



TOWN OF
Lowell
MAINE

**COMPREHENSIVE PLAN
ESTABLISHED 2024**





ACKNOWLEDGMENTS

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INTRODUCTION

A comprehensive plan guides the future growth of a municipality and creates a collective vision for local community and economic development. As a long-range plan, the document serves as an inventory of current community conditions and trends and identifies characteristics important for local growth. Adopting a comprehensive plan consistent with the State of Maine’s Growth Management Act has numerous advantages including preferential consideration when applying for state grants, promoting local resource protection, and providing a foundation for land use related decision-making. Following a framework established by the State of Maine, the Lowell Comprehensive Plan contains chapters in which related goals, analyses, policies, and strategies direct future growth and emphasize community values.

- Population and Demographics
- Housing
- Transportation
- Economy
- Water Resources
- Natural Resource
- Agricultural and Forest Resources
- Historic and Archaeological Resources
- Recreation
- Public Facilities and Services
- Fiscal Capacity and Capital Investment Plan
- Existing Land Use • Future Land Use

MISSION STATEMENT

To foster a vibrant environment for new and long-standing neighbors in pursuit of a stable and steady future for Lowell through community collaboration, environmental stewardship, and thoughtful development.

VISION

An uncut gem where rich tradition meets innovation



Rural Living At Its Finest

Lowell, Maine, nestled in the heart of Penobscot County, is a quintessential rural town. With its scenic landscapes, natural beauty, and a close-knit community, Lowell epitomizes the charm and simplicity of small-town living. The town's rich history, strong sense of community, and pristine environment provide the foundation for this Comprehensive Plan. This document outlines a roadmap for the community's future, considering its unique rural character, local values, and the aspirations of residents.

As a rural town without significant industrial presence or any land use maps, Lowell's Comprehensive Plan is an opportunity to celebrate and preserve its rural way of life, while responsibly preparing for the challenges and opportunities that lie ahead. This plan is designed to be a flexible guide, adaptable to the evolving needs and desires of residents as it shapes the future of Lowell.

Public Participation Summary

Participation from the Lowell community played an essential role in the comprehensive planning process. Throughout the plan's four phases, a Comprehensive Planning Committee consisting of the Planning Board, and other community members held public meetings to discuss plan chapters and the planning process. In February of 2022, a survey was distributed to the town to assess public perceptions of Lowell's quality of life as well as community opportunities and challenges. To enhance participation, surveys were accessible online and on paper in the Town Office. Upon the deadline, one hundred and seventy-five individuals participated in the survey via online form and mail. While not all respondents answered all questions, unanswered questions are classified as "No response," for the purposes of capturing the total number of respondents throughout the survey analysis. The survey and analysis are a joint effort between Eastern Maine Development Corporation and the Town of Lowell. Through the community survey, personal interviews, and Comprehensive Planning Committee, local involvement shaped and enriched the plan's vision and analyses.

Regional Coordination

Being such a small community, Lowell regularly engages with other municipalities to promote regional development and enhance the quality of life for its residents. It shares



EMS services with Howland, a transfer station with Burlington, and school districts with several surrounding towns (MASD 31 & RSU 67).

By working closely with neighboring towns, Lowell leverages collective strengths and tackles common challenges to create a stronger, more resilient rural community. The Town of Lowell will successfully continue the collective management of valuable resources including education, emergency response services, natural resources, and water resources. Because Lowell and the surrounding towns are so rural, no policy or strategy conflicts were identified.

Evaluation

Lowell's Comprehensive Plan is a community-driven endeavor. It represents its shared aspirations, values, and commitment to a bright and sustainable future, one where its rural character is celebrated, the natural resources are preserved, and its residents thrive in a vibrant and connected community. This plan will help to shape a Lowell that is true to its roots and prepare for any future.

The community will routinely monitor the degree to which future land use plan strategies have been implemented, the location and amount of new development, and the completion of capital investment projects. As new data becomes available over time, the existing data in the Comprehensive Plan chapters will be updated to ensure its contents are current and relevant.

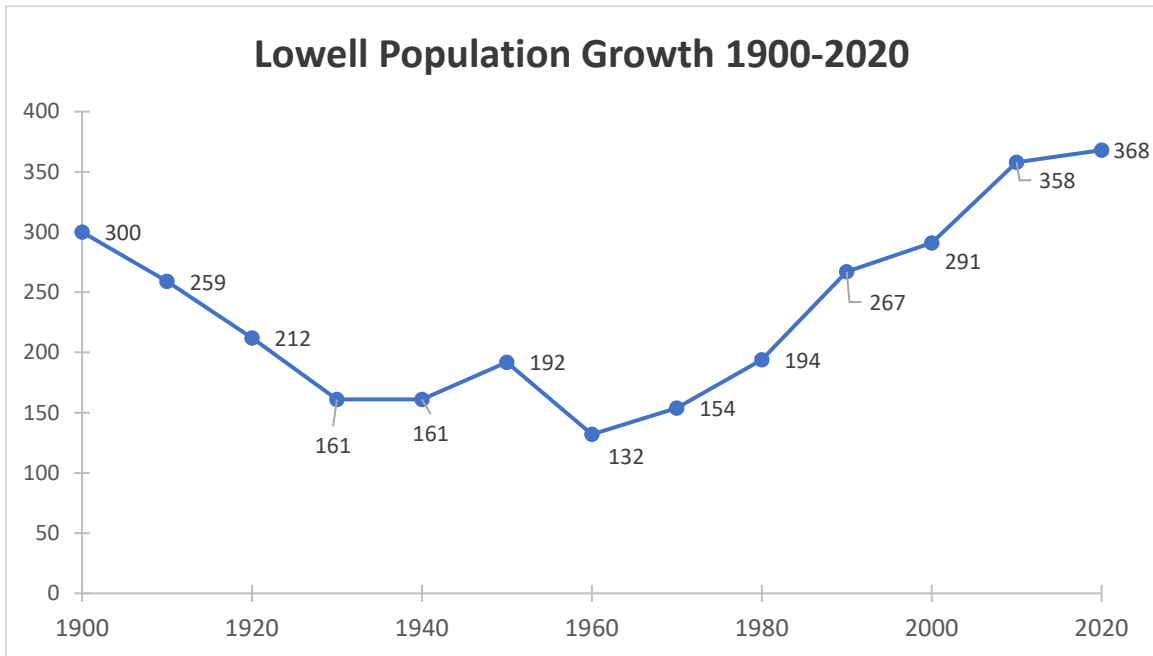




POPULATION AND DEMOGRAPHICS

Population Growth & Projection

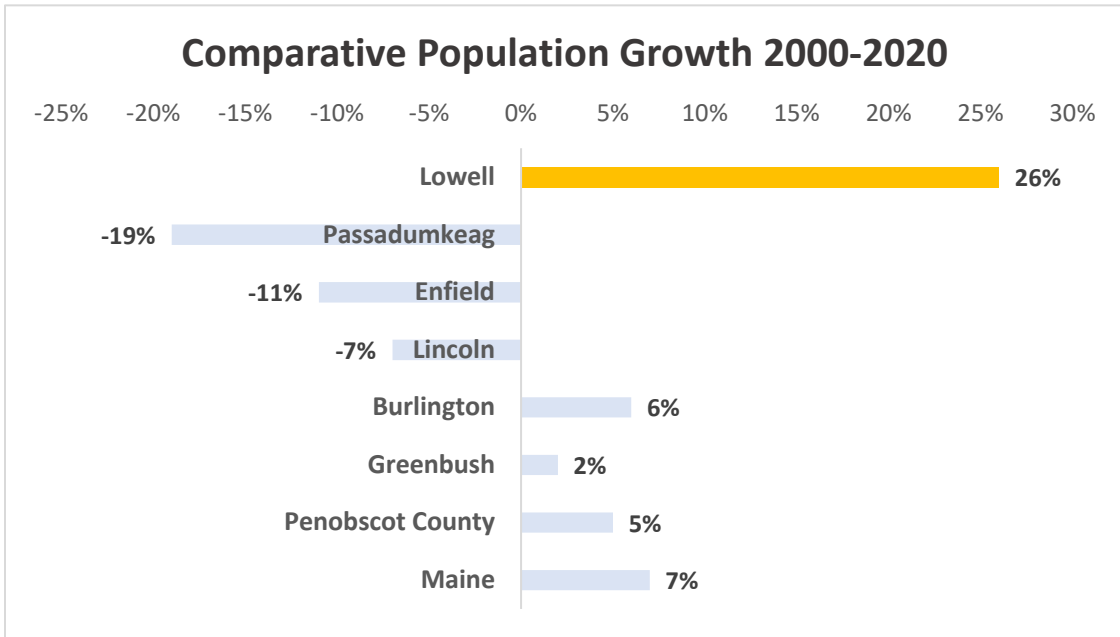
First settled in 1819, the Town of Lowell was initially known as Pages Mills. At the date of its incorporation on February 9th, 1837, the town was renamed to Huntressville, before being renamed once again to its current name, Lowell, the following year. Despite experiencing fluctuations between 1900 and 1950, Lowell’s population steadily increased between 1960 and 2020. After decreasing by 31 percent in the decade between 1950 and 1960, the local population followed a path of increase to 2020, when the population reached 368. In fact, between 1960 and 2020, the Lowell’s population rose by 179 percent, nearly tripling in size.



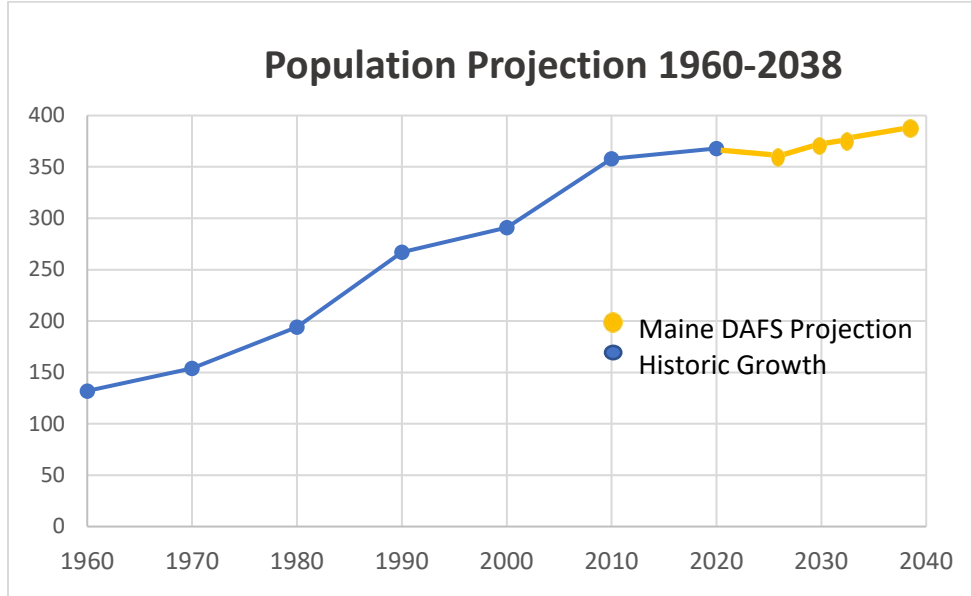
Compared to neighboring municipalities, Lowell’s population grew the most between 2000 and 2020, by 26 percent. Over the same period, Passadumkeag experienced a population decrease of 19 percent, followed by Enfield and Lincoln, with population decreases of 11 percent and 7 percent respectively. Of the local communities that also increased in population size, Burlington



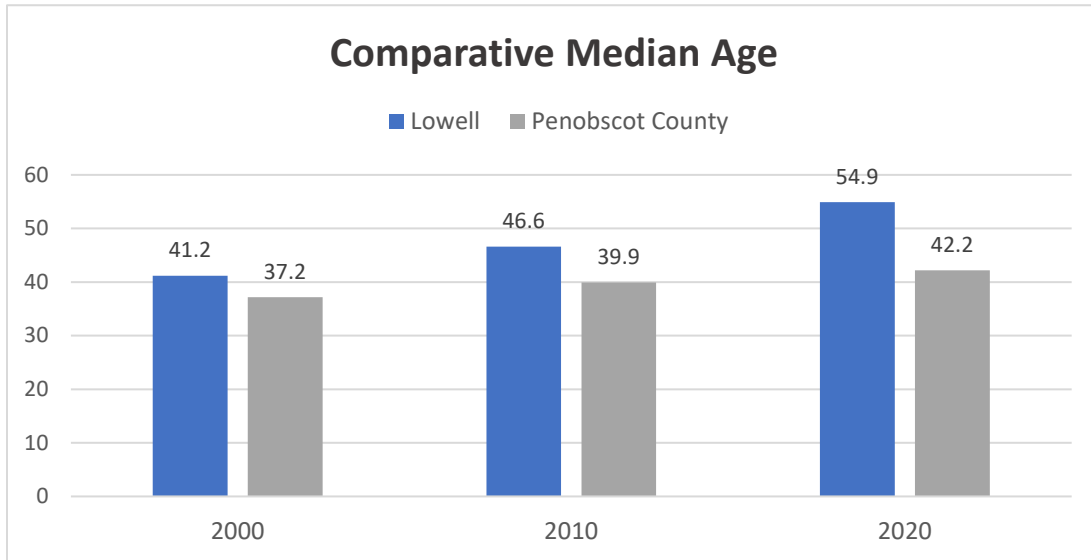
and Greenbush, their percentage increases significantly fell short of Lowell’s. At the county and state level, where populations grew by 5 percent and 7 percent respectively, Lowell’s growth still exceeded these expansive geographic areas. The town’s rural location coupled with the comparative population change experienced by other municipalities makes Lowell’s growth pattern unique.



Utilizing projections prepared by the Maine Office of Policy and Management, the Town of Lowell is projected to continue increasing over the next 16 years. Between 2023 and 2038, the town is expected to increase by 3%, from 367 to 378, inviting an additional 11 residents to the community. These projections mirror the positive growth pattern Lowell experienced between 1960 and 2020.



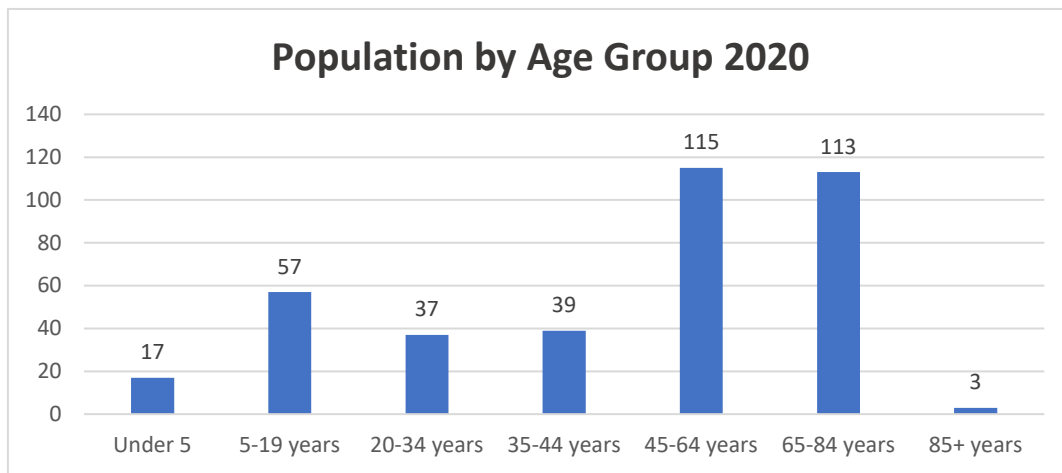
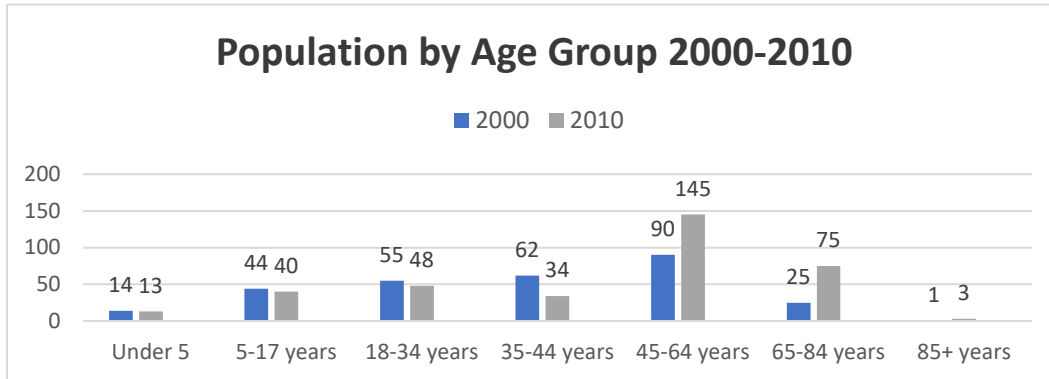
Age Distribution



Similar to a trend that has occurred in other Maine communities, Lowell’s median age increased drastically over the past two decades. While the median age increased by 13.7 years, from 41.2 to 54.9 between 2000 and 2020, this statistic increased the most over the past decade. Between 2010 and 2020, the median age in Lowell increased by 8.3 years. In comparison, Penobscot County’s median age increased by just 2.3 years to a significantly lower median age of 42.2, 12.7 years younger than that of Lowell’s. Compared to Lowell’s 13.7-year increase in median age between 2000 and 2020, Penobscot County’s median age increased by only 5 years during the



same period. These data suggest that if Lowell’s median age continues to rise, the community may need to make additional resources available to support the aging population.



In alignment with the characteristics of an aging population, the number of people in younger age groups has decreased over time. While 2020 statistics show a slight increase in the amount of people in younger age groups, the majority of residents are either between 45-64 years old or between 65-84 years old. Between 2000 and 2010, the 45-64 age group experienced the most change, with a 61 percent increase. In the following decade, the groups of those aged 45-64 years and aged 65-84 years were the most dominating, with the 45-64 age group decreasing by approximately 21 percent and the 65-84 age groups increasing by nearly 51 percent. These statistics coupled with the low fluctuation of those in younger age groups suggests that the individuals that were in the 45-64 age category a decade ago are now in the 65-84 age category

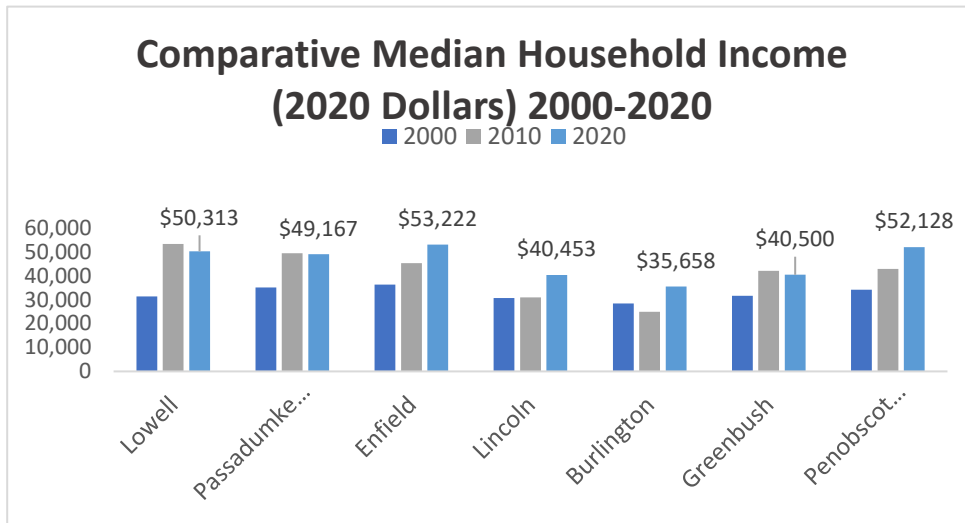
^{1 1} The 2020 Census uses slightly different age metrics than the 2000 and 2010 Censuses. Thus, two Population by Age Group graphs are incorporated in this chapter. The 2000 and 2010 Censuses organize those between the ages of 5-17 in an age group while the 2020 Census organizes those between the ages of 5-19 in an age group.



and of the new residents, a considerable number are retirement age and few are families with young children.

Income

Between 2000 and 2010, Lowell’s median household income increased by \$21,938, exceeding the increases experienced in other municipalities as well as in Penobscot County as a whole, where the median household income increased by \$8,690. In 2010, Lowell’s median household income was \$10,474 higher than the county average, before decreasing below the 2020 county average. Besides the Town of Enfield, where the 2020 median household income was \$1,094 above Penobscot County’s at \$52,128, Lowell’s income level at \$50,313 was the closest to the county average when compared to neighboring municipalities.



Education

Of those that are considered educated in Lowell, 36 percent graduated high school or received an equivalent diploma, while 13 percent earned a Bachelor’s Degree and 11 percent earned a Graduate or Professional Degree. Lowell’s population of those with a high school diploma is most similar to that of Penobscot County and the State of Maine, where the percentage of individuals with a high school degree is 33 percent and 31 percent respectively. While the percentage of Lowell residents that received a high school diploma is less than those of neighboring municipalities, the number of individuals with a bachelor’s degree or Graduate/Professional Degree in Lowell exceeded those with similar degrees in Passadumkeag, Enfield, Burlington, and Greenbush.



HOUSING

State Goal

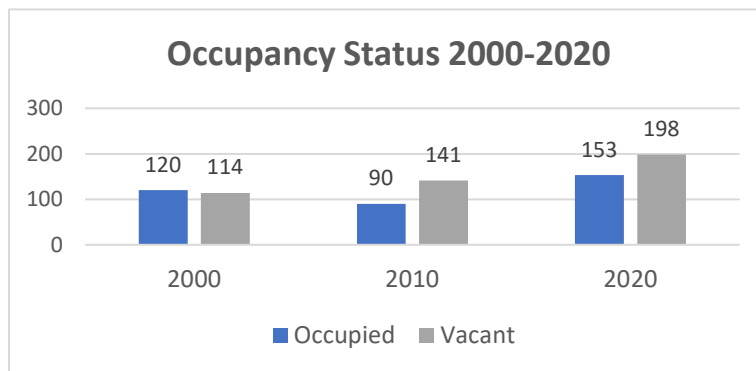
To encourage and promote affordable, decent housing opportunities for all Maine citizens.

Town Goal(s)

Monitor, evaluate and respond to real estate trends

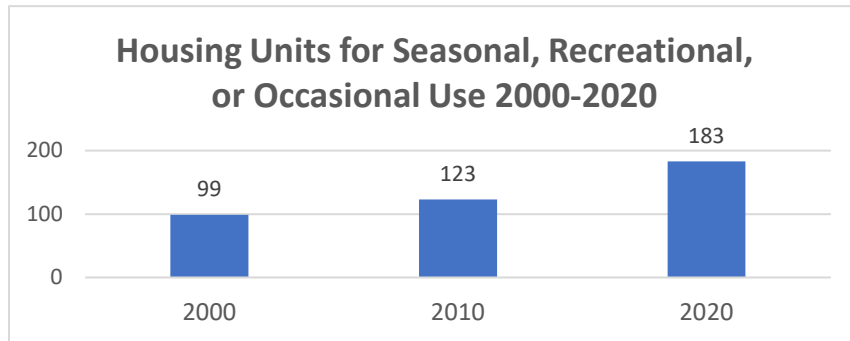
Occupancy

Between 2000 and 2020, new housing patterns have emerged in Lowell. While the town’s total number of housing units remained relatively the same between 2000 and 2010, with a decrease of just 4 units over the decade, the number of housing units increased by 52 percent between 2010 to 2020, more than doubling the past decade’s housing unit total. After the number of occupied units decreased by 25 percent between 2000 and 2010, the number of occupied units rose by 70 percent in the following decade. Comparatively, Lowell’s stock of vacant housing units has been steadily increasing over the past 20 years, with a 24 percent increase between 2000 and 2010 and a 40 percent increase between 2010 and 2020. In fact, despite the number of occupied units exceeding the number of vacant units in 2000, in recent decades, Lowell’s vacant units have outnumbered occupied units in Lowell. These statistics suggest that the number of units being utilized for seasonal housing is increasing at a faster rate than the stock of occupied, year-round housing.

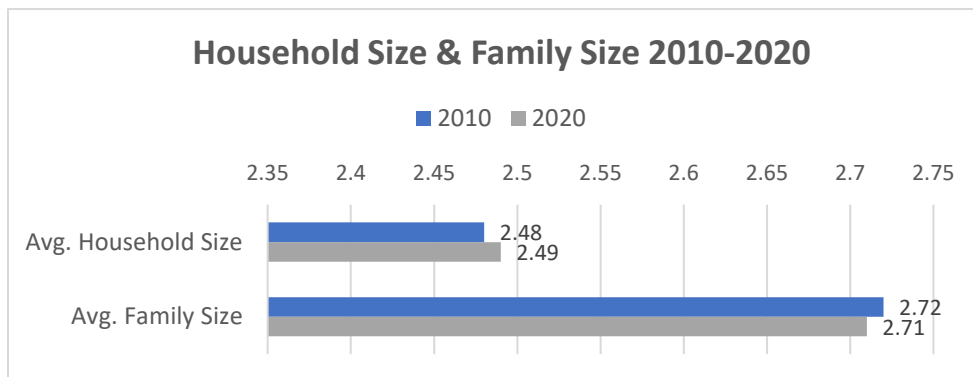




Over the past two decades, the number of housing units for seasonal, recreational, or occasional use has followed an upward trend. Similar to the significant increase of housing units between 2010 and 2020, housing units for seasonal use also increased during the same period. Between 2000 and 2010, Lowell reported a 24 percent increase in its stock of seasonal housing units, followed by another 49 percent increase in the following decade. Additionally, of the 351 total housing units Lowell reported in 2020, 52 percent were for seasonal, recreational, or occasional use. These statistics emphasize Lowell’s significant and increasing population of seasonal residents and housing units, and suggest that nonresidents value the seasonal assets that Lowell and the greater region have to offer, such as outdoor recreation.



