, p. 130

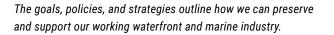


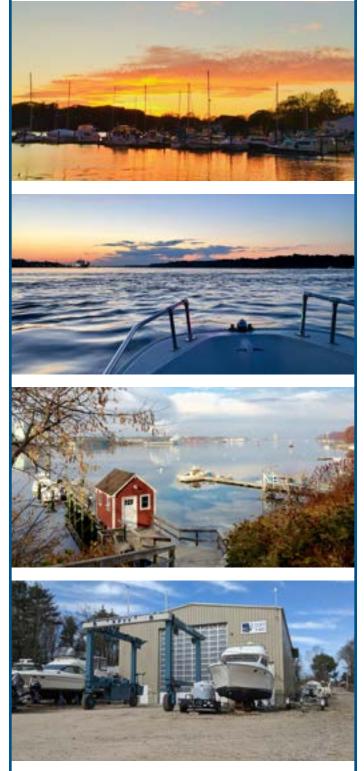
Preserving a Working Waterfront and Supporting Marine Businesses

While most of our shoreline is residential, preserving existing working waterfront uses and marine businesses is important to our local economy. Water-dependent businesses and economic activity have been part of our economy for centuries. Past and present, they include:

- > Boatbuilding
- > Boat maintenance
- > Marinas
- > Recreational boating
- > Boat storage and hauling
- > Commercial fishing and shellfishing
- > Aquaculture
- > Seafood warehousing and wholesaling
- > Production of canvas boat covers and accessories

Since Eliot, like the Seacoast region, has a very strong housing market, these working waterfront uses are susceptible to residential development pressures. Preserving these waterfront properties requires a sustained commitment from their owners to keep them as working waterfronts, such as the recent effort by Safe Harbor Marinas to upgrade the former Kittery Point Yacht Yard.





Safe Harbor Marinas (formerly Kittery Point Yacht Yard) boat maintenance facility. SHM was approved by the Eliot Planning Board in 2023 to upgrade the boatyard. Photo by Brookelyn Gingras, SMPDC

ELIOT MARINE RESOURCES GOALS, POLICIES & STRATEGIES

	Goal, Policy, or Strategy	Description	Responsibility or Partnership	Implementation Timing			
L	Goal 1	Healthy marine life and clean water quality in the Piscatad	qua River and its tributarie	!S			
	Policy 1	Protect, maintain and, where warranted, improve marine habitat and water quality					
;	Strategy 1	Encourage owners of marine businesses and industries to participate in clean marina/boatyard programs	Conservation Commission, Planning Office	Ongoing			
;	Strategy 2	Support implementation of local and regional harbor and bay management plans, including, but not necessarily limited to, recommendations of the Piscataqua Region Estuaries Partnership (PREP)	ling, but not necessarily limited to, recommendations of the Board, Conservation				
:	Strategy 3	Develop a watershed-based management plan for Spinney Creek to improve water quality and reduce nonpoint source pollution, and implement its recommendations	Conservation Commission, Planning Office, Public Works, consultant, Southern Maine Stormwater Working Group, Town of Kittery	Mid (plan)			
:	Strategy 4	In conjunction with Natural Resources Goal 1, Policy 2; the Open Space Plan; and the New Hampshire Coastal Watershed Conservation Plan, work with conservation partners to permanently conserve land that provides benefits and key functions for the coastal and marine environment (e.g., salt marshes and wetlands for storm surge buffering, flood storage, pollutant removal, drinking water protection, etc.)	Conservation Commission, Town Manager, Planning Office, Select Board, land trusts, nonprofits, governmental resource agencies, willing landowners	Ongoing			
	Cross- reference	Water Resources Goals 1 and 2 (Better water quality for surface waters and groundwater), including Goal 2, Policy 2 (Reduce the risk of pollution discharges via septic systems)					
	Goal 2	Healthy marine life and clean water quality in the Piscatad	qua River and its tributarie	es.			
	Policy 1	Protect, maintain, and foster water-dependent land uses and balance	them with other complementa	ry land uses			
:	Strategy 1	Provide information about the Working Waterfront Access Pilot Program and current use taxation program to owners of waterfront land used to provide access to or support the conduct of commercial fishing activities	Planning Office, Town Assessor	Ongoing			
5	Strategy 2	Support the ability for small-scale marine and water-dependent businesses, whose scale and character are reasonable within their context, to establish themselves and thrive in the community. Clarify zoning and land use regulations for water-dependent home businesses	Planning Office, Planning Board, Town Manager, Select Board	Ongoing			
	Policy 2	Protect, maintain, and enhance public access to the shore for both commercial and recreational uses					
	Strategy 1	Identify needs for additional recreational and commercial access (which includes parking, boat launches, docking space, fish piers, and swimming access), for example, Spinney Creek access from Main Street for small craft	Town Manager, Recreation Department, Planning Office, Conservation Commission, Select Board	Mid			
	Strategy 2	Provide sufficient funding for and staffing of the Harbormaster, and consider reinstituting the Harbor Commission	Town Manager, Finance Director, Select Board	Ongoing			
:	Strategy 3	Work with local property owners, land trusts, and others to protect major points of physical and visual access to coastal waters, especially along public ways and in public parks	Town Manager, Recreation Department, Planning Office, Public Works, Conservation Commission, Planning Board, Select Board	Ongoing			

ELIOT MARINE RESOURCES GOALS, POLICIES & STRATEGIES

	Goal, Policy, or Strategy	Description	Responsibility or Partnership	Implementation Timing
GOAL 3	Goal 3	A shoreline and marine environment that is resilient to cli	mate change	
Policy 3 Help Eliot's shoreline and the Piscataqua River become more re other likely climate change impacts			nt to sea level rise and	
	Strategy 1	Address the findings and implement the recommendations of the Climate Change Vulnerability and Resilience Assessment that relate to marine resources	Town Manager, Planning Office, Planning Board, Conservation Commission, Select Board, SMPDC	Depends on recommendation
	Strategy 2	Adopt a sea level rise (SLR) scenario to be used in development review, land use planning, and capital improvement projects	Conservation Commission, Planning Board, Planning Office, SMPDC	Short

MARINE RESOURCES ENDNOTES

¹ Wells Reserve at Laudholm. <u>wellsreserve.org/conservation/in-your-community/rivers-and-streams/piscataqua-river</u>

² Town of Eliot. Proposed Spinney Creek Tide Gate Schedule.

www.eliotmaine.org/DocumentCenter/View/1007/2024-Tide-Gate-Schedule---Spinney-Creek-PDF?bidId=

³ MaineDOT. Work Plan for Calendar Years 2024-2026. www.maine.gov/mdot/projects/workplan/

⁴ Piscataqua Region Estuaries Partnership (PREP) State of our Estuaries 2023. www.stateofourestuaries.org/wp-content/uploads/2023/05/SOOE-2023-Digital.pdf

- ⁵ PREP State of our Estuaries 2023
- ⁶ PREP State of our Estuaries 2023
- 7 PREP State of our Estuaries 2023

⁸ PREP State of our Estuaries 2023. The Figure 8.3 caption in the PREP report is abridged in the body text. It continues: "...and shown here as box and whisker plots. Boxes encompass the middle 50% of the data points. The horizontal line in each box is the median and the vertical whiskers encompass the remaining data. 'Outliers' are shown as individual points. Some years are omitted due to missing data. Blue line represents significant linear regression through annual median values. Data source: Great Bay National Estuarine Research Reserve and the Jackson Estuarine Laboratory, UNH"

- ⁹ PREP State of our Estuaries 2023
- ¹⁰ PREP State of our Estuaries 2023
- ¹¹ PREP State of our Estuaries 2023
- ¹² PREP State of our Estuaries 2023
- ¹³ PREP State of our Estuaries 2023
- ¹⁴ PREP State of our Estuaries 2023
- ¹⁵ PREP State of our Estuaries 2023
- ¹⁶ PREP State of our Estuaries 2023
- ¹⁷ PREP State of our Estuaries 2023. See pp. 58-61 for the data cited and quotes in this section.
- ¹⁸ PREP State of our Estuaries 2023. The figure caption notes the following data source: Michael Routhier, Ray Grizzle and Krystin Ward, UNH. 1996 data from Fred Short, UNH
- ¹⁹ Available at: <u>www.stateofourestuaries.org/2023-reports</u>
- ²⁰ 2020 Vessel and Licenses spreadsheet from DMR provided in the State Comprehensive Plan data package.
- ²¹ Reports available here: <u>www.maine.gov/dep/water/monitoring/305b/index.html</u>

²² MaineDEP. Integrated Water Quality Monitoring and Assessment Reports (2024 Draft Report). <u>www.maine.gov/dep/water/monitoring/305b/index.html</u>

²³ Maine DMR. Application for Change in Gear Authorization.

Spinney Creek, Eliot; Findings of Fact, Conclusions of Law, and Decision; June 14, 2022.

www.maine.gov/dmr/sites/maine.gov.dmr/files/inline-files/PISC%20SC_SpinneyCreekShellfish_DecisionHistory.pdf

²⁴ Reports available here: <u>www.maine.gov/dep/water/monitoring/305b/index.html</u>. A word search was done to look for "Spinney" in each report's appendix.

- ²⁵ 2020 Vessel and Licenses spreadsheet
- ²⁶ Maine DMR. 2023 Landings Information. <u>www.maine.gov/dmr/fisheries/commercial/landings-program/landings-data</u>
- ²⁷ Available at: <u>www.maine.gov/climateplan/the-plan</u>
- ²⁸ 2020 Vessel and Licenses spreadsheet
- ²⁹ Maine DMR. Where to Fish Along Maine's Coast. <u>www.maine.gov/dmr/fisheries/recreational/anglers-guide/where-to-fish</u>
- ³⁰ US Army Corps of Engineers. <u>www.nae.usace.army.mil/Missions/Civil-Works/Navigation/New-Hampshire/Portsmouth/</u>

CLIMATE CHANGE

We can take action to improve community resilience to climate change impacts and extreme weather and reduce greenhouse gas emissions (GHGs).

Climate Change Impacts in Maine

Climate change refers to long-term changes in global air and water temperature and weather patterns. Maine faces daunting short-term and long-term climate change risks, including temperature increases of up to 10°F by 2100, sea level rise by 3 to 5 ft. or more, increased intense precipitation events, threats to species of greatest conservation need, and many others.

IMPACTS TO PUBLIC HEALTH

The 2024 update of *Maine Won't Wait*, discussed further below, describes several public health threats that climate change is bringing to the state:

Maine is predicted to see an increase in heat illness with climate change. Data from emergency room visits in Maine show that heat illnesses are more likely to affect men and people who work outside or in hot environments. High temperatures also mean that ticks and mosquitoes can survive further north. As a result, incidence of Lyme disease is increasing in the state, along with new types of ticks such as those that can cause red meat allergy. Maine may also see more outbreaks of deadly viruses that mosquitoes carry, such as eastern equine encephalitis virus and Jamestown Canyon virus.

TABLE **12.X**

CLIMATE CHANGE

Climate trend/impact	Report finding
Historical statewide mean annual temperature	3.2°F increase since 1895
Additional warming predicted by climate models	2 to 4°F by 2050; 10°F by 2100
Historical statewide annual precipitation (rainfall and snowfall)	6-inch increase since 1895
Historical sea level rise along the Maine coast	Last century: 1.8 to 2 mm/yr. (about 0.6 to 0.7 ft.)
Last few decades: 3 to 4 mm/yr. (equivalent to about 1 ft. per century)	Referenced in 2009 Plan
Projected sea level rise along the Maine coast	Between 3 to 5 ft. by 2100 (intermediate scenario)
Historical frequency of extreme precipitation events	74% increase between 1948 and 2011
mpacts on Maine's species of greatest conservation need	1/3 of these species affected by climate-change-related threats
Harmful algal blooms in Maine's lakes and ponds	Projected to increase

Sample of findings from The Scientific Assessment of Climate Change and Its Effects in Maine, a report by the Scientific and Technical Committee, Maine Climate Council¹

Maine Won't Wait Climate Action Plan

In December 2020, the Maine Climate Council published *Maine Won't Wait: A Four-Year Plan for Climate Action.*² The plan set goals to reduce greenhouse gas (GHG) emissions to 45% below 1990 emissions levels by 2030 and 80% below 1990 levels by 2050. It notes that while GHG emissions have been declining in Maine since 2002, "significant progress must still be made to meet the state's 2030 and 2050 targets".

In November 2024, the Council released an update of the plan, noting that the "environment in which the Council produced this plan is different than four years ago, when Maine Won't Wait was first released". For example, Maine experienced three intense winter storms in December 2023 and January 2024 that caused likely well over \$100 million in damage to public infrastructure and private property. On the other hand, "historic state and federal investments in climate priorities, especially through the Bipartisan Infrastructure Law (BIL) and Inflation Reduction Act (IRA), have collectively delivered massive climate and clean energy opportunities for Maine communities, businesses, and consumers".³

MAINE WON'T WAIT PLAN GOALS

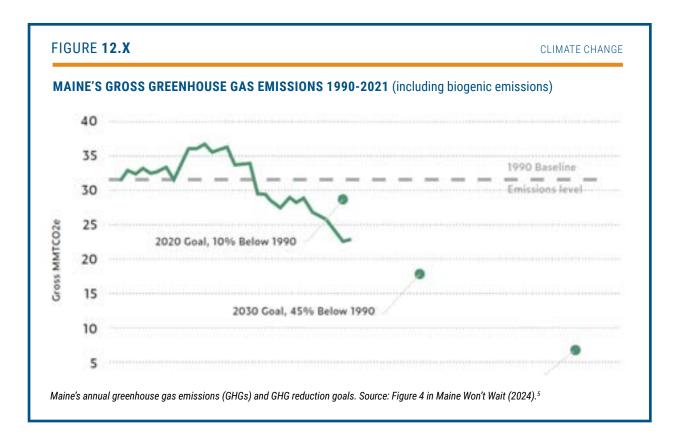
2020 Goals

- > Reduce GHG emissions
- > Avoid the costs of inaction
- > Foster economic opportunity
- > Ensure climate action benefits all Maine people

2024 Goals

- > Reduce Maine's GHG emissions
- > Strengthen resilience to climate impacts
- > Create jobs and economic prosperity
- > Bring climate action to all Maine people





PROGRESS ON GHG EMISSIONS

The Climate Council closely tracks progress on implementing Maine Won't Wait's recommendations. Recent progress reports note that:

> 2019 GHG emissions in Maine were 25% lower than 1990 levels, surpassing the state's medium-term goal of 10%

> This was due to a large drop (91% since 2002) in GHG emissions from the electric power sector, plus a small drop (8% lower in 2019 compared with 1990) in GHG emissions from the transportation sector

> GHG intensity has decreased, meaning that the same amount of energy can now be produced with less GHG emissions

> The state's economy has grown, meaning that it took 53% less GHG emissions to produce \$1 million in real state growth domestic product (GDP) in 2019 relative to 1990⁴

Signs of decreasing GHG intensity, increasing carbon sequestration through land conservation, and a state economy becoming less dependent on fossil fuels include:

 > An almost tripling of the number of electric vehicles (EVs) on the road between 2020 and 2023, from 4,268 to 12,369

> A five-year increase (2018-2023) in public EV charging stations from 151 to 459

> The installation of over 115,000 heat pumps in homes and businesses since 2019

> The weatherization of over 12,000 homes since 2019

> The percentage of Maine land that is conserved reaching 22%

> A tenfold increase over five years (2018-2023) of installed solar power capacity from about 80 MW to about 800 MW

 > About 175 communities having joined the Community Resilience Partnership (CRP) as of 2024, including Eliot⁶

FIGURE 12.X

CLIMATE CHANGE

GHG Emissions Sources in Maine

Text adapted from SMPDC's Regional Climate Change Impacts Report.⁷ Graphic excerpted from Maine Won't Wait (2024)

In Maine, most GHG emissions come from transportation, followed by residential, commercial, and industrial sources.

Transportation

 Emissions from transportation come primarily from the burning of fossil fuels for cars, trucks, ships, trains, and planes.

Electricity Production

> Emissions from electricity production are produced when fossil fuels, primarily coal and natural gas, are burned in electricity generation plants.

Industry

> Emissions from the industry sector are primarily from energy production, but also include emissions from some specific chemical reactions needed for production.

Commercial & Residential

 Emissions from homes and businesses are primarily from burning fossil fuels for heating buildings, the use of certain GHG emitting products and waste management.



Maine GHGs from fossil fuel combustion by sector. Source: Maine Won't Wait (2024 update).⁸

Climate Change Impacts in Eliot

The Town has begun to evaluate potential local climate change impacts. In 2022, as part of the Community Resilience Partnership (CRP) enrollment process⁹, a group of local stakeholders identified the following impact areas:

- > coastal flooding
- intense rainstorms
- riverine flooding
- > drought
- > high heat emergencies

They discussed how these impact areas relate to specific vulnerabilities. For example:

- > Rising groundwater levels as sea levels rise could affect drinking water wells, septic systems, and other underground infrastructure near the shore
- > The Town lacks a designated heating or cooling location for extreme weather situations
- See discussion below regarding emergency shelters identified in the 2022 York County Hazard Mitigation Plan
- > Drought has already affected local farms

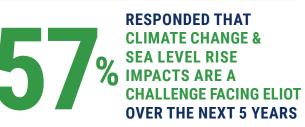
Eliot's climate change risk profile factors are summarized in the following paragraphs.

SEA LEVEL RISE

As noted in SMPDC's Regional Climate Change Impacts Report:

Warming temperatures cause rapid melting of glaciers as well as the expansion of water molecules in the oceans. Both of these effects are increasing the total volume of water in the earth's oceans. This causes

COMMUNITY SURVEY FEEDBACK



(Compared to about 25% who disagreed)



Current shoreline erosion along the Piscataqua River at the Eliot Boat Basin.

the average sea level to increase over time, with water encroaching on beaches and coastal communities.¹⁰

Maine Geological Survey's Sea Level Rise (SLR)/Storm Surge scenario modeling shows how much land is inundated at highest astronomical tide (HAT) under various SLR and storm surge scenarios. The map shows significant new inundated lands along the shorelines of the Piscataqua and York Rivers, Sturgeon Creek, and Shapleigh's Old Mill Pond as the scenarios increase in severity, especially starting with 3.9 ft. of SLR or greater, which is within the range of what is predicted for 2100.¹¹ Rising sea levels also lead to rising groundwater levels.¹²

SHORELINE EROSION

As noted in SMPDC's Regional Climate Change Impacts Report, "As sea level rises, coastal beaches, dunes, salt marshes, and bluffs are likely to experience increased erosion, landward movement and land loss" ¹³

Shoreline erosion along the Piscataqua River is already an issue, and it is likely to be magnified by sea level rise. Property owners along the river may face an increasing pressure to consider remedial measures to protect their shoreline from future erosion.

TIDAL MARSH MIGRATION

Sea level rise will cause the inland migration of coastal habitats, such as tidal marshes. "In areas where this inland migration is blocked by development," notes MDIFW, "these habitats will be lost."¹⁴ If sea levels rise by 1 m (3.3 ft.), the York River is projected to have 166 acres of future marsh in currently-undeveloped adjacent upland areas. This would be a substantial expansion of the existing marsh acreage along the York River (~400 acres). Another 51 acres would be blocked by existing development. About a third (237 of 702 acres) of the 250 ft. upland buffer around this future marsh is already developed.

A map of marsh migration in the 1 m SLR scenario, developed by Maine Coastal Heritage Trust (MCHT), is in the <u>Appendix</u>.¹⁵ Some of this future marsh area is along the stretch of the river in Eliot, northwest of Frost Hill Rd., suggesting the importance of conserving this land to promote coastal habitat resilience.

OCEAN ACIDIFICATION

As noted in SMPDC's Regional Climate Change Impacts Report:

As the concentration of carbon dioxide increases in the atmosphere, carbon dioxide is absorbed into the ocean. This changes the chemistry of ocean waters, increasing the overall acidity of the water. Acidification is also exacerbated by river discharge which carries excess nutrients from stormwater runoff. Runoff and warming ocean water can trigger algal blooms, which can lead to closures of shellfishing beds and impact human health. Increased ocean acidity limits marine life that produce calcium carbonate to build shells, such as oysters, scallops, clams, mussels, and sea urchins; all of which are significant economic species of cultural significance.¹⁶

COLORED DISSOLVED ORGANIC MATTER (CDOM)

Climate change is influencing the increase in colored dissolved organic matter (CDOM) in the Gulf of Maine. Elevated levels of CDOM, which consists of decaying plant matter, threaten the health of Piscataqua River estuarine ecosystems. CDOM blocks sunlight penetration into the water, which hinders the growth of eelgrass, phytoplankton, and seaweed.¹⁷

For further discussion on marine water quality threats, see Marine Resources.

EXTREME WEATHER AND AGRICULTURE

Farms in Eliot will see new challenges from a changing climate. While a longer frost-free growing season and increasing winter low temperatures might be beneficial by themselves, more frequent or more intense heat waves, combined with more frequent intense downpours, could lead to damaged crops, soil erosion, reduced livestock productivity, and other negative impacts.¹⁸ Drought, as noted above, is already a concern.

For further discussion on farms and climate change, see Agriculture and Forest Resources.

INVASIVE SPECIES

As noted in SMPDC's Regional Climate Change Impacts Report:

Invasive species, such as the Emerald ash borer, Asiatic bittersweet, and European green crab, are those that have a competitive advantage in our environment because they are not native to the area. In many cases, they are adapted for higher temperatures or wetter environments, making them better at surviving in a changing Maine climate. Invasive species can overgrow and outpace native Maine plants and wildlife, making it extremely difficult for native species to survive.¹⁹



Invasive European green crab found along the shores of Eliot.

SOCIAL VULNERABILITY

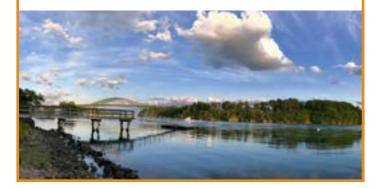
While climate change will likely impact every facet of the community in some way, those impacts will not be felt evenly across the community and will not be uniformly distributed among population groups. Individuals who already have increased social vulnerability or have been traditionally marginalized and underrepresented will be disproportionately affected by climate hazards, as they generally have lower capacity to prepare for, respond to, and recover from hazard events and disruptions. Those populations include children and older adults, households with lower or moderate incomes, individuals with pre-existing health conditions, people of color, and those living alone.

Eliot has a relatively high percentage of age 65+ residents (about 25% of the population). 9% of us live alone, and over 4% of us are age 65+ living alone.²⁰ These characteristics contribute to elevated social vulnerability as they tend to be associated with social isolation and decreased ability to prepare for and respond to storms, flooding, and other natural disasters. As a result, the community likely has an elevated level of vulnerability to natural hazards and climate impacts.

CLIMATE MIGRATION

Climate migration involves people moving from a riskier location to a safer location based on actual or projected climate change impacts. Because of its relatively cooler temperature, abundance of fresh water, and other characteristics, for example, Maine may see more people looking to move from places experiencing more intense summer heat or drought.

"Maine should anticipate the potential for growth, development, and economic opportunity as people migrate to Maine seeking refuge from severe climate impacts affecting other parts of the country." - Maine Won't Wait (initial 2020 version)²¹



Eliot could see intrastate climate migration where people living in Maine's coastal areas that are particularly vulnerable to sea level rise and storm surges may look to move inland.

Greenhouse gas emissions and mitigation ELIOT ENERGY COMMISSION

Formed in 2006, the Eliot Energy Commission, which no longer exists, was a group of citizens that helped track the Town of Eliot's energy use and recommend strategies for reduced energy use and renewable energy. The Commission created a GHG inventory of municipal buildings and led the effort to get solar panels installed at old town landfill (more details below).

TRANSPORTATION

Transportation is a big contributor to GHGs in York County. As noted in the report, Estimating On-road transportation emissions in York County, Maine, by Karina Graeter of SMPDC²²:

- "In 2017-2019, annual VMT [vehicle-miles traveled] for all of York County was approximately 2 billion miles"
- "Light duty vehicles (including passenger cars, light duty trucks, and light duty commercial vehicles) are responsible for 70% of the ORT [on-road transportation] emissions."
- In 2018, Eliot was responsible for an estimated 21,277 metric tons of carbon dioxide equivalent (MT CO2e) from on-road transportation sources, over 2% of the total for all of York County.

Walking and bicycling are zero-emissions modes of transportation. As discussed in Transportation, the Town has begun to invest in creating an active transportation (walking and bicycling) network. By building infrastructure that allows people to make an easier choice to walk or bike for trips where they would otherwise drive, Eliot can do its part in reducing GHGs from transportation.

Eliot can also help by participating in regional efforts to expand public transit options, carpooling and vanpooling, and other transportation demand management (TDM) strategies that reduce singleoccupancy car trips. For example, a Planning-Boardapproved MaineDOT public park-and-ride facility at Eliot Commons – at the time of this writing, not yet installed – should help encourage transit, carpooling, and vanpooling. This will help address the statewide goal in Maine Won't Wait (2024 update) of reducing light-duty VMT by 20% by 2030 and another 20% by 2050.²³

ELECTRIC POWER

The Town has taken steps to reduce our carbon footprint by partnering in an installation of two solar photovoltaic arrays on Town property.

PUBLIC WORKS GARAGE ARRAY

The Public Works Garage array was commissioned on June 12, 2014. It comprises 165 Canadian Solar 250-watt panel and 4 inverters. In its first five years, the array generated approximately 45,000 kilowatt-hours (kWh) per year of electricity. Electricity production will decrease slightly over the years as the panels age. The Town purchased the array in December of 2018 for \$43,000. Now all the energy produced goes directly to offsetting electrical usage by Town buildings.

LANDFILL SOLAR ARRAY

The solar array on the Town's landfill was commissioned on December 20, 2018. It comprises 384 Hanwha, Q Cell 345 Q Plus L-G4.2 panels rated at 345 watts and 2 inverters. This array is estimated to generate 171,000 kWh annually which will decrease as the panels age to approximately 151,000 kWh in the year 2044. The array was installed under a Plan Purchase Agreement where the contractor installs and owns the array until the Town purchases it. The earliest that can happen is after five years. The price will be determined based on Fair Market Value which is anticipated to be around \$196,000.

It is anticipated that the two arrays will generate about 95% of the electricity used by Town buildings, sewer pumps, parks, and stop lights.

ENERGY EFFICIENCY

The Town has taken several actions to increase municipal energy efficiency.

LED STREET LIGHTS

In 2018, the town voted for the conversion to LED street lights. LED lights:

> Are highly energy efficient – using 15% of the energy of an incandescent bulb

- > Have reduced maintenance costs because they last up to 100,000 hours
- > Produce directional light, rather than a diffused glow

> Do not produce light pollution by shining light into the sky

An additional bonus is that the LED street lamps were purchased by the Town, so the Town is no longer leasing CMP fixtures. It is anticipated that \$218,000 will be saved over 20 years by converting the street lights to LED.

HVAC AT TOWN HALL

The over 30-year-old HVAC equipment that was running ineffectively was replaced with ductless heat pumps which:

- > Improved air distribution problems
- > Uses electricity to run which will be free and green due to the Landfill Solar Array
- > Provides heating and cooling in one unit
- > Is a system that is easily modified or expanded as needed

The equipment will be reinstalled in the renovated Town Hall.

COMMUNITY SURVEY FEEDBACK



RESPONDED THAT IT WAS IMPORTANT TO INVEST TAX DOLLARS IN SUSTAINABILITY & RESILIENCE PROJECTS

(Compared to about 16% who felt it was of little to no importance)

TOWN OF ELIOT SOLAR ARRAYS

It is anticipated that the two Solar Arrays in Eliot will generate about



Of the electricity used by Town buildings, sewer pumps, parks & stop lights.



Source: Seacoast online

What We Can Do in the Future

Eliot should continue to look for ways to reduce GHGs in the future, including shorter-term actions that can contribute to the statewide GHG reduction target of 20% by 2030. Some recommended or possible actions include:

Ordinance amendments that encourage electric vehicle parking spaces and charging stations, compact car parking, motorcycle or moped parking, and bicycle parking

See Transportation Goal 3, Policy 3, Strategy 3 and Goal 4, Policy 1, Strategy 2

Seek partnership opportunities and grant funding

for the installation of EV or e-bike charging stations at Town Hall or other public facilities, where such stations are cost-neutral or net revenue generators for the Town Budget

- > See Transportation Goal 4, Policy 1, Strategy 3
- This could include technical assistance from SMPDC or another entity to assess where charging stations may be needed

The GHG benefits of **allowing more housing in growth areas, which are location-efficient,** allow people to live closer to their job, and give people more options for walking, bicycling, or taking transit to get to destinations

> See Land Use Goals, Polices, and Strategies

The extension of the Town's walking and bicycling network within the growth areas, and the extension of the Eastern Trail and East Coast Greenway through town as an off-road path, making it easier to choose to walk or bike comfortably instead of driving and encouraging green economic development

> See Transportation Goal 3

Encouraging and supporting local farms, reducing "food miles" and maintaining residents' access to healthy, sustainable food

 See Agriculture and Forest Resources Goals, Policies, and Strategies

Walker Keay Farm is an organic & regenerative family farm in Eliot

Projects that could be implemented by the school district for local schools, the Town for municipal buildings, or a partnership of the two, to improve energy efficiency or install renewable energy systems

 This was one of the top priority actions from the October 2022 Climate Change Community Workshop (see below)

Encouraging energy efficiency in private buildings²⁴

- Consider adopting a more stringent energy conservation code, or stretch code. As of this writing, the Town relies on the Maine Uniform Building and Energy Code (MUBEC), which includes the 2015 International Energy Conservation Code (IECC), and the stretch code is the next edition of the IECC (2021).²⁵ Municipalities may opt to use the IECC 2021
- > Consider ways the Town can provide incentives for energy efficiency upgrades in homes and businesses, dovetailing with Efficiency Maine's rebates and incentives

Permanent land conservation, which helps to sequester carbon

- See Natural Resources Goals, Policies, and Strategies
- > The Open Space Plan will also help to guide this strategy

Re-formation of the Eliot Energy Commission or a similar advisory group



CLIMATE CHANGE WORKSHOP

Top Priority Actions for Eliot

- Supporting alternative transportation modes, including bike and walking infrastructure
- Improving energy efficiency and weatherization of municipal and school buildings
- Protecting open space in the floodplain to increase flood buffers and community resilience



Street flooding from winter storm on January 13, 2024.

Becoming More Resilient to Climate Change Impacts

We are taking steps to plan for and take action on climate change in order to increase the resilience of the community. As discussed above, in 2023, Eliot enrolled in the CRP, gaining eligibility for funding to implement the priority climate resilience efforts. The enrollment effort was a collaboration between SMPDC, the Conservation Commission, and the Town's Planning Office. SMPDC's assistance was funded by a CRP Service Provider grant from GOPIF. The enrollment included:

- A Work Session with local stakeholders on August
 3, 2022, to complete a community resilience selfassessment
- > A Climate Change Community Workshop on Tuesday, October 25, 2022, at Green Acre with an estimated 18 attendees along with staff from the Town and SMPDC. The attendees reviewed, discussed, and voted to prioritize climate change community resilience actions from the CRP Action List provided by GOPIF. Attendees broke into four small groups to review and discuss the actions, which were listed on four flipchart sheets. At the end of the session, attendees placed stickers next to their top priority actions
- A Municipal Resolution approved on December 15, 2022, by the Eliot Select Board, committing the Town of Eliot to joining the CRP
- Formal notification of enrollment by GOPIF on January 10, 2023

CLIMATE CHANGE VULNERABILITY AND RESILIENCE ASSESSMENT

Funded by a CRP grant, we are completing a Climate Change Vulnerability and Resilience Assessment to better understand how climate change could impact the community and to identify actions to make Eliot more resilient. The assessment is investigating climate hazards facing the town, such as sea level rise and extreme heat; evaluating the impacts of those hazards; and evaluating the community's vulnerability to those impacts. The information will be used to identify actions the community can take to improve resilience to climate impacts.

The assessment includes:

- > Guidance by a Working Group of advisory committee members, Town staff, and citizens
- A science-based assessment of climate impacts and vulnerabilities
- Community input gathered from a community survey, stakeholder interviews, and a public workshop
- A social vulnerability assessment and other supporting research completed by a UNH Sustainability Fellow in Summer 2024

The assessment is expected to be completed in late 2025.

TABLE 12.X CLIN			IMATE CHANG	
YORK COUNTY HAZARD MITIGATION PLAN				
Shelter Type	Number	Total storm capacity (persons)	Capacity per year-round population (211,972)	
Emergency shelters	89	25,970	1 spot for every 8 residents	
Emergency shelters with backup generators	31	4,293	1 spot for every 49 residents	

Source: York County Hazard Mitigation Plan (2022). Emergency shelters and shelter capacity in York County.

Emergency Centers for Extreme Weather

The York County Hazard Mitigation Plan (2022)²⁶ notes the lack of space in county emergency shelters, including those that have backup generators.

EMERGENCY SHELTERS IN ELIOT

The county lists both Eliot Elementary and Marshwood Middle School as emergency shelters, but notes that neither have backup generators. The newly renovated Town Hall could be explored as a possible designated emergency shelter or designated warming/cooling center during extreme temperatures.

Town Hall has a gas-powered generator, which will soon reach its useful life. Replacing it will be an opportunity to upgrade to a new system that could use a more sustainable energy source.

ELIOT is JOINING the 'COMMUNITY RESILIENCE

PARTNERSHIP' to SUPPORT LOCAL CLIMATE ACTION

FIGURE 12.X

THE TOWN OF ELIOT IS TAKING ACTION ON CLIMATE CHANGE



Climate change is the long-term shifting of temperatures and weather patterns. Greenhouse gas (GHG) emissions generated by the burning of foosil fuels are a central cause of climate change. In Maine, most GHG emissions come from transportation, followed by residential, commercial, and industrial sources. While climate change is a global issue, there are significant local impacts and solutions.

RISING TEMPERATURES

- Increased ensuel overage temperatures & more summer days over 50° - Maint's annual temperature has increased 3.2°F chose 3805 and same heat days are expected to be 2 - 4 times many frequent by 2050.
- Shifting sections Warning has shortened Maine's winters and lengthered the summers by two weeks on average over the last century, a trend that is expected to continue as temperatures increase.

FOOD SYSTEMS & AGRICULTURE

Warwing temperatures are tringing longer growing seasons, but also potential damages from heat stress and shifting weather patterns to workers, crops, and livertock.

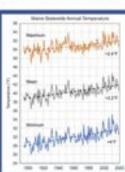
ENVIRONMENTAL IMPACTS

- Increasing sea level By 2050, Maine will likely experiment between 1.1 feet and 1.8 feet of sea level rise, and between 3.0 and 4.6 feet of sea level rise by 2100, with higher amounts possible. Shorelines will likely experiment increased ension.
- More intense and frequent storms <u>Maine's ensul prophetory</u> (sits and secondal) has increased over than 5 index alone 1855, and extreme prophetolation events (1° to 4° or mars) are becoming more frequent.
- Changes to wildlife and natural areas Wildlife and habitats, including willards, are under ateas from climate change. Estreme precipitation and temperatures are already contributing to stress on native tree stocks.

PUBLIC HEALTH

- Greater risk to socially uninvestile populations knowing temperatures and more high-heat days are putting people at risk, especially these who are etietry, have health know, or have limited access to hume air conditioning.
- Increasing injuries and illness warner and shorter winters have atready contributed to an increase in ticklearne illnesses like tyme disease. Extreme weather may tause injuries and deaths, outloveds of waterborne diseases, and food-borne illnesses following power autages, as well as mental health stress.

Vulnerability and Resilience Assessment Fact Sheet



Sea level rise wit

cause regular flooding of tidal

areas along tidal waterbodies.

Including Spinney Creek and

the Piscatagua River, and may

couse saltwater contamination





CLIMATE CHANGE



Storm rolling in at Eliot boat basin.

CLIMATE CHANGE ENDNOTES

¹ Available via: <u>www.maine.gov/climateplan</u>

- ² See link above
- ³The updated plan is also available at the same link above
- ⁴Cites both 2022 and 2023 progress reports, available at: www.maine.gov/climateplan/the-plan
- ⁵ Available at link above
- ⁶ Cites both 2022 and 2023 progress reports, available at link above
- ⁷Report provided by SMPDC in November 2023
- ⁸ Available at link above
- ⁹ More information at: <u>www.eliotmaine.org/209/Climate-Change-Resilience</u>
- ¹⁰ Report provided by SMPDC in November 2023
- ¹¹ Available at: <u>www.maine.gov/dacf/mgs/hazards/slr_ss/index.shtml</u>

¹² Wake, C., Knott, J., Lippmann, T., Stampone, M., Ballestero, T., Bjerklie, D., Burakowski, E., Glidden, S., Hosseini-Shakib, I., Jacobs, J. (2019). New Hampshire Coastal Flood Risk Summary – Part I: Science. Prepared for the New Hampshire Coastal Flood Risk Science and Technical Advisory Panel. Report published by the University of New Hampshire, Durham, NH. <u>scholars.unh.edu/cgi/viewcontent.cgi?article=1209&context=ersc</u>

- ¹³ Report provided by SMPDC in November 2023
- ¹⁴ York River Headwaters Focus Area Fact Sheet
- ¹⁵ Also available here: <u>yorkrivermaine.org/wp-content/uploads/2017/02/MarshMigYorkRiver.pdf</u>
- ¹⁶ Report provided by SMPDC in November 2023
- ¹⁷ PREP State of our Esturaries Report: <u>https://www.stateofourestuaries.org/2018-reports</u>
- ¹⁸ <u>umaine.edu/climate-ag/farm-response-changing-weather/</u>
- ¹⁹ Report provided by SMPDC in November 2023

²⁰ Census data cited in the UNH Sustainability Fellow's 2024 research for the Climate Change Vulnerability and Resilience Assessment

- ²¹ Available at: <u>www.maine.gov/climateplan/the-plan</u>
- ²² Available at: <u>smpdc.org/sustainable_transportation</u>
- ²³ See link above. The table with the reduction targets is on p. 172

²⁴ These recommendations are based on ideas from the Aging In Place Committee's Draft Comprehensive Plan Update review discussion on January 15, 2025.

²⁵ See Efficiency Maine's Building Energy Codes page for more information: <u>www.efficiencymaine.com/building-energy-codes/</u>

²⁶ <u>www.yorkcountymaine.gov/plans</u>

HISTORIC & ARCHAEOLOGICAL RESOURCES

In Eliot, we care deeply about our town's history and strive to remain closely connected to our past. This is demonstrated by the abundance of historical resources active in town.

The Importance We Place on Our Town's History

Founded in 1897 by Dr. John L.M. Willis, the Eliot Historical Society (EHS) has a mission to "to preserve the town's long and vibrant history through the collection of artifacts and documents. The society's monthly meetings are open to the public and offer interesting and educational programs pertaining to Eliot's history."¹ EHS holds meetings at the First Congregational Church or Grange Hall, but does not have a permanent location.

> EHS periodically showcases historical information displays around town, such as at the elementary and middle schools and Town Hall.

> EHS publishes a **monthly newsletter**, distributed to members and interested residents, and published on their website, featuring articles on Eliot history and research.

> EHS maintains and operates the restored District
 #8 One-room Schoolhouse and Museum, entrusted to them by the town.

> EHS has an Eliot Cemeteries website and map showing the locations of Eliot's 172 cemeteries and enabling lookup of gravesites.² The cemetery locations are also viewable as a layer in the Town's online public GIS system. In 2022, the layer was updated and linked to the EHS website. EHS coordinates with the Maine Old Cemetery Association (MOCA) and recently hosted a statewide MOCA quarterly meeting. The Society has an "Adopt A Cemetery" program to help care for family cemeteries, enlisting landowners, family members, and interested residents, and working with the town, to care for them, as well as providing instruction, assistance, and resources to do so.

Notes on Eliot Maine History is a blog maintained by local resident Eric Christian.³

ELIOT HISTORIC & ARCHAEOLOGICAL RESOURCES GOAL



Protection of the significant historic and archaeological resources in the community to the greatest extent practicable

See the end of this section for the full table of goals, policies, and strategies.

- > **Town Hall** has an archive of historical Town records and documents.
- > The **William Fogg Library** has a section with local, regional, and Maine history books and reports.
- > Eliot formed Committees in 1910, 1960, 1985 and 2010 to celebrate the 100th, 150th, 175th and 200th anniversaries (respectively) of the **founding** of the town.

> Bronze historical markers have been placed in the town by individuals, committees, and the EHS at many of its historic sites and buildings (1910-present). The most recent include Sandy Hill Farm (2002), Town Pound (2004), Site of the 2nd Parish Meeting House (2008), and Melvin Dixon Blacksmith Shop (2021).

> Eliot has several historic sites and buildings, some of which are discussed below, including the District #8 One-room Schoolhouse and Museum and three listings on the National Register of Historic Places.

History of Eliot: An Overview

PEOPLE OF THE DAWNLAND: PRESENT-DAY ELIOT BEFORE EUROPEAN CONTACT

There is evidence that people have been living in present-day Eliot for at least 12,000 years. For at least that long, Abenaki, Pennacook, and Wabanaki peoples have been stewarding the land they call N'dakinna. In what is now Eliot, they raised crops (mainly corn, beans, and squash) and fished in the Sturgeon Creek area. There is archaeological evidence of land use along the upper Accominticus (York) River as well. Various Pennacook communities moved seasonally throughout the region between agricultural fields, hunting grounds, upstream falls teeming with fish, and coastal fisheries. The system of governance was and is democratic: locally chosen Sagamores and regional Sachems represent the people.

Throughout the 1500s and early 1600s, Pennacook people of the area traded with European cod fishermen in the vicinity of what is now Old Road. They traveled well-worn trails along the Cocheco, Newichawannock (Salmon Falls), and Piscatagua Rivers, connecting Indigenous communities throughout New England. Many regional Indigenous peoples died from European diseases in "The Great Plaque" (1616-1619), leaving some cleared fields and settlements fallow and open along the Piscataqua and upper York Rivers. Other fields were temporarily fallow, reflecting seasonal use or crop rotation practices. English colonists began to settle in these areas around 1633. As European land use practices and mills reduced Pennacook farming, hunting, and fishing grounds, some adopted more European lifestyles. Others, hoping to maintain traditional lifeways, joined communities further from English settlement. In the late 17th and early 18th century, colonial land use goals and regional conflicts between the English, French, and various First Nations resulted in a series of devastating wars, which further reduced the regional Indigenous population. During these wars, English colonists, including those who lived in what is now Eliot, enslaved, killed, or forcibly relocated hundreds of Indigenous peoples along the Cocheco, Newichawannock (Salmon Falls), and Piscataqua Rivers. Pennacook who remained had their rights severely reduced through colonial policy and structures.

