

ATKINSON, NEW HAMPSHIRE



EXISTING CONDITIONS REPORT

March 2024

Table of Contents

Housing and Population Profile.....	2-15
Town Facilities and Services Profile.....	16-42
Transportation Profile.....	43-50
Recreation Profile.....	51-59
Natural Resources Profile.....	60-90
Natural Hazards Profile.....	91-103
Historical and Cultural Profile.....	104-117
Economy Profile.....	118-126
Land Use and Zoning Profile.....	127-137

Atkinson, New Hampshire

Population and Housing

KEY FINDINGS:

- The Town of Atkinson’s population has steadily increased each decade since the 1980’s. In 2021, the town’s population was 7,231. The town’s population is projected to continue slowly increasing through 2030 to a population of 7,653.
- Over the last 10 years, residents 15 to 24 years old and 55 – over 64 years old have increased. 22% of residents are currently 64 years old or older.
- The largest age cohort of residents in Atkinson are the 55 to 64-year-olds and older, which comprises approximately 43% of the population.
- The number of residents in the “family-forming cohort” (25-44 years old) is now lower than the state’s average, comprising 15% of the total population in town. This is lower than the state average of 25%.
- The average (median) age of Atkinson residents is 52 years old. The median age for the state of New Hampshire is 43 years old and the median age in Rockingham County is 45 years old.
- There has been a slight decline in the number of Atkinson students enrolled in Timberlane Regional School’s in grades 6-12 since 2012.
- Atkinson Academy student enrollment has not drastically changed since 2018.
- The majority of the housing units in Atkinson are owner-occupied single-family homes at 92% and 8% of housing units in Atkinson are renter occupied.
- In Atkinson, there are two 55+ housing developments. These include the Settlers Ridge Apartments, which provides low to moderate income senior housing, and Atkinson Heights Condominiums, which is an age restricted development.
- In Atkinson, approximately 12% of the population identify as living with a disability.
- According to the American Community Survey data from the years 2016-2020, Atkinson’s median household income is \$112,009, which exceeds that of the county and state.
- Atkinson has a significantly low vacancy rate for rental units at 0% and has been at 1% or lower vacancy for many years.

DATA SOURCES:

- 2016-2022 NH Housing Resources
- 2006 -2020 NH Housing and Demographic Data
- 2016-2021 American Community Survey (ACS)
- 2012 - 2022 Timberlane Regional School Enrollment Data
- 2021 NH Department of Employment Security Community Profiles
- 2022 New Hampshire Residential Rental Cost Survey Report
- 2022 Atkinson Zoning Ordinance
- Town of Atkinson Tax Assessor Data

INTRODUCTION

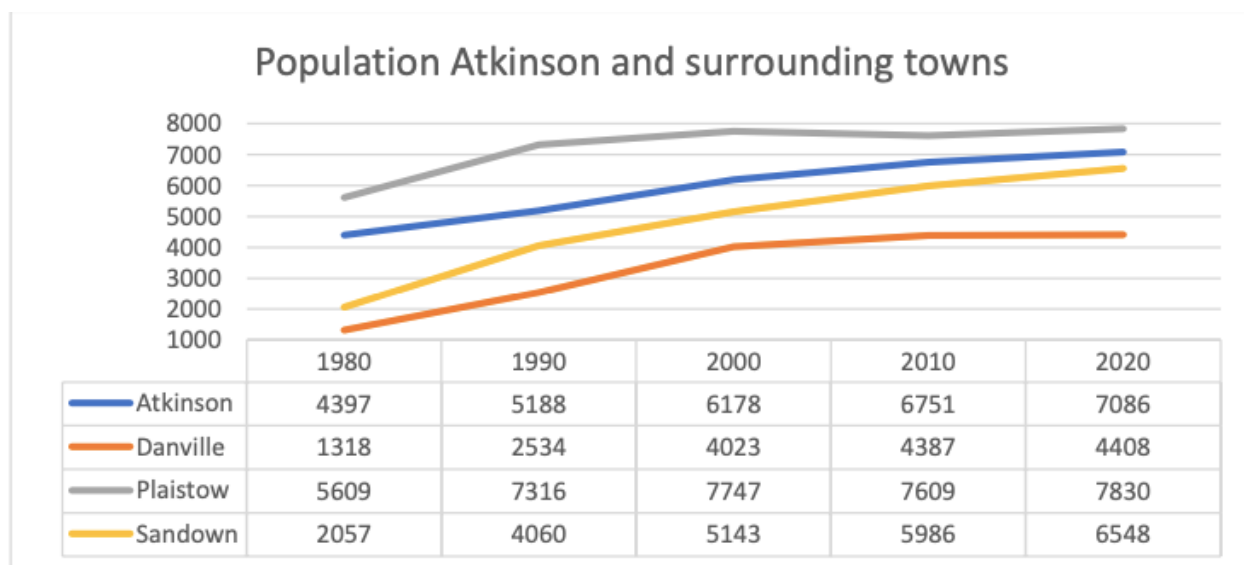
Analyzing the Town of Atkinson's existing population and housing characteristics, and how they've changed over time, helps to identify any deficiencies, issues, or needs the community may have now and in the future. Atkinson's geographic location in southern New Hampshire bordering the Massachusetts state line influences Atkinson's population and housing needs. Many of Atkinson's working residents commute out-of-state and most are commuting to Massachusetts. The U.S. Census included Atkinson in the New England City and Town Area (NECTA) (a defined labor market area) identified as Haverhill-Newburyport-Amesbury Town, MA-NH. This designation further reinforces the economic connection Atkinson has with its neighboring Massachusetts communities. Understanding Atkinson's changes in population and housing characteristics will help the community plan for the accommodation of the future residential population, as well as for other needed changes related to land use, municipal services, transportation, and more.

This profile will identify current population characteristics (as of 2020), as well as historic population trends, population projections, and an inventory of existing types of housing, current housing trends, and more. This profile is informed by data from the 2020 U.S. Census, the American Community Survey, and NH Housing resources. It should be noted that the American Community Survey Data represents an average of multiple years (in this case, 2016-2020 or 2017-2021). At the time of this report being developed, the 2016-2020 ACS data was used. As 2017-2021 data became available, this was cross referenced with 2016-2020 and any notable changes in trends were identified.

POPULATION

According to the 2021 U.S Census data, the year-round population in Atkinson is 7,231. Historically, Atkinson was an agricultural community with a sparsely populated area. The community grew quickly from 1950 to 1980. Since 1980, population growth has not continued at the same rate. However, the town's population has continued to increase over time at a steady growth rate and is projected increase to 7,653 residents by 2030. The historical data depicted in Table 1 shows this incremental growth with each decade since the 1980's. It should be noted that it is expected that the population will likely increase by 600 residents in the next few years because of Atkinson Heights Condominiums. The Population Atkinson and Surrounding Towns Graph shown on the following page depicts that Atkinson's population in comparison to its surrounding communities.

Table 1: Atkinson Population Trends Source: American Community Survey Data	
Year	Population
1950	492
1960	1,017
1970	2,291
1980	4,397
1990	5,188
2000	6,178
2010	6,751
2020	7,087
2025	7,389
2030	7,653



Population by Age

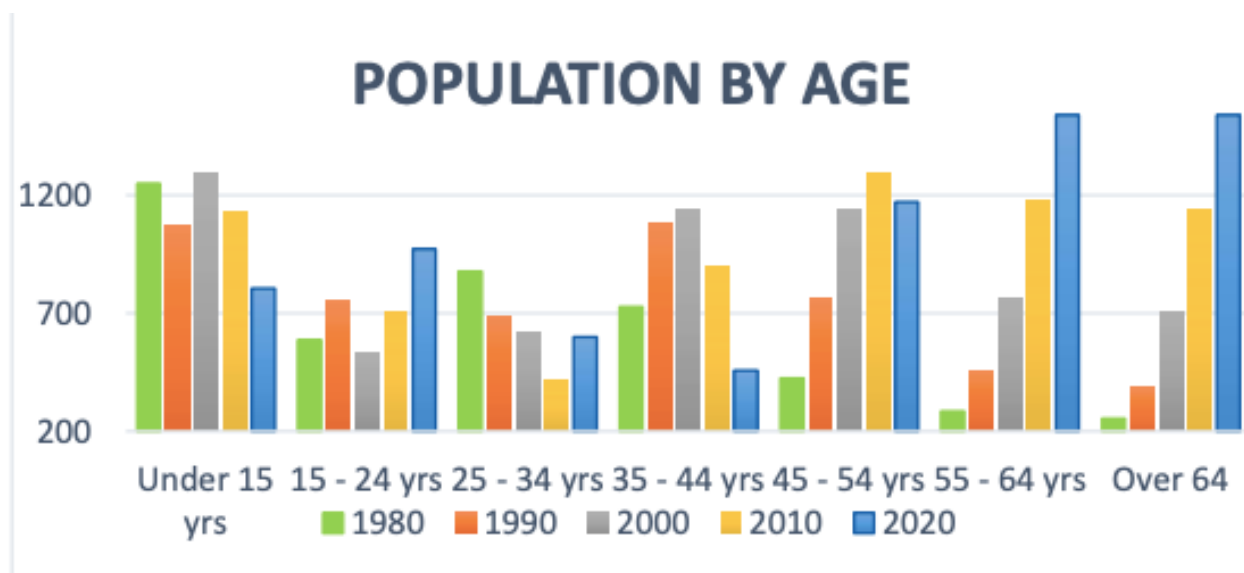
The average (median) age of Atkinson residents is 52 years old. The median age for the state of New Hampshire is 43 years old and the median age in Rockingham County is 45 years old. This indicates that the Town of Atkinson has a higher average age than that of the county and state. As shown in Table 2, the largest age cohort of residents in Atkinson are those within the 55 and over age bracket. This may indicate that the town consider how well they're able meet the needs of an aging population that is growing in the community.

Since 2010, the number of Atkinson residents under the age of 15 and 35-44 years old has been decreasing. In comparison with the rest of the age groups within Atkinson, about 43% of the existing population is over the age of 55. About 22% of residents are over the age of 64. The percentage of residents in Atkinson over the age of 64 is higher than that of the state at 18% for this age group. When analyzing historical data over the last 10 years, residents 15 to 24 years old and 55 – over 64 years old have increased. Residents in the age group of 25-44 years old identified as the “family forming age” represent 15% of Atkinson’s population which is lower than the state’s average at 25% for this age group. The bar graph on the following page shows population by age in Atkinson and how its changed over time.

Table 2: Age Categories in Atkinson

Source: 2020 U.S. Census

Age	Estimate	% of Population
Under 15 yrs	806	11.4%
15 to 19 yrs	498	7.0%
20 to 24 yrs	474	6.7%
25 to 34 yrs	599	8.5%
35 to 44 yrs	457	6.4%
45 to 54 yrs	1,171	16.5%
55 to 64 yrs	1541	21.7%
Over 64 yrs	1,540	21.7%
Total	7,086	-
Median Age (yrs)	51.9	-



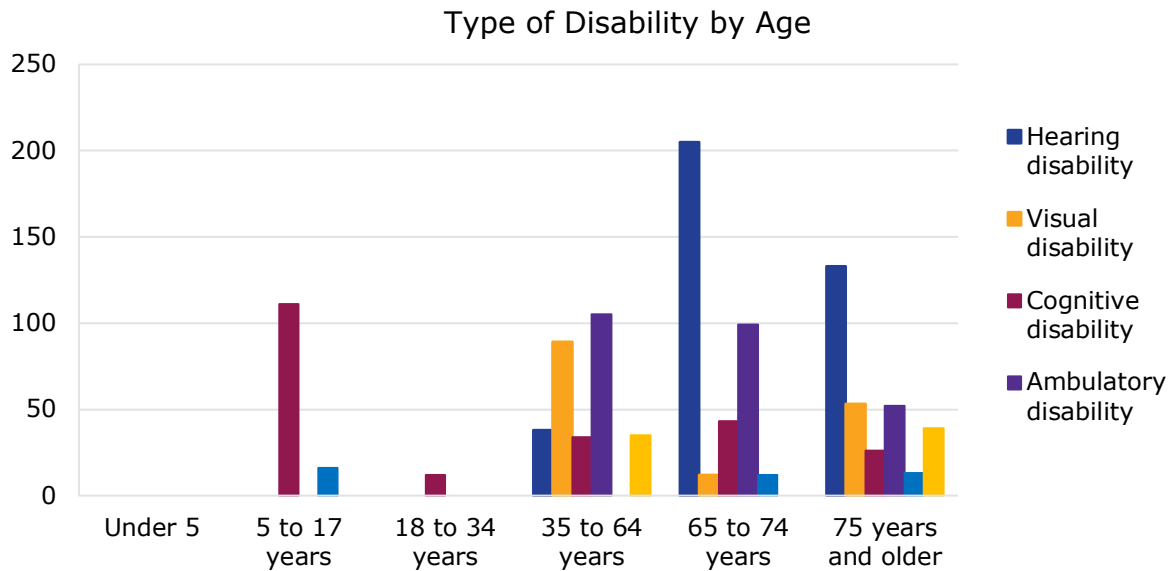
Population by Race

The following categories are terms identified by the American Community Survey Data. Although most of the population of Atkinson identifies as White, there is some diversity represented by residents of other races. An average of 93% of residents in the state of New Hampshire identify their race as White, whereas the Town of Atkinson's average is slightly higher at 95.6%.

Table 3: Population by Race Source: (2016-2020) American Community Survey	
Race(s)	Population
White	6,782
Black	0
American Indian	0
Asian & Pacific Is.	63
Hispanic	94
Other	75

Population Living with a Disability

In Atkinson, approximately 12% of the population identifies as living with a disability. The American Community Survey Disabilities by Age graph depicted on the following page, defines disabilities by category: hearing, ambulatory, vision, self-care, cognitive, and independent living disabilities. As seen on this graph, it appears that two of Atkinson's distinct disability demographics consist of residents with a hearing disability in the 65 to 74 age group and the 75 years and older age group.



Educational Attainment

According to the American Community Survey's 2020 data, about 98.2% of Atkinson's population has obtained a High School Diploma or higher level of educational attainment. About 42.1% of the population has a Bachelor's Degree or higher level of attainment.

Table 4: Education Attainment	
Source: (2016-2020) American Community Survey	
Level of Education Attainment	Population 25yrs and over
Less than 9 th grade	0
9 th to 12 th grade, No Diploma	85
High School Graduate	1,365
Some college, No Degree	1,180
Associate degree	420
Bachelor's Degree	1,340
Graduate or Professional Degree	889

Population by School Enrollment

As shown in Table 5 on the following page, the number of Atkinson students enrolled at the Timberlane Regional School (SAU 106) has been slowly declining since 2012. Although there is not much notable difference in the changing enrollment numbers of students in kindergarten and grades 1-5, there has been a slight decline in the number of Atkinson students enrolled in SAU 106 Regional grades 6-12. It should be noted that not all Atkinson students attend the Timberlane Regional School as there are private schools in the area that accept Atkinson students as well.

Table 5: Recent Timberlane Regional School Enrollment Data by Year – Atkinson Students
Source: SAU 106

School Year	2011-2012	2012-2013	2013-2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2021-2022
Preschool	18	17	12	12	17	20	24	23	14	17
Kindergarten	52	39	49	49	40	38	55	59	51	44
Grades 1-5	344	297	301	301	298	268	278	267	283	288
Grades 6-8	221	229	221	221	207	197	194	177	173	159
Grades 9-12	325	304	293	293	268	264	263	261	229	217
Total	960	903	876	876	830	787	787	787	750	725

Table 6: Total School Enrollment Data by Town in Timberlane Regional School District (TRSD)
Source: SAU 106

Town/Area	2011-2012	2012-2013	2013 - 2014	2014-2015	2015-2016	2016-2017	2017-2018	2018-2019	2019-2020	2020-2021
Atkinson	960	903	876	876	830	787	787	787	750	725
Danville	777	757	717	717	693	657	631	598	572	597
Plaistow	1,262	1,229	1,186	1,186	1,127	1,089	1,046	1,037	972	999
Sandown	1,062	1,024	986	986	1,016	1,033	1,090	1,044	974	965
TRSD	4,072	3,927	3,773	3,773	3,673	3,581	3,556	3,472	3,272	3,288

Table 6 above depicts the total school enrollment data in the Timberlane Regional School District (TRSD) by town. Generally, Danville and Atkinson have the least number of students enrolled in the TRSD. Overall, the student enrollment for the TRSD has been declining since 2012.

Table 7: Recent Atkinson Academy School Enrollment Data
Source: SAU 106

Month/Year	10/2018	10/2019	10/2020	10/21	6/2022
Preschool	15	16	8	12	11
Kindergarten	53	54	52	48	50
Grades 1-5	273	259	276	286	283
AA Total	341	329	336	346	344

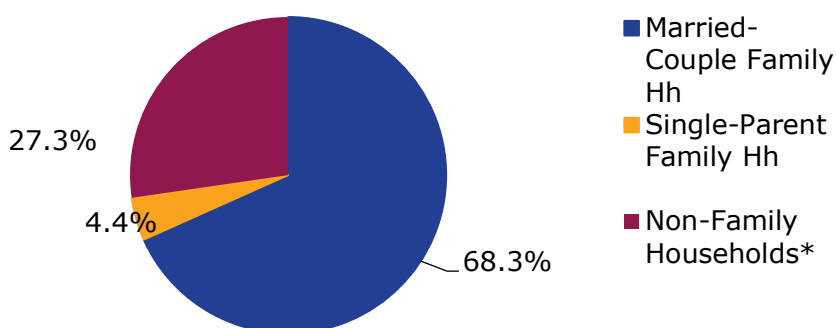
Table 7 identifies school enrollment data for Atkinson elementary students attending Atkinson Academy. When looking at this enrollment data since 2018, there are no drastic or notable changes in student enrollment numbers. It should be noted that the Timberlane Regional (SAU 106) Middle School and High School are in the Town of Plaistow. Atkinson Academy, Danville

Elementary, Pollard Elementary, TLC at Sandown Central, and Sandown North are also part of the Timberlane Regional School SAU 106 District. For pre-school and elementary grade students, all the elementary school families are allowed to request approval from the Superintendent to transfer to another in-district elementary school. Therefore, Atkinson’s pre-school through fifth grade students can attend one of the other elementary schools within the Timberlane Regional School District elementary schools listed above. The trend of continued population growth with a smaller percentage of school aged families should be considered while planning for the future of Atkinson.

Households and Families

The total number of households in Atkinson has increased by 7.7% since 2010. However, the average household size has decreased from 3.13 persons per households in 2010 to 2.85 in 2020. If the average household size continues to decline, this may also lead to a need for more housing units. New Hampshire Housing reports that about 27% of housing units in Atkinson from 2017-2021 were occupied by non-family households. The U.S. Census’ American Community Survey defines “non-family households” as a household that consists of a householder living alone (a one-person household) or where the householder shares the home exclusively with people to whom he/she is not related.

Family vs. Non-Family Households in 2017-2021



HOUSING

According to the Town of Atkinson, there are a total of 3,072 housing units. Most of these housing units are single-family residences, making up approximately 94% of the total housing inventory in Atkinson. The remaining approximately 6% of housing units are multi-family units. There are no mobile home units in town. Most of Atkinson’s housing units (78%) were built after the 1960’s. 27.3% of homes in Atkinson were built during the 1970s. Between 1970 and 2009, there was a steady production of housing (though incrementally declining each decade). Then, from 2010 to 2013, there was a significant decline in

Table 8: Units by Type	
Source: 2022 Town of Atkinson Data	
Unit Type	# Of Units
Single-family	2,876
Multi-family	196
Mobile Home/Other	0
Total	3,072

the number of housing units built. According to the 2020 Census, the average household size is 2.85.

As indicated in Table 10, almost half (47%) of the households in Atkinson live in a 3-bedroom unit.

Housing Tenure

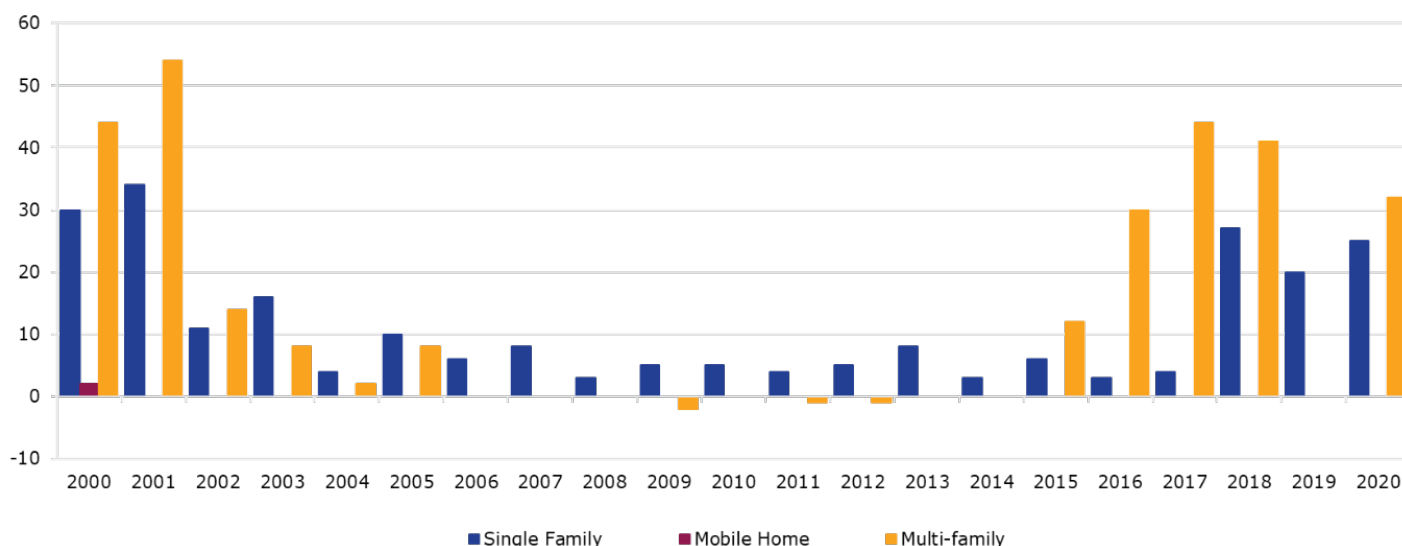
According to the 2017-2021 American Community Survey, about 92%, of the housing units in Atkinson are owner-occupied, which is a larger percentage compared to the state at 71%. The percent of renter occupied rental units (8%) in town has always been less than the number of owner-occupied homes in Atkinson when looking at the historical data. The percent of renter occupied rental units in Atkinson 8% is also significantly lower than the state average of 29%.

In reference to the graph, Housing Units Authorized by Permit in Atkinson below, according to New Hampshire Housing Finance Authority, single family housing is *“any detached dwelling unit meant for only one family to reside in. A single-family home has no shared property but is built on its own parcel of land”* and multi-family housing is a *“building or structure that is designed to house several different families in separate housing units”*.

Year Built	Units	% Of Total
2010 to 2020	243	0.6%
2000 through 2009	264	8.7%
1990 through 1999	586	19.3%
1980 through 1989	584	19.3%
1970 through 1979	827	27.3%
1960 through 1969	353	11.7%
1950 through 1959	115	3.8%
1940 through 1949	17	0.6%
1939 or earlier	165	5.4%

# of Bedrooms	Estimate	% of Total
No Bedrooms	53	2%
1 Bedroom	139	5%
2 Bedrooms	608	20%
3 Bedrooms	1,393	47%
4+ Bedrooms	773	26%

Housing Units Authorized by Permit



Age-Restricted Housing

Atkinson Zoning currently does not allow long term care facilities (Assisted Living Nursing homes nor Hospice) in Atkinson. Although Atkinson does not currently have an assisted living facility, Atkinson has two age restricted developments in town. Settlers Ridge Apartments are age-restricted rental units for ages 55 plus and is located at 25 Pope Road. The Settlers Ridge Apartments consists of three buildings, with a total of twenty townhouse style, one-bedroom units and six two-bedroom units (only these six two-bedroom units are two-story units).

Atkinson Heights Condominiums is a market rate age restricted condominium community located along the seventeenth fairway at the Atkinson Resort and Country Club. Under the provisions of the Federal Fair Housing Act, all residents must be 55 years of age or older. The Atkinson Heights Condominium Development will eventually consist of nine, thirty-two-unit mid-rise buildings. This development is still under construction and is located within the Golf and Sports Complex /Residential Sub-District (SCR-Subdistrict) identified in the 2022 Atkinson Zoning Ordinance. There are currently two completed buildings and construction has begun on the third. This unique type of cluster development is permitted in this district and is referred to as a Rural Residential & Recreation Cluster Development (RRRCD). Currently, it is projected that it will take ten years for all the units within Atkinson Heights to be completed.

Accessory Dwelling Units (ADU's) and Apartments

In 2016, the voters approved an Accessory Dwelling Unit Ordinance to replace the previous Accessory Uses: Extended Family Accessory Living Unit Ordinance. Permit approvals began in 2017. Since that time, there have been a total of fifty-eight approved accessory dwelling unit permits. While the State of New Hampshire allows attached or detached accessory dwelling units, the Town of Atkinson currently only allows attached accessory dwelling units. In recent years, there has been interest from local buyers in properties with accessory dwelling units as they allow for multi-generational housing or rental income.

There are two apartment developments in Atkinson: Settler's Ridge Apartments and Atkinson Apartments. Atkinson Apartments are located behind the Post Office and consists of ten buildings with a total of 178 one-bedroom units.

INCOME

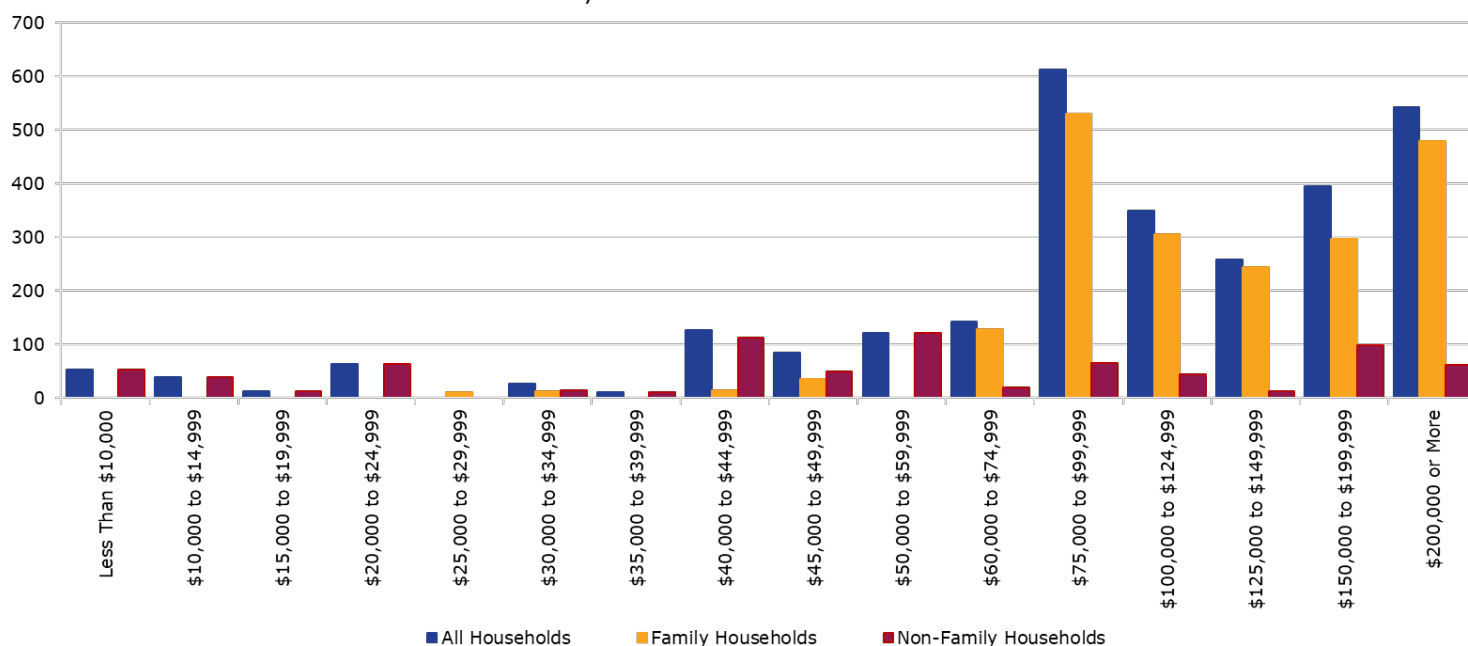
According to the 2016-2020 American Community Survey, the median household income in Atkinson for family households is \$112,009, which is higher than both the county and state's median incomes. The median family household income for Rockingham County is \$93,962 and for the State of New Hampshire is \$76,768. The median income for non-family households in Atkinson is \$53,722.

Table 11: Household income

Source: (2016-2020) American Community Survey

	# Of Family Households	# Of Non-Family Households
Less than \$10,000	53	53
\$10,000 to \$14,999	39	39
\$15,000 to \$19,999	13	13
\$20,000 to \$24,999	63	63
\$25,000 to \$29,999	0	0
\$30,000 to \$34,999	27	14
\$35,000 to \$39,999	11	11
\$40,000 to \$44,999	126	112
\$45,000 to \$49,999	85	50
\$50,000 to \$59,999	122	122
\$60,000 to \$74,999	142	19
\$75,000 to \$99,999	613	66
\$100,000 to \$124,999	349	44
\$125,000 to \$149,999	258	13
\$150,000 to \$199,999	395	98
\$200,000 or More	542	62
Total Households	2,838	779
Median Household Income	\$112,009	\$53,722

Households By Household Income



Poverty Level

The American Community Survey defines the percent of individuals below the poverty level by using “*income before taxes and does not include capital gains or noncash benefits (such as public housing, Medicaid, and food stamps)*”. The U.S. Census Bureau also uses a set of income thresholds that vary by family size and composition to determine who is living in poverty. As Table 12 illustrates, Atkinson has a lower poverty rate at 2.1%, when compared to the County and the State of New Hampshire.

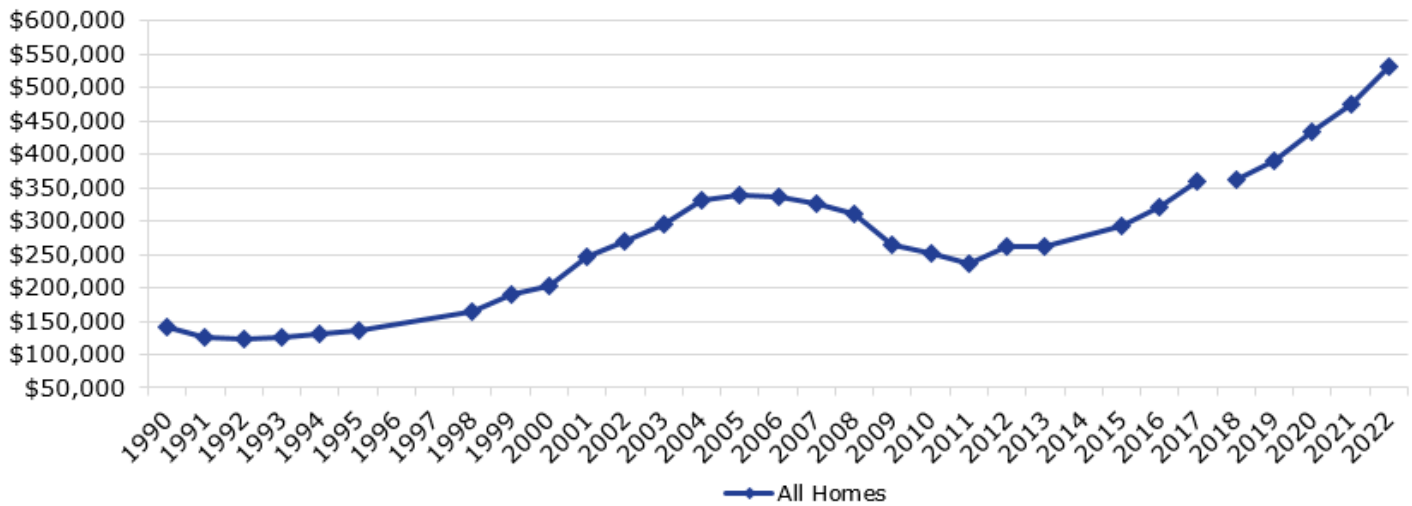
Table 12: Residents below the Poverty Level	
Source: (2016-2020) American Community Survey	
Geographic Area	% of Individuals Below Poverty Level
Atkinson	2.1%
Rockingham County	4.6%
New Hampshire	7.6%

HOUSING COSTS

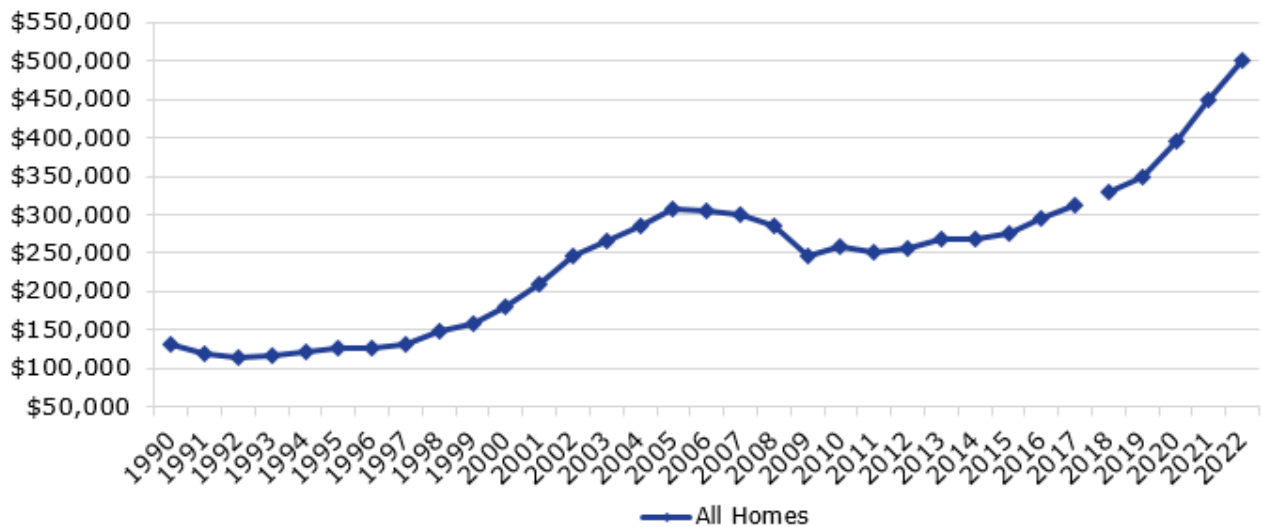
Analyzing Atkinson’s existing housing supply, the income levels of residents, and the current home values and costs is important to understanding how housing availability and affordability impact Atkinson’s residents. As indicated by the 2020 American Community Survey data, the median value of owner-occupied housing units in Atkinson is \$371,300 or approximately a monthly cost of \$2,450 with a mortgage and \$894 without a mortgage. According to the 2020 American Community Survey Data, the median home purchase price is \$344,000 in Rockingham County. Recently in 2021-2022, the average sale price of a single-family home in Atkinson was \$744,966, and the average sale price of condos was \$506,454 according to local realty. Please note that the American Community Survey Data reflects a median average of a five-year span. These numbers may vary from current housing costs due to the quickly changing housing market.

According to the 2022 New Hampshire Residential Rental Cost Survey Report, renters in the Lawrence, MA-NH HMFA (HUD Metropolitan Fair Market Rent Area) pay a median monthly rent of \$1,722. The Lawrence, MA-NH HMFA includes the New Hampshire communities of Atkinson, Chester, Danville, Derry, Fremont, Hampstead, Kingston, Newton, Plaistow, Raymond, Salem, Sandown, and Windham. The 2022 median monthly cost of rent in Rockingham County is \$1,708. When comparing this monthly cost to the 2015 median number, it can be observed that the cost of rent for Rockingham County has increased approximately \$400 per month. Housing costs in Atkinson also correlate to the vacancy rates for rental units across Rockingham County. The 2020 Census data indicated that Atkinson has no rental unit vacancies as the vacancy rate is at 0%. According to the 2022 New Hampshire Residential Rental Cost Survey Report for Rockingham County, the vacancy rate of rentals is 0.4% and, for the state it is 0.5%. A healthy vacancy rate range for rental units is 4 – 5% to ensure adequate availability.