As the number of housing units increased between 2010 and 2020, average household and family sizes fluctuated slightly, but remained relatively the same overall. These trends suggest that across the decade, housing types persisted, and Lowell attracted families of a slightly smaller size in 2020 than they did in 2010. This indicates further that no additional housing units may be necessary in the next decade. If new housing is built, it is important to ensure that land use controls encourage the development of quality affordable housing, including rental housing.





Tenure

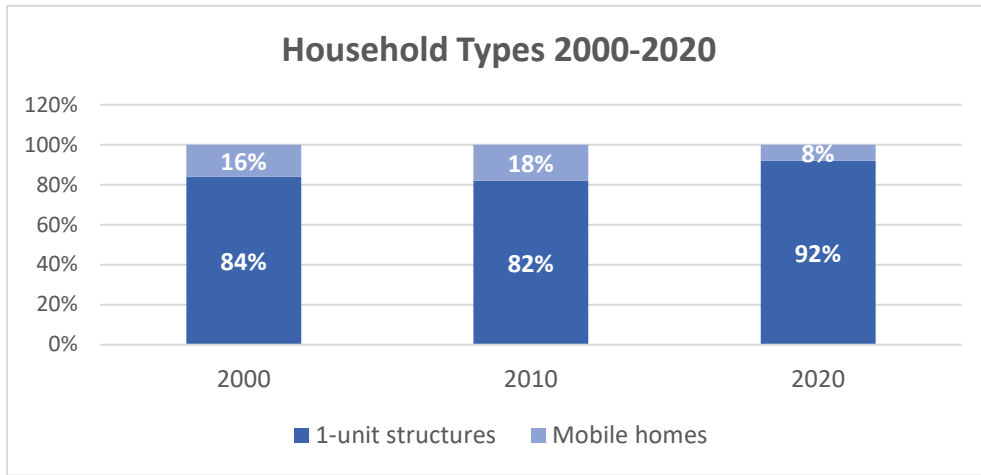
Despite persisting as the dominant housing type in Lowell, the percentage of owner-occupied housing units decreased by 13% between 2000 and 2020. Over the same period, the number of renter-occupied housing units rose by 13%, matching the percentage decrease of those residing in owner-occupied housing units. Comparatively, the percentage of owner-occupied and renter-occupied units in Penobscot County remained largely the same.

Housing Tenure

	Lowell		Penobscot County	
Year	Owner-occupied housing units	Renter-occupied housing units	Owner-occupied housing units	Renter-occupied housing units
2000	95%	5%	70%	30%
2010	88%	12%	69%	31%
2020	82%	18%	70%	30%

Lowell’s housing stock is primarily made up of 1-unit, single-family homes, and mobile homes. After the amount of 1-unit structures decreased slightly between 2000 and 2010, they increased by 10 percent in 2020, making up a total of 92 percent of the total housing stock. The remaining 8 percent of the housing stock was comprised of mobile homes.

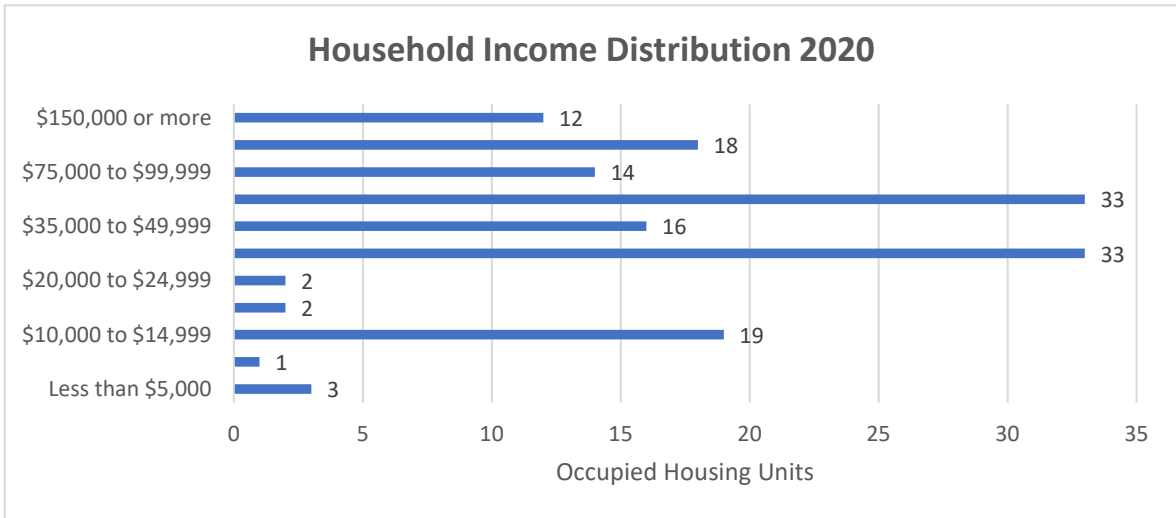
Based on projections, Lowell’s population is expected to continue increasing gradually over the next 16 years, by 11 people. It is not likely that this slight population increase will put significant stress on the housing stock or pressure to increase the housing stock. However, Lowell’s lack of multi-unit housing may present an issue. While single-family homes and mobile homes may meet the needs of the current aging population, as time passes, the demand for multi-unit rental housing could increase, especially if the town wishes to attract young professionals and families.



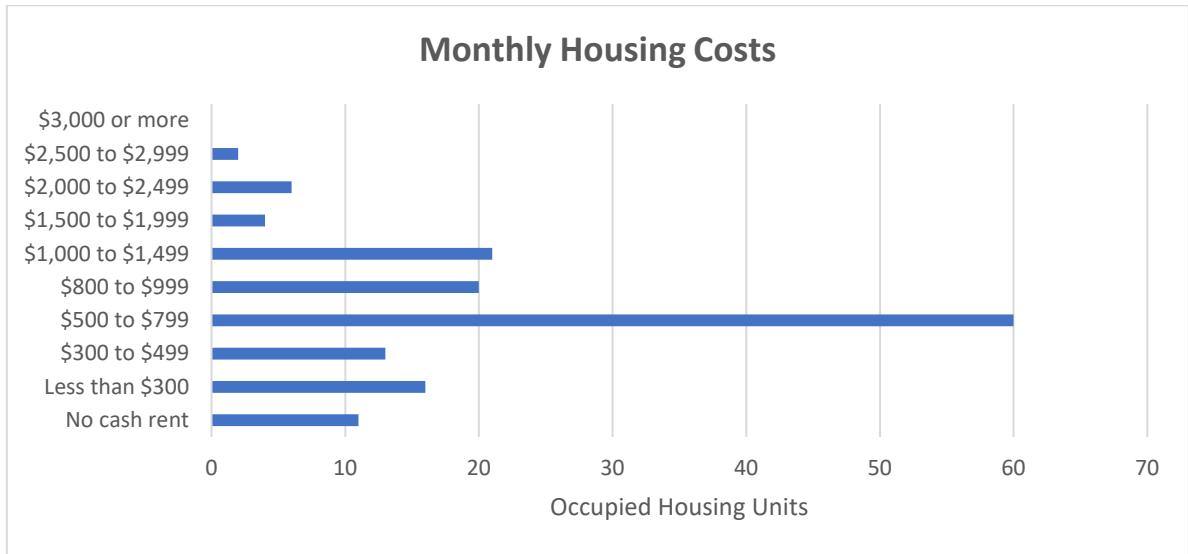
Affordability

In 2020, Lowell’s median household income was \$50,313. Equal percentages of Lowell households were distributed across two income brackets - \$25,000 to \$34,999 and \$50,000 to \$74,999. While the third most common income bracket out of the 11 possible brackets was \$10,000 to \$14,999, very few households earned between \$15,000 and \$24,999 or below \$10,000. While Lowell’s median household income is \$1,815 less than the county median of \$52,128, the median cost of a 2-bedroom rental unit is \$1,125, exceeding Penobscot County’s median cost of the same type of unit by \$108. In order for an individual to afford a 2-bedroom rental unit in Lowell, they must earn \$45,000, compared to \$40,694 in Penobscot County. According to the Maine State Housing Authority, Penobscot County’s 2020 Rental Affordability Index, which is the ratio of 2-bedroom rent affordable at median renter income to median 2-bedroom rent, was 0.83. In comparison, the State of Maine’s 2020 Rental Affordability Index was 0.88². An index of less than 1 means the area is generally unaffordable, which indicates the challenge prospective renters may face when trying to locate a unit affordable to them in Penobscot County.

² <https://www.mainehousing.org/policy-research/housing-data/affordability-indexes>. Accessed March 20th, 2022.



Housing is considered affordable if one is spending no more than 30% of their monthly income on housing costs, including utilities. For an occupant in Lowell earning the median household income of \$50,313, affordable housing would equate to spending \$15,093 or less on annual housing costs, or \$1,257 monthly. However, the median cost of a 2-bedroom rental unit in Lowell, \$1,125, and the income needed to afford a 2-bedroom rental unit are lower than what would be considered affordable to occupants earning the median household income. Further, as depicted in the chart below, the majority of occupied housing units spend \$500 to \$799 on monthly housing costs, followed by costs of \$1,000 to \$1,499 and \$800 to \$999. These statistics indicate that housing in Lowell is generally affordable to residents earning the median household income or 80% of the median household income of \$40,250, despite the town’s lower median household income and higher median rent than that of Penobscot County.



While affordable housing may not be a pressing concern in Lowell, demand for multi-unit housing may increase in the coming years if the town wishes to attract families and young professionals. In that effort, collaboration with neighboring municipalities and regional housing authorities in Penobscot, as there are no current regulations that affect the development of affordable or workforce housing.

Strategies

- Maintain, enact or amend growth area land use regulations to increase density, decrease lot size, setbacks and road widths, or provide incentives such as density bonuses, to encourage the development of affordable/workforce housing.
- Maintain, enact or amend ordinances to allow the addition of at least one accessory apartment per dwelling unit in growth areas, subject to site suitability.
- Create or continue to support a community affordable/workforce housing committee and/or regional affordable housing coalition.
- Designate a location(s) in growth areas where mobile home parks are allowed pursuant to 30-A M.R.S.A. §4358(3)(M) and where manufactured housing is allowed pursuant to 30-A M.R.S.A. §4358(2).



- Support the efforts of local and regional housing coalitions in addressing affordable and workforce housing needs.
- Seek to achieve a level of at least 10% of new residential development built or placed during the next decade be affordable.



TRANSPORTATION

State Goal

To plan for, finance and develop an efficient system of public facilities and services to accommodate anticipated growth and economic development.

Town Goal(s)

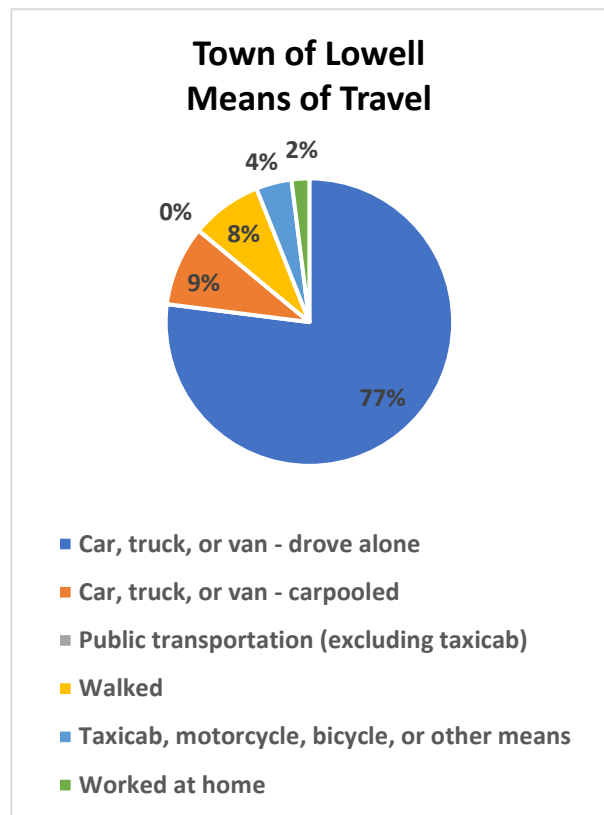
Develop a proactive, multi-year, funded transportation and infrastructure plan focused on resiliency and livability for all users.

Identify potential on and off-road connections that would provide bicycle and pedestrian connections to neighborhoods

Overview

Similar to many rural communities in Maine, Lowell has a very limited transportation network that is dependent on automotive use. Lowell’s roadway network is comprised of approximately 19 miles of roads owned and operate by the town and state. The majority of travel into Lowell is done via Route 188, which is a state road, and spans the width of Lowell, connecting both Burlington and Enfield. As the main arterial through Lowell, it is regularly used by residents, travelers, and businesses as well.

While traffic flow remains consistent throughout the year, many roads are in general need of patching and repaving, while more serious cases of road damage and degradation can require improvements to drainage, to enhanced safety markings and striping, to rebuilding entirely. Seasonal maintenance and snow clearance are well managed during seasons of heavy rain and snowfall – however – road and shoulder conditions in the summer months also require





critical consideration due to an excess of sand leftover from the winter. This is especially true for pedestrians and cyclists.

Looking towards the future of Lowell’s transportation network, long-term planning, zoning codification, and updates to flood-ready construction standards are critical to ensure that local transportation infrastructure remains resilient to the stresses of climate change, and extreme weather events. The town may enact ordinance standards for subdivisions and for public and private roads as appropriate to foster transportation-efficient growth patterns and provide for future street and transit connections.

Road Network & Infrastructure

The road system in Lowell sufficiently accommodates current levels of motor vehicle traffic. However, improvements and more robust standards are needed to improve safety and efficiency for pedestrians, cyclists, and drivers. The primary access road, Route 188, passes through the center of Lowell, while local roads provide circulation through rural residential areas.

Road	Maintenance type	Distance (mi.)
Webb Cove Drive		~6.25
Birch Lane		~1.4
James Jipson Road Ext.		~1.65
James Jipson Road		~1.4
Scout Lane		.3
Stanhope Mill Rd		.25
Johnson Kneel Rd		.1
Greenbush Lane		.4
Shore Lane		.6

Maintained Roads

Road	Maintenance type	Mileage
West Old Main Road	State	6.9
Porter Lane	Town	.15 Miles
Preble Road	Town	.02 Miles
Tannery Road	Town	1.75 Miles
Woodman Road	Town	1.9 Miles
Fogg Brook Road	Town	1.1 Miles
Escutarsis Road	Town (Up to Certain Point)	.03 Miles



Bridges/Culverts

Inventory of Bridges and Culverts

Name	Road	Crossing	Length (ft)	Width (ft)	Year Built	Jurisdiction	Condition	Last inspected
Wakefield Mill NO. 1 (2906)	E. Old Main Rd	Eskutasis Stream	12ft	31ft	1933	Maine DOT	Fair Satisfactory	10/6/2020
Woodman Mill (3278)	Woodman Mill Rd	Eskutasis Stream	15.8 ft	n/a	2000	Town of Lowell		7/27/2022
Passadumkeag (3527)	Tannery Road	Passadumkeag Stream	51.5 ft	14 ft	1937	Town of Lowell	Very Good	8/11/2021
Wakefield Mill NO. 2 (5112)	E. Old Main Rd.	Eskutasis Stream	15 ft	31 ft	1933	Maine DOT	Fair Satisfactory	10/6/2020

Public Parking

While population density might be lower than urban areas in Maine, public parking areas, even for rural towns, serve as essential infrastructure. They accommodate visitors, and promote local businesses and economic growth. Moreover, public parking enhances accessibility, ensuring that residents and visitors can access community services, events, and public spaces conveniently. Public parking for Lowell is located at town hall, as there is no reason currently to accommodate a greater amount of public parking.

Crash History

In 2020 and 2021 the Maine Department of Transportation identified the intersection of Escutarsis Road and Tannery Road with Route 188 as a high crash location. While there were only 7 total collisions during this period, and just one resulted in injury, this area can likely be



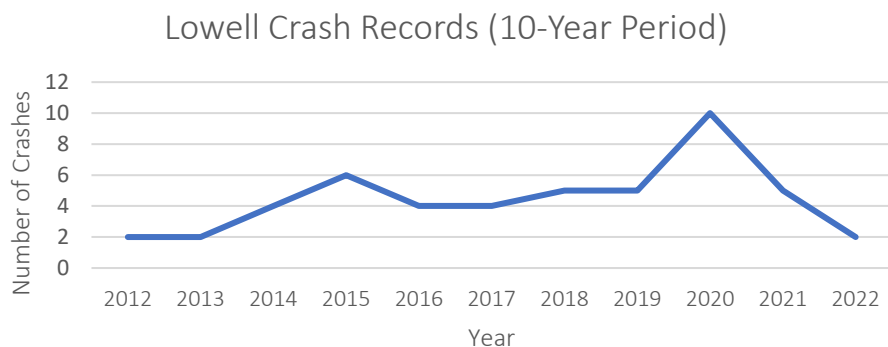
considered one of the most dangerous to travel in Lowell. Since 2012, there have been 49 crashes in Lowell, with an average of 4 annually.

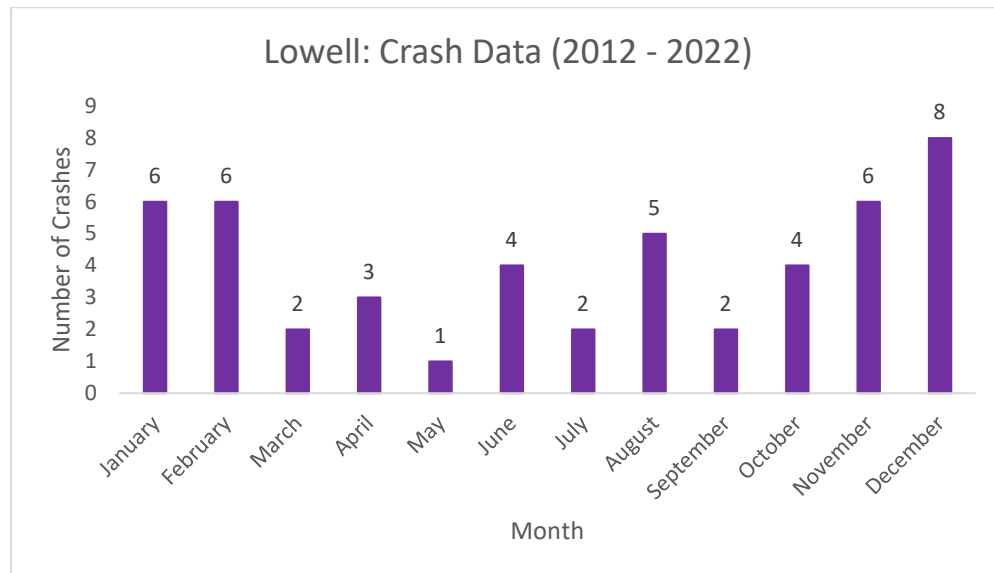
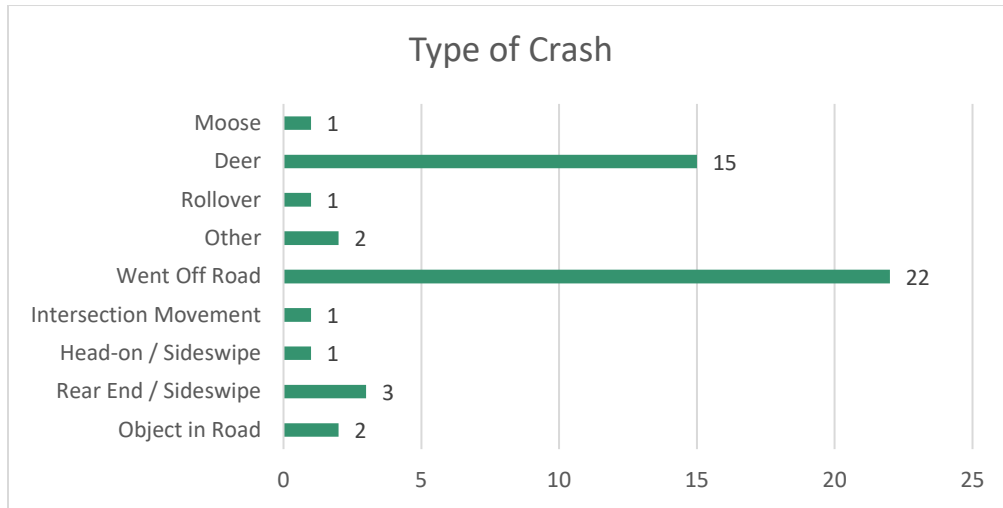
Taking into consideration Lowell’s few public roadways and lack of high-population or urban centers, the fact that most collisions occur on Route 188 is evident from collected data. While some collisions also occurred on Tannery Road and Woodman Mill Road in the proximity of the Passadumkeag River, these incidents may either be considered outliers, or results of recreation-bound traffic. Given the incredibly low AADT of under one hundred in these areas, the town may dedicate resources to improve safety along the river.

Given the low number of annual crashes in contrast to Lowell’s section of Route 188’s AADT ranging in the high hundreds, although it is a relatively high crash area, it does not appear likely that this section of Route 188 is extraordinarily dangerous.

There do not appear to be any outlying contributing factors to these crashes, as most occur during nominal conditions and their corresponding drivers being unimpaired at the time of collision. Although a correlation between accident occurrence and certain dates and times (on average vehicular crashes were more likely to occur on Wednesdays, and around the time of 11 AM and 6 PM) this is more indicative of unsafe driver behavior than driving conditions. However, while a road can be considered safe in regards to construction, roadway design has been shown to have influence on driver behavior and safety.

Taking into consideration that Route 188 is the primary corridor for travel in Lowell, and has been shown to have an increased likelihood of collision, one possible strategy the town is exploring to address where the turns become significantly sharper is to identify and realign sharper curves in the road can help improve visibility and reduce the risks of accidents. Below are tables showing where crashes occurred most in the last 10 years (2012-2022).





Design

Lowell maintains design and construction standards for public and private roads in line with those recommended by Maine Department of Transportation. There is discussion however, to review these standards and maintain the roads more frequently, as logging trucks have been more recently adding to the deterioration of Lowell’s roads. Although there are no current standards for bicycle/pedestrian facilities, there is interest into investigating the possibility of creating some.



Pedestrian Infrastructure

Lowell does not have sidewalks or any daily destinations within walking distance. To encourage greater development, the town may consider requiring sidewalk connections within growth zones or street widths that could later accommodate sidewalks and/or bicycle facilities. To improve pedestrian facilities overtime, the town may incorporate an ordinance to add or improve sidewalks at the time of road reconstruction on sections of roadway that are part of a town pedestrian plan. This would require first establishing a pedestrian plan with the help of local planning organizations, Maine DOT, and the Bicycle Coalition of Maine.

In order to facilitate long range bicycle and pedestrian improvements, design standards for road construction and repair need to accommodate the potential for pedestrian and bicycle infrastructure.

Lowell is a car-dependent community. Road and traffic conditions and the distance from Lincoln, the nearest major service center, makes biking for transportation prohibitive. While transportation connections do exist, none are particularly convenient for daily use, which likely contributes to a sense of Lowell being removed or “out of the way.” This works to Lowell’s benefit and detriment, as it helps to maintain Lowell as a local haven, while making it a challenging place to access economic opportunity.

By Rail

Amtrak - Brunswick (153 miles from Lowell)

The Amtrak Downeaster is located in Brunswick, Maine and provides trips to and from Portland, Maine, parts of New Hampshire and into Boston, Massachusetts. The distance to the rail service from Lowell makes for not a feasible form of transportation.

By Air

Bangor International Airport (49 miles from Lowell)

Bangor International Airport is the closest international airport offering flights to destinations along the East Coast.

By (Private) Bus

Concord Coach Lines Bangor (48 miles from Lowell) operate intercity bus services between Bangor, Augusta, Portland, and Boston.



By Public Transit

None

No public transportation options are currently available in Lowell. Given the older population, some form of organized public transportation service would be desirable, however, the low population density proves a challenge to sustaining such a service.

By Taxi/Ride Share/Ride Services

None

Taxis and ride hailing services including Uber and Lyft do not operate in Lowell. However, Lynx provides a variety of social service programs in Penobscot and Piscataquis Counties, including transportation services. The town encourages any local development of taxi type services.

By Foot

None

Road and traffic conditions and the distance from Lincoln, the nearest major service center, makes walking for transportation prohibitive.

Active Transportation

During the pandemic, people all over the United States started walking outdoors, utilizing trails, and bicycling more. The increased use of active modes of transportation have remained, despite a relative return to normal, pre-pandemic habits. The town has shown an interest in allocating funds toward investing in active transportation efforts, as the population is increasingly aging, and active transportation can be useful to improve livability for users of all ages and abilities. Lowell does not currently have any dedicated bicycle infrastructure.