Pennacook stewardship, culture, and practices continue to influence those who live in N'dakinna today.

Publications Produced For or By EHS

- > The Schools of Eliot (1996)
- Images of America: Eliot, a photo-based history book (M.A Elliott, 2005)



 The Life of Moses Gerrish Farmer
 (Adams/Frost, 1993; reprinted Boscowen Historical Society, 1995; EHS 2003 & 2010)

> Old Eliot, Vol 1-9 (1897-1909)
 (Willis; reprinted 1985)

Twice Told Tales of Eliot(EHS, 1966; reprint EHS 2010)

> Report on "Old Libbey Lane" for the Eliot Planning Board (EHS, 2015)

> Brickyards in Eliot (pub. 1995) and Pictorial Tour of Historic Markers, Plaques, and Landmarks in Eliot (n.d) written by EHS member Edward Vetter, edited by Esther Morrow

A View of Eliot's Past
 by EHS member Edward Vetter (1988)

History of the Eliot Centennial,
 1910, (Cole/Willis, 1912; reprint 2008)

> Tour of Historical Landmarks in Eliot, 3CD/ Cassette w/booklet and map (Adams, Leavitt & Leavitt for Eliot Bicentennial Committee, 2010)

 History of York County; includes narrative of Eliot's history (R.S. Bartlett, 1938; reprint EHS 2004)

 Brochures: Historical Buildings, Historic Markers, Eliot Schools, History Walk and Talk, Main Street/ Farmer Road Tour (Adams for Eliot's Maine Bicentennial Committee, 2021)

> 50th Anniversary Celebration of the Town of Eliot, Maine (Sesqui-Centennial Committee, 1960)

> **Views from Rosemary Hill** is a historical novel by Helen Goransson, set in Eliot and centered on the family of Ralph S. Bartlett, published in 2010.

 Captain Raitt's Cottage by Lee Downer (2008), documents the history of his home at 589
 Goodwin Road, built 1773. There appear to be seven Indian mounds on the Clark Farm (Sturgeon Creek area) on the northeast side of the then-B&M Railroad Depot. See below for further discussion.

ELIOT AFTER EUROPEAN SETTLEMENT

Based on the most recent research, the earliest European settlement occurred between 1633-1640, with the first settlers being those of Nicholas Frost (1634) and Alexander Shapleigh (1636). First settlement began along the river, with forests inland providing valuable timber. Shortly thereafter, those who had been granted large swaths of land gradually moved inland. Historically a primarily agricultural community, large farms were located throughout the town in the 17th through 19th centuries, with the largest percentage in the northern and western part.

The Piscataqua River and waterways provided a means of transportation, and saw and grist mills were established, initially, at the mouths of the creeks, followed by those inland on the York River. Shipbuilding was important to our economy through the middle of the 19th century – and brickyards in the late 19th century, with more than a dozen located along the Piscataqua River. The last brickyard (Morin) closed in 1965.

As our population grew, during the early 1800s, the area along the river in the southern part of the town (Eliot Neck) became densely settled.

HISTORIC SETTLEMENT PATTERNS

The original grants of land extended inland from the Piscataqua River, in long narrow strips. A remnant of those is present in the Adlington Road area where the old Wannerton grant lands can be seen and an old way (Libbey Lane) was established c. 1669.

Eliot Neck is the most densely settled area with houses orientated toward the water.

The second half of the 20th century saw a period of rapid development with new homes being built among older ones, specifically those on Ambush Rock Road; Rollingwood Road; Ridgewood Road; Great Hill Way off Frost Hill; Heron Cove Road, off Worster Road; Stacy Lane; Jennie Lane; the developments at Riverview and that off River Road (Bayberry Drive, Laurel Lane, Heather Road, N. Crescent Drive).

PREHISTORIC ARCHAEOLOGICAL SITES

Maine Historic Preservation Commission (MHPC) has identified the areas bordering our waters, both shoreline and inland, as potential sites that are sensitive to prehistoric archaeology (Figure _).

- > York River and York Pond area
- > The Sturgeon Creek and Marsh area
- > The area near Shorey's Brook from the Piscataqua River to Great Hill, along present-day Route 101
- > The shore of the Piscataqua River

EXAMPLES OF ARCHAEOLOGICAL SURVEYS IN ELIOT

Artifacts believed to be 12,000 years old were found by archaeologists conducting an excavation in advance of the construction of the Portland Natural Gas Transmission System pipeline in 1997. It was reported that the artifacts were going to be turned over to MHPC.⁴

In 2017, as part of the York River Wild and Scenic River study, the Northeast Archaeology Research Center (NEARC) conducted an archaeological study of the upper York River Watershed, including a phase 1 archaeological survey with test pit excavation.⁵ The study located five precontact sites in Eliot, finding lithic debitage (i.e. flakes from stone tool making), simple tools, and a projectile point "of the Late Archaic tradition, [dating] to approximately 5,000-4,500 B.P.". The study concluded that the "York River possesses significant potential for the identification of pre-contact cultural resources," continuing:

In addition, the identification and designation of these sites will aid in the management of these cultural resources, and will allow them to be more easily incorporated into an understanding of the pre-contact Native American and post-contact historic Euroamerican archaeological resources of Maine and the wider region.

Evidence of winter encampments were found in the Sturgeon Creek area during the late 1800s. (The area includes Town Map/Lot Numbers 72-4; 72-5; 72-6 and possibly other lands in the area.) Indian mounds were reported found on the Clark Farm, in the field, on the northeast side of the then-B&M Railroad Depot. Twentyfour-foot hearth, ashes, arrowheads, bowls and other relics, and a deposit of red mineral paint were found in one. Six other mounds in the area also held artifacts.⁶ Winter encampments, at Sturgeon Creek, have also been mentioned in other writings in Old Eliot and in the attack on settlers of Sturgeon Creek in letters from Maj. Charles Frost, during the Indian Wars.

FIGURE 13.X

HISTORIC & ARCHAEOLOGICAL RESOURCES

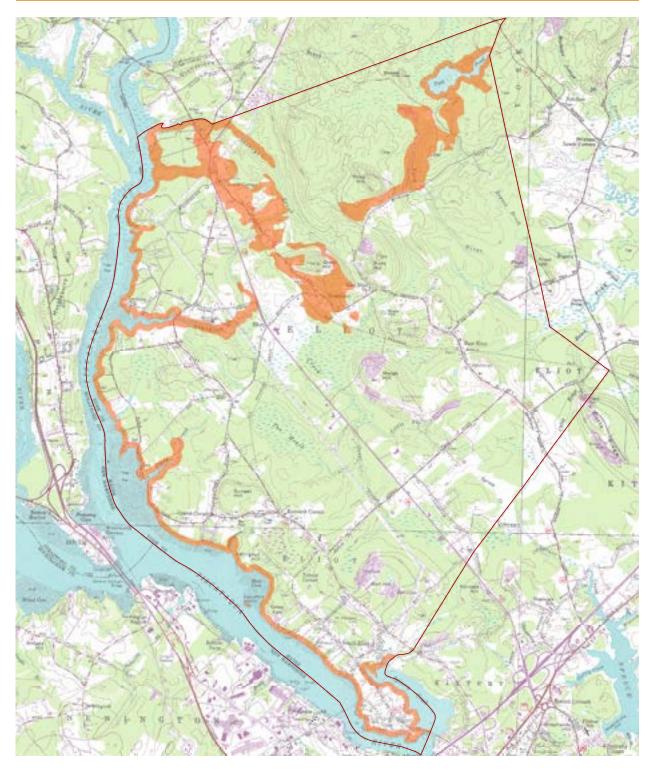


Figure __. Map of areas sensitive for prehistoric archaeology, August 2007



information provided by Maine Historic Preservation Commission August 2007 TABLE **13.X**

HISTORIC & ARCHAEOLOGICAL RESOURCES

HISTORIC ARCHAI	LOLUGICAL SI				
Site Name	Site #	Site Type	Periods of Significance	National Register Status	Location
Middle Parrish	ME 143-001	settlement	c.1620 - c.1675	undetermined	Location Unknown
Cammock Tide-Mill	ME 143-002	mill, tidal mill	After c. 1633	undetermined	Location Known
Edward Small House	ME 143-003	domestic	By c.1647	undetermined	Location Known
Stacy Creek Brickyard	ME 143-004	brickyard	c.1800 - c.1900	undetermined	Location Known
Piscataqua Wreck	ME 143-005	wreck, vessel	unknown	undetermined	Location Known
Neal Garrison	ME 143-006	garrison house	ca. 1720s to 1870s.	undetermined	Location Known
Hammond Garrison	ME 143-007	garrison house	The garrison was built in the later seventeenth century and was taken down in the early nineteenth century	undetermined	Location Known
Punkintown	ME 143-008	settlement	1651 deed to Nicholas Frost through numerous 19th century residents	undetermined	Location Known
Bartlett Saw Mill/ Hydro Facility	ME 143-009	mill, sawmill and hydroelectric plant		eligible	Location Known
Plaisted Farmstead	ME 143-010	domestic	Based on artifacts and documentary research.	undetermined	Location Known
Emery Farmstead	ME 143-011	domestic	Based on artifacts and documentary research.	undetermined	Location Known
Briggs Farmstead	ME 143-012	domestic	Based on artifacts and documentary research.	undetermined	Location Known
Bartlett-Briggs Grist Mill	ME 143-013	mill, gristmill	Based on documentary research.	undetermined	Location Known
Punkintown Mill	ME 143-014	mill, gristmill	Based on informant information of Silas Weeks of Eliot Historical Society.	undetermined	Location Known

Table __. MHPC-documented historic archaeological sites in Eliot as of March 2021. Adapted, with editorial/formatting changes, from a table provided by Leith Smith, $MHPC^7$



Left: Bartlett Saw Mill. Right: Pliny Emery house. Credit: EHS collection



HISTORIC ARCHAEOLOGICAL SITES

According to MHPC, to date, fourteen (14) historic archaeological sites have been documented for the town. They are listed in Table __.

MHPC (May 25, 2005) placed Libbey Lane on the Maine Historic Resources inventory, providing it protection. This lane was constructed between 1700 and 1725 and extends "from near the Piscataqua River, following parts of Trillium Way, extending through a bog, passing behind the north side of houses on the current Libbey Lane, crossing 103 and then extending almost to the powerlines south of and paralleling Route 236." It dates to the "early re-settlement period of Eliot" and is eligible for nomination to the National Historic Register in the areas of Exploration/Settlement and Landscape Architecture and for its potential "to demonstrate early eighteenth century road building technique".

The NEARC study of the York River Headwaters identified six post-contact historical archaeological sites in Eliot, noting which ones may have Outstandingly Remarkable Value (ORV). These sites are associated with either Punkintown or lumbering and milling activity along Brixham Rd. in the 19th century.

TABLE 13.X HISTORIC & ARCHAEOLOGICAL RESOURCES

HISTORICAL ARCHAEOLOGICAL SITES IN ELIOT

Site	Potential for ORV/NRHP eligibility: contributing resource to potential Punkintown historic district
Bartlett saw mill/hydro facility (ME 143-009)	
Plaisted cellar hole (ME 143-010)	Yes
Emery cellar hole (ME 143-011)	Yes
Briggs cellar hole (ME 143-012)	
Bartlett-Briggs grist mill (ME 143-013)	
Second Frost mill (ME 143-014)	Yes

Table __. Historic archaeological sites inspected by the NEARC study

MHPC has identified the following needs for further survey, inventory, and analysis:

No town-wide surveys for historic archaeological sites have been conducted to date in Eliot. Future archaeological survey should focus on the identification of potentially significant resources associated with the town's maritime, residential, and industrial heritage, particularly those associated with the earliest Euro-American settlement of the town in the 17th and 18th centuries.⁸

Also identified for their historic and possibly archaeological importance are:

- > Lanier Camp property on River Road: site of the old Ferry and William Everett's Tavern. [Survey, 1994].
- > The fields adjoining Rt. 236 and Depot Road: site of Native American encampment was noted; several artifacts recovered; six sites identified during plowing of the land. [Old Eliot Vol 9 No 1 page 39].
- > Brickyard Farm, 16 Cedar Road. Relatively recent base of operations for the Morin Brickyard. In its undisturbed state it may yield information.
- > Cohen Estate, off Tidy Road. Town Map/Lot 70-14.
 19th century house built on early brickyard property.
 This is the only "summer estate" property in Eliot and the site of former brickyards (Nason, Abbot, Hodgdon, Rowe) with possible archaeological significance.
- > Green Acre property, off Main Street. May contain remnants of the Hanscom shipyard operation.
- > Town Map/Lots: 48-28 & 49-10. Property at the corner of Goodwin and Beech Ridge Road. May yield evidence of a tanning operation that existed in that area.
- > There are sites of no longer extant homes that may yield some information on the early settlement of our town

The Town of Eliot has also identified the following as some of the important sites for possible marking and-or protection:

- > Lanier Camp (River Road)
- > Rosemary Cottage and (Depot Rd)
- Sites of stores (including Staples, Spinney, Liebman)

 Homes associated with early Post Offices (Jeremiah Libby House, 5 Old Libbey Lane; T.F. Staples, Pleasant St; Jeremiah P. Shapleigh, 5 Brixham Rd)

- > Site of our first town hall (1289 State Road)
- > Old Libbey Lane

COMMUNITY SURVEY FEEDBACK



RESPONDED THAT HAVING AVAILABLE HISTORIC SITES, STRUCTURES, & INFORMATION IS IMPORTANT

COMMUNITY SURVEY FEEDBACK



RESPONDED THAT PRESERVING THE CHARACTER AND HISTORIC ARCHITECTURE IS A CHALLENGE



Old Libbey Ln. Courtesy of EHS



Only one historically original general store remains in Eliot: the Maine Market.

HISTORIC SITES AND BUILDINGS

Eliot has a rich collection of historic sites and buildings. A summary of many historic buildings is in the Appendix.

In addition to the properties covered by that summary, there are a number of other 18th century houses that should be included as worthy of mention when considering preservation and/or marking:

- > Spinney House, 246 Main St. (1750): Asymmetrical with central chimney, very low posted frame and close-cropped eaves
- > 1128 State Rd. (1800) is one of the best examples of a small, slightly asymmetrical 5x2 bay cape
- > 1063 Main St. (1800): low posted with small windows, central chimneys and very closecropped eaves
- Asymmetrical 3x1 bay cape with center chimney all in later periods: 136 Old Rd. (1735), 28 Fernald Ln. (1777), 102 Adlington Rd. (1776).

1½-story center chimney cape: 329 Goodwin Rd. (1790); 34 Odiorne Ln. (1776); 614 Goodwin Rd. (c.1790), 24 Park St. (1786).

 > 2½-story houses of same period by town's most prominent landholding families, all having received some type of remodeling in later 18th or 19th centuries: 310 Goodwin Rd. (1765),
 4 Brixham Rd. (1740)

> During the second half of 18th century: 2-½ story center chimney with 5x2, 5x3 bay: 4 Gov Hill Road (1732), 714 Goodwin Rd. (1780), 301 Brixham (1790), I Sierra Ridge (1779)

> 5 Old Libbey Lane (1740); 23 Garrison Dr (1740);
59 Dover Road (1780); 67 Greenwood Street (1765); 101 Worster Rd (1753); 139 Brixham (1789);
153 Moses Gerrish Farmer Road (1774); 170 Old Road (1784); 301 Brixham Rd (1790); 362 Goodwin (1700); 838 Goodwin (1790); 1152 State Road (1760); 1609 State Road (1700); 1771 State Road (1750); 172 Adlington Rd (1800); 157 Adlington Rd (1750); 42 Fernald Lane (1800); 206 Old Road (1792); 235 Depot (1740); 246 Main Street (1750),
170 Old Road (1784); 589 Goodwin Road (1773).
235 Goodwin Road (1740)

A number of the earliest homes have mortared fieldstone foundations, a type not used around this area.

ARCHITECTURAL STYLES

One of Eliot's great strengths is its variety of classical architecture, with pockets of historical homes throughout the Town. EHS's "Reconnaissance Historical Buildings Survey/Cards" (1993) and "Historical and Architectural Report" (1994) are invaluable tools for determining the areas and buildings of historical significance. The report identifies those sites and structures that would be eligible for consideration by the National Register of Historic Places.

The report also gives us valuable insight into the ways that our "industries" have evolved: patterns of growth and decline, and the significant business ventures in Eliot. The report needs to be further looked at to identify structures/areas of significance to our history as they relate to farming, business (including stores, carriage shops), tourism (such as Lanier Camp and Green Acre), religious life (church, burial grounds related to), and other areas.

TABLE 13.X HISTORIC & ARCHAEOLOGICAL RESOURCES

HISTORICAL ARCHITECTURAL SITES IN ELIOT		
Location	Architect	
663 River Rd.	William H. Rhodes of NY	
137 Adlington Rd.	"Thrush Cottage" Russell Clipston Sturgis	
43 Mast Cove Rd.	Attributed to Frank Lloyd Wright or one of his associates	
116 Old Rd. – William Fogg Library	C. Howard Walker	

Table__. Buildings in Eliot designed by notable architects



Green Acre/Sarah Farmer Inn. Credit: EHS collection, courtesy of Rosanne Adams

DOCUMENTING HISTORIC RESOURCES

A town-wide reconnaissance-level inventory of historic resources in Eliot was conducted in two phases in 1992 and 1993-4. The projects and final report were funded by Survey and Planning Grants from MHPC and with federal funds from the National Park Service.

All buildings constructed before c. 1945 were recorded, photographed, and marked on enlarged copies of the USGS maps which served as a base map. A total of 639 properties were documented.

The Multiple Property Documentation Form for Historical and Architectural Resources of Eliot (1631-1945) was prepared for EHS and MHPC by Kari Ann Federer, with the assistance of Steven Mallory and James Kences. The form was finalized in October of 1995.

The report identified numerous properties that are worthy of further study and/or for possible nomination to the National Register of Historic Places.

CEMETERIES AND GRAVEYARDS

Eliot has approximately 172 cemeteries and graveyards, including two large cemeteries on State Rd. and private, family cemeteries and graveyards located around town. More information can be found in EHS's cemeteries and gravesites online database,⁹ and the cemeteries are mapped in the Town's online GIS system.

Mount Pleasant Cemetery and Brooks Memorial Cemetery are across the road from each other on State Rd., between Greenwood St. and Bolt Hill Rd. These cemeteries are stewarded by boards of trustees and employ caretakers. They contain many veterans' gravesites. The local American Legion provides flags and, on Veterans Day, holds a flag ceremony for Eliot veterans' gravesites at the two cemeteries. At present, the known Revolutionary War soldiers' graves are marked. Those of the Medal of Honor recipients should be also. Some early cemeteries have been relocated to the larger Mount Pleasant Cemetery, and EHS is actively searching for and compiling data. Assistance by the Town Clerk's office, in searching records, is invaluable to this research.

Maine law (Title 13, Chapter 83) establishes statutory access easements allowing access to family burying grounds by descendants and for maintenance purposes. It also places limits on construction or excavation within 25 ft. (or as otherwise specified in a local land use ordinance) of a known burial site or established cemetery. Neglect of older cemeteries is a concern. Under Maine law, cemeteries are not deeded with the land, and descendants have responsibility for their care. Due to the mobility of our society, there is often no one left to care for the cemeteries and the surrounding land owner does not take on the responsibility, so they fall into disrepair and are often lost. EHS does have an "Adopt A Cemetery" program, established in 2009, to help care for some of these cemeteries, but it is not adequate, by itself, to take care of all the older family cemeteries.

Cemeteries that the Town has taken responsibility for, by accepting monies for their perpetual care, and veterans' graves, are also concerns. Both need to be identified, and records prepared and updated as to their condition and when last cleaned. A systematic plan for their care should be developed. The Public Works Department has a list of veterans' gravesites that the department maintains.

TOWN RECORDS

Town records include town meeting minutes, board/ committee meeting agendas and minutes, annual town reports, property cards and records, vital records, permit applications and supporting materials, and other source material. They are a primary and important source of historical information about the Town that should be preserved, kept in Eliot, and available to citizens. Most are stored in Eliot Town Hall.

Prior to the Town Hall renovation project, Town records were not stored in a manner that fully protected them from fire or water damage. The renovated Town Hall will have an improved storage area for records. It will be climate controlled, fire resistant, and have individual storage vaults within the larger storage area.

Many Town records are also not digitized. Therefore, they are vulnerable to being permanently lost. In 2022, the Town hired a contractor to better organize and store paper copies of Town records. Building permit applications were also moved online. Creating a comprehensive, systematic, and publicly available digital archive of Town records that are of interest to the public should be a priority. For example, this could include publishing board/committee agenda packets, minutes, notices of decision, and other information going back further in time. Currently, the publishing of these documents on the website for several boards/ committees only goes back to 2016.

In 2025, the Town began a project to digitize some records.

PROTECTING THE BURIAL GROUNDS OF ENSLAVED PEOPLE AND PROMINENT HISTORICAL FIGURES

Special attention should be given to protection of those cemeteries of historical figures in the early settlement and growth of our town, and to those where enslaved people are or possibly are buried.

- > Andrew P. Fernald (Map/Lot: 49/9): Revolutionary War officer and instrumental in the incorporation of the Eliot.
- > Fogg Family burial ground (Map/Lot: 20/48): William Fogg and son John S. H. Fogg, benefactors of the town, and family members.
- > Hill Family burial ground (Map/Lot: 43/20): Cemetery of the ancestors of Maine Governor and Eliot native John F. Hill.
- > Farmer Cemetery (Map/Lot: 15/38): Resting place of members of the Shapleigh and Moses Gerrish Farmer (noted electrical inventor) families.
- > Elisha Shapleigh Cemetery (Map/Lot: 43/7): Enslaved woman "Hetty"-stone standing. Died 1862, aged over 100 yrs

Reported burial sites of enslaved people:

> Raitt Family cemetery (Map/Lot:73/22): Burial outside the burying ground; a long grave marked by field stones. [Eliot Epworthian, 1897] First person presumed to be buried there is Susanna Raitt, a person of color. [Lee Downer, Captain Raitt's Cottage, 2008]

Stacy Cemetery (Map/Lot: 87/9): Resting place of Samuel Stacy (1770). Reported to be slaves buried. [Old Eliot, Vol 1. Page 115.1909]

> Neall Cemetery (Map/Lot: 101/20): Reported that over the fence are buried the slaves owned by Andrew Neal. [Neal Family, by Emma E. Brigham, Springfield, Mass., 1938]

> Frost Cemetery (Map/Lot: 73/24): Reported that slaves of the Frosts buried here. Just over stone wall from garage/ house. "In the upper right hand corner near the division line of the Rocky pasture" [Old Eliot, Vol. 3]

> Rogers Cemetery (Map/Lot: 33/11): John Parry, who bought the farm later owned by John Rogers, at Rogers Point, brought slaves from Jamaica who are said to be buried there. Six graves, side by side, were described in 1909. Family cemetery there was moved in the last century. If other graves, they may be on the front lawn. [Old Eliot, Vol 8, page 123]

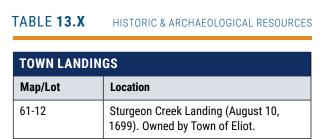
> Dixon Cemetery (Map/Lot: 14/13): field stones outside the cemetery arranged in a pattern suggesting earlier burials and/or perhaps servants or slaves.

> Nutter Cemetery (Map/Lot: 3/10): No trace of cemetery remains, but reported as containing slaves. [Eliot Epworthian, 1897]. Cemetery said to have been between two large trees, bordering Goodwin Road.

> Map 50/Lot 5 and Map/Lot: 41/7: At John Morrell's brickyard site (1600s) bones of his two slaves were disinterred c. 1923. Old Cottage Lane property. Two Morrell cemeteries are located there. [Old Morrell Estate in Eliot, Maine Has A Most Interesting History, McCollister, Portland Telegram, 1923.]

TOWN LANDINGS

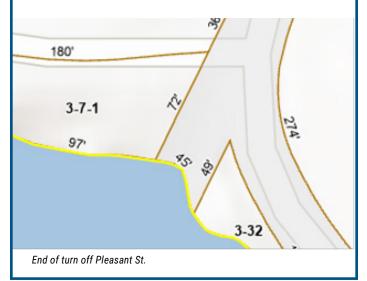
Those ancient landings (which the Town has not sold) should be well treasured and retained. Archaeological survey, as well as marking, may also be appropriate.



000-000	Off Woodbine Ave. Also possible location of old Salt Works.
NONE	End of turn off Pleasant St.



Off Woodbine Ave



SCENIC AREAS AND VIEWS

Eliot's scenic views are important and will gain increasing importance as land is sold for buildings. These are areas, groups of buildings, and sites that may or may not have historic value, but help to give us a sense of Eliot and our place and add to the aesthetics of our community. As we grow, we need to be sure that we pay attention to those things about the town that are worth preserving before they are lost to us forever. Something we would all do well to keep in mind is the advice that is given to archivists: "to do nothing to what you are trying to preserve that cannot be undone."

Scenic Areas and Views From a Historical Perspective

See also Natural Resources for more on scenic resources

- > The shorelines of Spinney Creek; of the "Long Reach"from Eliot Neck (Kittery/Eliot town line) to Frankfort Island
- > The older homes along Old Road and River Road
- View from Barnard's Hill (Goodwin Road, looking across to Marsh Hill)

 > View of Sturgeon Creek Marshes (Rt. 236 looking, east toward Great Hill and southeast toward Marsh Hill and the view on the opposite side of the road at Cedar Road looking toward the marshes)

> The fields of Depot Road and the early electric car trestle, on the west side of Rt. 236

> View of the old and stately homes as we look from the Town Hall up to the Library, including the Church Parsonage and Congregational Church

 View from Goodwin Road (property of 747 Goodwin Road) looking across the valley – west toward Stacy
 Hill and the Piscataqua

- > View from the Sturgeon Creek Bridge, looking over to the Tidy Road area and the Piscataqua
- > The fields of Lanier Camp property on River Road



The fields of Depot Road

Town of Eliot: 2025 Comprehensive Plan

HISTORIC DISTRICTS

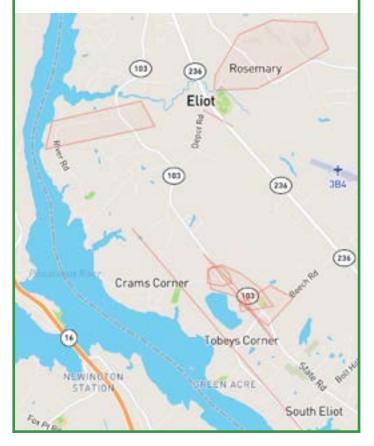
Eliot does not have any locally designated historic districts, but some areas of town have concentrations of history and historic buildings that may warrant future historic district consideration. They include:

- Farmer's Corner (the State Rd./Beech Rd. intersection) to John F. Hill Grange and Kennard's Corner (the State Rd.-Old Rd. intersection). These areas contain historic public buildings, religious buildings, and a mix of residences form all periods of development
- > The waterfront area of the town with its dense population of residences
- > One or more rural/agricultural districts that could be formed encompassing farm properties on Goodwin Rd

These areas generally accord with the suggested historic districts drawn by community members in the Community Survey's mapping exercise.

COMMUNITY SURVEY FEEDBACK

ELIOT COMMUNITY MEMBERS RESPONDED IN THE MAPPING EXERCISE: THESE HISTORIC DISTRICT SUGGESTIONS



CHALLENGES TO PRESERVATION & DOCUMENTATION OF HISTORIC SITES AND STRUCTURES

Loss of Sites and Structures Without Prior Intervention or Documentation

Although people have reported findings of early relics and building sites, there has been limited surveying done in Eliot at sites mentioned in the available literature, or at places known to be the home sites of our first European settlers. It is possible that many of the Piscataqua River sites have been lost due to construction or the rise of the river over the years.

Some significant historical sites have been lost due to construction without prior intervention to preserve or document artifacts, as the following examples show:

In the 1890s, relics from the Charles Frost Garrison were found during the plowing of the field. Approximately 35 years ago, during construction, an ash hearth was exposed. Although the owner was aware of the site that was being built upon, and despite what was found, the earth removal continued, the house was built, and the site was lost before it could be explored and documented.

- > The ancient saw mill on Frost Hill was lost when home construction began on what are now Frost Hill Circle and West Running Brook Lane.
- > The John Frost House on Brixham Rd. was demolished in 2013. Built about 1740, it was home to Frost and Raitt families whose family cemeteries are, to the rear, in the Wildbrook subdivision. Since the house was torn down, all that remains of the farm is the barn on the property.
- > The Hanscom House (1750) on the site of Clover Farm at 771 Main St. was demolished in 2021. Prior to the demolition, the contractor invited EHS to conduct a historical recordation of the house.
- > The Eliot High School, built in 1906 and designed by regionally significant architect Alvah Ramsdell, was a 1½-story building with broad hip roof, a central tower, and Victorian detailing. It was demolished in 1987, replaced by the present Town Hall.
- > The Hammond Garrison site's integrity was partially destroyed when the Town put a pipeline through the area in 2013.
- > Spinney House, 256 Main Street, was torn down. It was an asymmetrical cape with central chimney, very low posted frame and close-cropped eaves built in 18th century.

> 768 Main Street was, at one time, the office for the Hanscom Shipyard. It was a small, slightly asymmetrical 5x2 bay cape.

Lack of Resources

Many of the historic preservation tools listed below require financial and staff resources. When these resources are lacking, historic preservation opportunities may be missed.

Threats to Archaeological and Resources from Weather and Climate Change

Extreme weather events can pose threats to historic resources. Heavy rains can flood foundations and bring water inside the exterior shells of buildings. Strong winds can knock trees onto roofs. Heavy snow may put roofs at risk of collapse. Flooding or erosion can damage graveyards and gravesites. Even normal weather may accelerate wear-and-tear of historic structures or sites that are not adequately maintained.

Climate change may increase the risks to archaeological and historic resources from weather events. "The future of historic properties," MHPC argues, "is often overlooked in the complex process of planning for the effects of climate change, yet they are also subject to the effects of erosion, high water, intense storms, high winds and wildfire."¹⁰

MHPC maintains "Weathering Maine: Mapping Threats to Maine's Historic and Cultural Resources"¹¹, an online map that can display National Register listings, museums, or archives along with map layers related to climate change risks, such as flood hazard zones and lands projected to be inundated in various sea level rise (SLR) storm surge scenarios. None of Eliot's three National Register listings appears to overlap with the "risk" map layers, except for a slight inundation of the rear of one property – where there are no buildings – under the most extreme SLR storm surge scenario. However, other non-National-Register historic resources may be at greater risk.

For more information, see Climate Change.

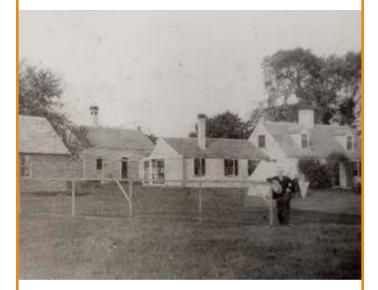
SITE PLAN REVIEW AND ZONING REGULATIONS NOW IN PLACE TO PROTECT HISTORICAL AND ARCHAEOLOGICAL RESOURCES

Demolition Delay Ordinance

In November 2021, voters approved a Demolition Delay Ordinance for Historic Structures, codified in Section 45-136 of the Town Code. This ordinance was proposed by EHS and written by the Town's Planning Office with assistance from EHS and MHPC. It establishes a 90-day delay period for review of a demolition permit application for a building or portion of a building that is 100 years in age or older, or that is on the National Register of Historic Places, so that alternatives to demolition – such as preservation, rehabilitation, or relocation – can be explored. The ordinance invites input from the Planning Board (after a public hearing), EHS, and MHPC. It does not prohibit or indefinitely delay demolition. If demolition is to be the result, a historical building recordation is required, and the applicant/ property owner is encouraged to salvage, recycle, and reuse as many of the building materials as possible.

THE NEW DEMO DELAY ORDINANCE GETS PUT TO WORK

In 2022 and 2023, the Demolition Delay Ordinance was applied to demolition permit applications for the barn on the Clover Farm site. In 2022, an application included a proposal to dismantle, but mostly preserve, the barn by relocating and rebuilding most of it on a property on Brixham Rd. After opinions from the Planning Board and EHS, the 90-day delay period was waived. However, the relocation did not happen. The lot was sold, the new owner applied to demolish the barn outright, and the 90day delay period was applied once again. The new owner then arranged with a different contractor to have the oldest portion of the barn dismantled and rebuilt on the contractor's property on Goodwin Rd.



The Clover Farm house and barn. Excerpt from: Images of America: Eliot, by Margaret A. Elliott

Even with the Demolition Delay Ordinance, historic buildings may be lost without sufficient historical documentation. Absent a legally binding instrument such as a historic preservation or archaeological site easement, and within the parameters of the land use regulations, the property owner retains broad rights to demolish or alter a historic building or site on their property.

For health and safety reasons, the Demolition Delay Ordinance has an exception for demolition of dangerous buildings (e.g. those that are structurally unstable or unsanitary, fire hazards, or otherwise health and safety hazards). This presents a dilemma in situations where the building may not constitute an immediate safety hazard, but has some elements that may be hazards if improperly disturbed (e.g. certain rooms with asbestos). The Town must take seriously and follow the ordinance when a dangerous building determination is made, or when it is requested by the property owner. At the same time, less urgent hazards might be mitigated by qualified professionals, and the building saved, or at least, if such hazards are known and avoided, a recordation or material salvaging might be done safely prior to demolition.

Subdivision Standards

One of the criteria for subdivision review is that the proposed subdivision "Respect and preserve historical features and sites and traditional land use patterns" (Section 41-2). Preliminary subdivision plan applications must include "A statement or plan concerning historical sites and land use patterns as provided in section 41-216" [Section 41-150(13)]. Section 41-216 states:

"The planning board may require that a landscape plan include graveyards, historical sites and buildings, and other features that are important assets. These sites may be identified from the comprehensive plan; information from maps, books or other printed matter; information from historical societies; or such other information that the planning board determines to be useful in its review of a subdivision plan."

These standards were applied to a Planning Board subdivision review at 771-787 Main St. (which includes the Clover Farm site discussed above). The tract to be subdivided has a private family cemetery. The approved plan included the required access easements from Main St. to the cemetery.

Shoreland Zoning

When the Planning Board reviews an application to change the use of a structure that is nonconforming regarding shoreland zoning setbacks, it must weigh several factors to determine that the new use will have no greater adverse impact then the existing use. One of these is the probable effects on archaeological and historic resources [Section 44-32(c)(5)].

Section 44-35(t) in the shoreland zoning land use standards states:

Archaeological sites. Any proposed land use activity involving structural development or soil disturbance on or adjacent to sites listed on, or eligible to be listed on the national register of historic places, as determined by the permitting authority shall be submitted by the applicant to the Maine Historic Preservation Commission for review and comment, at least 20 days prior to action being taken by the permitting authority. The permitting authority shall consider comments received from the commission prior to rendering a decision on the application.

Section 44-42 also exempts state-approved archaeologists conducting archaeological excavations in the shoreland zone from needing a shoreland zoning permit for the work, provided they employ erosion and sedimentation control measures.

Historic architectural survey work in the shoreland zone would presumably be exempt as it focuses on visual inspection of architecture and would require little to no land disturbance.

Architectural Compatibility

Section 45-414 in the Town Code authorizes the Planning Board to require new commercial construction in the Village and Suburban zones to use exterior building materials that harmonize with surrounding properties, and to be designed to be architecturally compatible in terms of scale, height, window size, and roof pitch.

Site Plan Review and Land Use Standards for Largerscale Solar Energy Systems

In 2022, Eliot voters approved comprehensive site plan review and land use standards for larger-scale solar energy systems (SES-LGs). Applications for SES-LGs must include information about archaeological and historical resources. Applicants must consult with MHPC and get their sign-off. There are exemptions for SES-LGs proposed mostly on an already-developed site, existing impervious surface, or a brownfield site. TABLE **13.X**

HISTORIC & ARCHAEOLOGICAL RESOURCES

Tool	Summary	Responsible Entities
Property, building, or resource acquisition or donation	The acquisition of land, a building or structure, or a resource with historical significance by an entity that can permanently preserve it	Federal or state agency or municipality, land trust, or historic preservation trust; may occur through donation by private property owner
Building relocation	The moving of a structure, or at least parts of it, from one property to another as an alternative to outright demolition. Some buildings can be towed whole, while others must be tagged, dismantled, and rebuilt	Willing property owners, specialized contractor
Historic preservation or archaeological easement ¹²	A voluntary legal agreement that protects a significant historic, archaeological, or cultural resource by giving the easement holder the authority to review and approve modifications to the resource	Property owner, preservation organization or agency (easement holder)
Listing on the National Register of Historic Places ¹³	The nation's official list of cultural resources worthy of preservation	Eligible buildings, sites, or districts are proposed for listing. National Park Service administers the program nationally, with delegation in Maine to MHPC
Federal income tax credit for rehabilitation of historic structures ¹⁴	20% federal tax credit for certified rehabilitations of certified historic structures	Developer/rehabilitation contractor
State historic rehabilitation tax credit ¹⁵	25% state tax credit for certified rehabilitations of certified historic structures; 5-10% credit increase may be available for some rehabs involving affordable housing	Developer/rehabilitation contractor
Historic property recordation	Provides an accurate written and photographic record of a historic property for research and other historic preservation purposes. Eliot's Demolition Delay Ordinance (Section 45-136) requires this before an applicable structure can be demolished	Property owner, demolition permit applicant interested party. EHS has conducted these recordations in the past. MHPC has published guidelines for proper documentation
Architectural survey ¹⁶	A systematic record of the built environment within a specified geographic area or time frame	Entities seeking National Register status for a specific district, municipalities (e.g. to inform zoning or design standards), others
Archaeological survey ¹⁷	Research and-or excavation of an area to seek artifacts or other information to assess prehistoric or historic use of the area	Professional, state-approved archaeologists. EHS initiated a survey of the Hammond Garrison site in 2009
Interpretive signage	Signs in public places depicting the history of those places	Nonprofit organizations, municipalities
Museum or collection	Building or part of a building displaying historic objects, artifacts, and information	Nonprofit, state, municipality, private collector, etc.
Educational presentations, informational materials, or events celebrating history		Town, schools, non-profits, EHS

COMMUNITY SURVEY FEEDBACK



RESPONDED THAT EDUCATIONAL RESOURCES ABOUT ELIOT HISTORY IS IMPORTANT TO INVEST TAX DOLLARS



Second graders from Eliot Elementary learn about Eliot history.

ELIQT

HISTORIC & ARCHAEOLOGICAL RESOURCES GOAL, POLICIES & STRATEGIES

Goal, Policy, or Strategy	Description	Responsibility or Partnership	Implementatio Timing
Goal 1	Protection of the significant historic and archaeological resour to the greatest extent practicable	ces in the communit	y
Policy 1	Increase town involvement in the preservation of the town's unique cultura	al and historical assets	
Strategy 1	Strategy 1 Provide support to the Eliot Historical Society to update and map historical buildings, cemeteries, archeological sites, and other significant sites in town and make nominations for National Register or state landmark designations where appropriate. Make these resources available to the Planning Board and Select Board		Ongoing
Strategy 2	Work with the Eliot Historical Society and the Maine Historic Preservation Commission to assess the need for, and, if necessary, plan for, a comprehensive community survey of the community's historic and archaeological resources	Select Board, Town Manager, Planning Office	Mid
Strategy 3	Consider providing informational programming regarding the archeological and architectural history of Eliot. Make available these resources to residents and visitors via the Eliot Historical Society website and any other means available to the town	Select Board, Eliot Historical Society	Short
Strategy 4	Ensure that the knowledge of historic buildings and sites and prehistoric archeological sites is made known to, and on file with, the Planning Board and Code Enforcement Officer, as they act on development proposals and that any impacts on these resources are mitigated as part of the development review process	Planning Board, Planning Office, Code Enforcement Officer	Ongoing
Policy 2	Provide town decision makers with the necessary support to protect the town	's most valued historical a	assets
Strategy 1	Enact a Historic Preservation Ordinance to require that historical and archaeological resources be identified and, if warranted, protected, if found within a proposed development. The review process should incorporate applicable maps and information provided by the Maine Historic Preservation Commission or Eliot Historical Society. Ensure that, as new regulations emerge in the future, they include a similar requirement, as appropriate. The ordinance may include criteria for when it applies, such as development scale, location near a known historic or archaeological resource, or other factors	Planning Office, Planning Board, Select Board	Ongoing
Strategy 2	Ensure that any alterations to Town-owned historic buildings do not diminish the historical value of such structures	Select Board, Town Manager, Code Enforcement Officer, Eliot Historical Society	Ongoing
Strategy 3	Ensure that any DOT-funded transportation improvements along Route 101 and Route 103 are compatible with the historic nature and character of the roadway	Select Board, Planning Office, Town Manager, Eliot Historical Society	Depends on projects' inclus in DOT Work Pl
Policy 3	Provide the means and incentives for landowners and developers to prese architecturally important structures and properties in Eliot	rve or restore historical	ly and-or
Strategy 1	Develop a preservation easement program that offers a path for owners to help protect and preserve significant buildings and landscapes of historic properties	Planning Office, Planning Board, Eliot Historical Society	Short
Strategy 2	Establish adaptive reuse land use regulations to allow some additional uses not otherwise allowed in the zoning for when a historic building is preserved or restored. The additional uses should be context sensitive and appropriate for the location	Planning Office, Planning Board, Select Board	Short
Strategy 3	Establish a residential density bonus for when a historic building is preserved or restored	Planning Office, Planning Board, Select Board	Short
Strategy 4	Include historic preservation as an eligible benefitting use of a Density Transfer Charge (DTC), Transfer of Development Rights (TDR), or Purchase of Development Rights (PDR) program, if the Town elects to establish such a program	Planning Office, Planning Board, Select Board, Town Manager, Budget Committee	Depends on whether program is established ar when
Strategy 5	Require subdivision or non-residential developers to take appropriate measures to protect known historic archeological sites and areas sensitive to prehistoric archaeology through modification of the proposed site design, construction timing, extent of excavation, and-or other measures	Planning Office, Planning Board, Code Enforcement Officer, Maine Historic Preservation Office	Ongoing

HISTORIC & ARCHAEOLOGICAL RESOURCES ENDNOTES

- ¹ eliothistoricalsociety.org/aboutus/
- ² eliothistoricalsociety.org/eliot-cemeteries/
- ³ eliothistory.blogspot.com/
- ⁴ Seacoast Online. <u>www.seacoastonline.com/story/news/1998/07/10/pipeline-digs-up-12-000/51315571007/</u>

⁵ Hudgell, Gemma-Jayne, Stephen R. Scharoun, Robert N. Bartone, and Ellen R. Cowie. (2017). Archaeological Survey of the York River Headwaters: A Community Approach for Identification and Management. <u>http://www.yorkrivermaine.org/wp-content/uploads/2017/12/York-River-Headwaters-Report-final-redacted-NEARC-Dec2017.pdf</u>

- ⁶Old Eliot, Vol 1 pages 39 and 29
- ⁷ Part of the Comprehensive Plan Data Package provided by Maine DACF
- ⁸ Communication from Christi Chapman-Mitchell to Rosanne Adams of EHS, 5-23-2005
- ⁹ eliothistoricalsociety.org/eliot-cemeteries/
- ¹⁰ MHPC, "Historic Properties and Climate Change" fact sheet
- ¹¹ www.maine.gov/mhpc/programs/protection-and-community-resources/climate-change
- ¹² MHPC. <u>www.maine.gov/mhpc/programs/protection-and-community-resources/easements</u>
- ¹³ MHPC. <u>www.maine.gov/mhpc/programs/national-register-of-historic-places</u>
- ¹⁴ MHPC. <u>www.maine.gov/mhpc/programs/tax-incentives</u>
- ¹⁵ Same as previous
- ¹⁶ MHPC. <u>www.maine.gov/mhpc/programs/survey/architectural</u>
- ¹⁷ MHPC. <u>www.maine.gov/mhpc/programs/survey/archaeological</u>

PUBLIC FACILITIES & SERVICES

We have dedicated municipal staff who take pride in helping the community. We seek to upgrade and maintain municipal buildings and facilities to adequately serve community needs and functions.