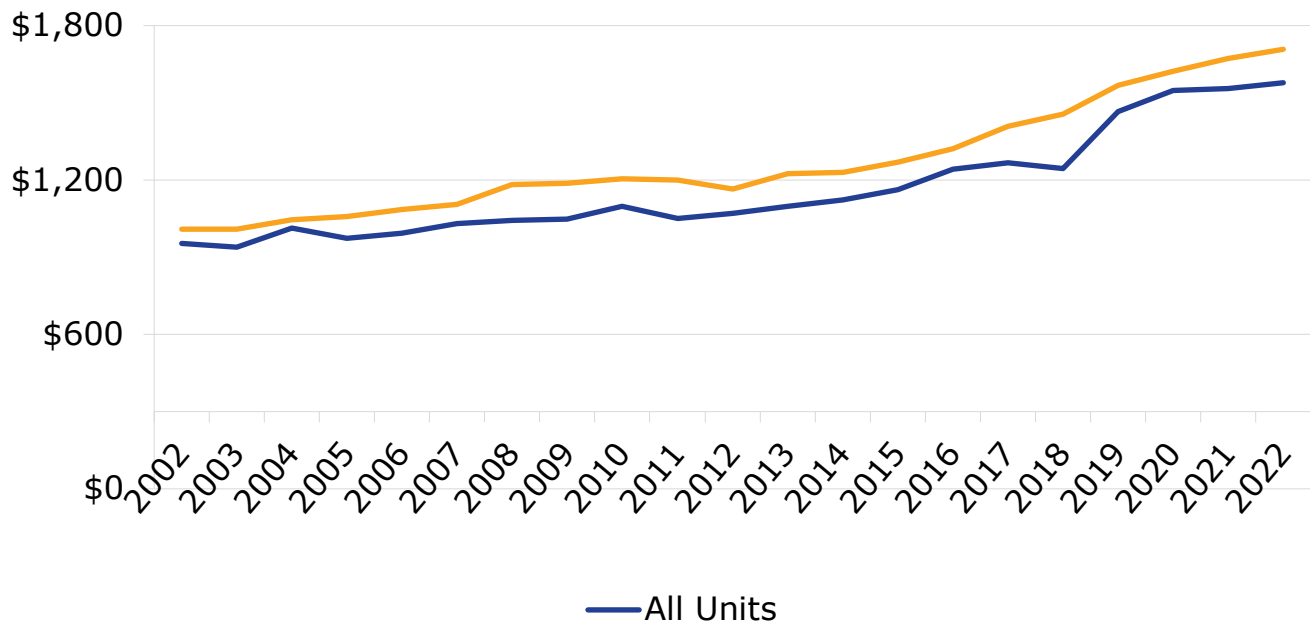
Median Home Purchase Price - Atkinson



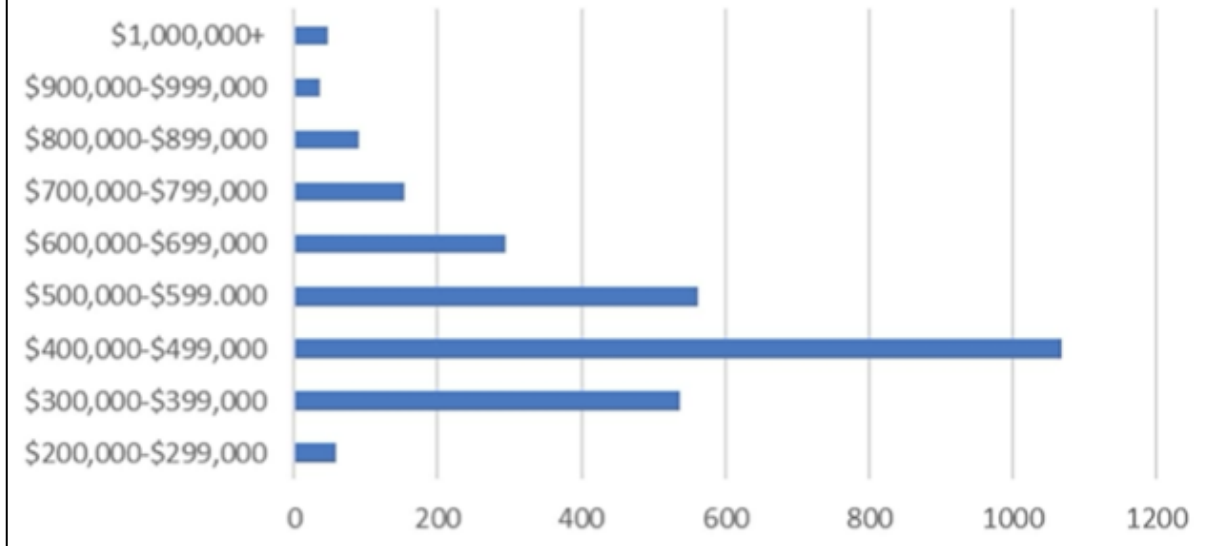
Median Home Purchase Price – Rockingham County



Median Gross Rental Cost – Rockingham County



Housing Unit Values: March 2023 Units/2020 Town Assessment Rates



WORKFORCE COMMUTING

The U.S. Census' American Community Survey reported that in 2021, 10% of Atkinson's workforce population worked from home. Atkinson's resident workforce is largely employed outside of the community, but since the pandemic, a larger number of residents may be working remotely from their homes resulting in more hybrid and remote workers than reported. The average commute time for Atkinson workers about 30 minutes.

The majority of Atkinson residents commute alone by vehicle (85%). According to the 2020 Census data, the total number of Atkinson workers 16 and over in the civilian labor force is approximately 4,891, which is 69% of the town's population. It should also be noted that most of Atkinson's residents have access to 2 or more vehicles (about 95%).

Table 14: Travel Time to Work

Transportation Mode	% or # of Commuters
Less than 10 minutes	4.9%
10-14 minutes	24.2%
15-19 minutes	10.9%
20-24 minutes	7.9%
25-29 minutes	3.8%
30 to 34 minutes	14.2%
35 to 44 minutes	10.7%
45 to 59 minutes	10.4%
60 or more minutes	13.0%

Table 13: Vehicles Available

# of vehicles available	% of Population
No vehicle available	0.0%
1 vehicle available	5.1%
2 vehicles available	48.5%
3 or more vehicles available	46.4%

Table 15: Means of Transportation to Work
Source: (2017-2021) American Community Survey

Transportation Mode	% of Commuters
Drove alone, car/truck/van	84.5%
Carpooled, car/truck/van	4.1%
Public Transportation	1.2%
Walked	0.0%
Other Means	0.0%
Worked from Home	10.1%

Atkinson, New Hampshire

Town Facilities and Services

KEY FINDINGS:

- Atkinson has 8 municipal buildings including: the Police Station, the Town Hall, the Fire Station, the Kimball Library, the Community Center, the Town Garage, the Kimball House, and the Center School. These facilities are mostly centrally located in Atkinson near Academy Avenue and in the southern portion of town along Main Street.
- Atkinson also has several departments and services housed in these facilities. These include: the Atkinson Community Television (ACTV) Department, Building Inspections, Code Enforcement and Land Use Department, the Elder Services Department, the Recreation Department, the Fire Department, the Police Department, the Kimball Library, the Department of Public Works (Highway Department and Brush and Recycling Center), Town Administration, Town Clerk, Assessor, and Tax Collector.
- Like many communities, Atkinson has a few existing community facilities that need investment in the years ahead. These include: the Town Hall, the Police Station, the Fire Station, The Community Center, and the Highway Garage.
- One way to plan for investments to municipal facilities over time is through the development, adoption, and implementation of a Capital Improvement Plan (CIP). Atkinson does not currently use a Capital Improvement Planning Process.
- The Town could consider utilizing an asset management program to begin tracking maintenance and to plan for building and infrastructure investments.
- Atkinson does not have a public sewer system and currently relies on private septic systems.
- The water system covering part of Atkinson is privately owned and publicly operated by Hampstead Area Water Company (HAWC). As of December 2022, HAWC services 1,426 connections in Atkinson or about 3,565 people.

DATA SOURCES:

- Interviews with Department Heads
- 2017-2021 Town Annual Reports
- Town of Atkinson Website
- Timberlane Regional School Website
- Rockingham Planning Commission (RPC)
- 2015 Master Plan Update
- 2020 Atkinson Road System Action Plan
- 2020 Building Needs Assessment
- 2017 Atkinson Police Department Facility Study
- 2020 Facility Condition Assessments
- 2022 Hampstead Area Water Company Data
- 2022 Atkinson Fire Department Water Supply Study and ISO Review
- 2020 Fire Service Resource and Staffing Study
- 2021 Primex Report
- Atkinson Building and Code Enforcement Department

- Approximately 49% of Atkinson’s households are served by this privately owned public utility, and approximately 51% of the households in Atkinson utilize private wells.
- The Fire Department also has a need for better communication capabilities such as radio and dispatch. The west side of town experiences coverage issues currently.
- The community has experienced growth over the last five years and with continued growth projected, there are additional strains anticipated on the services that the Police and Fire Departments provide as calls for services increase.
- The existing Hampstead Area Water Company water system appears to meet the Town’s demand for drinking water in the area that it serves. However, the water system does not appear to meet the needed fire flow demands for many of the commercial properties in Town and some of the multi-family residential dwelling complexes.

INTRODUCTION

This section identifies and describes the Town facilities and services that Atkinson provides to its residents. Over time, with the growth of the town’s population, municipal services will need to be modified to keep up with the needs of the community. Older facilities may need to be updated or staffing of municipal departments and services may need to increase. New services and facilities may be needed to accommodate a growing elderly population or to meet other emerging needs. These changes will impact the way in which services are provided, the buildings which house them, as well as their capital needs, and therefore, the town budget. The information described in this profile is a synopsis of Atkinson’s current municipal facilities and services utilizing a compilation of resources. This includes documents posted on the Town’s website, presented in Town annual reports, interviews with Department Heads and other contacts, as well as information gathered from the 2020 Building Needs Assessment and other recent and relevant documentation. Together, these sources help to identify the status and condition of existing town facilities and anticipated future needs.

The Town facilities and services covered in this profile include:

- Police Department
- Fire Department
- Town Hall/Administrative Offices
- Schools
- Public Works Department
- Kimball Library
- Recreation Department
- Community Center
- Elder Services
- Utilities
- Communications

POLICE DEPARTMENT

The Atkinson Police Department is currently located at 27 Academy Avenue in the old Rockwell School that was originally constructed in 1840. In 1992, the Rockwell School building was remodeled into the Atkinson Police Station. The need for additional Police Department space has been identified as a need over the years. A Building Needs Committee was formed by the Board of Selectmen to evaluate existing community facilities and create a Building Maintenance Plan. In 2017, a Facility Study of the Police Station was completed. It concluded that a new Police Station was needed and should be constructed to accommodate the wider service needs of the community.

The existing Police Station is 3,720 square feet and is on an existing 0.5-acre parcel. The Police Department Facility Study identified that a minimum lot size of 0.9 acres is required for a new Police Station. In April 2018, the Board of Selectmen designated a town owned lot on Main Street as the site for a new Police Station. The 2017 Police Department Facility Study identified that an 11,777 square foot Police Station was required with anticipated future space needs included. The new Police Station will have general office space, supply and records storage space, Patrol Sergeant and Shift supervisor offices, a briefing/roll call meeting room, a kitchenette, a booking room, interview rooms, adult and juvenile holding rooms, report writing room, active sallyport bay required for general booking, one bay for cleaning/maintenance/vehicle evidence, a lunch/break room, a public lobby, a community room, men and women's locker rooms with toilets and showers, physical fitness room, staff restrooms, public restrooms, storage space, a multi-purpose training room, and mechanical/electrical/janitor rooms.

The initial costs associated with this new Police Station project including the needs assessment, site surveys, ground testing, station design, and current work by architects have been funded by asset forfeiture in previous years. 2022's design furtherance was funded by ARPA funds. Therefore, none of the design process expense has been funded by Atkinson residents. The Board of Selectmen is creating a Police Station Steering Committee in 2023 for further study to construct a new Police Station.

The Police Department has six marked cruisers, three unmarked cruisers, and one motorcycle. In the 2023 warrant article the Police Department is requesting to replace two of the oldest/high mileage vehicles. The Police Department maintains alternating years of replacement with two replacements one year, and one replacement the next. In 2022, the Police Department did not make a request for the replacement of vehicles as there was a delay in receiving one of the cruisers that was approved in 2021. However, the Police Chief indicated that as the Police Department continues to grow, in order to meet the needs of the growing population, there will be a need for more vehicles in the future.

Staffing

The Atkinson Police Department has eight full-time officers, and seven part-time officers, consisting of a part-time Police Chief, a Captain, a Sergeant, and a Dispatcher.

Police Activity and Calls for Service

Table 1 provides a breakdown of the Atkinson Police Department's annual police activity related to arrests, crimes, and incidents. In 2021, the Police Department had 12,150 calls for service. Since 2019, the Atkinson Police Department has seen an increase in the number of calls for service and has identified a need for more staff in

order to accommodate the growing demand. In 2021, compared to other years and incidents, the crime activity that increased the most was breaking and entering vehicles. There was a

Table 1: Police Department Statistics Source: Atkinson Annual Town Report					
Activity	2017	2018	2019	2020	2021
Drug Overdose	-	2	1	1	2
Drug/Narcotic Violations	20	17	14	8	6
Drug Equipment Violations	7	11	10	8	6
Kidnapping/Abduction	0	1	0	0	2
Rape	0	0	0	0	0
Sex Crimes	3	2	1	0	2
Sexual Assault	-	0	1	0	2
Motor Vehicle Theft	1	0	3	1	2
Stolen Property Offenses	1	1	2	3	3
Domestic	13	42	30	28	17
Aggravated Assault	1	1	0	0	1
Simple Assault	5	12	7	3	6
Intimidation	3	3	0	0	0
Driving Under the Influence	16	17	20	13	15
Disorderly Conduct	6	4	0	0	1
Arson	0	0	0	0	0
Burglary/Breaking & Entering	5	4	14	1	1
Theft from Building/Vehicle	15	15	12	11	18
Destruction/Damage/Vandalism of Property	6	10	13	11	11
Bad Check	1	1	1	0	1
Credit Card/Automatic Teller Fraud	2	2	2	0	1
Impersonation	1	0	2	0	0
Identify Theft	0	11	20	37	25
Hacking/Computer Invasion	0	4	2	3	1
Counterfeiting/Forgery	2	1	3	0	2
Shoplifting	0	0	1	0	0
All Other Larceny	7	9	18	10	11
Animal Cruelty	0	0	0	0	1
All Other Offenses	59	52	61	59	70
Total	192	222	245	197	207
Arrests	85	100	100	88	97
Calls for Service	7,346	6,934	9,113	12,787	12,150

slight decrease in calls for service from 2020 to 2021 (5%), and a 10% increase in the number of arrests made.

Police Department Programs

The Atkinson Police Department provides a variety of community services including:

- George Charitable Foundation (educate school children about substance abuse) officers trained in L.E.A.D. (Law Enforcement Against Drugs) direct these efforts,
- Participating member of the Timberlane Regional School District School Safety Committee,
- Implementing A.L.I.C.E (Alert, Lockdown, Inform, Counter, Evacuate) in schools districtwide,
- Participating member of the Atkinson Academy Emergency Management Team,
- Assists Community Center and Recreation Departments Summer “Sun n’ Fun” program with staff training.

Additionally, the Atkinson Police Department performs services for the elderly including giving presentations at the Community Center on Fraud/Scam prevention along with other law enforcement experts, including USPS Postal Inspectors. The Department also conducts home checks when requested by residents who are going away, and any other locations that the Department receives requests or information about where additional visits are needed. Some examples include if someone is hospitalized, a family concerned about a senior parent wandering from the home, etc.

Atkinson Police Department Emergency Notification System

The Atkinson Police Department has their own dispatch that corresponds to lobby hours: Monday through Friday 8am to 4pm. The town has a dispatch contract with Plaistow to provide dispatch services during off hours, weekends, and holidays. Plaistow also is the dispatcher for the Fire Department.

Recent Projects

The Town’s first emergency call box was installed at Woodlock Park in coordination with the Recreation Department. The call box includes a direct line to the Atkinson Police Department, and an on-board AED (Automated External Defibrillator) that was donated by Trinity Ambulance. There is also a camera at the top of this box that is monitored at the Police Station. The Atkinson Police Department is currently working to install an emergency call box at Collins Park as well.

In 2021, the Atkinson Police Department joined the Southern NH Special Operations Unit (SNHSOU). This consists of highly trained officers from twelve area departments that deal with high-risk or unusual incidents such as Active Shooter Responses, Hostage Situations, Barricaded

Subjects that may injure themselves or others, and High-Risk Warrant Service. Members are trained in special tactics that attempt to resolve incidents without harm to innocent persons, officers, or suspects. The unit consists of tactical officers, negotiators, medics, and a mental health clinician. There is one Atkinson Police Officer that is registered as a member of the SNHSOU.

Funding

The Town of Atkinson currently receives its funds for various specialty equipment and training through Asset Forfeiture. In 2021, these funds from Asset Forfeiture were used to: upgrade the Taser technology, purchase and train in state-of-the-art photography gear, and renewal of the lease for the Police Motorcycle. The fund also allowed for the training of an officer on multiple levels of crash reconstruction.

Future Needs / Projects

The national and New Hampshire industry standard for full time officers per thousand residents is 2.0 to 2.1. By that standard, and with Atkinson's current population exceeding 7,000 residents, the Police Chief indicated that the Department should have fourteen plus officers. It is also likely that an incremental increase in staff will be needed as the town continues to grow.

ATKINSON FIRE & EMERGENCY SERVICES

The Atkinson Fire Department is located at 1 Academy Avenue. The Atkinson Fire Station was constructed at this location in 2000 when land was purchased, as well as to expand the Atkinson Cemetery and provide space for the Town



Garage. As identified in the November 2020 Fire Service Resource and Staffing Study, the Fire Station has a general office for administrative purposes, a gear room, an eating area, a Chief's office, a training room, a radio room, a day room, a bunk room, a kitchen, officer's office, clean room, and a work room. The Fire Station also acts as an Emergency Management Communication Center when necessary. The Fire Station needs significant infrastructure upgrades as it is not currently set up to effectively accommodate department needs.

The Department manages a vehicle fleet that consists of: one 2008 F-450 Ambulance, one Utility – 1 1994 F-350, one Engine – 1 1993 Spartan Pump, one Engine – 2 2005 HME Ladder,

one Engine – 3 2016 HME Pump, one Tanker 1 – 2013 Kenworth T370, one Squad 1 - 2019 Ford F-550, and one 2011 Ford Expedition (Command Car). Engine 1 is due for replacement, and in 2023 a warrant article will be put forward to request its replacement. If approved, the delivery of equipment can take up to three years.

Staffing

The Atkinson Fire Department maintains a call department (support staff) that consists of twenty-four to twenty-eight personnel. The Atkinson Fire Department has one part-time Fire Chief (26 hours), one Assistant Chief, one Deputy Chief of Fire Prevention, one Deputy Chief of Operations, one Director of Emergency Medical Services, one Captain, three Lieutenants, one part-time Administrative Assistant (28 hours), four full-time firefighters, one Fire Inspector, one Fire Warden, six Deputy Wardens, and one Firefighter Association President. Besides the four full-time firefighters, the part-time Fire Chief, and the part-time Administrative Assistant, all other positions are paid on call (part-time) with no set schedules. The Fire Chief also serves as the Emergency Management Director, and leads the development, implementation, and update of the town's Hazard Mitigation Plan. The four full-time Firefighters have a schedule of four days on and four days off from 6am – 6pm, but from 6pm – 10pm there is no guaranteed coverage.

The Atkinson Firefighter Association is made up of all members of the Fire Department that hold meetings and fundraising efforts to support equipment replacement and upgrade. Prior to 2018, the Firefighter Association oversaw the Atkinson Fire Department. The Atkinson Fire Department is now overseen by the Board of Selectmen.

In 2021, the Fire Department began a recruitment campaign for new members as approximately one third of the fire department call force was at or near retirement. Since the recruitment campaign started the call department is sufficient as of 2022, but there is still room for improvement. The Atkinson Fire Department is still recruiting qualified personnel as more staffing needs is required in the near future due to community growth and the fact that the community is aging.

Emergency Medical Services

The Town of Atkinson Fire Department has a contract with Trinity Ambulance, a private ambulance service stationed at the 1 Academy Avenue Fire Station providing 24/7 services. Trinity Ambulance provides emergency transport service to several area towns including Atkinson, Hampstead, Danville, Newton, Plaistow, and Sandown. A Trinity Ambulance vehicle is located at the Atkinson Fire Department and another is located at the Hampstead Fire Department. Trinity Ambulance Services provides emergency and non-emergency ambulance and wheelchair van transportation to numerous communities throughout the Greater Merrimack Valley and Southern New Hampshire. Trinity is currently contracted with Atkinson and other communities to also provide emergency 911 service.

Calls for Service and Response Times

The Atkinson Fire Department follows the fire and emergency response time standards set by the National Fire Protection Association (NFPA). Calls for service over the last six years are shown in the Table 2 and are broken out by fire and medical calls.

In general, there has been an increase in the number of calls for service over the last six years. As identified in the 2021 Annual Town Report, the Atkinson Fire Chief identified that the community has had significant growth within the last five years. With this continued growth, there are additional strains on the services that the Fire Department provides as calls for services increase. The increase not only pertains to emergency response services, but also to administrative services including permitting, inspections, and other service calls.

Table 2: Fire Department Responses to Calls for Service						
Source: Atkinson Annual Town Reports						
Call Type	2016	2017	2018	2019	2020	2021
Medical Aid	359	371	420	436	421	438
Motor Vehicle Accident	47	31	40	26	25	36
Building Fire	4	7	5	3	5	2
Vehicle Fires	2	0	1	1	4	1
Chimney Fire	1	2	2	2	0	1
Alarm Activations	107	9	90	98	94	97
C/O Activations	17	12	6	14	19	9
Smoke Investigation	6	15	5	8	25	12
Power Lines down	9	10	5	8	2	4
Public Assist	41	26	38	27	33	35
Grass/Woods Fire	6	2	1	3	2	4
Illegal Burning & Misc.	6	9	10	11	15	17
Hazardous Material	1	7	6	7	3	
Mutual Aid	25 (3 received & 22 given)	33 (1 received & 32 given)	24 (3 received & 21 given)	34 (4 received & 30 given)	25 (4 received & 21 given)	58 (7 received & 51 given)
Total AFD Responses	628	616	650	659	653	710
EMS Services Responses:						
Patients Treated	450	430	487	457	480	525
Total Ambulance Transports	284	290	328	280	284	319

Dispatching Services

Plaistow Police Department dispatches for the Atkinson Fire Department and others. Atkinson Police provides its own dispatch services during lobby hours. If a fire is reported, Atkinson will also notify surrounding communities as they have an Automatic Mutual Aid agreement in place.

Water for Fire Suppression

In 2022, the Atkinson Fire Department conducted a Water Supply Study. The Town of Atkinson is served by Hampstead Area Water Company (HAWC). HAWC is a privately owned public utilities company that provides drinking water and fire protection water to some areas of the town. Areas that are not supplied by HAWC must rely on alternate sources of water for fire protection. The HAWC water provided to the Town of Atkinson comes from groundwater wells operated by HAWC either located within Atkinson, or from wells located in neighboring communities depending on the demand for water at the time of use. The Water Supply Study notes that this water system was originally designed to provide clean drinking water to residents, not necessarily to provide fire suppression in the form of pressurized hydrants. In 2022, HAWC supplied water to 82 fire hydrants throughout the town using a gridded distribution system with various sized water mains, pump stations, and a 1-million-gallon elevated storage tank. It was identified in the Water Study that this water system appears to meet the Town's demand for drinking water in the area that it serves. However, the water system does not appear to meet the needed fire flow demands for many of the commercial properties in Town and some of the multi-family residential dwelling complexes.

Department/Building Needs and Future Projects

Recent Projects – As mentioned above a recent water study was completed in 2022. The water study covers all firefighter water supply need areas throughout town including existing dry hydrants and other infrastructure. The Water Study also identifies that the town's population growth is influencing the Fire Department needs and services.

A recommendation identified in the 2020 Fire Service and Resource Staffing Study Report suggests that the Atkinson Fire Department work toward reducing their insurance rating. Currently, the Town of Atkinson has an Insurance Service Office (ISO) rating of 06/6X. ISO is an independent risk company that services insurance companies, communities, fire departments, insurance regulators, and others by providing information about the risk. ISO analyzes the relevant data and assigns a Public Protection Classification (PPC) – a number from 1 to 10. A rating of 1 is adequate and a rating of 10 is insufficient, and Atkinson received a Class 6 rating. This class rating places the community in the middle of having a commendable fire suppression program for its size. The Fire Service and Resource Staffing Study Report recommended that the Town ISO rating goal should be to move the Department from a Class 6 organization to Class 5 over the next five years, and ultimately, a Class 4 rating over the next ten years. In the fall of 2023, the Atkinson Fire Department will be undergoing a reevaluation. For

more information on the ISO and PPC ratings, please see the 2020 Fire Service and Resource Staffing Study Report completed by Municipal Resources Inc. (MRI).

Future Needs – The Board of Selectmen has requested that the Fire Chief produce a Staffing Plan. The Fire Department currently has a staffing need for 24/7 coverage in the station. Additionally, the Fire Department currently struggles to get qualified staff especially during day shifts. This will also be addressed in a future Staffing Plan. A strategic plan has not yet been developed as this request is in its early stages. The Fire Service and Resource Staffing Study Report identified that, *“the size of the Atkinson Fire Department from a call personnel perspective is not going to be adequate to handle the expected emergency workload”*. This study also identified aspects of the community that necessitate the need for increased staffing for the Atkinson Fire Department which includes community growth, community aging, missed calls, extended response times, and reduced staffing.

The existing Capital Reserve Plan needs to be updated to reflect current apparatus.

Looking ten years into the future, the Fire Station facility will also need updating and renovating. While a 2021 Primex Report includes some recommendations for improvements, a separate building needs assessment for the Fire Station is still needed. The Fire Station will also need additional space as the existing station is not set up for 24/7 services. Currently, Trinity Ambulance also occupies space in the facility. The Primex Report identified the following facility updates needed:

- Upgrade the Protective Gear Storage Room,
- Obtain and install a personal protective equipment gear dryer,
- Obtain and install a traditional washer and dryer at the station to be used for cleaning clothing, other than turnout gear,
- Relocate the ice machine out of the garage/apparatus bay,
- Eliminate the slip, trip, and fall hazards created by the protruding floor drains in the center of the apparatus bays,
- Eliminate the slip, trip, and fall hazards created by the plywood ramps at entry to the apparatus bays,
- Install wire cage guards over the sprinkler heads that are exposed and easily contacted in the areas of the mezzanine and in the attic areas adjacent to the sleeping quarters.
- Remove and/or discard old, unwanted items for the mezzanine area, both above and below, to allow for better access to needed items and to improve ergonomics when accessing items stored in these areas,
- Improve storage area.

The Fire Department also has a need for better communication capabilities such as radio and dispatch. The west side of town experiences a coverage issue and the Fire Chief is trying to create a Capital Reserve Plan to address these needs.

TOWN HALL

The Atkinson Town Hall is located at 19 Academy Avenue and was built in 1985. The Town Hall replaced the former Atkinson Grange Hall that was built in 1913, which previously housed the



Atkinson Town Hall. When the new Town Hall facility was built in 1985, it was projected to adequately provide public services for a maximum population of 10,000 residents. The building houses offices for Atkinson's town services including Atkinson Community Television, Assessing, Building/Land Use Department, Tax Collector, Town Administration, Town Clerk, and Financial Management. The Town Hall currently houses six full time employees and nine part-time employees and several elected and appointed officials. The Town Hall is also where local boards and committees conduct their meetings including the Board of Selectmen, Planning Board, Zoning Board, and others.

The 2020 Building Needs Assessment identified that the condition of the Town Hall was rated as "poor". When considering how well this facility would meet the needs of Atkinson's population over the next decade, the Town Hall condition received the same "poor" rating. In addition to the town department offices, the Town Hall has two public restrooms, three storage closets, a small kitchen, and break room. The Board of Selectmen's Office also serves as a meeting room for other boards and includes the Atkinson Cable TV broadcasting room and accompanying video equipment. The Board of Selectmen's Office and meeting room can be divided into two meeting rooms.

The iconic pond located in front of the Town Hall adds to the unique character of the town. In winter, the pond is often utilized for ice skating, and in the autumn, it provides habitat for migratory birds. This pond is also utilized year-round by the Atkinson Fire Department as a fire pond.

Future Needs

The Town Administrator identified the need for a centralized air system, a back-up generator, and a reconfiguration of offices within the facility.

PUBLIC WORKS DEPARTMENT

In 2023, the Town of Atkinson consolidated to a Department of Public Works which includes the Care of Grounds personnel, the Highway Department, and the Recycling and Brush Center. These departments are overseen by the Department of Public Works Director.

Highway Department

Atkinson's Highway Department is located at the Town Garage at 1B Academy Avenue behind the Fire Station. The Town Garage is a 60-foot by 40-foot garage facility with a one-bay garage door and a side pedestrian entrance. The garage has a mezzanine/loft for a small 6-foot by 20-foot office for the Director of Public Works, as well as some space that is currently utilized for storage. The Town Garage also has one half bathroom. Located adjacent to the Town Garage building is a road salt building.

Table 3: Highway Department Vehicle Fleet

Vehicle Type	#
2015 Ford F550 Dump Truck	1
2017 Ford F550 Dump Truck	1
2015 CAT 415F Backhoe	1
2022 Chevy 2500 pickup	1
Plows	3
Wings	2
Sanders	2

The Highway Department is responsible for maintaining and overseeing the infrastructure of the town including all town roads, town-owned buildings, the Dow Common, Atkinson parks, and Atkinson's stormwater infrastructure. The Town of Atkinson hires a private contractor to mow recreational facilities and open spaces. The Highway Department owns a vehicle fleet and equipment as shown in Table 3.

Staffing

The Department has three employees, a Road Agent and two Highway Laborers. These three positions are full time from 6:30am – 5pm Monday through Thursday as well as overtime during the winter season.

Roads

The Highway Department maintains over 60 miles of roadway in Atkinson. The Department also maintains and updates the "*Atkinson Road System Action Plan*" which tracks road maintenance and improvement projects. This document was originally created in 1999 by the Town Engineer and Road Agent and was last updated in 2008. It served as a tool for the planning of prioritized annual spending made by the Town for capital improvements to Class V public streets through 2019. In 2020, the Town Engineer and Road Agent began the implementation of a Pavement Management Plan, included in the Atkinson Road System Action Plan, as an extended Action Plan for 2021 to 2029. During the 2022 construction season, 4.05 miles out of the 4.38 miles of

roadway scheduled for maintenance were completed due to the demands on the budget because of increased cost of gas, materials, etc.

The Highway Department also completes drainage work such as installing new catch basins and culverts; replacing and cleaning of catch basins and culverts, headwalls, shoulder gravel, tree work, ditch work, guardrail replacement; and improving grades to ensure compliance with the Town's Municipal Separate Storm Sewer System Program (MS4). This data is collected by the Road Agent and provided to the Town Administrator who completes the MS4 documentation to submit to the U.S. Environmental Protection Agency (EPA). The Road Agent is also trained to follow the New Hampshire Department of Environmental Services Green Sno-Pro Salt Reduction Program practices to reduce the environmental impacts of road salt usage. This includes the calibration of all equipment and keeping consistent records of salt applications. The Road Agent intends to have the two Highway Laborers take these courses as well.

Future Needs

The existing Town Garage does not sufficiently meet the needs of the Highway Department. The facility does not have a break room and only has one bathroom. With the Department's recent transition to becoming a Department of Public Works, investments in new equipment are quickly resulting in additional space needs for this facility.

Municipal Waste

Brush And Recycling Center

The Town of Atkinson's Brush and Recycling Center is located on Woodlock Park Lane, off Westside Drive, opposite the tennis courts. Prior to the creation of the Brush and Recycling Center, the Town had a municipal dump that operated before 1970 and was located on Meditation Lane. The Brush and Recycling Center is open on Saturdays and Sundays from 9am to 4pm. The Brush and Recycling Center is a gated gravel piece of land with two storage trailers (one utilized by the baseball field for netting equipment and the other stores town totter carts and trash bins). There are also three to four dumpsters and a deposit pile for brush and leaves. There is currently no structure present except an unused, condemned 4-foot by 6-foot shed. One Department of Public Works staff person works at the Brush and Recycling Center. The Brush and Recycling Center is for Atkinson residents only and requires a permit for use. From 2021-2022, Atkinson residents generated 330 tons of brush materials. The Town has a contract with Casella Waste Systems to pick up the recycling material and collected trash in the Brush and Recycling Center's dumpsters.

Curbside Waste Pick-up Services

The Town of Atkinson has curbside waste pickup through a contract with a private company. In 2018, the Town partnered with Casella Waste Systems for this service. Atkinson residents are provided one trash and one recycling cart. Pickup of household trash occurs every week, and

recycling every other week, Tuesday through Thursday. Once Casella Waste Systems picks up the household trash it is hauled to the Raymond Transfer Station located in Raymond, NH.

Other Municipal Waste Services

In addition to curbside pick-up and the Brush and Recycling Center, the Town also offers Bulk Waste Collection, which occurs three times a year. Residents can submit a bulk pick-up form and payment to the Town Administration Office at the Town Hall if the volume of trash exceeds that of the average household trash size. For residents who cannot bring their waste to the Brush and Recycling Center, or have it collected as bulk waste, Atkinson residents may use the Raymond Transfer Station to drop off their waste.

In collaboration with surrounding communities, Atkinson participates in a Household Hazardous Waste Collection Program. These Household Hazardous Waste (HHW) events occur twice a year and Atkinson residents are limited to ten gallons or equivalent of household waste. Proof of Atkinson residency is required at these events. The Household Hazardous Waste events are hosted in a different community each year. These events are town-coordinated and managed, and some funding is received through the State of New Hampshire. Some of the items acceptable to bring to a HHW Collection include the following:

- *Kitchen/bathroom Waste* - Aerosol Cans, bug sprays, floor care products, metal polish, furniture polish, oven cleaner, bathroom cleaners tile cleaners, disinfectants, batteries
- *Garage/shop Waste* - old gas, gas/oil mix, brake fluid, auto repair products, transmission fluid, other oils/cleaners, paints (oil based only), paint thinner, paint stripper, varnish, antifreeze
- *Garden/Misc. Waste* - chemical fertilizer, fungicides, rat poison, artist's paints, fiberglass epoxy, gun cleaning solvents, moth balls, pool chemicals, photographic chemicals, fluorescent bulbs

Data is collected at each of these Household Hazardous Waste (HHW) events not by the total tonnage collected by town, but by the number of drop-offs per driver's license. Table 4 shows the most recent data from the HHW event in June 2022 and shows Atkinson's usage of this program in comparison to surrounding communities. In June 2022, a total of 231 residents of the six towns listed in Table 4 utilized the HHW event and 14% of participants were Atkinson residents.

Table 4: June 2022 Household Hazardous Waste Event Data		
Town	Number of Cars	% of Total Cars
Atkinson	33	14%
Chester	84	36%
Danville	19	8%
Hampstead	41	18%
Kingston	30	13%
Plaistow	24	10%
Totals	231	100%

Future Needs/Projects

The Department of Public Works Director indicated that an employee shack is needed at the Brush and Recycling Center (with air conditioning) for staff to have a designated, covered place to check in residents for waste drop-offs. Additionally, regrading of the gravel land was identified as a need, as well as new signage for the Brush and Recycling Center.

CEMETERY DEPARTMENT

The Town of Atkinson has one cemetery that is organized into 6 sections and another which is under development. The Cemetery has an original entrance on Main Street, into Section I which was created in the late 1700's. Section II and III were added during the 1800's and through the 1900's. Then, a section known as "the New Cemetery" began behind the Kimball House through the early half of the 1900's. Finally, during the 1990's the two areas were connected by the purchase of land and the opening of Section IV, which lies behind the Fire Station and Highway Garage. Section V was developed behind Section III in the early 2000's. The next portion will be referred to as Section VI when it is completed in 2023, and that will utilize all the land that the Town has established as a cemetery up until this date. Burials continue today in Section III, IV, V, and the New Cemetery (Section VI). There are two convenient access gates located directly behind the Kimball Library building on the land donated by the Kimball Family in 1907.

Staffing

The Cemetery is managed by three elected Cemetery Trustees. The Cemetery has one paid employee (Care of Grounds Personnel) who works seasonally from April through December as needed to caretake the property, as well as arrange for and supervise all burial activities. The Care of Grounds Personnel currently has been offered full time, year-round employment in the Town through assignments to other departments during the winter months.

Future Needs and Projects

The Cemetery Department has an identified need for more cemetery space. Currently, there is a small undeveloped section in the back of the Atkinson Cemetery waiting to be loamed and seeded after years of bringing in in fill to this parcel. Once complete, this parcel will complete the expansion of the Atkinson Cemetery and will accommodate an additional 200 graves. This land would ideally be dry land without bedrock near its surface. As of 2022, there are still openings in Atkinson Cemetery section IV and V. However, when looking at the projected need for cemetery space, the Town should ensure additional land is secured to provide future Atkinson generations with burial space.

SCHOOLS

Atkinson students are part of the Timberlane Regional School District (SAU 106). There is one elementary school located in Atkinson (Atkinson Academy) and the Timberlane Regional School is in Plaistow, NH. The core capacity of the Atkinson Academy facility (library, gymnasium, cafeteria) and the facility's classroom capacity can be seen in Table 5.

Table 5: Atkinson Academy Capacities	
Academy Facilities	Capacity #
Library	Approx. 60-70
Gym	285
Cafe	185
Grades K and 1	20
Grades 2 & 3	23
Grades 4 & 5	26

The schools include:

Atkinson Academy

Atkinson Academy was founded in 1787, but the original school burned down in 1802. In 1803, it was rebuilt. Today, Atkinson Academy is located at 17 Academy Avenue and is known as the oldest standing co-ed school in the nation. Atkinson Academy provides education to pre-kindergarten through fifth grade. Though this structure was renovated many times since the 1800's, some of the most recent major additions were constructed in 2001, which included a library, gym, administrative offices, a nurse's office, and ground floor classrooms. In 2007, kindergarten classes were added. Currently, Atkinson Academy has twenty-four full-size classrooms, eleven smaller rooms/offices (guidance, nurse, occupational therapy, etc.), one recreation field that includes a baseball diamond and a large playground with various pieces, six sets of boy/girl bathrooms, and five adult bathrooms. As of June 2022, student enrollment for Atkinson Academy was 344 students according to the Timberlane Regional School District 2022 Enrollment Report.

Timberlane Regional School

The Timberlane Regional School District serves the communities of Atkinson, Plaistow, Danville, and Sandown. Each of the other towns also support their own local elementary school and send their middle school and high school students to the regional middle and high school in Plaistow. The District also offers a central preschool, Timberlane Learning Center, that is located in Sandown, as well as other individual preschool programs at each local elementary school in the region. Timberlane Regional School also oversees and maintains the Timberlane Performing Arts Center located in Plaistow which is a state music and drama facility.

Funding

The Town provides funds to the Timberlane School District by paying for its proportional share based on the number of Atkinson students enrolled. Starting in 1998, the Town of Atkinson instituted School Impact Fees in accordance with state RSA's to help pay for required capital improvements. These impact fees can also be used to pay for Atkinson Academy improvements or to help pay Atkinson's share to the Timberlane Regional School District.

Future Needs/Projects

Atkinson Academy has identified that the 1803 portion of the building will require repairs and renovations soon. The rest of the building will need regular maintenance and upkeep projects as expected for a school facility. Although the school is fully staffed as of 2022, there may be a need for an additional teacher or other staff members in the future if the student population grows or changes.

KIMBALL LIBRARY

Atkinson's Public Library, the Kimball Library, is located at 5 Academy Avenue. The original Kimball Library was located at 3 Academy Avenue which is now the Atkinson Historical Society. In 1977, the town voted to turn the Kimball House into a museum. The original Kimball Library was referred to as the Kimball House because in 1907 this structure served as the home of the first Atkinson librarian and her family. The current Kimball Library was constructed in 2008 and was designed to incorporate energy efficient construction methods. The existing building is 11,400 square feet and has an average of 32,000 visitors per year. The Kimball Library acts as a key community space for Atkinson residents of all ages and backgrounds.

The Kimball Library building consists of a lobby entrance, a large meeting room that holds 105 people with an attached kitchen, and a main circulation desk area where the adult and teen collections are located. Behind the circulation desk is a 10-foot by 12-foot glass office for the Library Director. There are three conference rooms. One has capacity for ten people, one for six people, and one for four people. There is a staff bathroom with an attached staff work room and break room, which also houses the mechanical equipment. There is a children's program room and there are two children's bathrooms. There are also two public bathrooms in the main lobby area. Lastly, there is an outdoor venue behind the Library that consists of a courtyard/amphitheater which is utilized for summer concerts, cookouts, and summer programming. The 2020 Building Needs Assessment identified that the Kimball Library received a rating of "poor condition" due to HVAC, façade, and interior deficiencies.