Budget

For FY 2023, Lowell budgeted \$11,500 for road maintenance including grading, ditching, and brush removal. However, \$110,000 – down \$21k from the year prior – has been earmarked for road maintenance during the winter. This is by far the largest expense Lowell must bear – and eclipses the relatively paltry sum of \$42,683 Lowell received from the state in FY 2022 as part of the Local Road Assistance Program (LRAP).

[Table of 2012-2022 budget, expenditures, etc.]

Maine DOT provides annual Local Road Assistance averaging \$13,436 to Lowell or for maintenance. There are no specific work items planned for Lowell during MEDOT’s 2023-2025 Work Plan.

Local Road Assistance by Fiscal Year	
FY 2019	\$28,488
FY 2020	\$29,480
FY 2021	\$27,544
FY 2022	\$29,628
FY 2023	\$29,468



Maine DOT Maintenance Accomplishments (2022)			
1	Drainage Structures Thawed	0.5	Tons of Patch Applied
2	Bridge Washed	75	Linear Feet of Brush Removed
2	Minor Sign(s) Installed or Maintained		

Activities managed on a larger scale, such as snow & ice control, and work done by contract are not listed. The maintenance accomplishments may extend into neighboring towns but are listed in the first town where the work was reported. Lowell currently maintains and updates its roads as needed, and actively participates in regional and state transportation efforts.

Sand and salt on roadways especially on shoulders can cause hazards for drivers. This is more prevalent in the wet, spring months where there is more runoff. The sand runoff causes issues on culvert drainage, leading to more ditching that need to be done. 2026 is the next time the main road is going to be evaluated and updated by the MaineDOT. However, there is also an in-town ditching effort launched 2 fiscal cycles ago. Where there is a lot of logging going on right now, further deteriorating the main and town-maintained roads may occur. Knowing this, the town is currently discussing the possibility of increasing the frequency for road maintenance by the state as well as the town.

Resilient road networks

A resilient road network in more rural areas, serves a critical purpose in enhancing community sustainability and disaster preparedness. The primary aim of such a network is to ensure reliable transportation and connectivity, even in the face of adverse weather conditions or natural disasters, such as heavy snowfall or flooding, which are common in this region. This resilience is achieved through a combination of well-designed road infrastructure and proactive maintenance strategies. Some of the ways the town is looking to create and bolster these networks is with long-range maintenance and repair schedule with a funding plan like the town roads reserve, which is used for grating and ditching, and the roads and bridges reserve used to replace the Tannery bridge, incorporating bicycle and pedestrian facilities, formalizing budget sources for larger roadway improvements with LRAP and Taxation, working with MaineDOT to evaluate culverts and drainage, designing for resilience and accessibility: paving and repair standards to ensure longevity of improvements including flooding, and evaluating of spring/summer road maintenance schedule. An important aspect of this will be including Stream Smart Road Crossing guidelines, which are designed to provide enough capacity to pass sediment, debris, fish and high



flows from extreme storm events without failure or damage to the structure. More about Stream smart crossings can be found on the Maine DACF website³

Strategies

Mentioned briefly in this chapter, The State of Maine requires certain strategies for a successful comprehensive plan. These are described below.

- Develop or continue to update a prioritized improvement, maintenance, and repair plan for the community's transportation network.
- Maintain, enact, or amend local ordinances as appropriate to address or avoid conflicts with: a. Policy objectives of the Sensible Transportation Policy Act (23 M.R.S.A. §73); b. State access management regulations pursuant to 23 M.R.S.A. §704; and c. State traffic permitting regulations for large developments pursuant to 23 M.R.S.A. §704-A
- Maintain, enact, or amend ordinance standards for subdivisions and for public and private roads as appropriate to foster transportation-efficient growth patterns and provide for future street and transit connections.

³ Maine Forest Service
https://www.maine.gov/dacf/mfs/policy_management/water_resources/stream_smart_crossings.html Accessed February 27th, 2024



ECONOMY

Goals

State Goal

Promote an economic climate that increases job opportunities and overall economic well-being.

Town Goal(s)

Lowell has several goals they wish to meet over the next ten years.

Zoning: Form a separate working group to look at the possibility of creating appropriate zoning for issues such as commercial businesses, housing divisions and short-term rentals. Zoning should reflect the goals of citizens to limit or expand various business and land uses.

Grants: Securing grants for town or individual resident's needs by securing grant writing education and opportunity seeking. Grant writing or monitoring needs to be an assigned or paid task of the Town government.

Promoting tourism: Posting information on ATV trails and water activities on website.

Land: In lieu of using or purchasing public land for development of any kind, explore the possibility of cooperative land purchases for the town.

Utilities/Communication: Promote and encourage public utilities to expand internet, cellular and electric power to all residents. Promote and encourage any businesses that would enable easier shipping such as a Mailboxes etc., UPS or FedEx drop-off.

Transportation: Med taxi

Tax relief: Investigate alleviating tax burden to residents by using firehouse facilities already owned by Lowell (EMS Services have been disbanded by the town as of 2022 – paired with Howland's EMS services and sold Med Taxi's to Glenburn for 63, 000).



Lowell's Economy

Initially established as a mill town in the 19th century, Lowell experienced significant industrial growth due to its strategic location along waterways, facilitating the establishment of textile mills. The abundant water resources powered the mills, attracting a workforce and contributing to the town's economic prosperity. Over time, however, economic shifts and changes in manufacturing led to the decline of the textile industry in Lowell. Today, Lowell's economy reflects a mix of sectors, including services, tourism, and small-scale manufacturing. Understanding the historical context helps appreciate how the community has navigated economic changes, demonstrating resilience and adaptability in the face of evolving industries.

The following factors have influenced this trend: citizen preference and low population.

What do you Like Most About Living in Lowell?	
Choice	Respondents
Low population density	131
Recreational opportunities	100
Feeling of safety	81
Cost of living	52
Caring community	44
Good place to raise a family	41

The economy of the Town of Lowell is effectively stagnant. Lowell had some commercial industry in the late 1800's and early 1900's, but they went by the wayside as industrialization edged out small mills and tanning production. Lowell is now a predominantly residential community. The primary concern of the citizens focuses on the tax burden.

What Do You Dislike About Living in Lowell?	
Choice	Respondents
Lack of dining choices	55
Lack of grocery stores	52
Cost of property taxes	51
Lack of law enforcement services	33
Lack of entertainment activities	25
Lack of retail stores	18



Lowell and the surrounding towns have their own very independent perspectives. This perspective is influenced by the large areas of each town, the relatively small population, the lack of infrastructure and the unique characteristic of each municipality. Lowell is without any local or regional economic plans, and because of the conditions (low population and resistance to expansion) it does not seem feasible that any will be recommended or created during the foreseeable future. If a business, a developer, or a regional planning committee becomes interested in Lowell, it is very doubtful that the citizens, because of their personal financial situation, would be willing to contribute some or any of their taxes towards such projects. However, this will depend on the plan itself, as well as the specific financial benefits for the town and its citizens.

The town of Lowell is unlike most villages in that it doesn't have a town center or heart of the town that would lend itself to renovations or improvements to make it more attractive to residents or visitors. The only area that could be considered the "nostalgic heart" of the town consist of a one-room schoolhouse that is currently undergoing private renovation and the remains of a local Grange that is no longer functional or habitable. The former Grange building is on a small lot with no parking space and is currently for sale by the national Grange association.

Projected growth in Lowell is not expected to increase to a significant degree. Lack of public water and sewer systems will not impact any future growth in current projections.

Lowell has a school choice program allowing parents a choice between two school districts or can pay for tuition at a private institution at the same rate as public school. The projected number of students for the foreseeable future is not sufficient to support a public school in Lowell.

At this time there are no health or social service facilities in Lowell. Residents make use of services located in nearby Lincoln, Bangor, and Millinocket. Along with the rest of the state, Maine health care and public health services are sorely lacking. This will continue to affect the entire population of Lowell.

Lowell recently switched from funding and operating its own fire and EMS to contracting for these services from Howland fire and EMS. Although these services are currently sufficient, there is a need to examine potential disaster scenarios to determine future needs in that area. Additional services could alleviate the burden even further in the future.

Commercial Development

Although the potential for any future industrial or major commercial development is not high, the town has had robust growth in the number of seasonal residents. As these numbers grow, there could be the potential for small businesses arising to service them. It is unknown how many



home businesses exist in the town, but there are a few roadside stands, egg production and sugar shacks. There is also a gravel pit. The working population of Lowell works outside of the town. The Town welcomes small business. The Town of Lowell also has ATV trails that are used by many seasonal residents.

There are other obstacles that hinder commercial growth. Lowell has not had any local development plans enacted in the last 5 years. The town does not have central water and sanitary systems, broadband service and cellular service is erratic, and three phase power is limited to a very small strip of road. There is no public water or sewer system in Lowell. Residents get their water from wells, with each residence responsible for a septic system or holding tank.

The town does not have a traditional downtown or village center or any commercial food establishments for groceries or takeout. Along with the low population numbers, this negatively influences developers who might consider building a motel, apartments, or any high-density housing. Lowell is picturesque but is not situated on a major State roadway with convenience of accessibility to US 95. It presents a long, dark commute to Bangor for those who work in the more metropolitan surrounding areas.

The Passadumkeag River flows through Lowell. The river is a nice size for canoes and kayaks but is not recommended for motorized boats unless they are intimately familiar with the river as it is filled with submerged rocks and stumps. There is a gravel boat ramp adjacent to the dam on Tannery Road and portage access on the downriver side of the dam. The boat ramp is not owned or operated by the Town of Lowell but was placed there by the dam operators. They don't seem to oppose public use but will not communicate with the Town for any suggestions or questions on promoting it. The Town of Lowell also has ATV trails that are used by many seasonal residents.

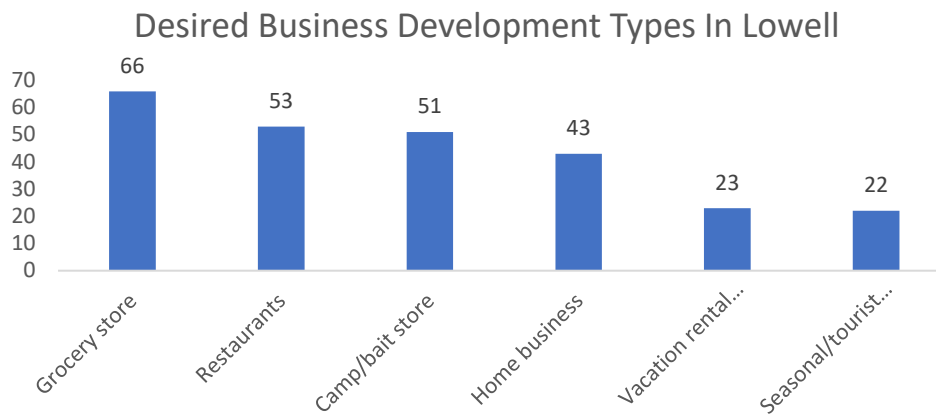
The Town of Lowell has adopted an ordinance to forbid commercial marijuana farms, social clubs, and commercial shops. It is felt that the cost of increased fire, police and ambulance services would outweigh any possible income from this source. Lowell wants to actively promote responsible and culturally enriching tourism experiences, focusing on the attractions it may already offer beyond the scope of marijuana related interests.

Economic Development Plan

Citizens have expressed their preference (as recorded in the latest town wide opinion survey) not to have larger businesses in town and this sentiment remains the same today. If this attitude towards larger businesses changes, it could help to alleviate the tax burden presently borne by the residents. It is unlikely that any significant changes in will occur even if zoning for business or industry is implemented because of the lack of demand for services. If the desire of the town is for no industrial or large businesses, then zoning needs to be investigated to codify this. Lowell



coordinates with regional development corporations and surrounding towns as necessary to support desired economic development.



The town has indicated through the survey that most would like a grocery store. According to the U.S. Department of Agriculture’s (USDA) Food Access Research Atlas, Lowell is categorized as food desert. A “food desert” refers to a census tract where a significant number or share of residents do not have access to affordable or good-quality fresh food with or without a vehicle within a certain distance. Howland, Passadumkeag, Maxfield, Burlington, and Lowell are all food deserts according to the USDA. Taking into consideration the wants and needs of town residents and for those in the surrounding area, there appears to be viable market openings to address these industry deficits, which would undoubtedly be a boon for Lowell’s economy.

There are other obstacles that hinder commercial growth. The town does not have central water and sanitary systems, broadband service and cellular service is erratic, and three phase power is limited to a very small strip of road. There is no public water or sewer system in Lowell. Residents get their water from wells.

Employment Trends

Many of the townspeople work in surrounding areas as there are no commercial enterprises in town. Many of the residents are also retired. There are currently no major employers in Lowell. There are also no economic development incentive districts, such as tax increment financing districts, in the community.



WATER RESOURCES

State Goal

To protect the quality and manage the quantity of the State's water resources, including lakes, aquifers, great ponds, estuaries, rivers, and coastal areas.

State Policies

To protect significant surface water resources from pollution and improve water quality where needed

To protect water resources in growth areas while promoting more intensive development in those areas.

To cooperate with neighboring communities and regional/local advocacy groups to protect water resources.

Town Goal(s)

Within 6 months of the publication of this comprehensive plan, the Board of Selectmen shall establish open and recurring lines of communication with the owners and management of the Tannery/Pumpkin Hill Dam (presently KEI).

Within 3 years of the publication of this comprehensive plan, the Board of Selectmen and KEI shall collaborate to develop a long-term plan to improve the safety of the navigable waters within the boundaries of all properties to which KEI holds flowage rights.

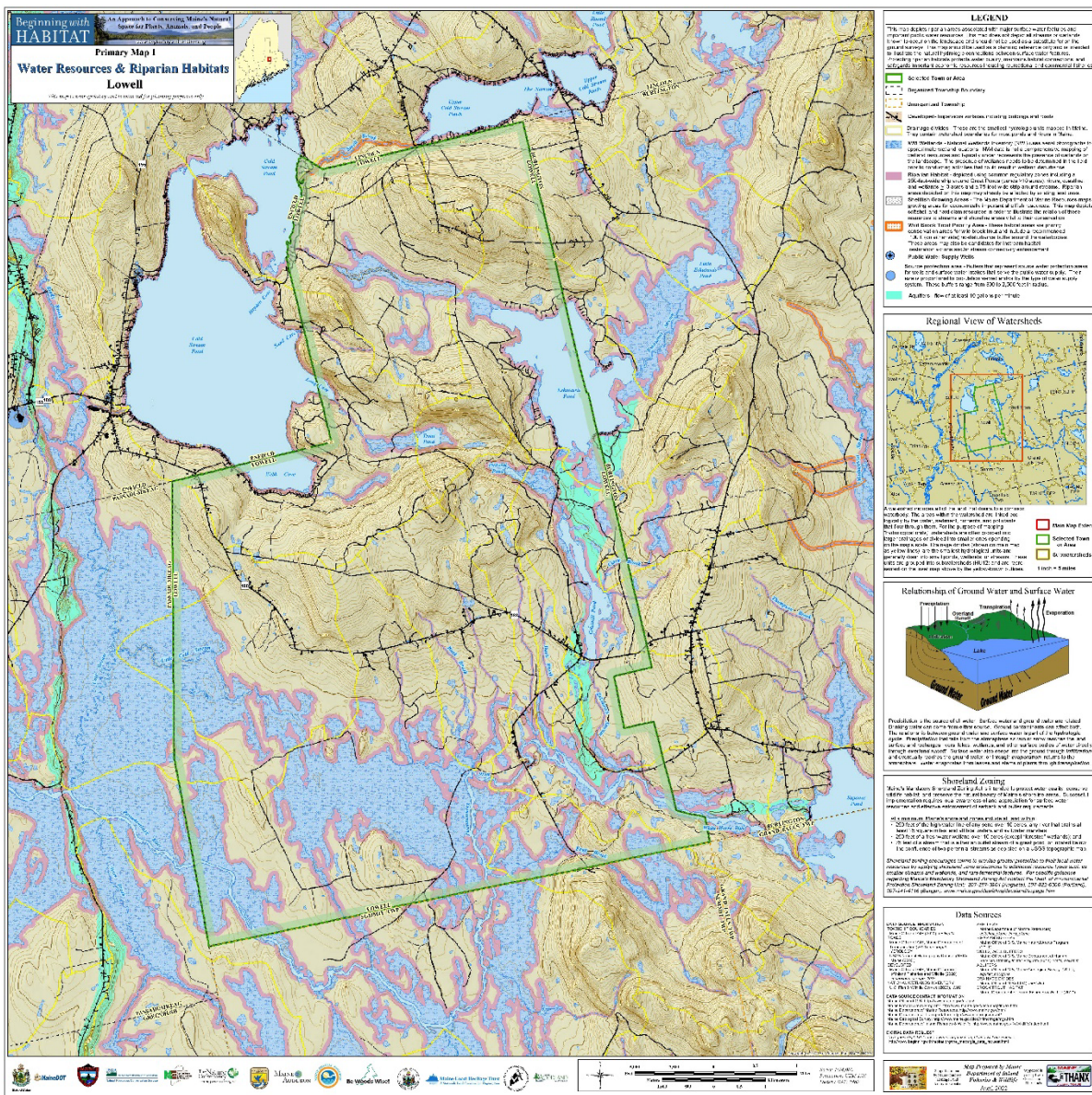
Within 5 years of the publication of this comprehensive plan, the Board of Selectmen and KEI should collaborate on the creation of an improved boat launch adjacent to the upstream and downstream sides of the Tannery/Pumpkin Hill Dam.

Protection & Preservation

Water resources in Lowell include part of Cold Stream Pond, Little Cold Stream, part of Escutarsis Pond (as it will be referred to in this document, but known formally as Eskutassis pond), Pickerel Pond, Trout Pond, Gristmill Pond, Davis Brook, Buck Brook, and Part of The Passadumkeag River. Water resources play a vital role in Lowell, serving as the literal lifeblood for the community since its founding, and helping to define the towns picturesque landscapes and natural beauty. Lowell's reliance on water goes beyond pure aesthetics. The areas diverse wildlife thrives in abundance



of water resources, attracting nature enthusiasts and tourists, bolstering the potential for ecotourism, and contributing to the community’s cultural identity. Equally crucial is the essential role of water in meeting the needs of the residents in Lowell, from wellled drinking water, to sanitation, promoting public health and well-being. Recognizing the preciousness of their water resources, the town of Lowell strives to preserve and protect their water resources, understanding that the sustainable management is vital for the prosperity of their community and the preservation for future generations. Below is a Beginning with Habitat Program map showing all the bodies of water that run through Lowell.

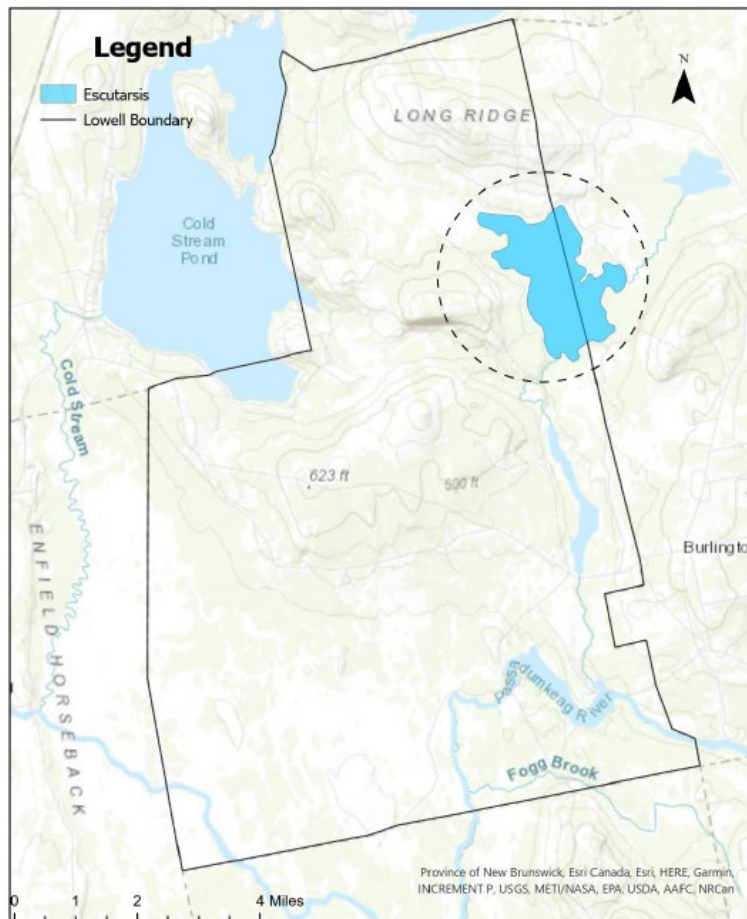




The Lore of Escutarsis

Toward the east of the town is a body of water known as Escutarsis Pond to those who live in Lowell. The name is a variant on Eskutassis, which is the Wabanaki word for little trout. Eskutassis is the more correct name for this little pond that straddles both Lowell and Burlington, but locally, it is known as Escutarsis, like the road around it. It is thought that “escutarsis” is closer to the way people said and heard it said originally, rather than how they saw it read, but no one in the town knows for sure. The pond is a warm water fishery that covers 885 acres with a mean depth of 11ft, and a volume of 11,656,996 m³. Since 2015, invasive largemouth bass (*Micropterus salmoides*) have been present in Escutarsis Pond.

Escutarsis Pond in Lowell





Passadumkeag

The 7-mile section of the Passadumkeag River that runs through Lowell is relatively small, yet actions to protect habitat and water quality along the river in Lowell can have a significant impact on aquatic life both within Lowell and downstream. Its waters support a diverse range of aquatic life, including Salmon, (*Salmo salar*), brook trout, (*Salvelinus fontinalis*) and various species of waterfowl. It is also one of only a few rivers in Maine known to support all ten species of freshwater mussels found in the state.

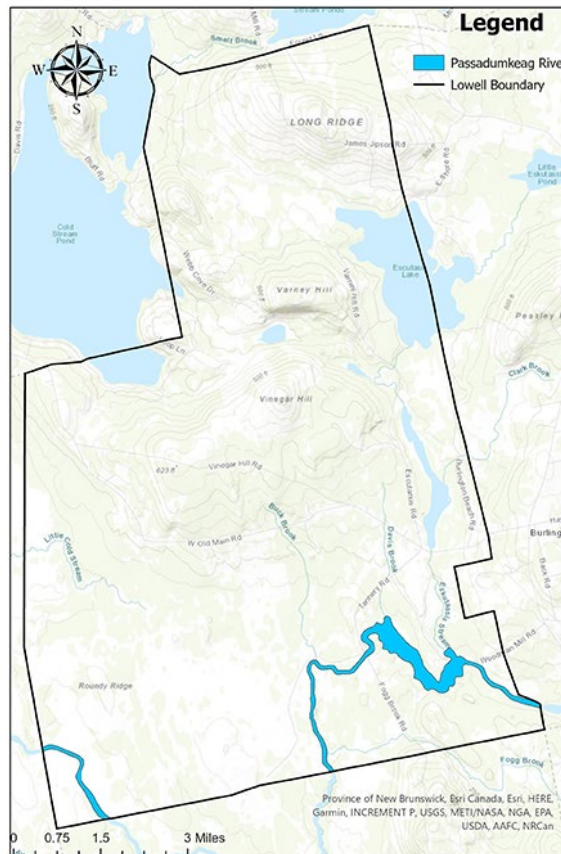
The river faces threats to both its quality and quantity. Pollution from potential agricultural runoff and development poses a risk to water quality, which harms aquatic habitats and overall ecosystem health. Specific contaminants found that have been found are not identified in this plan outside of a table further in this chapter. However, presence of previous industries and practices can show what previously contaminated the river, and help to guide residents on what to watch out for. The largest example is the historic tannery that was once present along the river in Lowell. Tanning uses tannins, chromium, alum or other chemical agents, some of which can be hazardous to human health and the environment, if not carefully controlled. In some instances, the presence of tanneries can be linked to PFAS pollution⁴. The tannery has now been closed for decades, but the road commemorating its existence still remains.

Additionally, alterations to the river's flow, such as dams and water diversions, have reduced its quantity, impacting water availability for both wildlife and human communities downstream. Current potential issues include the need for sustainable land management practices to mitigate pollution, restoration efforts to improve fish passages, and collaborative conservation measures to ensure the continued vitality of this vital river system. There are not enough data to show recorded presence of invasive species in or around the river other than the largemouth bass, which is also present in Escutarsis Pond.

⁴ <https://www.science.org/content/article/citizen-sleuths-exposed-pollution-century-old-michigan-factory-nationwide-implications> Accessed February 27th, 2024



Passadumkeag River In Lowell



Other Water Bodies

As stated previously, Lowell is defined by its water. Other than the two greater bodies listed above, others worth note include Gristmill Pond, Trout Pond, and Pickerel Pond. Gristmill, in particular, has a dam responsible for controlling water level when it gets too high or low in the surrounding area. This offers some flood and drought prevention methods, with the caveat that dams have the potential to disrupt natural hydrology, alter water quality, and affect the ecological balance. These structures can lead to sedimentation, altered flow regimes, and changes in nutrient dynamics, which can significantly impact pond ecosystems and the organisms within them.