Municipal Services

MUNICIPAL STAFF

The Town of Eliot employs approximately 50 permanent staff positions, including the following positions and roles:

- > Town Manager
- Assistant to the Town Manager (Human Resources Specialist)
- > Town Clerk (Register of Voters/Tax Collector)
- > Deputy Tax Collector (Deputy Town Clerk)
- > Assistant Clerk (2)
- > Treasurer (Finance Director)
- > Finance Assistant
- > Code Enforcement Officer
- (Local Plumbing Inspector, Building Inspector)
- > Town Assessor
- > Town Planner
- > Land Use Administrative Assistant
- > Recreation Director
- > Recreation Department Staff (2)
- > Fire Chief
- > Deputy Fire Chief
- > Assistant Fire Chief
- > Police Chief
- > Police Sargent
- Police Officers (6), including one serving as Department Office Manager
- > Animal Control Officer
- Public Works Manager (Road Commissioner, Transfer Station Manager, Sewer Superintendent)
- > Public Works Administrative Assistant
- > Public Works Staff (4)
- > Transfer Station Staff (6)

ELIOT PUBLIC FACILITIES & SERVICES GOAL



Plan for, finance, and develop an efficient system of public facilities and services to accommodate anticipated growth and economic development



CONTRACTED SERVICES

The Town also hires contractors to fulfill some municipal service needs and project roles. These contracted services include, but are not necessarily limited to:

- > Town legal counsel
- > Auditor of accounts
- Route 236 Water & Sewer Project owner's project manager (OPM) and design engineer
- > Town Hall Renovation architectural and engineering services
- Capital project engineering services, such as walking and bicycling facility projects

ELIOT GENERAL ASSISTANCE AND MAINSPRING

In 2024, the Town began contracting General Assistance (GA) services to Mainspring in Kittery. Mainspring is the central hub for social services that includes several local social service providers, such as Fair Tide and Footprints Food Pantry. The Town of Kittery already contracts with Mainspring for GA. With Mainspring, people in need will find many service options under one roof, making it easier to find the help they need without having to travel to several different locations across the municipalities. Mainspring's new building at 22 Shapleigh Rd. in Kittery opened in February 2025.

Mainspring's website summarizes their game-changing approach to social services:

"Most people seeking social services enter the system through a single agency, where an intake process typically involves an appointment, applications, and sharing with strangers the most personal details of their lives. More often than not, because these individuals would benefit from services offered by other agencies, they are sent off to repeat this time-intensive and emotionally draining process over and over again, always subject to the hours and availability of any one program. Social service agencies do their best to coordinate care, but without a system in place to do so with ease, they often end up working in silos. Seeking and receiving assistance can be a full-time job resulting in only shortterm solutions. We can and must do better. That is why we created Mainspring."

For more information: <u>www.mainspringcollective.org</u>

TOWN HALL

Town Hall is located at 1333 State Rd., next to the Police and Fire Stations and Hammond Park. It was built in the mid-1980s and features a main office area with wings for the Town Clerk's office and the board/ committee meeting room.

Exploring the renovation and expansion of Town Hall formally began in 2020. The building was seen as having insufficient space for certain municipal functions.¹ The meeting room was not large enough to host elections and had limited seating capacity and meeting technology. There were no auxiliary meeting rooms for smaller meetings. Municipal record and file storage capacity were insufficient, with cramped storage spaces that were not fully secured against fire and water incursion. "Addressing the challenges in a holistic manner will impact not only the lives of those living in poverty but be far more cost-effective than treating each challenge in silos."

- Mike Sullivan, Eliot Town Manager





New Mainspring building opened for services in February 2025

In 2023, Eliot voters approved a \$4 million bond for renovation and expansion of Town Hall and improvements to the Police Station. Construction began in September 2024 and is underway as of this writing, with an expected completion of Summer 2025. Town Hall services are temporarily located in Eliot Commons (28 Levesque Dr., Unit 9). The wings are being expanded and new space will be added in the back of the building. The interior will be renovated. This will nearly double the size of the building from 4,100 sg. ft. to about 8,000 sg. ft., including a larger board/committee meeting room, larger and better file storage space, new technology, and auxiliary meeting rooms. A drive-up window will be added for the Town Clerk's services. The parking lot is being renovated and reconfigured, and new walkways are being installed. The expanded Town Hall will create more flexibility for hosting meetings and reservation by community groups.

FIGURE 14.X

MARINE RESOURCES



Eliot Town Hall in April 2024, a few months before the renovation project began. Credit: Brookelyn Gingras, SMPDC



PUBLIC WORKS

The Public Works Department is located at 476 Harold L. Dow Hwy. and is next to the Town Transfer Station. The main building has three garage bays for storage and maintenance of the municipal fleet, plus office space. There is also a smaller garage building with room for three garage bays and another outbuilding with four garage doors. There is a dome storage building for road salt and outdoor storage for other materials.

POLICE

Providing 24/7 service to the community, the Eliot Police Department has a roster of seven full-time positions but, as of this writing, is authorized to go up to 10 positions. The command structure includes a Police Chief, Sergeant, and five full-time officers. Officers also serve in specialized roles, such as Harbormaster, School Resource Officer (SRO), and Department Office Manager. The Department also employs an Animal Control Officer (ACO).

The full-time officers make up the Patrol Division. Led by the Sergeant, the Patrol Division conducts, death investigations, narcotics investigations, crime scene management, criminal intelligence, and domestic violence follow-up investigations.

The Police Department has become a leading example for mental health policing, with a Crisis Intervention Team and embedded Police Social Worker program. The Department partners with the National Alliance on Mental Illness (NAMI) Maine chapter and Sweetser Mental Health for responding to mental health calls. The Department assists peer departments across York County and the state through Peer Support Teams.² The Police Station is located next to Town Hall and the Fire Station at 1333 State Rd. The \$4 million Town Hall Renovation Project bond includes \$300,000 for improvements to the Police Station.

FIRE AND RESCUE

The Eliot Fire Department has been serving the town since 1914, and the first fire station was built two years later. The Department has 30 volunteer firefighters who are trained for fire suppression, technical rescue, and hazardous material clean-up. The Department provides quick and professional service essential to the health, safety, and well-being of Eliot.⁴

The Fire Station is located next to Town Hall and the Police Station at 1333 State Rd. The Fire Department's emergency siren helps notify volunteer firefighters of an emergency and to report to the station.

A comprehensive study of the Fire Department is underway, as of this writing. The study will assess the status and future needs for Fire Department equipment, the Fire Station, organizational and operational structure, and other needs.



The Eliot Fire Department has been serving the town since 1914.

PUBLIC FACILITIES & SERVICES

TABLE **14.X**

POLICE OFFICERS				
Area	Officers per 1,000 pop.	2022 Population	# of officers (including chiefs)	
Nationally	2.0	332,403,650	~665,380	
Statewide	2.1	1,372,247	~2,921	
Eliot	1.0	6,848	7	
South Berwick	1.5	~7,500	11	

Table ___. Officers per 1,000 population for Eliot, South Berwick statewide, and national. Source for statewide, national, and South Berwick figures: South Berwick 2024 Comprehensive Plan.³ Eliot has less officers per capita than national and state averages, as well as South Berwick.

EMERGENCY DISPATCH AND RESPONSE

The Kittery Emergency Communications Center handles all emergency and non-emergency calls for the Towns of Kittery and Eliot. The center provides dispatch and communications services for Eliot Police and Fire, Kittery Police and Fire, and ambulance services. Each year, they receive over 30,000 phone calls across both towns and estimate that they dispatch about 20,000 calls for service (e.g. traffic stops, offenses, criminal complaints, house checks, alarms, and many others). The center also offers 24/7 walk-in service.⁵

The two towns' emergency response system appears to be adequate at the time of this writing and considering current police and fire staffing levels. Increasing Eliot Police Department staff, as discussed elsewhere in this section, and implementing relevant recommendations from the Fire Department study, should further benefit emergency response.

Municipal Service Needs

Our community is expected to grow to about 7,500 people by 2030 and surpass 8,000 by 2035. Municipal service needs will continue to grow within this plan's horizon. Those needs can be addressed in several ways.

- > More efficient services, e.g. by improving and streamlining service delivery processes or sharing or partnering with other municipalities or entities (Table _), creating economies of scale
- > Sufficient training for staff to boost their ability to effectively and efficiently deliver services
- > Preventative maintenance of equipment, and replacement when necessary, to help efficient service delivery by reducing time and money spent on temporary fixes for aging equipment
- > Augmentation of municipal services, e.g. through contracted services or by hiring permanent staff

COMMUNITY SURVEY FEEDBACK



RESPONDED THAT RESPONSIVE & EFFICIENT MUNICIPAL SERVICES WERE IMPORTANT FOR THEM IN THE FUTURE

Very important: 70% Somewhat important: 22%

Convenient and efficient municipal service examples include:

- In-person Town Clerk's services (motor vehicle registrations, recreational licenses and registrations, dog licenses, elections, and voting) with a staff of four
 - Online options for some of these services, such as vehicle registration rapid renewal, online dog licensing
 - > A drive-up window for these services will be available in the renovated/expanded Town Hall
- > Online building permit applications
- > Online fee and property tax payment options
- > Online Recreation Department program registration and fee payment

> Online interactive GIS map where people can look up information such as zoning, wetlands, conserved land, property records, and much more. This information may not be the official record, but it is a useful reference for research and due diligence on Eliot properties

> All board/committee meeting materials (agendas, minutes, etc.) available online or in print form at Town Hall. Most meetings have a remote videoconference/ telephone participation option, and they can be watched online, live or archived, or live on the Town's public access channel

- > Ongoing efforts to organize and digitize more Town records and make them available online
- > Contracting with Mainspring for Eliot general assistance (GA) services, as discussed above
- Contracting out technology, media, and website functions, such as an IT contractor, meeting video streaming, public access channel, GIS, and website hosting



Construction in March 2025 on the Town Hall. Credit: Mike Sullivan

Specific municipal service needs will be addressed each year by the Town Manager, Finance Director, Budget Committee, Select Board, and Eliot voters through the Annual Budget. The Town Manager annually seeks budget requests and information from Town departments. It is difficult to project exact needs over the plan horizon. However, at least the following should be considered:

 Based on the current number of officers per capita and future population projections, the Police
 Department will need to increase its officer positions

> The Fire Department study noted above is expected to address Fire Department staffing needs

> The Planning and Code Enforcement office will likely need an additional position, such as an Assistant Code Enforcement Officer, Land Use Technician, or similar

> Other staffing needs are dependent on the successful implementation of certain strategies in this plan. For example:

> A community pavilion or community center will need to be staffed and maintained

> A business licensing program will need staff time to manage. Ideally, the staff that manages the program could provide local business technical support, communications, economic development support, and similar efforts

> A local traffic calming program will need staff time to manage; however, it could also reduce staff time by streamlining the process for reducing speeds on local streets and roads while ensuring neighborhood buy-in

Health Care Facilities

As of this writing, there are no medical clinics in Eliot that offer the typical range of primary care services that a clinic would offer. There are clinics associated with hospital systems and private health care providers in all neighboring communities to Eliot (Table__).

Eliot does have some specialty health and mental health practitioners, such as a dental office, social workers, and therapists. Other

PUBLIC FACILITIES & SERVICES

TABLE **14.X**

MUNICIPAL SERVICES		
Service	Partner(s)	Notes
Municipal sewer	Town of Kittery, Portsmouth Naval Shipyard (PNSY)	Shared sewer system and wastewater treatment plant, Inter-Municipal Agreement on sewer capacity, responsibilities, shared costs, etc.
Municipal water	Kittery Water District, Towns of Kittery and York, PNSY	Parts of Kittery, Eliot, and York served by one system with one water treatment plant
Transportation planning and funding	Kittery Area Comprehensive Transportation System (KACTS)	Includes the Towns of Berwick, Eliot, Kennebunk, Kennebunkport, Kittery, Ogunquit, South Berwick, Wells, and York. KACTS is the designated Metropolitan Planning Organization (MPO) and is staffed by SMPDC. It helps the member municipalities coordinate on planning and funding transportation needs
Transit service	COAST bus	Eliot is served by the COAST regional public transit system
Social services and General Assistance (GA)	Mainspring, Town of Kittery, YCCAC	The Mainspring partnership means that Eliot GA services are physically co-located with other services that may be helpful to Eliot residents. This unique social services delivery model is further discussed elsewhere in this section. YCCAC also offers various services available to Eliot residents

Table __. Highlighted municipal services shared with neighboring communities, creating economies of scale for efficient delivery of services

health facilities have been proposed, but never followed through with. Eliot does not have a pharmacy, but used to: there was one in Eliot Commons when it opened. Some Eliot residents may be eligible for YCCAC's transportation services to medical appointments and care. The Eliot Aging-In-Place Committee has looked into increasing transportation options for Eliot's older adults for various trip purposes, including medical trips. Health care and wellness was the third-most desirable commercial development articulated in the Community Survey: 73% said it was either very desirable or somewhat desirable. While it is unlikely a major medical facility, such as a hospital, would seek to open in Eliot in the foreseeable future, a primary care clinic, pharmacy, or similar, could be an asset to the community – one that could, for example, be part of a mixed-use development in the Mixed Use zone or commercial development in the remaining C/I zone.

PUBLIC FACILITIES & SERVICES

HOSPITALS			
Hospital	Туре	Beds in Main Hospital Building	
York Hospital	Nonprofit	79	
Wentworth-Douglass Hospital	Not-for-profit charitable	178	
Portsmouth Regional Hospital	Private	234	

Table __. Hospitals within 10 miles of Eliot

TABLE **14.X**

Service	Partner(s)	Notes
Wentworth Health Partners Prompt Care	Dover	Wentworth-Douglass Hospital/MGB: Same-day care for minor illnesses/injuries (by appt.)
Wentworth-Douglass Express Care	Dover	Wentworth-Douglass Hospital/MGB: Urgent care, walk-in care
ConvenientMD	Dover	Private healthcare provider: Urgent care
York Hospital in Kittery	Kittery	York Hospital: Walk-in care
Portsmouth Family Care	Newington	Independent: Primary care, specialty
Portsmouth Outpatient Center	Portsmouth (Pease)	Wentworth-Douglass Hospital/MGB: Primary care, specialty, lab
Portsmouth VA Clinic	Portsmouth (Pease)	US Dept. of Veterans Affairs/VA Manchester: Primary care, specialty, lab, mental health
Portsmouth Health Care Center	Portsmouth (Pease)	Martin's Point: Primary care, lab, radiology, therapy
ConvenientMD	Portsmouth (Rt. 1)	Private healthcare provider: Urgent care
ConvenientMD	Portsmouth (Woodbury Ave.)	Private healthcare provider: Primary care
ClearChoiceMD	Portsmouth	Private healthcare provider: Urgent care
South Berwick Family Practice	South Berwick	Wentworth-Douglass Hospital/MGB: Primary care
York Hospital in South Berwick	South Berwick	York Hospital: Primary care, therapy, lab, OB/GYN, pediatric, seniors
York Walk-In Care	York	York Hospital: Walk-in care
York Living Well Center	York	York Hospital: Primary care, specialty, therapy

Highlighted clinics in neighboring and nearby communities, as of late 2024. This focuses on those that provide primary, urgent, and or walk-in care and does not include all specialty clinics or other medical services, or clinics located on the same campus as the above-listed hospitals. MGB = Mass General Brigham. This is not necessarily a complete list, and the range of services and locations may change.

Education

Public school in Eliot and South Berwick is provided by Maine School Administrative District 35 (MSAD 35).

MAINE SCHOOL ADMINISTRATIVE DISTRICT 35 (MSAD 35) BASIC FACTS:

- > Towns: Includes Eliot and South Berwick
- > Total enrollment: (as of this writing) 2,120 students
- > Campuses managed: 5
 - 2 in Eliot and 3 in South Berwick
 Combined area of the campuses: about 124 acres
- > Total building space managed by the District: 447,337 sq. ft.
- > Overall appraised value of District facilities: approximately \$80,000,000
- > Approximate annual fuel and power needs to operate District facilities:
 - 125,000 gallons of propane
 - 12,000 Dth of natural gas
 - · 2.6 million kWh of electricity
- School transportation fleet: 29 buses, 8 vans
 Fleet storage and maintenance is at a least bus maintenance facility
- > Approximate combined annual distance traveled and fuel use of the fleet:
 - 450,000 miles
 - 55,000 gal. of diesel fuel
 - 8,000 gal. of gasoline
 - Gets over 2,100 students to and from school, athletic contests, and field trips

> Food service:

- Cafeterias: 5
- Approximate annual meals served to students: 160,000
- > Employees:
 - Full- or part-time: 380
 - Additional substitutes: 100+
 - · Largest employer in Eliot and South Berwick

Eliot Elementary School (EES) serves children from Eliot in grades PreK through 3. EES has 23 classrooms, art and music rooms, a technology room, education support rooms, a cafeteria, a library, a gymnasium with a stage, a playground, and a baseball/softball diamond.

Marshwood Great Works School (MGWS), located in South Berwick, serves children from Eliot and South Berwick in 4th and 5th grade. MGWS has 30 classrooms, a cafeteria, a library, a gymnasium with a stage, a home economics room, a computer lab, a soccer field, and a baseball/softball diamond.

Marshwood Middle School (MMS), located in Eliot, serves children from Eliot and South Berwick in grades 6 through 8. MMS has 30 classrooms, two art rooms, a band room, a vocal instruction room, a home economics room, a library, a computer lab, a cafeteria, and a gymnasium with a shared stage. All students have laptop computers for their use provided in part by Maine Learning Technology Initiative (MLTI) funding and in part by the local budget. Outdoor facilities include a football field, soccer field, baseball diamond, softball diamond, and several practice areas. There is a dirt track and a concession stand. The Superintendent's office building is on the MMS campus.

Marshwood High School (MHS), located in South Berwick, serves students from Eliot and South Berwick in 9th through 12th grade. All students are provided with a laptop computer. MHS has an auditorium for school and community use with a seating capacity of 605. Although MHS is expected to meet the needs of the district in the future, the building was designed with expansion possible to 1,500 students. The athletic facilities include the following:

> The stadium field (used for football, soccer, and lacrosse) is encircled with a surface 400m, six-lane track. Stadium bleachers include a heated press box and PA system. The stadium is lit for night events

 Behind/underneath the stadium is a concession stand, with electricity and gas appliances; restrooms; team rooms; a storage room and a grounds storage room

> The secondary field (used for soccer and lacrosse) is located behind the stadium

Softball and field hockey fields are located next to the stadium area

 A practice field includes throwing areas for track and field (discus, javelin, and shot put) > The baseball field is located on the opposite side of the school campus, with fully enclosed dugouts. The outfield is used as an additional soccer field in the fall season

> Tennis courts (5) are located next to the baseball field

 The gymnasium has seating of approximately 1000-1200, with six basketball hoops

- > The wrestling room is used for wrestling and small exercise activities
- > The wellness center includes weights and cardiovascular equipment

District enrollment has declined since an enrollment of 2,389 students in 2010, to the current enrollment of 2,120 students.⁶ In addition, the local real estate market has escalated over the past four years, with an increase in the cost of homes across both communities. The District intends to monitor how this increase in home costs impacts the ability of younger families with children to purchase homes in both Eliot and South Berwick. Several land use and housing recommendations in this plan have the potential to promote more attainable workforce housing for both families with school-age children and for school faculty and staff.

One of the biggest changes to MSAD 35 operations in the last 10 years was the agreement with the town of Rollinsford to educate their students from grades 7 through high school. The original contract was signed in December of 2013 and the students began to attend in the fall of 2015. Rollinsford is billed monthly on a per student basis and additionally for Special Education Services.

Several challenges present themselves when looking at the future of MSAD 35 schools. Three of those challenges are:

 Navigating the transition back from the COVID-19 pandemic and addressing the learning needs of all students

> Finding and retaining professional staff. There are several areas in which the District is struggling with staffing that can potentially impact the learning experience of students. Most notable is the hiring of bus drivers and educational technicians to work with Special Needs students

PUBLIC FACILITIES & SERVICES

TABLE **14.X**

MSAD 35 SCHOOLS Current Enrollment 10-Year Average Current School Grades Capacity Enrollment % of Capacity Enrollment Eliot Elementary PreK-3 550 287 52% 313 Central PreK-3 550 371 67% 388 Marshwood 4-5 750 300 40% 304 Great Works Marshwood MS 6-8 825 473 57% 523 9-12 757 Marshwood HS 1100 685 62%

Table ____ MSAD 35 schools, grades served, capacity, and enrollment. Sources: MSAD 35 and Maine Department of Education, 2022, via SMPDC. Current enrollment figure (2024-25) at EES is directly from school staff.



> Balancing the needs of students, the impact of taxes on the community, and the current rate of inflation. For example, the District was recently notified the rate they are paying for electricity has increased from \$0.06 cents per kilowatt hour to \$0.16 cents per kilowatt hour. This is an increase of \$100,000 to the District budget for the second half of the fiscal year for electricity alone. This same theme carries across many other cost centers including the cost of propane, diesel fuel, and potentially health insurance⁷

WATER SERVICE TO MARSHWOOD MIDDLE SCHOOL

As discussed in the municipal water service section below, this plan recommends the continued extension of water and sewer service up Route 236 from Julie Ln. to Marshwood Middle School within the plan horizon. The school now relies on its own well water and must therefore manage its own water supply. The District has tested for lead in all potable water and is 100% compliant with lead standards. It has installed a PFAS system at the Middle School and is 100% compliant with PFAS standards.⁸

SEWER SERVICE TO ELIOT ELEMENTARY SCHOOL

This plan also recommends extending public sewer service into the Village within the plan's horizon, which would serve the Elementary School, Town Hall complex, residents, and businesses. The District anticipates a review of the school's leach field in FY28-29.⁹

While extending sewer would be a sizable capital expenditure for which the Town would have to piece together funding and financing, the extension would help avoid future costs for the Town, EES, and other new sewer users related to septic system monitoring and maintenance. Former leach field land could be devoted to other uses or vegetation other than grass.

BUSINESS INTERVIEW FEEDBACK

What challenges do you face running the business? Your ideas about what the community could implement to address those challenges?

"These properties have all paid into the [TIF] and don't have the benefit of access to the sewer...No water line keeps [my insurance] rates high." - owner of a Route 236 business



Eliot has been served by William Fogg Library since 1907

William Fogg Library

Eliot is served by William Fogg Library at 116 Old Rd. The building, designed by architect C. Howard Walker and dedicated in 1907, is on the National Register of Historic Places. The Library property was the homestead of William Fogg, a long-tenured postmaster in Eliot in the first half of the 19th century. His son, Dr. John S. H. Fogg, donated the land in his father's memory for the Library's construction.¹⁰

The Library is a trust that is governed by a Board of Trustees. New trustees are nominated by the existing trustees and approved by the Probate Court. The Library is not part of the municipal government, but it receives an annual grant from the Town of Eliot to help fund its operations. In connection with this, the Budget Committee, Select Board, and some members of the community have in recent years advocated for greater Town representation on the Board of Trustees, e.g. at least one trustee that is elected by Eliot voters.

The Library has multiple collection rooms and a children's reading room. The trustees have entertained an expansion plan in recent years; however, it is unclear when that plan would be finalized, funded, and implemented. As of this writing, the Library's capital improvement focus is on landscaping around the building.

A GATEWAY TO ELIOT VILLAGE

The Library and the Grange Hall sit at what could be considered a gateway into Eliot Village. The Town has been exploring extensions of active transportation facilities in this area (see Transportation for further discussion), including a sidewalk to the Grange Hall and improved crosswalks, and ways to calm traffic speeds on State Rd. as motorists enter this gateway from the State Rd. straightaway, with its 40 mph speed limit. Ideas have been suggested for the future of the Grange Hall, which is owned by the Eliot Grange, which is one of four local Granges in York County. These ideas have centered on preserving the building while making needed structure upgrades and site landscaping enhancements. Some have proposed it as a future community center. The Grange Hall hosts some events, and it is next to the Douglas Memorial Woods conservation area trailhead. The future of this area as a Village gateway and community gathering place depend in part on the exact direction and successful implementation of these ideas and other efforts. (See Recreation and Open Space for further discussion.)

Municipal Water Service

Kittery Water District (KWD) is a quasi-municipal corporation that provides public water to over 5,500 customers in Kittery, parts of Eliot and York, and the Portsmouth Naval Shipyard (PSNY). It is governed by a Board of Trustees. PSNY is KWD's largest customer by far and a significant source of user fee revenue (Figure _).¹¹

In Eliot, KWD's service area (Figure __) includes South Eliot, Beech and Bolt Hill Rds. up to Route 236, Route 236 between those roads, and the southernmost part

of River Rd. The Town's Route 236 Water and Sewer Expansion Project (2023-25) extended a water main northwest along Route 236 to Julie Ln.

Public water systems are important for fire protection. As of 2023, KWD's distribution system served 475 fire hydrants.¹² KWD continues to pursue upgrades to old fire hydrants to meet current standards.¹³ The Town's Route 236 project added new hydrants up Route 236.

KWD has been supplying water since 1907, when it was incorporated by the state legislature and took over ownership and operations of waterworks facilities built in 1901 to serve the Shipyard. As noted in KWD's 2020 Master Plan:¹⁴

KWD has four primary sources of supply...Boulter Pond, Folly Pond, Middle Pond and Bell Marsh Reservoir, all located in the Town of York. The District has protected over 5,000 acres of land in the watershed to protect this valuable resource.

The protected acreage surrounding KWD's reservoirs is an enormous benefit for drinking water quality, not to mention many other environmental benefits. Much of this land has never been developed. KWD restricts

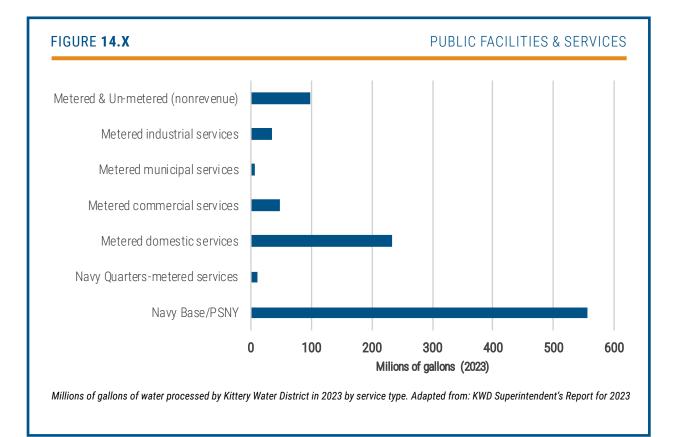
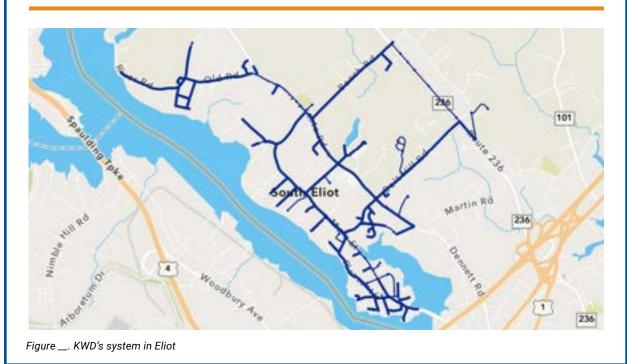


FIGURE 14.X

PUBLIC FACILITIES & SERVICES



activities on the acreage it owns. As KWD notes in its Annual Drinking Water Quality Report for 2023 (2023 WQ Report):

Our source water protection program prohibits all but passive recreation around the reservoirs. Frequent watershed protection patrols assure compliance with our watershed protection policies.

Other acreage in the watershed is part of a cluster of permanently conserved land (e.g. by land trusts) in the Mount Agamenticus to the Sea (MtA2C) conservation region.

The 2020 Master Plan also describes KWD's treatment plant:

The Francis L. Hatch Water Treatment Plant (WTP) was designed and constructed between 1959 and 1960 to treat water from all of the surface water supplies. The WTP is located near the outlet of Boulter Pond in the Town of York. Portions of the plant have been updated and modernized over the years including new chemical feed systems, pumps, controls emergency power and other ancillary systems. In 2019, the District initiated a major upgrade project to replace and modernize primary treatment processes in the facility.

Review of Potential Issues and Concerns WATER SUPPLY

Water supply shortages are not a pressing concern for the near future. The 2020 Master Plan found that KWD "has an abundant supply, which far exceeds the needs of the District's customers". That is based on a safe yield estimate of 5.6 millions of gallons per day (MGD), well above today's demand, which hovers below 3.0 MGD, and projected near-term demand of 3.3 MGD. The plan defines safe yield as "the maximum amount of withdrawal that can occur continuously from a reservoir system during a drought of record". In a normal precipitation year, available yield is 8.0 MGD. The safe yield analysis accounted for contingencies like even worse drought influenced by climate change, an out-ofservice pump, and a mutual aid emergency supply to York Water District (YWD).

Interconnects between KWD, York Water District, and other Southern Maine systems help increase water supply resilience. KWD has an interconnect on Route 1 at the York-Kittery line. A planned 16" main under the Maine Turnpike, including a pump station, will give KWD and YWD a second, larger interconnect and make the two systems even more resilient.

WATER QUALITY

As noted in its Annual Drinking Water Quality Report for 2023: "During 2023, drinking water produced by the Kittery Water District (KWD), either met or exceeded all federal and state health safety requirements".

The report also noted that, in 2022, 18 forms of per- and polyfluoroalkyl substances (PFAS) were tested for and all were non-detects.¹⁵ An October 2024 test of 29 PFAS compounds continued to find that all were below limits (<0.001 micrograms/liter [µg/L] / parts per billion [ppb]). The same test found that the lithium level in the sample was below the limit (<4.50 µg/L).¹⁶ KWD notes that they test the maximum PFAS compounds possible at the smallest detection levels possible.¹⁷

KWD has tested its four water source ponds and watershed for the following potentially harmful pathogens and contaminants, with none being detected:

- > Cryptosporidium
- > Giardia
- > E. coli
- Other microbial contaminants, such as viruses and bacteria
- > Inorganic contaminants, such as salts and metals
- > Pesticides and herbicides
- > Radioactive contaminants
- > Organic chemical contaminants18

KWD points to the large amount of undeveloped conservation land around its reservoirs as a key factor in its excellent water quality. Some other Southern Maine systems that rely on subsurface water and-or are near developed land have had water quality issues.¹⁹

LEAD PIPES

Replacing lead water service pipes has seen an increased focus nationally in recent years. The federal Bipartisan Infrastructure Law (2021) included \$15 billion for lead pipe replacement nationwide. Federal rulemaking issued in 2024 requires drinking water systems to replace lead service lines within 10 years. KWD's 2023 report showed miniscule lead in its samples of 32 sites: <0.001 ppb when the Maximum Contaminant Level (MCL) – the highest level allowed in drinking water – for lead is 15 ppb.²⁰

The U.S. Environmental Protection Agency (EPA) required public water service providers, by October 16, 2024, to inventory the materials that their water service lines (both the public portion leading from the street and the private portion on the customer's property) are made of. The key is to find lead or galvanized pipes that should be replaced. In its initial inventory, including updates through November 15, 2024, KWD found no service lines with any portions known to be made of lead. Less than 2% of service lines (121 of 6,423) were galvanized requiring replacement (GRR). A GRR line "is not made of lead, but a portion is galvanized and the system is unable to demonstrate that the galvanized line was never downstream of a lead service line".²¹

WATER MAINS AND SERVICE LINES

Each year, KWD makes upgrades to its distribution system, replacing aging infrastructure and increasing fire protection capabilities. Other entities also make water line upgrades and extensions in projects that they lead, with KWD coordination and review, such as the Town's Route 236 Water and Sewer Extension.

SYSTEM EXPANSION

KWD has no District-led system expansion plans in Eliot in the near term, but they support an extension of water service up Route 236 to Marshwood Middle School, which is recommended in this plan. (Like the extension to Julie Ln., future extensions are expected to be Town-led with coordination from utilities.) Building water lines north of the Middle School is seen as a very-long-term possibility, well beyond the horizon of this plan.

KWD continues to expand water service in its service area in a moderate, thoughtful, cost-effective, productive manner, and they continue to upgrade existing infrastructure to maintain its security and value. KWD takes a steady and methodical approach to system upgrades and expansions.²²

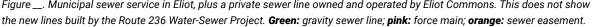
Municipal Sewer System

Eliot and Kittery share a sewer system. PSNY is also a customer in the system. Sewer service in Eliot is primarily limited to the following areas:

- South Eliot generally southeast of the Village center (Town Hall, Fire Station, Police Station, Eliot Elementary), which is not served by sewer
- > Route 236 and vicinity, Bolt Hill Rd. to Julie Ln.
- new municipal sewer lines constructed 2024-25;
 the private Eliot Commons sewer line serves the
 Commons and certain other customers

Sewage is treated at the Kittery Wastewater Treatment Plant (WWTP) at 18 Dennett Road. The Town of Eliot,





at the direction of the Sewer Superintendent, manages the actual sewer lines within Eliot. Regulations related to sewer service are covered in Ch. 18 of the Town Code. Sewer connection policies and fees are discussed further in Fiscal Capacity and Capital Investment.

The two towns coordinate on management and operations of our shared sewer system, a partnership that is enshrined in an Inter-Municipal Agreement (IMA). In 2021, in anticipation of the Route 236 project bringing future customers into the system, Town of Eliot staff began formal discussions with the Town of Kittery about increasing our reserve capacity at WWTP. The IMA was updated to increase the reserve capacity by 200,000 gpd, to a total of 400,000 gpd. The Route 236 Water-Sewer Project engineering consultant had estimated in 2020 that the existing annual average sewer flow from Eliot was 120,000 gpd, with another 26,300 gpd in "unrealized allocations" – related to approved projects that had not yet been built or generated wastewater. Assuming current use of between 125,000 and 150,000 gpd, the Town would have 250,000 to 275,000 in remaining reserve capacity, though the IMA also includes peak daily and one-hour limits.

As with the water line extension, this plan recommends extending the sewer line to the middle school, a priority expressed by several stakeholders and business representatives in interviews.

TABLE 14.XPUBLIC FACILITIES & SERVICES

PRIVATE WASTEWATER DISPOSAL TOWN CODE				
Section/ Subsection	Summary of Regulation			
21-2	Requires a soils test by a licensed site evaluator for all permitting applications involving a new or modified septic system. Plumbing inspector/CEO shall review and approve the test results before issuing the permit			
18-23(a)	Requirements for properly cleaning, replacing, and removing a private system when abandoning that system for a new public sewer connection			
18-23(b)	Requirement to have a building served by a private system when a public sewer connection is not available or feasible			
41-150(15); 41-217(d)	Requirements for subdivision plans to show proposed private system locations (if applicable) and associated soil suitability and test results			
41-218	Allows a subdivision application to propose either individual home private systems or a central system. Prohibits septic system location on soils rated poor or very poor			
44-35(k)	In the shoreland zone, requires all subsurface sewage disposal systems to meet state rules; establishes 75 ft. water body setback for clearing of vegetation to make room for a new system; notes state rules requiring 100 ft. water body setback for new systems; prohibits holding tanks for first-time residential uses			
45-216	Requires all subsurface sewage disposal facilities to be installed according to the state pluming code; requires minimum 1,000 sq. ft. area of suitable soil for location of systems; requires 100 ft. water body setback for new systems; requires that new/ replacement systems that handle >2,000 gal/day be engineered systems reviewed by third-party consultant and State DHHS			

Summary of selected private subsurface wastewater disposal system regulations in the Town Code

BUSINESS INTERVIEW FEEDBACK

What can the Town of Eliot do to promote economic development and business opportunities? "Sewer to the Middle School" - owner of a Route 236 business



Subsurface Wastewater Disposal

The vast majority of Eliot is outside of the municipal sewer service area. While Route 236 sewer line extensions will allow many commercial properties to transition away from septic systems, most residential properties will continue to rely on septic systems.

Local septic disposal businesses routinely pump septic tanks and service septic systems, ensuring that they are working properly and do not leak, overflow, or otherwise malfunction, with the potential to negatively impact the surrounding environment. Waste from pumped septic tanks is taken to area wastewater treatment plants (e.g. Kittery, South Berwick, Berwick) for disposal and proper treatment.²³

The engineered system requirement in Section 45-416 was added by LD 2003-related ordinance amendments crafted by the Planning Board and approved by voters in November 2023. Another area of focus for the Planning Board is whether to establish local standards, stricter than those in the state's Subsurface Wastewater Disposal Rule, for minimum depth to groundwater table, hydraulically restrictive horizon, or bedrock for soils on which a septic disposal field is to be located. The state standards are 9" depth outside of the shoreland zone and 15" depth in the shoreland zone, with some exceptions.²⁴ See Water Resources for more information.

Transfer Station and Recycling Center

The Transfer Station and Recycling Center are located at 468 Harold L. Dow Hwy., adjacent to Public Works.

SERVICES

Recycling:

- > Paper
- > Cardboard
- > Cartons
- > Glass
- > Plastic
- > Cans
- > Cat litter

Reuse and Donations:

- Clothing
- > Books
- > Swap shop
- > Salvation Army pick-up bin

Composting:

- > Food waste
- > Free composting bags

Waste Disposal:

- > Household non-recyclable waste
- > Bulky waste and demo debris
- > Real wood
- > Brush only
- > Universal waste (electronics)
- > Yard waste
- > Wood stove ash
- > Used motor oil
- > Shingles
- > Automotive and rechargeable battery
- > Purchase of pay-to-throw bags
- Household hazardous waste collection events (twice a year)
- > Worn American flag disposal (Eagle Scout and VFW project – disposed flags are given proper retirement ceremony)
- > Tire disposal

Pickup:

> Salt & sand

WORKFORCE

> Staff: 6 (part-time)

EQUIPMENT

- > 4 bailers
- > 1 glass crusher

OPERATING BUDGET

The Transfer Station operating budget, expenses, and revenues are in Table __. The increase in revenues from FY21 to FY22 was because the Town began recording pay-per-bag revenue with the Transfer Station after it had been incorrectly recorded elsewhere.

Revenues include pay-per-bag fees and proceeds from the sale of recycled items. The Town recently switched from a cash box to a credit/debit-card-only payment for disposal fees.

SOLID WASTE MANAGEMENT NEEDS

The Transfer Station has long provided municipal solid waste (MSW) disposal and recycling options to the community. Community members drop off waste and sorted recyclables. The Town contracts with private

TABLE 14.XPUBLIC FACILITIES & SERVICES

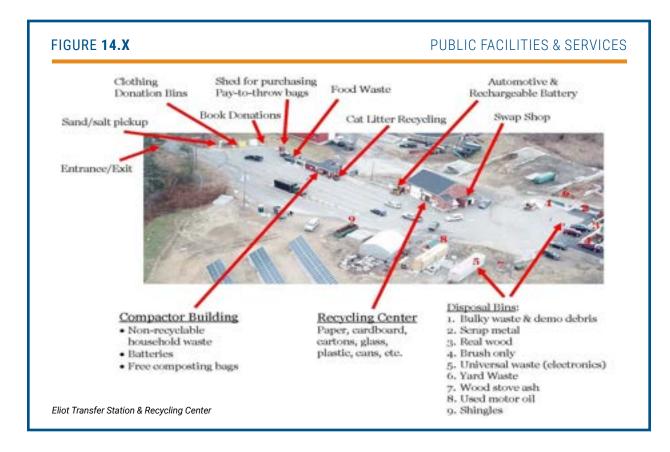
TRANSFER STATION OPERATING BUDGET

Fiscal Year	Operating Budget	Actual Expenses	Revenues
2020	\$252,296.00	\$238,651.55	\$98,234.65
2021	\$265,853.00	\$236,335.93	\$99,432.91
2022	\$278,108.00	\$253,898.12	\$241,381.50
2023	\$269,568.00	\$299,060.72	\$147,321.14
2024	\$293,112.00	\$297,225.48	\$190,467.77

Transfer Station operating budget, actual expenses, and revenues, FY20-24. Source: Eliot Finance Department

MUNICIPAL SOLID WASTE DISPOSAL COSTS					
Fiscal Year Operating Budg					
2020	\$32,513.79				
2021	\$30,147.58				
2022	\$29,499.99				
2023	\$32,243.48				
2024	\$50,020.47				

MSW disposal costs in Eliot, FY20 to FY24



haulers to bring it to disposal facilities and materials recycling facilities (MRFs). As of this writing, the Town sends MSW to EcoMaine and recycling to one of three MRFs: Clynk, Casella, and Berwick Iron. Other community members choose to use one of several private residential waste collection companies operating in the Eliot area.