Programs

The Kimball Library provides a variety of educational, informational, and recreational programs for adults. This includes speakers, performances, classes, craft and exercise programs, and book, film, and Mah Jongg clubs. The Kimball Library provides youth programming including a robust summer reading program, story times, Mother Goose on the Loose, STEAM and coding classes, performances, book clubs for children, and various craft programs. The Kimball Library also provides teen programs including interactive movie nights, monthly book discussions, and teen nights.

Table 6: Library Statistics 2022	
Circulation (total)	50,542 items
Adult and Teen	24,537
Children's	14,351
In 20Digital	11,654
Total (physical) items in collection	37,866
Items added	2,562
Items withdrawn	4,413
Library Card Holders as of October 2022	4,256

In 2022, 8,606 adults, teens and children attended over 708 programs including Summer in the Courtyard Performances and NH Humanities programs. The participants in these programs, events, and daily library use indicate that the Kimball Library is an important town service.

Services

In 2021, the Kimball Library launched the Aspen Discovery Library in collaboration with Southern NH Library Cooperative which includes the neighboring communities of Plaistow and Sandown. Much like the State of New Hampshire's Interlibrary Loan Program, the Southern NH Library Cooperative provides access to over 130,000 titles to Atkinson, Sandown, and Plaistow residents by combining their inventories and providing access to residents in each of these three communities. This program is provided through a non-profit organization, the Kimi Nicholas Center. This organization works with disabled community members and their aids to deliver requested books amongst the libraries of Atkinson, Sandown, and Plaistow. The Kimball Library also participates in the Interlibrary Loan Program which allows all New Hampshire residents to request books and other content online to be delivered to their requested library. The Kimball Library also provides a "Library of Things" program, provides one on one technical support to residents, notary services, passport services, and homebound book deliveries in cooperation with the Elder Services Department.

Collections

The Kimball Library also maintains a diverse circulating collection for all ages including books, magazines, newspaper subscriptions, audiobooks, and DVD's and Blu-rays. A wide variety of e-content both in print and audio formats, digital magazines and newspapers, and music and films to stream are available. The Kimball Library offers video games, Launchpads, and themed backpacks for children. Additionally, the Library provides WiFi, a specialized AWE kids computer, Hotspots, and a "Library of Things" including snowshoes, a telescope, games, and a radon detector. The Kimball Library maintains an inventory of computers, printers, and laptops, and provides access to a fax machine, a copier/scanner as well as items needed for conferences such as microphones and projection equipment.

Staffing

The Library has four full-time staff (some staff serve in multiple positions) including a Library Director, Assistant Director/ Manager of Youth Services, Head of Cataloging/Adult Programming, and a Children's Librarian. There are also eight part-time positions including Pages, Library Assistants, and Children's Services Personnel.

Future Needs/Projects

Recent improvements to the Library include the re-siding of the entire building as it was discovered that the original siding was not installed correctly when the building was built in 2008. With the number of programs and events the Kimball Library hosts, the Library Director indicated that the facility has storage space needs.

Staffing – Currently, the Library is not open all day on Saturday but there is an emerging demand for greater access. The Kimball Library would also like to provide an additional service to Atkinson residents by adding a Reference Librarian.

Building/Facility Needs – The mechanical equipment is aging and there is not a source of funding provided for the repair or replacement of this equipment. Carpets will need to be replaced. Additionally, through a recent Community Satisfaction Survey administered by the Kimball Library, residents state that they would attend more programs and events if more parking were provided. Therefore, the Kimball Library has identified a needed parking lot expansion.

Future Project – The Kimball Library is collaborating with the Energy Committee to install solar panels when the library's roof needs to be replaced, however, this project is still in the research phase.

RECREATION DEPARTMENT

Atkinson's Recreation Department Office is in the Community Center at 4 Main Street. The Recreation Department provides many services to Atkinson residents including, but not limited to:

- A diverse cultural community and special event activities for all family members of all ages and abilities
- Well-maintained parks
- Rental of community building recreation facilities, and playing fields
- Weekly, biweekly, and monthly programs and activities for adults and seniors of all abilities
- Organize day trips for adults and seniors
- 6-week Youth Summer program Sun 'n Fun

Staffing

The Recreation Department has a full-time Director that also serves as the Director of Elder Services for Atkinson. There are also 10-12 seasonal part-time employees hired in the summer for the children's summer program, Sun n' Fun. This includes one Sun 'n Fun Director, one Assistant Director, and approximately 8-10 counselors. The volunteer 5-member Recreation Commission, which represents the community at large, works with the Recreation Director to meet the community's recreation needs.

Facilities

The Recreation Department and Recreation Commission manages the following facilities:

Woodlock Park

Woodlock Park is located at 80 Woodlock Park Lane on the west side of town. This town park includes a pavilion, public restrooms, four baseball fields, two tennis courts (including four lined pickleball courts), two soccer fields, a playground, and the Woodlock Fit Trail System located behind the park on the Chadwick Town Forest Land.

Collins Park

Collins Park is located at 17 East Road. Collins Park consists of a lacrosse field, two multi-purpose fields, a walking path around the perimeter of playing fields, a small parking lot, and a portable restroom, which could be placed by one of the sports leagues.

Atkinson Community Center

Atkinson's Community Center is located at 4 Main Street and is home to the Departments of Recreation, Elder Services and Supervisors of the Checklist. The Center is also home to many senior programs, seasonal luncheons, and hosts many civic organization meetings and fundraisers.

The Community Center building was formally the Trinity House Camp which the Town of Atkinson purchased along with the fifty-acre parcel in 1985. The land was originally sold to the Society for the Protection of New Hampshire Forests and the parcel was subdivided into two lots. The Trinity Pond is located on the Community Center Property where the Fishing Derby has been held for many years sponsored by the Atkinson Recreation Department. One of the parcels included the Trinity House and five acres of land which the Town converted into the Community Center. The rest of the land (forty-five acres) that surrounds the Community Center is owned by the Society for the Protection of New Hampshire Forests. The original Trinity House remains a part of the Community Center today. The Trinity House has three floors, and an attached single-story banquet room that was existing when the town purchased the property in 1985 but was later renovated. The second and third floors of the Community Center are utilized for storage due to the handicap inaccessibility of the building. Therefore, only the first floor of the Community Center is utilized for the public.

The first floor, which is open to the public, includes the banquet room, three meeting rooms, two bathrooms, a kitchen, storage area for tables/chairs, the Recreation Director's Office, and the Elder Services Office. The banquet room has a 120-person capacity and is available for rent to the public for fundraising events, private parties, and meetings. The Community Center is heavily utilized as a gathering space. According to the 2020 Building Needs Assessment, the Community Center received a rating of fair condition defined as *"subject to wear but is still in serviceable and functioning condition"*. Looking out to the next decade at the time of this report (2020-2030), the Community Center was rated as being in "poor condition" which is defined as *"subjected to hard or long-term wear. Nearing the end of its useful or serviceable life"*.

Maintenance

The Care of Grounds personnel maintains and supervises the playing fields and trash pickups. The Town of Atkinson hires a private contractor that mows the town recreation facilities. The Recreation Department and Recreation Commission send requests to the Care of Grounds personnel to notify them when facilities need to be mowed or to address other maintenance requirements. The Recreation Department's budget supports maintaining playground structures, tennis courts, a pavilion, restrooms, and the Fit Trail.

Recent and Future Needs/Projects

Recent Projects – In 2020, the Atkinson Community Center installed a new entry system called “Kisi”. It is a cloud-based access control system and acts as a security system for the building. The Kisi system can be monitored remotely and doesn't need keys picked up from Town Hall. This system allows the Recreation Director to program for locking and unlocking of the Community Center's main entry door remotely for renters of the facility's space.

The Community Center has two small decks, one of which is located off the banquet room and one located in the front of the building with steps (which both serve as emergency exits). In 2022, these two decks were reconstructed in the same footprint in order to stabilize and replace the former weathered decking. The main entrance two-way wheelchair ramp, which was done as an Eagle Scout project, needs to be reconstructed and this project is currently included in the ARPA funds project.

Future Needs - The Recreation Department has identified a need to resurface the tennis courts at Woodlock Park, paving the parking area, expanding playing fields, adding a new basketball court, and there have been discussions about installing a temporary ice-skating rink at Woodlock Park. None of these projects are underway, and the Recreation Department is currently requesting ARPA funds.

As identified in the 2020 Building Needs Assessment, the fire alarm system in the Community Center was updated in 2020. The facility still has an anticipated need to mill, overlay, seal, and stripe the asphalt parking.

The Community Center needs more space to accommodate the increased usage by elder residents and to meet the rental demand for events which has increased over the years. The Recreation Director would like to construct a new Community Center that is entirely ADA accessible and complies with all related codes, but more research needs to be done on what the property could accommodate given the conservation easement on the five acres and given that the forty-five acres of the surrounding property is owned by the Society for the Protection of New Hampshire Forests. There may be possible restrictions. Additionally, there appears to be demand for a gymnasium to incorporate more sports programs. The deck railings of the pedestrian bridge on Trinity Pond needs replacement. In 2022, the Fishing Derby was held at

the Atkinson Town Hall Pond and is expected to be held there in 2023 as well until the railing on the pedestrian bridge on Trinity Pond is repaired.

For more information on recreation activities, programs, and facilities in Atkinson, visit the Recreation Profile of this Existing Conditions Report.

ELDER SERVICES DEPARTMENT

The Town of Atkinson maintains an Elder Services Department which is in the Atkinson Community Center. The Atkinson Elder Services Department provides complimentary transportation by appointment, lends a variety of donated medical equipment as needed, and acts as a link to information regarding helpful community resources. The Elder Services Department also offers Wellness Checks, reliable contractor's information, referral to Veterans Administration services, and works to collaborate with the Atkinson Recreation, Fire, and Police Departments. The mission of the Elder Services Department is to *"serve the needs of our senior citizens, be a resource for referrals to community resources, and provide safe and reliable transportation"*.

Staffing

The Elder Services Department staff consists of one Director of Elder Services, one Assistant Director, one Schedule Coordinator, and nine Drivers. The Director of Elder Services is a full-time position and also serves as the Town's Recreation Director.

Transportation Services

Atkinson's Elder Services Program maintains 5 vehicles to provide transportation to Atkinson seniors. To be eligible for these transportation services, it's required that the person be an Atkinson resident that is sixty years of age or older. The rides are free of charge and are available Monday through Friday between 8:00am to 5:00pm. The phone line to request a ride is staffed Monday-Friday from 8:30am-12:00 noon. This program for transportation services is funded by the town's annual operating budget and the five vehicles were funded by donations, which are managed by the Trustee of the Trust Fund. In 2021, the Atkinson Elder Services Transportation Vehicles provided 1,800 rides and travelled nearly 51,000 miles for medical appointment transportation, delivered library books through the Kimball Library homebound program, and delivered medical equipment rentals. The vehicles make trips specifically for elder services to medical appointments, prescription pickups, hair appointments, and grocery shopping for some eligible residents. The Elder Services Department vehicles include: two 2015 Toyota Venza, one 2017 Dodge Grand Caravan - wheelchair accessible minivan, one 2019 Toyota Rav4 Hybrid and the most recent addition, a 2022 Toyota Rav4-Hybrid.



Medical Equipment Services

Atkinson Elder Services lends out a variety of gifted medical equipment as needed free of charge to Atkinson residents.

UTILITIES

WATER AND WASTEWATER INFRASTRUCTURE

Water System

Atkinson's public water system is owned and operated by Hampstead Area Water Company (HAWC). As of December 2022, HAWC services 1,426 connections in Atkinson or about 3,565 people. This accounts for about half (49%) of the town's population. It should be noted that there is a small commercial sector included in this connection count. However, 90% or more of the HAWC customers in Atkinson are residential. The remainder of the town's population is served by private wells. The residents served by the public water system are generally located in the center and east side of town as well as a small area in the southeast side of town along the Plaistow town line (and near Bryant Woods Condominiums). The Hampstead Area Water Company also has 18 wells and 82 hydrants in Atkinson.

For a water system to be considered to have adequate water supplies, its supply capacity must be capable of meeting its maximum day demands. Water storage tanks are essential for ensuring adequate service pressure, meeting instantaneous water demands, providing required fire flow, and providing for short-term emergencies when the supply capacity may be out-of-service. The public water system is served by an atmospheric tank located at Page Farm (behind Winslow Drive), and a tank with booster pumps behind the HAWC shop at 54 Sawyer Ave. Water is also supplied through Southern New Hampshire Regional Water Project which delivers water from Manchester.

Sewage Disposal

The Town of Atkinson does not have a public sewer system; therefore, properties require individual on-site wastewater treatment systems. It should be noted that the Town of Atkinson has agreement with Manchester, New Hampshire to receive septic waters. However, most properties in town have these individual septic systems which are owned and maintained by the individual property owner. Once the septic gets pumped, the sewage goes to the Lawrence Public Sewer Facility for treatment.

Stormwater Management

The Town's stormwater collection system has evolved over time, as the town developed, and streets were constructed. This system encompasses many roads in town, and ranges from open culverts/swales to catch basins and associated piping. As road improvements have been made over the years, the Town has evaluated and addressed drainage improvements. The Highway Department and the Town Administrator's office are cooperatively working together to comply with the requirements of the Municipal Separate Storm Sewer System (MS4) permit issued on May 1, 2018 by the US Environmental Protection Agency (EPA). A Municipal Separate Storm Sewer System (MS4) includes the stormwater collection, conveyance, and outfall structures within a city or town. These structures include (but are not limited to) catch basins, drain manholes, culverts, stormwater basins, and swales. Along with approximately sixty other municipalities in NH, the Town of Atkinson's MS4 permit is regulated under the EPA Clean Water Act (CWA).

The Stormwater Management Program (SWMP) describes and details the activities and measures that will be implemented to meet the terms and conditions of the 2017 NH Small MS4 General Permit. The SWMP document should be updated and/or modified during the permit term as activities are modified, changed, or updated to meet permit conditions. The main elements of the SWMP are:

1. A public education program in order to affect public behavior causing stormwater pollution,
2. An opportunity for the public to participate and provide comments on the stormwater program,
3. A program to effectively find and eliminate illicit discharges within the MS4,
4. A program to effectively control construction site stormwater discharges to the MS4,
5. A program to ensure that stormwater from development projects entering the MS4 is adequately controlled by the construction of stormwater controls, and
6. A good housekeeping program to ensure that stormwater pollution sources on municipal properties and from municipal operations are minimized.

The Highway Department has undertaken an effort to reduce its road salt and sand use (which impacts water quality), perform annual ditch cleaning and culvert reinforcement, and, during

road replacement, ensure that the replacement of culverts are sized up to accommodate for increased precipitation and storm frequency.

ENERGY INFRASTRUCTURE

The Town of Atkinson and its residents are primarily serviced by the following utilities: Eversource and Unitil. It should be noted that Unitil has the vast majority of town while Eversource has a very small portion. However, Atkinson residents have also been investing in installing solar panels on their homes. Table 7 depicts the number of solar panel specific building permits granted by the Building and Code Enforcement Department. During 2017 and 2018, there were no solar panel permits granted, but in recent years (2019 to 2022) it appears that the number of solar panel permits granted has started to increase again overall.

Table 7: Solar Panel Permits								
Year	2015	2016	2017	2018	2019	2020	2021	2022
# of Permits Granted	24	13	-	-	4	1	5	16

As mentioned in the Kimball Library description, the Library is collaborating with the Energy Committee to install solar panels when the library's roof needs to be replaced. This project is currently in the research phase.

Energy Commission

The Town of Atkinson established an Energy Commission that consists of a Commission Chair and five members. The Energy Commission is an all-volunteer group that was appointed by the Board of Selectmen. The purpose of the Energy Commission is *"to coordinate, assist, and promote energy efficiency and conservation within the town, and to work with town officials to develop a capital improvement plan and a comprehensive energy plan for the town. It also works to identify and obtain funding through state, regional, and federal sources in support of energy conservation. It also coordinates outreach and awareness activities in the community"*.

Previous Projects – A recent project the Energy Commission completed in 2022, is the conversion of 180 streetlights to LED lights in collaboration with Unitil Electric Company. This project was partially funded by rebates and the other half of the cost for this project is being paid off over time. Unitil is allowing the Town to finance the other half of the project cost on its electric bills every month at 0% for 5 years to pay it off. The vendors that completed this job were paid in full and were compensated by Unitil. There are two remaining streetlights that are under Eversource Electric that the Atkinson Energy Commission would like to see converted to LED lights as well.

Current Projects – The Energy Commission is currently in the process of increasing the energy efficiency of all municipal buildings where possible. This was first approached by looking at the

existing town buildings to maximize their energy efficiency as much as possible through simple methods, such as replacing gaskets around doors, and converting interior lighting to LED. The Commission recognizes that it is important to establish the Return on Investment (ROI) prior to advocating further funding be allocated for the updating of town facilities to the highest energy codes possible. This ongoing project includes contacting vendors to look at town facilities and which buildings would be best for solar energy infrastructure. So far, solar vendors have identified the Kimball Library, the Community Center, and the Fire Station as south facing roofs which are good for solar energy generation. The Energy Commission also encourages the construction of all new town facilities, such as the Police Station, to be constructed to the highest level of energy efficiency and consider renewable energy production.

Atkinson Ordinances Supporting Renewable Energy Initiatives

The Town of Atkinson's Zoning Ordinance allows for the installation of solar panels and small wind energy systems in all zoning districts where structures of any sort are allowed. This is intended to encourage the use of renewable energy. For more information on small wind in Atkinson, visit Section 4100 Small Wind Energy Systems Ordinance of the Zoning Ordinance. The Energy Commission has suggested that a complete review of the land use regulations and local permitting requirements be completed. This review, or audit, will help to identify any unintentional barriers that may exist to the construction of renewable energy systems in Atkinson. It will also provide an opportunity to identify any incentives that can be adopted to encourage more property owners to install renewable energy systems.

COMMUNICATIONS

Comcast/Xfinity holds a non-exclusive franchise agreement with the Town of Atkinson for cable television services, telephone services, and high-speed internet service. This contract between the Town of Atkinson and Comcast/Xfinity was negotiated in 2014, and negotiations for the next renewal are currently underway under the formal process outlined in Federal Law. Comcast/Xfinity is the primary internet provider for the Town of Atkinson however, Consolidated Communications/Fidium is also an option for many but not all to provide telephone and fiber optic services.

Atkinson Community Television (ACTV)

Comcast provides cable services for the Town of Atkinson. Atkinson's Board of Selectmen, Zoning Board, Planning Board, Conservation Commission, Budget Committee, and Kimball Library Trustee meetings are broadcasted on Atkinson's Community Television Station (Channel 20) and on the Town Website (via Vimeo). In addition to government meetings, ACTV also broadcasts election results, parades, and other public events. Atkinson Community Television is a Public and Government Cable Access Channel maintained and operated by the Town since 1989. The Town of Atkinson employs a full-time Director of Communications to staff ACTV, and provides training and resources for the residents to produce and broadcast their own shows for the education, betterment, and entertainment of the Atkinson community.

ACTV's Broadcast Control Room is located behind the Selectmen's desks in the public meeting chambers located in the Atkinson Town Hall. This space serves as the Cable Department's control room, the Director of Communication's Office, and the storage facility for most of the equipment and is approximately 70 square feet in area. There is also a separate Server Room where all permanently installed equipment resides in a different part of the Town Hall building. The server room is approximately 80 square feet and is a shared space with the Town's server equipment.

Future Needs

Over time in this industry, there is always an anticipated need for new equipment as advances in technology continue. Large cable equipment purchases are only made annually via approved warrant articles utilizing monies from the Cable Capital Reserve Fund, a revenue source that does not currently impact the taxpayers or their property tax rate.

It should be noted that Atkinson internet provider speeds and bandwidth is poor. With more people working from home, this is a difficult obstacle. Many areas of town also have poor cell service.

Atkinson, New Hampshire

Transportation Profile

KEY FINDINGS:

- Atkinson’s transportation system is composed of a rural and suburban roadway network with some regionally important state routes carrying higher traffic volumes.
- Atkinson is a largely residential community with dispersed development that results in an automobile focused transportation system with limited pedestrian and bicycle infrastructure.
- Atkinson residents appear to have good access to the regional transportation system, but limited access to public transit options currently.
- Public transit exists in adjacent communities, but Atkinson has no direct interstate access, no formal local park and ride lots, and no mass transit system.
- Atkinson’s Elder Services is an innovative and locally funded program that provides rides to Atkinson residents aged 60 and older.
- Route 93 to the west in Salem/Windham and Route 495 to the south in Haverhill, MA are the two most relied upon highway systems for Atkinson residents. Access to these highways is primarily via Routes 111 and 121, respectively.
- Atkinson’s dominant traffic patterns reveal a strong north/south orientation which is heavily reliant on Main Street, Maple Avenue, East Road, Providence Hill, North Broadway and Westside Drive.

DATA SOURCES:

- 2015 Atkinson Master Plan Update
- 1998 Atkinson Master Plan
- 2020 Atkinson Road Action Plan
- 2021 New Hampshire Department of Transportation (NHDOT)
- Rockingham Planning Commission 2045 Long Range Transportation Plan
- 2016 Coordinated Public Transit/ Human Services Transportation Plan for the Greater Derry-Salem Region
- Traffic Study: Atkinson 2015 Intersection Analysis: Island Pond Road and West side Drive
- 2022 Atkinson Zoning Ordinance Scenic Roads
- 2012-2021 Town Annual Reports
- 2021 NHDOT Traffic Count Data
- 2017 – 2021 Vehicle Accident Data – Atkinson Police Department
- 2015 Robert Frost /Old Stage Coach Scenic Byway Corridor Management Plan

INTRODUCTION

Atkinson's transportation system is composed of the roadways and other infrastructure that support the chosen modes of transportation being used by residents, businesses, and visitors. Given its geographic location in southern New Hampshire on the border of Massachusetts and away from major highways and transit services, the town has limited transportation options. However, the current transportation system both impacts and is impacted by the land use pattern and future land use changes.

EXISTING TRANSPORTATION INFRASTRUCTURE

Roadways

Atkinson's transportation network includes roadways, culverts, trails, a bridge, and sidewalks. The existing roadway network includes 72 miles of state, municipal, and private roads as presented in Table 1. The length of state routes that extend through Atkinson is 9.5 miles. This includes NH 111 and NH 121 which provide access to Route 93 to the west in Salem/Windham and Route 495 in Haverhill, MA. These highway routes are the most relied on routes for Atkinson residents due to the town being predominantly a residential community; therefore, residents typically commute out of Atkinson for employment. The majority of Atkinson's roads are municipally maintained which gives the town control over their design and maintenance, but also the responsibility to maintain this infrastructure. Table 2 shows the definition of each roadway classification.

Table 1: Miles of all Roadways by Classification			
Road Class	Maintenance	Miles	Percent
0	Private	14	19%
II	State	9.5	13%
V	Local	48.9	68%
	Total	72	100%

Table 2: Miles by Classification	
Class	Class Description
0	Private Roads
I	Highways on the primary State highway system, excluding all portions of such highways within the compact sections of towns and cities of 7,500 inhabitants and over. The State assumes full control and pays cost of construction, reconstruction and maintenance of its sections; the portions in compact areas controlled by the towns and cities under Class IV highways.
II	Highways on the secondary State highway system, excluding all portions of such highways within the compact sections of towns and cities of 7,500 inhabitants and over. All sections improved to the satisfaction of the Commissioner are maintained and reconstructed by the State. All unimproved sections, where no state and local funds have been expended, must be maintained by the town or city in which they are located until improved to the satisfaction of the Commissioner.

III	Recreational roads which consist of all roads leading to, and within, State Reservation designated by the Legislature. The State Highway Department maintains full control of reconstruction and maintenance of such roads.
IV	Town and city streets which consist of all highways within the compact sections of towns and cities of 7,500 inhabitants and over. Extensions of Class I and II highways through these areas are included in this classification.
V	Rural highways which consist of all other traveled highways which the town or city has the duty to regularly maintain
VI	Unmaintained highways including all other public ways, including highways discontinued as open highways, highways closed subject to gates and bars, and highways not publicly maintained in suitable condition for travel for five years or more.

Many of the roads in Atkinson are paved except for a small stretch of Woodlock Park Lane where the Brush and Recycling Center is located. As shown in Table 3, Atkinson has about 71 miles of paved roads and about 2 miles of unpaved roads.

Table 3: Miles by Surface Type		
Type	Miles	Percent
Paved	70.5	97%
Unpaved	1.9	3%
Total	72.4	100%

According to NHDOT 2021 Pavement Condition Data, the state roadways in Atkinson are in good surface condition. Municipal roads are managed through an eight-year Road System Action Plan. The Pavement Management Program, led by the Road Agent and Town Engineer, was implemented in 2020. The purpose of this program is to protect and preserve the town's investment in earlier roadway base rehabilitation and or reconstruction. In the 2020 Atkinson Road System Action Plan, sixty public streets were identified as needing shim and overlay treatment over the next five years (2021-2025).

Bridges and Culverts

There is one bridge in the Town of Atkinson. This bridge is municipally maintained and is located on Mill Stream Pond Road. According to NHDOT's 2021 Bridge Conditions data, this bridge has not been identified as structurally deficient.

It is important to also maintain culverts as critical water crossings and any catch basins that connect to these culverts. In 2022, 289 catch basins were inspected and cleaned by the Highway Department and eight tons of material was removed. According to the 2022 Municipal Separate Storm Sewer System (MS4) Report, there are a total of 414 known catch basins in Atkinson. A Municipal Separate Storm Sewer System (MS4) includes the stormwater collection, conveyance, and outfall structures within a city or town. For more information about the Town of Atkinson's MS4 System and Permit, visit the Town Facilities and Services Profile and the Natural Resources Profile of this Existing Conditions Report. The Town of Atkinson has a plan to increase culvert sizes as roads are rebuilt and culverts are replaced. Increased culvert size will accommodate larger storms and ensure climate resilience while also improving habitat connectivity.

Sidewalks and Trails

Atkinson has a small section of sidewalk located on NH 121 (Main Street) near the Haverhill, MA state line. The sidewalk is in front of the Post Office and the Atkinson Community Center.

There are 20.5 miles of trails in Atkinson maintained largely by the Atkinson Conservation Commission. The Woodlock Fitness Trail is maintained by the Recreation Committee. These trails are primarily used for access to conservation lands and for recreation and few, if any, play a role in the transportation system.

Robert Frost/Old Stagecoach Scenic Byway

In May 2014, the Robert Frost/Old Stagecoach Scenic Byway was designated in Atkinson. This scenic route is part of a 44-mile scenic byway that travels through the towns of Derry, Atkinson, Auburn, Chester, and Hampstead. In Atkinson, the Robert Frost/Old Stagecoach Scenic Byway is located on NH 121 (Main Street) and extends from Robie Lane to the town line near Hampstead. The Robert Frost/Old Stagecoach Scenic Byway Council was also formed; and is comprised of representatives from the five communities and the Southern New Hampshire and Rockingham Planning Commissions. The Robert Frost/Old Stagecoach Scenic Byway Council and the planning commissions developed the Robert Frost/Old Stagecoach Scenic Byway Corridor Management Plan in 2015.

The state scenic byway program was established in 1992 and includes historically and culturally significant landscapes and landmarks. The Robert Frost/Old Stagecoach Scenic Byway includes the following landmarks in Atkinson: The Green Tunnel, Atkinson Congregational Church, Atkinson Town Center, Dow Common and Civil War Memorial, Atkinson Academy, Atkinson Historic Sites (41 Buildings), Atkinson Cemetery, and Atkinson Town Pond. More information on these historic landmarks in Atkinson can be found in the Historical and Cultural profile of this Existing Conditions Report, and some can also be identified on the 1980 Scenic Vistas and Pronounced Landscapes Map. In order to preserve these scenic and cultural landscapes and maintain the scenic byway, Atkinson had established Section 505 Scenic Vista and Pronounced Landscape Regulation in the Zoning Ordinance which provides setback requirements by zoning district.

RECOMMENDED BIKE ROUTES

The NH Department of Transportation maintains an interactive bicycle route map found here: <https://nh.maps.arcgis.com/apps/webappviewer/index.html?id=49c702c328d84a29af3b4a27eb271b37>

Included on this map are NHDOT recommended bicycle routes. The state identifies 7.6 miles of paved road in Atkinson as being good candidates for bicycle infrastructure. Currently, Atkinson does not provide designated and separated bicycle lanes. Some of the roads included in the

recommended bicycle routes include Meditation Lane, Maple Avenue, Academy Avenue, East Road, and NH 111. The state recommended bike routes can be seen on the NH State Bike Routes interactive map with the link above.

TRANSIT AND REGIONAL TRANSPORTATION ISSUES

Many segments of Atkinson's population would benefit from greater access to public transit options. According to Rockingham Planning Commission's 2045 Long Range Transportation Plan, *"Accessibility in the region is excellent for individuals with a motor vehicle. In contrast accessibility is very limited in much of the region for senior citizens, individuals with disabilities or other residents who lack a private motor vehicle or who are otherwise unable to drive to get to work, perform errands, or travel for other reasons"*. NHDOT provides three park and ride lots near Atkinson in Salem, Plaistow, and Hampstead.

Along Atkinson's southern border adjacent to Plaistow, NH, and Haverhill, MA, a small section of the Pan Am Railway passes through town. The Pan Am Railway was previously known as the Boston and Maine (B&M) Main Line West that runs between Boston and Portland, and the Amtrak Downeaster is the current rail service on this line. The Amtrak Downeaster can be picked up in Haverhill, MA. The train and bus stop access in Plaistow is no longer available. The Merrimack Valley Transit Service provides a 13-bus route from the Plaistow Walmart to Washington Square Transit Center in Haverhill, MA. Other transportation services in Rockingham County (as identified in the Rockingham Planning Commission's 2016 Coordinated Public Transit/ Human Services Transportation Plan for the Greater Derry-Salem Region Plan) are listed below. These transportation services are offered in Atkinson, adjacent communities, or are available throughout the whole region.

- **Atkinson Elder Services** – is a municipal program that offers rides to Atkinson residents aged 60 and older. Rides are provided free of charge to eligible riders and are available Monday-Friday between 8:00am-5:00pm. The phone line to request a ride is staffed Monday-Friday from 8:30am-12:00 noon. Drivers are part-time town employees. Medical trips are prioritized, and the program is funded through the town's annual operating budget and donations.
- **Granite State Independent Living** – is a statewide non-profit organization whose staff provide a range of services, including evaluation, skills training, and on-going support to enable eligible consumers to pursue independent lives. Four core service areas this organization provides includes information and referral; peer support and counseling; skills training; and individual and systems advocacy. GSIL maintains six wheelchair accessible vans and minibuses, which provide transportation statewide for social and civic activities. Historically, GSIL has not provided trips for medical appointments. However, since 2011, GSIL has become a provider of Medicaid Non-Emergency Medical Transportation (NEMT) for trips within a 20-mile radius of Concord.
- **Lamprey Health Care Senior Transportation** - provides rides for elderly and disabled residents of Rockingham County and parts of Strafford County. The program offers

weekly service on Fridays to residents of the towns of Hampstead, Atkinson, Danville, Sandown, Epping, Fremont and Raymond for shopping and medical appointments, with destinations largely in Plaistow. Other demand-response rides for medical appointments can also be scheduled by reservation at least a week in advance. The program operates a fleet of three cutaway buses as well as one station wagon. All of the buses are lift-equipped and have the capacity for two wheelchairs and up to 16 passengers.

- **Rockingham Nutrition Meals on Wheels** - has a primary mission of delivering meals to elderly and handicapped clients throughout the county and transporting elderly residents to meal sites. The meals on wheels program provides direct transportation to the meal site at the Vic Geary Center in Plaistow, and partners with Easter Seals and CART to provide meal site transportation in Derry and Londonderry. RNMOW also provides limited support for meal transportation to the Salem Senior Center. A seven-passenger minivan is based at the Vic Geary Senior Center in Plaistow.
- **Seniors Helping Seniors** – is a home care provider offering companion care, light housekeeping, errands, transportation assistance and dementia care. Care is provided by other seniors employed by the agency. Seniors Helping Seniors is a national organization with a Southern New Hampshire office in Bedford. Their service area includes the whole Rockingham Planning Commission region.
- **Kimi Nicholas Center** – is a private, non-profit human service center targeting the needs of disabled citizens in the towns of Londonderry, Derry, Salem, Windham, Atkinson, Hampstead, Chester, Sandown, Danville, and Haverhill, Massachusetts. Services include day habilitation, and communications and vocational training for adults with serious developmental disabilities. KNC operates a fleet of nine vehicles to pick up clients and bring them to the service center and return them home. The Kimi Nicholas Center also works with Atkinson’s Kimball Library, and surrounding town’s libraries, to deliver books and other content to elderly residents of these communities.

CIRCULATION AND DESIGN

Atkinson’s transportation system requires long-term planning and good design objectives which may be informed by the analysis of vehicle trips, commuting patterns, traffic counts, accidents, traffic calming, access management needs, and identified bicycle and pedestrian infrastructure needs. Atkinson’s dominant traffic patterns reveal a strong north/south orientation which is heavily reliant on Main Street, Maple Avenue, East Road, Providence Hill, and North Broadway.

Commuting Data

As identified in the Population and Housing Profile of this Existing Conditions Report, the commuting patterns of Atkinson residents over the age of 16 are related to their place of employment and their need for housing. Most working residents commute alone by automobile to their jobs. The 2021 American Community Survey Data identified that majority of Atkinson residents commute out of state and most of those that do are likely heading to Massachusetts. The average commute time for Atkinson workers is about 30 minutes. Additional commuting

data from the American Community Survey can be found in the Population and Housing profile and the Economy Profile.

Traffic Counts

Atkinson's most recent traffic count data for the roads in town is included in Table 3. This table depicts the most recent traffic data for these roadways (2021) in comparison to the traffic count data from previous years. This data was collected by the New Hampshire Department of Transportation. Reviewing the traffic data from 2018 to 2021, it appears that in most cases there has been a steady decline of traffic on the roads listed. The reason for these declines in traffic volume are not yet clear and appear to have started ahead of the Covid 19 pandemic and the increase in remote work during this time.

Table 3: Miles by Classification						
Location	Total Weekday Vehicles (2021)	Total Weekday Vehicles (2020)	Total Weekday Vehicles (2019)	Total Weekday Vehicles (2018)	Total Weekday Vehicles (2013)	Total Weekday Vehicles (2010)
NH 121 AT HAMPSTEAD TOWNLINE	6,106	5,506	6,524	7,763	8,000	8,100
NH 121 WEST OF WILLOW VALE	5,481	4,942	5,855	7,233	5,300	5,800
PROVIDENCE HILL RD AT SALEM TOWN LINE	1,212	1,093	1,295	1,515	1,500	1,600
NH 121 (ATKINSON DEPOT RD) AT ATKINSON TL	9,908	8,934	10,585	11,986	12,000	12,000
WESTSIDE DR NORTH OF HAVERHILL RD	2,509	2,262	2,680	3,236	2,900	2,800
GREENOUGH RD AT ATKINSON TL	2,192	1,977	2,342	2,680	2,200	2,200
EAST ROAD AT ATKINSON TOWN LINE	4,183	3,772	4,469	5,115	5,100	4,500

SHANNON RD EAST OF ATKINSON RD	2,229	2,010	2,381	2,864	4,000	3,500
--------------------------------------	-------	-------	-------	-------	-------	-------

Traffic Studies

In 2015, an intersection analysis was conducted by Rockingham Planning Commission (RPC) for the Island Pond Road and West Side Drive intersection. This intersection carries a greater amount of commuter traffic than what would be generally anticipated of this type of roadway. Island Pond Road is in the north-central part of Atkinson and provides an east-west connection between state routes NH 111 and NH 121. Westside Drive provides a north-south connection from Island Pond Road to Main Street in Salem and allows commuters to bypass much of the congestion that is typically further west on NH 111 and on NH 28 in Salem. RPC was asked by Atkinson's Road Agent to examine the potential of removing stop signs at this three-way stop intersection at Island Pond Road and West Side Drive. RPC's 2045 Long Range Transportation Plan describes that there are several roads in Atkinson that have been identified as congested based on the results of a travel demand model that was conducted, and these results are supported by the current traveling experience of highways during peak hours. The most congested route identified in the travel demand model was NH 111 in Hampstead, Atkinson, and Salem.

Accident Data

Between 2017 and 2021, there was a total of 401 accidents recorded on Atkinson's roadways. Two of the 401 accidents resulted in fatalities. Table 4 shows the total number of accidents reported in each year from 2017 to 2021 as provided by the Atkinson Police Department.

The intersection with the most accidents over the past two years is NH 111 at Waters Edge. The other roadways accounting for a higher rate of crashes are NH 111, Main Street (NH 121), and East Road.

Table 4: Atkinson Accident Data	
Year	# of Accidents
2017	77
2018	84
2019	77
2020	72
2021	91

TRANSPORTATION RESOURCES AND PENDING INFRASTRUCTURE PROJECTS

The Atkinson Public Works Department, Board of Selectmen, and the Planning Board are collectively responsible for overseeing the management of the town's transportation system, its maintenance, and future infrastructure investments. A review of the Rockingham Planning Commission's 2021-2024 Transportation Improvement Plan identified no pending projects in Atkinson. A review of New Hampshire Department of Transportation's 2023-2032 Ten Year Improvement Plan also identified no pending projects in Atkinson. The Rockingham Planning Commission's 2045 Long Range Transportation Plan does identify an unfunded project in Atkinson to Plaistow on NH 121 for safety improvements.

Atkinson, New Hampshire

Recreation

KEY FINDINGS:

- Atkinson’s Recreation Department and Elder Services Department offer over 10 programs for all ages at four different sites throughout town. These recreation sites are a combination of built structures, natural areas like Big Island Pond, and designated open spaces such as athletic fields.
- Atkinson has access to several nearby outdoor public and private recreational areas including the Timberlane Regional High School track and field, and the golf course at the Atkinson Resort & Country Club.
- There are approximately 21 miles of trails in Atkinson offering a diversity of recreational opportunities that include, but are not limited to, walking, bicycling, cross-country skiing/snowshoeing, and dog walking on nine unique trail systems.
- Atkinson's established trails are on protected land owned by the town.
- Data suggests a high usage of Atkinson’s roads and trails for recreation throughout the year including NH 111, Providence Hill Road, and NH 121.
- NHDOT has identified about 7.6 miles of recommended paved bicycle routes in Atkinson which include Meditation Lane, Maple Avenue, Academy Avenue, East Road, and NH 111.
- There is a demand for the Recreation Department to provide more programming for youth and teens.