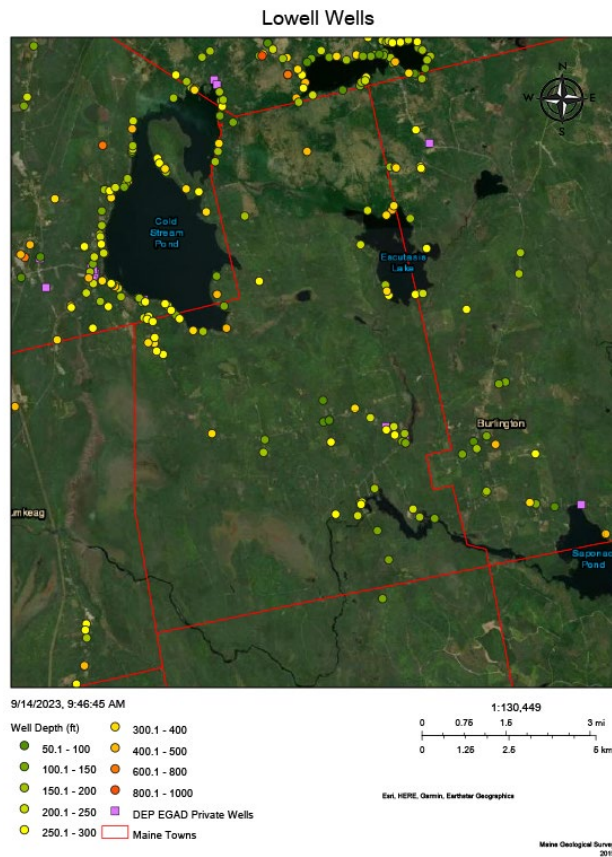
Also in the town is a portion of Cold Stream Pond, one of the cleanest bodies of water in the state. Development continues around this water body, making it vulnerable to the associated risks. One risk in particular is to the tidewater mucket (*Atlanticoncha ochracea*), which is a



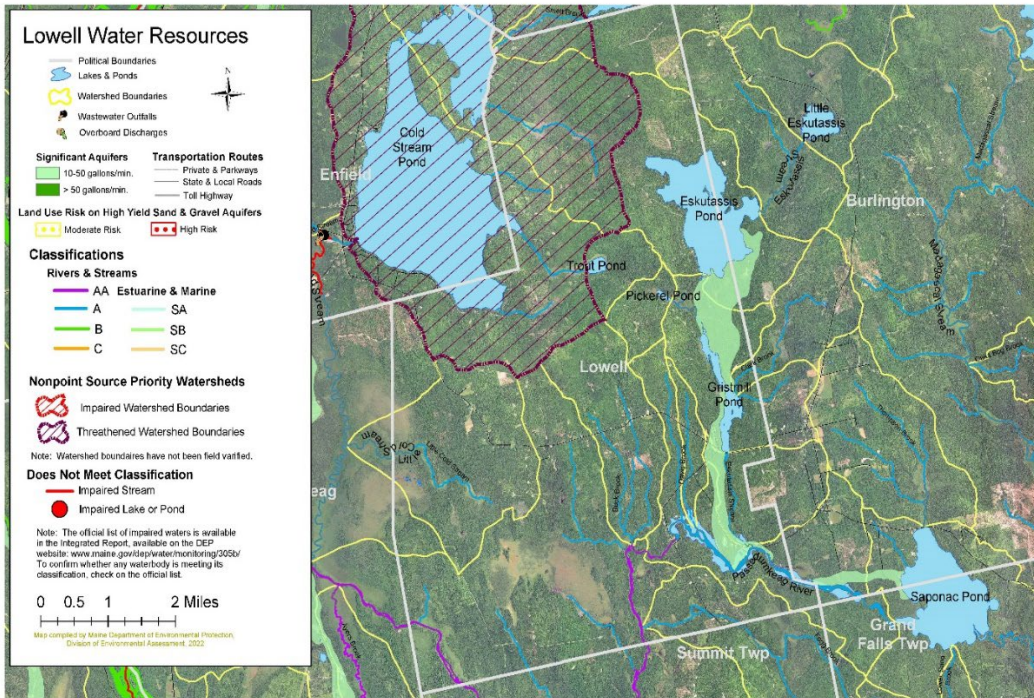
threatened species habituating in the lake. Freshwater bivalves, like this one, are filter feeders and provide an ecological service by improving water quality in the bodies of water they inhabit. Without this the tidewater mucket, the water quality of Cold Stream Pond and many other waterbodies would be at higher risk for pollution.

Ground Water and Aquifers

Lowell’s residents get their water from ground wells tapped into aquifers, as seen in the graphic below. A quick caveat, this map is an incomplete picture of the wells, as not all are reported. The groundwater is plentiful and seemingly robust to drought as evidenced by the absence of emergency ordinances during the last droughts in Maine in 2016, and 2020-2022.



As such, Lowell does not currently have any protection measures in place for their supplies and recharge areas aside from what the state requires. Looking to the future, droughts may become more prevalent throughout Maine and last longer. To mitigate the possibility of droughts in the future, it is important to routinely and thoroughly monitor the state of groundwater and aquifers.



Pollution

Because Lowell has quite a few sources of water, it’s important to keep track of any and all potential pollution. Disposing of waste properly, maintaining and upgrading septic tanks and wastewater treatment facilities, and reducing sediment runoff are a few of many ways to mitigate pollution in Lowell. Because Lowell does not have a public works department, public sewer, or a wastewater treatment facility, it relies on State and private contractors to manage these aspects of the town.

Point Source

Point source pollution comes from specific, identifiable sources, such as industrial facilities or wastewater treatment plants discharging contaminants directly into water bodies. Point-source pollution might arise from factories, sewage treatment plants, or other industrial activities that release pollutants into nearby waterways, leading to localized pollution and possible adverse effects on aquatic ecosystems. There are currently know areas for potential point-source pollution.

Nonpoint Source

Nonpoint source pollution is more diffuse and arises from multiple sources, making it challenging to pinpoint a specific origin. In Lowell, this could include runoff from forested or agricultural



lands, or construction sites, carrying pollutants like fertilizers, pesticides, oils, and debris into rivers and streams during rainfall events.

In December 2020, Maine DEP issued updated Nonpoint Source Priority Watersheds Lists identifying 71 impaired streams, 21 impaired lakes, and 36 impaired marine waters in the state, as well as 77 threatened streams, 170 threatened lakes, and 2 threatened marine waters. The term ‘threatened’ in these lists refers to unimpaired waters that are subject to potential impacts from nonpoint source pollution. In Lowell, there were no impaired streams or lakes on the 2020 lists.

Lowell is aware of what causes non-point-source pollution. In 2003, a well became contaminated by salt. The pollution was mitigated, and since then, Lowell is taking all necessary steps to mitigate any potential nonpoint source pollution. All buildings reportedly have up-to-date septic systems, sanding of roads is done to state standards, and shoreland zoning is managed well by the town code officer. The transfer station for the town is located in Burlington, and residents stated that when refuse is burned, it’s done to all DEP standards. The only real potential for nonpoint source pollution in the community may arise from excessive flooding in an area to be developed off of Fogg Brook road, and impacts related to shoreland development off of waterbodies like Cold Stream Pond. Certain conditions after heavy rains would have to manifest for this to be possible though. The town is working on strategies for future management of these areas. Shoreland development has powerful impacts on the function of habitats surrounding lakeshores, as the shallow water habitat serves as a very important and diverse ecosystem for organisms and microorganisms⁵.

Qualities of lake and pond waterbodies of Lowell are described below, and give a window to pollution that already exists in these important water bodies. Bringing attention to these factors allow decision makers to act on certain protections and regulations surrounding water bodies like these.

⁵ https://rockefeller.dartmouth.edu/sites/rockefeller.prod/files/prs_brief_1314-12.pdf Accessed February 28th, 2024



Phosphorus Levels and Other Qualities in Lowell Water Bodies

Water Body	Water shed Size (sq. mi.)	Annual Flush Rate (flushes per yr)	Avg. Phosphorus Level	2018 Phosphorus Level (ug/L)	Avg. Water Clarity (m)	2018 Water Clarity (m)	2018 Number of Tests
<i>Cold Stream Pond</i>	21	1.75	5.66 ppm	6	10.5	8	2
<i>Escutarsis Pond</i>	9.4	1.04	8 ug/L	n/a	9	n/a	n/a

Lowell is committed to protecting its water resources from pollution and improving water quality where needed.

Protection

There are no protection measures of water resources outside of the standards set by the state under DEP guidelines. As Lowell abuts part of Cold Stream Pond and the Passadumkeag River, it’s important that the community continuously aid in monitoring because of the significance of the ecosystem services these waterbodies provide. Lowell will continue to protect its water resources as needed. While more growth is encouraged in Lowell, the town recognizes the need for balance to protect these vital resources.

The area around the Passadumkeag River, in particular, is of increased importance because it’s considered the one of the most important rivers in Maine for freshwater mussel diversity, including all three species of state-Threatened mussels, as well as providing habitat for the state-Threatened Tomah Mayfly (*Siphonisca aerodromia*).

of recent efforts by a variety of agencies including Natural Resource Conservation Service (NRCS), The Nature Conservancy (TNC), Maine Department of Marine Resources (DMR), the Atlantic Salmon Federation (ASF), and Maine Audubon to improve and increase the amount of fish passages through barriers. A barrier to fish crossing is anything that prevents or reduces the ability of aquatic species to move where needed to survive and complete their life cycle. This includes physical barriers, such as dams, culverts, and levees, and environmental barriers such as excess sediment, poor water quality, and temperature or flow variations. In Lowell, these projects are centered around Escutarsis dam, gristmill pond dam, and the tannery hydro dam.

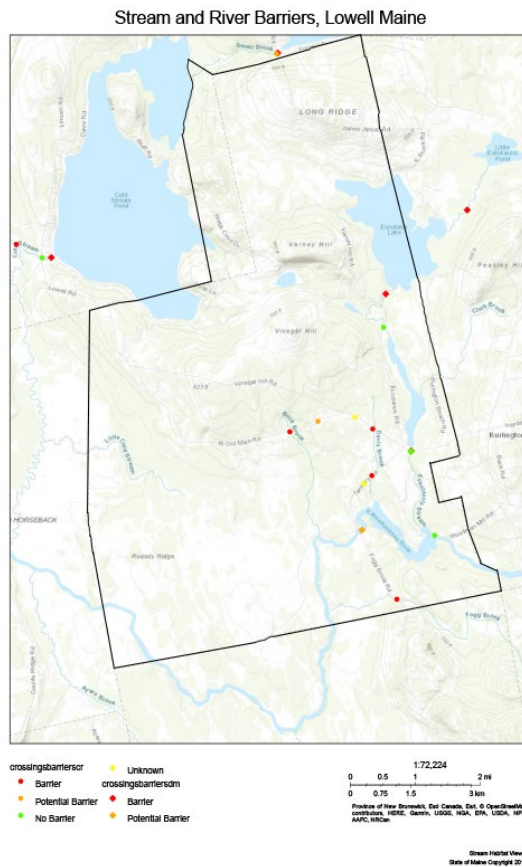


The goal is to improve fish passages generally, but also for alosines (shads). These actions were due to start in 2022, and will continue through 2024 according to the National Oceanic and Atmospheric Administration (NOAA).

Barrier Threats in Lowell

Watershed	Threat	Activity	Recovery Action	Location
Passadumkeag	barrier	Improve passage at the Eskutassis' outlet dam and grist mill dam	Improve fish passage for alosines	Lowell/ Burlington
Passadumkeag	Partial barrier	Lowell Tannery hydro dam relicensing	Improve fish passage	Enfield/ Lowell

There are several other barriers present around the town that pose risks to local native and migratory organisms. Lowell is committed to working with Maine Department of Inland Fisheries and Wildlife (MDIFW) to identify specific strategies to protect and improve water quality along its waterbodies.





Shared Resources

Most of Cold Stream Pond lies within Enfield and is managed by Enfield. The shoreline within Lowell is managed separately by their code officer. Collaboration to protect and manage cold Stream Pond between the two communities allows for the pooling of resources and management styles.

Another communal institution focused on water resources that provides for both Enfield and Lowell is the Enfield Fish Hatchery. Although it's based out of Enfield, the hatchery stocks salmon and brook trout in Lowell's waters as well. Collaboration between the two towns is necessary for successful brood stocking of ponds, lakes, and streams. Further coordination in the future is likely.

Passadumkeag River runs through Passadumkeag, Lowell, Summit TWP, and Burlington. This river contains multiple threatened species and one species of concern. The species of concern is the yellow rail (*Coturnicops noveboracensis*). Of the threatened, including brook floaters (*Alasmidonta varicosa*), tidewater mucket (*Leptodea ochracea*), yellow lampmussel (*Lampsilis cariosa*), and the tomah mayfly, two species are known to habitate within Lowell. Although it's important to recognize the unique characteristics of each species, for the purposes of this comprehensive plan, the biographies and natural histories of these organisms can be found on the MDIFW website.⁶

The issue with protecting wildlife is that most organisms don't recognize municipal borders. The protection and conservation of species that have habitat along Passadumkeag River will necessitate regional cooperation. That said, there are already state-wide efforts for these species' protection, but further effort from the surrounding municipalities would make any regulations surrounding their protection more effective.

Escutarsis Pond is shared by Lowell and Burlington. The two communities are already familiar with sharing resources and always willing to further the collaborative connection that most Mainers share. The only protection efforts that may be needed around the lake is to prevent potential erosion in the future from acid rain or flooding events. No invasive species have been recorded in the lake and no species of concern are recorded either at the time of writing this comprehensive plan.

Community Needs

Lowell does not have any needs for its water resources other than continued monitoring. The town continues to operate under best management practices for the area, making it known that the water resources are a point of pride, and using the pristineness as an opportunity for foster

⁶ [Listed Species: Endangered & Threatened Species: Wildlife: Fish & Wildlife: Maine Dept of Inland Fisheries and Wildlife](#) Accessed February 28, 2024



community education and engagement in continued sustainable water practices. Strong consideration must be given to climate change and potential impacts including flooding, changes in precipitation, and long-term impacts on water quality in local lakes, ponds, and the Passadumkeag River. There are several climate resilience resources available to the town through the [Maine Climate Change Adaptation Toolkit](#), an interagency initiative led by the Maine Department of Environmental Protection. The community should refer to these resources when considering preventative measures against climate change impacts. In addition to the Maine Climate Change Adaptation Toolkit, the Town may find the [Community Resilience Workbook](#) useful for planning.

Strategies

As per the requirements set by the state, Lowell plans to adopt or amend local land use ordinances as applicable to incorporate stormwater runoff performance standards consistent with:

- a. Maine Stormwater Management Law and Maine Stormwater regulations (Title 38 M.R.S.A. §420-D and 06-096 CMR 500 and 502).
- b. Maine Department of Environmental Protection's allocations for allowable levels of phosphorus in lake/pond watersheds.
- c. Maine Pollution Discharge Elimination System Stormwater Program

Also, Lowell will consider amending local land use ordinances, as applicable, to incorporate low impact development standards, develop a mitigation plan that will promote continued development or redevelopment without further stream degradation, maintain, enact or amend public wellhead and aquifer recharge area protection mechanisms, as necessary, and provide local contact information at the municipal office for water quality best management practices from resources such as the Natural Resource Conservation Service, University of Maine Cooperative Extension, Soil and Water Conservation District, Maine Forest Service, and/or Small Woodlot Association of Maine to encourage landowners to protect water quality. Doing this would also help to adopt water quality protection practices and standards for construction and maintenance of public and private roads and public properties and require their implementation by contractors, owners, and community officials and employees. Furthermore, Lowell plans to expand educational materials at appropriate locations regarding aquatic invasive species.



NATURAL RESOURCES

State Goal

To protect the State's other critical natural resources, including without limitation, wetlands, wildlife and fisheries habitat, sand dunes, shorelands, scenic vistas, and unique natural areas.

Town Goal(s)

Within 3 years of the publication of this comprehensive plan, the Board of Selectmen and the Planning Board shall establish and maintain relationships with all germane county and state authorities, in order to collaborate on efforts to achieve Lowell's highest objective regarding natural resources; to preserve, protect, and defend the idyllic environments of the Passadumkeag River and Gristmill Pond flowages within the boundaries of Lowell.

Within 5 years of the publication of this comprehensive plan, the Planning Board and Board of Selectmen shall establish a relationship with Maine Department of Inland Fisheries and Wildlife (MDIFW), with the end objective of developing a campaign to promote the expansion of responsible fishing within Lowell's waterways.

Ecological Interaction and Landscape

Lowell lies within the Eastern Maine Brunswick plains ecoregion. Otherwise categorized as region 82c. Region 82c is generally low-relief landscape, with some hills occurring. Elevations are mostly 200 to 600 feet with many peaks over 1000 feet. A mix of bedrock geology is found here, including low-grade metamorphosed pelites and sandstones, as well as intrusive granitic rocks and some volcanics. There are many long, north-south trending eskers and kames. Organic and finer-textured soils occur in depressions and on broad flat lowlands. The region has numerous lakes, and the largest concentration of peatlands in Maine. The lakes are often shallow, and mostly low in nutrients and alkalinity. Some areas of calcareous sediments with generally atypical alkaline wetlands also occur in the region. The climate is milder than in ecoregions to the north and northwest, and is transitional to the coastal Ecoregion 82g. Spruce-fir forest is dominant, with northern hardwoods on drier sites and hills. Forestry activities are a dominant land use. A few blueberry barrens occur in the south near the boundary with Ecoregion 82g. The following figure can be found in ecoregions of New England with a focus on the relevant part of Maine. More on Maine's ecoregions can be found on the Environmental Protection Agency's website⁷.

⁷ http://ecologicalregions.info/data/vt/new_eng_front.pdf. Accessed February 28, 2024



Looking at Lowell more specifically, their natural resources play a vital role in sustaining the town's ecological balance and economic well-being. The diverse array of forests, rivers, and wildlife habitats not only support the local ecosystem but also offer recreational opportunities, and contribute to the region's overall aesthetic appeal. Effective management of these resources ensures the preservation of biodiversity, maintains clean air and water, and fosters a resilient environment capable of withstanding environmental challenges. Lowell will bolster its economic vitality, attract visitors, and enhance the quality of life for its residents, while also safeguarding the natural legacy for future generations by responsibly utilizing and conserving these resources. Below is a map of scenic points which enhance the Town of Lowell for its residents.

Scenic Points of Lowell, Maine





Soils

Lowell has various soil types within its boundaries, with about 70 types recorded by the Natural Resources Conservation Service’s soil survey.⁸ Below are 10 most representative types throughout Lowell.

Major Soil Types of Lowell

Symbol	Name	Symbol	Name
BoA	Biddeford mucky peat	Pa	Peat and Muck
CaE	Canaan extremely rocky sandy loam	Pf	Peat, moderately fibrous
HvB	Howland loam	PrC	Plaisted loam
HvC	Howland silt loam	RaB	Red Hook and Atherton silt loam
MrB	Monarda-Burnham complex	RkD	Rockland, canaan material

When looking at any natural resource, soil is important to the support of every part of a given ecosystem. In Lowell, the soil structure is made up of mostly Monarda-Burnham complex, which is typical of a stony, forested area. With the exception of Howland Loam, and Plaisted loam, most of these soils are also not well-draining, meaning that there is greater potential for flooding if significant rains occur.

Critical Natural Resources

As defined in the State’s Comprehensive Plan Review Criteria Rule, “critical natural resources” are natural resources which under federal and/or state law warrant protection from the negative impacts of development. There are abundant critical natural resources that exist within Lowell. These include Significant Wildlife Habitats like inland waterfowl and wading bird habitats, deer wintering areas, an eccentric bog ecosystem, etc. The protection of each of these critical natural resources are recognized and considered when development planning occurs in Lowell. As Maine’s climate starts to fluctuate more due to human intervention, the state is generally experiencing more droughts each year, posing direct threats to our water resources which cascade throughout Maine’s ecosystems. Below are outlined critical natural resources that create habitat for wildlife throughout Lowell and beyond.

³ <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx> Accessed October 25, 2023.



Deer Wintering Areas

These play a crucial role in providing shelter and food resources for deer during the harsh winter months. These habitats often consist of dense coniferous forests, which offer protection from cold winds and snow accumulation. Additionally, they provide access to forage such as woody browse and shrubs that serve as essential winter sustenance for deer. Preserving these habitats is vital for maintaining healthy deer populations, as winter stress can lead to weakened individuals and increased susceptibility to diseases.

Inland Waterfowl and Wading Bird Habitat

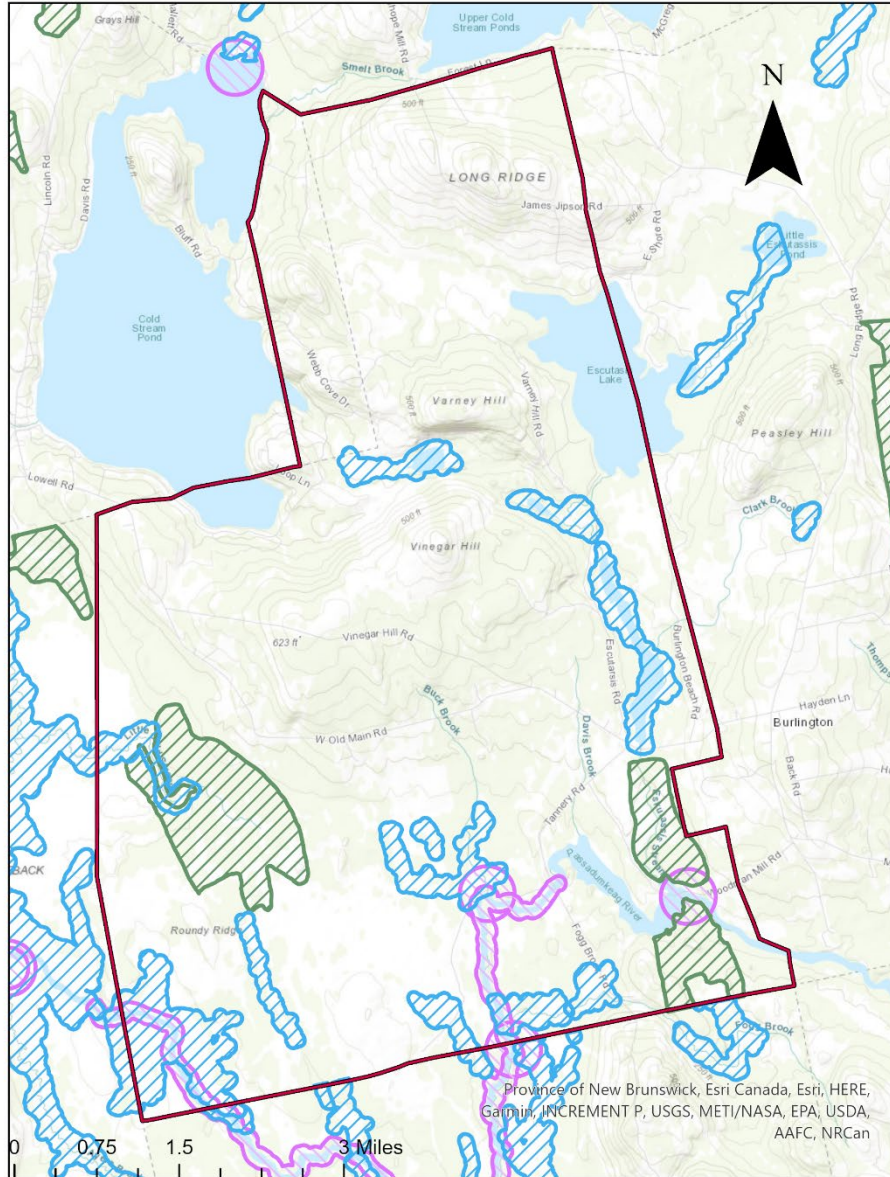
These are significant ecosystems that support a diverse array of avian species. The state's numerous lakes, ponds, and wetlands provide critical breeding grounds and stopover points for waterfowl and other birds like herons, egrets, and ibises during their migratory journeys. These habitats offer abundant food resources, nesting sites, and protection for bird spp. Birds often rely on the rich abundance of aquatic life found in these habitats, including fish, amphibians, and invertebrates. Maintaining and preserving these habitats is essential for the conservation of birds, contributing to biodiversity and maintaining ecological balance.

Passadumkeag River

This river is a prominent critical natural resource in Maine, being one of the most important rivers for freshwater mussel diversity in the state. This waterbody is particularly significant due to its role as a habitat for all three afore mentioned state-threatened mussel species, along with another state-threatened species, the tomah mayfly. The Passadumkeag River's clean and well-oxygenated waters create an ideal environment for these mussels, which are integral to the river ecosystem. Sedimentation, often a result of development and logging activities, poses a risk by altering the riverbed, and affecting habitat for the species present. Preserving the health and integrity of the Passadumkeag River is essential not only for the conservation of these threatened mussel species but also for maintaining the overall biodiversity and ecological balance of Maine's freshwater environments. Lowell is committed to striking a balance between economic activities and conservation efforts to mitigate these threats and ensure the long term health of the river by utilizing ongoing monitoring sustainable management practices.