Issues and potential needs for solid waste and recycling in Eliot include:

> Municipal solid waste disposal costs. Costs rose significantly from about \$30,000 in FY20-22 to about \$50,000 in FY24 (Table _).

> Volatility of costs and return on recycled materials as some materials' demand can change quickly and substantially. Demand influences the price the recycled materials can be sold for, and the sale price helps offset the cost of recycling.

> Whether to stay with sorted recyclables or go to single-stream. This was discussed in 2024 by the Town Manager, Select Board, and a resident who served on the former Solid Waste and Recycling Committee. Staff toured EcoMaine to explore their recycling services and met with their Chief Financial Officer. EcoMaine felt that the Town could save 25 to 30% on costs, but the downsides of single-stream were also discussed at Select Board meetings.²⁵ As of this writing, the Town is continuing with the current sorted recyclables approach.

Data on the amount of trash disposed and materials recycled is in the <u>Appendix</u>.

IMPROVEMENT NEEDS

If the Town ultimately switches to single-stream, there will be some rearranging of equipment, but the process will also be simpler in some ways because there will essentially be only one container where residents throw their recyclables.

Some municipalities seek to combine MSW services in a regional transfer station. The Town has not decided to go this direction, but if disposal costs continue to increase substantially, it could be an option that is explored further during this plan's horizon. If the Town looks further at this option, important process elements include buy-in from the community, participation from at least one other neighboring municipality, careful study of pros and cons/ costs and benefits, assessment of possible locations and their impacts, and other considerations.

Stormwater Management

Stormwater management, including the Town's MS4 program, is covered in *Water Resources*.

Power and Communications

Central Maine Power (CMP) provides electrical service in Eliot. CMP maintains a substation on Bolt Hill Rd. and a small substation off Beech Rd. The wide utility corridor cutting across the town, mostly in parallel with Route 236, is owned by Eversource (PSNH).

In recent years, electrical capacity issues have emerged, particularly for businesses on Route 236. As of this writing, CMP is beginning the process to build a new, larger substation across Bolt Hill Road from their current substation. This new substation is proposed to improve capacity, resilience, and reliability for PNSY, Eliot, and Kittery.

Internet and Broadband

Internet and broadband are discussed in Economy.

Focusing Infrastructure Investments on Growth Areas

This topic is discussed further in the *Future Land Use Plan and Land Use Goals, Policies, and Strategies*.

Street Tree Program

Most roads in Eliot are two-lane roads without a sidewalk or "planting zone" – the buffer strip between the sidewalk and the street where there are trees that are typically maintained as part of a street tree program.

While the Town therefore does not have a street tree program in that sense, like any municipality, the Town does maintain trees on public property. Sometimes, abutters or other community members have questions or requests regarding trees within or adjacent to Town rights-of-way (ROWs) and what the Town's responsibilities may be with respect to them. In response to some of these questions, the Town Manager sought a legal opinion from Maine Municipal Association (MMA) and included the following in his May 2, 2024, report to the Select Board:

"The question has come up a few times around trees in the ROW and whose responsibility it is to maintain or remove the tree.

Below is a response from Maine Municipal Association Legal Department (they also are our insurance carrier).

The municipality may at its expense remove healthy or dead trees located within the right of way if they pose a safety hazard to the traveling public or impede the municipality's ability to maintain the road. If a tree is located in the right of way but is not (in the determination of the municipal officers or road commissioner) a safety hazard, then the municipality is under no duty to remove it, even if the abutter requests removal. If the reason for removing the tree is to protect an abutter's house or property, rather than the traveling public, then the abutter should pay the costs of removal. Trees located outside the road right of way should not be removed by the municipality without the landowner's permission. The municipality may cut any limbs in the air or roots on the ground that intrude into the right of way, even if the trunk of the tree is outside the right of way.

The policy of the Town of Eliot is we do not, should not, cannot do work on private property, this includes the ROW, with the exception in the ROW when it "poses a safety hazard to the traveling public". I would respectfully suggest that if a town was responsible for removing any and all [trees] in all ROWs the effect on the budget would be astronomical, therefore impacting property taxes for even people on private roads. Thank you to all those who maintain their ROW with safety of the "traveling public" in mind."²⁶

Cemeteries

Cemeteries and graveyards are addressed further in *Historic and Archaeological Resources*.



The Town does maintain trees on public property.

ELIOT PUBLIC FACILITIES & SERVICES GOAL, POLICIES & STRATEGIES

Goal, Policy, or Strategy	Description	Responsibility or Partnership	Implementation Timing
Goal 1	Plan for, finance, and develop an efficient system of publi accommodate anticipated growth and economic developm		D
Policy 1	Efficiently meet identified public facility and service needs		
Strategy 1	Complete the Town Hall Renovation and Expansion Project	Town Manager, Consultant, Contractor	2025
Strategy 2	Explore options for upgrades related to clean energy, energy efficiency, and resilience for public facilities and Town-owned or -managed infrastructure	Town Manager, Planning Office, Select Board, Capital Improvements Committee	Ongoing
Strategy 3	Explore options for regional delivery of local services	Town Manager, Planning Office, Select Board	Ongoing
Cross- reference	See the Recreation and Open Space Goals, Policies, and Strategies regarding proposed new construction or upgrades of parks, recreational facilities, and civic amenities		
Policy 2	Provide public facilities and services in a manner that promotes and development in identified growth areas	and supports growth	1
Strategy 1	Identify any capital improvements needed to maintain or upgrade public services to accommodate the community's anticipated growth and changing demographics	Town Manager, Public Works, Select Board, Capital Improvement Plan Committee	Ongoing
Cross- reference	See Land Use Goal 1, Policy 2 and Economy Goal 1, Policy 2 regarding water and sewer service extensions serving growth areas designated by the Future Land Use Plan		
Cross- reference	See Land Use Goal 1, Policy 2, Strategy 1 regarding a minimum of 75% of new municipal growth-related capital investments into, or serving, designated growth areas		

PUBLIC FACILITIES & SERVICES ENDNOTES

¹ For example, see: Morang, Ralph. "Cramped times in Eliot's Town Hall". Foster's Daily Democrat. March 4, 2020. <u>www.fosters.com/story/news/2020/03/04/cramped-times-in-eliots-town-hall/1586492007/</u>

² Sources for this section include the Eliot Police Department webpage: <u>www.eliotmaine.org/201/Police and the 2023 Annual Town Report: www.eliotmaine.org/444/Annual-Town-Reports</u>

³ Available via: <u>southberwickmaine.org/government/adopted_active_documents.php</u>

⁴ Text adapted from the Eliot Fire Department web page: <u>www.eliotmaine.org/213/About-Us</u>; info on first fire station from Elliott, Margaret A. for the Eliot Historical Society (2005). Images of America: Eliot. Charleston, SC: Arcadia Publishing.

⁵ Text adapted from the Eliot Fire Department and Kittery Police Department web pages:

www.eliotmaine.org/213/About-Us and www.kitteryme.gov/police/pages/about-kittery-police-department.

⁶ This number differs slightly from the sum of the individual school enrollments in the associated table. An enrollment of 2,120 was cited in the Superintendent's 2024-25 Budget Presentation (see link below). The sum from the table is 2,116, and enrollment in the South Berwick Comprehensive Plan (2024), from which this section is adapted, is reported as 2,140. This plan's table has an EES enrollment figure (287) provided directly by school staff in December 2024.

⁷ This section is adapted from text in the South Berwick Comprehensive Plan (2024), as the two communities share the same school district and same schools, except for elementary schools. Some of that text is likely adapted from the Superintendent's 2024-25 Budget Presentation, available via: <u>www.rsu35.org/page/board-presentations</u>

⁸ Superintendent's 2024-25 Budget Presentation

⁹ Superintendent's 2024-25 Budget Presentation

¹⁰ Elliott, Margaret A. (2005). Images of America: Eliot.

¹¹ Kittery Water District. Superintendent's Report for 2023.

kitterywater.org/v2/wp-content/uploads/2024/06/2023-Superintendent-Report.pdf

¹² Kittery Water District. Annual Drinking Water Quality Report for 2023. <u>kitterywater.org/v2/wp-content/uploads/2024/06/CCR-2023.pdf</u>

¹³ Phone interview with Carl Palm, KWD Superintendent, December 13, 2024

¹⁴ Kittery Water District. 2020 Master Plan.

drive.google.com/file/d/1YoseoxE3stziXTRtKeLIG2v8HFgD9dGI/view (Google Drive doc)

¹⁵ Annual Drinking Water Quality Report for 2023

¹⁶ Test results from Microbac Laboratories, Inc. (Marietta, OH) from sample collected 10/15/2024

(Lab Sample ID M4|1385-01), forwarded by KWD

- ¹⁷ Phone interview with Carl Palm, KWD Superintendent, December 13, 2024
- ¹⁸ KWD. Annual Drinking Water Quality Report for 2023
- ¹⁹ Phone interview with Carl Palm, KWD Superintendent, December 13, 2024

²⁰ See reference above

²¹ KWD. Drinking Water Notice – LSLI (Lead Service Line Inventory). November 14, 2024. <u>kitterywater.org/drinking-water-notice-Isli-lead-service-line-inventory/</u>

²² Phone interview with Carl Palm, KWD Superintendent, December 13, 2024

²³ Based on phone interviews with two local septic service businesses, December 19, 2024.

²⁴ 10-144 CMR Ch. 241(5)(A)(3), available via: www1.maine.gov/dhhs/about/rulemaking

²⁵ See various 2024 Select Board materials and minutes, e.g. March 14, 2024.

²⁶ Town Manager's Report to the Select Board. May 2, 2024.

eliotmaine.org/DocumentCenter/View/1583/May-2-2024-Town-Manager-Report-PDF

FISCAL CAPACITY & CAPITAL INVESTMENT

The Town should strive for a stable tax rate, provide essential services to the citizens of Eliot, and make prudent capital investments to sustain and grow community quality of life.

Fiscal Conditions

THE TOWN'S FINANCIAL HEALTH: AN OVERVIEW

The Town of Eliot enters 2025 in excellent financial health. In 2024, Standard & Poor's (S&P) Global Ratings assigned its highest short-term borrowing rating, SP-1+, for \$4 million in general obligation bond anticipation notes for the Town Hall Renovation Project. S&P's Global Ratings report found that "Eliot maintains a very strong capacity to pay principal and interest....The rating reflects the town's stable local economy...and a history of surplus operations in recent fiscal years that have allowed Eliot to build its reserves above 30% of expenditures as of fiscal year 2023."

The S&P report also speaks to the Town's capacity for future debt, as the "maintenance of surplus operations as conservative revenue estimates outperform budgeted levels [is] allowing for the continued maintenance of very strong budgetary flexibility and liquidity...."

Property Valuation and Tax

Eliot's ability to raise tax revenue is dependent largely on its tax base or valuation. Eliot's valuation increased from approximately \$937 million in 2014 to approximately \$1,506 million in 2024. This is a nominal increase of about 61% over ten years. Adjusting for inflation, it is about a 21% increase.²

Over the last five years (2020-24), Eliot's valuation has increased considerably – by nearly half of the 2020 valuation in nominal dollars (Table _).

Total municipal valuation is made up of several factors – land valuation, building valuation, and personal property valuation – which vary slightly for each community. Eliot has one of the highest percentages of total valuation attributed to its building values at 60%, only lower than Berwick and North Berwick. Relatedly, Eliot has one of the lowest percentages of total valuation attributed to land, at 39%.

ELIOT FISCAL CAPACITY & CAPITAL INVESTMENT **GOAL**



An efficient system of public facilities and services to accommodate anticipated growth and economic development

See the end of this section for the full table of goals, policies, and strategies.

TABLE **15.X**

FISCAL CAPACITY & CAPITAL INVESTMENT

VALUATIONS AND MIL RATES					
Year	Eliot Valuation (rounded)				
2020	\$1,019,433,167	\$1,034,950,000	14.7		
2021	\$1,159,787,800	\$1,069,200,000	13.5		
2022	\$1,332,511,722	\$1,100,900,000	12.1		
2023	\$1,388,167,057	\$1,258,450,000	12.3		
2024	\$1,505,805,175	\$1,305,750,000	11.9		

Table ___. Local and state valuations and mil rates, 2020-2024. Source: Town of Eliot Assessor. The local valuation totals include homestead exemption and Business Equipment Tax Exemption (BETE) reimbursement values



FISCAL CAPACITY & CAPITAL INVESTMENT

2023 TAXABLE VALUATION BY TYPE					
Location	Total Taxable Municipal Valuation	Taxable Land Valuation	Taxable Building Valuation	Taxable Personal Property	
Eliot	\$1,339,853,007	\$526,446,800	\$803,779,400	\$9,626,807	
South Berwick	\$1,120,546,000	\$456,233,300	\$657,871,500	\$6,441,200	
Berwick	\$765,449,984	\$276,309,600	\$483,827,350	\$5,313,034	
Kittery	\$2,164,486,335	\$941,016,213	\$1,187,211,822	\$36,258,300	
North Berwick	\$838,997,200	\$268,998,400	\$519,725,700	\$50,273,100	
Wells	\$6,454,168,901	\$3,266,861,069	\$3,161,300,660	\$26,007,172	
York	\$6,974,868,042	\$3,232,798,200	\$3,715,514,700	\$26,555,142	
York County	\$50,987,024,114	\$22,414,720,988	\$27,927,234,024	\$645,069,102	

Table __. Taxable valuation by type, 2023, for Eliot, nearby communities, and York County. Source: Maine Revenue Service³. The totals exclude homestead exemption and Business Equipment Tax Exemption (BETE) reimbursement values

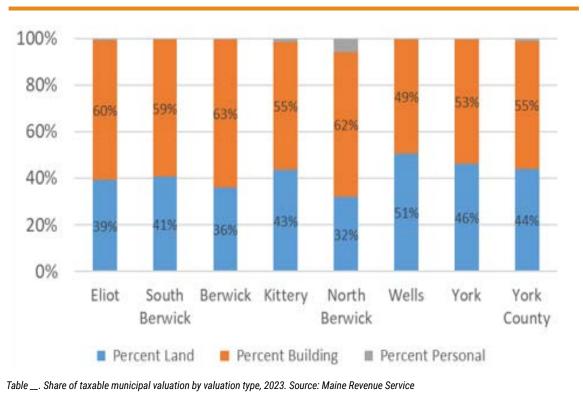


FIGURE 15.X

FISCAL CAPACITY & CAPITAL INVESTMENT

TABLE **15.X**

FISCAL CAPACITY & CAPITAL INVESTMENT

BUDGET REVENUES					
Fiscal Year	Governmental Activities	Business-type Activities	Total Revenues	Change from FY 2019	
2019	\$17,550,161	\$602,836	\$18,152,997		
2020	\$17,693,138	\$592,581	\$18,285,719	0.7%	
2021	\$18,248,391	\$622,341	\$18,870,732	4.0%	
2022	\$19,742,369	\$586,537	\$20,328,906	12.0%	
2023	\$20,137,785	\$501,699	\$20,639,484	13.7%	
2024	\$21,854,486	\$523,127	\$22,377,613	23.3%	

Table ____. Budget revenues, FY 2019-24. Applying an inflation rate of 22.7% between CY 2019 and CY 2024 (via the US Inflation Calculator website), FY 2019 revenues equal \$22,273,727 in FY 2024 dollars. Nominal FY 2024 revenues are 0.5% higher than that. Source: Annual audit reports

REVENUES FROM CHARGES FOR SERVICES					
Fiscal Year	GovernmentalBusiness-typeTotal ChargesActivitiesActivitiesfor Services				
2019	\$651,511	\$602,836	\$1,254,347		
2020	\$512,760	\$592,581	\$1,105,341	-11.9%	
2021	\$628,500	\$617,648	\$1,246,148	-0.7%	
2022	\$830,472	\$576,735	\$1,407,207	12.2%	
2023	\$767,179	\$498,138	\$1,265,317	0.9%	
2024	\$1,024,179	\$521,209	\$1,545,388	23.2%	

Table ____. Revenues from charges for services, FY 2019 to FY 2024. FY 2024 nominal revenues increased significantly from FY 2023 and were 23% above FY 2019 revenues, but applying an inflation rate of 22.7% between CY 2019 and CY 2024 (via the US Inflation Calculator website), real FY 2024 revenues were only 0.4% above FY 2019 revenues.

Current and Future Revenue Trends

The town collects revenues from several sources outside of property taxes. From FY 2019 to FY 2024, the town's overall revenues increased 23.3%. After adjusting for inflation, revenues stayed nearly flat (a 0.5% increase).⁴

In FY 2024, the largest revenue source besides property taxes was excise taxes, which was slightly higher than grants and other external contributions not restricted to specific programs (i.e. intergovernmental revenue). Excise taxes brought in almost \$1.7 million and grants/other external contributions brought in just over \$1.6 million.

From FY 2019 to FY 2024, grants and other unrestricted external contributions nearly doubled, after adjusting for inflation, experiencing a 137% nominal increase and a 93% real increase. American Rescue Plan Act (ARPA) funds were a major source of intergovernmental revenue, with the Town of Eliot receiving about \$740,000 in funding, which has been applied to Fire Department equipment and facility upgrades, parks and recreational amenity upgrades, bicycle and pedestrian infrastructure planning and design, a new Town website, and other investments.

The Town charges for services provided to the public and other governmental entities or organizations. Annual audits split these charges into governmental activities and business-type activities (Table ___). Almost all business-type activity revenue comes from charges for services. Examples of charges for governmental activity services include general government, public safety, recreation and culture, health and sanitation, code enforcement, and admin/Town committees.

How the Municipal Sewer System Sustains Itself as an Enterprise Fund

Business-type activity charges for services are for the Town's sewer fund. The sewer fund is a proprietary fund that is intended to operate like a commercial enterprise. As an enterprise fund, its capital and operating costs are recovered by user fees and charges.

Municipal sewer users pay the following to fund system capital and operations⁵:

System development charge: This is a one-time fee applied to new or expanded users to the sewer system. This charge is designed so that new and expanded users pay to access capacity in the system, at an equal status to those already connected to the system who have already contributed to the sewer system assets. This fee is payable at the time a permit for the new or expanded sewer connection is issued.

Fixed charges and fees: These fees include inspection fees, connection application fees, manual meter read fees, disconnect/reconnect fees, engineering/third party review fees, and Master Drain Layer's licensing/annual license renewal fees. These fees are charged only on an as needed basis for certain services, and are designed to closely cover the actual costs of time and effort necessary to complete the work.

> Meter charge-fixed and capital reserve: This is a fixed annual rate, charged quarterly, and is applied to all units regardless of sewer usage amount. This fixed meter charge is designed to provide revenue stability and to help cover fixed expenditures of the sewer system, such as labor, debt service, and capital reserves.

> **Meter charge-consumption:** This is charged at a rate per 100 cubic feet (cf) of water used per customer, as metered by the Kittery Water District (where available). This cost is calculated by multiplying the consumption rate per 100 cf by the number of 100 cf used by each customer. The rate is set so that the sum of the fixed meter charge revenues, other revenues, and the consumption charge revenues will provide enough funds to cover the estimated sewer system budget.

An **access only fee** is a recurring charge on a quarterly basis for users whose property fronts a street or road with public sewer, but do not connect to the sewer. This applies when the property has houses, buildings, or other uses that require wastewater disposal and are located within 250 ft. of the public sewer line.



TABLE **15.X**

FISCAL CAPACITY & CAPITAL INVESTMENT

EXCISE TAX AND MOTOR VEHICLE REGISTRATION REVENUES							
Revenue Source FY 2019 FY 2023 % change % change							
Motor vehicle excise tax	\$1,691,474	\$1,585,300	-6%	-21%			
Boat excise tax	\$14,202	\$14,504	2%	-14%			
All excise taxes	\$1,705,676	\$1,599,804	-6%	-21%			
Motor vehicle registration fees (state)	\$1,203,438	\$1,312,692	9%	-8%			

Table ____ Excise tax and motor vehicle registration revenues, FY 2019 and FY 2023. Note that FY 2023 includes \$402,941 in Rapid Renewal Motor Vehicle Excise Tax which was accounted for separately. Sources: Annual Town Reports, Annual Audits

The Maine Department of Transportation provides funding to assist in the maintenance of roads. The Local Road Assistance Program (LRAP) is discussed further in the Transportation section. As of this writing, the Town receives about \$45,000 annually from LRAP.

We have also received KACTS and MaineDOT capital project funding in recent years:

- > \$304,000 from the Bicycle and Pedestrian Program for design and right-of-way acquisition for the State-Beech Active Transportation and Infrastructure Project
- \$7,500 from the Village Partnership Initiative (VPI) for a planning and feasibility study of bicycle and pedestrian improvements on Moses Gerrish Farmer Rd. and Main St.

> \$320,000 from KACTS for the design phases of two MaineDOT projects to improve the intersections of Route 236-Route 101 (Goodwin/ Dover Rds.) and Route 236-Route 103 (State Rd.). MaineDOT and the Town are each contributing 10% matches of \$40,000

The town receives excise taxes on motor vehicles and boats. Excise tax revenues dipped slightly (-6%) between FY 2019 and FY 2023, though the decrease is significantly larger when adjusting for inflation (-21%). Excise taxes accounted for about 8% percent of total government activity revenues in FY2023. The town maintains a healthy unassigned fund balance, which was almost \$6.2 million in FY 2024. As noted in the FY 2024 annual audit: "The Town has steadily maintained a sufficient unassigned fund balance to sustain government operations for a period of approximately four months, while also maintaining significant reserve accounts for future capital and program needs."

Diversifying the Town's revenue sources through the exploration of additional non-tax revenues has been a priority in the past. The Town may consider what fees for services, licenses, permitting, and other sources that can allow for expansion of service provisions without requiring subsidization through general property tax revenues. For example, in 2025, the Select Board increased various Planning Board application fees. These fees had not changed in many years and were not coming close to recovering the costs of Planning Board reviews (e.g. public hearing notice publishing and certified mailings, staff time).

BUDGET COMMITTEE FEEDBACK

"In reviewing this section, a subcommittee of the Budget Committee recommends that, to maintain fiscal responsibility, the Town should establish a policy that its unassigned fund balance not drop below a certain amount."

FISCAL CAPACITY & CAPITAL INVESTMENT

EDUCATION'S SHARE OF EXPENDITURES					
Fiscal Year	Education expenditures	Total Govt Activity Expenditures	Education % of total		
2019	\$9,822,660	\$15,782,881	62%		
2020	\$10,024,430	\$16,486,292	61%		
2021	\$10,204,534	\$16,145,155	63%		
2022	\$10,518,719	\$17,584,161	60%		
2023	\$10,660,451	\$17,512,148	61%		
2024	\$10,954,227	\$18,048,054	61%		

Table ____ Education expenditures as a portion of total government activity expenditures in Eliot, FY 2019 to FY 2024. Source: Annual Audit Reports

GOVERNMENT ACTIVITY EXPENDITURES						
Expenditure Type	FY 2019	FY 2024	% change	% change (inflation adj)		
General Government	\$1,101,707	\$2,361,611	114%	80%		
Public Safety	\$1,447,194	\$1,618,879	12%	-6%		
Public Works	\$2,101,551	\$1,194,355	-43%	-52%		
Recreation and Culture	\$442,727	\$553,173	25%	5%		
Health and Sanitation	\$7,751	\$391,140	*	*		
Education	\$9,822,660	\$10,954,227	12%	-6%		
County Tax (and overlay)	\$527,762	\$529,715	*	*		
Interest on Long-term Debt	\$14,494	\$70,606	387%	309%		

Table _____. Revenues from charges for services, FY 2019 to FY 2024. FY 2024 nominal revenues increased significantly from FY 2023 and were 23% above FY 2019 revenues, but applying an inflation rate of 22.7% between CY 2019 and CY 2024 (via the US Inflation Calculator website), real FY 2024 revenues were only 0.4% above FY 2019 revenues. *Notes: the changes in public works and health and sanitation appear substantially related to the transfer station operating expenses falling under public Works in the FY 2019 audit and health and sanitation in the FY 2024 audit. The FY 2019 category is labeled "County Tax and Overlay" while the FY 2023 category is simply "County Tax". The totals in this table do not equal the sum of the line items because there are other categories between the two audits that do not match and are excluded from this table.

Current and Future Expenditure Trends

Education remains the single largest expenditure in Eliot, regularly accounting for more than half of the town's total expenses. Eliot's investment in education has consistently hovered between 60 and 63 percent of the Town's total government activity expenditures.

A table showing overall district spending compared to Eliot and South Berwick's annual education costs for FY 2024 and FY 2025 is in the <u>Appendix</u>.

Table __ compares selected expenditures between FY 2019 and FY 2024, adjusted for inflation. Some discrepancies relate to differences in how the audits categorized some expenses. Aside from these, the largest increases were in long-term debt interest payment and general government. Between the two fiscal years, total expenditures nominally increased 14% but decreased 4% when accounting for inflation. Development impact fees help to offset the cost of growth. State law authorizes certain capital costs to be paid for by impact fees. The Town only has a public safety impact fee. Impact fees were recommended in the 2009 Comprehensive Plan and 2010 Open Space Plan, but never implemented. This plan continues to recommend impact fees. In the short term, an impact fee study can explore the pros and cons and budget effects of various impact fees.

BUDGET COMMITTEE FEEDBACK

"In reviewing this section, a subcommittee of the Budget Committee recommends that the Town should establish a policy to place limits on annual property tax levies, similar to the limits prescribed by the now-repealed LD1." Several land use regulations require site plan and subdivision applicants to estimate impacts such as traffic, noise, glare, and visual. Two recent subdivisions (as of this writing) have made recreation and parks payment-in-lieu contributions that go to capital improvements for nearby parks. These payments-inlieu are a condition of the Planning Board waiving a requirement that publicly accessible recreational land be included within the subdivision.

Municipal Debt and Capital Financing

Eliot has a low level of debt when compared to the maximum debt allowed by state law. Towns may borrow up to 7.5% of their total state valuation, which in Eliot's case would be about \$97 million based on the 2022 valuation.

The 2024 audit notes: "At June 30, 2024, the Town had \$6,151,612 in bonds payable, bond premium payable,

BUDGET COMMITTEE FEEDBACK

In reviewing this section, a subcommittee of the Budget Committee recommends that the Town should establish a policy to set a maximum amount of debt we can take on.

"In our view, Eliot maintains a very strong capacity to pay principal and interest when the notes come due. The town has what we view as a low market risk profile because it has strong legal authority to issue long-term debt to take out the notes and is a frequent issuer that regularly provides ongoing disclosure to market participants..." - From the S&P Global Credit Rating Report (May 30, 2024): SP-1+ rating

TABLE **15.X**

FISCAL CAPACITY & CAPITAL INVESTMENT

MUNICIPAL SHORT-TERM DEBT						
Туре	Description	Interest rate (%)	Value	Maturity		
GO note	In anticipation of CWSRF financing for Route 236 Water-Sewer Project	1.0	\$14,100,000	12 mos. from issuance		
Bond anticipation note	Town Hall Expansion Project	5.0	\$4,000,000	6/18/25		

Table ___. Municipal short-term debt. Source: FY2024 Annual Audit. GO: General Obligation; CWSRF:Clean Water State Revolving Loan Fund Program

Туре	Description	Interest rate (%)	Payments	End	End
Governmental Activ	vities				
GO Bond	2019 GO Bond	1.82 to 2.39	\$16,758	2029	\$94,037
Bond premium					\$48,400
Direct borrowing	2022 capital lease for loader	2.99	\$27,957	2025	\$55,774
Direct borrowing	2022 capital lease for fire truck	2.99	\$65,504	2027	\$185,29
Direct borrowing	2022 capital lease for an excavator	2.99	\$15,083	2025	\$28,668
Lease liabilities	Copiers, printers, postage meter		various (\$144- \$722 monthly)	various (2024-27)	\$14,415
Governmental Activ	vities Balance				\$426,585
Туре	Description	Interest rate (%)	Payments	End	End
Business-type Acti	vities	/I	ł		
GO Bond	2019 GO Bond	1.82 to 2.39	\$16,758	2029	\$94,037
GO Bond	2023 GO Bond: \$4,500,000	1.83	\$259,988 to \$284,247	2043	\$4,500,000
Business-type Activities Balance					\$5,725,027

notes from direct borrowings payable and lease liabilities versus \$2,624,190 last year". This debt is equivalent to 0.47% of the 2024 state valuation.

Tax Increment Financing

Tax increment financing (TIF) is a tool used to generate funds within a community that generally for the use of community development, infrastructure improvements, and economic development. A TIF district works by capturing the increased tax revenue of an area of the community as it develops. Property tax assessed on the property valuation before the creation of the TIF, sometimes called the original assessed value (OAV), continues to go to the general fund. Over and above the OAV, property tax assessed on the increased value of the property after TIF creation, sometimes called the increased assessed value (IAV), is revenue for the TIF district and used to pay for improvements within or serving the district.

TIF Districts in Eliot

The Town has one large TIF district.⁶ Its official name is the Town of Eliot Municipal TIF District, but it is often still referred to by its former name, the Route 236 TIF District, since the parcels it includes are mostly along Route 236 between Arc Rd. and the Kittery line (Figure _).

The TIF was created in 2009 after approval by Eliot voters and the state Department of Economic and Community Development (DECD). It originally encompassed about 190 acres of parcels with an original assessed value (OAV) of about \$11.4 million. However, the next five years saw Eliot voters reject proposals for use of TIF funding to extend sewer service down Route 236. A local committee formed to develop alternative TIF ideas proposed an investment approach focused on Eliot Village instead of 236, but that, too, was voted down in 2017.

The next year, the Town requested a TIF amendment to:

- > add certain parcels in and near the Village Center to the TIF, increasing the total acreage to about 243
- > propose an additional economic development program to be covered by the expanded TIF centered around an "Eliot Development Center" multi-use facility to be developed in the Village zone. The program was to include child care and elder care, outdoor tourism promotion, trails and hiking, and technical support and incubation for small businesses and local agriculture
- > change the name of the TIF

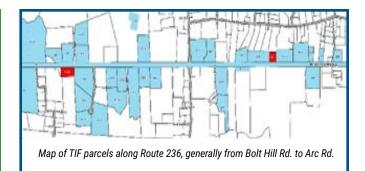
This amendment was approved by voters at the June Town Meeting and by DECD in early 2019. Nonetheless, after the 2017 vote, the momentum going forward was on the Route 236 Water-Sewer Extension Project. In November 2020, voters approved borrowing capacity of \$22.6 million for the project. The Town then sought a CWSRF loan from the Maine Bond Bank. As of June 30, 2024, the TIF had a balance of about \$7.7 million.⁷

Eliot Commons has its own TIF district that pays for improvements on the Eliot Commons property. It is a 30-year TIF that sunsets on or around 2039.

In the future, the Town should consider opportunities to create a new TIF, or invest from the current Town of Eliot TIF, as may be amended, to implement improvements envisioned in this plan for the Village area. The development of a Village Plan, as this plan recommends, would be a good opportunity for public discussion of the pros and cons of TIF investment in the Village.

BUDGET COMMITTEE FEEDBACK

In reviewing this section, a subcommittee of the Budget Committee recommends that the Town should set a policy to annually review its TIF districts with the Town Manager and Town Counsel for adherence to the TIF plans.



Financial Management

In the Fall of 2021, the Eliot Select Board brought in new management which set about to rationalize reserve accounts, update and modernize record-keeping, and streamline reporting. The result was significant improvement to the Town's financial management, analysis, and reporting capabilities. In 2022, it took over 12 months to complete the FY22 financial audit. Two years later, the FY25 audit was completed in half the time. The addition of talented accounting and finance professionals strengthened the Town's ability to effectively manage financial operations and respond to financial opportunities. The deployment of a modern digital infrastructure (using enterprise resource planning software) beginning in FY26 expects to enhance the effectiveness and transparency of financial decisions.

The Town has strengthened its financial oversight and control of operating expenses and asset management by formalizing financial processes with revised policies and procedures for cash management and reconciliation, disbursements, grants management, and the procurement card program. Better oversight means better decisionmaking when managing Town resources. Recently, the Town engaged professional investment managers to actively and safely invest Town funds in the market, resulting in significant returns and a new revenue source for the Town. An updated Investment Policy guides the manner in which the Town invests public funds.

Capital Investments

Eliot must make capital investments in a cost-effective manner to meet the needs of the community and improve quality of life.

Capital investments include:

- > New vehicles (Fire, Police, Public Works, etc.)
- > Road paving
- > Traffic and safety upgrades
- > Trails and multimodal improvements,
- > Stream crossing upgrades
- > New or improved park-recreational amenities,
- > Utilities (such as water and sewer expansions)
- > Other major infrastructure & equipment investments

As of this writing, the Town of Eliot is implementing several major capital projects. The renovation of Town Hall is due for completion in Summer 2025. The current phase of the Route 236 Water and Sewer Project is also due to be completed in 2025. Field construction and improvements to William Murray Rowe Park are expected to commence in 2025. These investments will address long term infrastructure needs and growing demands on recreation facilities.

The capital improvements envisioned in this Comprehensive Plan address a range of future improvements in parks, public safety, transportation, and infrastructure. Existing parks at Frost-Tufts, Hammond Park, and the Boat Basin are slated for renovations and face-lifts using grants and reserve funds. Proposed projects for walking and bicycling improvements and build out of the Eastern Trail in Eliot will seek grant funding. Public safety will be enhanced with upgrades to the police station and firehouse funded as part of the Town Hall Renovation Project. Transportation projects to improve traffic and pedestrian safety on Route 236 are planned using MaineDOT grants, federal funding, and potentially other sources like TIF funds. Eliot's largest infrastructure project, the Route 236 Water and Sewer Project, will continue to add capacity in the coming years using TIF funds.

The cost to the Town of capital investments can be mitigated through carefully crafted funding approaches. External grant funding can pay for half or more of a capital project's cost, particularly transportation improvements. Grant opportunities can be competitive, take staff time to apply for, and often require a commitment of local match funding (typically 10-50%). However, grants can significantly reduce the cost burden for the Town. The Town has been successful in recent years in obtaining several grants.

Eliot has not had a standalone Capital Improvements Plan (CIP), but the Town Manager is in the process of restoring a regular CIP. Capital investments are included as needed in the Annual Budget. Eliot has a Capital Improvement Commission that is appointed by the Select Board and charged with assisting the Town Manager with capital projects being considered and-or currently being managed.

COMMUNITY SURVEY FEEDBACK



RESPONDED THAT RESPONSIVE & EFFICIENT MUNICIPAL SERVICES WAS IMPORTANT IN THE FUTURE.

	Project	Description	Funding & Financing Approach	Timeframe
Parks, Recreation & Civic	Town Hall Renovation	Renovate and expand Town Hall	Project underway using voter-approved GO bond	In progress
	William Murray Rowe Park Renovation	Renovate Murray Rowe Park, including its ballfields	Project underway using Town reserve funds, developer payment-in-lieu	In progress
	Frost-Tufts Park Renovation	Renovate the park and its recreational amenities	Town reserve and grant funding; developer payment-in-lieu possible for small portion	Short
	Eastern Trail	Build out off-road path segments of the Eastern Trail as opportunities allow, informed by the Eastern Trail Study	Seek grant(s) to cover most of cost; include key segments in larger projects; some segments may be included in developments; Town match may be expected for grants	Short-Mid-Long (dep. on the segment)
	Walking trail improvements	Improve and extend public walking trails in the Town Forest parcels or elsewhere	Seek grant(s) to cover most of cost; consider match from land bank reserve, other reserve funds, private donations; in-kind/volunteer work	Long
	Boat Basin improvements	Renovate the Boat Basin as described in the Recreation and Open Space strategy	Town reserve and grant funding; developer payment-in-lieu (Clover Farm \$14k and possibly other future developments)	Mid
	Hammond Park-Dixon Road Recreation Area Placemaking	Improve placemaking and recreational/ civic amenities	Grants, private donations, Town bond or reserve funding	Mid-Long
	Community center	Study potential community center options; proceed based on recommendations in the study	Study can recommend potential funding sources; depending on the project, explore state bond funding.	Short (study); Mid-Long (implementatio
Public Safety	Project	Description	Funding & Financing Approach	Timeframe
	Police Station upgrades	Make upgrades to the Police Station	In-progress, concurrent with Town Hall project	In progress
	Fire Station upgrades	Make upgrades to the Fire Station	Some improvements are in-progress and others are expected for the future	In progress
	Project	Description	Funding & Financing Approach	Timeframe
	Road paving	Ongoing pavement maintenance and repaving of Town roads	General fund; in FY24, paving budget increased to \$1 million to address backlog	Ongoing
Transportation	Route 236 Water & Sewer Project	Install water & sewer lines on/near Route 236 between Bolt Hill Rd. and Julie Ln.	Project underway using Clean Water SRF Ioan, TIF	In progress
	Route 236 Traffic & Safety Improvements	Work with DOT on corridor traffic, safety, and multimodal improvements from Kittery line to Depot Rd.	Design funded 50/50 DOT/Town split. Seek grant(s) to cover most of construction; Town match expected; explore use of TIF	In progress (design); Short (construction)
	Bicycle and pedestrian improvements: Beech Rd.	Extend walking and bicycling facilities in the Village and vicinity	DOT grant of \$304k funding design of Beech Rd. extension; \$76k ARPA match from Town; Seek grant(s) to cover most of construction; Town match expected; explore partial use of TIF funds	In progress (design); Short (construction)
	Bicycle and pedestrian improvements: Village area	Extend walking and bicycling facilities in the Village and vicinity, beyond the above Beech Rd. project	Seek grant(s) to cover at least half of cost; Town match expected	Mid-Long

TABLE **15.X**

Continued on next page ...

Table ___. A list of capital improvement projects either ongoing or recommended in this plan. This is not necessarily an exhaustive list for the project's within this plan's horizon, as new capital needs may arise that are unforeseen at the time of this writing

FISCAL CAPACITY & CAPITAL INVESTMENT

TABLE **15.X**

FISCAL CAPACITY & CAPITAL INVESTMENT

	Project	Description	Funding & Financing Approach	Timeframe
	Route 236 Intersection Improvements (north end of town)	Work with DOT to improve Route 101 and Route 103 intersections for traffic, safety, and multimodal improvements	Design funded 80/10/10 with KACTS grant funding \$320k, DOT \$40k, Town \$40k from reserves. Seek grant(s) to cover most of construction; Town match expected	In progress (design); Short (construction)
	Route 236 Water & Sewer Project: Future Extension to Arc Rd.	Extend water and sewer lines from Julie Ln. to Arc Rd.	Deferred portion of current project; TIF funds expected for this segment	Mid
5	Route 236 Water & Sewer Project: Future Extension to Marshwood Middle School	Extend the water and sewer lines from Arc Rd. to Marshwood Middle School	Explore use of expanded TIF and grant funding; work with school	Long
	Village Sewer Expansion	Extend domestic sewer service into the Village area	Consider a new or expanded TIF district; sewer fees and charges will cover costs	Long
S	Project	Description	Funding & Financing Approach	Timeframe
Vehicles	New vehicles	Purchase vehicles for Public Works, Police, Fire, Rec/Parks, and other Town operations, as needed	These needs are addressed on a case-by- case basis in Annual Budgets, or through Town Manager/Select Board review	Ongoing

Table ____. A list of capital improvement projects either ongoing or recommended in this plan. This is not necessarily an exhaustive list for the projects within this plan's horizon, as new capital needs may arise that are unforeseen at the time of this writing

Implications and Summary

> Overall, Eliot is in excellent fiscal health

> The Town has a very low level of municipal debt compared to its valuation and what Maine municipalities are allowed to borrow

> The Town appears to be in a good position to finance our current large capital expenses through the Route 236 TIF, Clean Water State Revolving Loan Fund, general obligation bonds, budget reserves, and grant funding

> Promoting growth in the growth areas proposed in the Future Land Use Plan and Map – as new infrastructure that serves the growth areas comes online – is expected to bring in economic development and more property tax revenue over time. When TIF districts retire, property tax revenue shifts to the general fund. Before then, growth in the TIF district will help to pay the debt incurred to make the infrastructure investments

> Education continues to be the largest Town expense. However, state education allocations have increased in recent years. No major changes in what and how the Town allocates funds are expected > Development impact fees help to offset the cost of growth. This Comprehensive Plan continues to recommend impact fees. In the short term, an impact fee study can explore the pros and cons and budget effects of various impact fees

> The Town can make various capital improvements to better serve the needs of Eliot residents and improve quality of life. External funding, like grants or private donations, should be emphasized as a contributing funding source to many of these improvements. In most cases, at least some Town share will be needed. The Town share could be allocated from reserve funds in the budget, or through bonds or other borrowing that is approved by voters at a Town Meeting or Referendum election. Other potential local grant match sources could include (but are not necessarily limited to) TIF funds, impact fee revenues, developer payment-in-lieu contributions, inkind contributions, or private donations

> The Town can consider setting fiscal responsibility policies such as those related to maintaining a sufficient unassigned fund balance and periodically reviewing TIF district expenditures and revenues

FISCAL CAPACITY & CAPITAL INVESTMENT GOAL, POLICIES & STRATEGIES

Goal, Policy, or Strategy	Description	Responsibility or Partnership	Implementation Timing		
Goal 1	An efficient system of public facilities and services to accommodate anticipated growth and economic development				
Policy 1	Finance existing and future facilities and services in a cost-effective manner in a way that allows the Town to stay within LD1-style spending limitations and reduces the local tax burden				
Strategy 1	Explore grants to assist in the funding of capital investments within the community	All Town departments, advisory committees	Ongoing		
Strategy 2	Explore opportunities to work with neighboring communities to plan for and finance shared or adjacent capital investments to increase cost savings and efficiencies	Recreation Department, Town Manager, Public Works, Consultant, Contractor	Short		
Strategy 3	Prioritize unrestricted reserve funds to help maintain a stable property tax rate, invest in non-recurring capital projects and other community priorities, and for emergencies and contingencies	Select Board, Budget Committee, Town Manager, Finance Department	Ongoing		
Policy 2	Develop and maintain fiscal policies that promote transparency, prudent borrowing, and good stewardship of tax increment financing (TIF) funds				
Strategy 1	Create, maintain, and periodically review strategic financial policies for specific topics	Select Board, Budget Committee, Town Manager, Finance Department	Ongoing		
Strategy 2	Create a policy or guidance on the maximum amount of debt the Town should carry relative to revenues. This policy should exceed typical municipal guidelines (i.e. prescribe a lower maximum debt level than those guidelines) and be structured to enable the Town to maintain a preferred bond rating for future borrowing needs	Select Board, Budget Committee, Town Manager, Finance Department	Mid		
Strategy 3	Formalize a process for periodic review of the Town's TIF funds	Select Board, Budget Committee, Town Manager, Finance Department, Town Assessor, Planning Office	Short		

FISCAL CAPACITY & CAPITAL INVESTMENT ENDNOTES

¹-<u>https://www.eliotme.gov/433/S-P-Global-Bond-Rating</u>

² A 30.8% inflation rate from 2013-2023 was used based on the US Inflation Calculator: <u>www.usinflationcalculator.com/</u>

³ Source for this and other references in this section:

https://www.maine.gov/revenue/taxes/property-tax/municipal-services/valuation-return-statistical-summary

⁴¹ Revenue figures are from annual audit reports: <u>www.eliotmaine.org/410/Eliot-Annual-Audit-Reports</u>. A 19.2% inflation rate from 2019-2023 was used based on the US Inflation Calculator.