DATA SOURCES:

- 2011 Natural Resource Inventory
- 2022 Land Conservation Plan
- Rockingham Planning Commission (RPC)
- Atkinson Conservation Commission
- Atkinson Recreation Commission
- 2021 Atkinson Annual Report
- Strava Global Heat Map
- NH GRANIT
- Atkinson Town Website
- Atkinson Recreation Department

INTRODUCTION

Atkinson's recreation facilities and activities contribute to resident's quality of life by providing many community and recreation resources for all ages, while promoting public health. Throughout previous Atkinson Master Plans, it is clear that the community values its recreational facilities, programs, and lands which includes open space areas. These properties and programs are overseen by the Town's Conservation Commission, Recreation Committee, and Recreation Department.

Recreational Facilities and Programs

Atkinson has a Recreation Department and a Recreation Committee that together maintain and offer recreational facilities and programs for all demographics in the community. Recreation opportunities in town take advantage of the unique rural and historical character of the natural resources and built facilities in Atkinson including Big Island Pond and the extensive trail system on Atkinson conservation lands. The full list of sites and facilities offered in Atkinson are found in Table 1. The list of programs provided by the Recreation Department, and other local organizations are found in Table 2. The Town could consider investing in a deeper study to analyze whether the existing recreation facilities and programs are meeting the community needs. Additionally, this study could help determine whether existing funding for recreation facility maintenance and programming is adequate.

Table 1: Recreational Locations in Atkinson				
Site Name	Recreational Facilities	Acreage	Location	Conservation Status
Atkinson Recreation Department List of Facilities:				
Woodlock Park	4 baseball fields, 2 soccer fields, 2 tennis courts, picnic area, trails, 1/2 basketball court, 1 Pavilion, restrooms, access to power and water	-	80 Woodlock Park Lane	Developed Open Space
Collins Park	Lacrosse fields, multi-purpose field	10.03	17 East Road	Conserved, w/ Recreation Deed Restriction
Kimball Library Courtyard	Courtyard/Amphitheater	-	5 Academy Ave	Developed Open Space
Canoe/Kayak Launch	Small dock w/ limited parking	0.27	Stickney Road	Conserved
Schools:				

Atkinson Academy	Basketball Court, gymnasium	-	17 Academy Ave	Developed Open Space
Timberlane Regional School	Indoor track, football field, outdoor track, soccer field, two baseball fields, practice field, four tennis courts, gymnasium	-	44 Greenough Road Plaistow, NH	Developed Open Space
Privately-Owned:				
Atkinson Resort & Country Golf Club	18-hole course, driving range, a 9-hole par-3 course	220.75	85 Country Club Drive	Developed Open Space

Table 2: List of Programs in Atkinson	
Atkinson Recreation Department List of Programs:	
Co-ed Volleyball (Adult)	Tai Chi – Temple Exercises
Fusion Fitness (Adult)	Whist Party – Card Game
Gentle Yoga (Adult)	Line Dancing (Adult)
Jacki’s Aerobic Dance Class (Adult)	Seasonal Senior Luncheons
Craft projects (holidays)	Day Trip Programs for Seniors
Kid’s Summer Program: Sun n’ Fun	Ice Cream Socials/Concerts
Learn to play Pickleball	Egg Hunt, Fishing Derby (Kids)
Adult one Day Trip Programs (Seniors and Adults)	Veterans Breakfast and Ceremony (Veterans and General)
Tree Lighting (General)	
Programs Run by Local Organizations	
Timberlane Youth Lacrosse	Timberlane Youth Soccer League (TYSL)
Timberwolves Soccer Club (TSC)	Timberlane Youth Basketball Softball Program
Garden Club	Boys/Girls Scouts
Youth Programs at Kimball Library	Atkinson Youth Basketball and Softball
Atkinson Garden Club	Atkinson Lions Club
Atkinson Women’s Civic Club	Atkinson Veterans Club

TRAIL NETWORK

The Town of Atkinson has an extensive trail network throughout the community, which accommodates a variety of recreational uses including hiking, biking, cross-country skiing, hunting, and dog friendly sites. Each property and trail system determine which permitted uses are allowed. The permitted uses for each trail system in Atkinson can be found in Table 3. Atkinson’s total trail network encompasses 20.5 miles of publicly accessible trails. The parcels that support these trail systems are identified on the Trails on Conservation Land Map – Map H from the 2022 Land Conservation Plan also found at the end of this profile. There are also a

significant number of trails that are privately owned in cluster development neighborhoods that are not a part of the Town of Atkinson Trail System, but still exist in town for residents of those neighborhoods such as the Bryant Woods Trails.

Atkinson's Conservation Commission has worked to expand the trail network over time, and in recent years, trail maps were created and supplied at each of the trailheads. In 2021, the Conservation Commission established a new trail entrance on Juniper Lane to the western portion of Sawyer Forest, completed the addition of a Fitness Trail along the Woodlock trails in the Chadwick Town Forest, and took initial steps toward completing ADA Compliant Trails in Slade Town Forest in collaboration with the Atkinson Recreation Department. As shown in Table 3, Atkinson has several trails located on town-owned/managed land. In fact, all the properties listed in Table 3 are on protected land.

Table 3: Recreational Trails in Atkinson				
Site Name	Total Trail Miles	Location	Total Acreage of Land	Permitted Use
Caroline Orr Land Trail System	2 miles	4 Main Street behind Community Center and Robie Lane	60 acres	Hiking, dogs allowed, seasonal hunting
Sawyer Land Trail System	3.9 miles	Sawyer Ave and Jupiter Lane	Approx. 140 acres	Hiking, dogs allowed, seasonal hunting
North Sawmill Swamp Trail System	3.7 miles	Knightland Ave	102.35	Hiking, dogs allowed, seasonal hunting
Crown Hill-Noyes Trail System	3.4 miles	East Road and Crown Hill Road	48.83	Hiking, biking, dogs allowed, seasonal hunting. This trail system connects to both Plaistow and Hampstead trail systems
South Sawmill Swamp Trail System	1.5 miles	Woodlawn Ave	102.35	Hiking, dogs allowed, seasonal hunting

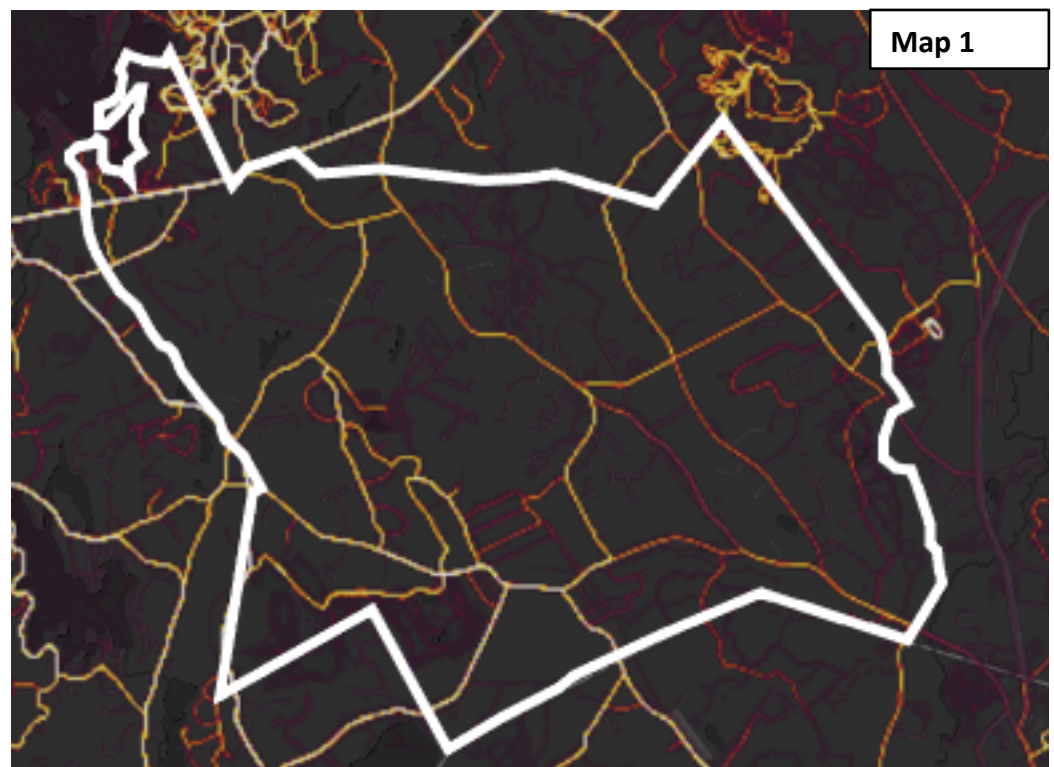
Marshall Land Trail System	2.2 miles	Boulder Cove Road	Approx. 35 acres	Hiking, dogs allowed, seasonal hunting. This trail system connects to Hampstead trail system.
Stickney Trail System	2.3 miles	Lakeside Drive	34.44	Hiking, biking, dogs allowed, seasonal hunting
Woodlock Trail System	1.5 miles	Adjacent to Woodlock park and Merrill Dr.	Approx. 4.5 acres	Hiking, dogs allowed, seasonal hunting, Fitness Trail

Recreation Commission

The Town of Atkinson has a Recreation Commission that consists of five members and the Recreation Department Director. The Atkinson Recreation Commission is a volunteer commission appointed by the Board of Selectmen and meets once a month. The Recreation Commission is responsible for maintaining the parks in Atkinson as well as the Fitness Trail at Woodlock Park. The Recreation Commission notifies the Care of Grounds personnel of the town when mowing or other maintenance is needed at town parks, the Dow Common, etc. The Commission works with the Recreation Director to plan and implement a wide range of civic, cultural, and recreational opportunities for all residents of Atkinson. Other responsibilities include overseeing the Recreation and Community Center facilities and ensuring the safety, development, and quality of the town's athletic fields, parks, and recreation facilities.

RECREATIONAL USES

A helpful resource to observe and understand the popularity of recreation activities and usage areas is through Strava Heat Maps. These maps indicate areas in Atkinson where users are frequently participating in a variety of recreation activities. This includes both existing recreation assets and other places that may not be owned or managed by the



town. Strava describes itself as a “*social network for athletes*” where the program tracks and analyzes the activities of its users by connecting to the individual’s device such as a phone, watch, GPS, etc. Strava then uses this information to create a usage map (also known as a heat map) to depict where their users recreate. It should be noted however, that not all Atkinson recreation participants utilize Strava, and this data is not intended to represent all recreational users in Atkinson. It does help indicate trends for further investigation. To learn more about Strava Heat Maps, visit <https://medium.com/strava-engineering/the-global-heatmap-now-6x-hotter-23fc01d301de>.

The town wide heat map (Map 1) represents all forms of recreation in Atkinson that Strava collects – bicycling, running, walking, aquatic, and winter activities. This map indicates that many of the Strava users are recreating on Atkinson’s roads and existing trails. In addition to these, recreationists are utilizing Atkinson’s roads. Strava users are also utilizing Atkinson’s conservation areas, and cluster development set aside areas.

Bicycle Recreation Usage

It should be noted that many of Strava’s users seem to already be using roads for recreation that were identified in NHDOT’s recommended bike routes. As seen on Map 2, Atkinson’s most popular roads for bicycling are Main Street (NH 121), Providence Hill



Road, North Broadway, and NH 111 which appears to be utilized by many users from Haverhill, MA and Salem, NH. Images like the one shown in Map 2 provide the town with a visual of the demand on recreation and transportation infrastructure and may help to assist the town in identifying what areas are the highest priority to implement bicycle lanes on existing roads or where developing separate routes may be necessary.

Run/Walk Recreation Usage

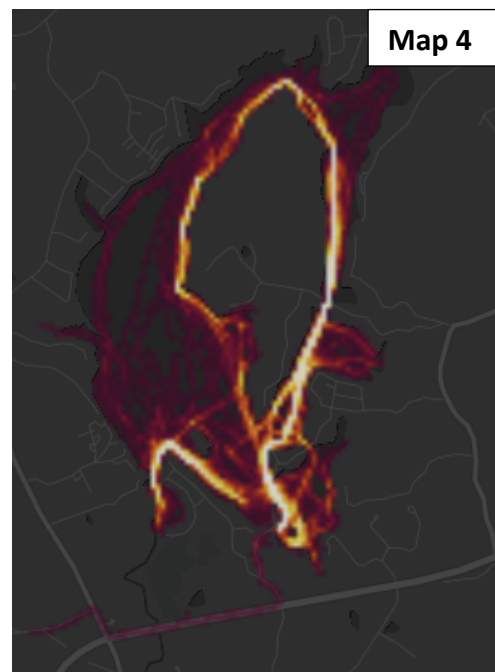
Map 3 shows high run/walk usage in Atkinson Heights, on Providence Hill Road, NH 111, and connecting to Haverhill Road in Salem and along Westside Drive connecting to the center of town. This



may be an indication that if more sidewalk infrastructure was available, additional residents would utilize Atkinson roads for running/walking. In addition to Atkinson's roads, Woodlock Park and the Stickney Trail System show many recreation users.

Aquatic Recreation Usage

As shown on Map 4, there is significant aquatic recreation activity from Strava users on Big Island Pond. Map 4 shows the entirety of Big Island Pond though it should be noted that only the southern portion of this pond is in Atkinson and is accessed by Atkinson residents at the canoe/kayak launch on Stickney Road. Further explanation of the town canoe/kayak launch is described below. This indicates that the public canoe/kayak launch on Big Island Pond is highly utilized and contributes to a diverse range of recreational activity offered in Atkinson.



Winter Recreation Usage

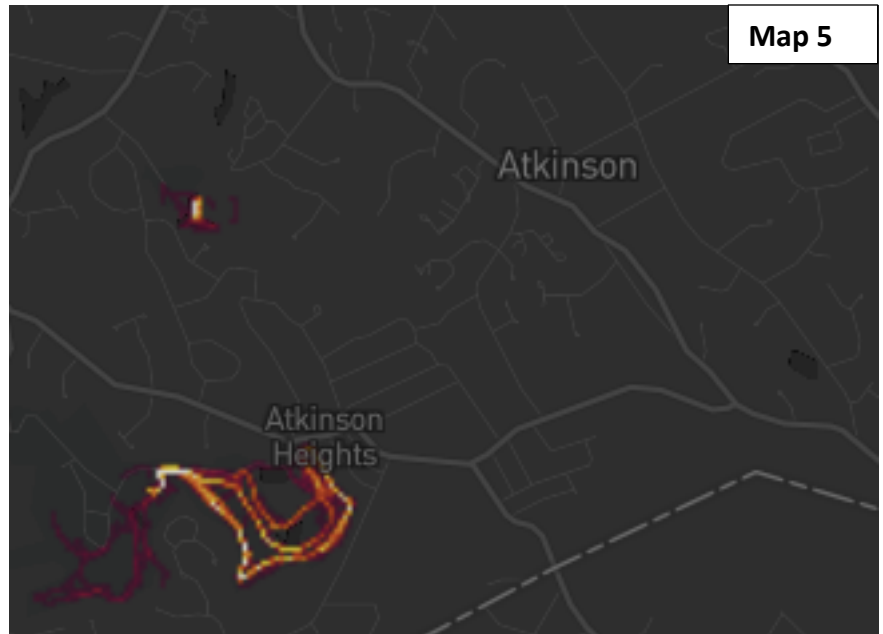
Map 5 shows that there is significant winter recreation activity in Atkinson Heights as well as Woodlock Park. This indicates that Atkinson's recreational resources are utilized year-round by some users.

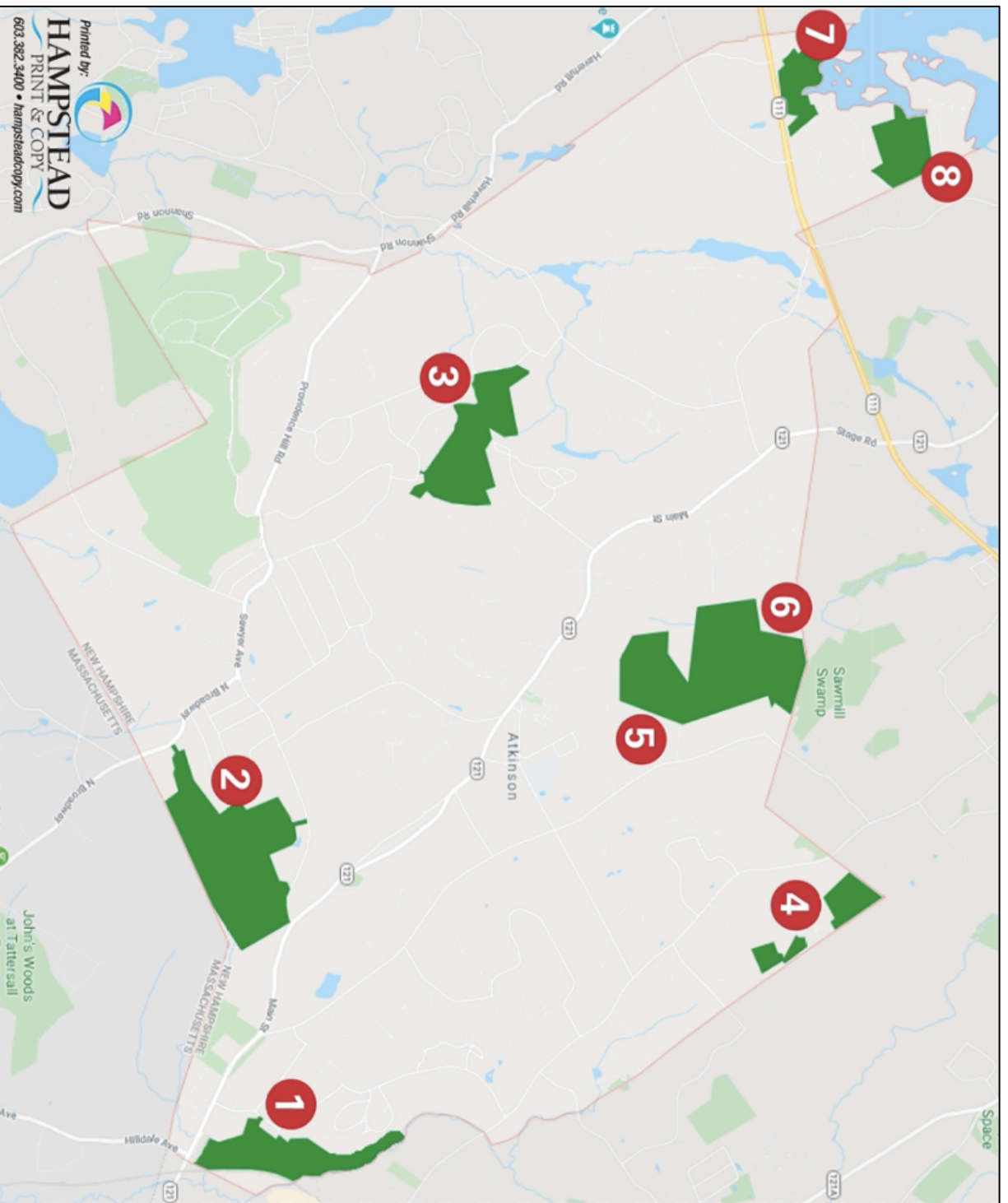
TOWN CANOE/KAYAK LAUNCH

The Town of Atkinson maintains a public canoe/kayak launch for Atkinson residents located on Stickney Road that provides recreation access to Big Island Pond. This launch is for personal recreation only and commercial use is prohibited. There are two small parking lots provided at this launch on either side of the launch steps with a combined capacity of approximately eight vehicles. More information about the Town's canoe/kayak launch can be found on the Town of Atkinson website under the Conservation Commission tab.

RECOMMENDED BIKE ROUTES

The NH Department of Transportation maintains an interactive bicycle route map found here: <https://nh.maps.arcgis.com/apps/webappviewer/index.html?id=49c702c328d84a29af3b4a27eb271b37>. Included on this map are DOT recommended bicycle routes. In Atkinson, there are 7.6 miles of recommended paved bicycle routes. Many of these state-recommended bike routes coincide with the Strava street bicycle heatmap and include connectivity through Atkinson's center to neighboring communities. Some of these road connections include Meditation Lane, Maple Avenue, Academy Avenue, East Road, and NH 111.





Appendix B, Map H

Trails on Conservation Land

- 1 - Caroline Orr Trails
- 2 - Sawyer Trails
- 3 - Woodlock Trails
- 4 - Chambers-Fila Trails
- 5 - Sawmill South Trails
- 6 - Sawmill North Trails
- 7 - Stickney Trails
- 8 - Ruth Marshall Trails

December, 2021

Prepared by the
Atkinson Conservation Commission
with funding from a
Moose Plate Conservation Grant



Atkinson, New Hampshire

Natural Resources

KEY FINDINGS:

- Currently, 10% of Atkinson's land area has been permanently conserved, and this conservation land is town owned and managed.
- An additional 9.9% of Atkinson is protected open space land associated with Cluster Developments, but not all of these parcels are accessible to the public.
- 36% of Atkinson's Tier 1 Habitat - the highest ranked habitat in the state - is conserved. Ranked habitats show where habitats in the best ecological condition in the state are located, based on biodiversity, arrangement of habitat types on the landscape, and lack of human impacts.
- According to the State's Wildlife Connectivity Model, there are four identified blocks in Atkinson that are identified as priority habitat.
- Rare habitats in Atkinson include grasslands, peatlands, temperate swamps, wet meadows/shrublands. Grasslands cover 388 acres in Atkinson which is 5% of the total land area, and 12% of all grasslands are conserved. Considering only 8% of grasslands in New Hampshire are currently under conservation easements, Atkinson is ahead in the conservation of this rare habitat.
- Appalachian oak-pine forests are the most common forest type in Atkinson covering 43% of the town, of which one quarter (25%) are protected. This data was derived from the State of NH Wildlife Action Plan data without regard to property ownership and much of this forested land in Atkinson consists of trees growing on homeowners' properties.

DATA SOURCES:

- NH GRANIT, Conservation/Public Lands
- NH Wildlife Action Plan
- 2022 Atkinson Land Conservation Plan
- 2011 Atkinson Natural Resource Inventory
- Atkinson Conservation Commission
- Atkinson Water Committee
- 2020 Atkinson Hazard Mitigation Plan
- 2021 PFAs Focused Site Investigation Work Plan
- Shoreland Water Quality Protection Act (SWQPA) Summary
- NHDES's Guide to Groundwater Reclassification
- NHDES's Guide to Groundwater Protection
- NHDES's Groundwater Resources in New Hampshire: Stratified-Drift Aquifers
- Hampstead Area Water Company
- NHDES's Assessments of Public Water Supply Sources – Atkinson
- NHDES's Drinking Water Source Assessment Program (DWSAP) Plan
- Regulated MS in New Hampshire Communities
- Atkinson's MS4 Webpage
- Assessments of Public Water Sources
 - Merrimack River-Shawsheen River to East Meadow River Watershed: Lake Assessments and River Assessments
 - Little River Watershed: Lake Assessments and River Assessments
 - Lower Spickett River Watershed: Lake Assessments and River Assessments

- Atkinson is fortunate enough to have 10 Town Forests that total about 580 acres as of December 2022.
- Atkinson sits at a higher elevation relative to the Spickett River Watershed and the Powwow River – Merrimack River Watershed. This indicates that the quality of most of the water begins in Atkinson. Therefore, it is the responsibility of Atkinson to consider the downstream impacts of the various land uses in the community.
- The Spickett River Watershed accounts for 62% of the town's area, and the Powwow River – Merrimack River Watershed accounts for 38%.
- As identified in the 2022 Land Conservation Plan, Atkinson has eight Prime Wetlands: Hall Farm Pond, Hog Hill Brook, Hovey Meadow Wetland, Steward Pond Farm, Sawmill Swamp East, Sawmill Swamp West, Wright Farm Pond, Bryant Brook.
- Atkinson has limited stratified drift aquifers with only 7% of the town containing these aquifers. 15 acres in Atkinson are considered high yielding stratified drift aquifers.
- Atkinson's potential contamination sites are mostly located in the northwest part of town in the industrial zone and near NH 111.

INTRODUCTION

One of the many challenges communities face is the need to balance development pressures with available open space and natural resources. In Atkinson's case, the town has demonstrated a devotion to the protection of its natural resources. Rivers, streams, grasslands, soils, aquifers, watersheds, and nearly all natural resources have their own demarcation methods that do not apply to jurisdictional boundaries, and there is value in exploring what is happening both within Atkinson's boundaries and beyond into neighboring towns. This Natural Resource Profile coincides with the recently released 2022 Atkinson Land Conservation Plan and provides supplemental information that will inform the Master Plan.

LAND COVER – FORESTED LAND

This section is based on the 2019 National Land Cover Database (NLCD) and helps explain the amount of forested land in Atkinson.

Towns	Total Acreage in Town	Acreage of Forested Land	% of Town	Protected Forested Acres	% Forested Land Protected
Atkinson	7,258	3,811	53%	828	22%
Derry	23,226	12,168	52%	1,723	14%
Hampstead	9,014	4,518	50%	1,723	24%
Plaistow	6,790	2,736	40%	650	24%
Salem	16,569	4,047	24%	629	16%

Although the NLCD resolution is 30m x 30m, it can provide a helpful overview at the municipal scale. Atkinson is 53% forested, which is a combination of deciduous, evergreen, and mixed forests. Atkinson has a total of 3,811 acres of forested land of which 828 acres or 22% is protected. According to the 2011 Natural Resource Inventory, Atkinson had 4,127 acres of

forested lands at that time, which was 56.7% of the town. This represents a 3.7% decrease in forested land cover since 2011. Table 1 compares the percentage of forested land in surrounding communities. As shown in Table 1, Atkinson has the highest percentage of forested land at 53%. Though Atkinson's percentage of protected forested land is not the highest when compared to neighboring towns, Atkinson is not far behind at 22% of protected forest land.

WILDLIFE ACTION PLAN – HABITAT TYPES & RANKED HABITATS

The NH Fish & Game Department, along with many partners across the state, updated the Wildlife Action Plan (WAP) in 2020. The WAP includes two sets of data:

1. Habitat land cover – shows where the different types of wildlife habitat are located throughout the state; and
2. Highest ranked habitat by ecological condition – shows where habitats in the best ecological condition in the state are located, based on biodiversity, arrangement of habitat types on the landscape, and lack of human impacts.

The Wildlife Action Plan details relative to Atkinson can be found in the 2022 Land Conservation Plan identified on Map 9 also shown at the end of this profile.

Habitat Types

Appalachian oak-pine is the most common habitat type in Atkinson as it makes up nearly half of the town at 43%. 25% of the Appalachian oak-pine habitat is protected in Atkinson. This data was derived from the State of NH Wildlife Action Plan data without regard to property ownership and much of this forested land in Atkinson consists of trees growing on homeowners' properties. This habitat type is common below 900-foot elevation in the southern part of the state and is known for a diverse age and vegetative structure promoting wildlife diversity. Because of their expansiveness, many large wildlife species depend on this habitat for part or all their life cycle including black bears.

The second largest habitat type in Atkinson is Hemlock-Hardwood-Pine which covers 6% of the town and 16% is protected. The Hemlock-Hardwood-Pine species is the most common forest type in New Hampshire covering nearly 50% of the state. These forests are dominated by hemlock, white pine, beech, and oak trees and have a highly variable composition considering their ability to occur on different elevations, soil types, and topography. When conservation of Hemlock-Hardwood-Pine is done in large unfragmented blocks, it can provide important habitat for some of New Hampshire's largest fauna such as black bears and bobcats.

Grasslands cover 388 acres or 5% of the total land area of Atkinson, and 12% of grasslands are protected. Considering only 8% of grasslands in New Hampshire are currently under conservation easements (<https://www.wildlife.state.nh.us/habitat/types.html>), Atkinson is ahead in the protection of this rare habitat. Comprised of grasses, sedges, and wildflowers, grassland communities provide ideal habitat for state endangered and threatened species of wildlife.

There are several other rare habitat types found in Atkinson which include:

Peatlands, which the state has determined are of extreme importance for carbon sequestration and vital to many rare plants and wildlife species that depend on them. Though there are only 22 acres (0.03%) in town. It is important to note that this is an extremely rare habitat in New Hampshire and 50% of this peatland habitat in Atkinson is protected.

Temperate Swamps, contain four Atlantic white cedar communities in New Hampshire and pitch pine-heath swamps, which are rare and typically associated with Pine Barrens. Additionally, hemlock is common in temperate swamps throughout New Hampshire. In Atkinson, there are 212 acres of these swamps in town that make up 3% of the town. Almost half (44%) of the temperate swamps in Atkinson are protected.

Wet Meadows/Shrublands, which are often grouped into three broad habitat categories: wet meadows, emergent marshes, and scrub-shrub wetlands. These habitats are important for flood management, are typically controlled by groundwater, and are vital food sources for many threatened and endangered wildlife species. In Atkinson, there are 254 acres or 4% of the town designated as wet meadows/shrublands and 53% have been protected.

Peatlands, temperate swamps and wet meadows/shrublands are rare habitat types in New Hampshire and together account for a total of 12% of Atkinson's land area. Of those habitats, a little over one-third (33%) have been protected.

Ranked Habitats

As mentioned, the above-described habitat types are identified as rare habitat types in the NH Wildlife Action Plan. If the town wants to focus conservation efforts on these habitats, Atkinson could utilize the Prioritized Habitat sections described below identify the largest unfragmented areas where these habitat types are

Table 2: Wildlife Action Plan – Total Priority Habitat for all 3 Tiers				
WAP Tier	Acres in Town	Percent of Town	Protected Acres	Percent Protected
Tier 1: Highest Ranked Habitat in State	156	2%	56	36%
Tier 2: Highest Ranked Habitat in Biological Region	58	1%	55	95%
Tier 3: Supporting Landscapes	519	7%	204	39%

found. This helps determine the high priority areas relative to the town's conservation interests. In fact, these priority areas are also identified in the 2022 Land Conservation Plan, and the corresponding habitat tiers are identified on Map 9 completed by Rockingham Planning Commission and included at the end of this profile. As identified in Table 2, Tier 1 habitats (those that are ranked the highest ranked habitat in the state) account for 2% of Atkinson's total

land area as classified in the NH Wildlife Action Plan and 36% are protected. For Tier 2 habitats (lands that are highest ranked in the biological region) Atkinson has 58 acres in total, which is only 1% of the land area. Tier 2 is Atkinson's highest percentage of protected lands at 95% protected. Tier 3 habitats, also known as supporting landscapes, total 519 acres accounting for 7% of the town's land area and 39% are protected. These wildlife tiers can be found on the Land Conservation Plan's Map 9: Wildlife Habitat Features at the end of this profile.

GENERAL AND AGRICULTURAL SOILS

The 2011 Atkinson Natural Resource Inventory explains soils as *"a principal determinant of the land's development capability, particularly in areas that rely on subsurface waste disposal (conventional septic systems)"*. The depth to the water table and bedrock, and susceptibility to flooding, both affect the suitability of a site for roads, buildings and septic systems. The 2022 Land Conservation Plan and 2011 Natural Resource Inventory identify that Atkinson has five soil types in town that are listed and described in Table 3 below. Please refer to the Atkinson Soil Potential for Development Map at the end of this profile.

Table 3: General Soil Types in Atkinson	
Soil Type	Description
Canton-Chatfield-Hollis	Well drained and somewhat excessively drained, very deep to shallow, mineral and loamy soils that are gently sloping to steep; form mountains, hills and ridges that have many basins and narrow drainageways
Hinckley-Windsor-Canton	Very deep excessively drained soils derived from glacial outwash; form eskers, kames, terraces, deltas and outwash plains
Canton-Montauk-Paxton	Well drained, loamy soils that are gently sloping to steep; form broad hills, and found in wide areas between hills, and in many narrow
Paxton-Woodbridge-Hollis	Well drained and somewhat excessively drained soils that formed in (compact) glacial till; form hills and ridges
Canton-Scituate-Montauk	Very deep, moderately well drained soils formed in compact glacial till

Agricultural Soils

Atkinson was once considered a major farming community, though agriculture activity has declined throughout the southern New Hampshire region over the decades. Despite there not being many farms left in town, Atkinson has a significant amount of state and locally identified important agricultural soils. It should be noted that of the state and locally identified important

agricultural soils in Atkinson, there are some parcels with agricultural soils that are developed on, and some are forested.

The 2011 Natural Resource Inventory identified that Atkinson’s agricultural soil lands can be classified in three groups based on the character of the soils and their suitability for crop production.

Prime Farmland – is land which has the best combination of physical and chemical characteristics for the production of crops. It has the soil quality, growing season, and moisture supply needed to produce sustained high yields of crops when treated and managed, including water management, according to current farming methods. Atkinson has a total of 2,118 acres of Prime Farmland soils or 29% of the town’s total land area of which 12% or 262 acres is protected.

Farmland Soils of Statewide Importance – According to the USDA-Soil Conservation Service, Land Inventory and Monitoring (LIM) System, Farmlands of State Importance are rated as being of statewide importance for the production of food, feed, fiber, forage, and oilseed crops. They can be farmed by greater input of fertilizer and erosion control practices and will produce fair to good crop yields when managed properly. Atkinson has a total of 1,387 acres of Farmland of Statewide Importance soils or 19% of the town of which 14% (198 acres) is protected.

Farmland Soils of Local Importance – Farmland of Local Importance is either currently producing crops, has the capability of production, or is used for the production of confined livestock. Farmland of Local Importance is land other than Prime Farmland or Farmland of Statewide Importance. This land may be important to the local economy due to its productivity or value. It does not include publicly owned lands for which there is an adopted policy preventing agricultural use.

TOPOGRAPHY AND SLOPE

The 2011 Natural Resource Inventory includes comprehensive information about the geologic landscape of Atkinson. These features have not changed significantly since 2011, but this important information is summarized and compiled below.

The topography of Atkinson differs throughout town with scattering hills separated by steams, brooks, and large wetland complexes. Elevations range from a high of 426 feet to 295 feet from above sea level. Table 4 is from the 2011 Natural Resource Inventory and identifies major topographic features and their corresponding elevations in Atkinson.

Table 4: Major Topographic Features and Elevations in Atkinson	
Topographic Feature	Elevation (feet)
Hog Hill	426.5
Providence Hill	337.9
Pine Knoll	377.3
Bragg Hill	308.4
Poor’s Hill	295.3

Slope

Slope is the relative steepness or pitch of a piece of land and can be measured in the form of percentages calculated by dividing the difference in elevation of two points by the distance between those two points. Slopes from 0% to 3% are usually associated with wetlands, and are not well drained. Areas with slopes from 3% to 8% and favorable soils are generally ideal for development. Construction on slopes from 8% to 15% will require extra care to provide proper drainage and soil stabilization. As described in the 2011 Natural Resource Inventory (NRI), *“for the purposes of zoning and regulation, most communities define steep slopes in the range of 15 and 20%.”* Development on steep slopes requires greater land disturbances to construct roads and buildings, as well as more infrastructure to manage runoff and prevent erosion. The NRI identifies goals for limiting and/or regulating land-based activities on steep slopes.

WATER RESOURCES

Atkinson’s water resources play a significant role in the services, health, and quality of life within the town. It is important to analyze this critical resource further to identify the existing water supply, water quality, and related potential or existing water-related concerns in town. High quality groundwater, surface waterbodies, wetlands, streams, and other water sources provide many services that benefit community members and the shared natural environment. These resources also help to define the rural character of the town.

Watersheds

The following section describes the watersheds that Atkinson lies within, as well as provides an important understanding of how Atkinson’s geographical location within these watersheds influence the surface waters within and beyond the town’s jurisdictional boundaries. The entirety of Atkinson lies within the Merrimack River Watershed. This large watershed has a classification of a HUC8. The smaller the HUC number, the larger the watershed is. The Merrimack River Watershed is made up of several smaller sub watersheds (fourteen HUC10 watersheds) however, the Town of Atkinson lies within two of these HUC10 sub watersheds: the Spickett River Watershed and the Powwow River-Merrimack River Watershed. All streams within the Merrimack River Watershed flow into the Merrimack River, so all streams that originate in Atkinson, or are flowing into and through Atkinson, end up in the Merrimack River. It is important to recognize Atkinson’s location within these watersheds to understand how the water flows into Atkinson from other communities and out of Atkinson into neighboring communities further downstream.

A total of 8 miles of the Merrimack River Watershed streams flow into Atkinson from upstream waters such as the Spickett River Watershed. No additional streams flow into Atkinson when going from the HUC10 watershed to the larger HUC8 watershed. Therefore, this indicates that the primary upstream surface water source into Atkinson is by the flow of water from the Hog Hill Brook from Hampstead. To clarify, this shows that Atkinson doesn’t have many upstream

surface water considerations because of the location of the town. Atkinson sits at a higher elevation within the Spickett River Watershed and the Powwow River-Merrimack River Watershed and therefore only 8 miles of the Hog Hill Brook flows into Atkinson from Hampstead. Due to Atkinson's location sitting at a higher elevation within these two HUC10 watersheds, this means that most of the water in Atkinson originates in town. The town's location also indicates that Atkinson has a high responsibility to ensure positive surface water quality measures because the town's runoff ends up in downstream towns.

The Spickett River Watershed accounts for 62% of Atkinson whereas the Powwow-River – Merrimack River Watershed accounts for 38% of town. These two watersheds are on average 53% forested. This indicates that there is a significant amount of opportunity for future conservation efforts of forested lands within these watersheds should the town chose to consider. The two watersheds in Atkinson have an average of 22% of conserved forested land. It should be noted that this conserved land is in reference to both protected and conserved lands including open space lands. This shows that the Town of Atkinson has done a fairly good job of conserving forested land across the watersheds in town. This also shows that Atkinson is concerned about water quality in Atkinson as well as the quality of water that flows out of Atkinson to other communities downstream.

SURFACE WATER

This surface water section provides information on the existing rivers, streams, wetlands, and other waterbodies in Atkinson; as well as provides insight on the importance of

waterbody buffers and describes Atkinson's land area containing surface waters. Atkinson has approximately 21 miles of streams and rivers accounting for only seven named tributaries (brooks) within its boundaries, ranging in stream order classification from first order to third order. For stream order classifications, the larger the number, the larger the stream or river size. As shown in Table 5, 63% of all streams in Atkinson are first order streams which are typically smaller streams. A visual of the location of the streams in Atkinson by stream order can be found on the Atkinson Ordered Streams Map on the following page.