Critical Natural Resources in Lowell, Maine



Legend



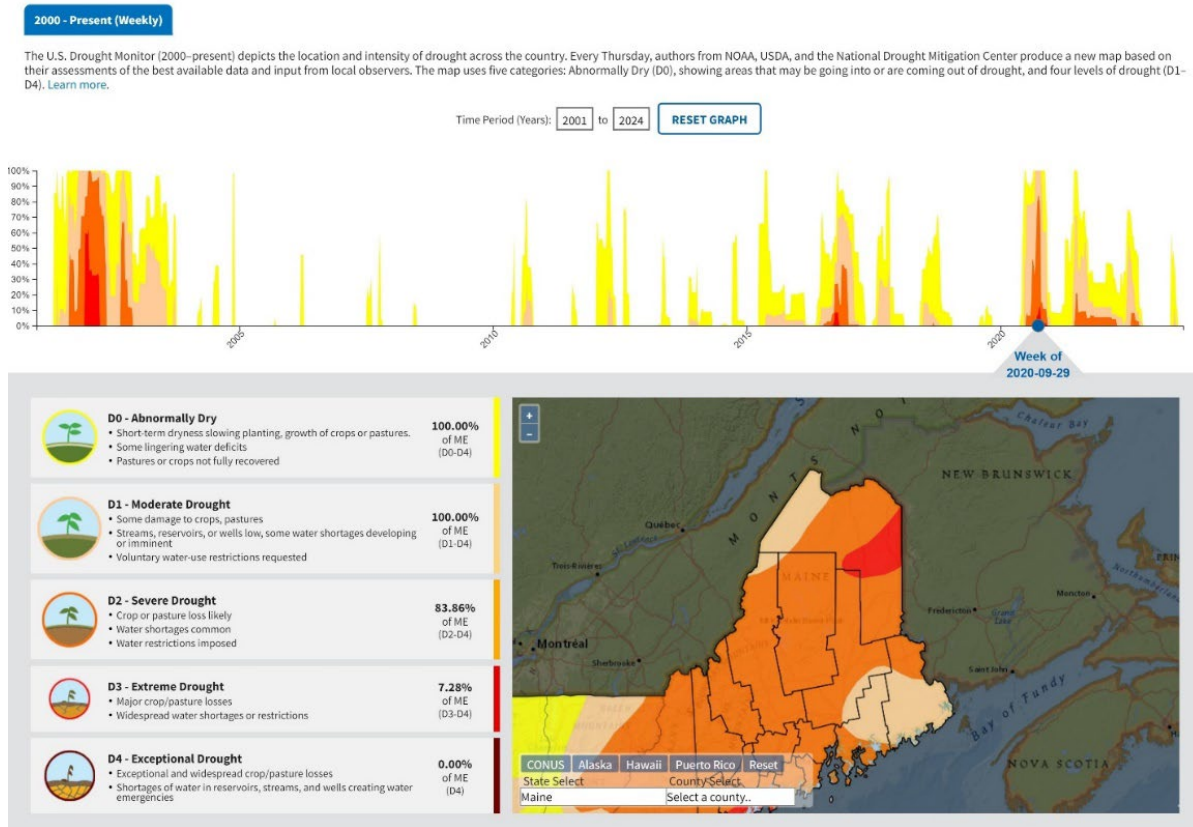
EMDC EASTERN MAINE DEVELOPMENT CORPORATION

- Lowell Boundary
- Inland Waterfowl and Wading Bird Habitat
- Deer Wintering Areas
- Endangered Threatened and Special Concern Wildlife



Threats

As previously stated, Maine has seen increased instances of drought throughout the state since at least 2000. Drought in Lowell would mean losses to plant growth, increases to fire and insect outbreaks, altered rates of carbon, nutrient, and water cycling, and at worst, local species extinctions. In short, it could lead to the loss of area and cleanliness of the local water bodies. The following graphic shows drought conditions from 2000 to the present, with a highlight point on a certain week in 2020 when recent drought conditions were at their worst.



To mitigate the effects a drought may have, Lowell has included strict regulations into their shoreland zoning. When doing any development around any areas where there are prominent water resources, the town follows the shoreland zoning accordingly (100 foot buffers on all streams, and buffers of 250 feet along streams that are known to support rare mussel species). Local shoreland zone standards are consistent with the state guidelines and are updated to the current state levels.

Acid rain may no longer immediately threaten ecosystems, however, recent fires all over the country and beyond have caused prevailing winds to bring the smoke to our region causing a phenomenon called “dirty rain”. Despite more fires in Ohio, California, and parts of Canada, Maine has not yet received deposits of harmful chemicals from Dirty rain. If drought conditions



persist throughout the US, causing more fires, the likelihood of dirty rain depositing chemicals into Maine’s soils and waterways becomes more likely. To mitigate this, Lowell can use similar tactics similar to those it already uses prevent runoff or nonpoint source pollution, being cautious of when a dirty rain event may occur, and monitoring the town’s ecosystems for harmful chemicals.

Another newer problem occurring throughout Maine is due our growing understanding of polyfluoroalkyl substances (PFAS). 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. As of now, our understanding of PFAS is that exposure may cause a number of different health risks:

Potential Health Impacts from PFAS
Decreases in fertility or increases in high blood pressure in pregnant women
Reduced ability of the body’s immune system to fight infections including reduced vaccine response
Child development effects including low birth weight, accelerated puberty, bone variations, or behavioral changes
Increased risk of some cancers including prostate, kidney, and testicular cancers
Interference with the body’s natural hormones
Increased cholesterol levels and/or risk of obesity

According to Maine Department of Environmental Protection (MDEP), technology for the treatment, concentration, and destruction of PFAS is still in its early stages, and at this time there is no universal, cost-effective way to remove PFAS from all media. Furthermore, technologies currently available to manage PFAS vary based upon the type of media. For example, removing PFAS in water requires different considerations and processes than removing PFAS from soil, sludges, leachate, vegetables, milk, beef, or other contaminated media. This is because each media type has unique characteristics which may pose challenges with existing technology. Both the Federal Government, the State of Maine, multiple academic institutions, and private industry are researching new technologies and methods for treating, concentrating, and destroying PFAS. It is anticipated that options will be evolving rapidly over the next few years. To mitigate any potential presence of PFAS in Lowell, residents can continue to keep its standards for drinking water via private wells updated. Monitoring for PFAS is also important. Kleinschmidt has been in contact with Lowell, and will soon be performing water quality and PFAS testing on certain sites.

Invasive species are also a threat to the natural resources in any area. In Lowell, there are two confirmed invasive species. These include a type of honeysuckle (*Lonicera* spp.), which is known to reduce native plant diversity, shading out tree seedlings, providing berries of poor nutritional



value to native birds, and displacing the plants that native insects and other fauna rely on, and purple loosestrife (*Lythrum salicaria*). Purple loosestrife is known to create loss of wildlife diversity by having many seeds and a high germination rate. No further management is needed at this time, but the town is open to coordination with the state to mitigate the presence of any invasive species.



Invasive Purple Loosestrife

Natural Resource Management

As Maine's natural resources are a vital part of our economy and way of life, their sustainable management is at the crux of our continued future. Maine has various regulations which are instituted at state and municipal levels. The most notable law being the Natural Resource protection Act (NRPA), which is the most comprehensive law. NRPA is the umbrella act covering the various hunting and fishing laws limiting the taking of organisms, Maine's endangered species laws which expanded on current federal laws, laws regarding specific organisms, amongst many others. The main purpose of the Natural Resources Protection Act is to regulate activities that affect protected natural resources, including coastal sand dune systems, coastal wetlands, significant wildlife habitat, fragile mountain areas, freshwater wetlands, great ponds and rivers, and streams or brooks.

Lowell utilizes local, regional, and state management laws and regulations as the guideline for their own natural resource management practices. Wherever possible, the town participates in interlocal efforts to manage these natural resources, and makes all information available to residents at the town hall.



Protection

There are several Endangered or Threatened species, and species of concern that have a habitat range in or around Lowell. The species in the table below were those found to occur in Lowell.

Endangered and Threatened Species of Lowell

Common Name	Latin Name	Listing Status	Type	Location
Brook Floater	<i>Alasmidonta varicosa</i>	Threatened	Mussel	Passadumkeag River
Yellow Lampmussel	<i>Lampsilis cariosa</i>	Threatened	Mussel	Passadumkeag River
Tidewater Mucket	<i>Leptodea ochracea</i>	Threatened	Mussel	Passadumkeag River
Fall Fimbry	<i>Fimbristylis autumnalis</i>	Species of Special Concern	Plant	Escutarsis Pond

In addition to species threatened by humans, Lowell has important and rare community types vital to a healthy environment (also listed below).

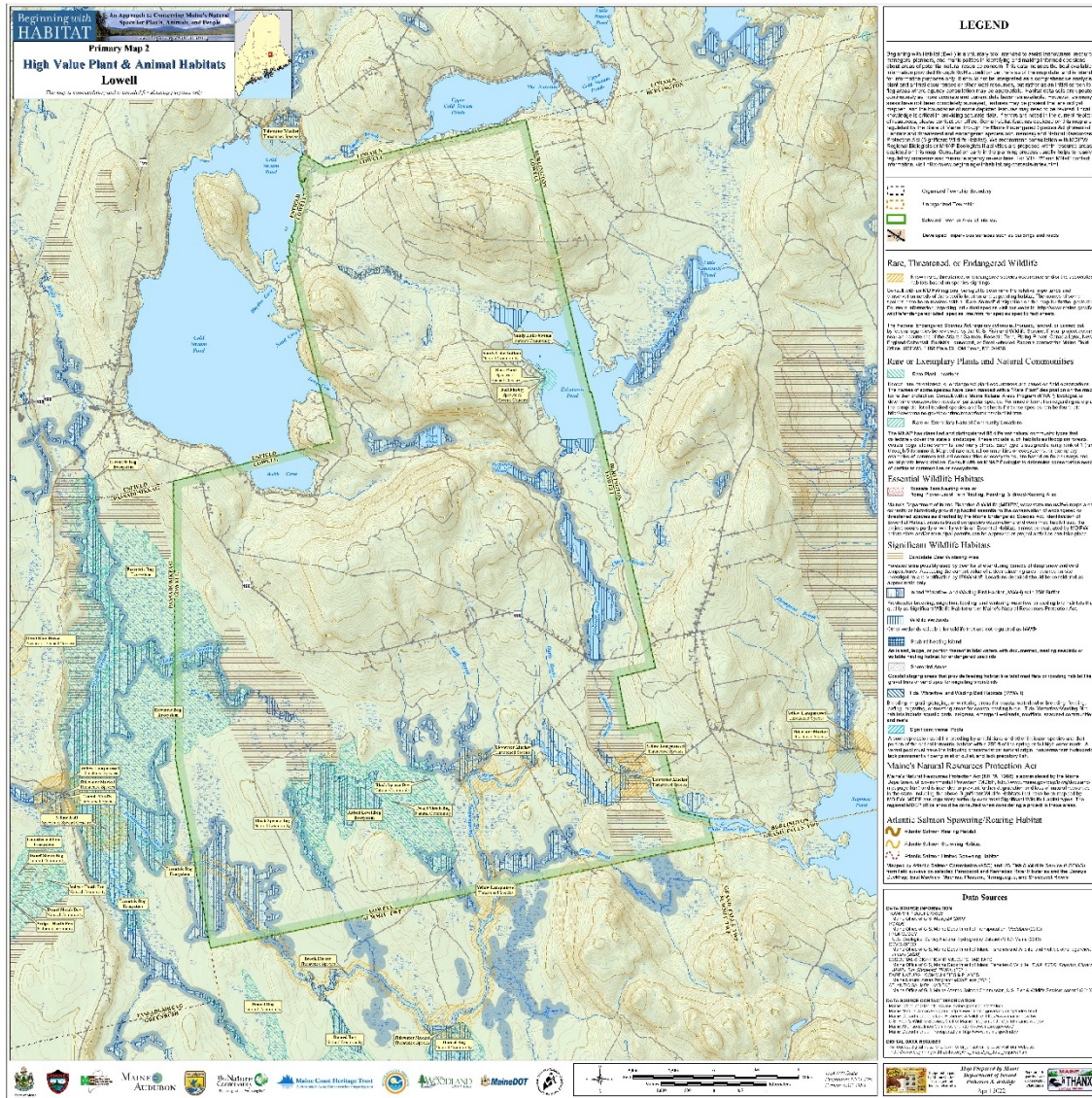
Biological Communities of Lowell

Community Name	Predominant Characteristics	Landmark Spp.	Vulnerability	Approximate Location(s)
Black Spruce Bog	Forested with black spruce and/or larch trees over typical bog vegetation of heath shrubs, graminoids, and peat mosses.	Black spruce or larch trees	Apparently Secure in Maine (S4)	South Western Lowell
Dwarf Shrub Bog	Open peatland vegetation is raised above the regional water table. Leatherleaf is less abundant. Tufted cotton grass is present. Black spruce is common as scattered trees, but tree cover <25%.	sheep laurel, rhodora, and/or Labrador tea.	Secure in Maine (S5)	South Western Lowell



Eccentric Bog Ecosystem	Gently sloping raised bogs on the sides of shallow valleys. The slope of the bog is patterned, with ridges of dwarf shrub bog (sometimes semi-forested) alternating with troughs containing bog pools and/or moss lawns. Ridges and troughs run perpendicular to the direction of water flow.		Vulnerable (S3)	Throughout Lowell
Raised Level Bog Ecosystem	Flat peatlands in basins with mostly closed drainage, receiving water from precipitation and runoff from the immediate surroundings.	Sphagnum Moss	Apparently Secure in Maine (S4)	South Western Lowell
Sandy Lake-bottom	In this shallow water vegetation type, almost all of the plant growth is underwater with only the flowering portions of the plants above water		Secure in Maine (S5)	North Western Lowell (Escutarsis Pond)

In order to properly manage endangered species and those of concern, significant wildlife habitats, and important communities and ecosystems. Lowell pursues partnerships with residents to protect them along with all critical natural resources. Being such a small close-knit town, residents often work together to be responsible stewards, additional educational materials may be provided at the town office (in addition to what is already present). No purchase of land or easements have been pursued for protection purposes yet.



Regional Cooperation

As stated in a previous chapter, wildlife, and organisms in general, do not recognize municipal or man-made boundaries, which makes management on a regional level crucial to sustainability. Lowell works with surrounding communities to manage the river and Cold stream Pond, and matters habitat management that requires input from other adjacent towns as well.

The Future of Natural Resources Through Land Use Planning

Lowell is committed to future sustainable management and protection of its natural resources. The planning board routinely meet to discuss and update the town’s land use plan and ordinances



to provide a clear set of guidelines that takes appropriate measure to protect those resources including but not limited to, modification of the proposed site design, construction timing, and/or extent of excavation. Part of this is to clearly delineate critical resource areas and provide all necessary information to those living in proximity to critical resource areas.

Consideration of Beginning with Habitat Initiative

Part of Lowell is a “beginning with habitat focus area”, known as the Passadumkeag River – Thousand Acre Heath Focus Area. Generally, these are natural areas of statewide ecological significance that contain unusually rich concentrations of at-risk species and habitats. Focus Areas support rare plants, animals, and natural communities; high quality common natural communities; Significant Wildlife Habitats; and their intersections with large blocks of undeveloped habitat. Beginning with Habitat Focus Area boundaries are drawn based on the species and natural communities that occur within them and the supporting landscape conditions that contribute to the long-term viability of the species, habitats, and community types. For the health and beauty of the ecosystem, Lowell is willing to explore conservation actions with Beginning with Habitat, MDIFW and surrounding towns in the region where the Passadumkeag River also runs through.

Strategies

- Through local land use ordinances, require subdivision or non-residential property developers to look for and identify critical natural resources that may be on site and to take appropriate measures to protect those resources, including but not limited to, modification of the proposed site design, construction timing, and/or extent of excavation.
- Pursue public/private partnerships to protect critical and important natural resources such as through purchase of land or easements from willing sellers.



AGRICULTURAL & FOREST RESOURCES

State Goal

To safeguard the State's agricultural and forest resources from development which threatens those resources.

Town Goal(s)

Within one year of publication of this comprehensive plan, the Planning Board shall identify, and establish working relationships and mutually beneficial binding agreements with all logging companies conducting in-progress and planned future operations within the town of Lowell.

Within one year of publication of this comprehensive plan, the Planning Board and the Board of Selectmen shall collaborate to develop and implement clear policy requiring the evaluation of any tax acquired property which may better serve the community through green space preservation or long-term revenue through forest management, versus simple resale.

Within three years of publication of this comprehensive plan, the Planning Board and Code Enforcement Officer shall establish a working relationship with the Maine State Forestry Service with the end objective of educating the residents of Lowell on the benefits of Tree Growth and Shoreland Preservation programs, best practices, rules, and enforceable regulations.

Forest Resource Protection and Agricultural Development

Forestry is a legacy industry in Maine, having been around since before colonization. When settlers arrived in the early 17th century, the abundance of valuable timber in the region was recognized and quickly exploited for shipbuilding, trade, and construction materials. By the 19th century, Maine's timber resources were in high demand, fueling a booming lumber industry. With rapid industrialization, lumber practices became unsustainable, leading to concerns about deforestation and environmental impact. Overtime, conservation efforts sustainable management practices have been implemented to safeguard Maine's forest ecosystems while still supporting a thriving forestry industry that continues to play a vital role in the state's economy and identity. In 2021, Forestry made up 2.6% of Maine's total GRP, which is a greater share than the US (0.8% of total GRP).

Similarly, the agriculture industry is just as important to Maine. As the state developed through the colonial era, farms contributed heavily to the growth of trade and industry. Presently,



farming remains crucial to Maine’s economy despite making up only 5% of its GRP in 2021, by supporting rural livelihoods and contributing to the state’s rich agricultural heritage.

Forest Resources

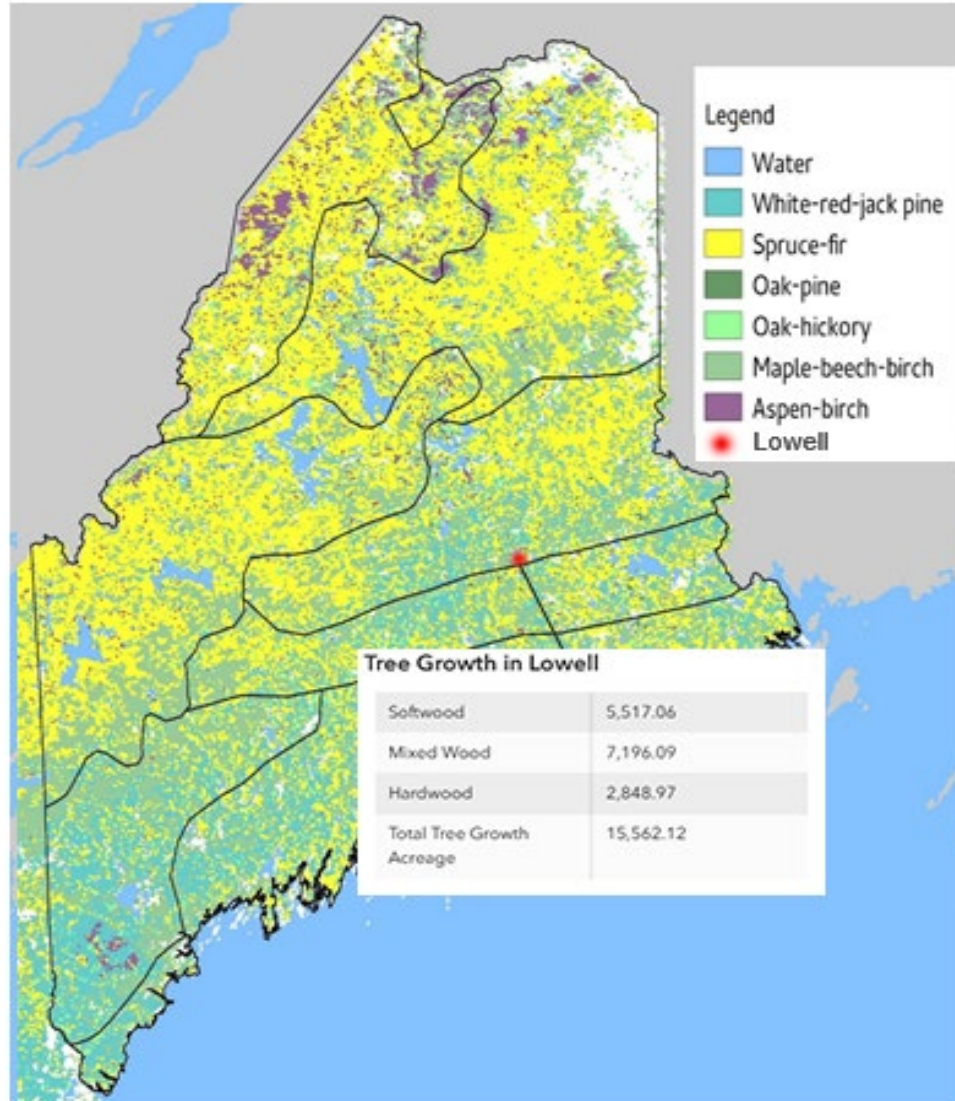
Lowell is mostly forested. The land is well traveled by logging trucks with stands that are being harvested on rotation, and a significant amount of land is actively managed. Although Lowell does not own any of this land, Pleasant River Lumber is located next door in Enfield, while Madden Timberlands lies a little farther south in Passadumkeag which may be contributing to the increased traffic. In town discussions, there was mention of opening a greater dialogue with the truckers so that the community is more involved with its land management.

Forests and Tree Cover

The Tree Growth Tax Law – a law enacted in 1972, requires State landowners to develop a Woodland Management Plan, which allows property owners to take advantage of the state’s current use tax laws. It involves filling out a worksheet that describes land characteristics such as acreage, waterbodies, wildlife, trail information, and tree species. Thanks to this, it’s easier to keep track of these data for reporting purposes. In Lowell, a bulk of the forest is Spruce-fir, with maple, beech and birch cover as well. This is known as a mixed forest.



Maine Tree Cover



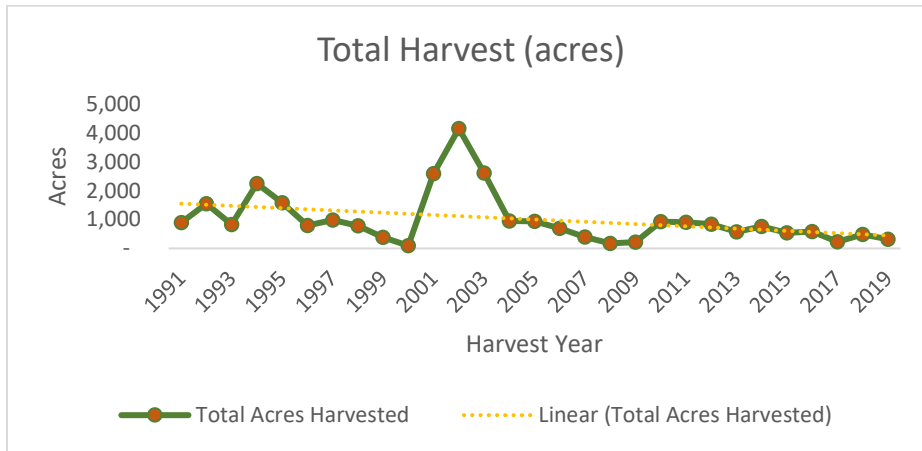
Source: US Forest Service Forest Inventory & Analysis forest type cover.

The above shown forest cover is common for this area of Maine. As of this comprehensive plan, the only plant species listed as a possible threat to Lowell’s forests is Asian honeysuckle (*Lonicera* spp.) according to the Maine Department of Agriculture, Conservation, and Forestry. Non-native honeysuckle is invasive because it competes with native species too successfully, and has the potential to overgrow and crowd out the entire understory of a forest. There are no indicators of endangered species within Lowell’s forests, so there is no action being taken for special protection of Lowell’s forested land.



Timber Harvesting and Forestry

Like much of Maine, Lowell has seen an on average decline for lumber harvest over the last 30 years.



That being known, there are still a few logging trucks travelling through the town. If possible, the town is discussing managing the roads to better accommodate these vehicles. There are no current efforts to manage forestry activity within Lowell. Furthermore, if any, there are minimal impacts of housing and other land use development on local logging operations, so there are no current indications this trend will vary without intervention by the town.

Two larger parcels of land have just been sold for logging and development. Forested land along Fogg Brook may be developed for homes by the current owners. This may cause increased traffic through the area, especially Fogg brook and Tannery roads. To account for this possibility, the town is discussing future road improvements and power extensions to and through the area.