⁵ Eliot Sewer Department. User Rates & Fee Definitions.

www.eliotmaine.org/DocumentCenter/View/312/2020-User-Fees-for-Definitions-PDF

⁶ For more information: <u>https://www.eliotme.gov/331/TIF-District-Route-236</u>

⁷ FY2024 Annual Audit

REGIONAL COORDINATION



Eliot collaborates with communities throughout York County to exchange information, assets, and cost sharing. With our neighboring communities, we share a sense of responsibility to serve the needs of residents, businesses, and visitors across the region. We will contribute to regional initiatives to improve housing choices and affordability. We share vital ecological connections that extend beyond our town borders, and we will continue to partner with conservation organizations to protect and conserve these important connections – especially as we all face the challenges of a changing climate. - Excerpt from this plan's "Our Role in the Region"

As Eliot has grown, the Town has introduced more sophisticated municipal services. However, coordination with surrounding towns remains important, especially as it relates to transportation, natural resources, and social services, which permeate town boundaries.

Eliot is a part of the Kittery Area Comprehensive Transportation System (KACTS) organization, which is responsible for planning and programming federally- and state-funded transportation projects in Eliot and eight other southern York County communities. KACTS is the federally-designated Metropolitan Planning Organization (MPO) for these communities. MPOs foster collaboration and coordination between cities and towns, which tends to work better than each municipality acting on its own when planning transportation improvements that have a regional impact or addressing issues on transportation routes that cross town lines. KACTS membership allows the town to be involved in large and regionally impactful transportation decisions.

KACTS is staffed by the Southern Maine Planning and Development Commission (SMPDC), the regional planning organization. KACTS staff take the lead on regional transportation plans and studies, inviting local and MaineDOT input. The two Route 236 corridor studies done in 2019 and 2021, respectively, are examples of KACTS-led studies that addressed transportation issues affecting both Eliot and the larger region.

Many conservation efforts that impact Eliot are regional efforts. The Mount Agamenticus Conservation program spans York, South Berwick, and Eliot. Great Works Regional Land Trust (GWRLT) is the steward for conservation lands in Eliot and five neighboring communities. The GWRLT board has historically had a representative who lived in Eliot, though as of this writing, it does not. The York River Stewardship Committee includes appointees from the four watershed towns (Eliot, Kittery, South Berwick, York) and representatives from the National Park Service (NPS) and Wells National Estuarine Research Reserve (WNERR).

Mainspring, The Seacoast Social Services Collective, is an impressive and inspiring example of regional coordination to improve social services delivery. Opened in February 2025 in Kittery, Mainspring is the central hub for social services for the Kittery-Eliot area, hosting several different social services agencies in one place. Led by the nonprofits Fair Tide and Footprints Food Pantry, the creation of Mainspring was made possible by contributors to a \$6.3 million capital campaign. The Towns of Kittery and Eliot are both contracting with Mainspring to provide General Assistance (GA) services.

Improvements in Regional Coordination

Looking toward the future, this plan recommends several strategies for improving regional coordination and creating more regular engagement with neighboring communities. As the Town works to address future challenges, regional solutions are considered. Working with SMPDC and state agencies will also help the Town engage with other communities and, when needed, ensure that actions are consistent with the region. Such recommendations include:

> Continue to be an active member of KACTS

> Participate in regional meetings or workshops exploring regional strategies to provide stable workforce housing, including homeownership and rental housing

Support the efforts of local and regional housing coalitions in addressing affordable and workforce housing needs

> Continue to contribute to the Mainspring partnership in providing comprehensive social services needs for residents of Eliot, Kittery, and nearby communities, including Eliot general assistance (GA) services available to Eliot residents

> Coordinate with the regional chamber of commerce, regional development corporations, and surrounding towns as necessary to support desired economic development

> Continue to participate in interlocal and regional planning, management, and-or regulatory efforts around shared critical and important natural resources such as the York River Stewardship Committee, the Mt. Agamenticus Conservation Steering Committee, the Eastern Trail Management District, and the Piscataqua River Estuaries Partnership (PREP)

> Participate in interlocal and regional efforts to monitor, protect and, where warranted, improve water quality, such as the Spruce Creek Watershed Based Management Plan (Kittery-Eliot)

> Establish conservation corridors between existing conservation lands, and work with bordering communities to create contiguous conserved lands

> Consider whether regionalization of solid waste management may be more cost effective, efficient, or resilient for Eliot and surrounding communities

> Enroll (and maintain existing enrollment) in regional and state partnerships to access grants resources and guidance around climate change planning, such as the Community Resilience Partnership, which Eliot joined in 2022-23

> Maintain existing relationship with Great Works Regional Land Trust and explore ways the Town could better support the organization or advance similar goals at the municipal level

> Meet with neighboring communities to coordinate land use designations and regulatory and non-regulatory strategies

> Consider, with input from neighboring communities, the need for a congregate care facility in the next 10 years, and options for developing one in town or regionally as needed

> Consider the feasibility and need to hire communications staff, potentially shared with neighboring towns



Appendix

Public Involvement Summary

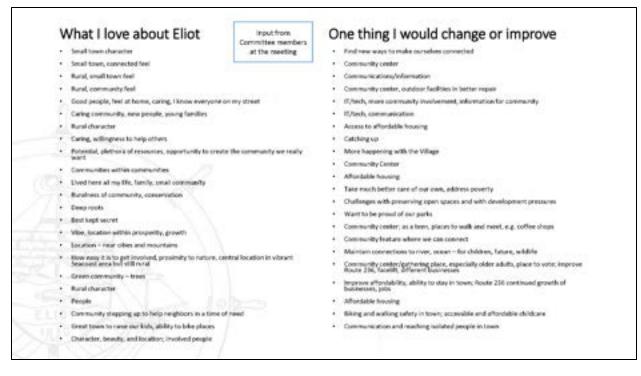
The Guiding Committee and Subcommittees

The Comprehensive Plan Update was guided by a **Comprehensive Plan Committee (CPC)** appointed by the Select Board made up of citizens, Town advisory committee representatives, and Town staff. The CPC includes co-chairs, a vice chair, and a secretary. All meetings of the CPC are open to the public with publicly posted agendas and a remote participation option.

CPC meetings

- November 9, 2022 Kickoff
- March 22, 2023 Meeting following Public Visioning Session
- October 18, 2023 Vision and regional role statement
- November 8, 2023 Vision and regional role statement continued
- March 11, 2024 Goals, Policies, and Strategies
- September 23, 2024 Draft plan review 1
- November 21, 2024 Draft plan review 2
- February 19, 2025 Draft plan review 2
- April 8, 2025 Final review meeting for the draft plan

The CPC is made up of **subcommittees** that focus on specific topics. Subcommittee meetings were also open to the public with publicly posted agendas.



Notes from an icebreaker exercise at the CPC Kickoff

Subcommittee meetings

Land Use

- December 6, 2022
- April 22, 2024
- May 8, 2024
- October 9, 2024

Economic Development

- December 12, 2022
- April 9, 2024
- May 16, 2024

Environment, Open Space, and Climate Change

- December 19, 2022
- February 15, 2023
- October 2, 2023

Housing

Eliot 2025 Comprehensive Plan Appendix Public Involvement Summary

- December 15, 2022
- February 14, 2023
- December 8, 2023

Transportation

- December 22, 2022
- June 16, 2023
- October 4, 2023
- November 15, 2023
- January 31, 2024

Parks and Recreation

• January 10, 2023

The CPC also includes a **Youth Advisory Group**, whose active members included a high school student and a middle school student living in Eliot. The group met once on January 30, 2023, and also helped spearhead the idea for the Youth Survey to supplement the Community Survey.

Community Survey

The **Community Survey** was open from mid-December 2022 through mid-February 2023. Over 700 residents filled out the survey. The survey was available online and in paper form. A link to the survey was posted on the Comprehensive Plan web page, shared in two Town web news releases, publicized by Town advisory committees, and shared by Eliot residents and organizations on social media and email lists.

In December, postcards with a survey link, QR code, and options for filling out the paper version were mailed to every Eliot household. Blurbs about the survey were published in the Weekly Sentinel. Paper copies and postcards were available in Town Hall and at the William Fogg Library, and Eliot Connects volunteered to help deliver and pick up paper copies.

Youth Survey

While the Community Survey has a significant sample size, the self-reported question about the age of the respondents indicated that not many people (less than 10) aged 24 years or younger completed the survey.

The Youth Advisory Group recommended a supplemental Youth Survey to allow more young people in Eliot to have a voice. The **Youth Survey** was distributed via the schools in

spring of 2023 and received over 60 responses. It is shorter than the Community Survey, and it phrases some of the questions differently, but the subject areas covered are similar.

Eliot Historical Society Collaboration

The **Eliot Historical Society** (EHS) took the lead in developing the Historic and Archaeological Resources section of the Comprehensive Plan.

An initial EHS meeting to discuss the plan was held on November 7, 2022. EHS members and the Town Planner subsequently collaborated on content for the inventory and goals, policies, and strategies.

Community Visioning Public Input Session and CPC Meeting #2

Regatta Room at Eliot Commons, Wednesday, March 22, 2023

The **Visioning Session** had approximately 80 attendees, and was immediately followed by a CPC meeting. The ideas shared by the public informed the Community Vision Statement.

Beginning With Habitat Presentation

Wednesday, June 7, 2023, part of the Conservation Commission meeting, 5:30pm

Presentation by Steve Walker of Maine Department of Inland Fisheries and Wildlife (MDIFW)

This was not exclusively a Comprehensive Plan-related presentation, but the information provided helped inform the Comp Plan development.

Fall-Winter 2023-24

During this time, the CPC met to complete the vision and regional role statements. The inventories; goals, policies, and strategies; and future land use plan drafts were advanced further at this time.

Business and Stakeholder Interviews

Mostly in Fall-Winter 2023-24, a few CPC members and the Town Planner conducted business and stakeholder interviews: one-on-one interviews to ask the owners of businesses and representatives of other organizations a series of questions to inform the Comprehensive Plan, particularly the Economy section and the topic of improving Route 236. Overall, there were 15 interviews conducted – 14 businesses (almost entirely small, local businesses) and 1 local nonprofit organization.

Agriculture and Food Security Commission

The **Agriculture and Food Security Commission** provided invaluable input on the Agriculture and Forest Resources inventory and goals, policies, and strategies at its April and May 2024 meetings.

Concurrently, the **Maine Farmland Trust** provided courtesy review of this section. MFT's municipal policy and planning guide, *Cultivating Maine's Agricultural Future (2nd ed.)*, was the source of multiple recommended strategies.

Future Zone in Town Hall

The Future Zone was held in the Eliot Town Hall Meeting Room, May 21-June 5, 2024

The **Future Zone** was a drop-in activity where members of the public could stop by to share their ideas on the draft goals, policies, and strategies, future land use plan, and big ideas. The room had a charrette-style format with different stations allowing for different types of input, such as:

- Placing "like" stickers and writing comments on the draft goals, policies, and strategies
- Viewing the draft future land use map and making comments on growth and rural areas
- Participating in a visual preference survey of development designs, streetscape amenities, suburban settings, rural landscapes, commercial corridors, and other settings

The Future Zone was held over several weeks, with multiple weekdays including evening hours, plus one Saturday, to allow many options for participation. It was advertised on the web page, news releases, social media, list serves, posters, signage, and a postcard sent to every Eliot household.

It is estimated that about 125-150 people visited the Future Zone or provided input on the draft materials in other ways.



Future Zone attendees

Aging In Place Committee Review

The **Aging-in-Place (AIP) Committee** received an overview presentation on the draft Comprehensive Plan in January 2025, offering input that was incorporated into the draft. The AIP Committee's work and resources had already informed various parts of the plan, including Transportation, Housing, and Recreation and Open Space. Both the past committee chair and the current chair, plus two other members, served/are serving on the CPC.

Conservation Commission Review

The **Conservation Commission** reviewed the draft Comprehensive Plan at its December 2024 and January 2025 meetings, providing comprehensive review comments that have been addressed with draft plan changes. They also received and discussed status updates at previous meetings.

Budget Committee Fiscal Capacity and Capital Investment review

A subcommittee of the **Budget Committee** reviewed and contributed to the Fiscal Capacity and Capital Investment Plan section. The Budget Committee Chair also serves on the CPC. The Budget Committee provided recommendations in late March that were incorporated into the section.

Event Tabling

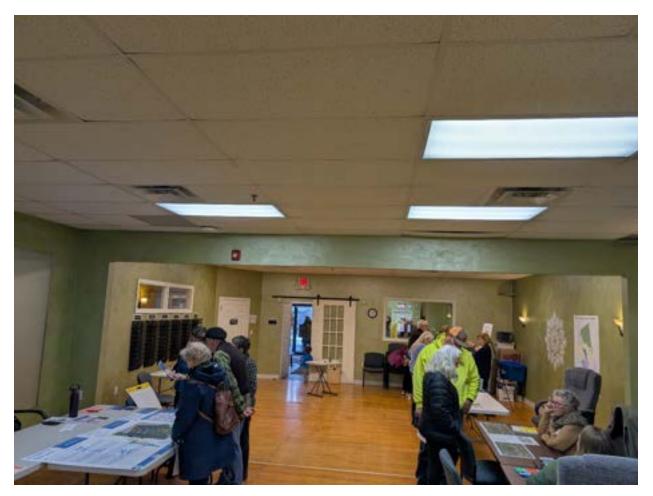
We had a table with Comprehensive Plan info and input opportunities at each **Festival Day** from 2022 to 2024 and at the **Eliot Connects Summer Kickoff** at the Boat Basin on June 8, 2024.



Table at the start of Eliot Festival Day, 2022, including a vision board for the launch of the plan update. After Festival Day, the vision board was placed in the lobby of Town Hall to allow more input over the next few months.

Public Showcase

The **Public Showcase** was held on Tuesday, February 25, at Temporary Town Hall. More than 50 attendees showed up to learn more about the Draft Comprehensive Plan, Draft Open Space Plan, and proposed Route 236 Mixed Use zone.



Public showcase attendees

Planning Board Public Hearings

The **Planning Board** held two public hearings on the draft plan:

- March 18, 2025
- April 1, 2025

The board also received several updates and shared ideas at other meetings.

At the April 1, 2025, meeting, the Planning Board endorsed the plan.

Select Board

The **Select Board** received an update at their March 27, 2025, meeting. At this meeting, the Select Board endorsed the plan. At their April 10, 2025, meeting, the Select Board finalized the June 10, 2025, Town Election & Referendum warrant, including an article on plan adoption.

Community Info Session

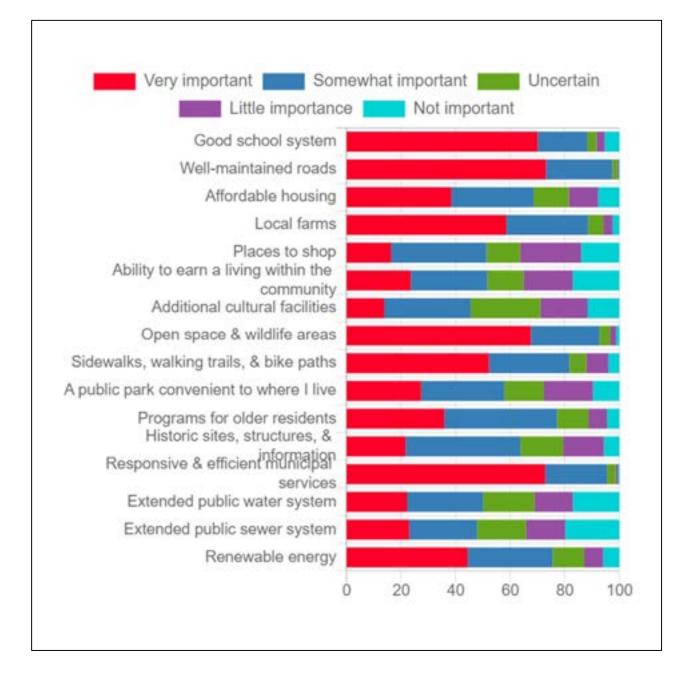
A **Community Info Session** is planned (as of this writing) for May 5, 2025, to allow the public a final opportunity to learn what



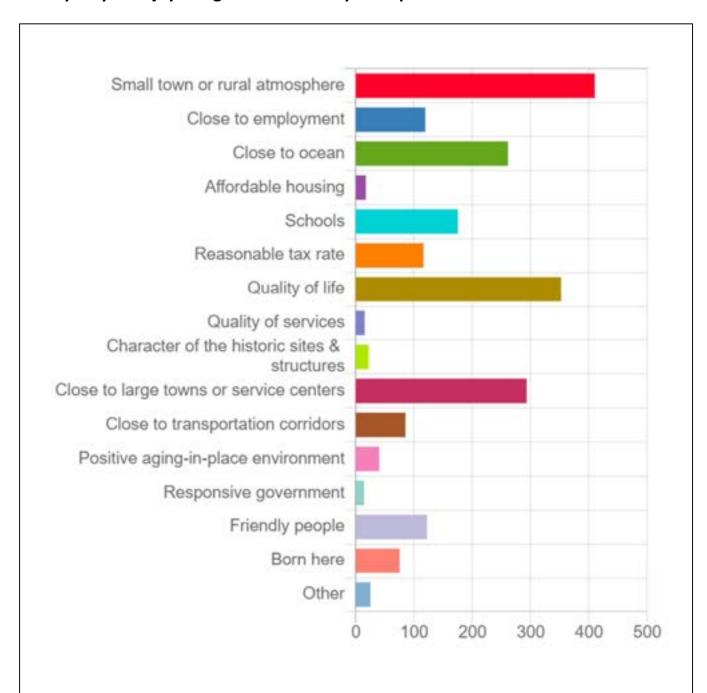
Eliot Comprehensive Plan Community Survey

Preliminary Results Summary Text-based questions March 14, 2023 [updated for plan appendix]

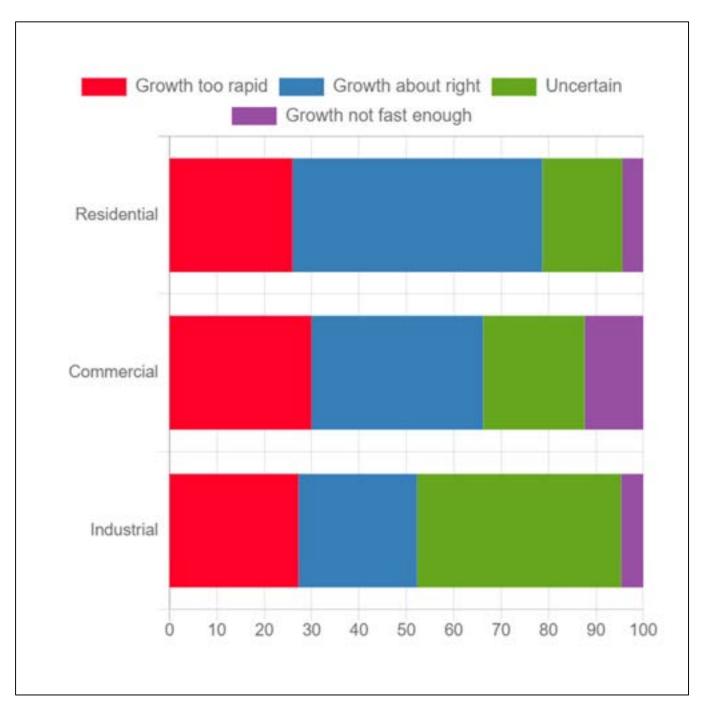
Note: for the stacked bar graphs, the 0-100 scale represents percent of respondents.



1. In the future, how important is it to have the following available to you?

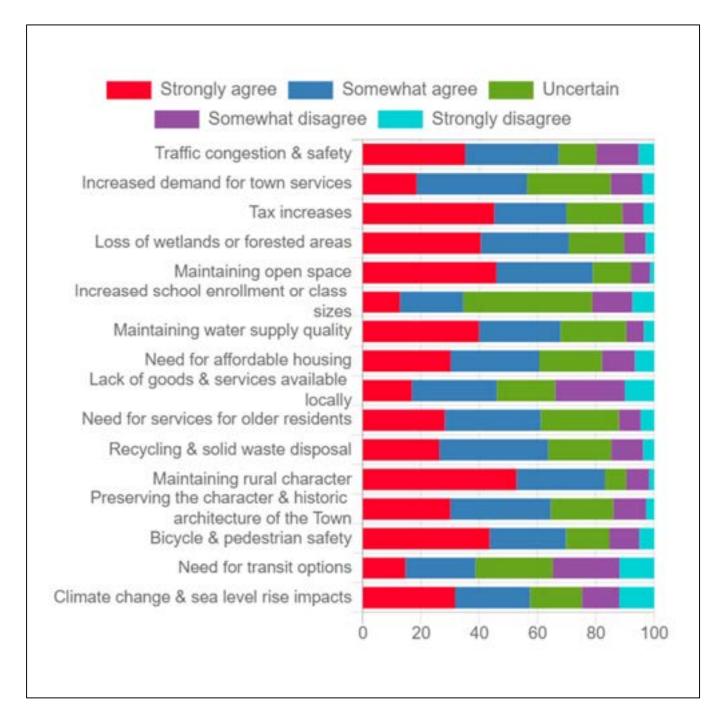


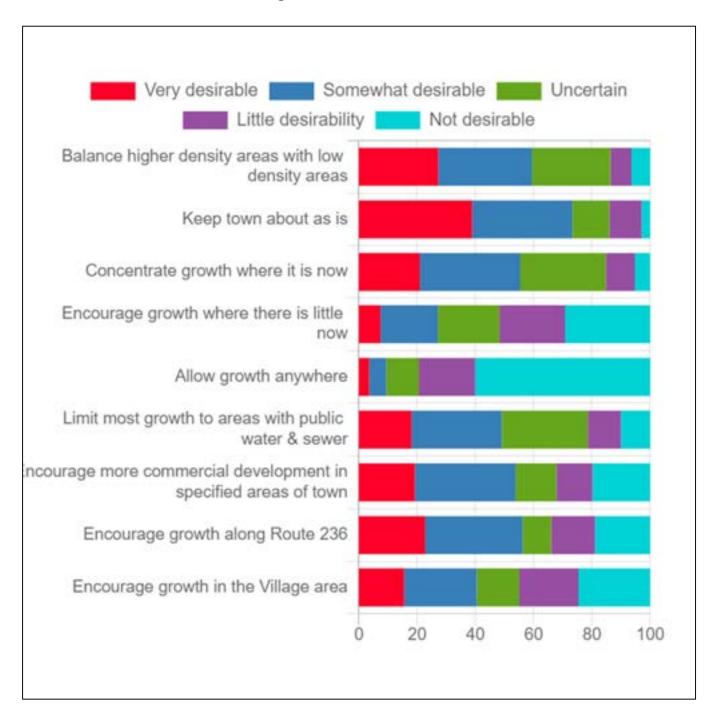
2. Why do you enjoy living in Eliot? Select your top three reasons.



3. What is your opinion about the rate of growth over the past 10 years?

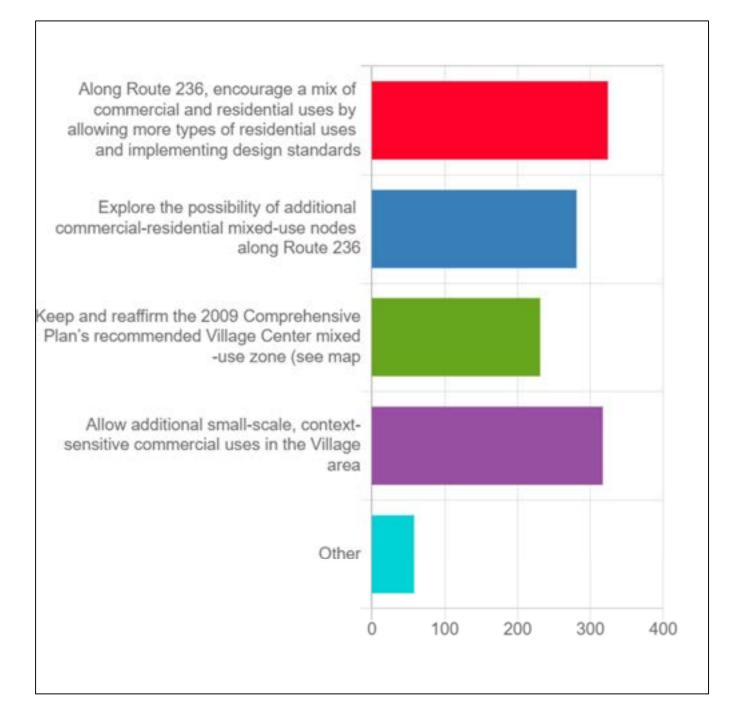
4. Please rate how you feel about the following statement: " is a serious challenge facing Eliot in the next 5 years."

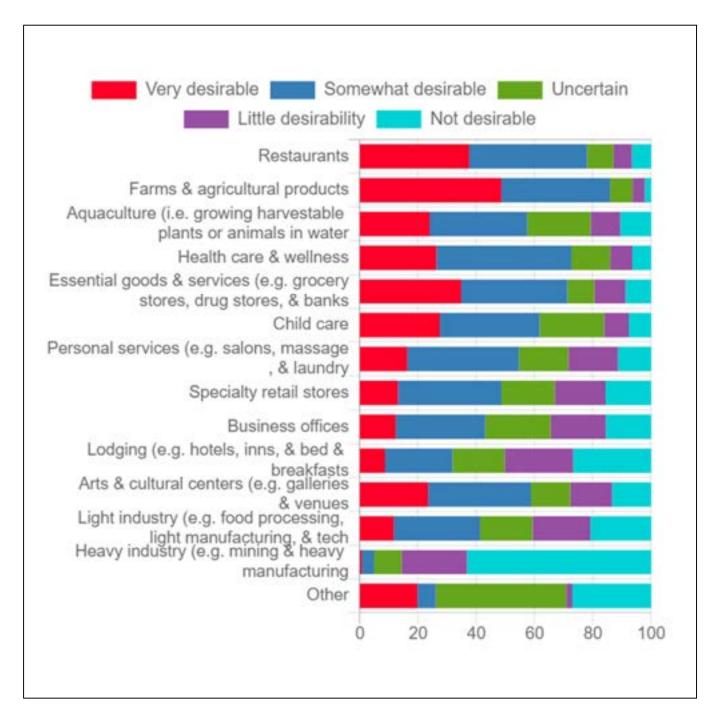




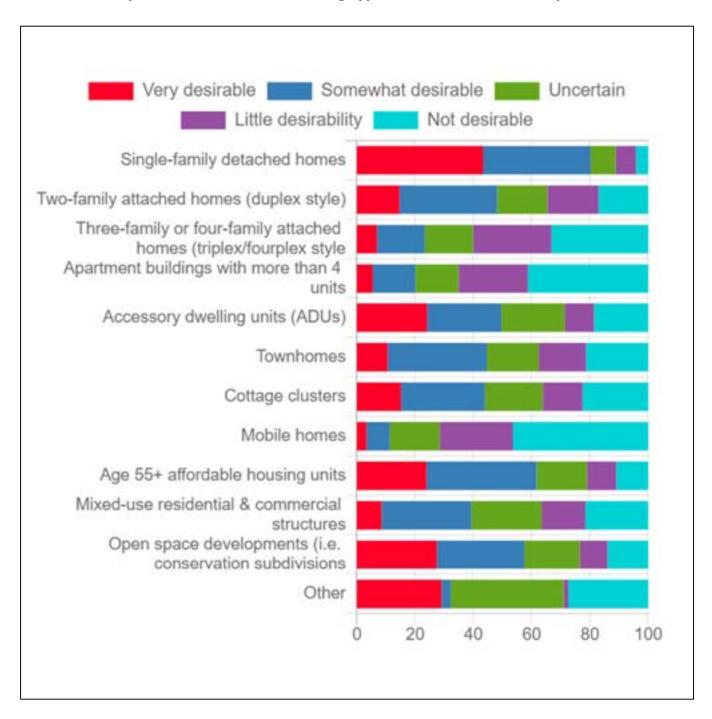
5. How desirable are the following for Eliot's future?

6. Please check all of the following strategies regarding mixed-use development that you support:



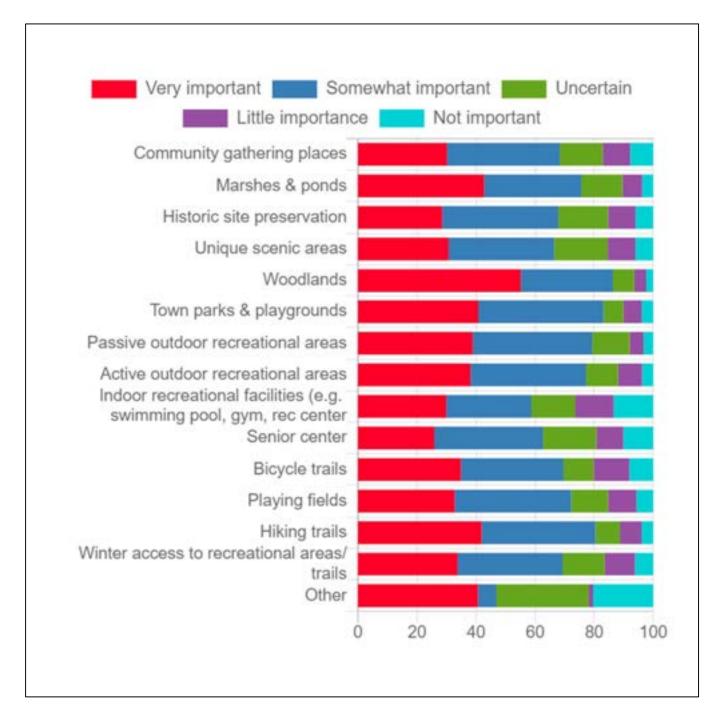


7. Please rate your desire for the following types of commercial development in Eliot:

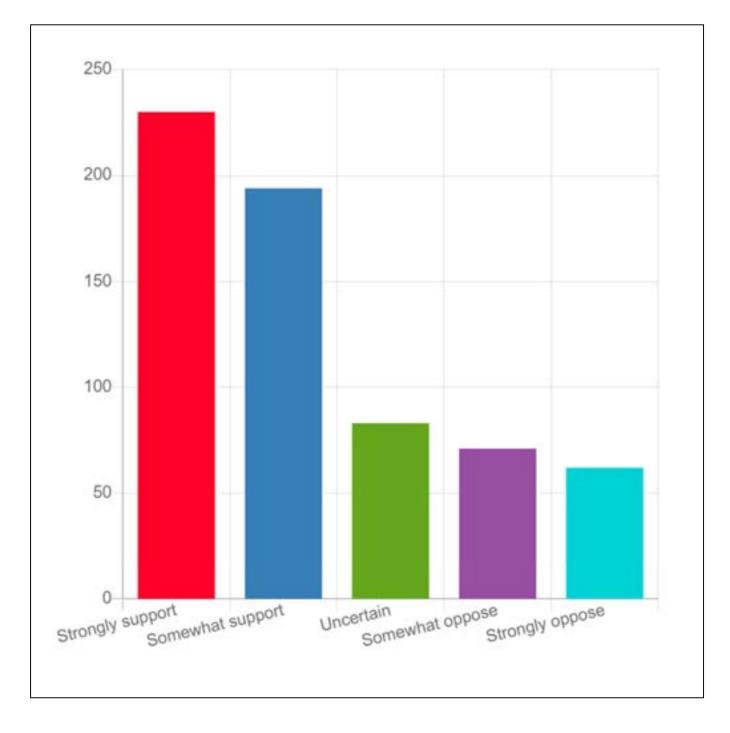


8. Please rate your desire for the following types of residential development in Eliot:

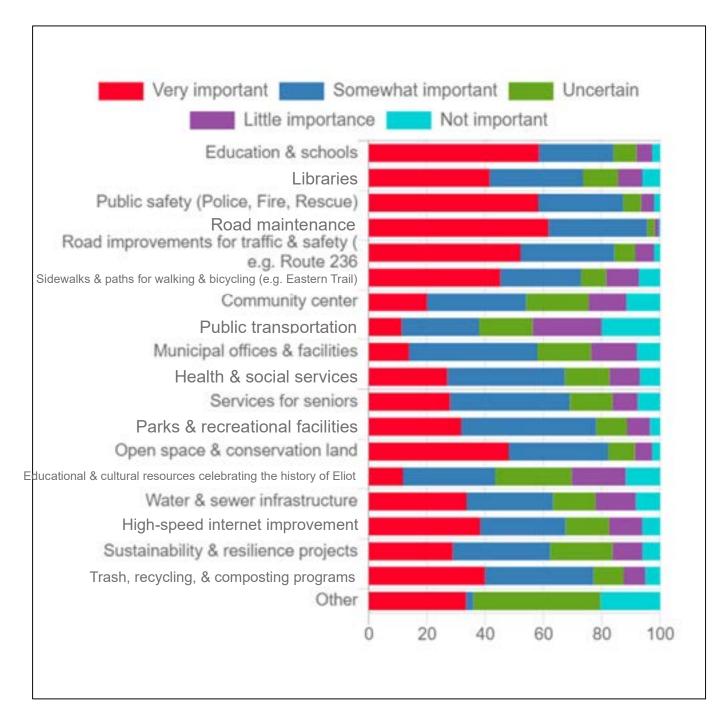
9. How important is it that your local tax dollars be used for the preservation or creation of the following natural or recreational assets?



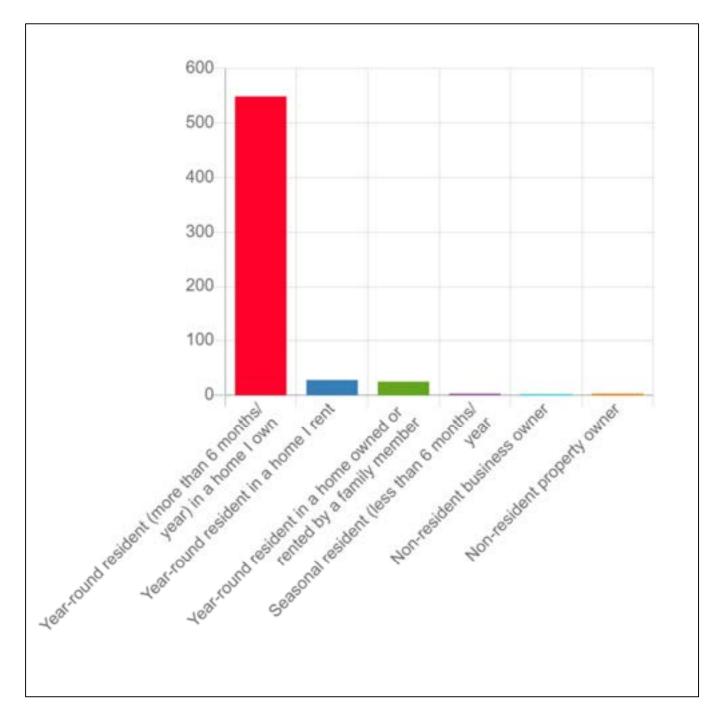
10. Would you support the expenditure of town funds, even if there is a potential increase in fees or property taxes, to acquire and protect more open space, either through the purchase of land and/or easements?



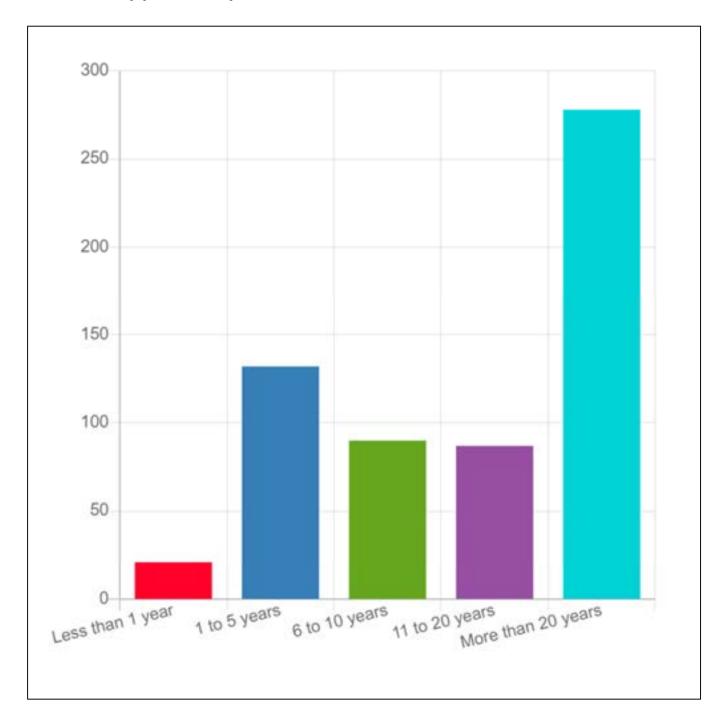
11. From the municipal services and projects below, how important do you feel each is for investing your tax dollars?



12. [map-based question – to be summarized separately]

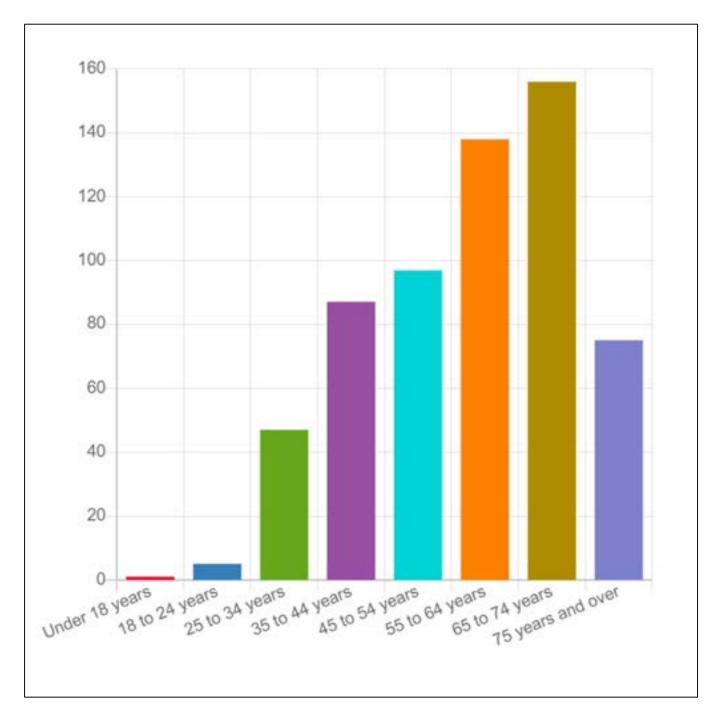


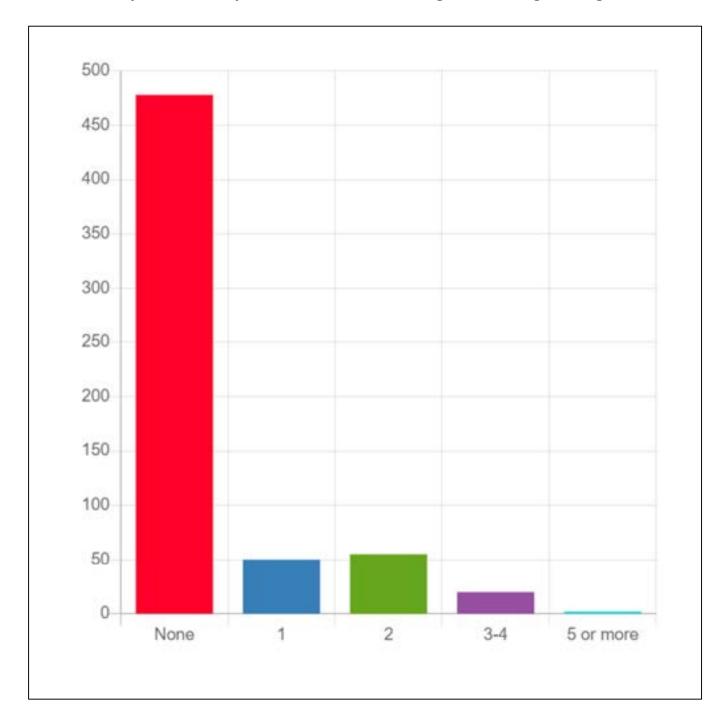
13. What is your residency status in Eliot?