Table 5: Atkinson Stream Orders			
Stream orders	Description	Miles	Percent of streams
1	Connect smaller wetland complexes and form headwater drainages from nearby hills	12.9	63%
2	Typically connect large wetlands	4.5	22%
3	Complexes located in wide valleys between hills	3.2	16%
Total		20.6	100%

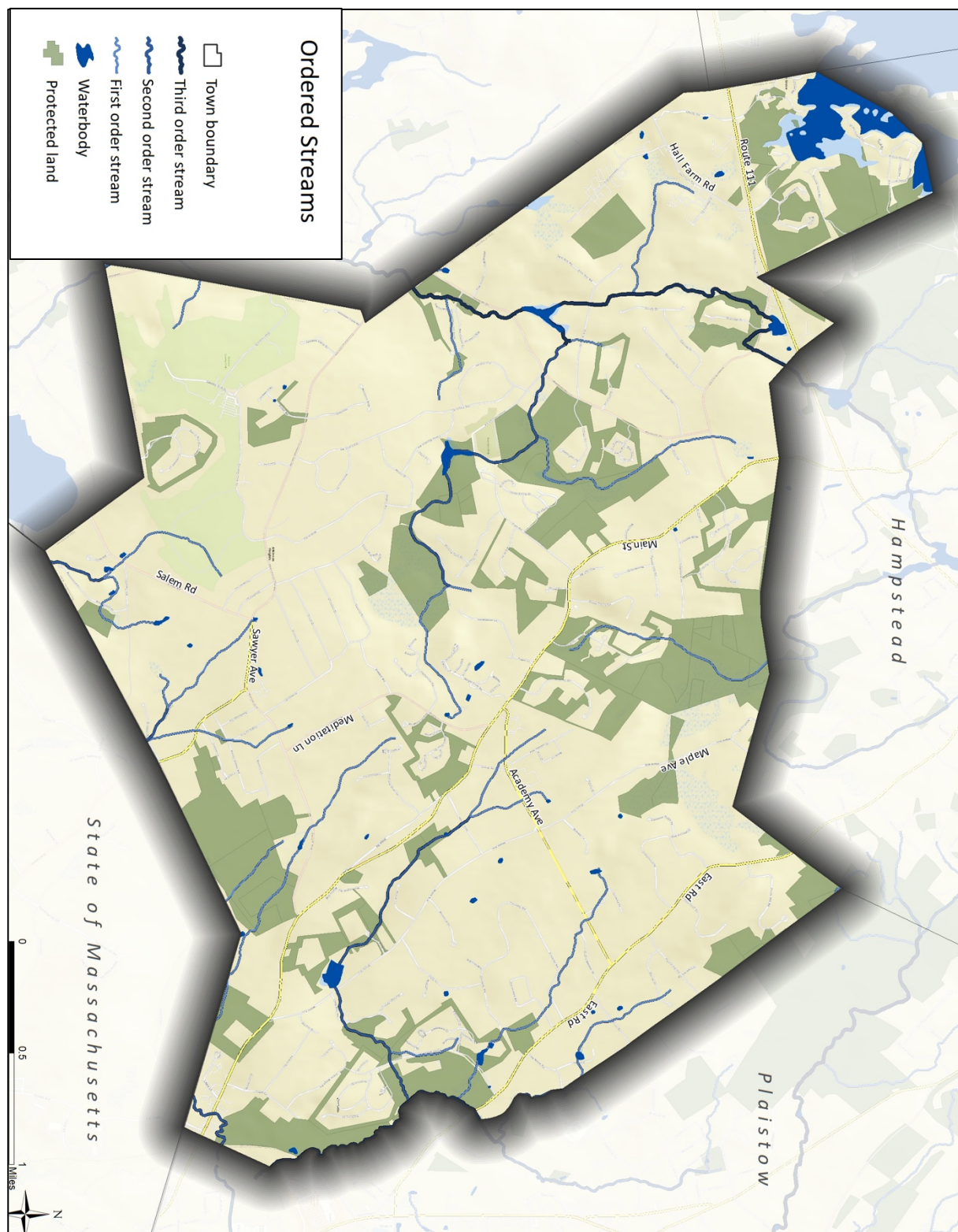


Table 6 identifies a list of the rivers and streams in Atkinson, the corresponding New Hampshire Department of Environmental Services (NHDES) waterbody identification number, what watershed the stream/river is located in, as well as its geographical location within town. The geographic location descriptions depicted in Table 6 can also be found in the 2011 Atkinson Natural Resource Inventory (NRI).

Table 6: Rivers and Streams in Atkinson			
NHDES Waterbody ID #	NHDES Stream Name	Watershed	NRI Geographical Location
NHRIV700061102-04 & 05 & 06	Hog Hill Brook- Unnamed brook	Lower Spickett River	Headwaters in the northwest corner; drains south to Salem
NHRIV700061102-08	Hog Hill Brook - Providence Hill Brook	Lower Spickett River	Tributary of Hog Hill Brook; drains west to Salem
NHRIV700061401-06 & 07	Foote Brook	Little River	Headwaters in southern area; small impoundment at mid-point; drains south to Haverhill, MA
NHRIV700061102-01	Unnamed Brook – To Johnson Pond	Lower Spickett River	-
NHRIV700061401-05	Unnamed to Blunts Pond	Little River	-
NHRIV700061401-11	Unnamed Brook	Little River	-
NHRIV700061102-07	Unnamed Trib. To Captain Pond	Lower Spickett River	-
NHRIV700061402-01	Creek Brook	Merrimack River- Shawsheen River To East Meadow River	Headwaters in extreme southern area; joins unnamed tributary at town/state border; drains south to Haverhill, MA
NHRIV700061402-02	Unnamed Brook	Merrimack River- Shawsheen River To East Meadow River	
NHRIV700061401-10	Camp Brook	Little River	Headwaters in extreme southern

			area; drains to Haverhill, MA
--	--	--	-------------------------------

Wetlands

The National Wetlands Inventory, managed by the US Fish & Wildlife Service, is the most comprehensive dataset on wetland abundance, distribution, and detailed characteristics. This dataset identifies permanently flooded areas like lakes and ponds as well as other wetland types. Atkinson only has 93 acres of permanently flooded waterbodies accounting for 1% of the town's area. Seasonally flooded/saturated wetlands account for 475 acres or 7% of town of which 47% are protected. Other wetland types exist in Atkinson to a limited degree, this includes semi-permanently flooded and temporarily flooded wetlands. Almost half (49%) of Atkinson's wetlands (excluding permanent waterbodies) have been protected; 42% of all wetlands in Atkinson have been protected.

In Atkinson, 1,137 acres or 16% of the town's total land area is composed of hydric soils of which 33% are protected. Hydric Soils, as identified by NHDES, are soils that are saturated or flooded during the growing season sufficient to produce anaerobic conditions in the upper soil layers. As identified in Atkinson's 2022 Land Conservation Plan, Atkinson has eight identified prime wetlands: Hall Farm Pond, Hog Hill Brook, Hovey Meadow Wetland, Steward Pond Farm, Sawmill Swamp East, Sawmill Swamp West, Wright Farm Pond, Bryant Brook.

Atkinson's hydric soils and prime wetlands are shown on Map 7 – Wetlands of the 2022 Land Conservation Plan (included as an addendum to this Existing Conditions Report). For more information on Atkinson's prime wetlands, refer to Section 4 of the Land Conservation Plan.

THE SHORELAND WATER QUALITY PROTECTION ACT (SWQPA)

The Shoreland Water Quality Protection Act (SWQPA) includes all lands within 250 feet of the following waterbodies:

- All lakes and ponds greater than 10 acres.
- All 4th order and greater streams and rivers and most designated rivers, including sections less than 4th order.
- All waters subject to the ebb and flow of the tide.

There is only one pond in Atkinson that is greater than 10 acres and fits the requirements for SWQPA which is Big Island Pond. Big Island Pond is in the extreme northwest corner of Atkinson, with a large portion of the lake located in the Town of Hampstead to the north and east and Derry to the west. Approximately 218 acres of Big Island Pond is located within Atkinson. A list of Atkinson's ponds and major streams can be found in Table 7. More than one quarter (28%) of the SWQPA area is protected. For more information on the SWQPA refer to Atkinson's 2011 Natural Resource Inventory.

WATER QUALITY ASSESSMENT

This following water quality assessment is based on data collected from the New Hampshire Department of Environmental Services (NHDES), and the programs and tools NHDES uses to evaluate Atkinson's water quality. The Surface Water Quality Assessment Program from the NHDES provides a thorough report card of water quality assessments every two years for many of the state's rivers, lakes, and beaches. Each waterbody is assessed on (1) aquatic life integrity, (2) fish consumption, (3) potential drinking water supply, (4) primary contact recreation, (5) secondary contact recreation, and (6) wildlife. Figure 1 describes these rankings.

In a cursory exploration of the NHDES 2020/2022 Consolidated Assessment and Listing Methodology (CALM), which provides a full understanding of how the Surface Water Quality Standards are translated into assessments, there was no discussion of the impact from agricultural pollution/runoff. For Atkinson to better understand the role of agricultural pollution/runoff, the Town could contact NHDES for more information.

Table 7 shows the overall assessment for the ponds and streams in Atkinson. All waterbodies received a poor grade for fish consumption because of mercury, and although many of the waterbodies do not have data, all of them received a good assessment for potential public drinking water supply. Based on data from NHDES shown in Table 7, there appears to be concerns for Island Pond for Primary Contact Recreation as it was ranked as poor by the state. The town may consider mitigating efforts to address this rating.

Figure 1:		Severe	Poor	Likely Bad	No Data	Likely Good	Marginal	Good
		Not Supporting, Severe	Not Supporting, Marginal	Insufficient Information – Potentially Not Supporting	No Data	Insufficient Information – Potentially Full Supporting	Full Support, Marginal	Full Support, Good
CATEGORY	Description							
Category 2	Meets standards						2-M or 2-OBS	2-G
Category 3	Insufficient Information			3-PNS	3-ND	3-PAS		
Category 4	Does not Meet Standards;							
4A	TMDL* Completed	4A-P	4A-M or 4A-T					
4B	Other enforceable measure will correct the issue.	4B-P	4B-M or 4B-T					
4C	Non-pollutant (i.e. exotic weeds)	4C-P	4C-M					
Category 5	TMDL* Needed	5-P	5-M or 5-T					

* [TMDL](#) stands for Total Maximum Daily Load studies

Table 7: Ponds and Major Streams in Atkinson								
Waterbody ID #	Waterbody Name	Aquatic Life Integrity	Fish Consumption	Public Drinking Water Supply	Primary Contact Recreation	Secondary Contact Recreation	Wildlife	Assess. Unit Category
NHLAK700061101-01-01	Island Pond	5-M	4A-M	2-G	5-M	2-G	3-ND	5-M
NHIMP700061102-04	Country Club Pond	3-ND	4A-M	2-G	3-ND	3-ND	3-ND	3-ND
NHIMP700061401-05	Wildlife Pond	3-ND	4A-M	2-G	3-ND	3-ND	3-ND	3-ND
NHIMP700061401-03	Foote Brook – Private Swimming Pool	3-ND	4A-M	2-G	3-ND	3-ND	3-ND	3-ND
NHIMP700061102-01	Hog Hill Brook	3-ND	4A-M	2-G	3-ND	3-ND	3-ND	3-ND

For detailed assessments of each stretch of river/stream/waterbody, refer to the Watershed River Assessments referenced on page 1 under Data Sources. An interactive web map, the 2020/2022 Surface Water Quality Assessment Viewer, can be found there. This tool allows users to identify particular lakes, rivers, and waterbodies and their associated assessment every two years dating back to 2008.

There are three ponds considered impaired based on the NHDES assessments. They are listed in Table 8. These "*impaired surface waters*" don't have much impact on Atkinson and only represent a small percentage of town. This is because Captain Pond is located within Salem, NH and the Kelly Brook – Seaver Brook is located within Plaistow, NH though their wetland buffers extend slightly into Atkinson

Table 8: Surface Waters with Impairments			
Waterbody name	Acres in Town	Percent of Town	Impairment
Island Pond	281	4%	Chlorophyll-a, Cyanobacteria hepatotoxic microcystins, Phosphorus (total)
Captain Pond	48	1%	Chlorophyll-a, Dissolved oxygen saturation, Phosphorus (total)
Kelly Brook - Seaver Brook	34	0.5%	Benthic-Macroinvertebrate Bioassessments (streams), Dissolved oxygen saturation, Escherichia coli, Dissolved Oxygen (mg/L)
Total	363	5%	-

which accounts for their small percentage in town. Although not included by NHDES as surface waters with impairments, there are local concerns for Blunt's Pond as well because of the large amount of eutrophication that is caused by nutrients, (mostly lawn fertilizers) that flow into it.

GROUNDWATER

This groundwater section provides information on Atkinson's groundwater resources such as the types of aquifers in Atkinson and their relative percentage of development or forested land cover based on the 2019 National Land Cover Database. The types of aquifers are classified based on their ability to percolate water through subsurface material (ground). An aquifer's ability to pass water through the ground to recharge the groundwater is known as

transmissivity. The “Groundwater-Resources in New Hampshire: Stratified Drift Aquifers” document describes stratified-drift aquifers as primarily layers of sand and gravel deposited by glacial meltwater from retreating glaciers. Only 7% of Atkinson’s land area is over stratified drift aquifers. The document “Ground-Water Resources in New Hampshire: Stratified Drift Aquifers” further explains the complex concept of transmissivity:

“...the higher the value of hydraulic conductivity, the more readily water can flow through the aquifer material. Aquifers that have a large, saturated thickness, and are composed of material with high hydraulic conductivity, will have a high transmissivity and can readily transmit water to wells”.

More than one third (35%) of all land on top of aquifers has been protected. However, 39% of low producing aquifers have been developed and 35% are still forested. 56% of land above moderate producing aquifers has been developed and contains no forested land. Moderate producing aquifers are classified as the less than 1,000 square feet per day and 1,000-2,000 square feet per day transmissivity. There are many variables that determine the impact of development over aquifers including specific pollution compounds, upstream contaminants, soil type, and others. Atkinson’s stratified drift aquifers are in the extreme west part of town along the Salem, NH town line and are also located in the extreme east and southeast of Atkinson along the Plaistow, NH, and Haverhill, MA, town lines. A map of Atkinson’s aquifers can be found on Map 6 – Groundwater, Aquifers (USGS 1992) in the 2022 Land Conservation Plan and has been included at the end of this profile.

If the town identifies groundwater resources as a high natural resource priority, there are many measures the town can explore. Municipalities are authorized to develop local groundwater protection programs, a result of New Hampshire’s Groundwater Protection Act from 1991. The groundwater classifications for GA2 are “*potentially valuable stratified drift aquifers defined by USGS, no land use prohibitions, and no active management*” as identified in the NHDES Groundwater Reclassification Document. Only a small area (15 acres) in Atkinson is considered a GA2 area. This area is located in the western side of Atkinson at the Salem town line. For approaches to groundwater protection refer to the NH Department of Environmental Services Guide to Groundwater Protection and to understand the process to reclassify groundwater to GAA or GA1, refer to the NH Department of Environmental Services A Guide to Groundwater Reclassification.

WATER SUPPLY

This section highlights Atkinson’s existing water supply and issues related to water quantity in town. As identified in the Town Facilities and Services Profile of this Existing Conditions Report, Hampstead Area Water Company (HAWC) services 1,426 connections in Atkinson or about 3,565 people. This means that about half (49%) of the town’s population is tied into the HAWC system. The other approximately 51% of Atkinson’s population are on private wells. There are a total of forty-three public water systems in Atkinson in which eighteen are active. It should be noted that most Atkinson’s active public water supply wells are bedrock wells and there is only

one active gravel-packed well in town. New Hampshire Department of Environmental Services only releases public water supply data as public information, therefore data on private wells and private water supplies in Atkinson is limited.

According to a NHDES 2021 Environmental Factsheet, *“Most bedrock wells for household use are 200 to 500 feet deep; some are over 1,000 feet. The median depth of bedrock wells in New Hampshire is approximately 400 feet. The median yield is 15 gallons per minute (gpm)”*. In Atkinson, there are five bedrock wells that are over 500 feet but the overall average well depth of the active public wells in Atkinson is about 400 feet which corresponds with the states average well depth. There are six active bedrock public water supply wells in Atkinson that have a yield lower than the state’s median which is 15 gpm. This indicates that Atkinson’s wells supply less gallons per minute (gpm) than that of the state’s average. Approximately 39% of Atkinson’s active public wells have a below average yield per minute.

Expansion of Regional Water Supply Infrastructure

The State of New Hampshire’s (NHDES) largest regional water distribution system interconnection project was conducted in the Southern New Hampshire communities of Derry, Windham, Plaistow, Salem, and with the Hampstead Area Water Company (HAWC) which serves the towns of Atkinson and Hampstead. This project was implemented because of water supply issues in these communities due to a reduction in supply capacity from contamination of local wells, and because of the region’s growing population. Phase one of this project began in 2016 by creating a regional water pipeline from Manchester Water Works (Lake Massabesic water supply) to Derry, Windham, Salem, HAWC (Atkinson and Hampstead), and Plaistow. Phase 2 involved sending 7.15 million gallons of water per day to the Hookset pump station of which 3.1 million gallons of water per day gets sent down to southern New Hampshire through Derry. Since 2020, HAWC (Atkinson & Hampstead) have been tied into this regional pipeline water supply. Hampstead Area Water Company receives 250,000 gallons of water per day from this pipeline to supply Atkinson and Hampstead.

POTENTIAL CONTAMINATION

The following section discusses NHDES identified potential contamination sites in Atkinson and the importance of monitoring these locations in order to prevent contamination in Atkinson and downstream of the town. The Watershed Section of this profile identified Atkinson’s location in relation to surrounding towns within the larger watersheds. This information helps identify Atkinson’s potential downstream impacts to water resources. The town contains higher elevation lands within each of the smaller sub-watersheds it falls within. This indicates that the quality of most of the water begins in Atkinson. Therefore, it is the responsibility of Atkinson to consider the downstream impacts of the various land uses in the community.

There are a total of nine active potential contamination sites within the 250-foot SWQA buffer. Table 9 and 10 identify that eleven percent (10 total) of the active potential contamination sites in Atkinson are underground storage tanks. Table 9 shows the total potential contamination

sites in Atkinson. However, Table 10 compares the number of active potential contamination sites in Atkinson with those that are within the 250-foot SWQPA buffer – these numbers look very different.

Table 9: Atkinson – Total Potential Contamination Sites					
Site type	Number active	Number inactive	Number declassified	Other	Total number
Aboveground Storage Tank	13				13
Nonsecure Environmental Monitoring Sites	15				15
Hazardous Waste Generators	5	17	2		24
Local Potential Contamination Sources	19				19
Remediation Sites	25	22		10	57
Solid Waste Facilities	2	2			4
Underground Storage Tank	10				10
Total	89				142

Table 10: Atkinson SWQPA - Potential Contamination Sites within the SWQPA						
Site type	Number active	Number inactive	Number declassified	Applied for	Other	Total number
Aboveground Storage Tank	2					2
Nonsecure Environmental Monitoring Sites	5					5
Hazardous Waste Generators		4				4
Local Potential Contamination Sources						0
Remediation Sites	1	3			1	5
Solid Waste Facilities	1					1
Total	9					17

NHDES has identified these local potential contamination sites/sources in town. These potential contamination sites/sources are mostly concentrated in the northwest part of town. Not coincidentally, these potential contamination sites are also located in Atkinson's Industrial Zone along Industrial Way and off NH 111. Additionally, other potential contamination sites are located in the center of town near the Atkinson Fire Department, as well as downstream of Main Street (NH 121). This indicates that there should be some concern about Atkinson's land

use development in relation to the community's impacts on water resources. A visual of where these potential contamination sites in Atkinson can be found is provided on Map 6 – Groundwater, Aquifers from the Land Conservation Plan. This map is also included at the end of this profile. This map also shows the Wellhead Protection Areas that are described later on in this section.

PFAs (Per- and Polyfluorinated Substances)

According to New Hampshire Department of Environmental Services, PFAs are a group of chemicals that have been increasingly found in our environment and throughout the state. *“Some PFAS do not break down easily and can move through soil, get into groundwater, and be carried through air. Because they are stable chemicals and move so easily in the environment, some PFAS have been found far away from where they were made or used”*. In March 2021, the NHDES Waste Management Division completed a PFAs Focused Site Investigation Work Plan in Atkinson. Between December 2019 and March 2020, NHDES sampled six private wells for 26 PFAs on Academy Avenue. Each location was sampled once, and one of the locations was sampled twice. Academy Avenue is the detected source of PFAs contaminants due to the cleaning of fire trucks at the Atkinson Fire Department and the associated runoff. The results of these samplings showed that at two locations, two PFAS were detected at concentrations exceeding their respective Ambient Groundwater Quality Standards (AGQS) (up to 19 times higher). These PFAs are perfluorooctanoic acid (PFOA) and perfluorohexane sulfonic acid (PFHxS). Regulated PFAS were detected at three other locations below their respective AGQS. Regulated PFAS were not detected at one location. Ambient Groundwater Quality Standards (AGQs) are groundwater standards established by the State of New Hampshire that are intended to be protective of groundwater as a source of drinking water.

WELLHEAD PROTECTION AREAS

Using data from the NHDES identified potential contamination sites in Atkinson, this section describes the identified types of potential contamination sites that fall within wellhead protection areas. About half of the properties in town utilize private wells as their primary water source. The wellhead protection areas can be seen on Map 6 – Groundwater, Aquifers Map found at the end of this profile. While there are potential contamination sites scattered around the wellhead protection areas, there are two main pockets. (1) near the intersection of Main Street and Academy Avenue, and (2) in the northwest corner near NH 111. Table 11 identifies that there are a total of 86 potential contamination sites located within wellhead protection areas in Atkinson. However, there are a total of 52 active potential contamination sites within these wellhead protection areas. Wellhead protection areas account for 55% or 3,965 acres of Atkinson.

Table 11: Atkinson - Potential Contamination Sites WITHIN Wellhead Protection Area (WPA)					
Site type	Number active in WPA	Number inactive	Number declassified	Other	Total number
Aboveground Storage Tank	7				7
Nonsecure Environmental Monitoring Sites	6				6
Hazardous Waste Generators	4	8	1		13
Local Potential Contamination Sources	10				10
Remediation Sites	16	15		8	39
Solid Waste Facilities	2	2			4
Underground Storage Tank	7				7
Total	52	25	1	8	86

WATER QUALITY AND QUANTITY CHALLENGES IN ATKINSON

In order to address the water quality and quantity concerns in Atkinson, it is important to first identify what the water issues in town are and what areas of town these are most present in. In terms of water supply, in 2018, about 30 private wells went dry near Kent Farm. Residents in this area either had to drill new wells as they were dealing with dry wells, or their wells had issues with contamination and residents had to install filtration systems. The wells near this neighborhood are bedrock wells which typically replenish themselves with water running through seams in the rock. This left many residents of this area reliant on bottled water for their drinking water supply. This neighborhood begins along Main Steet in Hampstead but includes a portion of Atkinson as well.

Due to the operations of Johnson and Johnson Company in the 1980's, located on NH 111, there have been 1-4 Dioxane contaminants discharged to Atkinson's groundwater. Many Atkinson residents' water supplies have been contaminated as a result, and in order to address these and other contamination issues the Southern New Hampshire Regional Pipeline expansion was implemented.

WATER RESOURCE COMMITTEE

The Atkinson Water Resource Committee was formed by the Board of Selectmen in 2021. The Committee consists of six members two of which act as a liaison to the Conservation Commission and the Board of Selectmen. The four remaining members are appointed for three-year terms. The Atkinson Water Resource Committee was formed to serve as an advisory and educational resource to the Town of Atkinson and its residents on issues concerning environmental sustainability, with a focus on water access, quality, conservation, economics,

education, and regulation. The Committee also serves as the primary advisor to the Select Board on all issues pertaining to water resources. The Committee's duties are:

1. To monitor via the NH DES OneStop website the Registered Water User (RWU) water usage in the town and report the usage to the Select Board;
2. To first bring to the Atkinson Select Board all water related issues which may affect the town or neighboring towns;
3. Track and report on relevant water issues at the state level, specifically legislative initiatives, DES and PUC actions which may affect Atkinson and neighboring towns;
4. Apply for grants that will enhance the future of water resources in our community.

STORMWATER MANAGEMENT

The Town of Atkinson participates in a Stormwater Management Program and maintains and manages a Municipal Separate Storm Sewer System (MS4). Below is a description of the program and MS4 system.

"Local drainage systems, whether natural or constructed, are important features that generally carry stormwater runoff away from developed areas to undeveloped areas, waterbodies, and wetlands. Although these drainage systems help to manage stormwater in our built environment, they are also a primary source of untreated pollutants in receiving waters including bacteria, nutrients oil, trash, and many other pollutants. These untreated pollutants in stormwater runoff are defined by the U.S. Environmental Protection Agency (EPA) as "nonpoint source pollution", meaning that the source of the pollution is not directly attributable to a single spatial point or polluter. Stormwater runoff from streets, parking lots, and lawns picks up and carries contaminants as it moves across the ground surface before entering into local drainage systems.

A municipal separate storm sewer system (MS4) includes the stormwater collection, conveyance, and outfall structures within a city or town. These structures include (but are not limited to) catch basins, drain manholes, culverts, stormwater basins, and swales. As with approximately sixty other municipalities in NH, the Town of Amherst MS4 is regulated under the EPA Clean Water Act (CWA) and requires a permit for discharges to the environment".

The 2021 Atkinson Stormwater Management Plan was updated in 2022. For more information on the Atkinson MS4 program visit: <https://www.town-atkinsonnh.com/town-administration/ms4>

PROTECTED LANDS

For the purposes of this section, protected lands include both conserved lands and open space lands. Conserved can be defined as acres that are mostly undeveloped and are protected from development. Atkinson has a total of 1,313 acres of protected land in which accounts for 18% of the town's total land area. As described in the 2022 Land Conservation Plan, *"to date, the town has protected more than 580 acres by purchasing and owning protected land, which represents roughly 8.7% of the buildable land in Atkinson"*. As shown in Table 12, in comparison with surrounding towns, Atkinson is one of the top two leading towns with the most acres protected.

Table 13 provides a list of protected lands by primary management in Atkinson. This table indicates the manager of these lands rather than the owner because it is common in Atkinson for the land to be owned by one entity and managed by another entity through conservation easements, set aside areas (Open Space Cluster Developments), deed restrictions, or to be fee owned. Of the total 1,313 acres of protected land in Atkinson, the majority is managed and/or owned by the Town of Atkinson. The remaining lands are owned by qualified third party organizations, and or is under private ownership. This indicates that Atkinson is active in the conservation of the town and its residents are willing to invest in natural resource protection.

The 2022 Land Conservation Plan, prepared by the Rockingham Planning Commission (RPC) in collaboration with the Atkinson Conservation Commission, identified several locations in Atkinson for priority conservation. These priority areas for conservation were identified by creating a Co-Occurrence Map, which identifies areas in town that have multiple critical natural resource types ("co-occurring" in an area). After the analysis of Atkinson's existing conserved land, an inventory of natural resources, and identified conservation priorities, the Co-Occurrence Map was created in order to identify Atkinson's major natural resource priority locations. In addition to this map, the Land Conservation Plan (Section 5) presents a corresponding table and map (Table 5.1 and Map 5.3) that identify conservation attributes located within selected areas of Atkinson. For more information on how this co-occurrence map was created, and how conservation attribute locations in Atkinson were chosen, as well as what conservation attribute locations were chosen, visit Section 5 of the Land Conservation Plan.

Table 12: Protected Lands in Abutting Towns

Town	Total Acreage	Protected Acres	Percent Protected
Hampstead	9,014	1,676	19%
Atkinson	7,258	1,313	18%
Plaistow	6,790	834	12%
Derry	23,226	2,623	11%
Salem	16,569	1,597	10%

Table 13: Protected Lands in Atkinson by Manager

Manager	Acres	Percent of Protected Lands in Atkinson
Town of Atkinson	1,265	96%
Town of Hampstead	2	0.2%
Rockingham County Conservation District	19	1.4%
Society for the Protection of NH Forests	7	0.5%
Southeast Land Trust	2	0.2%
Other	18	1%
Total	1,313	100%

TOWN FORESTS

Atkinson is fortunate enough to have 10 Town Forests that total about 580 acres as of December 2022. The Town Forest properties are also registered tree farms and are overseen by the Conservation Commission. The town also routinely consults with professional foresters to maintain the health and viability of the Town Forest properties through implementation of forest best management practices. As identified in the 2022 Land Conservation Plan, since 1985, the Conservation Commission has worked with a consulting forester to update the management plans for the Town Forest properties to keep them productive and aesthetically maintained. The management plans for the Town Forests in Atkinson can be found on the Atkinson Town website under the Conservation Commission. Table 14 lists the Town Forests in Atkinson and its total acreage. For more information on the town forests see the 2022 Land Conservation Plan.

Table 14: Atkinson Town Forests	
Site Name	Acreage
Chambers – Fila Town Forest	48.83
Caroline Orr Town Forest	61.19
Ruth McPherson Town Forest	28.46
Sawyer Town Forest	146.55
Chadwick Town Forest	50.67
Slade Town Forest	18.8
Judge Marshall Town Forest	32.04
Sawmill Town Forest	102.35
Stickney Town Forest	34.44
Ruth Marshall Town Forest	57.1

Some recent projects within the town forests that the Conservation Commission is working on as of December 2022 include:

- Stickney Town Forest selectively logged in order to provide new growth forest for wildlife.
- The town is in the process of acquiring a 15-acre parcel at the end of Knightland Road (adjacent to Sawmill Ridge Development open space). This parcel is already surrounded by conserved land and will extend the North Sawmill Swamp Town Forest.

PRIORITIZED HABITAT AND CORRIDORS

The NH Fish and Game Department, along with many other partners across the state created the NH Wildlife Connectivity Model using information derived from the state's Wildlife Action Plan. The NH Wildlife Connectivity Model is *"a basic, GIS-based, landscape permeability model that predicts broad-scale wildlife connectivity zones across the state"*. The analysis of this model indicates areas that are key for both land protection efforts and strategic locations for restoring connectivity in currently fragmented landscapes. The model is also based on the NH Wildlife Action Plan's identified rare habitat types, identified habitat corridors, and land cover types. The NH Wildlife Corridors map shows potential corridors that connect core areas of wildlife habitat that are over 50 acres in size and identified as a priority in the NH Wildlife Action Plan (Highest Ranked Habitat in NH and/or Highest Ranked Habitat in Biological Regions).

The NH Wildlife Connectivity Model was created to assist municipalities across the state identify where priority habitat is located within their communities. The NH Wildlife Corridors Map helps communities identify the key surrounding areas of these identified priority habitats which may

also have development pressures. Together, these resources can help drive community land use and policy decisions based on the character and vision of the community. The identified priority wildlife areas in Atkinson, that were identified by the state, are identified as Priority Habitat Blocks based on acreage. The subsections of this profile below present these specific Priority Habitat Blocks, and a corresponding table breaks down the districts based on the type of habitat that is located within that block and the amount of habitat that is currently protected in town. A visual of the priority habitat blocks and state identified habitat corridors can be found on the Atkinson, NH Prioritized Habitats Blocks and Corridors Map at the end of this profile.

Priority Habitat Blocks

The 2022 Atkinson Land Conservation Plan indicates conservation priorities for Atkinson as identified by the Conservation Commission. The Atkinson Conservation Commission identified that *“the Wildlife Action Plan conducted by NH Fish and Game paints a more realistic picture of the important wildlife areas in Atkinson, so ... those areas are included in the prioritization process”*. Other related conservation priorities identified in the Land Conservation Plan include the continuity of protected open space, as well as unfragmented blocks, and wildlife corridors and blocks. The discussion of priority habitat blocks as described below provides supplemental context to the Land Conservation Plan while following the Conservation Commission’s key priorities, and sheds light on the amount of already protected land due the Conservation Commissions previous land protection efforts.

The State has identified four blocks in Atkinson as priority habitat areas. Prioritized Habitat Blocks show core areas of wildlife habitat (areas over 50 acres in size that are a priority in the New Hampshire Wildlife Action Plan). The larger block numbers correspond with the higher acreages of these areas of prioritized habitat. The corresponding Prioritized Areas and Habitats Map located at the end of this profile provides a visual representation of where these blocks exist in town and corresponds with the Prioritized Habitat Block subsections.

Block 1

As shown in Table 15, three-quarters of Block 1 is Appalachian oak-pine habitat, which is a common habitat in southern New Hampshire. The entirety of Block 1 is protected.

Table 15: Prioritized Habitat Block 1				
Block Number	Total Block Acres	Habitat Type	Acres	Percent of Total Block
Block 1	42	Appalachian oak-pine	32	76%
		Hemlock-hardwood-pine	10	24%

Block 2

Identified in Table 16, 71% of Block 2 is Appalachian oak-pine habitat and 16% is composed of Hemlock-hardwood-pine habitat. Though both of these habitat types are common in the

state, these types of habitats still provide valuable homes and resources to wildlife and the town. The entirety of Block 2 is also protected.

Table 16: Prioritized Habitat Block 2				
Block Number	Total Block Acres	Habitat Type	Acres	Percent of Block
Block 2	55	Appalachian oak-pine	39	71%
		Developed impervious	1	2%
		Developed or barren land	3	5%
		Hemlock-hardwood-pine	9	16%
		Open water	1	2%
		Peatland	1	2%
		Wet meadow/shrub wetland	2	4%

Block 3

Table 17 identifies that nearly the entirety of Block 3 is grassland habitat which is classified as a rare habitat in the State of New Hampshire. In Atkinson, none of this identified priority habitat block is protected. This could be a focus of future conservation efforts if the town chooses.

Table 17: Priority Habitat Block 3				
Block Number	Total Block Acres	Habitat Type	Acres	Percent of Block
Block 3	74	Appalachian oak-pine	1	1%
		Developed impervious	1	1%
		Grassland	70	95%
		Open water	1	1%
		Temperate swamp	1	1%

Block 4

This Block accounts for a total of 113 acres, the largest acreage of the state identified habitat blocks in Atkinson. More than half of Block 4 is composed of wet meadow/shrub wetland which is a State classified rare habitat. 81% of Block 4 or 92 acres is protected.

Table 18: Priority Habitat Block 4				
Block Number	Total Block Acres	Habitat Type	Acres	Percent of Block
Block 4	113	Appalachian oak-pine	47	42%
		Hemlock-hardwood-pine	1	1%
		Peatland	1	1%
		Temperate swamp	1	1%
		Wet meadow/shrub wetland	63	56%

CONSERVATION TAKEAWAYS

Although there are only a few state-identified priority habitat blocks in Atkinson, much of those identified habitats that exist in Atkinson are already protected. If the town wants to add to its conservation priorities, the town could consider conserving/protecting rare habitats such as wet meadows/shrub wetland habitat found in Habitat Priority Block 4.

WILDLIFE CORRIDORS

Wildlife corridors connect these habitats so that wildlife can move between areas without significant fragmentation from developed land. As identified in the NH Wildlife Corridors 2018 Report, the NH Fish and Game Department (NHFG) partnered with the NH Department of Transportation (NHDOT) and NH Department of Environmental Services (NHDES) to research wildlife corridors in New Hampshire to address the following research topics:

1. Existing and needed wildlife corridors,
2. Voluntary mechanisms that affect wildlife corridors, and
3. Any existing statutes, rules, and regulations that affect wildlife corridors.

This research was then simulated within the NH Wildlife Connectivity Model. Atkinson's identified wildlife corridors surround the priority habitat areas so the town may wish to consider future conservation and protection of these wildlife corridors as it establishes its priorities for future conservation efforts. Additionally, as shown on Map 14: Connecting the Coast which is included in the Land Conservation Plan, the Conservation Commission identified Connecting the Coast Wildlife Habitats and Prioritized Blocks. For more information on Connecting the Coast prioritized habitat corridors and blocks in Atkinson, visit the Land Conservation Plan. The Conservation Commission included the Connecting the Coast wildlife corridors and prioritized habitat blocks in the Land Conservation Plan in order to help protect the surface waters and their immediate areas from development.

ATKINSON CONSERVATION COMMISSION

The Atkinson Conservation Commission is a volunteer organization empowered by state law to protect Atkinson's rural character by *"managing the existing conservation lands and educating the public on the benefits of protecting natural resources"*.

OPEN SPACE IN ATKINSON

Atkinson's open spaces play a vital role in the health and quality of life in town. Open space as identified in the Atkinson 2011 Natural Resource Inventory includes *"any lands that remain in a natural and undeveloped condition that contribute ecological, scenic or recreational value. The definition of open space may be expanded to include working lands (forests, agriculture, field corners, fence rows and abandoned pastures) and managed green space such as golf ranges, parks, and recreation areas"*. The 2022 Land Conservation Plan identifies that there are many

benefits to the community for preserving open space lands. Some of these benefits include Wildlife and Habitat Protection, water quality, drinking water and local groundwater aquifer protection, scenic and aesthetic values, historic landscape and resource preservation, agricultural uses and farmland production, air quality protection, flood impact prevention, and recreational uses and educational opportunities.