Agricultural Resources

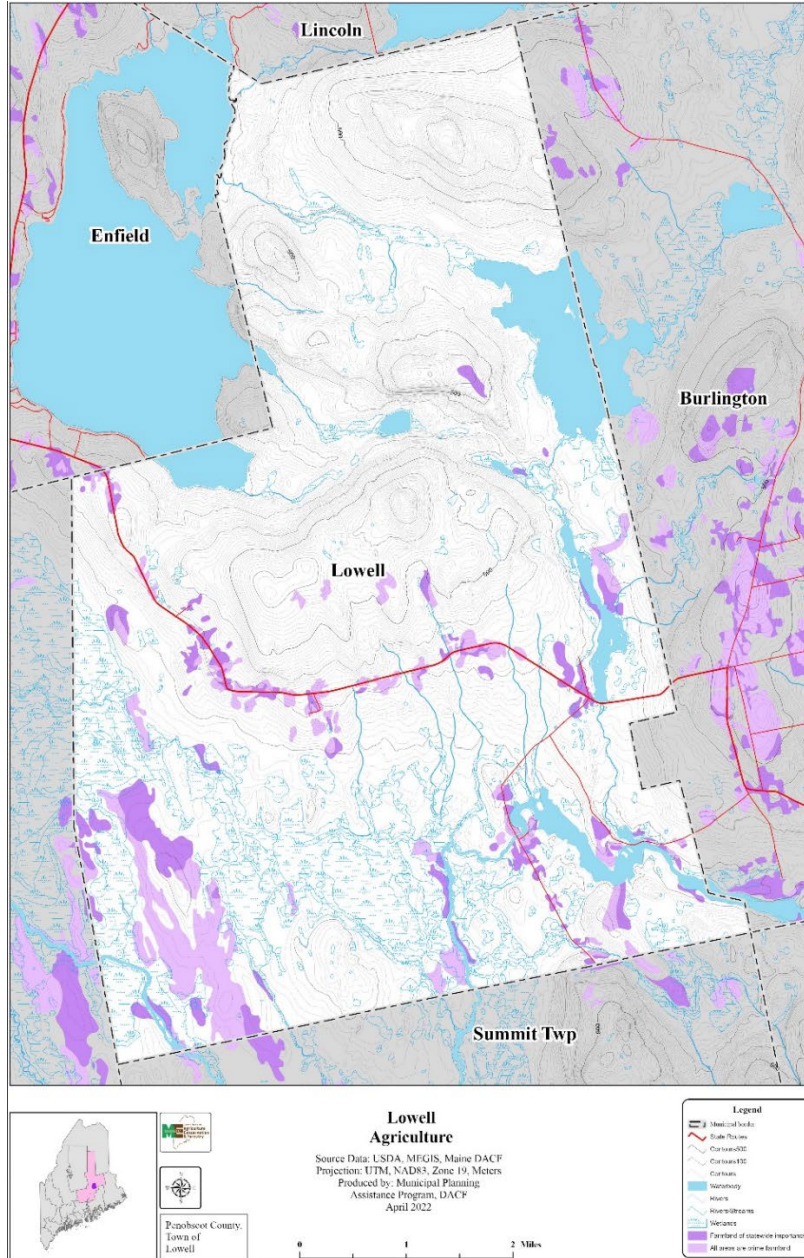
There are no large plots of land dedicated to agriculture in Lowell. Many residents have small gardens that they are able to harvest from, and livestock that they manage. Lowell’s land-use ordinances are written so that residents may sell what they grow or manage by the side of the road on their property. The Local Food Sovereignty Ordinance’s purpose is to give residents increased access to local food, support the ability of residents to produce, sell and consume locally produced foods, and to reduce governmental regulation of local foods to the extent permitted by and pursuant to the Maine Food Sovereignty act. The ordinance became effective in 2022.

Lowell has one farm in town, which is privately owned. Although there is only one farm, Lowell residents are supportive of bringing more agricultural opportunities into the community, and



preserving any and all farmland available for the future.. The food sovereignty ordinance was established partially for that reason.

Because there are no issues with food production or forestry practices in Lowell, the community does not feel the need to act to protect productive farming or forestry lands beyond or outside what state regulations already mandate.





Strategies

- 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.
- Amend land use ordinances to require commercial or subdivision developments in critical rural areas, if applicable, maintain areas with prime farmland soils as open space to the greatest extent practicable.
- Limit non-residential development in critical rural areas (if the town designates critical rural areas) to natural resource-based businesses and services, nature tourism/outdoor recreation businesses, farmers' markets, and home occupations.
- Encourage owners of productive farm and forest land to enroll in the current use taxation programs.
- Permit land use activities that support productive agriculture and forestry operations, such as roadside stands, greenhouses, firewood operations, sawmills, log buying yards, and pick-your-own operations.
- Include agriculture, commercial forestry operations, and land conservation that supports them in local or regional economic development plans.



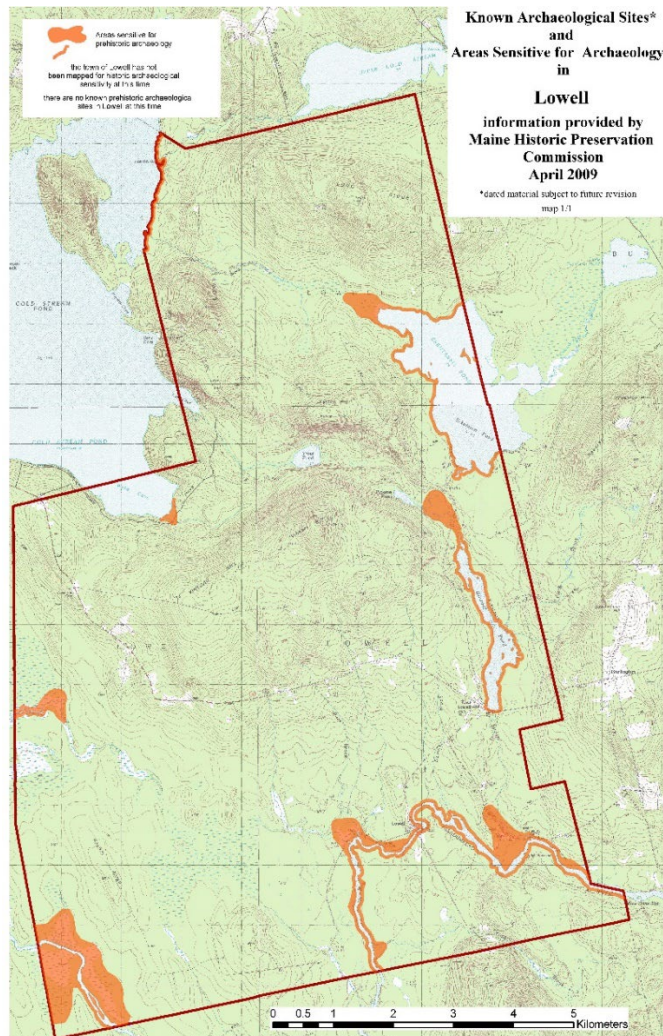
HISTORICAL AND ARCHEOLOGICAL RESOURCES

State Goal

To preserve the State’s historic and archaeological resources.

Town Goal

To protect the integrity of Lowell cemeteries to honor and preserve the memory of our founding members, veterans, and citizens.





History of Lowell

Lowell is situated in Penobscot County and is forty-eight miles north-northeast of Bangor. It is bounded on the north by Lincoln and Enfield, on the east by Burlington, on the south by Township No.1, and on the west by Passadumkeag and Enfield. The first settlement was made in the part of the town known as Long Ridge in 1819, when Alpheus Hayden and Levi Doane from Canaan, Somerset County, settled there. According to tradition they came up the Penobscot to the Passadumkeag River, then up Little Cold Stream to Cold Stream Lake and crossed the lake to the Ridge. The land was probably purchased from the Commonwealth of Massachusetts. For a time, the infant settlement was known as Huntressville in honor of Frederick D. Huntress who owned a mill on a site near the one later owned by R.J. Wakefield. Hannibal Hamlin was Speaker of the State House of Representatives on February 7, 1837, when the town of Huntressville was incorporated. The first written records of the town bear the inscription: Records of the town of Huntressville, April 17, 1837: Alias Owsborough, alias Pages Mill, and alias Lowell. The first town meeting was held at Huntress Mills on Monday April 17, 1837, and the following officers were chosen: Moderator: John Austin, Town clerk: Frederick d. Huntress, Selectmen: Fredrick D. Huntress, Alpheus Hayden, Nathaniel Coffin, Constable David Moore. At this meeting they voted to disperse with Article No 21, since Article No 21 was for the purpose of raising money for the support of the poor and we are led to infer that there were no poor that year.

For a time, the Huntressville/Pages Mill settlement was known as Deanfield in honor of a very popular teacher Miss Mary C. Dean (who later became Mrs. Stephen Kimball) and the Rev. Pindar Field. The two names were combined.

At some point, there was a local tradition that the name of the first male child born in that territory would also become the name of the newly established town. That child's name was reported to be Lowell Hayden. Lowell Hayden's remains are located in one of the cemeteries located on private property.

Opening in 1854, Lowell had a tannery for 40 years, and there was a clothes pin factory and spool bar mill on the Passadumkeag River. There were also several sawmills operating on the Escutarsis stream at one time.

List of location and condition: Pumpkin Hill Dam on the Passadumkeag River is the site of the former tannery and is now owned by KEI power company for producing electric generation. The West End and Tannery cemeteries inter several civil war veterans, as well as veterans from almost all recognized wars afterward. The cemeteries are in reasonably good condition. According to the MHPC's Kirk Mohny and Leith Smith, no properties in Lowell are currently listed in the National Register of Historic Places, and no historic archaeological sites have been documented.



Furthermore, Arthur Spiess stated there are no prehistoric archaeological sites currently known in the town of Lowell, primarily because no archaeological survey has been done. MHPC continued on to say the shoreline of Escutarsis Pond, its outlet, and the banks and valley of the Passadumkeag River need archaeological survey. This is also true for all other aspects of Lowell's potential historical and archeological sites.



Tannery Cemetery in autumn

Patterns of settlement

The paved roads (town owned, not State highways) are in areas where past businesses (tannery and sawmill) existed. Other town roads are generally unpaved and seasonal roads, comprised of legacy trail heads to “camp roads” or legacy logging trails.

Historic Resource Protection

There are no buildings in the town of Lowell that fit into the legal definition of a “historical” building. The one-room schoolhouse (built circa late 1800's) is currently privately owned and is in the process of being rehabilitated and preserved to provide a museum/shop and the former Grange building (circa 1890) is currently vacant and has been on the market for sale for at least 10 years. The only other archaeological sites within Lowell are five cemeteries, two are town maintained and three are on privately owned land. Each hold the remains of town founders, revolutionary, civil war, and other veterans as well as town residents.

Local Site Plans

There are currently no local site plans or subdivision regulation requiring a survey for historical or archaeological resources. Future land use and zoning sections need to address this. Currently, the most recent sexton is working hard to map and attempt to identify unmarked graves. A Perpetual Care Fund for cemetery upkeep and maintenance exists, and a plan for future



stone/marker repairs and enhancements for the preservation of these historical resources is underway. Lowell also does not have any sites that are identified by the Maine Historic Preservation Commission.

Strategies

Because there is much to be done to establish historical and archeological sites in Lowell, the strategies for this plan are simple. Lowell aims to promote public awareness of, and appreciation for Lowell's history and Mark all places of historical significance by working with the town's residents. The town also plans on working with the local historical society to seek out potential areas and artifacts of historical and archaeological significance to be professionally surveyed and documented, and historical and archaeological sites and artifacts should be monitored to ensure their protection and preservation.



RECREATION

This chapter will describe current health and recreational resources, access the current and future adequacy of these resources, and attempt to predict future availability of open spaces and areas for public recreation and access will be threatened by future growth and development.

State Goal

To promote and protect the availability of outdoor recreation opportunities for all Maine citizens, including access to surface waters.

Analyses

The town of Lowell holds a deep appreciation for its natural surroundings and recognizes the importance of providing accessible recreational resources to its residents. The population in Lowell is very low (under 400) and doesn't have any designated funding for purchase or maintenance of public recreational facilities. It does, however, have an abundance of natural outdoor recreational opportunities for those who seek it. Projected growth in the next 10 years is not expected to exceed the 400-person mark. If past activity is an indicator of future changes in age groups, the mix will most likely remain close to the same. Lowell's population will continue to age, with a few families with children moving in from time to time, but those children do not tend to remain in the community after graduating.

The town understands that promoting an active and healthy lifestyle not only benefits individuals but also strengthens the community as a whole. However, Lowell does not have any public recreation facilities. Currently, all open tracts of land are privately owned. There are no tracts of lands under any type of State conservation or reserve status.

"What do you like most about living in Lowell?"	Respondents
Low population density	131
Recreational opportunities	100
Feeling of safety	81
Cost of living	52
Caring community	44
Good place to raise a family	41



Lowell has not explored the idea of purchasing or partnerships with landowners to acquire open spaces or access to waterways. Any plans requiring public funds to be raised or spent would have to be proposed to the community. (See strategies section for more information)

Although Lowell has an abundance of water resources, there are no town owned public accesses to any of them. All access to water resources is at the mercy of private entities. Access is by private invitation or through use of a corporate owned informal boat launch. Access restrictions do not seem to occur, and not posted. However, there are boat launches and public access in neighboring towns, such as Enfield, Lincoln, and Burlington.

Areas that are being used for recreation activities such as hunting, or ATV trails are privately owned and are in Tree Growth\forested areas. Recreational trails in Lowell are all on private property and are only for ATV and snowmobile use. These trails are registered and maintained by local and surrounding community state-sanctioned clubs. Generally, property owned by individuals is restricted with signage against public use with the land companies owning forested lands allowing ATV trails and hunting. No conflicts are noted at present. These trails are not to be used for walking or cross-country skiing. There are no publicly used open spaces and no associated facilities such as parking and toilet facilities.

Currently, there are no private recreational programs within Lowell with the exception of the local snowmobile, ATV club. Fishing is allowed in the bodies of water within the town and hunting is done on private land within state hunting law parameters. A nearby area operates a private disc golf course, and a state-stocked fishing pond in Burlington for children. There are public beaches and boat launches in Lincoln, Enfield, and Burlington. A popular area of recreation, Cold Stream Pond, is located in Enfield and Upper Cold Stream is located in Lincoln. There are public golf courses in Enfield and Lincoln. Slightly north in the Lee, there is a downhill skiing facility. There are quite a few recreation opportunities in the local area that meet the needs of Lowell residents.

Bodies of water in Lowell:

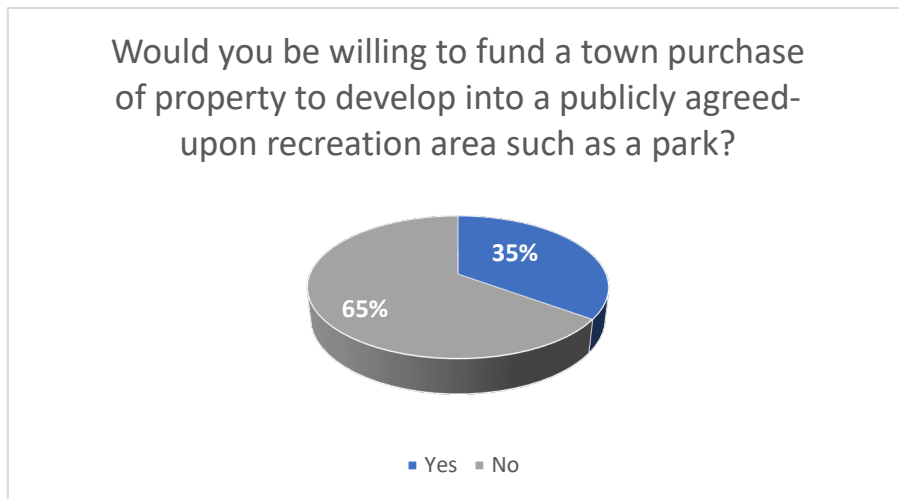
Pickerel Pond
Little Eskutassis Pond
Eskutassis Pond
Cold Stream Pond
Upper Cold Stream
Trout Pond
Passadumkeag River and Stream
Multiple streams and brooks



ATV/Snowmobile Clubs in the area:

- Burlington Back Country Riders Club
- Cold Stream Snow-Riders Club
- Lincoln Snow Hounds Club

Locally, there is an active ATV/snowmobile club headquartered in Burlington. Trails are maintained by club members with other surrounding clubs participating in some areas also. Generally, property owned by individuals is restricted with signage against public use with the land companies owning forested lands allowing ATV trails and hunting.



State Policies

There are no recreational facilities in Lowell, and thus no maintenance or upgrades are scheduled. There is currently public access in other communities that seem to be adequate community use presently. To achieve a public access point within Lowell doesn't seem to be a concern with community members and would be a significant taxpayer expense.

Lowell will continue to seek opportunities to maintain a point of public access to water for boating and fishing by working with property owners and other methods for low or no cost options.

Strategies

Recreational needs in Lowell are low because of the abundance of recreational opportunities in the surrounding areas. However, greater access to various waterways would be a great addition



to both town residents and to anyone visiting the area. Any such plan would need to be of minimal cost and maintenance.

Currently, the network of trails for motorized use is being maintained through the local club and is connected to the regional trail system. Non-motorized use doesn't seem to be a present need as most walkers use logging trails. There are also walking trails in Lincoln and there is an abundance of State and National parks for hiking in the surrounding areas. Baxter State Park is just a 90-minute drive North from town.

As an immediate goal, Lowell plans to seek out conservations organizations and learn more about land trusts in order to pursue opportunities to protect important open space or recreational land.

To predict the future availability of open spaces and areas for public recreation, Lowell will undertake proactive planning and land-use strategies. The town will conduct thorough assessments of existing open spaces, considering their ecological significance, recreational potential, and accessibility. By implementing responsible zoning policies and conservation efforts, Lowell aims to safeguard these invaluable areas from encroachment and preserve them for future generations.



PUBLIC FACILITIES AND SERVICES

State Goal

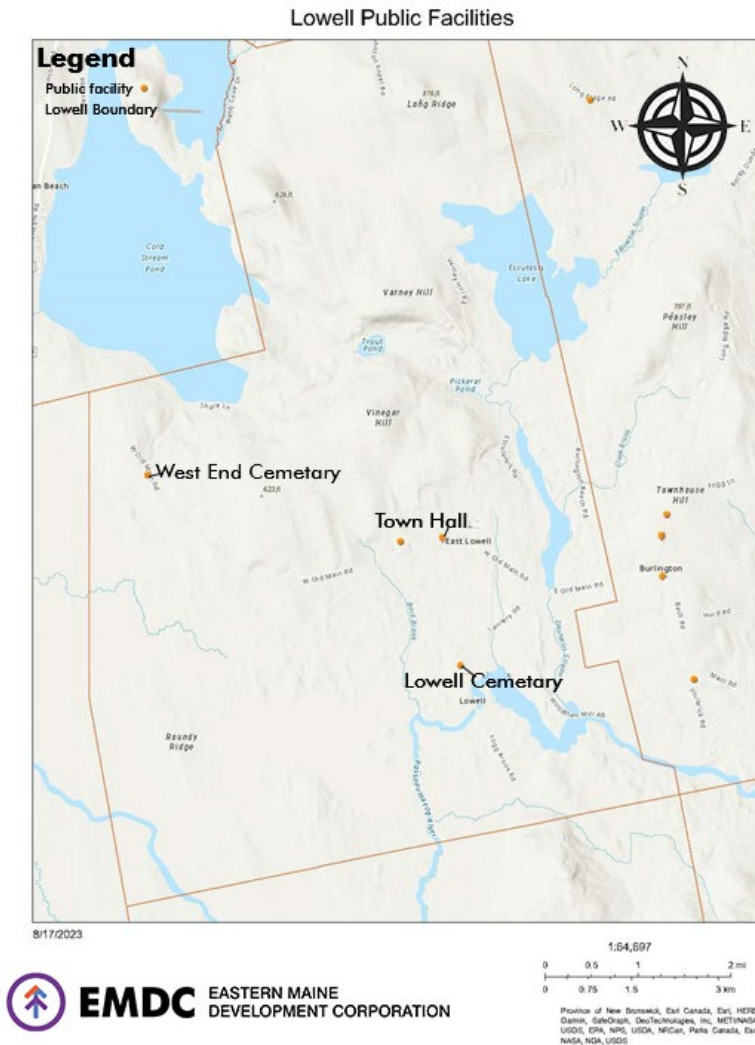
To plan for, finance and develop an efficient system of public facilities and services to accommodate anticipated growth and economic development.

Local Partnerships, Collective Growth

Lowell, being the well forested community that it is, has opportunity for much growth in terms of its public facilities. As such, the community does not have a street tree program as there are trees along virtually every road in Lowell. Lowell's public facilities include resources such as the town hall, 2 Public Cemeteries, a salt shed, a transfer station it shares with Burlington, and a partnership on Fire and EMS services it shares with Howland. As the population of Lowell is not expected to increase to a significant degree, current municipal services are adequate to meet these needs. All these facilities listed above are in good condition, with ongoing maintenance included in budgeted items, with no additional facilities being anticipated to be needed. It is clear that Lowell is fostering growth through municipal partnerships with surrounding towns. This will lead to an all-around stronger region.



Lowell Town Hall



Sewer and Water Systems

Lowell does not currently have a public sewer system. Each residence has an independent septic system or tank. The residence density is too low to create a central system and there are no plans for a system in the Future Land Use Plan. Residents rely on private companies to pump septic waste. It’s projected that residents who need to have septic tanks pumped will experience higher costs in the future due to changes in environmental law A public sewer system is essential for local economic development and supporting residential and commercial growth. Providing increased sewage capacity will expand opportunities for community growth.

Similarly, Lowell does not currently have a public water system. Private wells are the primary source of water. The residence density is too low to create a water district extension policy and there are no plans for a system in Future Land Use Plans.



Lowell's storm water management system consists of a series of ditches and culverts that are currently properly maintained and funded for all town-controlled roadways. The state department of transportation provides all other maintenance for state roads.

Overall, the projected growth in Lowell is not expected to increase to a significant degree. Lack of public water and sewer systems will not impact any future growth in current projections.

Schools

School age children in Lowell are part of the RSU 67, or MSAD 31 Howland school district. If residents are in MSAD 31, They attend school in Enfield for Elementary, move to Hichborn Middle School, and the finally to Penobscot County High School. For RSU 67, students attending Ella P. Burr Elementary, Mattanawcook Junior High, and then Mattanawcook Academy. No school construction is planned for the future. Lowell has a school choice program allowing parents a choice between two school districts or will pay for tuition at a private institution at the same rate as public school. The projected number of students for the foreseeable future is not sufficient to support a public school in Lowell.

Public Safety

Lowell recently switched from funding and operating its own fire and EMS to contracting for these services from Howland fire and EMS. Although these services are currently sufficient, there is a need to examine potential disaster scenarios to determine future needs in that area.

Utilities

The current infrastructure for telecommunications is sufficient to meet the needs of Lowell, but electric power is lacking on many town roads. Further study is needed to determine the need for town involvement in encouraging power companies to electrify this rural area.

Health and Social Services

At this time there are no health or social service facilities in Lowell. Residents make use of services located in nearby Lincoln, Bangor, and Millinocket. Along with the rest of the state, Maine health care and public health services are sorely lacking. This will continue to affect the entire population of Lowell.

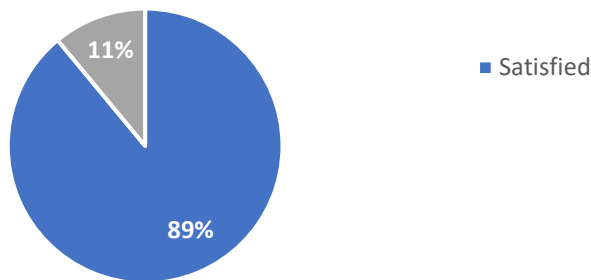
Municipal Staffing

As Lowell's town office is only ten years old, it is sufficient for current and future purposes described by the town. In the event population increases and additional services are needed, the office can expand hours of operation to meet those needs. There is sufficient capacity in the



Tannery Road Cemetery to meet anticipated needs. Funds are set aside for perpetual care and improvements to those cemeteries. Funds for future improvements are included in the ongoing budget and will cover all expected growth. All policies and strategies listed throughout this chapter appear to be in line with state goals. Furthermore, Lowell has reserve accounts for all buildings and anticipated bridge repairs. Public sentiment echoes the discussions with Lowell’s comprehensive planning committee.

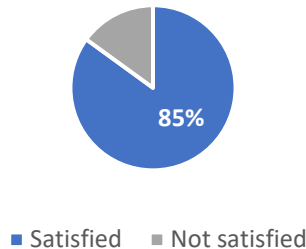
How satisfied are you with the administrative services offered by the town?



Waste Management

The solid waste management system is currently meeting the needs of Lowell which uses private septic to hold and dispose of waste. At this time, recycling options are far too expensive for the Burlington/Lowell Transfer Station to make use of. The only way the town will be able to afford to recycle is if the prices for metal, paper, and plastic increase to the point where the effort will fund itself.

How satisfied are you with the current level of waste management provided by the Burlington/Lowell Transfer (BLT) Station?





CAPITAL INVESTMENT

State Goal

To plan for, finance and develop an efficient system of public facilities and services to accommodate anticipated growth and economic development.

Town Goals

To maintain current, and establish potential new budget reserve accounts for projected and foreseeable major capital expenditures, e.g., the repaving of Tannery Road, the re-roofing of the town's municipal office, the expansion and/or rebuilding of the town's salt-sand shed, etc.

To establish policy requiring the annual evaluation of the town's undesignated budgetary reserves, by the Board of Selectmen and the Budget Committee, for potential investment into financial instruments which produce additional revenues.

To brainstorm, collaborate and earnestly explore all feasible opportunities to partner with regional neighboring towns for the possible consolidation and centralization of commonly provided municipal services.

To establish a community-based working group with the objective of identifying viable and sustainable alternative mechanisms for municipal revenue generation beyond the current standard of simple property taxation.

To reduce Maine's tax burden by staying within LD 1 spending limitations

Financing Future Growth

A significant component of planning for future growth is determining which capital investments are most essential for achieving the community's vision. The next step is to consider sources for how the capital investments will be funded, whether that be grants, or donations. By having a Comprehensive Plan that is found consistent with the Growth Management Act by the State of Maine, the community will be given preferential consideration when applying for state grant programs. In turn, this will assist the community in funding their capital investment projects. All planned and potential future capital investments will be funded via property taxes and grants as they are procured. Reserve accounts have been established also. Although there are no current



plans to borrow to pay for capital investments, the community has a very good credit rating and more than sufficient borrowing capacity to obtain necessary funding. A cooperative capital investment with Burlington resulted in a purchase of a new compactor and burn pad for the jointly owned and operated transfer station.