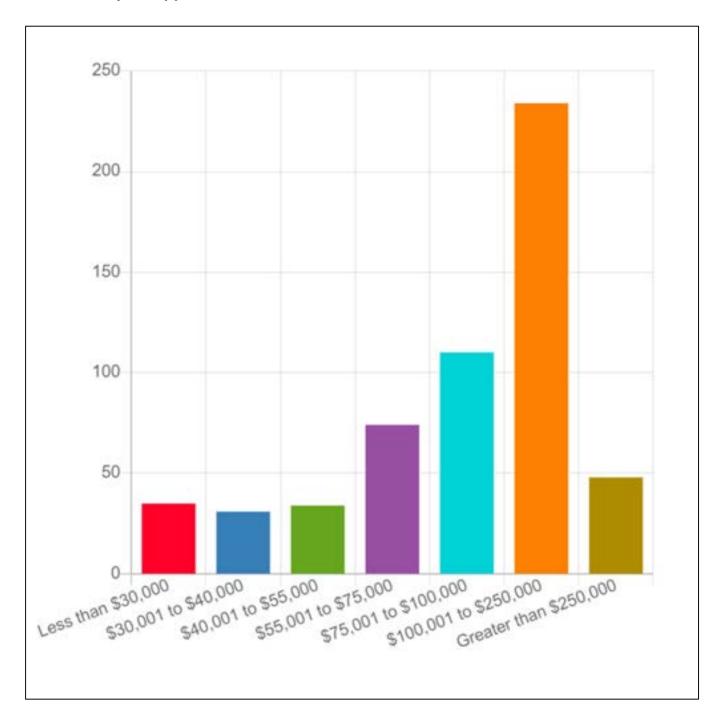
Eliot 2025 Comprehensive Plan Appendix Community Survey Preliminary Results Summary – Text-based questions



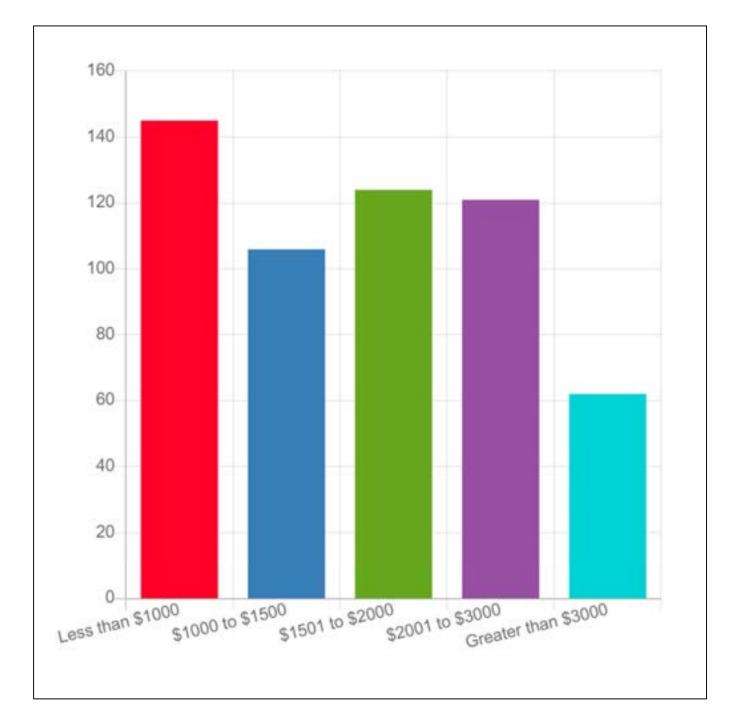




16. How many children do you have in school, Kindergarten through 12th grade?

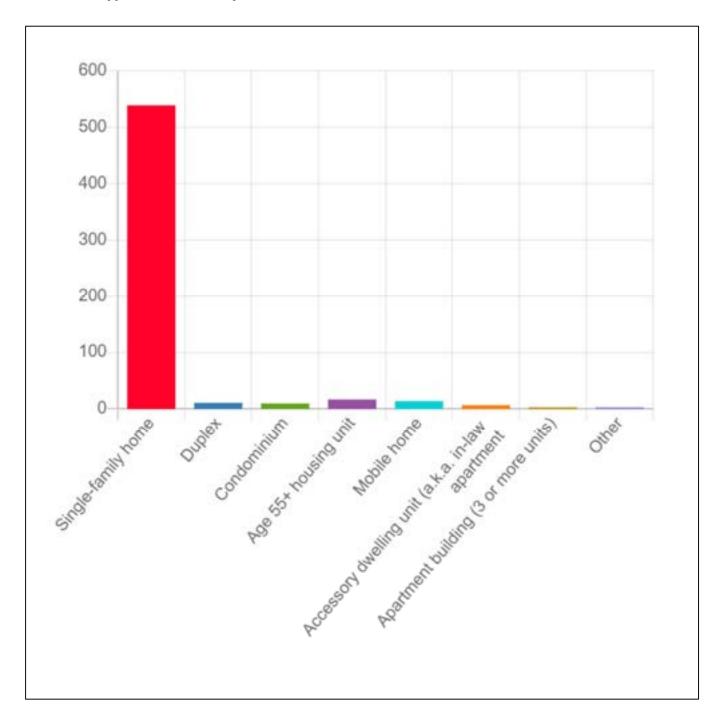


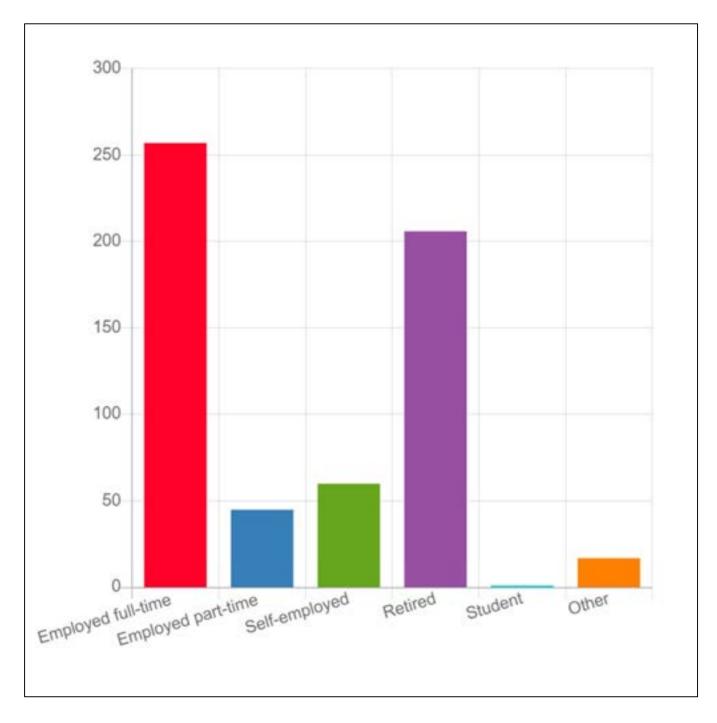
Eliot 2025 Comprehensive Plan Appendix Community Survey Preliminary Results Summary – Text-based questions



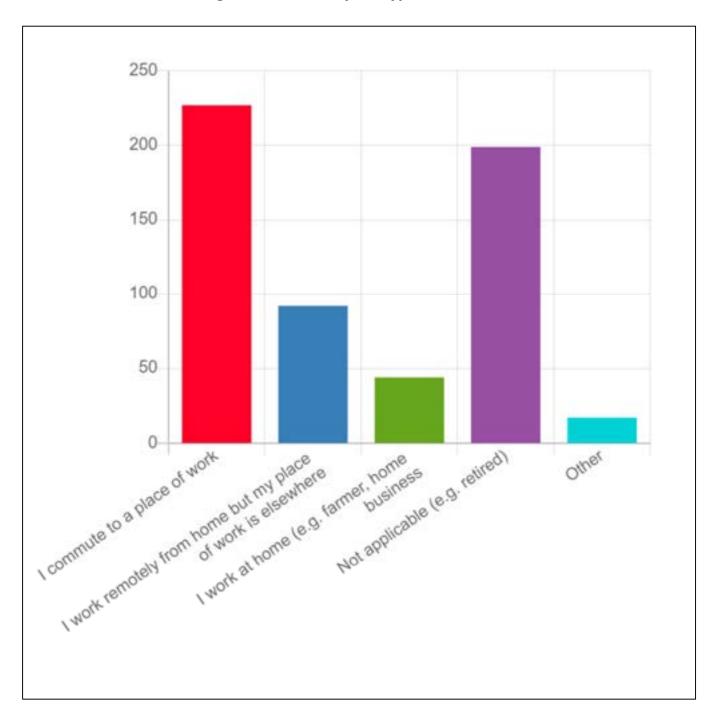
18. About how much is your monthly mortgage or rent *plus* monthly cost of utilities?

Eliot 2025 Comprehensive Plan Appendix Community Survey Preliminary Results Summary – Text-based questions



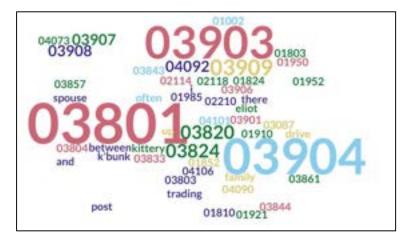


21. Describe your employment status:



22. Which of the following best describes your typical commute?

Most popular employer ZIP codes for people who commuted to a place of work



03801: Portsmouth

03904: Kittery

03909: York

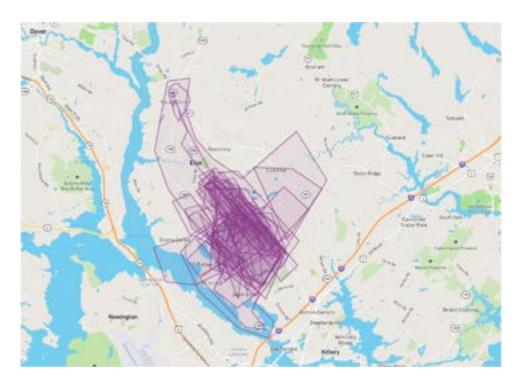


Eliot Comprehensive Plan Community Survey

Preliminary Results Summary Map-based questions May 9, 2023 [updated for plan appendix]

From Question 5:

Optional: Draw on the map the area(s) in town where you would like to see growth by clicking on the button below.

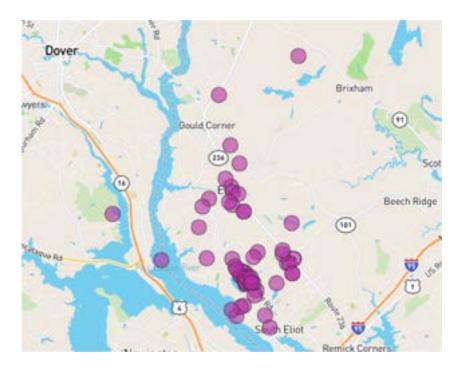


Zoomed in

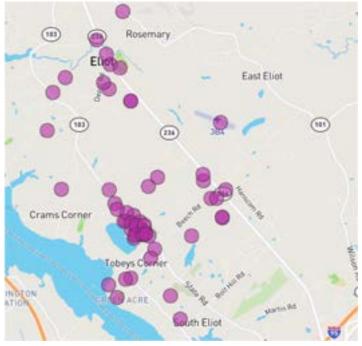


Eliot 2025 Comprehensive Plan Appendix Community Survey Preliminary Results Summary – Map-based questions Question 12. Optional: Place your ideas for other community priorities on the map by clicking the buttons below and then drawing points, lines, or areas on the map. If you don't want to map any of these priorities, click the > arrow at the bottom to continue to the next question.

Community Gathering Space

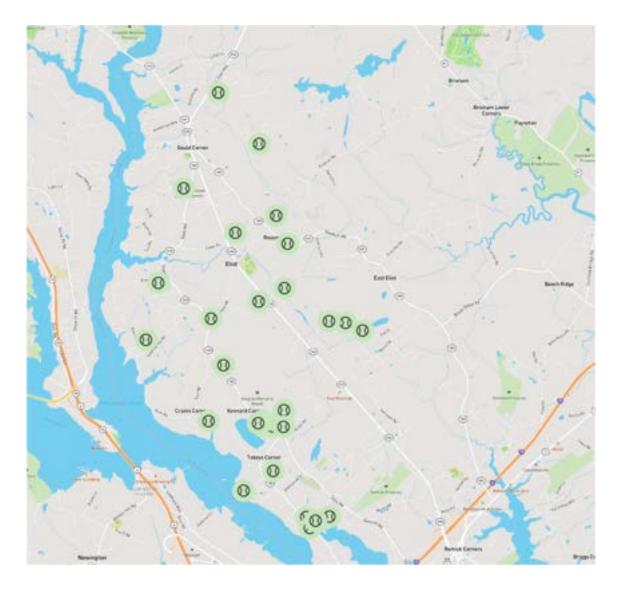


Zoomed in



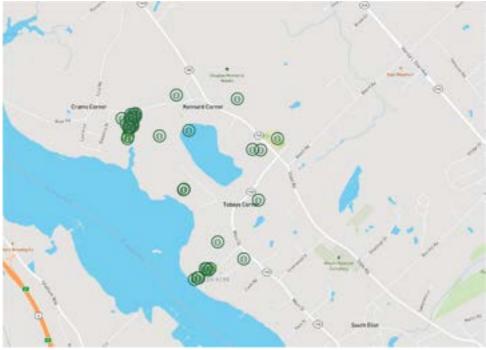
Eliot 2025 Comprehensive Plan Appendix Community Survey Preliminary Results Summary – Map-based questions

New Park

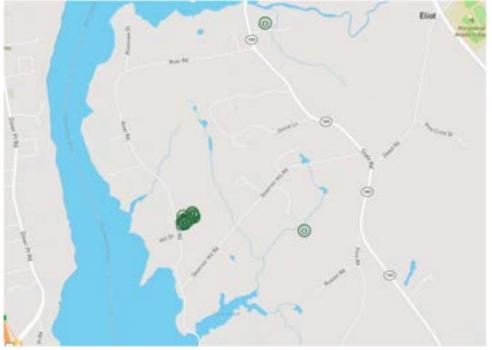


Improvement of Existing Park

Village area



River Road area

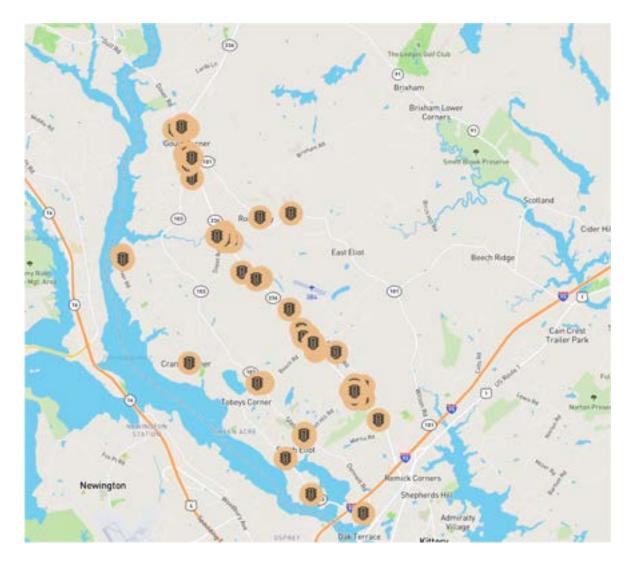


Eliot 2025 Comprehensive Plan Appendix Community Survey Preliminary Results Summary – Map-based questions

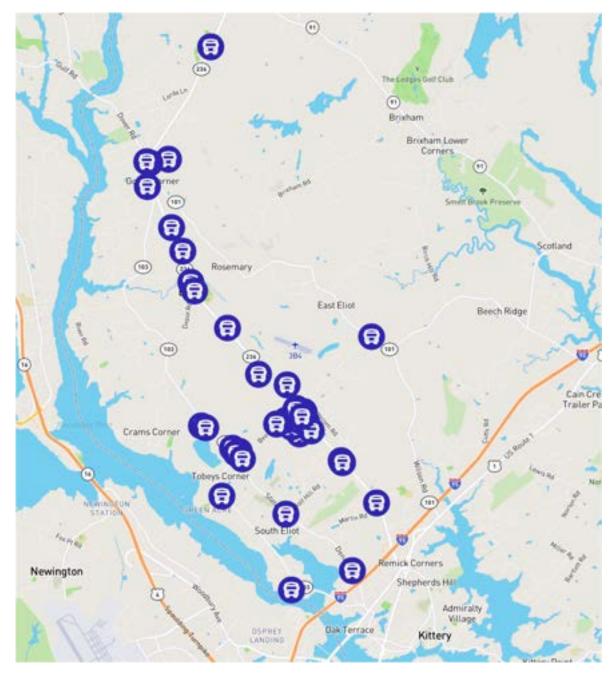
Road Improvement



Intersection Improvement



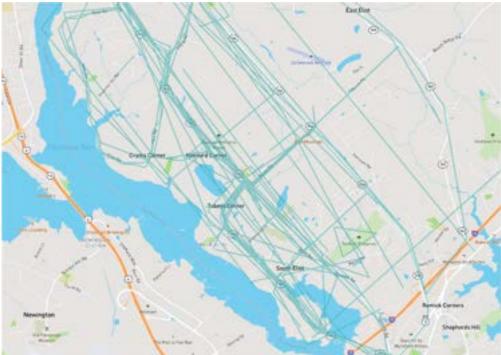
Transit Stop



Bicycle and Pedestrian Facility



Zoomed In

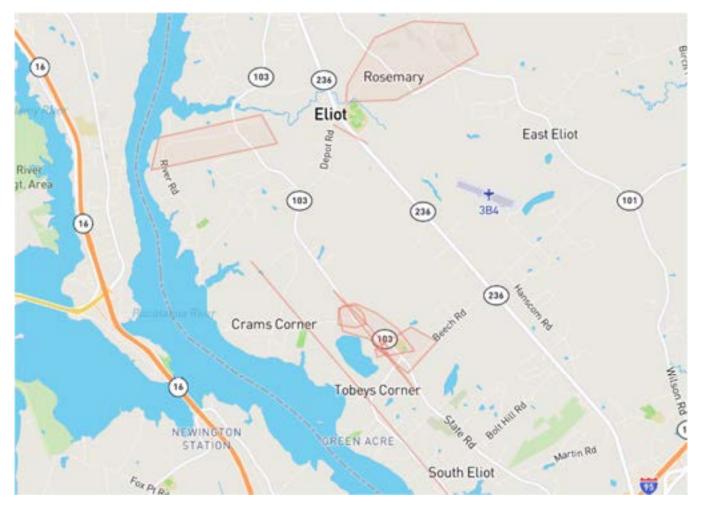


Eliot 2025 Comprehensive Plan Appendix Community Survey Preliminary Results Summary – Map-based questions

Land Conservation Area

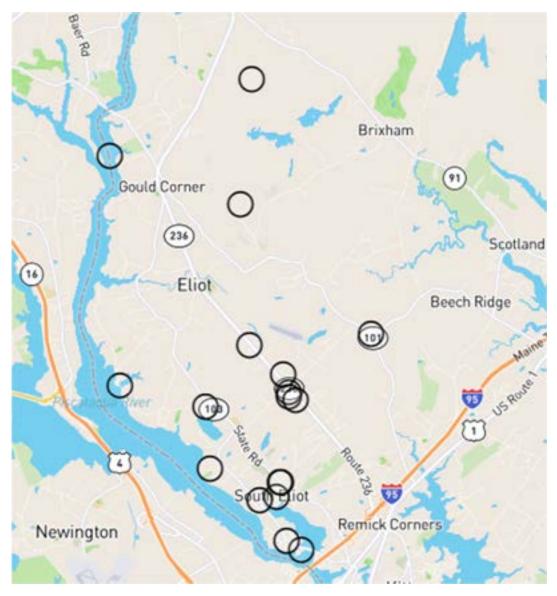


Historic District

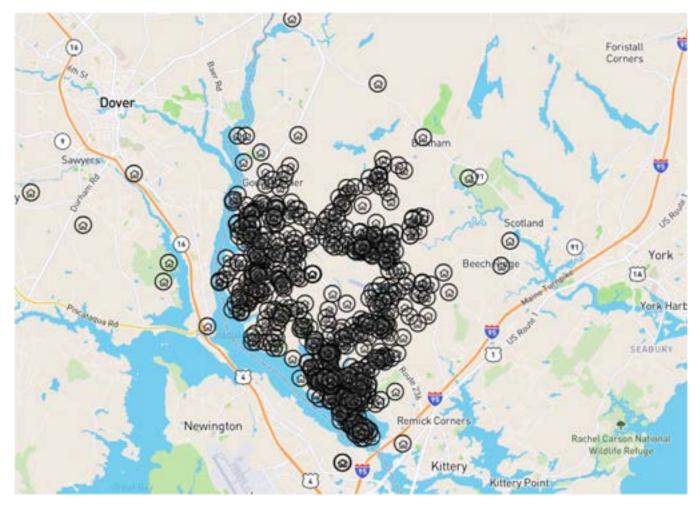


Other

Specific ideas to be added



20. In what part of town do you live? Click the button below to place a pin on the map. Approximate location or nearest intersection is OK.



March 2023 Visioning Session: Summary of Ideas and Opinions

Held March 22, 2023, at the Regatta Banquet & Conference Center

What do you like about Eliot?

1. A hidden gem community-small town feel

2. It has a friendly feel

3. Open spaces rural aesthetic - proximity to resources (e.g., 95, Portsmouth, boating, woods)

4. Maine Market is a wonderful addition to your community

5. I like Maine market and Dead Duck

6. Family friendly, great location schools

7. Rural feel, open spaces new business: Maine Markey, White Heron, Sturgeon Farms, love what these add to the town.

8. Comradery of the citizens of Eliot able to come together for anything.

What would you change about Eliot?

1. I wish people would drive closer to the speed limit

2. Larger shoulders or sidewalks (River Rd & Beech Rd toward the commons from State Rd)

3. I'd like more sidewalks to make it more pedestrian friendly

4.We Need to identify a community space outside or inside – Farmers markets weekly by the Town Hall Would be great- winter farmers markets at the Grange Hall. Bring people together more. Music at Dead Duck was great but it's hard to know where to find the info.

5.Landscaping the Eliot Commons.

6. Community Center for all ages & events.

7. Dead Duck could be better utilized more celebrating/ welcoming diversity

8. Dinghy dock to use, more boat moorings.

9. Would love a public pool or town collaboration that has a public pool

10. Better utilization of resources we already have- Eliot Boat Basin, Frost Tufts, area near skating pond. Use these resources to find ways to connect community members.

11. Definitely sidewalks

12. Community rec center with town pool. All ages So many options here.

13. Education around river ecology and conservation, major erosion happening less marijuana place

14.We'd love a rec center/gym and sidewalks

Transportation (Ideas or Thoughts)?

1. Publicize countrywide and Eliot/Kittery transportation options that already exist (e.g., York County Community Action) for residents that have transportation limitations (Also Community Services)

2. Encourage "public" transportation as much as possible (e.g., Vans, volunteer drivers etc.)

3. Bike Paths / side walks near the Village area and near concentrated housing area.

4. Bike paths / sidewalks on Depot Rd Beech, Main St Bolt Hill to the Marina Bridge (Kittery line) widen road sidewalks Main St. The bridge on Main St. Marina Creek is dangerous for fishing – build out a safe walkway area to fish and birdwatch.

Eliot 2025 Comprehensive Plan Appendix March 2023 Visioning Session Summary of Ideas and Opinions 5. Connect Eliot residents to quality-of-life resources via shared/public transportation system that is institutionalized and fully supported by the town. Not just hospitals and Wal-mart. (Work with Berwick & Kittery as well)

6. Safer biking availability

7. Support safe transportation/ recreation for youth by creating system of sidewalks/paths that connects safe spaces for them and families ex. Boat basin to Eliot Elementary to Frost Tufts.

8. Side walks in South Eliot. Cars drive so fast, yet there are so many walkers, runners, w/dogs, families with strollers.

9. Bike trail along Rte 91 joint effort with South Berwick & York

10. Rte. 236 at Eliot Commons: planting related in median before & after planned road work

11. Electric charging stations

12. Sidewalks

13. Bike path and sidewalks

Where do you want to see growth?

1. Keep commercial/industrial regulated for pollution mitigation and kept within already designated commercial/industrial districts, stay with route 236 corridor (other than small scale)

2. Village community center and park sponsored by the town, with limited commercial venues (for cafes etc.)

3. The Eliot Commons is such a large commercial space that could be better utilized for common use – small restaurants/cafes/place to sit

4. Not sure if possible but another eatery near the school/Maine Market area. Not near wetland, York River head waters, Piscataqua river save the wetlands

5. Designate low-growth areas - at risks for/due to hazardous road issues (sharp turns etc.)

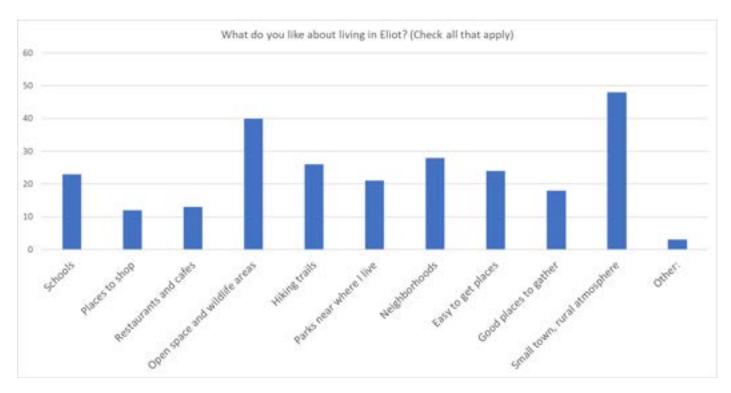
6. Beautify Route 236 somehow



Eliot Comprehensive Plan Youth Survey

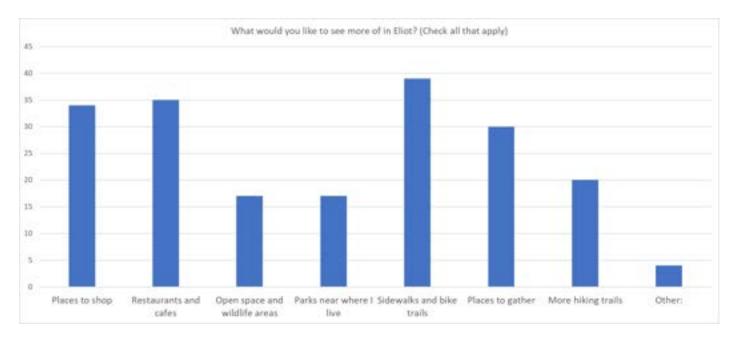
Preliminary Results Summary Text-based questions October 18, 2023 [updated for plan appendix]

Note: this includes responses starting May 30. Some responses prior to that date were filled out by parents.

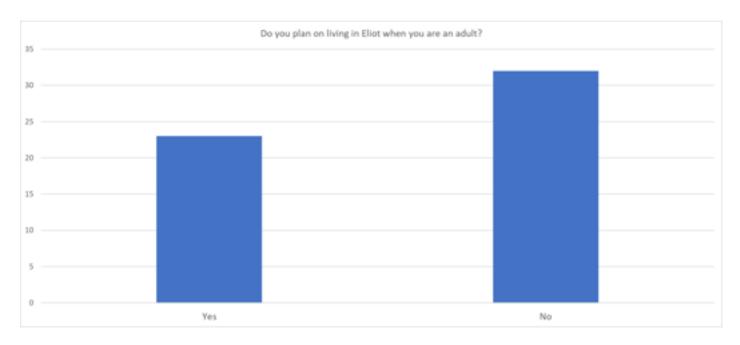


What do you like about living in Eliot? (Check all that apply)

What would you like to see more of in Eliot? (Check all that apply)

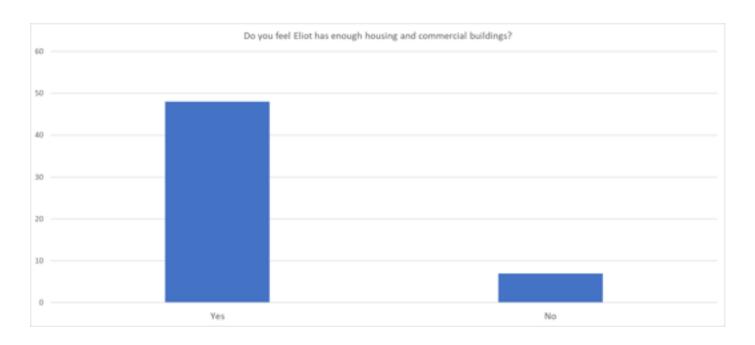


Eliot 2025 Comprehensive Plan Appendix Youth Survey Preliminary Results Summary



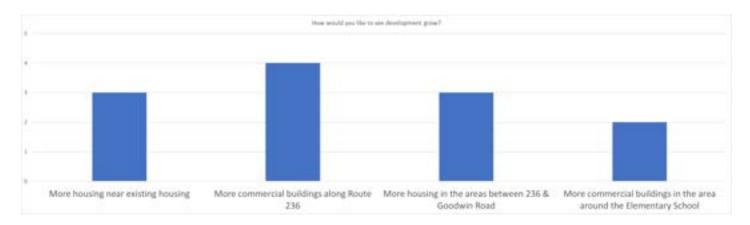
Do you plan on living in Eliot when you are an adult?

Do you feel Eliot has enough housing and commercial buildings?



Eliot 2025 Comprehensive Plan Appendix Youth Survey Preliminary Results Summary

How would you like to see development grow?



What are your ideas for improving parks, recreation opportunities, and outdoor/nature areas in Town?

More places for kids to play .. like skateboarding parks . Ice skating rinks.

More knowledge and access to the land that already exists for the public. More land preserves for hiking and other outdoor activities.

more access and more of them

updated maintenance

Keep parks by the water

Create more places where people can go.

idk

Just to have more of them in general and make them easily accessible

Better Downtown

Just add more parks and public areas with gardens and trees like Prescott Park in Portsmouth.

None near me.

I think more hiking trails would be great in our town; if they were similar to locations in South Berwick that would be cool.

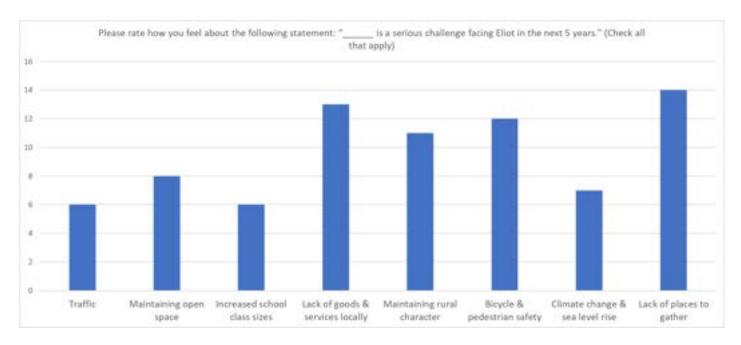
-Make a few more parks with sports fields, trails, and park equipment, right now there are a few, but not a lot of community fields, etc.

"Eliot should add trash cans to Frots Tuffs Park, seeing as it doesn't have a single trash can and there's lots of littering. Also more community places would be nice, I feel isolated in Eloit, there ain't too many public hang-out places."

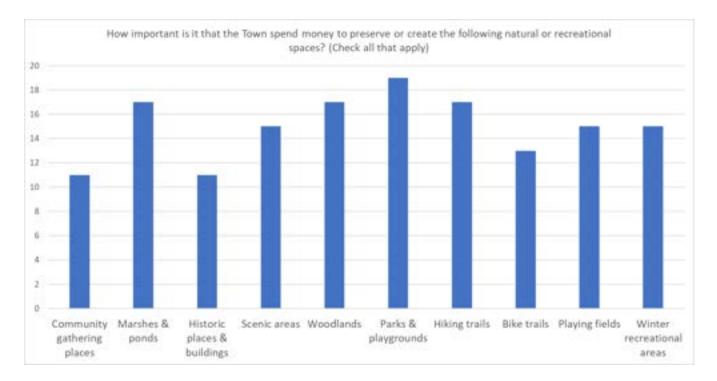
More hiking trails

Eliot 2025 Comprehensive Plan Appendix Youth Survey Preliminary Results Summary

Please rate how you feel about the following statement: " is a serious challenge facing Eliot in the next 5 years." (Check all that apply)



How important is it that the Town spend money to preserve or create the following natural or recreational spaces? (Check all that apply)



Write in comment: "Eliot is a nice small town with a lot of nice nature and it would be great if it kept that nature, or even made more of it maintained and public so everyone could enjoy it."

Eliot 2025 Comprehensive Plan Appendix Youth Survey Preliminary Results Summary

RESPONSES TO FUTURE ZONE COMMENTS

GOALS, POLICIES, AND STRATEGIES

Comment transcriptions may include minor edits for spelling, grammar, clarity, etc.

Jeff Brubaker, AICP, Town Planner

Thank you to everyone who commented at the Future Zone or via email!

Goals, Policies, and Strategies

Comment #	Goal/Policy/Strategy #	Comment	Response
Ag 1	Agriculture, Goal 1, Strategy 1-5	If town policy is reasonable, no one should bypass zoning, planning, reducing setbacks, etc. This is just complicated language to hide the fact that individual[s] want to do what they want without the possibility of others stopping them. I support farms + farming in Eliot. These changes don't!	While Strategies 1-5 do recommend reducing zoning barriers, they also have qualifying language meant to prevent negative impacts, such as retaining Planning Board review for more impactful uses (S3), only streamlining high tunnels/greenhouses if they meet certain criteria (S4), and only reducing setbacks for farm stands below a certain size (S5). However, based on this comment, S2 has been reworded to better balance the setback flexibility with protection against impacts to abutting residential properties.
Ag 2	General	A community kitchen would dovetail several initiatives and maybe earn money	To address this comment, a new Strategy 3 under G2, P2 has been added that references a community kitchen as one way to "build



Comment #	Goal/Policy/Strategy #	Comment	Response
			community knowledge and capacity around local food processing, storage, and preparation".
Econ 1	Economy Goal 1, Policy 2, Strategy 4	Have heard of several people who are concerned about our electrical grid's capacity to support the electrical needs of marijuana grow operations	This strategy speaks to improving electrical capacity generally on Route 236, and the Town has a cap (i.e. maximum licenses allowed) on the number of cannabis cultivation facilities. Businesses typically work directly with CMP to determine what power usage CMP will allow for the business.
Econ 2	Economy Goal 1, Policy 2, Strategy 4	Work with CMP to increase utility reliability. Power on north end of town surges a lot, even during no storm events	Added "reliability" to this strategy, and added "and other parts of town" to stress the importance of adequate capacity and reliability townwide
Econ 3	Economy Goal 1, Policy 2, Strategy 1	Improve appeal of 236. As an Eliot resident, I feel I need to go to Portsmouth or Kittery to experience a town with small businesses (going to eat, getting coffee, etc.)	We believe that the zoning updates envisioned for Route 236 in this plan, especially the Mixed Use zone described in Land Use G1, P1, will provide more opportunities for small businesses and will (over time) increase the appeal of Route 236, enabling places to be built that are more appealing to park once, walk around, and patronize multiple small businesses.
Econ 4	General / Future Land Use Map	Consider zoning changes to allow more business opportunities along Route 236 outside of the C/I district	This was a verbal comment at the Future Zone and aligns with a response from the same person during a business stakeholder interview. At this time, there are no new growth areas or Future Land Use Map changes along the northern part of Route 236 (current zoning: Suburban by Marshwood MS, then Rural north of Sturgeon Creek). However, it is a valid question

Comment #	Goal/Policy/Strategy #	Comment	Response
			whether the plan should identify smaller commercial nodes, such as around the Route 236-Route 101/Goodwin Rd./Dover Rd. intersection. This has not yet been determined but is something that could be considered by the Comp Plan Committee as we refine the draft plan heading into this fall.
Water 1	General	Prioritize runoff / water pollution	There are several strategies proposed to reduce stormwater runoff pollution – centered on Water Resources G2, P1, but also elsewhere
Water 2	General	Reduce wetland destruction[:] so vital to water absorption	This is an important point. Water Resources G1, P2, S1 recommends bringing in more wetlands under shoreland zoning regulation, and G1, P5 recommends establishing local wetlands protections. Of course, Maine DEP continues to have a key regulatory role.
Water 3	General	[Decrease] fertilizer use	Education about fertilizers and water quality is mentioned in G1, P4, S3.
Water 4	General	Fund sampling for PFOAs & other contaminants	A reference to MaineDEP's PFAS and PFOA resources has been added to G1, P4, S3.
Housing 1	Goal 1, Policy 4	(Summary of verbal comment) Add strategy re: energy efficiency in housing, supporting energy efficient homes, energy efficiency upgrades & workforce development around energy efficiency upgrades	Added S4 under P4 to address this comment
Housing 2	General	No big housing developments	Overall, the largest change based on the plan's approach would be in the Mixed Use zone, which

Comment #	Goal/Policy/Strategy #	Comment	Response
			is concentrated between Beech Rd. and Bolt Hill Rd. and is already mostly developed, except for the wetland complex which this plan recommends to mostly stay undeveloped. By concentrating more growth in this already- developed, but underdeveloped, area, the plan helps to keep the character of the Town's rural areas and take the growth pressure off them. The Rural zone is proposed to stay Rural, non-growth area, with additional protections for character and the environment.
Transportation 1	Goal 3	Would have loved to see something here about expanded side walks, bike lanes, etc. This would improve roadway safety without relying on vehicles. South Eliot <u>needs</u> sidewalks from Pleasant Street to Dead Duck to the Elementary School. Would be so much more family friendly 😇	The expansion of sidewalks and bike facilities on MG Farmer/Main St. into South Eliot is covered in G3, P3, S2. The Town has already recommended (in the 2021 bike-ped plan) and begun studying (with the help of a DOT grant) these facilities. The study should be completed this fall.
Transportation 2-3	General	Traffic light is needed at intersection of Bolt Hill Rd. and Route 236 / Install traffic light at intersection of 236 and Bolt Hill Rd. [2 comments]	A traffic light at Bolt Hill was not found to be warranted in the 2019 Corridor Study for this stretch of 236; however, one could potentially be warranted in the future if conditions and traffic change. This could be considered as part of the DOT project design referenced in G2, P1, S1, or a traffic light could become warranted in conjunction with new development in the vicinity, encouraged by the proposed Mixed Use zone in this area (see Land Use goals, policies, and strategies).

Comment #	Goal/Policy/Strategy #	Comment	Response
Transportation 4	General	Widen end of Bolt Hill Rd. at intersection with State Rd so that 2 cars can easily turn	G2, P1, S4 covers the type of project that could improve this intersection; however, we will consider adding this intersection to the Inventory chapter discussion.
Transportation 5	General	Turning lanes needed on 236	We expect turning lanes (where warranted) to be part of the DOT project design referenced in G2, P1, S1. Turning lanes were also recommended by the two Route 236 corridor studies done in 2019 and 2021.
Transportation 6	General	Eliot is <u>not</u> walkable. There are no useful side walks on State or Mainand a high volume of walkers. The side walk should be extended up State Rd.	This is covered by G3, P3, S1 and S2. The Town is continuing with the design of the State-Beech Active Transportation and Infrastructure Project, which will extend the sidewalk and bike lanes/shoulders on Beech Rd. to Eliot Commons and each end of the existing State Rd. sidewalk to the Grange Hall and Beech Rd., which will set up future projects to extend further.
Transportation 7	General	State Rd. paving is needed. The water project dug up a part of the road last year and one strip is detrimental to car[s]	DOT paved State Rd. in the Village in mid-Sept. 2024.
Transportation 8	General	Sidewalk/shoulder on Beech Rd.	See response to Transportation 6
Transportation 9	General	Bike friendly 236; recognize [bikes] to cross 236 at [Beech]	See G2, P1, S1. We expect this to be addressed in the DOT corridor design project.
Transportation 10 (emailed)	General	1. Sidewalks sidewalks sidewalks Beech Rd, Goodwin, Beech Ridge Rd – ideally connecting the York end of Beech Ridge to	See above responses regarding Beech Rd sidewalk extensions and G1, P1, S6 regarding Goodwin Rd. – which doesn't explicitly

Comment #	Goal/Policy/Strategy #	Comment	Response
		downtown Eliot, thus connecting the York end to the river side and giving many residents some much needed safety when walking. Traffic has really increased on these roads and it is dangerous for pedestrians.	recommend sidewalks but talks about proven safety countermeasures. Our 2021 Bike-Ped Plan also recommends shoulders along at least some parts of Goodwin Rd. Our sidewalk focus now is in and near the Village area, expanding from our lone sidewalk segment on State Rd. to serve nearby walkable destinations. Creating a core sidewalk network will make it easier to extend further in the longer term, e.g. Beech Rd. from Route 236 northeast toward Goodwin, should the community wish to do so
Transportation 11 (emailed)	General	Do something about the truck traffic on Goodwin-Beech Ridge. It is a residential area, but during the day it sounds like a construction site, so many trucks going back and forth, it's cacophonous.	The Town does not have the authority to restrict commercial truck traffic on state-owned and state-aid roads. Both Goodwin Rd. and Beech Ridge Rd. are the latter (State Rule 17-229, Ch. 104: Travel on State and State Aid Highways). MaineDOT has sole jurisdiction. There is an option for municipalities to request <u>time-of-day</u> restrictions for <u>through trucks</u> but this is subject to strict criteria and public process involving all affected parties, and ultimately DOT's decision.
Transportation 12 (emailed)	General	here are the things that I would love to see in Eliot in the coming years: Sidewalks on Beech Road from Goodwin to State. So many people love to walk around here but there's barely a shoulder and it's frankly very dangerous much of the	See response to Transportation 6 regarding our in-progress project (now in design phase) to build a sidewalk on Beech Rd. from State Rd. to Route 236, referenced in G3, P3, S1.