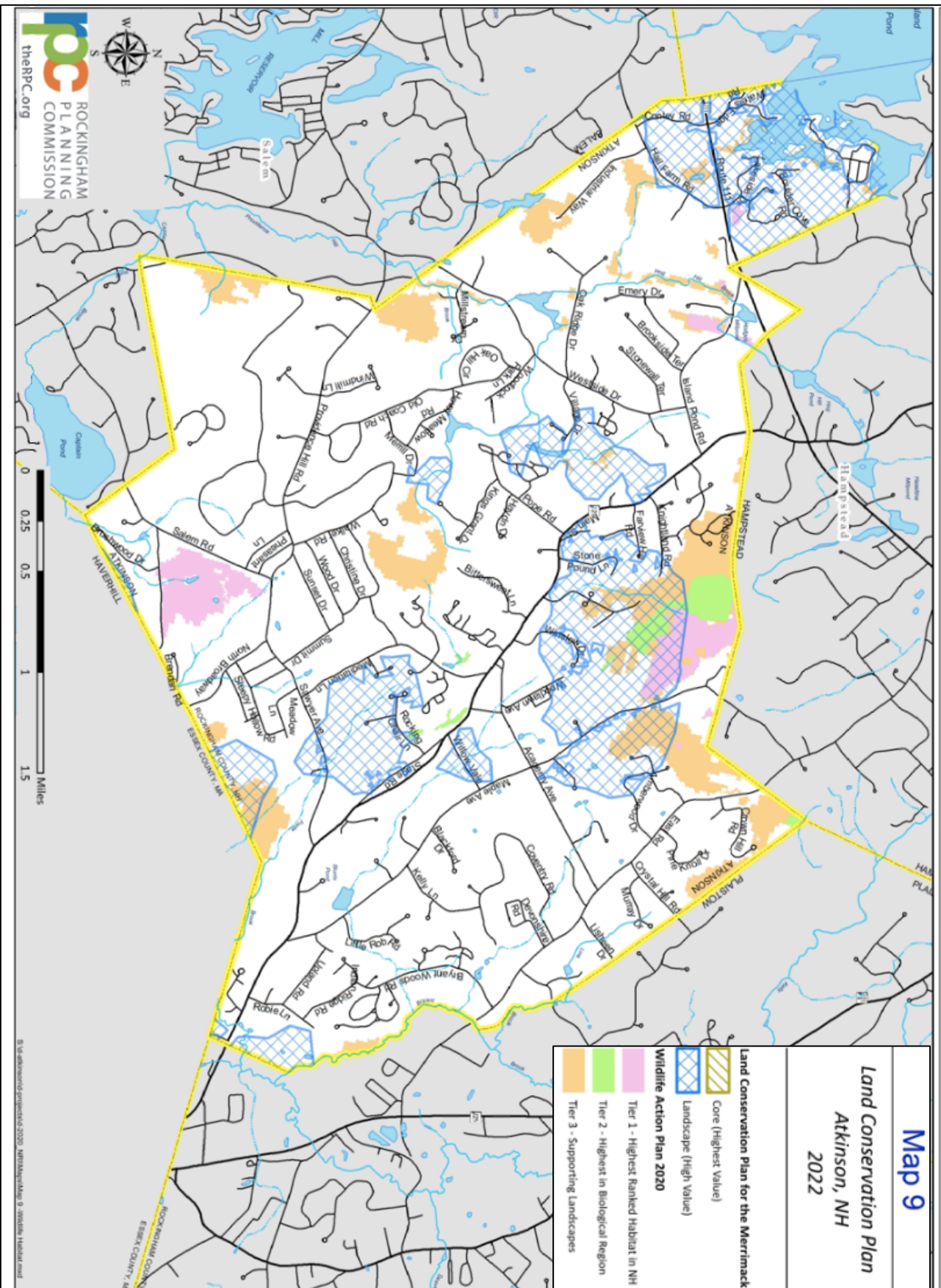
The Atkinson 2022 Land Conservation Plan's Map 8 – Open Space, found at the end of this profile, shows the parcels of land in Atkinson that are conserved, town forests, municipal land, other RSA 36-4:A conservation land, and parcels that have a conservation easement or conservation deed restriction on them owned by either the town or privately as well as development parcels that are associated with open space. For more information on the open space lands in Atkinson, visit the 2022 Land Conservation Plan.

Cluster Development Open Space

Atkinson is unique in terms of the amount of dedicated open space that has been set aside through cluster developments. Although this set aside open space is not deemed “conserved” due to the absence of a conservation easement on many of these parcels, about 661 acres of set aside open space is undevelopable due to zoning restrictions. This set aside open space is identified by the developer to meet the Rural Cluster Residential Development provisions. The Town of Atkinson currently has 20 cluster developments that account for about 1,313 acres of the town. A list of the cluster developments, their entire development acreage, and their open space acreage can be found in the Land Conservation Plan Appendix B Table and Map B.

Although these open spaces created through cluster developments benefit the town by preserving the rural character, many of these set aside open space parcels act as a thin buffer to the development. This can be shown on the Cluster Development Open Space Map found at the end of this profile. These thin strips of lands do not contribute to the health and safety of wildlife by providing adequate space of wildlife habitat, and many do not provide public access. Additionally, the Town of Atkinson only holds a conservation easement on a few of these cluster development open spaces deeming these parcels to be in permanent conservation.

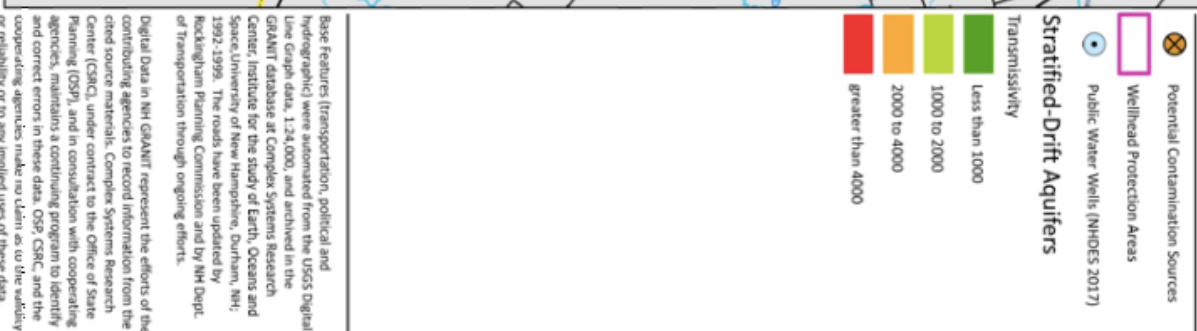
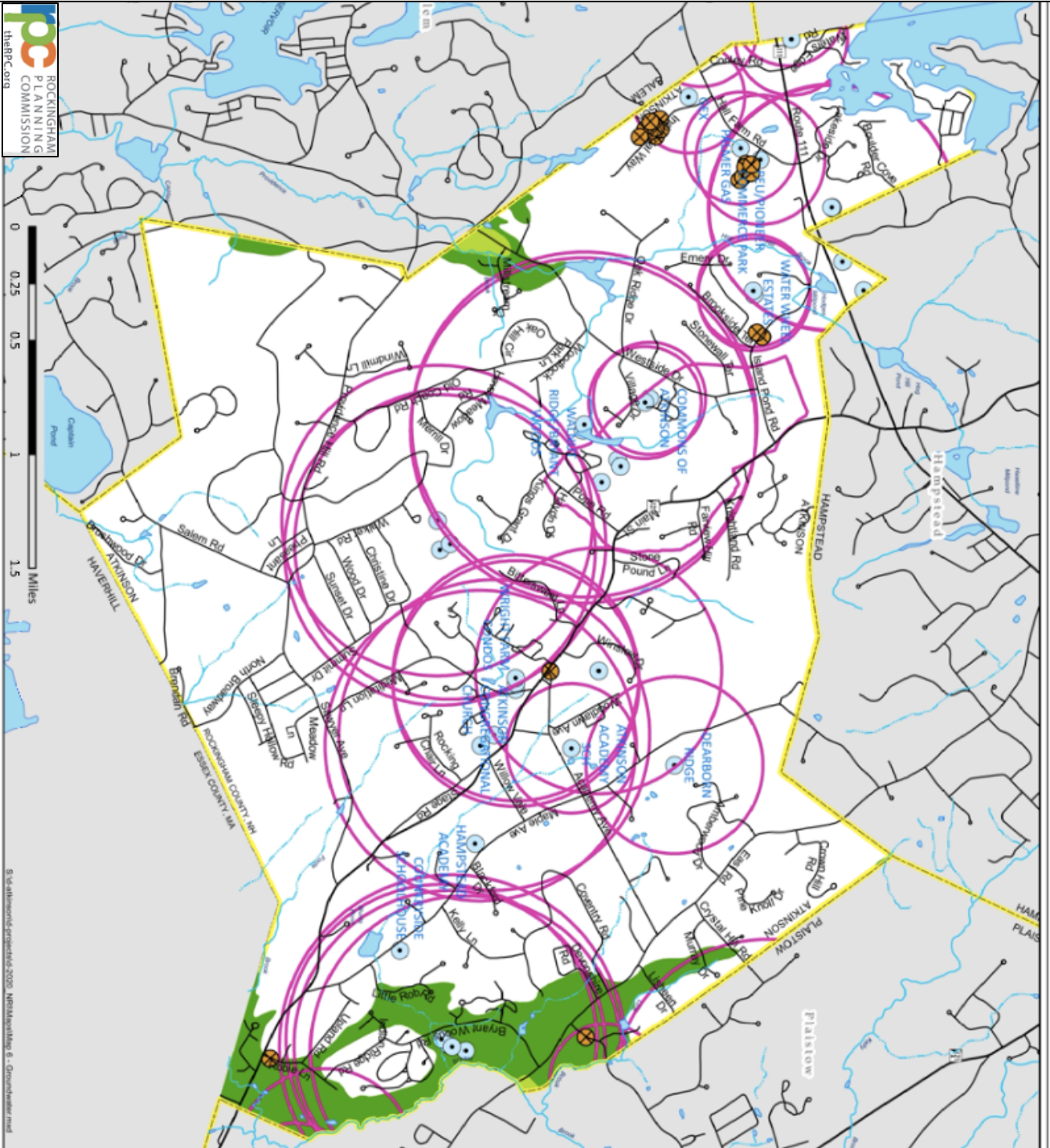
Map 9 - Wildlife Habitat Features



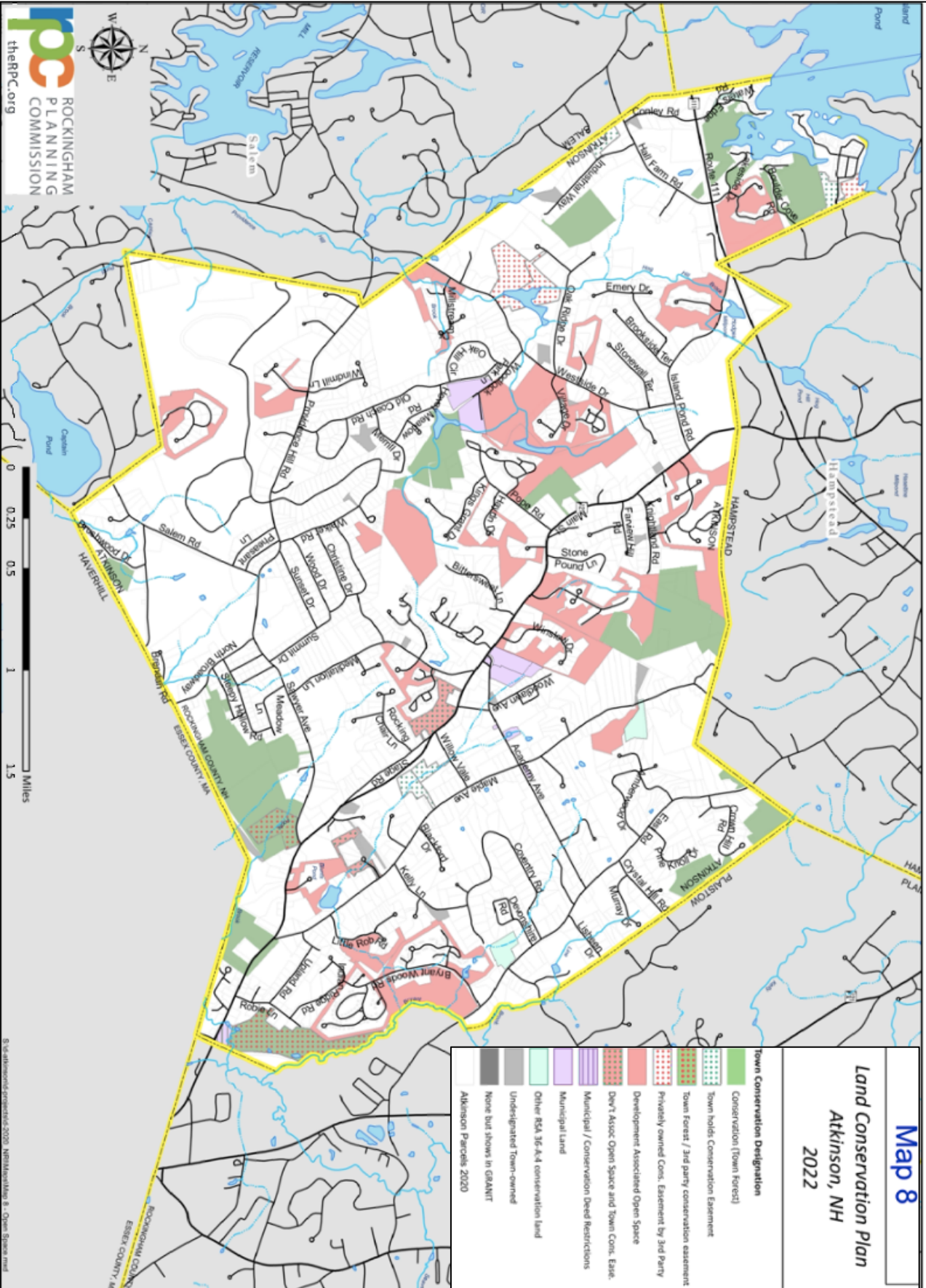
Map 6 - Groundwater, Aquifers (USGS 1992)

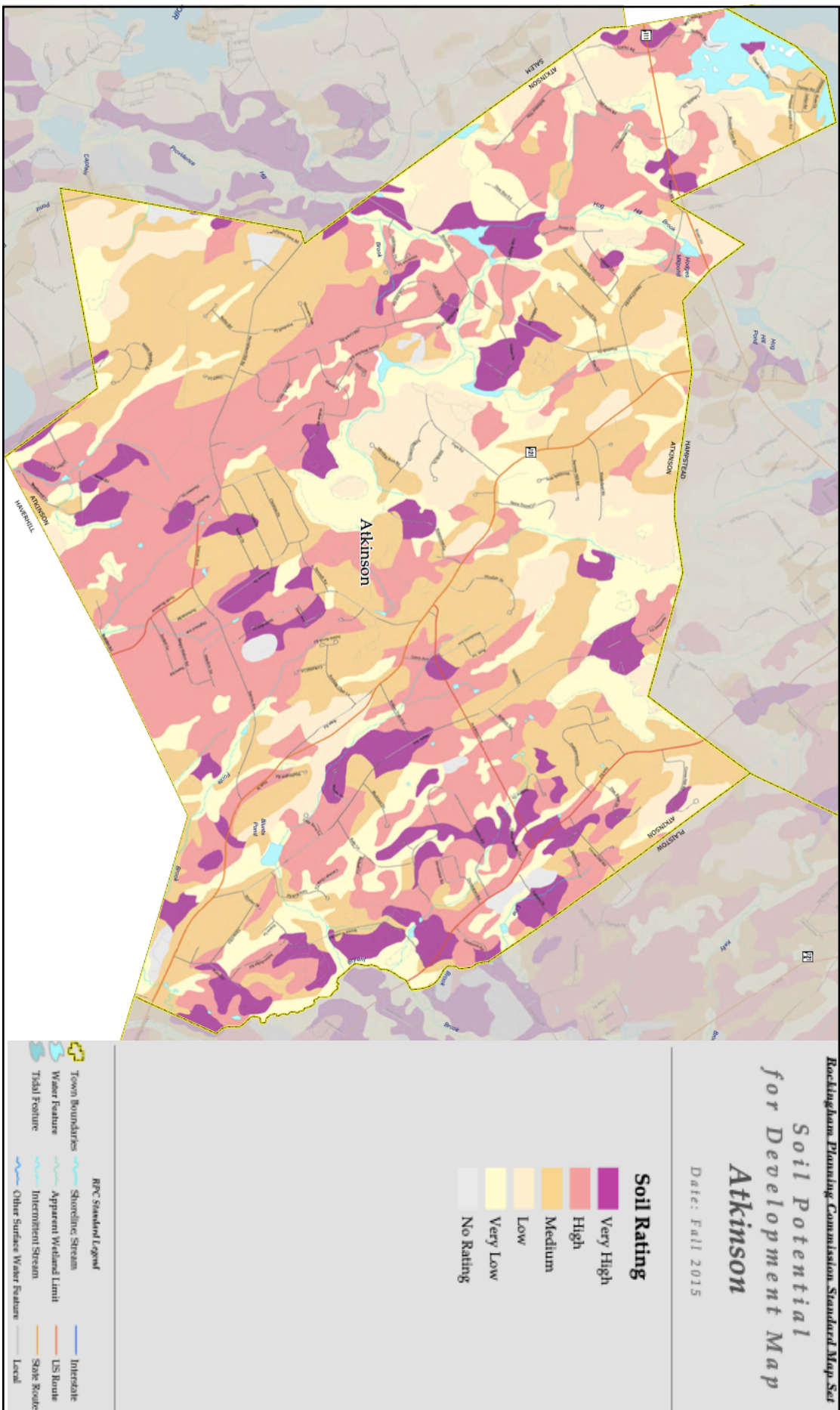
Map 6

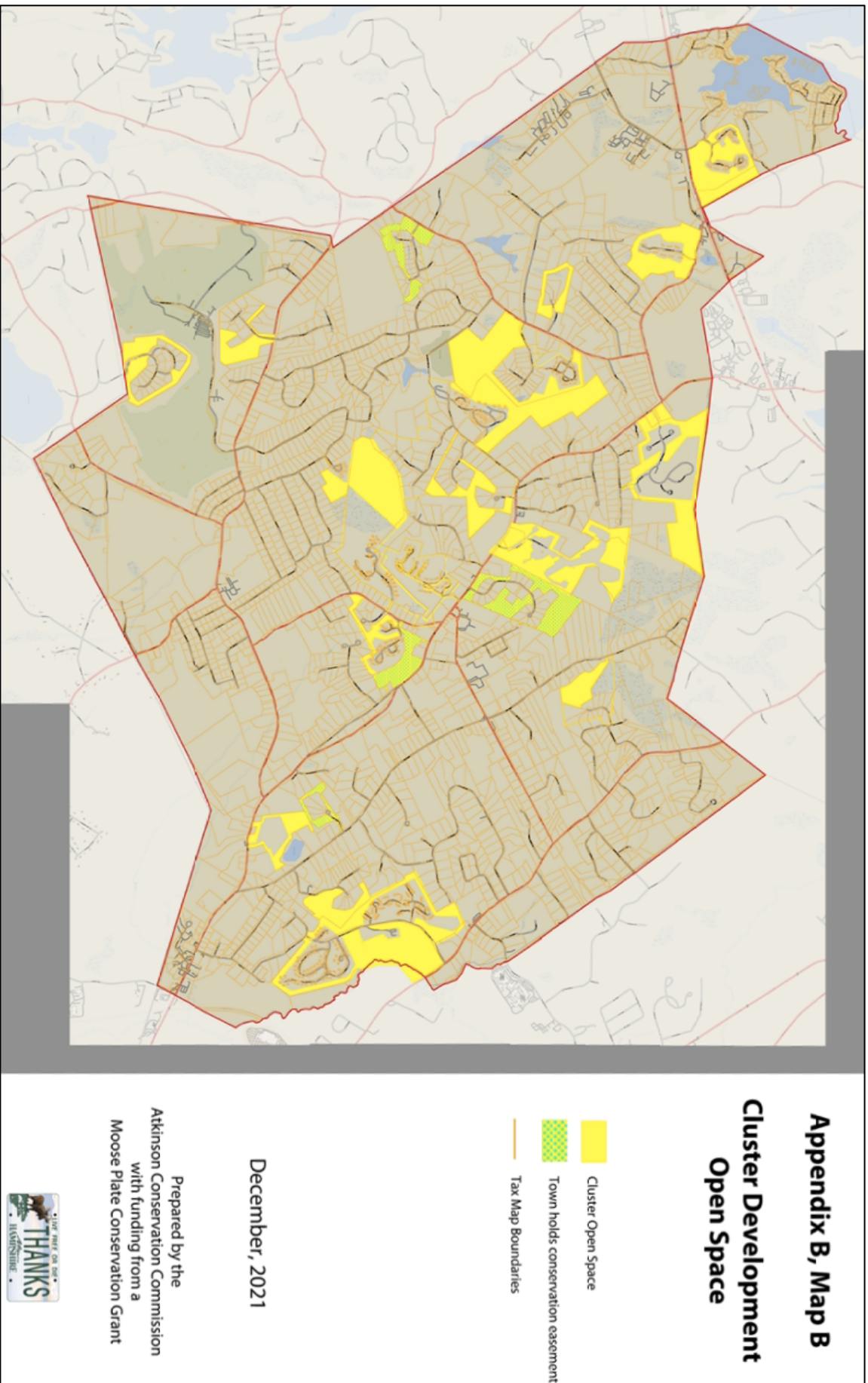
Land Conservation Plan
Atkinson, NH
2022



Map 8 - Open Space







Atkinson, New Hampshire

Natural Hazards Profile

KEY FINDINGS:

- The most pressing natural hazards that Atkinson is facing are extreme temperatures, drought, wildfires, and isolated flooding.
- The flood zones in Atkinson are isolated and distributed throughout town. This includes areas surrounding Island Pond in the northwest part of town, along Hog Hill Brook, an area just south of NH111 between Main Street and East Road, and in the southeastern part of town along the Haverhill, MA, state line and the Plaistow, NH, town line.
- Average temperatures in New Hampshire have risen more than 3°F since the beginning of the 20th century.
- In 2021, there were 22 fires reported in Atkinson. This included illegal burns, miscellaneous calls, and number of grass/woods fire. However, this is an increase in the number of the fires reported in previous years.
- Only 4% of Atkinson, or 287 acres, is in the 100-year floodplain and an additional 0.03% or 2 acres are in the 500-year floodplain.
- 0.3% of the town's roads, 0.21 miles, are within the 100-year floodplain and none of Atkinson's roads are within the 500-year floodplain.

DATA SOURCES:

- 2020 Hazard Mitigation Plan
- 2022 Land Conservation Plan
- 2018 State of New Hampshire Hazard Mitigation Plan
- 2022 Town of Atkinson Zoning Ordinance
- NH GRANIT Data
- United States Geological Survey (USGS)
- NH Division of Forests and Land
- Rockingham Planning Commission (RPC)
- 2015 RPC Regional Master Plan – Natural Hazards and Climate Change Chapters
- 2017-2022 National Integrated Drought Information System
- 2022 NOAA New Hampshire Climate Summary
- 2021 National Interagency Fire Center

INTRODUCTION

With the impacts of climate change becoming more of a reality for communities in the region, it is important for the Town of Atkinson to identify and address potential natural hazards that can occur in the community and any vulnerable infrastructure that may be affected. The frequency and intensity of natural hazard events in the region is increasing. It is essential that communities like Atkinson identify any weaknesses in infrastructure and develop mitigation strategies to ensure the resilience of the community. Atkinson has identified Hazard Mitigation goals in the 2020 Hazard Mitigation Plan, and they are listed below:

- Reduce or avoid long-term vulnerabilities posed by natural hazards impacting Atkinson, including the impacts from flooding, hurricanes and high wind events, severe winter weather, wildfire and conflagration, earthquakes, drought, and extreme temperatures.
- Improve upon the protection of the Town of Atkinson's general population, the citizens of the State and guests, from all natural and man-made hazards.
- Reduce the potential impact of natural and man-made disasters on Atkinson and the State's Critical Support Services.
- Reduce the potential impact of natural and man-made disasters on Atkinson's Critical Facilities in the State.
- Reduce the potential impact of natural and man-made disaster on Atkinson's and the State's infrastructure.
- Improve Atkinson's Emergency Preparedness.
- Improve Atkinson's Disaster Response and Recovery Capability.
- Reduce the potential impact of natural and man-made disasters on private property in Atkinson.
- Reduce the potential impact of natural and man-made disasters on Atkinson's and the State's economy.
- Reduce the potential impact of natural and man-made disasters on Atkinson's and the State's natural environment.
- Reduce Atkinson's and the State's liability with respect to natural and man-made hazards generally.
- Reduce the potential impact of natural and man-made disasters on Atkinson's and the State's specific historic treasures and interests as well as other tangible and intangible characteristics that add to the quality of life to the citizens and guests of the State and the Town.
- Identify, introduce and implement cost effective Hazard Mitigation measures so as to accomplish Atkinson's and the States' goals and objectives in order to raise the awareness and acceptance of hazard mitigation planning.

Listed below are the natural hazards that need to be understood and addressed in Atkinson:

Extreme Temperatures

As identified in the 2018 State of New Hampshire Multi-Hazard Mitigation Plan, extreme temperatures can be defined as, *“a period of prolonged and/or excessive hot or cold that presents a danger to human health and life”*.

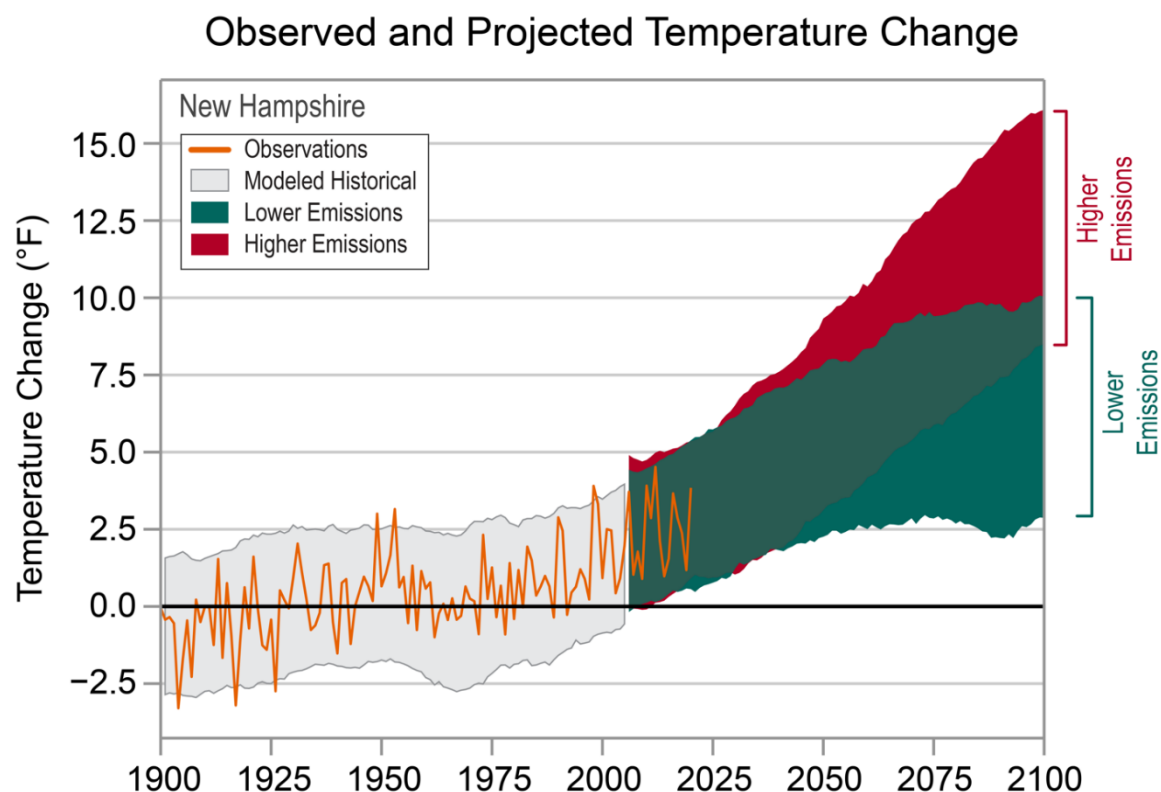
Warmer Temperatures

New Hampshire experiences between two to ten days per year where the heat index reaches 95 degrees. In Rockingham County, the region is predicted to be impacted by more extreme heat events. The increase in temperatures predicted for longer durations of time indicates that Atkinson is expected to be impacted as a result of these warmer temperatures. As identified in the 2020 Hazard Mitigation Plan, *“extreme heat events impact Atkinson for 2-3 days each summer”*, however with more recent data from the 2022 New Hampshire NOAA Climate Summary it appears there have actually been more extreme heat events. The impacts to Atkinson due to warmer temperatures are identified in the next table:

Table 1: Impacts from Warmer Temperatures	
Category	Impacts
Health	Risk of heat related injury or death to humans, pets, and livestock. There is particularly a risk to the elderly and the young.
Transportation	Road damage can result as asphalt can soften in extreme prolonged heat and concrete roads can explode. Vehicles experience increased stress on cooling systems and other components.
Agricultural	Livestock can be severely impacted or killed, crop production can be slowed, damaged, or destroyed. Although warmer temperatures will increase the length of the growing season, this could lead to a greater demand for water to irrigate crops and lawns.
Energy	The increased use of cooling systems such as air conditioners creates an increased demand for energy consumption during extreme heat temperatures. This demand can lead to the heating of power lines causing transmission and distribution lines to sag and sagging

	powerlines can short out causing power outages and brownouts
Water	<p>Water Resources: The demand for water increases to meet animal and human needs in order to prevent illness and water consumption utilized to cool down equipment and structures. Firefighter hose pressure can also be affected.</p> <p>Water Quality: Rises in water temperature can result in lower water quality and can affect fish populations and result in the death of other organisms. Increased temperatures can also lead to more precipitation events in place of snow during winter months, and may result in drought due to increased evaporation.</p>

According to the 2022 NOAA New Hampshire Climate Summary, since the beginning of the 20th century, New Hampshire's temperatures have risen more than 3°F. The greatest warming has occurred in the winter, with an increase of more than 4°F since 1900. NOAA's Observed and Projected Temperature Change Graph below shows the state's historical data in comparison to the projected change in temperatures over time based on high versus low emissions.



Colder Temperatures

Although the earth's climate is warming, it is still probable that other extreme temperature events such as extreme cold temperatures will continue to occur during the winter season as well. As defined in the state of New Hampshire Multi-Hazard Mitigation Plan, extreme cold during winter months, also known as cold snaps, are caused due to the southern transport of arctic airmasses into the northeast. Atkinson experienced severe impacts from the 2008 ice storm that left residents out of power for at least a week, if not more, and significantly damaged electrical and road infrastructure. At the time, the Town utilized the Fire Station to provide water to residents. The Community Center acted as a shelter and provided food and internet access to residents. The Timberlane Regional High School acted as a safe place. Reflections on incidents such as the 2008 ice storm help shed some light on the importance of preparedness in anticipation of these extreme temperature events before they occur. The impacts to Atkinson due to colder temperatures are identified in the table below:

Table 2: Impacts from Colder Temperatures	
Category	Impacts
Health	Risk of cold related injury such as hypothermia and frostbite, or death to humans (elderly especially at risk), pets, and livestock.
Transportation	Vehicles, batteries, etc. damaged due to freezing or wind.
Agricultural	A freeze or frost early or late in the growing season can cause increases in the cost of products, loss of products, and impacts to livestock.
Energy	Increases in energy use due to heating systems during extreme cold temperatures.
Water Resources	Frozen water resources, pipes, and systems can lead to infrastructure damage, and create a disconnect preventing people and animals from getting water.

Drought

The state of New Hampshire's Department of Homeland Security and Emergency Management defines a drought as *"the absence of water in a region that occurs slowly due to below average precipitation over an extended period, resulting in low stream flows, low surface water, and low groundwater levels"*. In recent years, the State of New Hampshire has experienced increases in drought levels occurring for longer durations of time that have caused significant impacts which require community adaptation and implementation measures. For the state to successfully

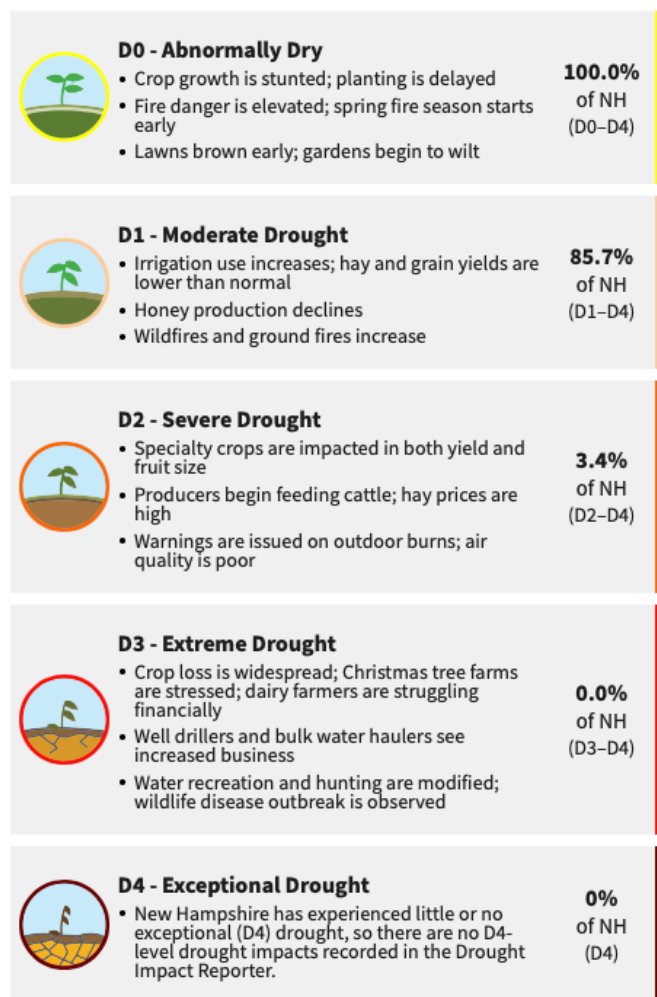
monitor and respond to drought conditions, the state has been divided up into 5 drought management areas in which Rockingham County is identified as the “Coastal Drainage” drought management area. The threats to Atkinson due to drought are identified in the next table with the following categories of impact:

Table 3: Impacts from Droughts	
Category	Impact
Water	Lack of water causes productivity of natural vegetation and agriculture to decrease; risk to summertime drinking water supply, lack of water for public safety, the amount of impervious surface area reduces infiltration and contributes to drought impacts.
Environmental	Loss or destruction of fish and wildlife habitat; lack of food and drinking water for wildlife; increased stress on and possible extinction of endangered species; lower water levels in reservoirs, lakes, and ponds; loss of wetlands; more frequent wildfires; wind and water erosion of soils; poor soil quality.
Economic	Destruction of crops causing higher food costs, cost of irrigation and drilling more wells, timber industry workers may be affected if wildfires are exacerbated by drought destroying timber, water companies having to spend money on new or additional water supplies.
Social	Anxiety or depression about economic losses caused by drought; health problems related to poor water quality, dust and pollen; threat to public safety from an increased number of wildfires, reduced incomes, fewer recreational activities.

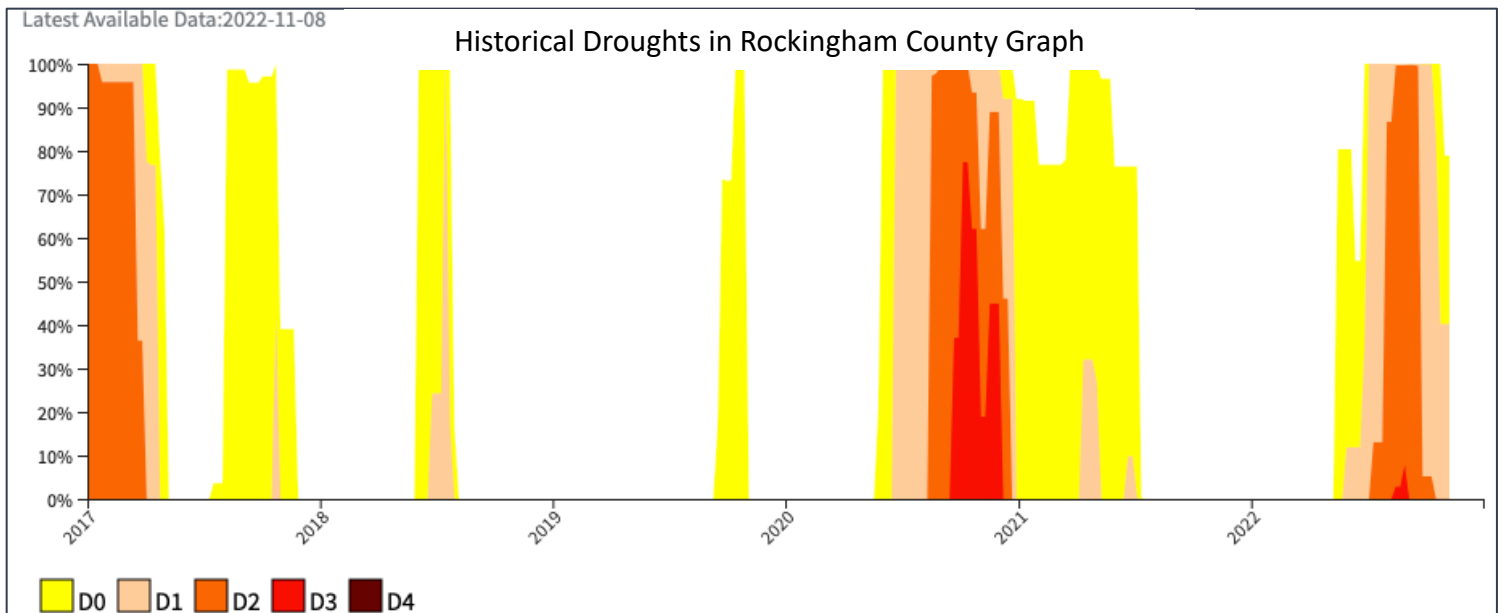
Recent data from the U.S. Drought Monitor (USDM) shows that Rockingham County has experienced extreme drought in 2021 and 2022. The USDM relies on drought experts to synthesize the best available data and work with local observers to interpret the information. The USDM also incorporates information about how drought is affecting people, with its network of over 450 observers across the country, including state climatologists, National Weather Service staff, Extension agents, and hydrologists. Droughts are classified as D0-D4 which can be described in the image to the right. The Historical Droughts in Rockingham County Graph depicts this data on the following page.

The 2022 Atkinson Land Conservation Plan identified town approaches to limit the impacts from drought and they are listed below:

- Town wide water conservation program aimed at public outreach and education, and phased reduction of water usage during drought such as limiting use of groundwater during drought for lawn watering and non-food production activities.
- Encourage and facilitate the capture and reuse of rainwater and clean household water for indoor plant watering, outdoor landscaping and household cleaning.
- Create public announcements on social media, in newsletters, and through email about drought conditions and how to best manage water use during these periods.
- Distribute lawn signs with messaging about water use and conservation.



Source(s): [NDMC](#), [NOAA](#), [USDA](#)



Wildfires

The State of New Hampshire’s Department of Homeland Security and Emergency Management defines wildfires as *“any non-structural fire, other than a prescribed fire, that occurs in the Wildland. Wildlands consist of vegetation or natural fuels”*. Drought conditions create high probability of wildfire due to the lack of water and dry vegetation that act as fuel. As identified in the NH Multi-Hazard Mitigation Plan, the number of woodland fires in the state increased by over 200% during the 2016-2017 drought. Some factors to consider that can lead to a potential increase in woodland fires are:

- The average length of snowpack has decreased by 12 days over the last 50 years, causing bare ground exposed longer and forests to be more susceptible to fires during a drought.
- Temperatures are allowing disease and insects to move north, killing trees which provides more fuel for fires.
- Other extreme weather events, such as windstorms or ice storms, are downing more trees adding fuel to fires during a drought.