Town leadership actively monitors and will continue to evaluate potential undeveloped land purchase opportunities as they become available. It is envisioned if a suitable parcel is acquired the town will resource funding, through either locally appropriated funding, or Federal and State grant programs for a centralized community open-air park to promote healthy outdoor exercise and family gatherings. The town has set an initial investment cap of not more than \$250,000 inclusive of the initial land purchase.

Town leadership is currently working through Eastern Maine Development Corporation (EMDC) to explore coordination and funding efforts to increase high-speed internet functions to local unserved and underserved areas. In conjunction with internet expansion, the town is beginning to research costs associated with expansion of power lines to areas not currently serviced, specifically on designated town roads. As an investment of this level will most certainly be several million dollars, leadership accepts this challenge will take many years and will require significant partnership with State authorities and electric service providers.

Resultant to the recent disbanding of the town's local volunteer fire department, the Board of Selectmen are engaging a study for the cost-effective repurposing of the nearly 3000 square feet of space at the municipal building. Preliminary options for the space include, amongst many notions; a municipal public works function, a daycare center, an internet café, a community gymnasium or any viable function that may serve to benefit the public and potentially generate additional revenue for the town. Initial estimates for conversion of the former fire department space to its new purpose range from \$50,000-\$250,000.

The Board of Selectmen, the town Road Commissioner and partners from neighboring Burlington are currently working through the Community Resiliency Program (CRP) to seek grant funding for long overdue capital investments into town-maintained roads. Above and beyond the annual maintenance the town already performs on these roads, it has become evident that major expenditures must be implemented, in a phased approach over the next 5-10 fiscal cycles. Initial estimates for substantial road substructure repairs and/or resurfacing range from \$2-3 million dollars. As the local property tax base cannot alone afford this level of funding, the Board understands it will require assistance from both Penobscot County and the State Department of Transportation.

The source of revenue for all expenditures in Lowell are taxes as well as state and federal funding. Lowell does not have any additional sources of funding. Lowell continues to reach out to other communities for opportunities to share costs, but there are very few instances where sharing



would provide any price breaks or relief. The one bright spot has been the transfer station. Below is a 5-year snapshot of Lowell’s revenue.

		2019	2020	2021	2022	2023
Revenues						
	Property Tax	\$113,468.00	\$139,205.00	\$113,158.00	\$144,441.00	\$92,292.00
	Excise Tax	\$66,766.00	\$81,082.00	\$74,111.00	\$86,761.00	\$92,251.00
	Licenses & Permits	\$2,199.00	\$2,336.00	\$2,751.00	\$2,868.00	\$2,273.00
	Intergovernment	\$81,568.00	\$95,438.00	\$99,689.00	\$95,335.00	\$124,941.00
	Other	\$5,080.00	\$8,559.00	\$5,553.00	\$3,238.00	\$6,781.00
Total Revenues		\$269,081.00	\$326,620.00	\$295,262.00	\$332,643.00	\$318,538.00
Expenditures						
	General Gov't	\$112,539.00	\$109,103.00	\$118,637.00	\$145,870.00	\$160,129.00
	Public Works/ Safety	\$125,647.00	\$141,720.00	\$143,779.00	\$171,800.00	\$167,450.00
	Fire and Ambulance	\$93,996.00	\$49,326.06	\$29,642.00	\$24,050.00	\$47,334.00
	Sanitation	\$36,710.00	\$41,562.00	\$34,913.00	\$50,000.00	\$50,000.00
	County Tax	\$67,506.00	\$71,403.00	\$73,099.00	\$81,955.00	\$89,400.00
	Buildings/Infrastructure	\$105,041.00	\$70,495.00	\$40,893.00	\$40,893.00	\$40,894.00
	Education	\$455,708.00	\$429,499.00	\$516,057.00	\$511,436.00	\$613,081.00
Total Expenditures		\$997,147.00	\$913,108.06	\$957,020.00	\$1,026,004.00	\$1,168,288.00

Source: Town of Lowell

Between FY 2019 and FY 2023, Municipal revenues had a relative increase, with the exception of 2020, and 2023. In this 5-year window, revenues were highest in 2022. Overall, municipal revenues increased by nearly 18.38% between FY 2019 and FY 2023. Across the five-year window, on an annual basis, Lowell expended the most on education. Lowell spent an approximate average of 50% of their total expenditures on education. Between FY 2019 and FY 2023, municipal expenditures increased by approximately 17.2% overall. The second closest to education, public works/ public safety in FY 2021 and FY 2022 expended approximately 16.7% and 14.3% of total expenditures, respectively.

Debts

Long-Term Debt

The Town currently has a Primary mortgage of \$360,826.61, until 2037 on its municipal building. There is also a secondary mortgage of \$70,836.66 until year 2037.

Short-term Debts

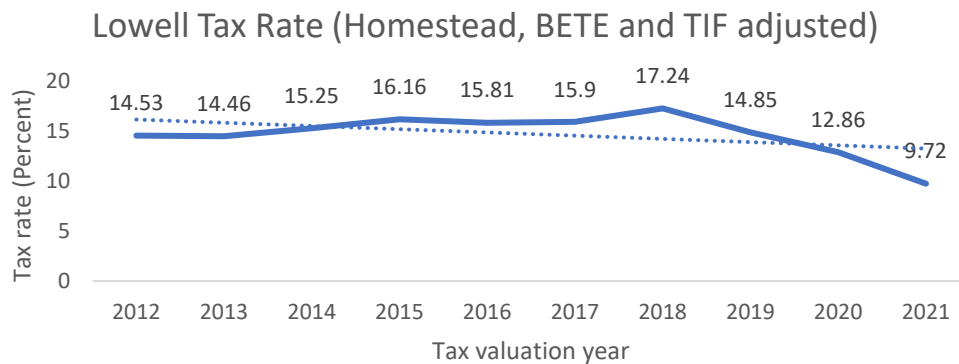
Lowell currently has no short-term debts.

All debts are within the statutory and Maine Bond Bank recommended limits.



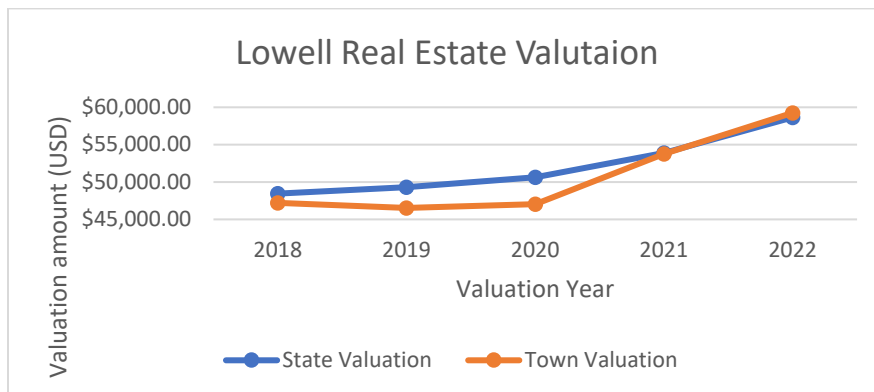
Maine State Valuation

The State’s Valuation is informed by field work, meetings with local assessors, and a sales ratio study which measures the assessed value of residential and certain commercial properties relative to their actual selling price. It is used to determine things such as the levy of county taxes and state funds for education and revenue sharing, as well as to establish bond debt limits. Since the State Valuation process takes about 18 months to complete, this valuation lags behind actual market values and municipal assessments by nearly two years by the time it is final and certified. Lowell’s 2021 State Valuation is 9.72%. Lowell’s State Valuation decreased approximately 4.81% between 2012 and 2021. There have been some fluctuations, but more consistently, the tax rate has gone down in Lowell.



Local Valuation

Below is a chart of Lowell’s State and Town Total Valuation for the last 5 years (2018-2022).



The form of valuation that occurs at the municipal level and is used to determine local taxes. The Town’s valuation is based on assessed values for real estate and personal property as determined



by the Town Assessor. Operating grants and contributions are often sourced from county, state, or federal programs and include funds for education, school lunches, and retirement benefits.

Property taxes are assessed against land, buildings, and other assets and are a common self-sourced form of income. As such, reductions to county, state, or federal funding for these municipal programs often compel municipalities to rely on local property tax as a stable source of revenue. In FY 2019, Lowell total property tax revenue was \$689,496.27. In FY 2023, the revenue was \$469,828.36. In the last 5 years, the property tax revenue has gone down \$219,667.91.

Capital Investment Plan

Because Lowell is not expected to experience significant population growth, there are no additional services or building efforts planned for the next ten years except the regular maintenance on buildings, roads, and bridges. Greater consideration is being made for the town goals listed above. Reserve accounts have been established for this purpose and future bridge replacement will be funded by a combination of reserve money, grants, and loans. These are established on an as needed basis, and are largely identified based in past investments and tracking what is happening around the state. Estimated costs for the planning period are \$10,000,000 based on tracking these past trends and perceived needs. Funding priorities will largely go toward the town hall first and foremost, then town roads (grading, sand and salt), followed by any and all necessary infrastructural improvements. As stated previously, funding sources will be from property taxes and grants as they are procured.

For financial information on revenues, expenditures and mil rates, see the March 21 2023 Town of Lowell Annual Report.

The future of capital Investment Funding

Capital investments refer to the expenditure of municipal funds of \$20,000 or more to purchase assets of land, machinery, equipment, or buildings. There are a variety of capital investments that the Town of Lowell has identified as being priority projects in their Capital Investment Plan. Projects related to broadband expansion, housing developments, and sustainable growth are among them. These will be funded in numerous ways, including bank loans, municipal low interest loans, a Forestry Reserve Account, donations, volunteer labor, tax funding, private funding, and state and municipal grants.

Over the next 10 years, Lowell is expecting approximately \$250,000 in capital investments. This number is based on what has been received in the past and looking at how inflation trends are shaping capital investment around the state. If the community approves the projects listed in the plan, the diverse funding sources (e.g. state grants, municipal grants, donations, etc.) enhance borrowing capacity and increase the likelihood of project completion.



EXISTING LAND USE

Understanding Lowell’s existing land use and zoning provides a basis for understanding current conditions and determining if future changes need to be made to achieve town goals. Land use regulations have implications for all of the other elements of Lowell’s Comprehensive Plan. As a primary tool to maintain and focus uses, zoning and land use regulations are critical to efforts to be proactive about directing change and protecting the features that residents wish to preserve.

Current Land Use





Lowell does not have any land use maps. As such, the above base map is used as a basis to plan out what future land use may look like for the town. Currently, there are no residential areas that would classify as a “development” in the suburban or urban sense of the word. All building has been of a residential nature and has been constructed lot by lot. These structures have been consistent with the vision of the town, which is to maintain a rural residential environment with large lots. Currently, house lots are required to be a minimum of 2 acres in size and have a minimum of 200 ft of road frontage. The previous land use ordinance was approved in 2000. Additional zoning or ordinances are not needed at this time.

Shoreland Zoning

Lowell’s shoreland zoning Ordinance applies to all land areas with 250 feet, horizontal distance, of the normal high-water line of any great pond or river, or upland edge of a freshwater, wetland, and all land areas within 75 feet, horizontal distance, of the normal high-water line of a stream. The ordinance was adopted in 2021 and follows the current state minimum guidelines. The ordinance can be found on the Lowell town website.

Planning Board

The Town of Lowell has a 5-member planning board that reviews all permit requests for compliance with State and Local requirements. The town also has a code enforcement officer that assists the board in this process, and inspects new construction for adherence with sewage and wastewater codes. The code enforcement officer also provides advice and inspections for shoreland zoning.

Lowell’s character is shaped by the significant natural resources, water resources, and aesthetic landscapes in the community. Regulatory protection through conservation easements, and the Shoreland Zoning Ordinance, ensures the sustainability of local waterbodies, significant wildlife habitats, and the towns overall beauty. Continual regulatory support from the Department of Agriculture, Conservation and Forestry (DACF), Maine Department of Inland Fisheries and Wildlife, and non-regulatory support from the Maine Natural Areas Program (DACF), Nature Conservancy, Penobscot County Conservation Association, and the Cold Stream Pond Association, and various lake and pond associations, will foster community growth while maintaining the continual protection and recognition of local natural, aquatic, and historical resources.

Floodplain Management Ordinance

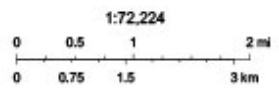
Lowell does not have any floodplain issues and does not have flood insurance beyond what is provided by the Maine Municipal Association.



Lowell Flood Hazard Map



- 9/8/2023, 1:58:09 PM
- Maine Towns
 - Flood_Zones_Q3**
 - A
 - AE
 - Political Jurisdictions



Province of New Brunswick, East Canada, East, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METWASA, USGS, EPA, NPS, USGS, NRCAN, Parks Canada, Earthstar Geographics, Maine Floodplain Program, FEMA

Maine Floodplain Program
2017



Development and Trends

Land ownership patterns are characterized by residents as few people owning large parcels of land. Minimum lot sizes are 40,000 sq. feet. Standard lot size in Lowell is usually much larger than this, but, more recently, Lowell has seen smaller parcels of land being used for more residential space, as more people move to the area. This is evidenced by the population statistics in Population and Demographics chapter. Lowell also has little development pressure, it's considered a bedroom community for Lincoln in the north, and Bangor further south. With its lower tax rates and well-known potential, it is an attractive community for those wishing to locate to the town. Taking these facts into consideration, projected development is unlikely to change in the next 10 years.

The comprehensive plan cannot provide detailed solutions for all of the community's economic development issues. It does, however, identify many of the basic resources, facts, and local concerns so that the town's leaders, along with the residents can have better information for the future decision-making on some of the town's most pressing land use matters.



FUTURE LAND USE PLAN

State Goal

To encourage orderly growth and development in appropriate areas of each community, while protecting the state's rural character, making efficient use of public services, and preventing development sprawl.

Town Goal(s)

Encourage the Development of affordable housing options for residents of all income levels.

Encourage sustainable, high-quality development which protects community character, provides balanced land uses and is tailored to the rural living of Lowell

Expand Public Transportation options to reduce dependency on personal vehicles.

Planning for Future Growth/ Implementation Strategies

It is of key importance to Lowell to identify areas where future growth is likely to occur as well as locations for the rural town. To ensure the community's vision is at the forefront of future land use considerations, constraints to development, including conserved land, threatened wildlife habitat, wetlands, and slope are identified in the natural resources and water resources sections. Being considerate and thoughtful when planning where future growth may be most suitable is essential to ensuring that the character and historical value of the community are respected and acknowledged. Current and future residents, land developers, and prospective local business owners may find the following beneficial in the process of creating land use maps considering locations best suitable for their business or residence. The Future Land Use Plan for the Town of Lowell consists of the designation of land use growth areas and the establishment of implementation strategies providing for appropriate local land use control (provided below). It is important when viewing this map to consider the critical natural resources identified on maps in other sections of the plan, which are not shown in the below map.



Lowell Possible Future Land Use Map



Alignment with Community Vision

Feedback from both the Community Survey and Community Visioning session revealed an emphasis on improving community development, preserving open space and other natural resources, encouraging small locally owned businesses and home-based businesses, and only regulating growth to the extent needed to maintain the small-town atmosphere. Typically, there are some municipal growth-related capital investments that are needed to support development in growth areas, as seen above. However, Lowell’s growth may be more concentrated as residential and nothing else, and may see minimum to no growth regardless of expectations.

The Future Land Use Plan, which identifies growth areas where residential and commercial development are projected, and rural areas, where open space and agriculture are top priorities, aligns with Lowell’s’ mission statement... “To foster a vibrant environment for new and long-



standing neighbors in pursuit of a stable and steady future for Lowell through community collaboration, environmental stewardship, and thoughtful development.”

By identifying limitations to development, which encompass wetlands, protected wildlife habitats, conserved lands, and the terrain's slope, Lowell aims to encourage future growth while upholding the community values and its rich heritage. The deliberate demarcation of these zones offers a preview of prospective development while showing respect and regard for the town's history. The Future Land Use Plan is a good start for Lowell to plan out their growth in a sustainable way. Currently, Lowell's development has been geared purely toward residential zoning. Conversely, the voiced desire for industrial growth areas signifies the need for enhanced economic development as the community evolves. Historical industries like the Tannery, and mills have played a pivotal role in driving economic development and supporting the local workforce in the past. However, where those industries no longer exist in the town, Lowell is looking to other possibilities. This comprehensive plan lays the necessary groundwork. By designating land suitable for industrial purposes, the community is positioned to diversify the local economy and create more job opportunities. Likewise, the possibility of mixed commercial and residential growth areas reflects Lowell's commitment to meeting the current housing demand while planning for future economic development. This mixed development will bolster the local business community and offer the town the opportunity to expand its housing options. Recognizing that Lowell's population is growing faster than neighboring towns and has witnessed an increase in home occupancy during the COVID-19 Pandemic, expanding the housing supply becomes vital to accommodate both existing and future residents. This aligns with the vision of progressing towards the future while addressing present and historical needs and circumstances. Any future land use plans implemented will fall to the selectboard and the planning board, and ultimately voted on by the residents of Lowell.

Natural Opportunities and Constraints

Sustainability and Responsible Growth

Lowell remains committed to sustainable growth and the protection of its natural resources. The Future Land Use Plan will ensure that all development, including any new restaurants, grocery stores, and housing, aligns with environmental goals. This includes considerations for clean energy, conservation, and environmental impact assessments. Being such a rural area, Lowell has a lot of opportunity to shape its future land use from start to finish.

Infrastructure and Services

In response to the community's feedback, Lowell will continue to invest in infrastructure and public services needed to support its residents. This includes ensuring that roads and utilities are adequate to meet the needs of residents and potential businesses. Because the existing use is all rural, Land Use proposals may need additional capital investment.



Recent Development Trends

Growth Areas

Although the town does not yet have a land use plan or ordinance set in place, when it implements one, the ordinance will regulate residential, commercial, agricultural, forestry, and industrial land uses. Currently, all of Lowell is rural. The principal use for this land is residential and agricultural (hobby farms only), forestry, rural type residence, and associated uses. Lowell aims to develop other specific purposes of this area including conservation of natural resources, reduction of soil erosion, and the encouragement of appropriate recreational land use. It appears that most development will occur in residential housing. Over the next decade, Lowell expects to add commercial and residential development to its current stock of such lots and buildings.

Commercial Zones

In response to the community's desire for more commercial attractions, Lowell may designate specific areas for commercial development within the next 5 years. These zones will encourage the establishment of new restaurants, a grocery store, and other retail businesses. These commercial areas will be conveniently located to serve the needs of residents and contribute to the local economy. In the next 10 years, the town expects one new commercial unit.

Residential Development

While maintaining low property taxes is a priority for our community, there is a real need for new residential development. Lowell may promote the construction of affordable housing options to address the demands of the growing population while keeping property taxes as low as possible. In the next 10 years, Lowell expects 10 new residential units.

Challenges

Land use planning is a critical aspect of community development, ensuring sustainable growth and resource management. However, Lowell, like other rural towns in Maine, faces distinct challenges in this regard. The challenges to developing future land use are the same as those that seen throughout this comprehensive plan. This is easiest to see when referring to maps in other sections. Lowell is mostly constrained by the wetlands throughout its landscape. Addressing these challenges requires a tailored approach, considering the town's specific needs, resources, and aspirations. Collaborative efforts involving local stakeholders, experts, and innovative solutions are essential to overcome these challenges and promote sustainable development in rural communities. It is unclear at present where new development will be most likely constructed.



Efforts in Land Use

In shaping the future of Lowell, Maine, efficient permitting procedures, and general approaches to land use planning are always being monitored for future improvement. Marked by strategic capital investments and collaborative initiatives with neighboring communities as well as planning organizations, Lowell plans to support the level of financial commitment necessary to provide needed infrastructure in growth areas. As there are no growth-related capital investments planned for Lowell, there are no anticipated municipal capital investments needed to support proposed land uses. This chapter not only aims to show efforts towards standardization and efficiency but also sets the stage for sustainable development. By pooling resources and insights through regional collaboration, Lowell ensures a cohesive and interconnected approach to land use that transcends individual boundaries. The unwavering commitment to a substantial financial investment underscores the town's determination to build the necessary infrastructure for any growth areas that may arise in the near future, laying the foundation for a resilient and prosperous future.

Strategies

- Using the descriptions provided in the Future Land Use Plan narrative, maintain, enact or amend local ordinances as appropriate to:
 - a. Clearly define the desired scale, intensity, and location of future development;
 - b. Establish or maintain fair and efficient permitting procedures, and explore streamlining permitting procedures in growth areas; and
 - c. Clearly define protective measures for critical natural resources and, where applicable, important natural resources.
 - d. Clearly define protective measures for any proposed critical rural areas and/or critical waterfront areas, if proposed.
- Direct a minimum of 75% of new municipal growth-related capital investments into designated growth areas identified in the Future Land Use Plan.
- Periodically (at least every five years) evaluate implementation of the plan in accordance with Section 2.7.
- Track new development in the community by type and location.



APPENDIX



Strategy Implementation Table

The table below lists strategies in applicable chapters of the plan and local groups and entities that will play lead roles in their implementation along with a timeline that is broken down into the following categories:

- Ongoing – The strategy is something the Town is actively working on, and is encouraged to continue doing as part of the implementation of the Comprehensive Plan.
- Immediate – A strategy that is on the verge of completion and the Town is able to start and/or complete within five (5) years of adopting the Comprehensive Plan.
- Long-Term – These strategies require a significant lead-time that may involve prior actions to be completed. These strategies are anticipated to take more than five (5) years to complete.

Estimated timeframes for strategy completion are also provided. In addition to these strategies, Lowell may annually review the Strategies in the Comprehensive Plan.