Comment #	Goal/Policy/Strategy #	Comment	Response
		time due to high traffic of trucks and speeding cars.	
Transportation 13 (emailed)	General	[continued from Transportation 12] A sidewalk on Goodwin Road or at least an enlarged road to include an actual shoulder for people to walk on. Goodwin Road goes through such beautiful areas and it would be incredible to walk/jog on it without the fear of being hit by a truck or car. It would also be great to have a sidewalk that connects all the way to the Kittery Outlets.	See response to Transportation 10. The systemic safety study recommended in G2, P1, S6 could explore improvements such as road shoulders on at least some parts of Goodwin Rd.
Transportation 14 (emailed)	General	[continued from Transportation 12] Address speeding. Especially in the summer, there is an increase of speeding on Rte 101 (and I'm sure in other areas of Eliot like State Rd). In my three years here, I've never seen a trooper near my neighborhood pulling people over for speeding.	See response to Transportation 10. The systemic safety study recommended in G2, P1, S6 could explore design improvements that encourage more moderate speeds on Route 101. If residents would like to see lower-cost, quick- implementation measures, such as signage or speed feedback signs, they can make that request to the Select Board or Town Manager. See also G2, P1, S4 regarding context-sensitive design changes that address documented traffic speed and safety issues.
Transportation 15 (emailed)		[continued from Transportation 12] Address large trucks using Beech Ridge Rd. Trucks should rely on larger roads to get to their destinations and not Beech Ridge Road. Beech Ridge Rd is a narrow, windy	See Response to Transportation 11

Comment #	Goal/Policy/Strategy #	Comment	Response
		road with residences — it is not Rte 236 or Rte 1, which are prepared for a large truck/industrial vehicle presence.	
Transportation 16 (emailed)	General	River road is currently being paved which I found odd because the road was perfectly fine. However State Road near the Kittery line has some pretty nasty pot holes that could definitely use some repair.	DOT paved State Rd. in mid-Sept. 2024.
Transportation 17 (emailed)	Goal 4, Policy 1, Strategy 3	This would favor EV vehicle owners over traditional gas powered car owners. Unless the Ev charging station was pay-per-use (to provide maintenance costs and compensate the contractor fully), it would disenfranchise taxpayers who would be paying to maintain others' cars as well as their own. Since there is no assistance for fueling traditional gas fueled cars, this would unduly burden certain taxpayers beyond reasonable costs of normal (taxpayer funded) budgetary items.	Based on this comment, consideration was given to deleting this strategy entirely, especially since it did not get any "likes" at the Future Zone. The Transportation Subcommittee of the Comprehensive Plan Committee felt it should stay in, because it would help meet Goal 4, Policy 1, but they agreed with your general suggestion about tax impacts, so it has been reworded to add a clause about any EV station installation being "cost-neutral (at minimum) or net revenue generators for the Town Budget". This will avoid a situation where taxpayers subsidize these stations, and point to a situation where any EV stations will bring in net revenue for the budget.
Transportation 18	Goal 5, Policy 3, Strategy 1	Private sector can do this	This comment (regarding planting flowers and other plants in transportation corridors) already lists the Eliot Garden Club as the responsible/partnership entity to achieve this. But we have added "private businesses" and "sponsoring entities" as additional entities. This emphasizes that this strategy is not the domain

Comment #	Goal/Policy/Strategy #	Comment	Response
			of the Town, but we do want to honor an important priority that has been expressed by the Garden Club (and in fact they are already doing this work in some places). Similarly, businesses may want to do similar plantings to beautify areas in front of their business, or sponsor other plantings, so that is the reason to add those to the Responsibility/Partnership column. We have added "DOT" to note how DOT may elect to do this on corridors they own, or if a private entity wants to plant in a DOT corridor they need DOT's approval.
Land Use (LU) 1	General	In general I would like to say that people who move to Eliot (esp. in the past) did so because of its small town / semi rural feel. We didn't want to live in a city or widely developed (houses or commercial) area. We want the undeveloped space (wetlands, woodlands, etc.) left as such. No big housing developments or commercial. Please leave the look and feel of Eliot as is!! It's too late for most of us to up and move as the growth becomes too much. Please stop it now – before its too late! Thank you.	We know that this sentiment is a top priority from the input we have heard so far, and we believe that the approach presented in the draft plan and Future Land Use Map responds accordingly. The plan prioritizes keeping the rural areas rural and proposes several strategies around conservation and protecting/promoting farms and preventing sprawl. Most of the area now zoned Suburban would be proposed to stay that way. The vision for existing Village Zone (G1, P1, S1) is for modest growth that maintains its small-town New England character. The vision for the Village transitional area (S2) between the Village and Route 236 also emphasizes modest growth and context-sensitivity to retain its character. The most significant change is the existing Commercial-Industrial zone along Route 236 between Beech Rd. and Bolt Hill Rd., which is proposed to have a greater mix of residential

Comment #	Goal/Policy/Strategy #	Comment	Response
			and commercial uses in a new Mixed Use zone. This growth will be concentrated along a part of a corridor – Route 236 – which the community has said needs to improve in terms of the look and feel. The Community Survey did prioritize both keeping the town about as is but also concentrating growth where it is now, with good support for encouraging mixed use growth along Route 236.
LU 2	G3, P2, S1	Once again, all of this is just I don't want proper review of developmentthis is how wealthy investors abuse our town	Based on this comment, this strategy has been reworded somewhat to clarify that streamlined review would be intended for uses that have presumptively lesser impacts on abutting properties or the environment, or in the Mixed Use zone for developments that use pre- approved building forms. The idea is to match the rigor of review with scale, complexity, and potential impacts.
LU 3	General	I didn't see specifically, but paving and road conditions post projects need improvement. The sewer and natural gas extensions have ruined two main roads in town. And are significantly worse than before the projects	The natural gas line extension was done by a private company along DOT-owned Route 236, meaning the Town had no direct role in overseeing the project or the repaving done at the end of the project. The Town's Route 236 Water-Sewer Project contractor completed a repaving of the sewer line trench, and the new pavement was reviewed and approved by DOT. See also Transportation Goal 1, Policy 1.
LU 4	General	[summary of verbal comment] Great Cove Boat Club – don't expand	It is not known what the Boat Club plans to do in the future but any significant expansion proposal would be reviewed by the appropriate permit

Comment #	Goal/Policy/Strategy #	Comment	Response
			authority, e.g. Town Code Enforcement Officer, Planning Board, Maine DEP, etc.
LU 5	G2, P2, S2	[summary of verbal comment] Remove minimum parking requirements	Based on this comment, added "Consider reducing minimum parking requirements where warranted".
LU 6	General	[summary of verbal comment] Consider making more of north Route 236 a commercial area (e.g. for lots abutting Route 236 north of Depot Rd.)	The Comp Plan Committee has discussed adding a "Rural Crossroads" designation at the north end of Eliot, at Goodwin Rd./Route 101, to address this comment, and serve as a northern gateway into town
LU 7	General	Preferences to add commercial buildings to existing dilapidated buildings or empty buildings as opposed to clearing tree lots	We believe that our Future Land Use Map and growth areas address this important point. The proposed Mixed Use zone is located where there is primarily already built-up land, but which is underdeveloped. The rest of the Commercial- Industrial zone is proposed to stay as it is today.
LU 8	General	Preference for <u>NO</u> big box stores.	Based on this comment, Goal 1, Policy 1, Strategy 2, regarding the Mixed Use zone, has been updated from "discourage" to "prohibit" big box development
LU 9 (emailed)	Goal 3, Policy 1, Strategy 2 (re: additional Code Enforcement/Planning workforce)	This is a major added expense to the yearly budget. (Full time pay, benefits, etc.) During a time of rising inflation, it is simply not sustainable.	The Planning Office strongly believes that additional workforce is now needed to handle current and anticipated workload. However, as this comment mentions, there would indeed be a budgetary impact. The recommendation names the Town Manager, Select Board, and Budget Committee in the "Responsibility/Partnership" column –

Comment #	Goal/Policy/Strategy #	Comment	Response
			suggesting that any such workforce proposal would need to be vetted through the Budget process. Planning Office expenses are partially offset by permit fees and Planning Board review fees paid by applicants.
LU 10 (emailed)	Goal 1, Policy 1	In regards to the designated [future land use] boundary changes, from our personal standpoint and interests, they all largely exclude where we maintain property in town. Considering the housing density at present combined with the unbuildable wetlands in the area, and since the proposal isn't directly tied to the town water expansion initiatives, not sure why this area[*] isn't a good idea to be included. [* attached a map marking an area along State Rd. west of the Village, Fore Rd., and the Heath]	This area is proposed to remain as is in terms of future land use and zoning, and be a non-growth area. As G1, P3, S1, notes, non-growth areas disincentivize significant growth, but they may nonetheless see modest growth in the future. As this comment mentions, there are significant constraints to development in the area – the Heath, wetlands – plus some steeper slopes. The sewer extension recommendations in this plan's time horizon are down Route 236, and into the Village, but not necessarily beyond the Village. For these reasons, this area is not designated as a Transitional Area/Adjacent Neighborhood or other growth area. Property owners in this area will still have a choice to propose developments of their property under the existing zoning, or choose to leave their property undeveloped or pursue permanent conservation, or some mix of those options.
LU 11 (emailed)	G1, P3, S2	the idea of creating a "critical" rural area seems a bit excessive and I'm not really sure what impact that would have, if any aside from more effort and wasted resources from the town's side, when put to practice.	The critical rural area already exists in the zoning, and is referenced in the 2009 Plan. CROs are a common element of Maine comprehensive plans. This plan simply seeks to expand the CRO to include a small part of land NE of Goodwin Rd., centered around Beech Ridge Rd. The main

Comment #	Goal/Policy/Strategy #	Comment	Response
			effect of the CRO is that subdivisions inside of it must be Open Space Developments (i.e. cluster/conservation subdivisions).
LU 12	Zoning lines creation & limits	Having a clear zoning line to intend to be a distance of a road or center line or a boundary line of an existing tract at the time of adoption	This is an important technical point exercise that the Town could consider undertaking at any time – e.g. creating text/metes and bounds descriptions of zones to eliminate any confusion.
Recreation and Open Space (Rec) 1	G1, P1	Improved playground infrastructure @ Boat Basin – speaking as a young family (3yo + 1yo) who will have <u>years</u> of use of these types of family-friendly facilities!	Added improved playground infrastructure to G1, P1, S2
Rec 2	G1, P2 + P3, S4; G2, P1 + P2, G3 all	"Arboretum" incorporating Douglas Woods & contiguous open space/woodland/beech forest behind elem school, with loop trail connecting to Beech Rd (recreational use only) – 100+ year time scale	Re-worded G1, P2, S1 to add the arboretum and trail connection recommendations
Rec 3	General	Need initiative to proactively manage pests in an eco-responsible way	This topic is addressed in Natural Resources G1, P4, S3 but will look at strengthening the wording regarding ecologically friendly pest management methods
Rec 4	G1, P1-P2	Please use funds to fix up <u>existing</u> parks before creating new spaces. Like Murray- Rowe.	Generally, P1-P2 reflect this timing. Murray Rowe is in-progress. The strategies that speak to other existing parks' improvements are generally shorter-term than the new park strategy (P2, S2) which is long-term

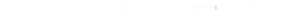
Comment #	Goal/Policy/Strategy #	Comment	Response
Rec 5	G1, P1, S3	Please keep 2 playgrounds at Frost-Tufts separate. Little kids need their own space away from older kids. These structures need improvements/sanding.	S3 has been updated to replace the playground consolidation text with a reference to keeping the 2 playgrounds separate. This is also the preference of the Rec Director
Rec 6	G1, P2	[summary of verbal comment] Walking trail next to wetland behind Town Hall, going to shoreline if possible	G1, P2, S1 has been re-worded and includes "new trail connections" as one of the possible improvements the Village rec plan could consider
Natural Resources (Nat Res) 1	General	Reduce wetland destruction so vital to water absorption	A number of strategies address wetland protection, for example under Water Resources Goal 1, Policies 2 and 5 – relating to shoreland zoning upgrades, a local wetland regulation program, and net residential density
Nat Res 2 (emailed)	General	Address the spread of Japanese Knotweed. I'm seeing so much more of it on the side of 101 and Beech Road. It is highly invasive and now choking vulnerable marsh areas. It looks like it's being spread through the mismanagement of road construction. This should be addressed & rectified ASAP!	While some aspects of this issue would be addressed operationally by the responsible agency (DOT for both Route 101 and Beech Rd., Town for Town roads), language has been added under Natural Resources Goal 1, Policy 4 to address invasive species in an ecologically responsible manner

Future Land Use Map and Growth Areas

Comment #	Growth or Non- Growth Area	Comment	Response
FLUM 1	Commercial- Industrial	Need way better traffic management, center turn lane? 4 lanes all the way through Eliot on 236? Significant traffic growth is expected	MaineDOT is beginning the design phase for a corridor improvement project on Route 236 in Eliot and Kittery. The Town expects to participate and have a say in the design process. Two corridor studies done in 2019 and 2021, respectively, made recommendations for traffic and safety improvements along the corridor, including a center turn lane, turn lanes at intersections, and signalized intersection improvements. The corridor is expected to accommodate current and future traffic with 2 through lanes (1 in each direction, plus turn lanes), and we do not see a likelihood that adding 1 additional through lane in each direction (to make 4 total) would be warranted or recommended at this time, nor was it recommended in either corridor study, which projected future traffic volumes. Also see Transportation G2, P1, S1.
FLUM 2	Suburban	More investment in walking/bike paths	The draft plan identifies several investments in walking and bicycling infrastructure for Eliot's future, including the Eastern Trail and walking/bicycling improvements in the Village area and Beech Rd. corridorwhich will partly serve the Suburban zone
FLUM 3	Suburban	Keep acreage in [tact] for building no less than 2 [acres] may be increase[d]	The plan envisions most of the Suburban zone to stay as is, insofar as retaining the 2-acre minimum lot size and area-per-dwelling-unit. The proposed Village Transition [Transitional Area/Adjacent Neighborhood], and G1, P1, S3, does recommend creating a new zone out of the Suburban zone with minimum lot size being reduced to 1 acre. However, this area is a relatively small portion of the Suburban zone between the Village and Route 236 – and carries over a similar minimum lot size change recommended in the existing (2009) Comprehensive Plan
FLUM 4	Transition to Critical Rural	Farms on other side (marked as Suburban) of Goodwin Rd. become critical rural	No change at this time, but I expect that this comment will be reviewed further as we refine the draft this fall and winter.

Comment #	Growth or Non- Growth Area	Comment	Response
FLUM 5	Mixed Use	[summary of verbal comment] Encourage small businesses in single shopping area ("park once and walk around")	This is very much part of what we envision in different nodes of the proposed Mixed Use zone
FLUM 6	Mixed Use	Consider Housing Strategies 2 through 6 in this zone [likely referring to strategies under Goal 1, Policy 1]	These Housing strategies (under Housing G1, P1) would potentially be applicable in the Mixed Use zone. S2 and S4 are worded so they apply to growth areas, including the Mixed Use zone, and S3, S5, and S6 are essentially neutral with respect to future land use areas
FLUM 7	Village Transition [Transitional Area/Adj. Nbhd.]	Strongly consider Housing Strategies 4 through 6 in this zone	The way they are worded, these Housing strategies could indeed be applied in this zone
FLUM 8	Mixed Use	[Summary of verbal comment] Make sure wetland is preserved	Future Land Use G1, P1, S2 and the Future Land Use Plan narrative both speak to preserving this wetland in the Mixed Use area as an environmental asset, with any impacts minimized, mitigated, or compensated with preservation of other wetlands in town. Development nodes would primarily be on either side of the wetland as noted on the Future Land Use Map.



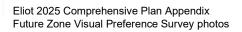










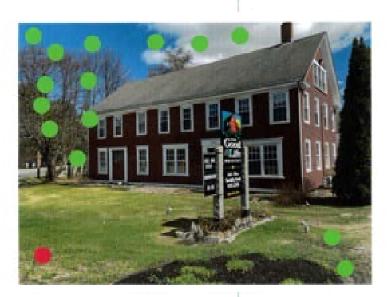


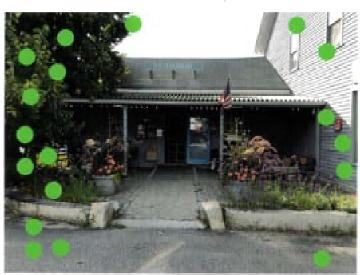








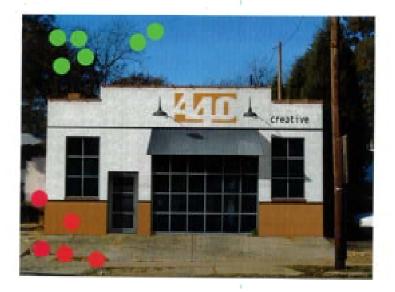




Eliot 2025 Comprehensive Plan Appendix Future Zone Visual Preference Survey photos

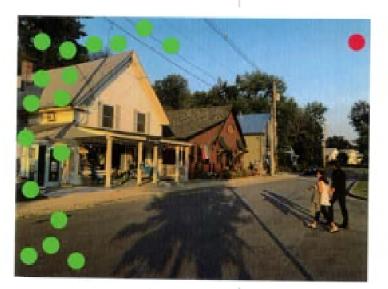


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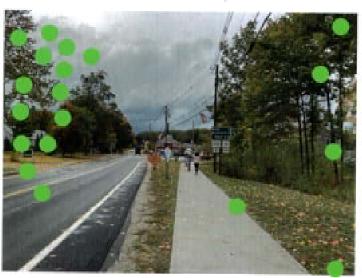


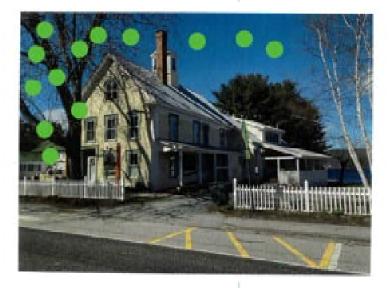




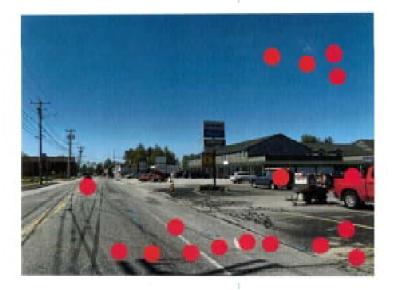


Eliot 2025 Comprehensive Plan Appendix Future Zone Visual Preference Survey photos

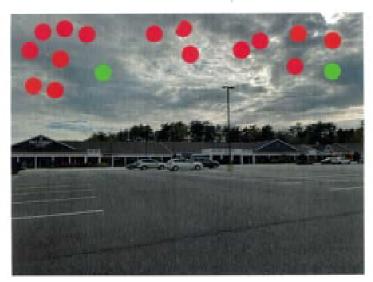




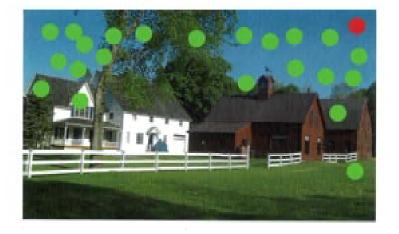




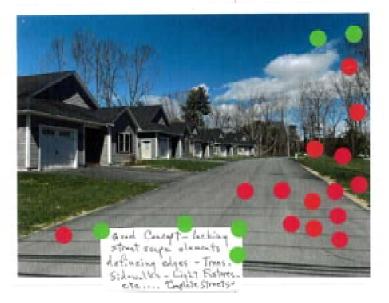


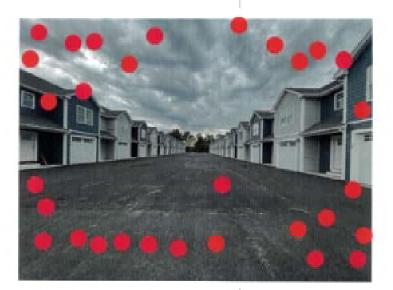


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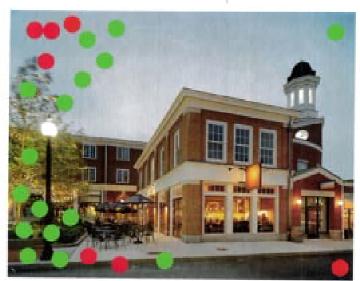


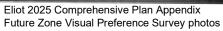


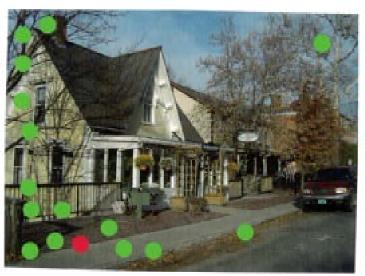




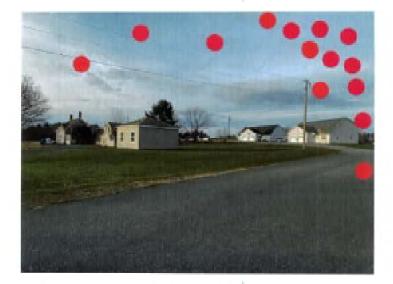








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ELIOT Comprehensive Plan Comment Form

Agriculture & Forest Passures	Policy 1 Stratom A High tunnal group haves
Agriculture & Forest Resource	Policy -1 Strategy 4 – High tunnel greenhouse is the first highlight on the Big Ideas card. So
	looked for more info without success. The
	Strategy seemed confusing as well especially
	the first sentence. I am very supportive of this
Outdoor Space	Hiking trails, fishing, boating, kayaking for
Outdoor Space	
	aging natural art, biking, walking dogs.
Small Local Business	Space for a market where small business &
	restaurants can be.
Art	Places for community to make art & connect
Mixed Use Zoning	Concerned about additional stop light on 236
	to the usage. Important to keep the traffic
	moving on 236 to prevent backups during
	peak hrs.
Community	Building more connection through
	community space. A Community Center for
	all ages small business & restaurants that
	create connection &a place to gather
Conserving Open Space/Forest/ Nature	Make more town trails lands water ways
	accessible to the public. Invest in bettering
	our current parks & have them better run. A
	plan for the ice rink.
History	Preserving our historical places & our old
	graveyards
Access	Sidewalk biking safe access for walking &
	biking through the town
Housing	"Housing" bulletin mentions potential
	"inclusionary housing" provision for
	affordable housing as part of larger
	subdivisions. I would suggest referring to the
	recent Town of Kittery ordinance additions
	for guidance 16.10.9 subsection of the
Housing	Conservation subdivision standards.
Housing	More housing types for Seniors smaller
	single-family dwelling /duplexes cottage
	clusters. Affordable subdivisions/additions to
	existing homes

Open Space areas	There are many beech areas conducive & important to be kept in a natural state &/or can be used as a soft recreational area
Historical	Continue to put in place mechanisms to help identify/preserve or repurpose historical buildings & properties
General	Impressed with the work the Committee has done & responsiveness to the public input. The mixed-use areas for 236 is great!
Housing/Accessory Dwelling Units	I propose that the housing proposal of the Comprehensive Plan include flexibility to allow two accessory dwelling units on a property in addition to the current flexibilities regarding ADU's.
Mixed use zoning/Housing	I support mixed us zoning along 236 & building housing there. Would love to see more affordable housing aimed at people who work in the area (not vacation) duplexes, single houses, small apartments.
Mixed used zoning / Business	It would be awesome to have small grocery store or food co-op (like Golden Harvest) in the area by the Post Office. Also support more small business like Maine Market in town.
Public Transportation/Light Pollution	Transportation & unit bus. Reduce sign lights
Biking Lanes on 236 & Bike safety	Street light recognizing bikes, weight sensors are needed on Beech Rd /236
Housing	In support of affordable housing opportunities duplexes & cottage clusters
New Village	In support
Utilities	Interested to hear if utilities will be upgraded i.e sewer/water Seeley Lane area
Conservation Plan	Well, made
Mixed used zoning change	100% Agree
General Plan	Open house is super idea. Thank you. Keep info available on-line but many older citizens are not on-line. That's why this is so good.
Potential change from 2ac. Lot to 1ac.	Do have a concern about this may not be in favor of this
Improving Aesthetic in mix use	Yes-100%
Conservation Plan	Yes-Agreed
Commercial District	Hannaford or other grocery store would be great.

.....

Plan Implementation Evaluation Measures

At least every five years, it is recommended that progress on this plan's recommendations be evaluated. The following basic evaluation framework is a starting point, not meant to be exhaustive. The community can add to and refine this list going forward.

1. The degree to which future land use plan strategies have been implemented

- 1.1. Village Plan completed or underway
- 1.2. New amenities and placemaking projects in the Village
- 1.3. New linear feet of bicycle or pedestrian facilities in the Village
- 1.4. Mixed Use zoning and design standards adopted
- 1.5. Status of DOT's Route 236 corridor project does it accord with the Town's vision?
- 1.6. Village Transition zoning adopted
- 1.7. C/I zoning changes adopted
- 1.8. # of lot splits into lots <3 ac. in the C/I district, for lots connected to water+sewer
- 1.9. Rural Crossroads overlay zone adopted
- 1.10. Critical Rural Overlay expansion adopted
- 1.11. Critical Natural Resource Overlay adopted
- 1.12. Density Transfer Charge (DTC) or similar program adopted
- 1.13. Growth Management chapter overhauled (Ch. 29) and differential growth cap adopted
- 1.14. JLUS strategies implemented in Eliot
- 1.15. Examples of partnerships on land use strategies with neighboring communities
- 1.16. # of land use public info sheets, interpretation policies, FAQs, etc. published
- 1.17. Examples of streamlined permitting procedures
- 1.18. Off-street parking regulations substantial revision adopted

2. Percent of municipal growth-related capital investments in growth areas

2.1. Capital investment projects and their costs – within and outside of growth areas, growth-related or not

3. Location and amount of new development in relation to community's designated growth areas, rural areas, and transition areas

- 3.1. New dwelling units by zone (including existing and proposed new)
- 3.2. New businesses and commercial space by zone
- 3.3. New developments by zone (raw #)
- 3.4. Civic and recreational amenities included in developments
- 3.5. Conservation funds raised by DTC/similar program and density benefit

Eliot 2025 Comprehensive Plan Appendix Plan Implementation Evaluation Measures Additional Notes on Implementation

- 4. Amount of critical natural resource, critical rural, and critical waterfront areas protected through acquisition, easements, or other measures
 - 4.1. Number of permanent conservation acquisitions by type (e.g. land trust, resource agency, Town, other)
 - 4.2. Acreage of new land preserved and qualitative evaluation of benefits (e.g. BwH map features, does it help flood resilience, does it provide passive recreational benefits, etc.)
 - 4.3. Continued tracking of Current Use Tax Program participation
 - 4.4. Shoreland zoning amendments that go beyond the minimum DEP guidelines
 - 4.5. Critical Rural Overlay expansion adopted or put on Town Meeting/Election warrant
 - 4.6. Critical Resource Overlay adopted or put on Town Meeting/Election warrant

Additional Notes on Implementation

Agriculture and Forest Resources

In implementing the goals, policies, and strategies in this section, we will:

- Consult with the Maine Forest Service district forester when developing any land use regulations pertaining to forest management practices as required by 12 M.R.S.A. §8869
- Consult with Soil and Water Conservation District staff when developing any land use regulations pertaining to agricultural management practices

Water Resources

Comprehensive Plan checklist strategy: Maintain, enact or amend public wellhead and aquifer recharge area protection mechanisms, as necessary

How this plan will address this through other strategies

- Future Land Use Goal 1, Policy 2, Strategies 3-4 involve extending water and sewer so that it will serve Marshwood Middle School and Seacoast Waldorf School – two facilities that use a public water source (PWSID# ME0000216 and ME0092503) and subsurface wastewater disposal systems
- Future Land Use Map and Future Land Use Goal 1, Policy 3, Strategies 1-2 recommend maintaining the Rural area as a non-growth area and expanding the Critical Rural Overlay

 which will limit development and help protect the Marshwood Estates PWS and the Kittery-Eliot aquifer discussed in the Water Resources inventory

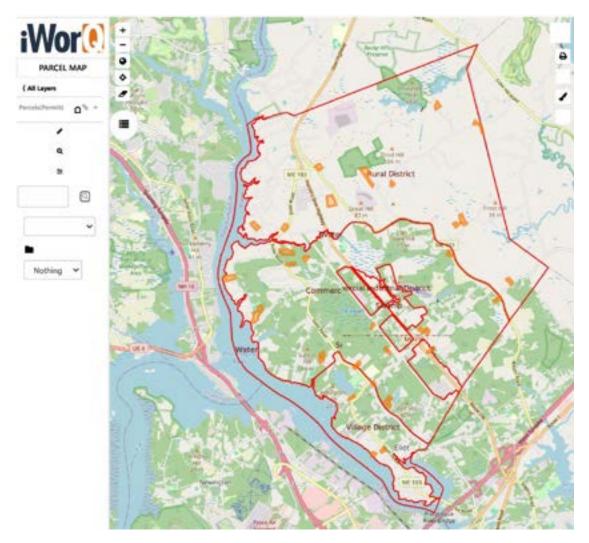
Housing Growth Map

Preliminary map showing where permits for new principal dwelling units (growth permits) have been issued, based on the Town's IworQ online building permit platform

Years: 2022 through late February 2025

Prior to the IworQ system, permits were paper-only. They way the permits are logged in Excel spreadsheets varies from year to year. It is not easy to process that data, filter out only new dwelling units, standardize it, and map it without a substantial time commitment.

Parcels with orange outlines are locations of new (growth permit) dwelling units (excludes teardown + rebuilds)



Survey write-in commercial development preferences

Write-in response excerpts under "Other" to Community Survey Question 7: "Please rate your desire for the following types of commercial development in Eliot." Typos in responses have been corrected

What they wrote in	What they rated it
Better rec opportunities for kids	Very desirable
Brewery/distillery	Very desirable
Casual fast food like Chipotle or Panera	Very desirable
Community center, larger space for older kids to hang out	Very desirable
Desire rural not commercial	Very desirable
Enough already with the pot growers and pot shops. Eliot looks like a drug cartel	Very desirable
and the customers are crazy drivers.	
Grocery stores	Very desirable
GYM!	Very desirable
I picture Eliot as a bedroom community. I'd like to see small town businesses to meet the needs of residents and visitors such as restaurants, groceries, gift shops, personal services, etc Commercial and industrial business is good but it should be zoned away from the village and hidden in a park. We should try & limit through traffic to Route 236. slow speed limits on secondary roads with electronic speed signs to slow traffic down and PROMOTE ACTIVE TRANSPORTATION.	Very desirable
No more marijuana places- get rid of the pot places!!!!	Very desirable
Senior center, pool, library extension	Very desirable
Small locally owned retail or restaurantsno chains. So more of the \$ spent	Very desirable
filters directly down into our community.	
Small retail business	Very desirable
Stop the growth of Eliot. We live here because we like living in a small town where tourist[s] are not!!!	Very desirable
Support local businesses!	Very desirable
The surrounding areas have development, keep Eliot unique by not trying to be Kittery/Dover/Portsmouthplay up natural improvements, natural spaces, farms, outdoor recreation, people are seeking peace more and more	Very desirable
The town is already growing too rapidly. Additional development serves only certain interests and accelerates the continued degradation of our rural character.	Very desirable
Waterfront industrial on the river	Very desirable
We've provided Ballfields for decades now let's pay attention to our courts - Pickleball courts. You have an aging population that play on ridiculously patched tennis courts but have impeccably groomed fields for young adults. Excuse mebut who's paying the bulk of the taxes here?	Very desirable
A version 2 skatepark. This time without a wooden bowl that gets ruined by the rain after a few years :)	Somewhat desirable

Art studios - pool - gym - bakery	Somewhat desirable
RECREATION GYM	Somewhat desirable
Safe walking spaces	Somewhat desirable
Again - I fully support agriculturebut not more pot farms blowing fumes in the wind	Uncertain
No more cannabis and how about enforcing the current laws, NO SIGN CAN SAY CANNABIS, MARIJUANA, etc. PROTECT OUR YOUTH!!!!	Little desirability
Adults only stores.	Not desirable
Cannabis sales	Not desirable
Chain businesses	Not desirable
commercial Solar projects should not permitted in any area other that landfills, gravel pit or brownfields. save the gird for residents.	Not desirable
Enough with the pot shops, and factories.	Not desirable
Marijuana retailers	Not desirable
More Cannabis distilleries	Not desirable
No marijuana shops.	Not desirable
No more pot stores. It's embarrassing what you have allowed.	Not desirable
We do NOT need more marijuana dispensaries on 236.	Not desirable
We have so many of the above amenities [other choices in the survey question] in Portsmouth and Kittery- not necessary in Eliot in my opinion	No rating provided
No more marijuana stores! Other businesses! Put sewer down 236!	No rating provided
no more cannabis growers or retailers in Eliot.	No rating provided
Maintain and support small local business and farms that already are established in town	No rating provided
Less marijuana retail - enough already. Market is saturated with this in Southern Maine	No rating provided
I think we have way too many CBD/recreational marijuana shops!!!	No rating provided
Grocery store is needed	No rating provided
Fewer CBD/ Marijuana outlets. This retail industry is not likely to sustain as many	
outlets as there are now in this area.	No rating provided
Enough weed stores	No rating provided
All of the above could be desirable if done in a coherent focused way and economically viable for the service. Current route 236 development is an outstanding example of what should be curtailed as environmental degradation	
unsupporting to community concepts.	No rating provided

Bicycle Level of Traffic Stress (LTS)

Bicycling tends to be safer, more comfortable, and more inviting for people of all ages and abilities when it can be done physically separated from motor vehicle traffic, especially moderate- or higher-speed traffic. A common metric for measuring these qualities is Bicycle Level of Traffic Stress (LTS), which rates streets and intersections on a scale of 1 to 4, with 1 representing the least stress (i.e. suitable for children) and 4 representing the most stress (i.e. riding in close proximity, or mixed with, higher-speed traffic, only suitable for people who are very experienced bicyclists).

LTS factors include the number of lanes, whether a street has a striped or physically protected bike facility, the posted speed limit or prevailing speed of traffic, and the presence of turn lanes or onstreet parking. These factors are combined to create a composite score for each street and intersection, which can be represented in a color-coded street map.

An LTS analysis was not done for the 2021 bicycle and pedestrian plan, "Improving Conditions for People to Walk and Bike in Eliot", because almost all roads in Eliot are no more than two lanes without existing bike facilities or shoulders. Because of their posted speed limits, we know that Route 236, Route 101 (Goodwin Rd./Dover Rd.), and most of State Rd. are LTS 4. Many of the Town's current active transportation efforts seek to improve LTS 4 road segments. If the Town creates a comprehensive Active Transportation Plan in the future, that process could include an LTS analysis.

	Street Width		
Speed Limit or Prevailing Speed	2-3 lanes	4-5 lanes	6+ lanes
Up to 25 mph	LTS 1 * or 2*	LTS 3	LTS 4
30 mph	LTS 2 * or 3 *	LTS 4	LTS 4
35+ mph	LTS 4	LTS 4	LTS 4

Figure ___. Bicycle Level of Traffic Stress (LTS) for mixed traffic. Source: Professor Peter G. Furth, Northeastern University. <u>https://peterfurth.sites.northeastern.edu/level-of-traffic-stress/</u>

Parks and Recreation Service Analysis

This is the full service analysis referenced in Recreation and Open Space.

Notes about this analysis

NRPA disaggregates their statistics into population size cohorts. Unless otherwise noted, the statistic for jurisdictions less than 20,000 population is cited. When a residents-per-facility statistic is cited, the lower number is generally better because it means better "supply" of the facility relative to "demand", as represented by community population. NRPA often cites the median statistic, so communities under the median (i.e. less residents per facility) are technically doing "better than most" communities – at least those that participated in the review – and communities over the median are technically doing "worse than most". But this is only one metric – and as mentioned, each community is unique – so it should not be given too much weight by itself. Still, it is a useful starting point.

Youth softball fields

- What we have:
 - o 1 field at Eliot Elementary School that may be used for younger levels of youth softball
 - o 1 field reserved for school use at Marshwood Middle School
- Residents per youth softball field
 - o NRPA median: 5,079
 - o Eliot: 7,162
- Nearby communities:
 - o 1 field at Aggie Field in South Berwick
 - 1 field at Kittery Memorial Field
 - o 1 small field at Kittery Community Center
- What it means: We have one youth softball field, assuming that the EES field is the only one available for non-school use. The renovation of Murray Rowe Park will include a youth softball field next to the Little League field. Two softball fields would place us under the median residents per field.

Youth baseball fields

- What we have:
 - o 1 Little League field at Murray Rowe Park, has been in disrepair but being renovated
 - 1 field at Eliot Elementary School usable for younger levels of baseball, e.g. teeball
- Residents per youth baseball field
 - NRPA median: 3,114¹
 - Eliot: 7,162, or 3,581 after renovation of the Murray Rowe Park field
- Nearby communities:
 - 1-2 fields at Aggie Field in South Berwick

- 1 small field at Kittery Memorial Field of dimensions suitable for younger levels of baseball, e.g. teeball
- 1 field at Bog Road Fields in York
- What it means: The current disrepair of the Murray Rowe Park youth baseball field means the community does not have a functional youth baseball field. Little League games have relocated elsewhere. The upcoming restoration of the park and field will bring Eliot back into proximity with the NRPA median (2 fields for a community of our size) when counting the Elementary School field.

Adult baseball fields (90 ft. basepaths)

- What we have:
 - 1 privately-owned field, Raitt Ballfield: previously used for Babe Ruth baseball, but it is not often used now
 - 1 field reserved for school use at Marshwood Middle School
- Residents per adult baseball field
 - NRPA median: 7,627
 - o Eliot: 7,162
- Nearby communities:
 - 1 field at Kittery Memorial Field with 90-ft. basepaths, but the outfield is shared with football and soccer and the outfield fence is not contiguous; may be more suitable as a practice field
 - Adult baseball league games in the region are primarily played on fields in Rochester and Portsmouth, with other leagues playing in and around the Portland area
- What it means: Without regular baseball use, the future of the Raitt Ballfield is uncertain. Having one adult baseball field puts Eliot right near the NRPA median.

Basketball courts (outdoor and indoor)

- What we have:
 - 1 outdoor court at Frost-Tufts Park
- Residents per basketball court
 - NRPA median: 3,729
 - Eliot: 7,162
- Nearby communities:
 - Outdoor court at Powder House Hill in South Berwick
 - Indoor court with open gym, youth and age 35+ basketball leagues at Kittery Community Center
 - Outdoor courts at Ellis Short Sands Park in York
 - Outdoor courts at South Mill Pond in Portsmouth
- What it means:
 - The outdoor court at Frost-Tufts Park is a full court and is probably adequate for the time being, though we may want to explore adding a second court at some point within this Comprehensive Plan's horizon.²

Tennis courts (outdoor)

- What we have:
 - 2 outdoor courts at Frost-Tufts Park
- Residents per tennis court
 - NRPA median: 2,805
 - o Eliot: 3,581
- Nearby communities:
 - 0 1 court at Shoetown Playground South Berwick Community Center
 - 8 courts at South Mill Pond in Portsmouth
- What it means: With the two tennis courts at Frost-Tufts Park, Eliot has slightly less courts than the NRPA median for the <20,000 population cohort, but more than the median for all other cohorts and the average for all NRPA review agencies (5,860 residents per facility). The courts are sometimes used for pickleball, and local pickleball advocates have asked about potentially restriping or repurposing the courts for more formal pickleball use.

Pickleball courts

- What we have:
 - Use of 2 Frost-Tufts Park tennis courts for pickleball
- Residents per pickleball court
 - o NRPA median: 3,252
 - Eliot: No standalone courts, but 3,581 if the tennis court use is accounted for
- Nearby communities:
 - The Waterhouse Center in Kennebunk
 - Private pickleball clubs
- What it means:
 - Pickleball advocates have expressed strong interest in establishing dedicated pickleball courts in Eliot, or restriping the Frost-Tufts Park tennis courts with pickleball lines. By adding two dedicated pickleball courts, Eliot would be about at the NRPA median.
 - The Waterhouse Center in Kennebunk shows how a semi-outdoor events pavilion can host pickleball, shared with ice skating in the winter and other events. A pavilion next to Town Hall, if it was similarly equipped with courts, could provide dedicated, precipitation-protected pickleball to residents and allow the two tennis courts to remain for tennis.

Rectangular fields: multi-purpose

- What we have:
 - o 3 fields at Frost-Tufts Park (or one large field about 225 ft. by 500 ft.)
- Residents per rectangular multi-purpose field
 - NRPA median: 3,859
 - Eliot: 2,387
- Nearby communities:

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- 1 field at Aggie Fields in South Berwick
- 1 field at Bog Road Fields in York
- A rectangular multi-purpose field is combined with the larger baseball field outfield at Kittery Memorial Field
- What it means: The community has more rectangular multi-purpose fields than the NRPA median. See below for the discussion of how this interacts with soccer field needs.

Soccer fields (youth)

- What we have:
 - 1 soccer-specific field at Murray Rowe Park
 - o 3 fields at Frost-Tufts Park (or one large field about 225 ft. by 500 ft.)
 - o 1 reserved for school use at Marshwood Middle School
- Residents per youth soccer field
 - NRPA median: 3,600
 - Eliot: 7,162 if counting the Murray Rowe Park field or one of the Frost-Tufts fields;
 3,581 if counting both
- Nearby communities:
 - 1 field at Aggie Fields in South Berwick
 - 2 fields at Bog Road Fields in York
 - o 1 field at Haley Fields off Litchfield Rd. in Kittery
- What it means: To distinguish between rectangular multi-purpose fields and youth soccer fields and avoid double counting, we could assume that the community needs four fields total to approach the NRPA median for each. This need is nominally met between the Frost-Tufts and Murray Rowe Park fields, but there are some additional nuances:
 - The Murray Rowe Park restoration will install a youth softball field where the soccer field has been; however, the outfield will continue to be adaptable for youth (age 10 and under) soccer field
 - For Eliot-specific needs beyond the NRPA median, the community might consider the Frost-Tufts fields sufficient for now to accommodate both soccer and any other sports activities (e.g. football, lacrosse, field hockey) accounting also for the availability of neighboring communities' fields. Or, the community may want to plan for another rectangular multi-purpose or soccer-specific field over the longer term.