In order to mitigate the impacts from wildfires, the Town of Atkinson has its own Forest Fire Warden who educates the public on safe fires and wildfire prevention as well as the distribution of fire permits. Atkinson follows NH State Law (RSA 227-L:17) which requires fire permits for all outside burning unless there is still snow ground cover. According to statistics from the National Interagency Fire Center, in the state of New Hampshire in 2021, there was a total of 280 fires which burned 96 acres. Table 4 shows data retrieved from 2017-2021 from the Fire Department statistics in the Town of Atkinson Annual Reports.

In recent years, there has been a slight increase in the number of illegal burns reported by the Atkinson Fire Department, and a minor increase in the number of grass/woods fires. This could coincide with the increase and longevity of droughts in the area creating dryer vegetation that acts as fuel for these fires. Wildfires are a threat to the forests and neighborhoods of Atkinson. Though Atkinson has managed to maintain much of its

Table 4: History of Illegal Burns & Misc. Fire Department Calls			
Year	# of Illegal Burns & Misc Calls	# of Grass/Woods Fire	Total
2021	17	5	22
2020	15	2	17
2019	11	3	14
2018	10	1	11
2017	9	2	11

rural character in a quickly developing portion of New Hampshire, much of the Rockingham County region has seen rapid commercial and residential development. Due to Atkinson's land use balance of development and woodlands/open space, the Town should examine its Wildland-Urban Interface (WUI) with the remaining natural lands. The Wildland-Urban Interface (WUI) are areas of development that abut and are near wildlands. A WUI area can also be described as a zone where structures and other human developments meet or intermingle with undeveloped wildlands, or any point where the fuel feeding a wildfire change from natural (wildland/vegetation) fuel to man-made (urban) fuel.

Inland Flooding

The state of New Hampshire's Department of Emergency Management's Multi-Hazard Mitigation Plan defines inland flooding as, *"a high flow, overflow, or inundation by water, which causes or threatens damage from the overflow of rivers, their tributaries, and streams throughout the State, primarily from high precipitation events"*. Atkinson's 2020 Hazard Mitigation Plan identifies that inland floods are most likely to occur in the spring due to the increase in rainfall and melting of snow. However, flooding can occur at any time of the year. For example, a sudden thaw in the winter or a major downpour in the summer can cause flooding because there is suddenly a lot of water in one place with nowhere to go.

Increased Precipitation

The effects of climate change can also cause more severe weather events and may result in an increase in precipitation resulting in flash flooding and extreme precipitation events. Flash flooding is defined as, *"a rapid rise in water level and extreme velocities in a river or stream, beginning within six hours of the causative event"*. In New Hampshire, flash flooding also includes ice dams and rapid snow melt. An extreme precipitation event can be identified as one where more than one inch of rain falls within 24 hours, or more than 2-4 inches falls in 48 hours. The threats to Atkinson due to increased precipitation are identified below:

- Damage to infrastructure such as buildings, roads, bridges, culverts, increased erosion and degraded water quality.
- Road closures due to flooding and/or culvert and bridge failure.

- Increased rainfall intensity during storms resulting in greater flood damage because flood zones are underestimated on current flood maps.
- Loss of homes and business due to flooding.
- Possible release of toxic materials.
- Loss of critical facilities due to flooding.

Riverine erosion, scouring, and flooding

Increased precipitation and flash flood events along with increased impervious surfaces contribute to riverine erosion. The rivers and streams that are most affected by erosion are those within watersheds that have steep terrain, where rivers have been historically straightened and modified, and those that have development adjacent to them. Scouring typically occurs downstream of bridges and culverts and other structures within rivers such as retaining walls and riprap revetments. The threats to Atkinson due to flooding are identified in the next table with the following categories of impact:

Table 5: Impacts from Flooding	
Category	Impact
During Flood	Risk of drowning, becoming trapped, or emergency services not being able to rescue people in distress.
After Flood	If properties are not properly cleaned, mold and rot can occur in areas that were flooded causing health problems for people and pets. Damage to personal properties, businesses, industrial complexes, housing units, roads, stormwater infrastructure, bridges, culverts, power and utility lines.
Overtime	Damage to structures causing rot and degradation.
Environmental	Release of hazardous chemicals, pesticides, and other materials into flood waters will contaminant those waters; downstream water quality issues due to overwhelmed storm drainage systems in developed areas being overwhelmed and inundated; disrupts the balance of the existing ecosystem, kills animals/plants/insects; contaminated floodwaters introduced to the ecosystem create impacts.
Economic	Damage to structures, loss of commerce due to business closure or inaccessibility, and rebuilding and mitigating related costs.

Additional causes that contribute to inland flooding as identified in Atkinson's Hazard Mitigation Plan are described below:

- **Erosion and mudslides** - *Erosion is the process of wind and water wearing away soil. Typically, in New Hampshire, the land along rivers is relatively heavily developed. Mudslides may be formed when a layer of soil atop a slope becomes saturated by significant precipitation and slides along a more cohesive layer of soil or rock. Erosion and mudslides become significant threats to development during floods. Floods speed up the process of erosion and increase the risk of mudslides.*
- **Rapid snowpack melt** - *Warm temperatures and heavy rains cause rapid snowmelt. Quickly melting snow coupled with moderate to heavy rains are prime conditions for flooding.*
- **River ice jams** - *Rising waters in early spring often breaks ice into chunks, which float downstream and often pile up, causing flooding. Small rivers and streams pose special flooding risks because they are easily blocked by jams. Ice in riverbeds and against structures presents significant flooding threats to bridges, roads, and the surrounding lands.*
- **Dam breach and failure** - *Dam failure results in rapid loss of water that is normally held by the dam. These kinds of floods are extremely dangerous and pose a significant threat to both life and property. There are five man-made dams in Atkinson:*
 - Lagoon at Atkinson Country Club (if breached water would flow towards Haverhill, MA),
 - Dam at the Killam property on Westside Drive (if breached would put homes in Salem, NH at risk),
 - Dam at Island Pond Road (if breached would cause road flooding),
 - Dam on Hodge Mill Pond (privately owned and if breached would impact Oak Ridge and Mill Street), and
 - Dam adjacent to Community Center.

There are also four large beaver dams that could cause flooding if breeched: Two of these dams are on Hovey Meadow Pond off Merrill Drive, one Dam is on Stewart Farm Pond, and the other Dam is on Sawmill Swamp. While flooding due to beaver dams does have potential negative impacts to infrastructure, it is also important to note that beavers and their habitat are important elements of wetland ecology.

Flood Zones

Designated flood zones are areas described by the Federal Emergency Management Agency (FEMA) as being prone to varying levels of flood risk. These flood zone areas are identified on the FEMA Flood Insurance Rate Map (FIRM) in terms of a designated 1% (also referred to as Base Flood or 100-year flood) and 0.2% (500-year) annual flood zones. FEMA identifies Special Flood Zone Hazard areas as “*areas that will be inundated by the flood event having a 1% chance of being equaled or exceeded in any given year*”. The FIRM also shows moderate flood hazard areas between the limits of the base flood and the 0.2% annual chance flood. Existing

floodplains in Atkinson include areas surrounding Island Pond in the northwest part of town, along Hog Hill Brook, an area just south of NH111 between Main Street and East Road, and in the southeastern part of town along the Haverhill, MA, state line and Plaistow, NH, town line. These FEMA identified Flood Hazard Areas in Atkinson is shown visually on Map 5 of the Land Conservation Plan – Surface Water, Watersheds, and FEMA Flood Hazard Areas – also found at the end of this profile. There are three primary flood zone types in Atkinson including:

- Zone A: – 1% annual chance flood (also known as the 100-year floodplain)
- Zone AE – 1% annual chance flood (100-year floodplain)
- Zone X – 0.2% annual chance flood (also known as the 500-year floodplain)

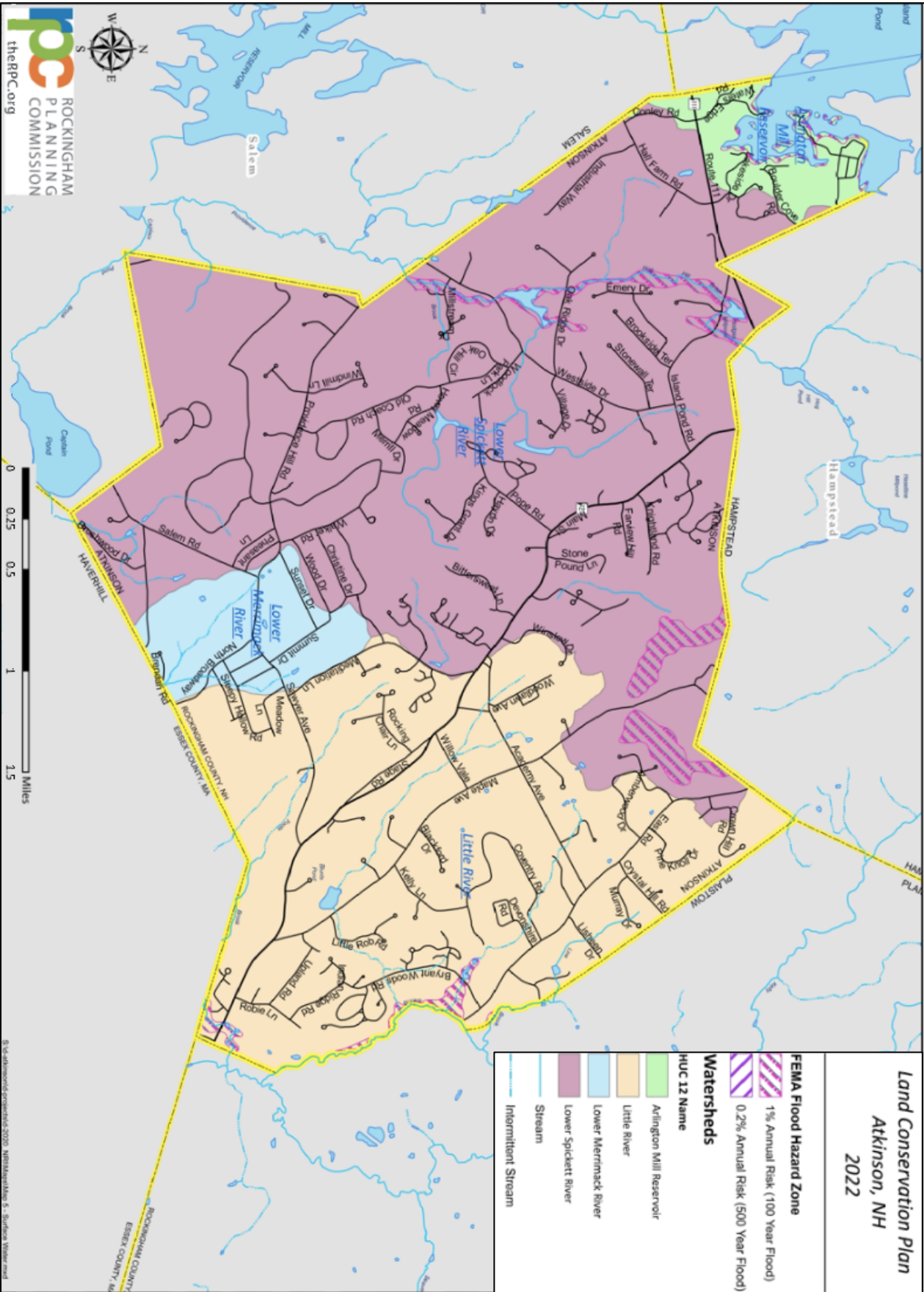
In Atkinson, only 4% of the town or 287 acres is in the 100-year annual floodplain and an additional 0.03% of the town or 2 acres are in the 500-year floodplain. In terms of roadways, Atkinson fortunately has only 0.21 miles or 0.3% of the town's roads in the 100-year floodplain, and none of Atkinson's roads lie within the 500-year floodplain. The small amount of Atkinson roadways that do lie in the 100-year floodplain are mostly located in the northwest part of town surrounding Island Pond and along Hog Hill Brook. As identified in the 2020 Atkinson Hazard Mitigation Plan, *"the Highway Department indicates that flooding can result from long-term beaver dams, impacting the following roads: Brushwood Drive, Bryant Woods Road, and Maple Avenue"*.

In order to mitigate losses due to flooding, the Town of Atkinson joined the regular program of the National Flood Insurance Program (NFIP) in March of 2009. The current Flood Insurance Rate Map and Flood Insurance Study was completed May 17, 2005. The National Flood Insurance Program involves providing full insurance coverage based on risk shown on the FIRM map for Atkinson. Participating communities in the NFIP must agree to adopt a Floodplain Development Ordinance and enforce regulations in order to protect the floodplain from future development impacts. As a result, Atkinson adopted a Floodplain Development Ordinance and the details of this regulatory tool are briefly described below.

Atkinson Floodplain Management Ordinance

This ordinance identifies certain areas of the Town of Atkinson, New Hampshire that are subject to periodic flooding, causing serious damages to properties within these areas. Relief is available in the form of flood insurance as authorized by the National Flood Insurance Act of 1968. The regulations in the Atkinson Floodplain Management Ordinance apply to all lands designated as special flood hazard areas by the Federal Emergency Agency (FEMA) in its "Flood Insurance Study for the County of Rockingham, N.H.", with the associated Flood Insurance Rate Maps. These areas are designated as Zone A and AE on the Flood Insurance Rate Map. For more information on Atkinson's Floodplain Management Ordinance, visit the Atkinson Zoning Ordinance, Planning and Land Use Regulations.

Map 5 - Surface Water, Watersheds, FEMA Flood Hazard Area



Atkinson, New Hampshire

Historical and Cultural Profile

KEY FINDINGS:

- Atkinson has extensive historic and cultural resources which are well documented.
- Atkinson's Historical Society is heavily involved in efforts to educate the public about Atkinson's history.
- Atkinson is fortunate to have several active cultural organizations and popular community events that bring residents together and build a greater sense of community.
- Atkinson is part of the Old Stage Coach Scenic Byway and features many historic structures and landscapes that have been preserved over time.
- Atkinson has a significant number of remaining historic structures from many architectural eras. These include the forty sites identified along the Old Stage Coach Scenic Byway which show examples of Georgian style, Federal-style houses, Greek Revival style, the Colonial Revival style, and bungalow houses.
- Farms that were once central to Atkinson's land use pattern and identity have slowly disappeared, but remnants of the agricultural landscape can still be seen today.
- Atkinson has one property listed on the National Register of Historic Places: Atkinson Academy.
- Atkinson has one property listed on the New Hampshire State Register of Historic Places: The Center School.

DATA SOURCES:

- Atkinson Historical Society Website
- New Hampshire Division of Historical Resources (NHDHR)
- National Register of Historic Places
- Atkinson 2015 Master Plan Update
- 1999 Atkinson Then and Now: 2nd Edition
- Old Stagecoach Scenic Byway Brochures
- Atkinson Local Organization Websites

INTRODUCTION

This profile identifies and describes Atkinson's many historical and cultural resources. This includes taking a look back at the indigenous peoples of the area, the first colonial settlers, how the community was incorporated as a town, and the significant landmarks and landscapes that remain today. Historic and cultural resources add to the unique character of the town and help to distinguish Atkinson from other New Hampshire communities. These resources include both physical resources (landscape features, buildings, and physical sites) as well as non-physical resources (organizations, programs, clubs, and community traditions).

ATKINSON'S HISTORIC BACKGROUND

The indigenous peoples known as the Pennacook Native Americans lived on the land now known as Atkinson before colonial settlement. The larger Haverhill, Massachusetts area was called the "Pentucket" during these early days. Unfortunately, many of the Pennacook tribe members were impacted by rising rates of illness, such as measles, and famine, which reduced their population significantly. Chief Passaconaway was fearful of more death and devastation affecting his people, so he led his remaining tribe to new homeland near Concord, New Hampshire. Beyond the Penacook Native Americans, many other tribes passed through what is now known as Atkinson leaving traces and artifacts. It is believed that the passing tribes may have stopped to rest at Big Oak, or at Indian Rock. These locations were known to have been stops along Native American tribe's way from their journey from Rhode Island to Canada. Additionally, many Native American artifacts have been found around Big Island Pond.

Early settlement in this area was centered around agriculture where farmers cultivated corn, wheat, potatoes, fruits, and livestock. The cultivation of potatoes and flax for the spinning of linen was introduced to the area in 1718 by a group of Scotch-Irish immigrants who eventually settled in Londonderry. These crops became the first two major marketable commodities of the area that helped to sustain Atkinson's economy through agricultural trade. The first settlers in Atkinson were Ben Richards of Rochester, John Dow of Haverhill, Nathaniel, Jonathan, and Edmund Page of Haverhill, MA. They became residents of "North Parish" located in the western portion of Haverhill. This land is now known as Plaistow and Atkinson. In 1740 the Massachusetts boundary was established and much of this "North Parish" area became part of southern New Hampshire. Atkinson's land as we know it today was once a part of Plaistow when Plaistow was established as a town in 1749. Atkinson was incorporated as its own official Town in 1767. The Town was named after Theodore Atkinson, a nephew of the former Provincial Governor of New Hampshire named Benning Wentworth.

During the first year of Atkinson's incorporation, town meetings were held in John Dow's home until 1768 when a meetinghouse was constructed on the north side of Main Street next to the Old Cemetery. In 1773, the Atkinson Cemetery was officially established and during the Revolution, at least three grist and mills had been constructed. The remains of the mills may be seen today on Shannon Road, West Side Drive, and Island Pond Roads. The old cemetery on Main Street still exists today. After the Revolution, many settlers experienced a regional upswing

in industry, education, transportation, and architecture. Textile mills and shoe factories were located in Haverhill, MA, and during this time, Atkinson was busy constructing new roads that were utilized by stagecoach. This led to a general increase in travel and blacksmiths and wheelwrights became in demand in Atkinson's economy. There was also a significant demand for education which led to the establishment of many schools, library associations, and colleges in the region. In 1787, Atkinson built the first Atkinson Academy. The construction of Atkinson Academy turned Atkinson from an agricultural town to an academy town and attracted many students to the area. Students lived in various farmhouses throughout the area, and many became teachers in Atkinson and neighboring towns.

Agriculture in Atkinson

With increased industrialization in the Haverhill-Atkinson area, this led to an even higher demand for transportation services. Turnpikes and canals were constructed and were shortly superseded by railroad networks. Access to these transportation systems benefited Atkinson due to its location and proximity for goods, resources, and trade. Some Atkinson residents began to work from home producing agricultural goods and turning out piece work for Haverhill factories. Access to the railroad system gave Atkinson settlers the opportunity to transport products easily. Agriculture was thriving in Atkinson and was creating a diverse range of occupations. Atkinson had the capacity to ship milk, butter, and cheese to markets in Boston and Haverhill, and by 1854 E.N. Greenough became the first local farmer with a milk run between Atkinson and Haverhill. However, the success of the agricultural industry would eventually face one of the most difficult periods of time due to farmers having to adapt to the regions changing needs as area residents began moving west during 1870 and for thirty years after. Farm abandonment in the east became more prevalent as the west produced cattle and wheat more cheaply. The railroad expansion also allowed for more people to move away. Fortunately, milk remained a demanded product of the Atkinson region, and would appeal to the markets of Boston and other large cities. As these cities became more industrialized and more densely populated, the demand for milk and other dairy products grew and the transition from the multi-purpose farm to the dairy farm had begun. Atkinson soon became the second ranking milk-producing town in Rockingham County by 1875, and local dairy farmers were selling 420,000 quarts of milk annually to Boston.

The overall decline of multi-purpose farming in Atkinson due to farm abandonment had a dramatic effect on the reforestation of the area. During the Civil War decade of 1860-1870, Atkinson had a significant amount of cultivated land and a decline in forest cover. However, as people began to abandon their farms to move out west or for employment in nearby mill towns, the ecology began to change. Young forests took over the once cultivated land and this is still reflected in present-day Atkinson with its high percentage of forest cover.

Atkinson's Economy

With the decline in agriculture and farming in Atkinson, the town sought other ways to revive its economy. During the late 19th century, Atkinson tried to promote the community as a summer tourist attraction by putting a new emphasis on the beautification of the town which included the planting of trees along Maple Avenue that still stand today. The 20th century in Atkinson was also represented by a significant decline in agricultural activity for the town and by 1942, there was only one remaining milk route to Haverhill. Atkinson continued its attempts to promote the town as a resort town in the early years of the 20th century.

In the first ten years of the 20th century, a trolley car line was proposed to run from Haverhill to Hampstead to the playground area of Island Pond. The transition in transportation to automobiles led to the cancellation of this trolley car line, but Island Pond still had summer cottages that have mostly been converted to full time residences today. With the advent of the automobile, crushed stone surfaces began to take the place of mud and gravel on farm-to-market roads, and these new roads would soon become the network of interstate highways that now surround the town. During the 1950's and 1960's, increased use and creation of automobiles and automobile infrastructure soon led to residents commuting out of town for employment, and by 1979, 61.8% of the town's workforce was employed out of Atkinson. Due to Atkinson's location, Boston's urban sprawl, the airport in Massachusetts, along with New Hampshire's more favorable tax rate, Atkinson experienced a tremendous increase in population which led to Atkinson becoming a prime residential community in the Southern New Hampshire region.

SIGNIFICANT ATKINSON HISTORICAL FIGURES, SITES, AND STRUCTURES

Atkinson has a rich history that was shaped by its former residents that helped to create the town's unique sense of place through historic resources. Though Atkinson has a rich history and an abundance of historic landmarks, features, and structures, a few important historic sites and structures in town help distinguish Atkinson's unique character today. Below are some significant individuals, sites, and structures that played a role in Atkinson's history.

Reverend Stephen Peabody

Stephen Peabody was born in Andover, MA (now Boxford, MA) on November 11, 1741. He graduated from Harvard at the age of 29 and studied divinity with another minister for three years. In 1772, Peabody was called to serve as the Town of Atkinson's first minister. He settled in Atkinson as the first pastor of the Congregational Church, and he bought a small farm and built what we know today as the Kimball House.

Reverend Peabody became very involved in town and was a leader of education in Atkinson. One of the rooms in his home was used as a schoolroom by Mrs. Colby, a dame school for boys and girls. One day, Rev. Peabody's brother, Phillips from Andover, and his Uncle John from Exeter, told him that an academy was being built in Andover and Exeter. This information helped Rev.

Peabody when two men proposed to construct Atkinson's very own academy. Reverend Peabody's son Stephen was born in 1773 and he was one of the first Atkinson students to attend the academy. His daughter Polly entered the academy in 1791 and became the first girl to enroll at Atkinson academy making the school the second academy in the country to be co-educational. A monument is located in Atkinson Cemetery for Rev. Peabody that was erected by a grandson.

Atkinson Schooling and the Center School

Education in Atkinson started in the community as early as 1769 when "Sculmasters" were hired in Atkinson and set up in private homes. By 1774, the town was divided into three school districts each with their own schoolhouses. By 1869 there were six school districts in Atkinson, each with its own schoolhouse including the Center School. The original Center School was located in the field opposite of the Rockwell building and by 1878 the original Center School was abandoned and physically moved to be attached as a shed to the Union Store on Academy Avenue; the school shed has since been demolished. But a new Center School was built in 1880 and was open until 1948 when the Rockwell School opened. Today, the Center School is Atkinson's last remaining one room Schoolhouse. In August 2022, the Center School, located across from Atkinson Academy, was placed on the New Hampshire State Register of Historic Places.

Atkinson Academy



Above: Atkinson Academy

The Town of Atkinson has provided education to the children going back to the beginning of the Town. The first Atkinson Academy was built in 1787 on land donated by Dr. Cogswell at the corner of Meditation Lane and Academy Avenue. The original Atkinson Academy was a one-story building with a spacious fireplace. Atkinson Academy was a private-school and required students pay tuition to attend. In 1802, the Atkinson Academy burned down, and the new Atkinson Academy was built in 1803 in the location we know today as Academy Avenue. The new academy was 34 feet by 60 feet, two stories high, with a cupola. A portion of Atkinson Academy was partitioned off in 1843 when the Academy Trustees entered an agreement with the town to allow town meetings to be held in the building. In 1880 the town built the Center School. The town's last remaining one-room schoolhouse opened in 1880 to 1949. The second Atkinson Academy served until 1949 when the Trustees closed the doors as a secondary school due to high schools in the surrounding towns offering expanded programs. In 1949 the Universal Unitarian Church was remodeled, and the Rockwell school was opened.

After the Atkinson Academy closed, many Atkinson students attended the Rockwell School. After a few years of the Atkinson Academy lying dormant, the Academy Trustees turned the building over to the town in hopes it would be used for educational purposes. The building stood empty for several years and began to deteriorate. It was repaired and restored by the Alumni Association who raised funds for repairs.

In the early 1960's, the Timberlane Regional School District was formed, and at that time the grammar school utilized the Atkinson Academy and the Rockwell School. As the population grew, Rockwell School was no longer able to house all the students so more extensive renovations were made to Atkinson Academy. The Rockwell School was closed in late 1970's.

The Atkinson Academy school had been closed for about twenty years during the mid-20th century, and then became a public school and part of the Timberlane Regional School District in 1958. Several additions were made to the original building starting with a large wing on the east side of the building which provided four large classrooms, administrative offices, health offices, and an all-purpose room called Dyke Auditorium in honor of Harlon C. Dyke, the last headmaster of the Academy. The Atkinson Academy is listed on the National Register of Historic Places.

Atkinson Cemetery

Atkinson Cemetery, also referred to as Atkinson's "Old" and "New" Cemetery, was first established in 1773 when a piece of land was laid out on Main Street (now Academy Avenue). The first documented burial in the Atkinson Cemetery on Main Street was a Hampstead man who was being taken to North Parish Cemetery in Haverhill, MA but the road was impassable due to weather so when the funeral procession reached Atkinson Cemetery, it was decided the burial would take place there instead. In 1773, a vote was taken at town meeting to accept land from John Dow for the use as a burying yard. The half-acre parcel was located to the northwest of the original meetinghouse. In 1822, the town purchased another half-acre of land from Mr. David How, a trader who lived in Haverhill, to enlarge the cemetery. Mr. How also set aside a small

piece of land to be utilized as a town common, but this is not the same piece of land that is known as the Dow Common today. Mr. How's land that was located behind the meetinghouse and adjacent to the cemetery was traded for additional cemetery land around 1850. In 1907, additional cemetery land was acquired by donation from Joseph Kimball, a summer visitor in Atkinson. Joseph Kimball donated the land and Peabody House to the town to use as a library and possibly a museum with permission to use a portion of the land for a cemetery. The "New" Cemetery extension located behind the Kimball Library was laid out in 1912.

Kimball Library

In 1907, Joseph Kimball felt the need for Atkinson to have a permanent building to house a library. He purchased the former home of Reverend Stephen Peabody, from Mr. and Mrs. Walter Maddocks and donated the Peabody House to the Town of Atkinson with the stipulation that *"the buildings and ground be used for the needs and convenience of the town library, and perhaps a museum and art gallery; that it be named 'Kimball Library' and that a bronze tablet be placed in the building stating its name and giving a few words of explanation; the rear back of four hundred feet from the road may be used for graves if found desirable;"*. Reverend Peabody built the Kimball House in the beginning of 1772 after he purchased a twelve-acre parcel from Oliver Knight. The original house had eight rooms which still contains the gunstock beams and several Christian doors. Pegged, hand-hewn timbers can be seen in the double-thick granite and brick cellar. In 1882, Dr. Isaac Hovey came to Atkinson and for nearly fifty years practiced medicine in this house. The Walter Maddocks family of Boston bought the house in the early 1900s from the heirs of Dr. Hovey. They decided to modernize it, according to the Victorian style that was popular at the time. They constructed the large bay windows on two floors, elevated the roof, and added the two great central dormers at the front of the house. The Kimball House had remained as the town's permanent library since 1907 and as the town's population increased, the present Kimball Library was annexed in 1975 and the town then voted to approve the Kimball House for use as a museum. The Kimball House is now a free-standing building and is maintained by the Atkinson Historical Society. A new stand alone, state of the art Kimball Library was opened in 2008 on Academy Avenue.

Dow Common and Monument

The Dow Common and Monument was donated to the town by William C. Dodd to commemorate the soldiers who fought in the Civil War. Dedication ceremonies at this site were held in 1888. The monument was originally situated differently on the common but was moved in 1891 in order to construct a new road known today as the portion of Academy Avenue that turns towards Hampstead.



Above: Dow Common and Monument

Town Pound

In early Atkinson, many of the townspeople were farmers who owned a variety of animals including cattle, dogs, sheep, horses, and pigs for clothing and food. As more land was cleared and cultivated, the stock of animals in Atkinson increased and the need for Atkinson to provide some sort of containment of stray dogs, cattle, and other animals became necessary. In 1787, a committee of three people were elected to decide on the location of a town pound. At the next town meeting, residents voted to construct the town pound set on the hill above Mr. Grocer's house, now known as Main Street. Originally, the road went on the other side of the structure. The road was changed in the 1930's. A double-faced sign donated by the Historical Society, and a decorative fence and flowering shrubs have been placed on the westerly side of the enclosure abutting Stone Pound Lane. The Atkinson Garden Club continues to care for the garden area at the front of the Pound.

Atkinson's Historical Architecture and Landscape Vistas

Atkinson has a significant number of historic structures that have remained throughout many architectural eras. These historic structures, and their distinctive architectural features can still be seen in present day Atkinson. The architectural features of these structures help distinguish Atkinson as a unique community and provide a sense of history and character. Examples of these structures can be seen along Atkinson's Old Stage Coach Scenic Byway mostly along Main Street. Some of the architectural designs of these structures found in Atkinson include Georgian style, Federal-style, Greek Revival style, Colonial Revival style, and Bungalow style houses.

Designated landscape vistas on the Atkinson Old Stage Coach Scenic Byway include East Road, Maple Avenue, Main Street, Island Pond Road, Sawyer Avenue, Shannon Road, North Broadway, and Salem Road. Table 1 below identifies the forty significant historic structures identified along the Old Stage Coach Scenic Byway as found in the Atkinson Historical Society's informational brochure. These locations also correspond to a scenic byway roadmap. For more information about Atkinson's Scenic Byway visit the Transportation Profile of this Existing Conditions Report.

Table 1: Atkinson Byway Sites			
Historical Name	Description	Main Street #	Year Built
Colonial-era Stage Road Marker	Colonial period road marker at the start of Atkinson Stage Coach Byway.	26	-
Donated Town Forest Parcels		23-33	-
Greenleaf Clark House	Built by the man who, during the Revolutionary War period, had been New Hampshire's representative to the Continental Congress	29	c. 1820
Historic Name Unknown		35	c. 1905
Noyes House		43	c. 1895
Alanson Sawyer House	Served as an Atkinson School	46	c. 1850
Gilmartin House		51	c. 1900
Sawyer House		53	c. 1886
Thomas – Wheeler House	Built by Corporal William Thomas after returning from serving in the War of 1812. Thomas served as a State Rep. to the NH General Court, was on the Governor's Council in 1850, as a NH Representative to the US Congress, and as a US Senator from 1879 until his death in 1888. His great grandson Stephen Wheeler was born in this house and went on to become NH Attorney General, Associate Justice and then Chief of the NH Superior Court and from 1957 until his death in 1967 was an Associate Justice on the NH Supreme Court.	54	c. 1812
Historic Name Unknown		67	c. 1910
Taylor House		70	c. 1895
The Tunnel	A level roadway cut into the bottom of, and around the eastern side of Poore's Hill because of the many winter stage coach accidents and difficult travel on the icy and steep Stage Road over the hill.	68-84	c. 1857
Protected Open Space		74-86	2006
Abraham Dow House		3 Stage Rd.	c. 1870
Town Center Scenic Vista	Viewed to the north as you emerge from the Tunnel	85-101	-
Tristram Knight Farm	In 1767, Tristram and his three sons, Oliver, Stephen, and John were among the original petitioners to the NH General Court for Atkinson's incorporation as a NH town (separate from Plaistow)	88	c. 1757
Nathaniel Cogswell House	Served as Atkinson's Congregationalists' Sunday meeting site until the Atkinson Congregational Church was built Atkinson Academy students also boarded there	92	c. 1766
Cogswell Farm	Nathaniel and Judith Cogswell had 19 children. Their 8 boys served a total of 38 years of military service during the American Revolutionary War – a national record and more than any other family in the country!	95	c. 1740
Gilbert House	The early site of the Atkinson Free Public Library	98	c. 1770
Congregational Church		101	c. 1835

John Atwood House		102	c. 1772
John Bassett House		103	c. 1790
Knight House		104	c. 1840
John Gilbert House		105	c. 1790
Tenney House		106	c. 1840
L.P.E. Richards House		108	c. 1820
John Dow House	The oldest house in Atkinson. Dow was one of Atkinson's original settlers. In 1767, he was one of Atkinson's successful petitioners to the NH General Court for Atkinson to be incorporated as a NH town. His home was the site of early Atkinson Town Meetings. Dow also donated the land for the first and oldest section of Old Atkinson Cemetery. Dow House also served for a while as Atkinson's Post Office and General Store.	107	c. 1727
George Wright House		109	c. 1840
Atkinson Town Common	The Civil War Soldiers Monument was erected on the Common as an Honor Roll to honor Atkinson's Civil War soldiers. Dow Common was named after George Dow (one of John Dow's sons) who was awarded the Congressional Medal of Honor for bravery during the Civil War.	112	c. 1888
Atkinson Academy (National Reg)		-	1787, 1803
Atkinson "Old" Cemetery	Where Atkinson's earliest, colonial period settlers are buried.	114	1773
Charles Fernald House		115	1840
Page Homestead	The second oldest house in Atkinson, three Pages were among the first five settlers of Atkinson. In 1747, Johnathan Page was one of the colonists who petitioned the NH General Court for Plaistow (which included Atkinson) to be split off from Haverhill, Mass and be a NH town. In 1767, Pages were among those who petitioned the NH General Court for Atkinson to be split off from Plaistow and incorporated as a separate town.	129	c. 1737
Grover House/Inn	Mid-way point on the State route from Boston to Manchester and Concord. The Inn was a stopping point where stage horses were fed, watered, and rested while the passengers went into the Inn for a meal, use the outhouse, and usually rested over-night.	136	c. 1830
Town Pound	Where loose and wandering farm animals were kept until there were claimed by their owners	-	1788
Johnson House	Was believed to be haunted by the 22 different families that tried to live there, but were scared off and frightened into moving out of the house by strange noises, apparitions of people seen entering rooms with no one then found in the room, chairs rocking with no one in them, and footsteps at night.	2 Pope Road	c. 1810
Knight House	The third oldest house in Atkinson. Built before Atkinson was incorporated as a town.	160	c. 1740
Stephen Dole House	Dole was one of the original colonialists who petitioned the NH General Court for Atkinson to be incorporated as a NH town. Dole served in Atkinson's colonial militia and fought in the Revolutionary War.	165	c. 1776
Albert Little House		178	c. 1860
John Little House		180	c. 1840

HISTORICAL AND CULTURAL ORGANIZATIONS, EVENTS, AND TRADITIONS

Throughout the years, Atkinson's historic and cultural organizations have evolved and expanded, and some events and traditions have remained over time. Table 2 shows a list of the organizations and groups in Atkinson. (More recreation type programs and organizations can be

found within the Recreation Profile of this Existing Conditions Report). Below is a description of some of these organizations and groups.

Table 2: Historical and Cultural Organizations and Groups	
Atkinson Women’s Civic Club	Atkinson Lion’s Club
Atkinson Historical Society	Friends of the Library
Atkinson Garden Club	Boy Scout Troop 9
Atkinson Veterans Club	Girl Scout Troop 12573
Girl Scout Troop 59015	Cub Scout Pack 95

Atkinson Historical Society

The Atkinson Historical Society (AHS) was created in 1954, and the organization’s board consists of a president, a vice president, secretary, treasurer, and three board members. The Atkinson Historical Society is located in the Kimball House on Academy Avenue. The AHS typically conducts six meetings a year and has an active events team. The goals of the AHS include:

- To bring quality and interesting events into Atkinson to inform the public about a current topic of interest or historical topics of all kinds,
- To act as a resource to Atkinson residents by helping research specific homes or people from Atkinson,
- To preserve the history and records of Atkinson and New Hampshire, to maintain the Kimball Museum, to share local history, knowledge and friendship.

The Kimball House is home to Atkinson’s Historical Museum which is maintained by the AHS. The Kimball House has an extensive collection of maps, clothing, furniture, letters, and other documents related to the history of Atkinson. The Kimball House is open every Saturday from 10AM – 2PM. Recent projects of the AHS include the addition of hearse house gates and the cleaning of monuments at the Atkinson Cemetery, a gate and sign at the Town Pound, signs and plaques at the Dow Common, the addition of street signs honoring those lost in wars, a monument for WW2 and Korea, installation and dedication of a Vietnam honor roll, historic pictures in the Town Hall, and a plaque at the Atkinson Academy. In August 2022 the AHS had the Center School placed on New Hampshire State Register of Historic Places. The AHS is the early phase of having the building restored and in the early phases of raising funds for this project.

Atkinson’s Lions Club

The Atkinson Lion’s Club was formed in 1976 when a group of men met in the Kimball Library to discuss the needs of the community and its residents. Today, the Atkinson Lions Club provides many services to the community including fundraising for projects, providing scholarships for high school seniors, turkey baskets for those in need during the holidays, and making donations to local food pantries. The Lions meet twice a month from September through May, dinner meetings are held at Atkinson Country Club and business meetings are held at Atkinson

Community Center. For the 2022-2023 year, there are fourteen officers and directors. Atkinson Lions Club is involved in many improvements throughout the community including building the town's bulletin board at the Kimball Library, the canoe launch on town owned land by Big Island Pond, serving behind the scenes as sponsors for Timberlane School spelling bees and skating parties, and hosting many fundraisers in Atkinson including the annual yard sale and pancake breakfasts.

Atkinson Women's Civic Club

Atkinson's Women's Civic Club was formed in 1974 and the first official meeting was held in January 1975. The club was formed to help serve the Town of Atkinson with financial and volunteer assistance. The Women's Civic Club sponsors many fundraising events including craft and food markets, town yard sales, shredding events, and Trivia Night. Monies earned from these fundraising events are then donated to various organizations throughout Atkinson to assist in special projects or to purchase equipment. Some of these donations go to the Atkinson Fire Department, Police Department, Schools, Scholarships, The Kimball Library, Scouts, and more. Today, the Civic Club consists of almost forty women. Other town events the Atkinson Women's Civic Club assists with or sponsors are candidate's night, refreshments for town meeting, the Memorial Day Parade, and the town's fishing derby.