Chapter Title	Strategy	Responsible Agent(s)	Timeframe for Completion
Housing	1. Use state-level real estate trends to reevaluate property taxes and collect on tax arrears	Board of Selectmen, Planning Board and Assessing Agent	Immediate/ Ongoing
	2. Create more affordable housing for new and future residents	Board of Selectmen, Planning Board and Assessing Agent	Immediate/ Ongoing
	3. Support the efforts of local and regional housing coalitions in addressing affordable and workforce housing needs.	Board of Selectmen, Planning Board	Immediate/ Ongoing
	4. Seek to achieve a level of at least 10% of new affordable residential development built or placed during the planning period	Board of Selectmen, Planning Board and Assessing Agent	5-10 Years
Transportation	1. Continue to update a prioritized improvement, maintenance, and repair plan for the community’s transportation network	Board of Selectmen, Road Commissioner	Immediate



	by reviewing usage of roads to guide repair and maintenance		
	2. Replace eroding culverts	Board of Selectmen, Road Commissioner	Immediate
	3. Identify potential on and off-road connections that would provide bicycle and pedestrian connections to neighborhoods	Board of Selectmen, Planning Board	Immediate/ Ongoing
	4. Enact local ordinances as appropriate to address or avoid conflicts with: a. Policy objectives of the Sensible Transportation Policy Act (23 M.R.S.A. §73); b. State access management regulations pursuant to 23 M.R.S.A. §704; and c. State traffic permitting regulations for large developments pursuant to 23 M.R.S.A. §704-A.	Board of Selectmen, Planning Board Road Commissioner	3-5 years
	5. Enact, ordinance standards for subdivisions and for public and private roads as appropriate to foster transportation-efficient growth patterns and provide for future street and transit connections	Board of Selectmen, Planning Board Road Commissioner	3-5 years
Economy	1. Use State and National trends to guide economic development	Board of Selectmen, Budget Committee	Immediate
	2. Expand internet, cellular and electric power to all residents.	Board of Selectmen, Planning Board	Immediate – 5 years
	3. Appoint a committee of several people to identify ways of attracting new businesses to Lowell	Board of Selectmen	1-3 Years
	4. Investigate and pursue opportunities for collaboration with neighboring towns in developing employment opportunities within and attracting businesses to the region	Board of Selectmen	Immediate/ Ongoing
Water Resources	1. Create and adopt robust water quality review criteria with low impact development standards for when economic development occurs on or around water resources	Board of Selectmen, Planning Board, MDIFW, All Lowell Residents, and property owners	5 Years
	2. Educate large landowners about the potential tax benefits associated with donations of property or conservation easements to various non-profit land trusts	Planning Board	Immediate/ Ongoing



	3. Expand educational materials at appropriate locations regarding aquatic invasive species.	Planning Board	Immediate/Ongoing
	4. Identify existing uses that threaten ground and surface water resources, monitor them on a regular basis, and require clean-up and/or mitigation where necessary. Take measures to reduce pollution from public and private roads as well as phosphate pollution from fields, roads, and residences to help adopt water quality protection practices and standards for construction and maintenance of public and private roads and public properties and require their implementation by contractors, owners, and community officials and employees.	Board of Selectmen, Lowell Residents	Immediate/ Ongoing
	5. As per the requirements set by the state, Lowell plans to adopt or amend local land use ordinances as applicable to incorporate stormwater runoff performance standards consistent with: <ul style="list-style-type: none"> a. Maine Stormwater Management Law and Maine Stormwater regulations (Title 38 M.R.S.A. §420-D and 06-096 CMR 500 and 502). b. Maine Department of Environmental Protection's allocations for allowable levels of phosphorus in lake/pond watersheds. c. Maine Pollution Discharge Elimination System Stormwater Program 	Board of Selectmen, Maine Department of Environmental Protection	3-5 years
Natural Resources	1. Create and adopt robust Ecological review criteria for when economic development occurs on or around critical natural resources	Board of Selectmen, Planning Board, All Lowell Residents, and property owners	5-10 years
	2. Create and carry out a plan for sustainable pest control especially regarding mosquitos breeding in culverts	Board of Selectmen, Planning Board, Road Commissioner, DOT	1-3 years



	1. Educate landowners within the designated natural resource areas as to the importance of this area and the severe negative impacts of intensive development and invasive species	Board of Selectmen	Immediate/ Ongoing
	2. Identify and implement aquifer protections that can be implemented in Lowell	Board of Selectmen and Planning Board	5-10 Years
	3. Participate in local and regional efforts to monitor, protect, and improve water quality as well as preserving critical natural resources	Board of Selectmen, Regional Planning Commission, and Maine DACF	Immediate/ Ongoing
	4. Through local land use ordinances, require subdivision or non-residential property developers to look for and identify critical natural resources that may be on site and to take appropriate measures to protect those resources, including but not limited to, modification of the proposed site design, construction timing, and/or extent of excavation.	Board of Selectmen and Planning Board	Immediate/ Ongoing
	5. Pursue public/private partnerships to protect critical and important natural resources such as through purchase of land or easements from willing sellers	Board of Selectmen and Planning Board	Immediate/ Ongoing
Agricultural and Forest Resources	1. 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.	Board of Selectmen and Planning Board	Immediate/ Ongoing
	2. Establish working relationships and mutually beneficial binding agreements with all logging companies conducting in-progress and planned future operations	Board of Selectmen and Planning Board	1-3 Years
	3. Support productive agriculture and forestry operations, such as roadside stands, greenhouses, firewood operations, sawmills, log buying yards, and pick-your-own operations	Planning Board, Code Enforcement Officer	Immediate/ Ongoing
	4. Consult with Soil and Water Conservation District staff when developing any land use regulations pertaining to agricultural management practices	Board of Selectmen, Planning Board, DACF	Immediate/ Ongoing
	5. Amend land use ordinances to require commercial or subdivision developments in critical rural areas, if applicable, maintain	Board of Selectmen, Planning Board	3-5 Years



	areas with prime farmland soils as open space to the greatest extent practicable		
	6. Limit non-residential development in critical rural areas (if the town designates critical rural areas) to natural resource-based businesses and services, nature tourism/outdoor recreation businesses, farmers’ markets, and home occupations	Board of Selectmen, Planning Board	Immediate/ Ongoing
	7. Encourage owners of productive farm and forest land to enroll in the current use taxation programs	Board of Selectmen,	Immediate/ Ongoing
	8. Permit land use activities that support productive agriculture and forestry operations, such as roadside stands, greenhouses, firewood operations, sawmills, log buying yards, and pick-your own operations	Board of Selectmen, All Lowell Residents	Ongoing
	9. Include agriculture, commercial forestry operations, and land conservation that supports them in local or regional economic development plans.	Board of Selectmen, All Lowell Residents	Ongoing
Historic and Archaeological Resources	1. Promote public awareness of, and appreciation for Lowell’s history	All Lowell Residents	Immediate/ Ongoing
	2. Mark all places of historical significance	All Lowell Residents	1-3 Years
	3. Potential areas and artifacts of historical and archaeological significance should be professionally surveyed and documented, and historical and archaeological sites and artifacts should be monitored to ensure their protection and preservation	Board of Selectmen, Historical Society	1-5 years
Recreation	1. Identify and capitalize on opportunities to promote sustainable increase in usage of Lowell’s rivers, ponds, and streams	Board of Selectmen and Planning Board	Immediate/ Ongoing
	2. Create multi-use recreational trails for residents to enjoy	Board of Selectmen and Planning Board	3-5 years
	3. Support private landowners, land conservation organizations and recreational clubs that provide trails for public use	Select Board, appropriate Boards and Committees, interested clubs and residents	Ongoing Continuous
Public Facilities and Services	1. Re-evaluate population trends and public services to match expected growth and needs	Board of Selectmen and Town Office Staff	Immediate/ Ongoing



	2. Evaluate and update the tax maps and create an online GIS data base for public view	Board of Selectmen, Tax Assessor, Planning Board	3-5 Years
	3. Continue to adapt and revise its municipal services to respond to changes in the population. Areas of particular concern include, but are not limited to, emergency services, housing, recreational opportunities, economic development, and planning.	Town Office	Immediate/ Ongoing
	4. Assign a committee or community official to explore ways of addressing the identified needs and/or implementing the policies and strategies outlined in the plan	Selectboard	1-5 years
Fiscal Capacity and Capital Investment Plan	1. Explore new generation streams by reviewing towns of similar size to diversify tax revenue	Board of Selectmen	5 years
	2. Explore opportunities to work with neighboring communities to plan for, and finance, shared or adjacent capital investments to increase cost savings and efficiencies.	Board of Selectmen	Long term
	3. Support the hiring of a fulltime Code Enforcement Officer (CEO) to replace the current part time position to provide adequate permitting services, as well as to enforce existing ordinances and state regulations.	Town Meeting, Board of Selectmen	Immediate/ Ongoing
Future Land Use Plan	1. Using the descriptions provided in the Future Land Use Plan narrative, maintain, enact or amend local ordinances as appropriate to: <ul style="list-style-type: none"> a. Clearly define the desired scale, intensity, and location of future development; b. Establish or maintain fair and efficient permitting procedures, and explore streamlining permitting procedures in growth areas; and c. Clearly define protective measures for critical natural resources and, where applicable, important natural resources. d. Clearly define protective measures for any proposed critical rural areas and/or critical waterfront areas, if proposed. 	Board of Selectmen, Planning Board	Long term, 5-10 years

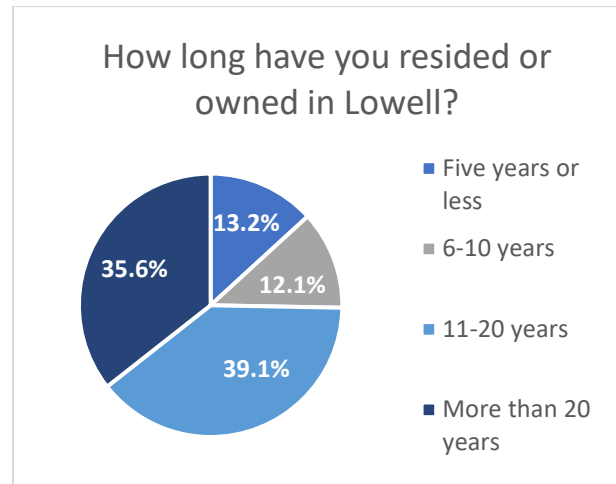
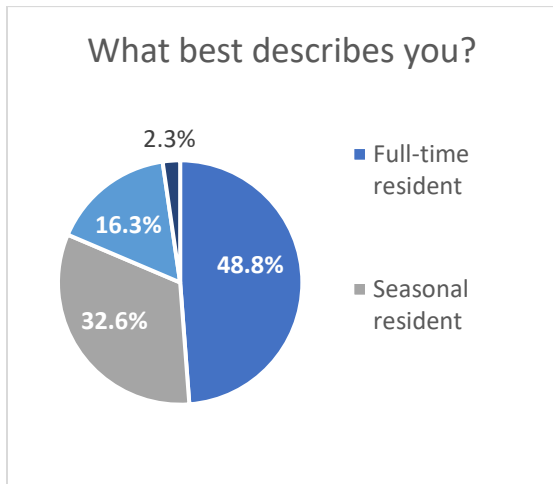


	2. Direct a minimum of 75% of new municipal growth-related capital investments into designated growth areas identified in the Future Land Use Plan.	Board of Selectmen, Planning Board	Immediate, 3-5 Years
	3. Periodically (at least every five years) evaluate implementation of the plan in accordance with Section 2.7.	Board of Selectmen, Planning Board, Comprehensive Plan Committee	Immediate, Long term, 5 and 10 Years
	4. Track new development in the community by type and location.	Board of Selectmen, Planning Board, Assessor, Code Officer	Immediate, Ongoing, and Long term



Lowell Community Survey Results

In February 2022, one hundred and seventy-five (175) individuals Lowell, Maine participated in a survey to assess public perceptions of quality of life as well as community opportunities and challenges. Based on 2020 census data, Lowell has 368 residents occupying 153 dwellings full time. 198 dwellings are occupied by part-time residents with the number of occupants/users unknown. While not all respondents answered all questions, unanswered questions are classified as “No response,” for the purposes of capturing the total number of respondents throughout the survey analysis. This survey and analysis are a joint effort between Eastern Maine Development Corporation and the Town of Lowell.



What do you like the most about living in Lowell?

Top 6 most cited responses

Choice	Respondents
Low population density	131
Recreational opportunities	100
Feeling of safety	81
Cost of living	52
Caring community	44
Good place to raise a family	41

What do you dislike about living in Lowell?

Top 6 most cited responses

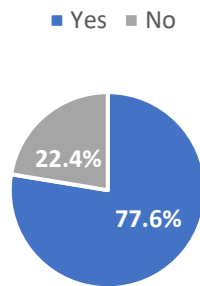
Choice	Respondents
Lack of dining choices	55
Lack of grocery stores	52
Cost of property taxes	51
Lack of law enforcement services	33
Lack of entertainment activities	25
Lack of retail stores	18



How satisfied are you with the administrative services offered by the town?



Are there any additional services you would like to see offered?



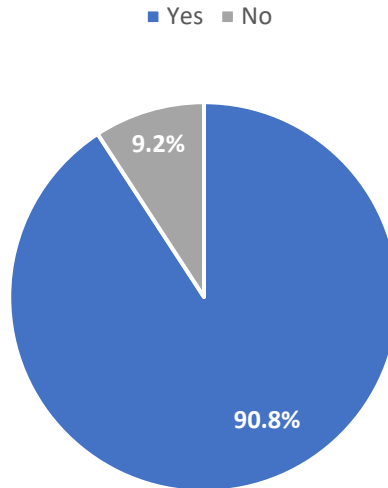
If you answered “yes” to the previous question, what type of services?

Top 6 most cited responses

Choice	Respondents
Ability to use credit cards at the town office	7
Extended hours at the town office	3
Trash and recycling pickup	3
Online registration ability	3
Road maintenance	3
Library/library privileges	2



Are there any services that you feel are no longer needed?

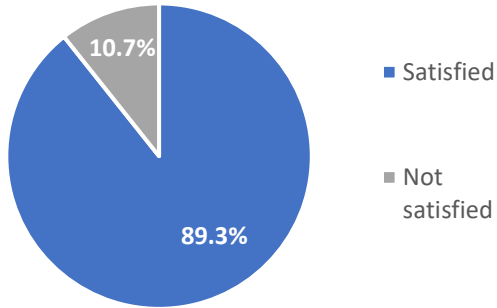


If you answered “yes” to the previous question, what type of services?

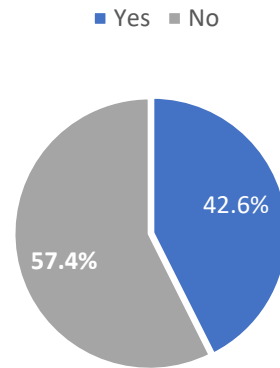
Town fire and rescue
School board, 3 selectmen – why not just a mayor
Inspection
Fire and rescue should be contracted out to save tax money
A town office the size of a big city with a small population
Fire department, do not have enough people to man it. Join Howland and other towns for cost savings and better service
We are too small of a town to support our own fire dept ambulance service, tax dollars would be better spent to have contracted service with Lincoln or Howland. It makes no sense to carry all equipment costs – no one there to respond in time
Fire, but only if it saves money
Tax collector
Fire and emergency – join with Howland and Burlington for improved services and lower cost
Fire department and ambulance services
Dog licenses



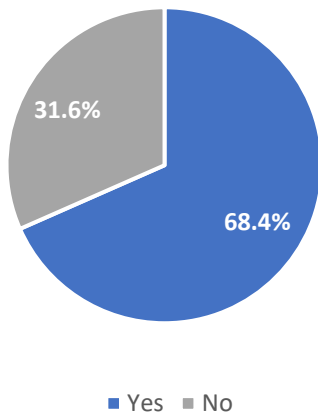
How satisfied are you with the current level of services provided by the Lowell fire and EMS department?



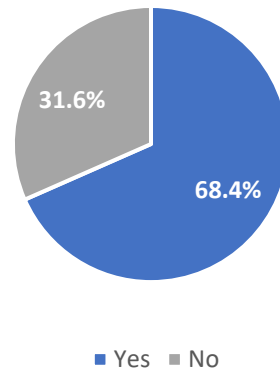
Would you like to see the Lowell fire and EMS department services expanded?



Would you be willing to fund transfer station improvements if savings were to pay for themselves in 3 to 6 years?

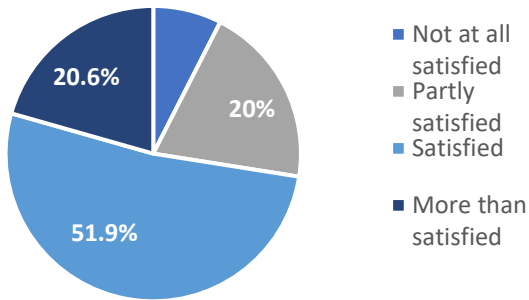


Would you be willing to fund transfer station improvements if savings were to pay for themselves in 3 to 6 years?

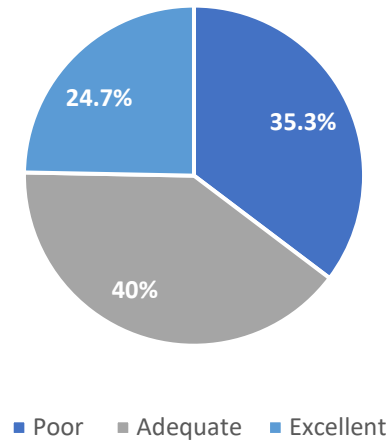




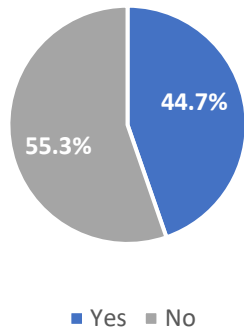
The economic and population growth in Lowell has been stagnant for years. Are you satisfied with this?



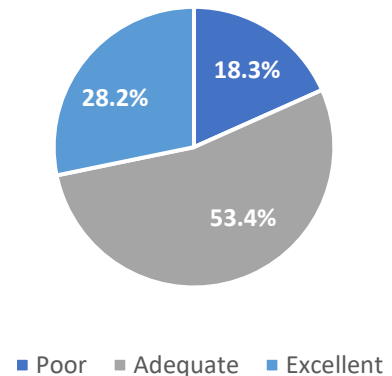
What word would best describe your internet access?



If you live off-grid or own property you haven't built on, do you have access to electric power?

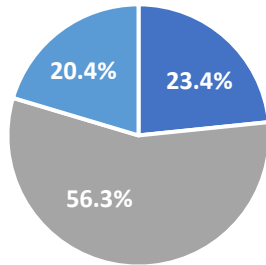


What word would best describe the reliability of your electric power?



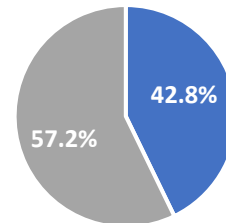


What word would best describe the reliability of your cell phone coverage?



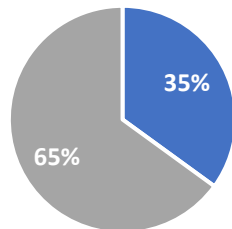
■ Poor ■ Adequate ■ Excellent

Would you be in favor of realigning your zip code so that you are being serviced by the nearest post office?



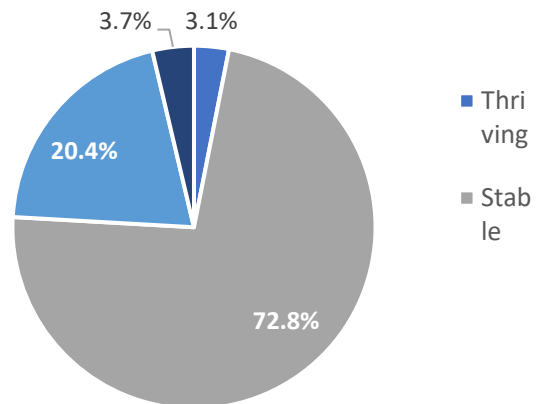
■ Yes ■ No

Would you be willing to fund a town purchase of property to develop into a publicly agreed-upon recreation area such as a park?

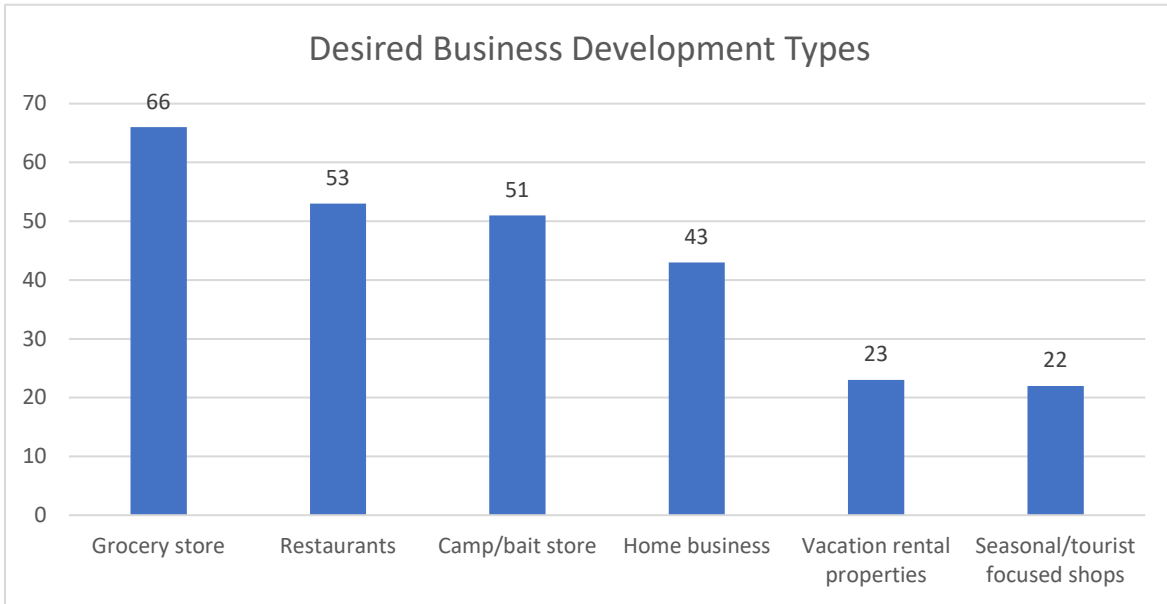


■ Yes ■ No

Please give your overall impression of Lowell.



■ Thriving
■ Stable



Note: These are the top six most cited responses

Other:

Adult education offerings and classes
Convenience store
General store
I bought a home here because it's NOT developed. To me, it's just the right size; all necessities are covered and a nice variety of great shops. Target, etc. are available within a short drive – just far enough away. This is a great part of Lowell's appeal.
I live here because there are no stores or shops
Manufacturing
No additional businesses are needed
No business development
No marijuana stores
None!!! This is a rural community and should remain as such!!!
Restaurant/gas station
Why would we want to change our quality of life that we have had for many, many years. It is changing every day.
A public boat ramp on passadumkeag river, stumps pulled from the river for safety
Development is not needed
Gas station
No additional businesses needed
None
See above



What are the impediments to opening a business in Lowell?

Top 3 most cited responses:

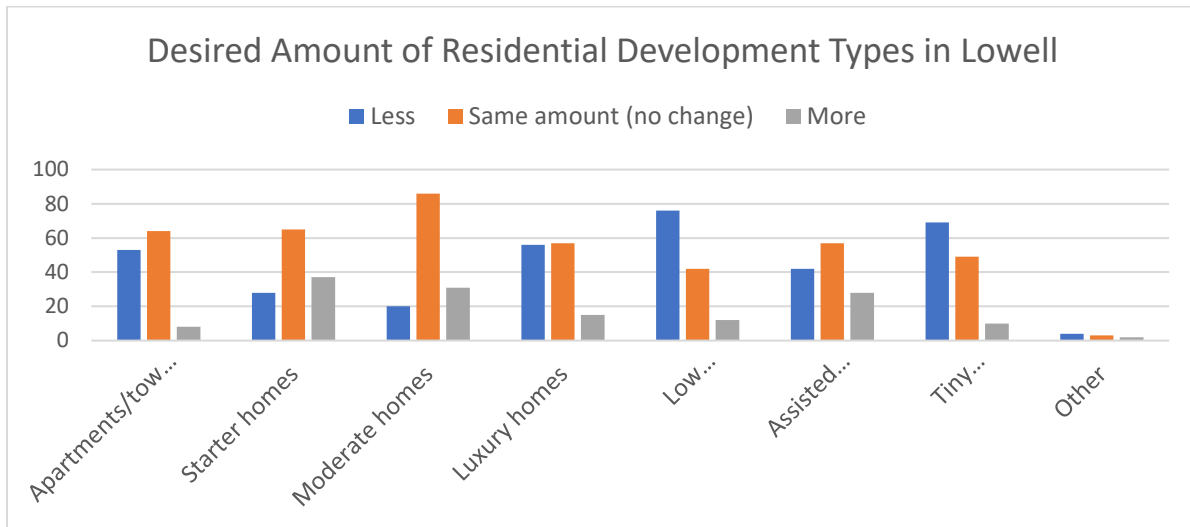
Choice	Respondents
Low population	20
Location	6
Lack of workforce	4

What would make it easier to open a business in Lowell?2020

Top 3 most cited responses:

Choice	Respondents
Lower taxes	6
Dependable internet	5
More tourism	3

Next to each option below, please indicate the following types of residential development you would like to see more, less, or the same amount of in Lowell.

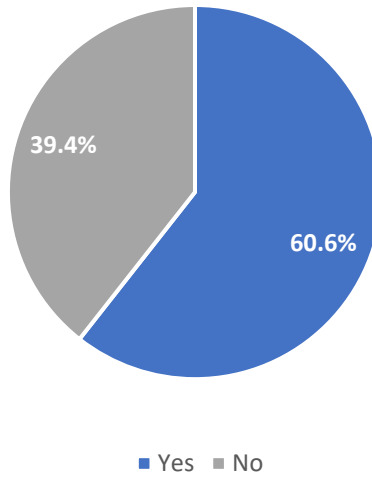


Other:

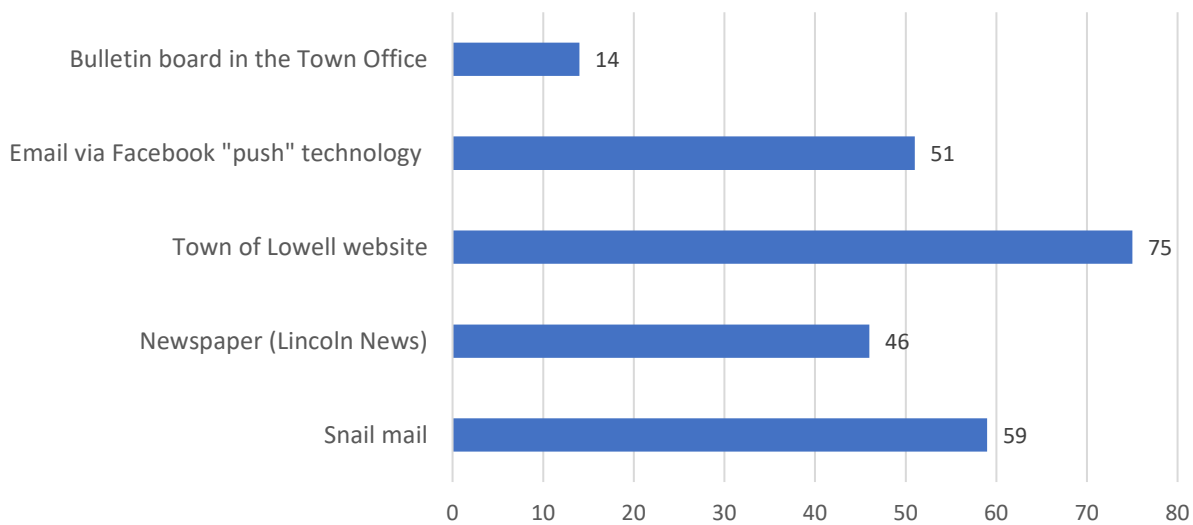
Relax subdivision laws/rules to encourage building
None
Housing for the elderly
Off grid communal living and marijuana cultivation
No additional development needed



Would you be more likely to comply with obtaining a building permit if there were no fee required?



By what form of communication do you prefer to be notified of public community meetings and community news?





For Youth

What do you like the most about Lowell?

Top 3 most cited answers:

Choice	Respondents
Recreation	10
Quiet	9
Caring community	7

If you could change anything about Lowell, what would it be?

Top 3 most cited answers:

Choice	Respondents
More businesses (ex. restaurant, gas station, grocery store, etc.)	7
Wouldn't change anything	5
Better roads	3