Swimming pools or areas

- What we have: No public swimming pools or formal swimming areas in the community
- Residents per outdoor swimming pool
 - NRPA median: 9,745 for communities < 20,000 population; 38,635 for all agencies
 - Eliot: no outdoor swimming pools
- Nearby communities:
 - York beaches
 - Beaches at Fort Foster in Kittery

- Jenny Thompson Outdoor Pool open in the summer months, open to both residents (discounted fee) and non-residents with daily, punch ticket (12 admissions), and seasonal pass options
- Dover Indoor Pool, Henry Law Park open year-round, open to both residents (discounted fee) and non-residents with daily, punch ticket (12 admissions), and seasonal pass options
- Pierce Island Outdoor Pool in Portsmouth open for 2+ months in the summer, open to both residents (discounted fee) and non-residents with daily and season pass options
- What it means:
 - While currents make the Piscataqua River unsafe for swimming, Eliot is fortunate to be within a short drive (1-2 hours or less) of many Seacoast and Maine beaches and lakes with swimming beaches. While intrepid swimmers, surfers, paddleboarders, and others use the ocean more intensively for aquatic fitness and recreation, most people will prefer to use the beaches for relaxing or recreating on the sand, or wading in the shallow surf.
 - Public swimming pools in Dover and Portsmouth provide several nearby swimming options for non-residents of those communities. Some private gyms and clubs provide indoor or outdoor swimming pools to members. With these regional options and considering the costs of construction and maintenance, there is no pressing need for the community to have our own public full-sized swimming pool. However, a shallow wading pool for kids or a splash pad might be worth exploring within this plan's horizon.

Ice skating

- What we have:
 - The pond next to Town Hall when it has been cold enough to freeze
 - Residents per outdoor ice rink
 - NRPA median: 8,045
 - Eliot: 7,162, if the pond is included
- Nearby communities:
 - Dover Ice Arena: open skates, skating lessons, hockey leagues
 - o Strawberry Banke Museum, Portsmouth: outdoor skating rink in the winter
 - The Waterhouse Center in Kennebunk: covered semi-outdoor pavilion that has a skating rink in the winter
- What it means: The pond rarely freezes enough for safe skating. An artificial rink would allow for more winter skating days. See discussion above under "Dixon Road Recreation Area".

Playgrounds

- What we have:
 - 1 playground at Frost-Tufts Park
 - o 1 playground at the Boat Basin
- Residents per playground

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- NRPA median: 2,014
- o Eliot: 3,581
- Nearby communities:
 - 1 playground at Fort Foster in Kittery
 - 1 playground at the Kittery Community Center
 - 1 playground at Short Sands Beach in York
 - 1 playground at Vaughn Woods State Park in South Berwick
 - o The Shoetown Playground next to the South Berwick Community Center
- What it means: Eliot is somewhat above the NRPA median for communities < 20,000 population, but under the median for all agencies. A new playground should be considered at some point in this plan's time horizon.

Dog parks

- What we have:
 - 1 dog park, the Barks & Rec Dog Park at Frost-Tufts Park
- Residents per dog park
 - NRPA median: 11,100
 - o Eliot: 7,162
- Nearby communities:
 - York Dog Park (17 Bog Rd.), opened in 2024
 - Portsmouth Dog Park at South Mill Pond
- What it means: With the Barks & Rec Dog Park (established in 2015), we are well under the NRPA median for communities < 20,000 pop. and very much under the median for all agencies (43,532).

Parks and acres of parkland per resident

- What we have:
 - About 22 acres of parks, between the Boat Basin, Frost-Tufts, Murray Rowe, and Hammond Park
- Acres of parkland per 1,000 residents
 - NRPA median: 13 acres per 1,000 residents
 - Eliot: About 3 acres
- Residents per park
 - o NRPA median: 1,225
 - o Eliot: 1,791
- What it means: The typical small community in the NRPA review manages about 4 times the acreage of parkland as Eliot. However, we are much closer to the median residents per park for communities < 20,000 population, and we are below the median (2,287) for all agencies.

Indoor recreation facilities

NRPA's review lists 10 indoor recreation facilities maintained by responding agencies. The most common facility maintained was a recreation center (63% of agencies), and the least common was an arena (8%). Several of these facilities, like performance amphitheaters, aquatics centers, indoor

ice rinks, and stadiums, are better suited for larger cities. There is also a regional nature to many of these facilities, as they are of a scale that they can be shared by residents of more than one community. In our region, for example, we have the following:

- Kittery Community Center
- Dover Ice Arena
- Dover Indoor Pool
- Rotary Arts Pavilion in Henry Law Park, Dover
- Prescott Park in Portsmouth

¹ 2023 report, Fig. 3. There may be a typo as youth baseball field is listed twice. We assume that the first statistic (median = 3,114) is for youth fields and the second statistic (median = 7,627) is for adult fields.

² It is important to note that, like some other metrics, the median residents per court for communities under 20,000 is by far the lowest compared to larger cohorts. The median for the next cohort up (20,000 to 49,999 pop.) is almost exactly our current population (7,117 residents per court), and the median for all communities is 7,404.

Shoreland Zoning Consistency Analysis

"The Mandatory Shoreland Zoning Act, 38 M.R.S.A. sections 435-449, requires all municipalities to adopt, administer, and enforce ordinances which regulate land use activities within 250 feet of great ponds, rivers, freshwater and coastal wetlands, including all tidal waters; and within 75 feet of streams as defined. The Act also requires the Board of Environmental Protection to establish minimum guidelines for such ordinances...The Act requires that municipalities adopt shoreland zoning ordinances consistent with, or no less stringent than, those minimum guidelines."

- Maine DEP, Ch. 1000: Guidelines for Municipal Shoreland Zoning Ordinances

The Town first enacted a shoreland zoning ordinance likely in the 1970s, with a substantial update enacted in 1988. Codified as Chapter 44 of the Town Code, it has been amended several times over the years. Full rewrites occurred in 1993 and 2018. Shoreland zoning districts are shown on the Town's official zoning map. Chapter 44 defines allowable land uses in each district, performance standards for various shoreland uses, and rules for reviewing legally nonconforming uses and structures.

Changes affecting shoreland zoning require DEP review for consistency with DEP's Guidelines for Municipal Shoreland Zoning Ordinances, codified as Chapter 1000 in the department's administrative rules. Once DEP approves, the changes become effective. DEP occasionally updates the guidelines or proactively directs the Town to make revisions. Through close coordination with DEP, Eliot's shoreland zoning regulations can remain consistent and up-to-date.

The guidelines serve as a model ordinance. Municipalities do not need to match their shoreland zoning ordinance word-for-word with the guidelines. In fact, DEP encourages municipalities to tailor their regulations based on local considerations and local planning documents, such as this Comprehensive Plan, "provided that such ordinances are equally or more effective in achieving the purposes of the Act" (Ch. 1000 Guidelines, p. 1). An ordinance can be more stringent than the guidelines.

This section reviews Ch. 44 for consistency with the guidelines and congruence with Eliot's three neighboring communities. It is a planning-level review, as a comprehensive legal analysis is beyond the scope of this section.

ARTICLE I. - IN GENERAL

44-1 – Purposes

Consistent

44-2 – Authority

Consistent

44-3 – Applicability

Consistent

44-4 – Definitions

Not analyzed here due to the sheer number of definitions to review. Definitions are updated as needed through ordinance amendments.

44-5 – Effective date of ordinance and ordinance amendments, repeal of formerly adopted ordinance, and repeal of timber harvesting standards

Consistent, but could use some minor wording updates

44-6 – Availability

Consistent

44-7 – Severability

Consistent

44-8 – Conflicts with other provisions

Consistent

44-9 – Amendments

Consistent

44-10 to 44-20 – Reserved

ARTICLE II. - DISTRICT REGULATIONS

44-21 - Districts and zoning map

Consistent

The Town has five shoreland zoning districts:

- 1. Resource protection
- 2. Limited residential
- 3. Limited commercial
- 4. General development
- 5. Stream protection

Eliot 2025 Comprehensive Plan Shoreland Zoning Consistency Analysis All five of these are included in the guidelines. However, there are some differences with the guidelines:

- The guidelines include a Commercial Fisheries/Maritime Activities (CFMA) district that restricts uses to only functionally water-dependent uses. However, this is not applicable to many Maine communities. The guidelines make clear that the establishment of a CFMA district is optional, being one possible technique for managing a waterfront. Aquaculture and commercial piers are allowable, with some limitations, in all five of Eliot's existing shoreland districts.
- 2. The guidelines designate two classes of General Development (GD) zoning: I and II (called "GD1" and "GD2" here). GD1 includes "*existing*, intensively developed areas" (emphasis added) devoted to commercial, industrial, or intensive recreational activities. Examples include manufacturing, fabricating, or other industrial activities; wholesaling, warehousing, retail, and other commercial activities; and intensive recreational development, such as amusement parks. The Town's GD district located in only two small areas along the river aligns with GD1 in the guidelines. GD2 refers to similar activities and uses as GD1, but it is applied to "*newly established* General Development Districts where the pattern of development at the time of adoption is undeveloped or not as intensively developed as that of [GD1]" (emphasis added). GD2 would be of interest if the Town wanted to allow more areas of similar shoreland development intensity and use as the longstanding GD areas: the former Kittery Point Yacht Yard and the Great Cove Boat Club. However, this could conflict with a principle of strong resource protection for shoreland areas. The town's lack of a GD2 district is a policy decision that is more stringent than, and therefore consistent with, the guidelines.

The other subsections in Section 44-21 – scale of map, certification of official zoning map, and changes to the official zoning map – are consistent with the guidelines.

Sec. 44-22 – Interpretation of district boundaries

Consistent

Secs. 44-23-44-30 - Reserved

ARTICLE III. - LAND USE REGULATIONS

Sec. 44-31 – Requirements

Consistent

Sec. 44-32 – Nonconformance

Consistent

However, one minor wording change could be made:

• For clarity, 44-32(e)(2) could add a statutory reference for the State Minimum Lot Size Law: 12 M.R.S.A. sections 4807-A through 4807-D

Sec. 44-33 – Establishment of districts

Consistent

The differences between the Town's shoreland zoning and the guidelines regarding the CFMA and GD2 districts are discussed above.

The guidelines allow municipalities to include, in the Resource Protection (RP) district, certain "other areas which have been recommended for protection in the comprehensive plan of the municipality, or as otherwise endorsed for protection by the municipal legislative body". These areas are:

- A. Other important wildlife habitat
- B. Natural sites of significant scenic or esthetic value
- C. Areas designated by federal, state, or municipal governments as natural areas of significance to be protected from development
- D. Other significant areas which should be included in this district to fulfill the purposes of this Ordinance, such as, but not limited to, existing public access areas and certain significant archaeological and historic sites deserving of long-term protection as determined by the municipality after consultation with the Maine Historic Preservation Commission.
- E. Areas within 250 feet, horizontal distance, of the upland edge of freshwater and/or coastal wetlands, which are rated "moderate" or "high" value waterfowl and wading bird habitat, including nesting and feeding areas, by the Maine Department of Inland Fisheries and Wildlife (MDIF&W). These areas are generally depicted on a Geographic Information System (GIS) data layer.

Sec. 44-34. – Table of land uses

No areas of inconsistency are apparent in this planning-level review. The Town often makes changes to this table; all changes are reviewed by DEP for consistency prior to their becoming effective.

Sec. 44-35. – Land use standards, Subsection (a) – Minimum lot standards

Partially inconsistent

This section defers to the lot standards for the base zoning district, which are included in Section 45-405. References in 44-35(a) to the "nearest adjacent non-shoreland zoning district" should be cleaned up to reduce confusion. Shoreland zoning is properly understood as overlay zoning, but the base zoning still applies to shoreland areas. "…nearest adjacent non-shoreland zoning district" inaccurately implies that the two are mutually exclusive.

The guidelines specify minimum lot area and shore frontage by land use and whether the shoreland zone is adjacent to a tidal or non-tidal area. To check consistency, the table below compares these standards to those in 45-405.

Standard	Guidelines		Rural	Suburban	Village	C/I	Consistent?
	Tidal areas	Non- tidal areas					
Residential							
Min. lot size	30,000 sq ft	40,000 sq ft	3 ас	2 ac	1 ac	3 ac	Yes, larger lots required in all districts

Min. shore frontage (ft)	150	200	200	150	100	300	Yes for Rural and Suburban (tidal areas only), no for Village. Most residential uses are prohibited in C/I; it is technically possible, but unlikely, that a residential lot could be created in C/I that has less than the guidelines' shore frontage.
Governmental, Institutional, Commercial or Industrial per principal structure							
Min. lot size	40,000 sq ft	60,000 sq ft	3 ас	2 ac	1 ac	3 ac	Yes for tidal areas: larger lots required in all districts; no for non-tidal areas in Village
Min. shore frontage (ft)	200	300	200	150	100	300	Yes for C/I district; no for all other districts, except Rural in tidal areas
Public and Private Recreational Facilities							
Min. lot size	40,000 sq ft	40,000 sq ft	3 ас	2 ac	1 ac	3 ac	Yes, larger lots required in all districts
Min. shore frontage (ft)	200	200	200	150	100	300	Yes for Rural and C/I; no for Suburban and Village

Paragraphs (2) through (5) are generally consistent with the guidelines, though paragraph (5) could add "institutional" to match the guidelines:

If more than one residential dwelling unit or more than one principal governmental, **institutional**, commercial or industrial structure or use, or combination thereof, is constructed or established on a single parcel, all dimensional requirements shall be met for each additional dwelling unit or principal structure, or use.

The guidelines also allow municipalities to make provision for clustered housing within the shoreland zone if other dimensional standards are met. It is not clear how this might be applied in Eliot in a way that would offer the same or greater protections for the shoreland resource compared to a typical dwelling unit, but this could be further studied.

The guidelines state: "When determining whether dimensional requirements are met, only land area within the shoreland zone shall be considered."

Sec. 44-35. - Land use standards, Subsection (b) - Principal and accessory structures

Generally consistent, but some minor revisions may be warranted

Paragraph (4), which limits the percent of non-vegetated surface in the shoreland zone, could have a few updates to better match the guidelines:

The total footprint area of all structures, driveways, parking areas and other non-vegetated surfaces, within the shoreland zone shall not exceed 20 percent of the lot or a portion thereof, located within the shoreland zone, including land area previously developed, except in the general development district, adjacent to tidal waters and rivers which do not flow to great ponds classified GPA, where lot non-vegetated surface coverage shall not exceed 70 percent. This limitation does not apply to public boat launching facilities regardless of the district in which the facility is located.

For the purposes of calculating non-vegetated surface coverage, non-vegetated surfaces include, but are not limited to the following: structures, driveways, parking areas, and other areas from which vegetation has been removed. Naturally occurring ledge and rock outcroppings are not counted as non-vegetated surfaces when calculating lot coverage for lots of record on March 24, 1990 and in continuous existence since that date.

The guidelines call non-vegetated surface coverage "lot coverage", but it is important to clearly distinguish between this shoreland zoning standard, which refers to any non-vegetated surface, and "lot coverage", the base zoning dimensional standard that refers only to buildings or structures (see Sections 1-2 and 45-405).

Sec. 44-35 – Land use standards, Subsection (c) – Piers, docks, wharves, bridges and other structures and uses extending over or below the normal high water line of a water body or within a wetland

Generally consistent.

Ch. 44 has additional standards for these uses for piers in tidal waters, but this means the Town's shoreland zoning is more restrictive than the guidelines, which is allowed.

The Town could revise this subsection to be closer to the guidelines by adding the guidelines' provisions for shoreline stabilization.

Sec. 44-35 – Land use standards, Subsection (d) – Campgrounds

Consistent

Sec. 44-35 – Land use standards, Subsection (e) – Individual private campsites

Consistent

Sec. 44-35 - Land use standards, Subsection (f) - Commercial and industrial uses

Consistent

Sec. 44-35 – Land use standards, Subsection (g) – Parking areas

Consistent

Sec. 44-35 - Land use standards, Subsection (h) - Roads and driveways

Consistent

Sec. 44-35 – Land use standards, Subsection (i) – Signs

Inconsistent

This section merely states, "See zoning ordinance", presumably referring to what is now Article XI of Ch. 45, regulating signs. That article has no provisions for signs in shoreland zones. The guidelines include standards for signs in the RP, SP, LR, and LC districts.

Sec. 44-35 - Land use standards, Subsection (j) - Stormwater runoff

Consistent

In addition to this section, stormwater standards are included in Section 45-411 (zoning), 41-213 (subdivisions), and Ch. 35 (post-construction stormwater management standards for developments that disturb one or more acre of land).

Sec. 44-35 – Land use standards, Subsection (k) – Septic waste disposal

Consistent

Sec. 44-35 – Land use standards, Subsection (I) – Essential services

Consistent

Sec. 44-35 – Land use standards, Subsection (m) – Mineral exploration and extraction

Consistent

Sec. 44-35 – Land use standards, Subsection (n) – Agriculture

Consistent

Sec. 44-35 - Land use standards, Subsection (o) - Reserved

This section pertained to timber harvesting. In accordance with the guidelines, it was repealed from Ch. 44 as the Town deferred to the State Bureau of Forestry to regulate all forestry activities in Eliot.

Sec. 44-35 – Land use standards, Subsection (p) – Clearing or removal of vegetation for activities other than timber harvesting

Generally consistent, but the guidelines have separate sections for dead/hazard tree removal, exceptions to clearing and vegetation removal requirements, and revegetation requirements

Sec. 44-35 – Land use standards, Subsection (q) – Erosion and sedimentation control

Consistent

Sec. 44-35 – Land use standards, Subsection (r) – Soils

Consistent

Sec. 44-35 – Land use standards, Subsection (s) – Water quality

Consistent

Sec. 44-35 – Land use standards, Subsection (t) – Archaeological sites

Consistent

ARTICLE IV. - ADMINISTRATION

Sec. 44-41. – Administering bodies and agents

Consistent

Sec. 44-42. – Permits required.

Consistent. Subsection (f) regarding pre- and post-construction photographs was added in 2021 per direction from DEP.

Sec. 44-44. – Procedure for administering permits.

Finding (7) from the guidelines is not in this section. That finding reads: "Will not adversely affect existing commercial fishing or maritime activities in a Commercial Fisheries/Maritime Activities district."

Sec. 44-45. – Expiration of permit.

Consistent

Sec. 44-47. – Appeals.

The guidelines give municipalities the option to specify the basis of review by the Board of Appeals: appellate or de novo. This section currently specifies that appeals from the Planning Board are reviewed on an appellate basis and appeals from the Code Enforcement Officer are reviewed on a de novo basis. No change is needed here unless the Planning Board and Board of Appeals believe different standards of review would be more appropriate.

Amendments to this section were approved in June 2021 that added provision for disability variances, as specified in State law. These amendments were found by DEP to be consistent with the guidelines.

There is a typo in Subsection (c): one reference to "board appeals" should be "Board of Appeals".

Sec. 44-48. - Enforcement.

Consistent. This section enumerates specific dollar amounts for fines while the guidelines make a statutory reference to 30-A, M.R.S.A. 4452. A cursory review suggests that the 44-48 fine amounts are consistent with the statute.

York River Marshes Marsh migration (1m SLR Scenario)

Planning Area

2,743 ac

Current marsh, modelled future marsh under a 1m sea-level rise scenario, and areas within 1,000 horizantal feet of modelled future marsh.

Current Marsh

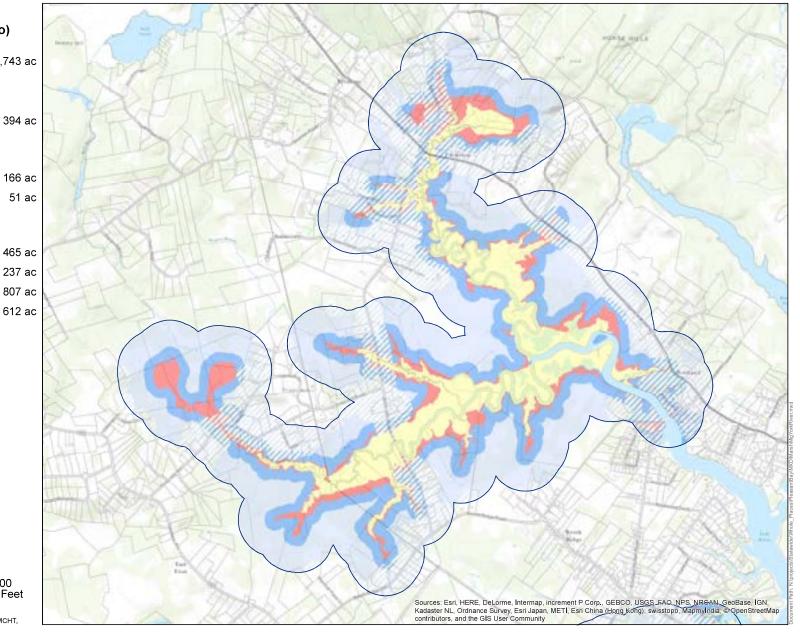
Future Marsh Area

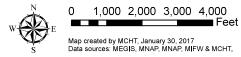
Modelled using a 1m sea-level rise scenario

	Future Marsh (Undeveloped)	16
/////	Future Marsh (Developed)	5

Upland Buffers

From the upland edge of modelled future marsh				
Less than 250' (Undeveloped) 46			
Less than 250' (Developed)	23			
More than 250' (Undeveloped	l) 80			
More than 250' (Developed)	61			





Eliot 2025 Comprehensive Plan Appendix

Historic Property Survey

by the Eliot Historical Society (EHS)

Noah Emery House

Condition: good

Use: private residence

Description: One of two of Eliot's earliest buildings dating from 1720-30. Became the wing of a "Mansion House" c. 1799. Mansion house burned in late 19th century and this house remained.





Pliny Emery House 968 Goodwin Road Condition: fair Use: private residence

Description: One of two of Eliot's earliest buildings dating from 1720-30. Unique one story 4 bay, with hip roof and a typical L-plan, feather edged clapboards, held in place with hand-forged nails



Timothy Spinney House

1011 Main Street

Condition: good

Use: private residence

Description: Built by Timothy Spinney in 1816, on land originally owned by Joseph Hammond. Spinney was a carpenter and built several homes in the area.



Weymouth/Worster House 101 Worster Road Condition: good Use: private residence

Description: C. 1753. Believed to incorporate some of the original building of the home of Alexander Ferguson home

located at the "head of Mast Creek" as referenced in at 1660 deed. Alexander was a Scotch prisoner, sent to this area, as a result of the English Civil War battles of Dunbar (1650). Later descendant Dennis Ferguson married Katherine Weymouth, who owned adjoining lands in this area.

Knowlton House

139 Brixham Road

Condition: good

Use: private residence

Description: Built in 1789 by John Knowlton. He owned a rather large farm here with land on both sides of the road.



Leighton House

310 Goodwin Road

Condition: fair

Use: private residence

Description: c. 1765 Home of Major Samuel Leighton, whose father, Lieut. John, served in the French War. Samuel served in Col.

Scammon's 30th Regiment of Foot; as Captain of Col. Ebenezer Francis' York Count Company serving at Dorchester Heights (1776); Captain of the 7th Co. in the 2nd York County militia regiment and commissioned second Major under Col. Ichabod Goodwin (1778). Son, General Samuel Leighton, served in the War of 1812 and had charge of the building of the fort at Dixon's Point, in Eliot, was Eliot's first representative to the General Court of Massachusetts from 1811-1814 and escorted President Monroe through his brigade. Tradition has it that General Lafayette was entertained in this home.



Kashmer Farm

142 Goodwin Rd

Condition: poor [changed from "good" based on the description]

Use: private residence

Description: The oldest operating dairy farm in Eliot, consisting of farmhouse, older barns, and modern cow sheds. The barn is in very poor condition and the house is in poor condition.

Tuttle's Cider Mill

815 Goodwin Rd.

Condition: good

Use: The rear of the building contains the original "King Tut" cider operation established in 1903 and has been in continuous operation for 120 years. Significant in its documentation of an agriculture-



related industry. It may be eligible for the National Register if sufficient original equipment remains to document the historic operation of the mill. [RS]

Rhodes House and Carriage Barn

663 River Rd.

Condition: good

Use: Private residential

Description: Built by William H. Rhodes of New York City in the style of Andrew Jackson Downing. Exceptional carriage barn with Victorian detailing in the gable dormer and decorative cut shutters. [RS]





Bartlett Farms 269 Brixham Rd. Condition: unknown Use: Private residential use Description: The second he

Description: The second house on the property built c. 1880, by descendants of John Heard Bartlett who relocated here in the mid 1700s. The property included saw and grist mills on Stoney Brook (York River). In the 1930s William Bartlett operated a water powered saw mill during the

Depression. On this property, Arthur, Edward and John Bartlett operated the "Third Hill Dairy Farm" business, here, from the mid-1930s to 1987. The "milk house" is still seen at the far right of the addition to the house. Third Hill Farm was one of the last milk processing plants in York County.

Briggs Grist Mill on York River (last water-powered grist mill in Eliot)

Condition: unknown

Use: waterway

Description: Originally the saw and grist mill of Thomas C. (1805-1893) and George C. Bartlett (1807-1876), in the early 1800s. George H. Briggs (1826-1903) who was born in Portland Maine bought ½ interest in the Bartlett grist mill, along with the privilege in the mill pond and dam, from Thomas and George and continued the operation. Remnants of the operation exist today.



Caleb Emery House 215 Old Road Condition: Use: Private residential use

Description: Built 1814 by Eliot's first physician, Dr. Caleb Emery, who practiced here from 1809 to 1831. Served in the Militia. Married the daughter of Eliot's second Congregational Church minister, the Rev. Samuel Chandler.

Moses Gerrish Farmer Home and Workshop

Eliot 2025 Comprehensive Plan Appendix Historic Property Survey

1271 & 1275 State Road

Condition: fair

Use: Private residential use

Description: 1271 State Road was built c. 1908 after the original home burned. Part of the rear of this house and the 2nd floor front, right corner room are said to incorporate some of the original building. Shapleigh and Farmer Cemetery is located to the rear of the property of 1271 State Road.

1275 State Road was built c. 1872 and was formerly the workshop of noted electrical inventor Moses Gerrish Farmer. Originally located behind site of home at 1271 State Road, which was the home of Farmer and his family.

Nicholas Frost Garrison Site

613 Goodwin Rd

Condition: site disturbed

Use: Private residential use

Description: Site of the Nicholas Frost Garrison, c. 1635/6, built on part of his 400-acre tract on the south side of Frost's Hill (aka Great Hill), at the head waters of Sturgeon Creek. The garrison was vacated in 1756 when they moved to a new house. Present home was built over the site and has compromised the site, but further exploration should be considered when/if further disturbance occurs. Ancient Frost cemetery located over the stone wall to the east of the house.



Charles Frost Grave Site

614 Goodwin Road

Condition: Recent toppling of trees require their removal (2023). Was last cleaned in 2022.

Use: Private residential use

Description: Considered to be the oldest marked burial site in Maine (1697) associated with a descendant of one of Eliot's

earliest settlers (Nicholas Frost) and an historical figure.

The John Frost Garrison

23 Garrison Dr.

Status

- National Register
- Historic easement requiring MHPC review of any work done on the property

Condition: Underwent restoration in 2022

Use: Private residential use



Description: Built on land, once part of Charles Frost's original 140 acre grant (1660), by grandson John Frost who settled here in 1730. Manor House built c. 1732 and a small guard-powder house in 1735 and, in 1738, the Garrison.

John F. Hill Grange Hall



Condition: Fair. Building interior needs some renovation. Roof repaired in 2021. Electrical systems updated in 2016.

Use: Private building used and maintained by the John F. Hill Grange #393 for meetings and rented for occasional community events, meetings and private functions. Next to the building is a public trailhead for Douglas Memorial Woods.

Description: The John F. Hill Grange was formed on May 20,

1902, established as Piscataqua Grange 393, and changing its name to honor its native son, who had been Governor of Maine. The John F. Hill Grange building was dedicated on December 9, 1910. Significant because of its historic association in the history of the town. An important part of our agricultural history as a town, encouraging farming and a center of social activity.

Green Acre Baha'i School: Sarah Farmer Inn, Ole Bull Cottage, PD&Y Trolley station, Rogers Cottage, Staples Cottage and associated building – Fellowship House

61 Green Acre Drive

Condition: good

Use: Center of learning for the Baha'i Faith

Description: Significant in representing our summer tourism activity and playing major role in the historical development of the town during the period. Built on the site of the Hanscom Shipyard, the

Eliot 2025 Comprehensive Plan Appendix Historic Property Survey



main building, built c. 1890, is Queen Anne style with hipped roof and served as a hotel when first built. Historic restoration of buildings completed in 1994. "Chalet Cottages" is a recent reconstruction of original 1890s buildings; Kelsey Center, and Harry Randall Guest House are recent additions (1990/2000s). The property as a whole retains a high degree of integrity and is eligible for the National Register under several criteria including being associated with Farmer family who were responsible for its establishment and played a major role in the history of the town; the buildings are among the most architecturally distinguished buildings of the period with the Inn a good typical example of a late 19th century hotel building type, "of which there are relatively few surviving examples in the seacoast region". [RS]

Ole Bull Cottage

Condition: good

Use: lodging for Green Acre

Description: The only example in Eliot of a large Shingle style cottage and one of the few buildings erected specifically for a summer residence.



Rogers Cottage

925 Main Street

Condition: good

Use: lodging for Green Acre



Description: It was built by John Rogers, son of Charles W. Rogers. It originally stood down near the water at the Green Acre. In 1870, it was moved to the main road. In the 1930s, it operated as the Golden Cock Tea House, offering hospitality and refreshments to passersby.

Betsy Green House

200 Old Road

Condition: good

Use: Private residential use

Description: Owned by Stephen Green who married Betsy Kennard. Built about 1730 (according to the tax card, other place says c. 1808). Stephen was a cobbler and is noted for having used copper in his work. His shop was



Eliot 2025 Comprehensive Plan Appendix Historic Property Survey down in the cellar and his wife Betsy ran a "Penny Shop" upstairs, selling needles, pins, cloth, and household supplies.



East Eliot Methodist Church

540 Goodwin Rd

Condition: good

Use: Private residential use

Description: Eliot's oldest standing church, built in 1826. Greek Revival period church with square corner tower and a pyramidal roof added c. 1890; basement in 1940s. Tower was added onto in the back, c. 2006. Restoration and improvements are ongoing (2023).

Grist and Saw Mill at Sturgeon Creek

State Road

Condition: appears undisturbed

Use: Road way/waterway/bridge - town of Eliot

Description: Site of Nicholas Shapleigh's saw mill, erected in 1652. Later Capt. Elisha Shapleigh had a grist mill here (1816-1896). A ferry was operating here as early as 1649. Unknown when building was taken down. Old Town Landing (Map/Lot: 61-12]

Knowlton Carriage Shop

340 Goodwin Road

EHS Notes that the Daniel Goodwin Blacksmith Shop is no longer standing. This building at the corner of Frost Hill Road and Goodwin Road is actually the Knowlton Carriage Shop (as identified in the EHS 1993 building survey). It is unclear if it now has any historic value because of the renovation following it being damaged.

Condition: good, restored approx. 15 years ago

Use: Private residential use

Description: Nathaniel Knowlton (1791-1864) came from a family of cabinet makers. He was trained in Boston and operated a carriage, furniture and casket shop from this building. He is also known to

have made clock cases. Nathaniel Knowlton's ledger book can be seen at the Maine Historical Society. He and wife Rosanna (Goodwin) are buried at the far end of what was their property.

Hammond House / Old Acre

162 Old Rd.

Condition: unknown

Use: Private residential use

Description: c. 1880 Former Congregational Church Parsonage house.



Mill at Shapleigh Old Mill Pond

River Rd.

Condition: good

Use: N/A

Description: Site of Alexander and later his sons Nicholas and John Shapleigh's saw and grist mills, run by the tidal waters of the creek passing to and from Shapleigh Old Mill Pond. On the river side of the present road, at low tide, one can still see the remains of the fieldstone foundation and wooden beams in the mud where these mills once set. This creek has had other names including Cammock's Creek and Stacy's Creek and the crossing of it called "The Ford at Pine Point", which could only be done at low tide.

Hugh Paul Family Farm

302 Depot Rd.

Status

• National Register (1988)

Condition: house and barn good; outbuildings need repair

Use: Private residential use

Description: House and barn built c. 1804 by Hugh Paul (1781-1852)

on part of the original land bought from John Moffatt in 1777. House retains the original "Moses Eaton" style stencils on the wall, Indian shutters in the "parlor", jackknife carved decorative wood



trim and the old kitchen hearth with baking and smoking ovens. Various outbuildings have been added over the years.

Portsmouth, Dover, & York (PD&Y) Railroad Trestle

Near the corner of Route 236 and Depot Rd., across from Marshwood Middle School

Condition: The trestle superstructure is gone but earthwork and some piers remain

Use: Located on a family farm

Description: This trestle was part of a flyover of the Eastern Railroad right-of-way (now Route 236) by the Portsmouth, Dover, & York (PD&Y) Railroad.



PD&Y Electric Railroad Travel Bed

Running from Ambush Rock Road (off Goodwin Rd.) to the York Line

Condition: various, some of the bridges have been kept up

Use: passing through on private lands. Some parts of it used for walking, horseback riding and ATV's with landowner permission

District Schoolhouse #3

97 Brixham Rd.

Condition: very good recently had update

Use: private residential use

Description: Also known as the *Maj. Charles Frost School.* Third building on the site. Erected in 1880. Closed in 1941. Sold and converted into a dwelling c. 1980. Updated c. 2020. Retains some of its original character and outhouse addition. May be a good site for an archaeological exploration.



Schoolhouse #8

67 Greenwood St.

Condition: good; new roof c. 2021

Use: Maintained and run by the Eliot Historical Society. Opened in spring, summer, fall, and by appointment and to the children of the school district during the school year. Restored one-room schoolhouse; used as an educational tool for children, adults, and visitors with displays on schools and other Eliot history.

Description: Originally opened in 1841, and following its closing in 1941, this building had various uses including firehouse and cemetery storage before being entrusted to EHS by the town (1996). Restored, it was reopened in 2006.



Site of the first Town Hall

1289 State Rd.

Condition: privately owned land

Use: lawn

Description: Site of Eliot's first permanent Town Hall, built in 1880. The building served many purposes over the years. It was used as a High School from 1888 until 1906 when the new High School was built. At one time it contained a Selectman's Office, was used to store fire trucks and in final years as a gymnasium for Eliot High School teams to practice in. By action of the then Governor of Maine, John F. Hill, a native of Eliot, it became the office of the Eliot Steamship Company in the early 1900s, bringing tax revenue to Eliot. The building was sold in the 1960s and torn down.

Melvin Dixon Blacksmith Shop

1333 State Road

Condition: good

Use: Owned by the town of Eliot. Storage for the Eliot Community Services Department.

Description: Town meetings held here for 1860-1880, before permanent town hall was built. A historical plaque was added to the building in 2022.



Site of the old high school

1333 State Rd.

Condition: N/A

Use: N/A

Description: Site of the first High School built in Eliot, 1906. It was demolished in 1987, replaced by the present Town Hall.

Town Pound

Adjacent to property at 590 Goodwin Rd

Condition: good

Use: on private land

Description: This enclosure is the only existing "town pound" enclosure remaining within the town, of those established in the 1700s. Date unknown but reference to it in was made in 1810 at Eliot's first town meeting with Charles Frost elected keeper of the pound and later William Scammon and Jeremiah Shapleigh, all of whom lived next door, at the time they served. The original walls reached at least 6 feet high, as shown by oldest picture c. 1912. Restored by Eliot Historical Society Member, Lyndon Leavitt, who cared for it during his lifetime.



William Fogg Library & Homestead

116 Old Rd.

Status

National Register

Condition: Good

Use: The town's public library. The homestead is used for occasional events and tours.

Description: Dedicated in 1907 to the town by Dr. John S.H. Fogg, the library building has one-and-ahalf stories, with classical and Colonial Revival style and detailing. Some notable features include a steep hipped roof in the front section, fieldstone exterior walls, and a front pavilion with lonic columns. Inside the building, the wood trim and original furnishings have been retained. The building was designed by Boston architect C. Howard Walker. As noted in its National Register application, "Due to its prominent siting, high style, unusual fieldstone exterior and exaggerated roof line, the Fogg Library is both an important local landmark and an anomaly."

Records indicate that the William Fogg House, fronting on Old Rd., was built in 1819. For a time, it housed the Eliot Post Office.

T.F. Staples – Goodwin Store

288 Pleasant Street

Condition: Fair

Use: Private residential use

Description: Originally built c. 1820, by Thomas F. Staples as a general store and continued, in that use, for over 150 years. The back of the building was outfitted for a post office. From 1883-1962, the South Eliot Post Office was located here and then changed name to the Eliot Post Office (1935) when the East Eliot Post Office closed.



Eliot Post Office/Attar Engineering

1284 State Road

Condition: good

Use: private business

Description: First building built in Eliot as a Post Office for the town. Entry hall contains original dedication plaque and wall of glass door post office boxes. In use from 1962-1990.





Willis House 144 Old Road Condition: fair Use: Private residential use

Description: Two story house with bay windows was originally a low-roofed cape built by a Mr. Dixon about 1725. House and land

Eliot 2025 Comprehensive Plan Appendix Historic Property Survey purchased abt. 1775 by John Fogg, g-grandfather of Dr. John L.M. Willis. Second story added around 1815 and remodeled again in 1870. Dr. Willis was founder of the Eliot Historical Society (1897), editor of "Old Eliot", magazine of the Society, and had an extensive collection of antiquities from the area going back to the late 17th century. Willis was also as teacher and trustee for the William Fogg Library.



Shoe Shop 643 Goodwin Road Condition: poor Use: Private residential use

Description: One-storied gable front building with four-panel door on the gable end façade, 6/6 sash, whose size and form suggest it may have been a shoe shop, on land of the Paul

family (1777). If so, it is a "rare surviving example of that building type, important for documenting a small local industry."

Waste Disposal and Recycling Levels

Year	2019	2020	2021	2022	2023
Tons of MSW (trash) disposed via landfill or waste-to-energy incinerator			665.52	675.06	
Tons of MSW recycled - typical household items like containers, cardboard, paper, etc.			152.05	155.02	
MSW recycled - scrap metal/white goods, etc.			3.06	3.52	
MSW diverted from disposal through reuse (swap shops, etc.)	*	*	*	*	*
MSW organics composted or sent for anaerobic digestion			1.00	1.50	
Total MSW diverted from disposal			156.11	160.04	
Total MSW generated			821.63	835.10	
Estimated MSW diversion rate (includes recycling, composting, reuse and a 5% credit for Maine's bottle bill recycling activity)			24.0%	24.2%	
Maine's statewide recycling rate (excluding construction demo and debris)	37.8%	34.0%	33.7%		

Table ___. Municipal solid waste (MSW) and recycling volumes in Eliot, 2021-22. An attempt to find municipal data for 2019-20 and 2023 and statewide data for 2022-23 was unsuccessful. Sources: Town biennial report to MaineDEP, MaineDEP statewide reports. Note: the Transfer Station does have a swap shop, but data is not available on weight of materials reused.

Capital Investment Ballpark Cost Estimates

Project	Description	Ballpark cost or cost range		
Parks, Rec, Civic				
Town Hall Renovation	Renovate and expand Town Hall	\$4,000,000		
William Murray Rowe Park Renovation	Renovate Murray Rowe Park, including its ballfields	\$500,000		
Frost-Tufts Park Renovation	Renovate the park and its recreational amenities	\$700,000		
Eastern Trail	Build out off-road path segments of the Eastern Trail as opportunities allow, informed by the Eastern Trail Study	Variable; see ET Study (2025) for more info		
Walking trail improvements	Improve and extend public walking trails in the Town Forest parcels or elsewhere	Nominal (i.e. volunteer-built) to \$5,000/mi. for simple dirt trails Significantly more for special		
		segments (e.g. bridges, boardwalks)		
Boat Basin improvements	Renovate the Boat Basin as described in the Recreation and Open Space strategy	\$500,000 to \$1,000,000		
Hammond Park-Dixon Road Recreation Area Placemaking	Improve placemaking and recreational/civic amenities	<\$10,000 for Memory Walk & small amenities (e.g. benches, bike rack) \$1,000,000 to \$2,000,000 for pavilion		
Community center	Study potential community center options; proceed based on recommendations in the study	Low: \$3,000,000 (renovate existing bldg.) High: \$40,000,000 (Town of York est.)		
Public safety				
Police Station upgrades	Make upgrades to the Police Station	\$300,000 (part of current Town Hall project)		
Fire Station upgrades	Make upgrades to the Fire Station	Will depend on needs study		
Transportation				
Road paving	Ongoing pavement maintenance and repaving of Town roads	Low: \$300,000/yr High: \$1,000,000/yr		
Route 236 Water & Sewer Project	Install water & sewer lines on/near Route 236 between Bolt Hill Rd. and Julie Ln.	\$20,000,000 to \$22,000,000 for full project incl. pump stations		
Route 236 Traffic & Safety Improvements	Work with DOT on corridor traffic, safety, and multimodal improvements from Kittery line to Depot Rd.	Depends on scope of improvements (now in design)		
Bicycle and pedestrian improvements: Beech Rd.	Extend walking and bicycling facilities in the Village and vicinity	Low: \$3,000,000 High: \$4,500,000		
Bicycle and pedestrian improvements: Village area	Extend walking and bicycling facilities in the Village and vicinity, beyond the above Beech Rd. project	Low: \$350,000 (e.g. only Grange Hall segment) High: >\$15,000,000 for State + MG Farmer/Main + Old extensions		

See Fiscal Capacity and Capital Investment for more information on these projects

Road-stream crossing improvements	Improve stream crossings/culverts for better flood resilience and wildlife passage	Depends on design
Utilities		
Route 236 Intersection Improvements (north end of town)	Work with DOT to improve Route 101 and Route 103 intersections for traffic, safety, and multimodal improvements	\$5,000,000
Route 236 Water & Sewer Project: Future Extension to Arc Rd.	Extend water and sewer lines from Julie Ln. to Arc Rd.	Refer to previous engineering design work
Route 236 Water & Sewer Project: Future Extension to Marshwood Middle School	Extend the water and sewer lines from Arc Rd. to Marshwood Middle School	Would be determined by engineering study
Village Sewer Expansion	Extend domestic sewer service into the Village area	\$8,000,000 (per consultant desktop memo, very ballpark estimate)
Vehicles		
New vehicles	Purchase vehicles for Public Works, Police, Fire, Rec/Parks, and other Town operations, as needed	Depends on vehicle