Atkinson Garden Club

In 1951, Mrs. L. Joseph Eno, and a few other women from the Women's Club had a shared interest in gardening and decided to form a separate club to further pursue their shared interest. By 1952, the Atkinson Garden Club (AGC) was founded, and a president, vice president, and secretary-treasurer were elected. In 1956 the club joined the New Hampshire Federation of Garden Clubs. The purpose of the Garden Club is to *"provide education, resources, state and national networking opportunities to promote the love of gardening, floral design, and to encourage civic and environmental responsibility among its members"*. Meetings are held on the first Wednesday of each month, March through December, at the Kimball Library, or at the Community Center. The Atkinson Garden Club is very active in the community and provides many beautification aspects that contribute to Atkinson's unique rural character. Club projects include the annual cleanup of common areas and annual plantings, decoration of public areas for the holidays, senior



outreach, scholarship to a Timberlane Regional High School Senior (AGC awards a \$750 scholarship to a local student that is pursuing a college program related to conservation, the environment or horticulture), donation of items for the Emmaus House, and the AGC sponsor's youth activities and many other projects in Atkinson.

Atkinson Veterans Club

Before the establishment of the Atkinson Veterans Club, first, the Atkinson Recreation Department started hosting Veterans Coffee Hours on Veterans Day, November 11, 2001. Then, the Atkinson Veterans Club was formed as one of Recreation Department's monthly programs in March 2002 as a social meeting place for a group of mostly retired former service men and women. The Atkinson Veterans Club was chartered in May 10, 2007. The Atkinson Veterans Club meets at the Atkinson Community Center the first Tuesday of each month. This club is open to all branches of military service and all Reserve components of the Military Armed Forces. The Club maintains three donation boxes for retired flag collection at the Town Hall, Community Center, and Library. The Atkinson Cemetery includes approximately 345 veteran burials, and the Veterans Club actively supports the Cemetery Caretaker. The Club is also involved in several other community events including the Memorial Day Parade and Dow Common Ceremony, and on Veterans Day, a brief ceremony and breakfast is held at the Atkinson Fire Department. Starting in 2019, the Atkinson Veterans Club has participated in the Wreaths Across America Program to place a "Remembrance Wreath" on all veteran graves in the Atkinson Cemetery. Some proceeds of the wreath sale revert to the Club which has pledged the variable proceeds to be used for flowers throughout the year on Veteran graves at the discretion of the Cemetery Caretaker. The Club has no formal affiliation with the VFW, American Legion, or other organized groups. The Club is not formally organized as a 501c3 non-profit.

Atkinson Churches

Atkinson Congregational Church

In 1772 the Atkinson Congregational Society was formed, and by 1835 a new church was built on Main Street on land that was donated by Joseph Cogswell. Before the construction of this church, Congregationalists would meet in the Atkinson Meetinghouse which opened its doors to numerous religious groups of the community. The Atkinson Meeting House was taken down in 1845. However, the Atkinson Congregational Church still remains today at its original location at 101 Main Street. In November of 2022, the Atkinson Congregational Church celebrated its 250th Anniversary. Since its establishment, the Atkinson Congregational Church has provided many services to the Atkinson community. This includes the Doris and Vivian Horton

Scholarship which is awarded to students entering their sophomore, junior, or senior year of college for the upcoming academic year with the requirement that at least one member of their family must be members of Atkinson Congregational Church for the past three years or more.



Above: Atkinson Congregational Church

Atkinson, New Hampshire

Economy

KEY FINDINGS:

- 69% of Atkinson’s population is over the age of sixteen and is participating in the workforce in Atkinson and in the surrounding region.
- Atkinson’s resident workforce is largely employed outside of the community.
- The largest employers in Atkinson are located throughout the community, but mostly near NH 111, Sawyer Ave, and Country Club Road.
- The largest employer in Atkinson is the Atkinson Country Club.
- Atkinson’s commercial district is located in the northwestern part of town near NH111.
- Many of Atkinson residents travel to and rely on services in Salem, Hampstead, Plaistow, and Haverhill, Massachusetts.
- Majority of Atkinson’s workforce population works out of state, most likely in Massachusetts.

DATA SOURCES:

- 2011-2021 NH Department of Employment Security
- 2011-2021 NH Housing Data
- 2015-2021 U.S. Census’ American Community Survey Data
- Town of Atkinson
- Greater Salem Chamber of Commerce
- 2021 Atkinson Community Profile
- Plaistow Area Commerce Exchange (P.A.C.E.)

INTRODUCTION

This section summarizes Atkinson's existing businesses and economic activity. Understanding Atkinson's economic resources is vital to informing the future land use pattern of the community. The location of Atkinson's business districts and the types of business activity conducted has implications for infrastructure investments, transportation choices, and housing demand. While the community is primarily residential in nature, some residents work from home, operate home businesses, and require support infrastructure and services to support their personal and professional needs. Due to Atkinson's proximity to the growing employment centers in neighboring communities, Atkinson has also experienced continued residential development and some automobile dependent commercial activity. Today, many Atkinson residents rely on commercial development and services in Salem, Plaistow, Hampstead, and Haverhill, MA.

ATKINSON'S LOCATION

It is important to note that Atkinson's location is one of the town's greatest assets for economic development. Its central location gives the town access to Route 93 to the west in Salem/Windham, and to Route 495 in Haverhill, MA primarily via routes NH 111 and NH 121. Additionally, the southern portion of the community connects to Haverhill, MA by North Broadway, and NH 121 and contribute to the commerce and development patterns of Atkinson. Though Atkinson is primarily a bedroom community close to the Southern New Hampshire/Massachusetts state line, Atkinson is also unique in that residents can enjoy rural living while having easy access to shopping and urban areas elsewhere in the region. Atkinson's geographic location in southern New Hampshire on the Massachusetts state line has a significant influence on Atkinson's economy and Atkinson community member's reliance for services in surrounding communities. Many of Atkinson's working residents commute out-of-state and most of those that do are heading to Massachusetts. The Census has included Atkinson in the New England City and Town Area (NECTA) (a defined labor market area) identified as Haverhill-Newburyport-Amesbury Town, MA-NH. This designation further reinforces the economic connection Atkinson has with the communities and state to the south.

EXISTING DEVELOPMENT PATTERNS AND BUSINESS ACTIVITY IN ATKINSON

Currently, there are five areas in Atkinson with differing levels of economic activity, and other scattered businesses located elsewhere in town. These geographic areas of business activity are addressed below.

NH 111 Corridor

Atkinson's primary commercial and industrial development area is located along and off NH 111 in the northwest portion of the town, and this type of development activity extends into the neighboring communities of Hampstead and Salem. This area along NH 111 consists of businesses such as a gas station, Dunkin Donuts, automobile shops, and construction

companies. There are also a few commercial and industrial developments off NH 111 on local roads including a restaurant on Island Pond Road; Palmer Oil and Gas, Community Crossroads, a karate school, and Stanley Tree Service on Hall Farm Road; and Montes Marble & Granite, Atkinson Graphics, Wicked Sticky Designs, and



Above: Atkinson Village Center feat. Atkinson Fire Station, Town Garage, Cemetery, and Historical Society.

the former GEX, Inc. on Industrial Way. This existing industrial area located on Industrial Way also has space available for additional businesses. These areas fall within the Commercial/Industrial (CI) and Commercial/Professional (CP) zoning district.

Town Center

Atkinson's town center is located on Academy Avenue and consists of municipal, institutional, and residential uses. The Town Offices, Kimball Library, Atkinson Academy, Historical Society, Police Station, Fire Station, Town Garage, Dow Common, and



Above: Atkinson Village Store

Cemetery are located within the town center. This area falls within the town center zoning district and is home to many community events which are held most often at the Kimball Library

or the Dow Common. For more information on Atkinson's Town Center Zoning District, visit the Land Use and Zoning Profile of this Existing Conditions Report.

NH 121 (Main Street) Corridor

NH 121 (Main Street) is a part of Atkinson's Old Stage Coach Scenic Byway designation, and only a few commercial developments exist along this route. Starting at the Haverhill, Massachusetts state line, there are some public uses including the Atkinson Community Center and the Post Office. There is also a former restaurant and building which currently houses several small businesses. Further north along Main Street there is the Atkinson Congregational Church, and adjacent to Atkinson Avenue is Atkinson's general/convenience store. On Main Street in the northern portion of town near the Hampstead town line, there are a few additional businesses including a truck repair shop, and a lumber company. NH 121 lies within the Rural Residential-2 (RR-2) and Town Center (TC) zoning districts.

East Road Corridor

There are also a few commercial developments along East Road close to the Plaistow town line including a nail salon, a dog day care, a flower shop, and the Pentucket Baptist Church. Many Atkinson residents also access Plaistow's services through this area. East Road falls within the Town Residential-2 (TR-2) and the Rural Residential-2 (RR-2) zoning districts.

Southwestern Portion of Town

Atkinson also has a few commercial developments located in the southwestern portion of town along Providence Hill Road, Country Club Road, and Sawyer Avenue. These include Lewis Builders Development Inc., Hampstead Area Water Company, an auto body shop, and the Atkinson Country Club (which includes a pro shop, golf academy, and restaurant). This part of town lies within the Rural Residential-2 and Sports Complex Overlay (RR-2/SCR) Zoning District. For more information on the RR-2/SCR Zoning District, visit the Land Use and Zoning Profile of this Existing Conditions report.

Atkinson Agricultural Activity

Atkinson was once dominated by agricultural operations and was considered an agricultural community early on. Over time the community transitioned to more of a residential community as new homes superseded the agricultural activity and active farms in Atkinson. There are still a few farms that remain today and contribute to the agricultural activity in the community. Below is a table of active farm operations in the community which have a commodity and/or service they provide. In addition to the farms listed in Table 1 on the following page, there are several small hobby farms located on residential properties throughout town that are unknown. Some examples of what these small hobby farms have include goats, eggs, and honey. Additionally, in Atkinson, there are three properties that have Barn easements on them, two of which are located on Main Street, and one located on Maple Avenue.

Table 1: Active Farms in Atkinson	
Name	Location
Lewis Farm	Salem Road
Woods Farm	Main Street
Atkinson Riding Academy	Meditation Lane
Stewart Tree Farm	Main Street
29 Main Street Horse Stables	Main Street
Winchell Flower Farm	East Road
Shannon Trails Horse Farm	Backland off Shannon Road
Murphy Family Farm	Westside Drive

Home Occupations and Remote Workers

Atkinson residents are also working from home. The U.S. Census' American Community Survey reported that in 2021, 10% of Atkinson's workforce population worked from home however, due to the pandemic, there may be more remote workers than reported. The town has a permit process for home businesses operating in a residential zone. It is likely that most of the existing Atkinson workforce who work from home do not meet the threshold requirements of having to seek a special exception from the Zoning Board. The exceptions from the permit application requirements include home occupations in which no customers or vehicles come to the location and no sign is present, no agricultural activity is grown and sold on the premises, and home occupation permits that were previously granted by the Planning Board prior to March 8, 1984 are "grandfathered". For the specifics on home occupation permits in Atkinson, refer to Section 450 Accessory Uses: Home Occupations of the Atkinson Zoning Ordinance, Planning and Land Use Regulations.

ATKINSON'S LARGEST EMPLOYERS

The largest employers in Atkinson are located throughout town off of NH 111, Country Club Road, and Sawyer Ave respectively. One observation based on Table 2 is that it appears that these businesses were established across several

Table 2: Largest Employers in Atkinson Source: U.S. Census' American Community Survey Profile			
Business	Product/Service	Employees	Established
Atkinson Resort & Country Club	Resorts/Country Club	227	2002
Palmer Gas Company	Propane Gas	109	1969
Lewis Builders, Inc.	Builder	94	1953
Busby Construction	Contractor	70	1979
Atkinson Academy	School	50-60	1787

decades from the 1950's – early 2000's. This suggests that Atkinson has had sporadic periods of economic development activity which attracted these businesses.

ATKINSON'S LABOR FORCE

According to the NH Department of Employment Security in 2020, approximately 4,891 workers or 69% of Atkinson's population is over the age of sixteen and part of the available civilian work force in Atkinson and the surrounding region.

Table 3: Atkinson's Labor Force		
Source: NH Department of Employment Security		
Annual Average Labor Force	2011	2021
Civilian Labor Force	3,743	4,013
Employed	3,510	3,872
Unemployed	233	141
Unemployment Rate	6.2%	3.5%

The U.S. Census' American Community Survey reported that in 2021, 10% of Atkinson's workforce population work from home. Atkinson's resident workforce is largely employed outside of the community, but since the pandemic, a larger number of residents may be working remotely from their homes resulting in more hybrid and remote workers than reported. This presents a potential that these workers may have an unmet need for local services within Atkinson. However, it should be noted that many of Atkinson workers currently travel to Salem, Hampstead, Plaistow, and Haverhill, MA for most of their service needs.

ATKINSON'S EMPLOYMENT AND WAGE STATISTICS

Table 4 identifies the most recent employment and wage data available for jobs within Atkinson as collected by the NH Department of Employment Security. The table includes both private sector jobs and government positions. Table 5, from NH Housing, compares the private sector employment numbers in Atkinson for a variety of different industries. During this decade, there was an increase in employment in all categories, however the private sector had the most significant increase.

Table 4: Employment and Wages in Atkinson – October – December 2021					
Source: NH Department of Employment Security					
Percent of Working Residents	Units	Oct. Employment	Nov. Employment	Dec. Employment	Weekly Wage
Total, private plus government	128	1,258	1,263	1,231	\$1,349
Total private	126	1,191	1,191	1,197	\$1,374
Goods-producing industries	36	374	393	389	\$1,800
Service-producing industries	92	884	879	842	\$1,149
Total government	2	70	68	64	\$2,137
Federal government	1	9	10	10	\$1,320
Local government	1	61	58	54	\$817

Table 5: Annual Average Covered Private Employment

Source: NH Housing

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total Change
Goods-producing industries	286	404	416	413	381	386	407	386	374	355	372	86
Service-producing industries	608	641	682	716	733	742	818	783	823	742	808	200
Total private employment	893	1,046	1,098	1,130	1,114	1,128	1,226	1,169	1,197	1,097	1,180	287

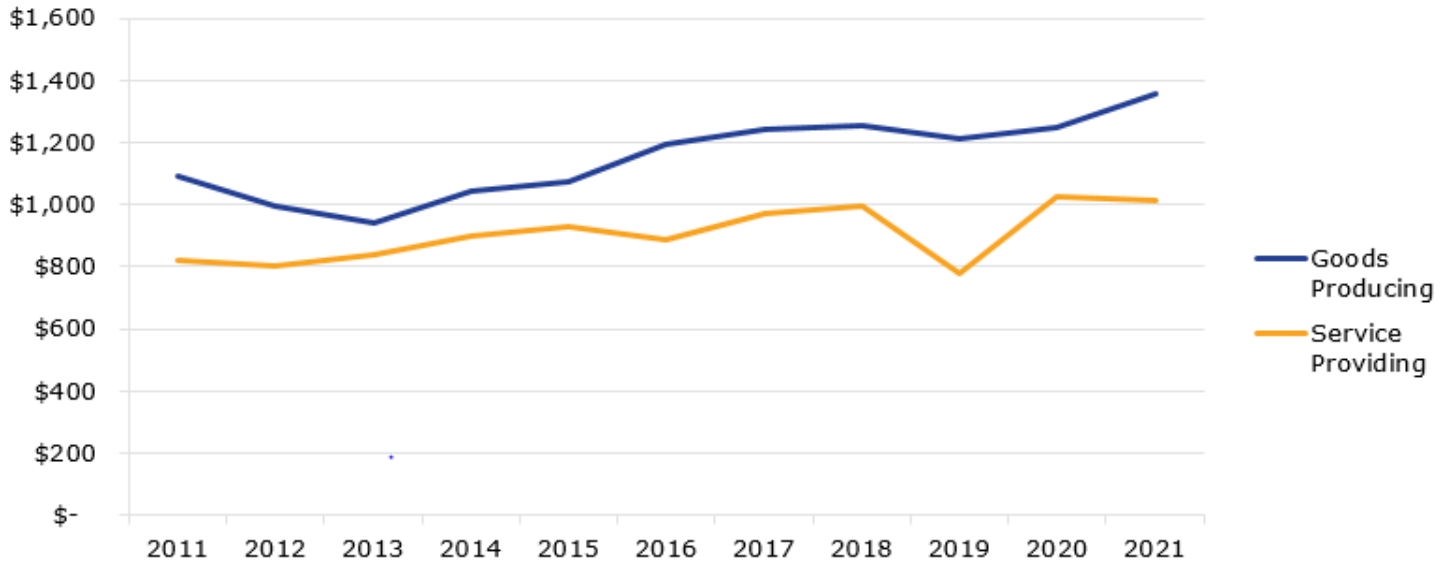
Table 6: Covered Private Employment Wages

Source: NH Housing

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	Total \$ Change
Goods-producing industries	\$1,090	\$994	\$944	\$1,042	\$1,075	\$1,194	\$1,242	\$1,256	\$1,213	\$1,247	\$1,354	\$265
Service-producing industries	\$820	\$800	\$837	\$897	\$932	\$889	\$971	\$994	\$779	\$1,025	\$1,016	\$196
Total private employment	\$906	\$875	\$877	\$950	\$981	\$993	\$988	\$1,009	\$1,005	\$1,097	\$1,122	\$216

Tables 5 and 6 and the Covered Private Employment Average Wages Graph on the following page, all identify the number of private sector Atkinson workers and earnings by workers over the last decade. These results, as reported by NH Housing, are based on Quarterly Census of Employment and Wages (QCEW) program files extracted from Quarterly Employer Tax and Wage Reports. In Atkinson, the earnings by workers over time have increased slightly over the last decade with a sharp decrease in service producing wages in 2019 that have since increased and plateaued in 2020 to 2021.

Covered Private Employment Average Wages



HOME OCCUPATIONS AND REMOTE WORKERS

As indicated in Table 7, almost 100% of Atkinson's population has a computer and internet access within their homes. This infrastructure and access to technology is necessary for many people working from home.

Table 7: Computer and Internet Use Source: U.S. Census' American Community Survey	
Computer and Internet Use	2017-2021
Households with a computer	97.8%
Households with a broadband internet subscription	95.4%

The Town of Atkinson's Zoning Ordinance defines home occupations as *"the accessory use of a dwelling for a business nature conducted by the residents thereof which is clearly secondary to the dwelling use for living purposes and which does not change the character thereof or adversely affect adjacent properties or the neighborhood. Home Occupation includes Family Group Day-Care home facilities and professional, business office uses, such as a small office, doctor's, stockbroker's, bookkeeper's, designer's, manager's and other professional consultants' offices"*.

ECONOMIC DEVELOPMENT PARTNERS

Chamber of Commerce

The Greater Salem Chamber of Commerce is a non-profit 501(c)(6) organization that promotes and supports business relationships and community involvement in the region. The Chamber is organized to provide businesses advocacy, information, visibility, networking, and community. The Greater Salem Chamber of Commerce includes five towns in southern New Hampshire. More information on the Chamber is available at: <https://www.gschamber.com/about-the-chamber>

Plaistow Area Commerce Exchange (P.A.C.E.)

P.A.C.E. is a non-profit 501(c)(6) organization that was established in 1988 to establish a close working relationship and communication with the local business economy in southern New Hampshire. The organization brings businesses and professional people together to address issues of common interest, to get to know each other better, and work toward a more structured direction for the future growth and prosperity within the community. The Plaistow Area Commerce Exchange includes seven towns in southern New Hampshire: Atkinson, Danville, Hampstead, Kingston, Newton, Plaistow and Sandown. More information on P.A.C.E. is available at: <https://www.pacenh.com>.

Atkinson, New Hampshire

Land Use and Zoning Profile

KEY FINDINGS:

- 52% of Atkinson’s total land area is currently being used for residential use.
- Protected open space land use account for 21% of Atkinson’s land area. Protected open space includes Cluster Common Land at 13% and Town Conservation Land at 8%
- Atkinson has three Commercial Zoning Districts: Commercial, Commercial-Industrial, and Commercial-Professional, which account for 6% of the town’s total land area.
- Atkinson’s current commercial and industrial uses only account for 4% of the town.
- The Sports Complex/Residential Subdistrict accounts for 1,033 acres or 14% of the town.
- Atkinson’s Town Center Zone is located on NH 121 and Academy Avenue and includes municipal, open space, and residential uses. It also includes one commercial business. Although the Town Center Zone only accounts for 2% of the town, more than half (66%) of this zone is composed of residences.
- The rural character, low development density, and the network of protected vistas and open spaces gives many people a false sense that the community has a great deal of land available for development.
- Other zoning districts in Atkinson include the Wetland Ordinance and the Floodplain Management Ordinance.

DATA SOURCES:

- 2022 Ordinances, Laws, and Regulations for the Town of Atkinson
- 2015 Atkinson Master Plan
- 2010 CTAP Build-Out Analysis
- Rockingham Planning Commission (RPC)
- Town of Atkinson GIS Data
- Atkinson Land Use Department
- Atkinson Tax Assessor
- 2023 CAI Technologies Parcel Data

INTRODUCTION

Atkinson's existing land use pattern shapes the rural character of the community. The rural character is a unique quality due to the town's geographic location in southern New Hampshire, an area that is experiencing significant development pressure and activity. The existing land use pattern consists mostly of distinct residential neighborhoods scattered throughout town. Although Atkinson is largely a "bedroom community" there are also small pockets of commercial and industrial development in town. These are generally located in the northwest and southeast portions of the town.

The Town of Atkinson has Cluster Development Regulations in place that enable denser residential development in exchange for setting aside fifty percent of the land as permanent open space. The first version of these regulations was the Rural Residential Cluster which was adopted in 1982. As of 2022, the town had twenty Cluster Developments that account for about 1,313 acres of land in Atkinson. Examples of these Cluster Residential Developments, located throughout Atkinson, include Bryant Woods, Centerview Hollow, Settlers' Ridge, and Cogswell Farm. Each of these Cluster Developments represent a different development density, number of units, and overall design. Another distinct residential neighborhood in Atkinson is locally referred to as "The Maze". This neighborhood was constructed by Lewis Builders and is like a typical suburban style development with small lots and a network of interconnected streets. The Maze neighborhood was developed prior to the implementation of Cluster Development Regulations.

Partially due to the successful use of Atkinson's Cluster Development Regulations, a large portion of Atkinson's land area is protected open space. Some of these open space lands are conserved natural resource areas, are set aside lands from cluster developments, or are protected scenic vistas or landscapes. The rural character, low development density, and the network of protected vistas and open spaces gives many people a false sense that the community has a great deal of land available for development. However, this is not the case. The amount of land already developed, combined with the protected open space lands, and the many parcels that are not developable (wetland buffers, water bodies, etc.) means that Atkinson does not have a significant amount of developable land remaining under existing regulations.

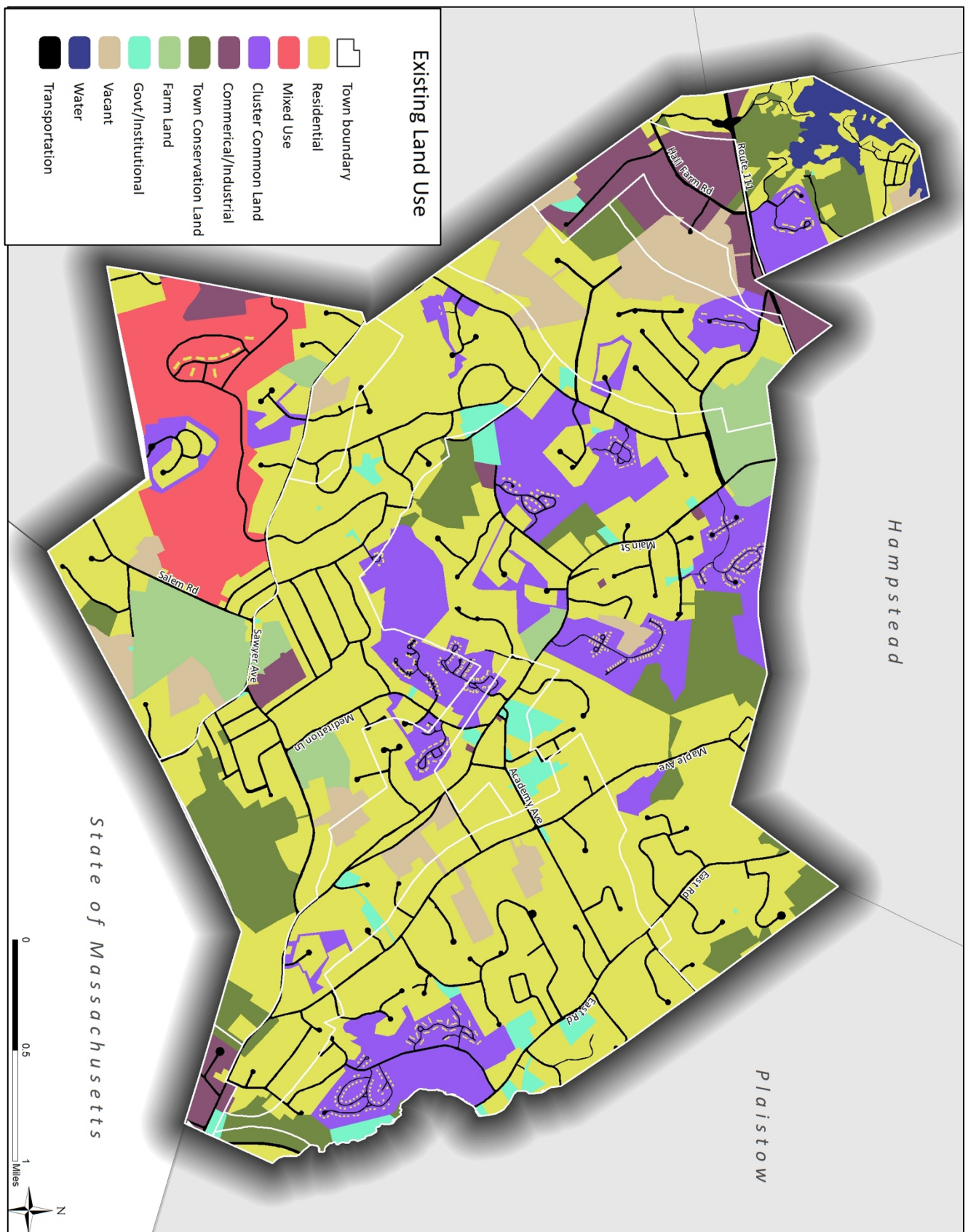
EXISTING LAND USE

Atkinson's existing land use pattern is primarily residential at 52% of the town. The second largest land use in Atkinson's cluster common land (or set aside open space) accounting for 13% of the town. This is partly due to Article VI: Rural Cluster Residential Development Section 600 of the Atkinson Zoning Ordinance, Planning and Land Use Regulations. The third largest land use in Atkinson is town conservation land at 584 acres or 8% of the town's total land area. There are currently two areas in town that are zoned for Commercial/Industrial uses, one area that is zoned for Commercial uses, and one area that is zoned for Commercial/Professional uses. All the commercial and industrial areas combined make up 4% of the town's land area.

Atkinson's government and institutional uses are in the Town Center zoning district and combined they make up 2% of the town's land area. Additionally, 1% of Atkinson's land area is composed of waterbodies (Big Island Pond), streams/brooks, and wetlands. As identified in the 2015 Atkinson Master Plan update and depicted in Atkinson's current land use, the town is almost fully developed under the existing regulations. A summary of the town's land use by acreage and percent of the town's land area can be seen in Table 1. Atkinson's Existing Land Use Map can be found on the following page.

The Existing Land Use Map illustrates the distribution of land uses across Atkinson and highlights the fact that much of the town is utilized for residential use and protected open space which includes cluster common space and town conserved land. In fact, 73% of Atkinson's existing land use is composed of residential uses and protected open space.

Table 1: Atkinson Land Use Distribution		
Use	Acres	Percent of Town
Cluster Common Land	913	13%
Commercial/Industrial	290	4%
Farmland	301	4%
Government/Institutional	145	2%
Mixed Use	384	5%
Residential	3,764	52%
Town Conservation Land	584	8%
Transportation	429	6%
Vacant	377	5%
Water	72	1%
Total	7,260	100%



EXISTING ZONING

The Town of Atkinson has eight primary zoning districts as well as other zoning regulations for natural resources and natural hazards as depicted in Section 410 and 420 of the Atkinson Zoning Ordinance. Table 2 provides details on the area covered by each zoning district throughout the community and the percent of town that each district accounts for currently. Evaluating the existing zoning districts and land uses provides insight on how each zoning district is currently being used. The subsections below present the specific zoning districts, and a corresponding table breaks down the districts based on their use of land area in town.

Rural Residential-3 (RR-3)

Atkinson's Rural Residential-3 district is limited to agricultural, forestry, and certain other non-intensive uses as well as low density residential development. There are two areas in town that are zoned for Rural Residential-3. Both areas are located in the northwest portion of town and are separated by Commercial zones and NH Route 111. One of the Rural Residential-3 zones is in the Big Island Pond area along the Derry and Hampstead town lines.

Table 2: Atkinson Zoning Districts		
Zone	Acres	Percent of Town
Commercial (C)	42	1%
Commercial – Industrial (C-I)	264	4%
Commercial – Professional (C-P)	88	1%
Sports Complex/Residential Subdistrict (RR2/SCR)	1,033	14%
Rural Residential – 2 (RR-2)	2,407	33%
Rural Residential – 3 (RR-3)	876	12%
Town Residential – 2 (TR-2)	2,404	33%
Town Center (TC)	144	2%
Total	7,258	100%

Table 3: Rural Residential-3 Land Use Breakdown		
Land Use	Acres	Percent of Zone
Cluster Common Land	97	11%
Commercial/Industrial	8	1%
Farmland	40	5%
Govt/Institutional	0	0%
Residential	372	43%
Town Conservation Land	116	13%
Transportation	46	5%
Vacant	122	14%
Water	71	8%

Table 3 shows the land use breakdown of the Rural Residential-3 Zone. Most of this zone (43%) is residential use and 14% of this zone is composed of vacant land. 13% of this district is town conserved land and 11% of this zone is cluster common land. In total, 24% of the Rural Residential-3 zone is in some form of protected open space, whether that is set aside open space for cluster developments or town owned conservation land.

Rural Residential-2 (RR-2)

Rural Residential-2 Zone is currently tied with the Town Residential (TR-2) Zone as one of the two largest zoning districts in Atkinson. The Rural Residential-2 Zone accounts for 33% or 2,404 acres of town. There are two areas in Atkinson that are zoned for this district. One of the areas encompass most of the north and center of town along the Hampstead and Plaistow town lines. There is also a smaller area of town zoned for Rural Residential-2 in the western part of town adjacent to the Salem town line. This is in between the Sports Complex/Residential Subdistrict Zone and the Town Residential Zone. Table 4 shows the land use breakdown of the Rural Residential-2 Zone.

Table 4: Rural Residential-2 Land Use Breakdown		
Land Use	Acres	Percent of Zone
Cluster Common Land	513	21%
Commercial/Industrial	9	0%
Farmland	71	3%
Govt/Institutional	39	2%
Residential	1,350	56%
Town Conservation Land	234	10%
Transportation	131	5%
Vacant	59	2%

A little more than half (56%) of the Rural Residential-2 Zone is residential use. 21% of this zone is cluster common land and another 10% of this zone is town conserved land. In total, 31% of the Rural Residential-2 Zoning District is some form of protected open space.

Town Residential (TR-2)

The Town Residential Zone is the prime residential area in the community. This area was designated for residential development because the soils are generally suitable for development and this area is easily accessible to the Town Center Zone and available services. Like the Rural Residential-2 Zone, this is one of the largest zoning districts in Atkinson and accounts for 33% or 2,404 acres of town. There are two Town Residential Zone areas. One is located in the east side of town bordering Plaistow and the other borders the Sports Complex/Residential Subdistrict Zone. Table 5 shows the land use breakdown for the Town Residential Zone.

Table 5: Town Residential Land Use Breakdown		
Land Use	Acres	Percent of Zone
Cluster Common Land	241	10%
Commercial/Industrial	22	1%
Farmland	51	2%
Govt/Institutional	66	3%
Residential	1,612	67%
Town Conservation Land	189	8%
Transportation	159	7%
Vacant	56	2%

Currently, 67% of the Town Residential Zone is residential use and 10% (241 acres) is composed of cluster common land. Additionally, 8% of the Town Residential Zoning District is conserved land owned by the town. 18% of this zoning district is some form of protected open space.

Town Center (TC)

The Town Center Zoning District is located to the west of Maple Avenue and to the east of Wrights Farm Road encompassing a portion of NH 121 (Main Street) and Academy Avenue where the town's municipal facilities are located. This zone was established to provide a civic center for the town while preserving the historic character of the area. Table 6 shows the land use breakdown for the Town Center Zone.

Table 6: Town Center Land Use Breakdown		
Land Use	Acres	Percent of Zone
Cluster Common Land	6	4%
Commercial/Industrial	1	1%
Farmland	0	0%
Govt/Institutional	29	20%
Residential	95	66%
Transportation	13	9%

A large percentage of the Town Center Zone is composed of residential uses at 66%. Currently, 20% of this zone is utilized for educational and government uses.

Sports Complex/Residential Subdistrict (RR2/SCR)

This unique zoning district covers an area of town zoned for Recreational/Sports related businesses and amenities. Currently, this includes a golf course, a restaurant, a pro shop, and higher density multi-family housing. Residential development in this zone must include a minimum of 250 acres and be a rural residential cluster development referred to as a "Rural Residential and Recreational Cluster Developments" (RRRCD). The Sports Complex/Residential Subdistricts Zone is located in the southwest portion of the town on the Haverhill, Massachusetts State Line and east of the Salem Town Line.

Table 7: Sports Complex/Residential Subdistrict Land Use Breakdown		
Land Use	Acres	Percent of Zone
Cluster Common Land	42	4%
Commercial/Industrial	23	2%
Farmland	137	13%
Govt/Institutional	0	0%
Mixed Use	384	38%
Residential	311	31%
Town Conservation Land	10	1%
Transportation	52	5%
Vacant	58	6%

Table 7 breaks down the Sports Complex/Residential Subdistrict Zone.

Currently, 38% of the RR2/SCR Zone is composed of mixed land uses. About one third (31%) of this zone is residential use and 13% of this zone is farmland. 5% of this zoning district is protected open space from cluster common land and town conservation land.

Rural Residential and Recreational Cluster Developments

As described in the Zoning Ordinance, Rural Residential and Recreational Cluster Developments are *"appropriately covenanted dwelling units which legally restrict, under the provisions of the Federal Fair Housing Act, and this ordinance occupancy to residents all of whom are fifty-five (55) years of age or older. To ensure the occupancy of elderly dwelling units by the elderly, the following covenants will be recorded on each Deed to a dwelling unit"*. An example of a RRRC

development in the community is the Atkinson Heights development that is currently underway. The buildings in the Atkinson Heights development are allowed to be taller than developments elsewhere in town but has a required 400-foot setback from the road. Two of the nine buildings planned are already complete. In total there will be 288 housing units created, with 32 age restricted units per building.

Commercial (C)

The Commercial Zoning District in Atkinson encompasses a small area in town located in the southeast portion of town bordering Haverhill, MA. This district was designated to promote the pleasant residential characteristics and shopping environment of a neighborhood. Table 8 shows the land use breakdown for Atkinson's Commercial Zone.

Land Use	Acres	Percent of Zone
Commercial/Industrial	29	70%
Govt/Institutional	3	7%
Residential	2	4%
Town Conservation Land	4	9%
Transportation	4	10%

Currently, 70% of this zone is utilized for commercial and industrial uses, and 10% of this zone is composed of transportation such as roadways. Additionally, 9% of the Commercial Zone is composed of town conservation land.

Commercial-Industrial (C-I)

This district allows for the establishment of small-scale manufacturing opportunities along with shopping and service-related activities. There are two areas in town that are zoned for Commercial Industrial uses. One is in the northwest portion of town dividing two Rural Residential-3 zoning districts, and the other is a small area of town located southeast along the Plaistow town line. The land use breakdown for the Commercial-Industrial zone is depicted in Table 9.

Land Use	Acres	Percent of Zone
Cluster Common Land	4	2%
Commercial/Industrial	177	67%
Government/Institutional	5	2%
Residential	14	5%
Town Conservation Land	19	7%
Transportation	21	8%
Vacant	23	9%

Most of the Commercial-Industrial Zone is utilized for commercial/industrial land uses. Additionally, 9% or 23 acres of this zoning district is vacant and 7% of this district is town conserved land. In total an additional 9% of the Commercial-Industrial Zoning District is protected open space.

Commercial Professional (C-P)

The Atkinson Zoning Ordinance describes the Commercial Professional district as a transitional zone between the commercially/industrially zoned areas and any residentially zoned areas. This zone is intended to accommodate the growth of home businesses and to establish an area necessary to support the existing need for low impact services. This zoning district is located in the northwestern part of town south of NH 111 between the Commercial-Industrial Zone and the Rural Residential-3 Zone. Table 10 shows the land use breakdown for the Commercial Professional Zone.

Table 10: Commercial Professional Land Use Breakdown		
Land Use	Acres	Percent of Zone
Cluster Common Land	2	3%
Commercial/Industrial	21	24%
Residential	0	0%
Town Conservation Land	7	8%
Transportation	1	1%
Vacant	57	65%

Over half (65%) of this Zone is currently vacant whereas 24% of this of the Commercial-Professional Zoning District is in commercial/industrial use.

EXISTING LAND USE TAKEAWAYS

Commercial Zones - The three commercial zones in Atkinson, (Commercial, Commercial-Industrial, and Commercial-Professional) contain a high amount of commercial/industrial uses. The average commercial/industrial usage in these zones is 54%, however, that average is brought down by the amount of commercial/industrial land use in the Commercial-Professional Zone, which has an average of 24%. The other two commercial districts in town have very high percentages of commercial/industrial land uses.

Sports Complex/Residential Sub District – This district appears to currently have a mix of land uses including residential, farmland, protected open space, recreational and others.

Residential – The three residential zones in Atkinson (Rural Residential-3, Rural Residential-2, and Town Residential) show a similar pattern with the majority of the land use being utilized for residential followed by protected open space which includes both town-owned conservation land and cluster development common land. Each residential district averages 55% residential use and 24% protected open space.

Town Center – The Town Center Zoning District has the highest percentage of government/institutional use, but also accommodates some residential uses.

OTHER ZONING DISTRICTS

The Town of Atkinson has two other districts described in the General Provisions of the Zoning Ordinance. An overview of each is described below with additional information found in the

Wetland Zoning

The purpose of this district is as follows: *In the interest of public health, convenience, safety, and welfare, the regulation of wetlands areas is intended to guide the use of area of land with standing water or extended periods of high-water table. The ordinance is intended to:*

1. *To protect persons and properties from the danger of floods by preserving natural floodwater storage areas.*
2. *To prevent the Town from incurring the costs of constructing sewer lines and treatment facilities which will be necessitated by the unwise development of unsuitable areas.*
3. *To prevent the Town from incurring the costs of constructing sewer lines and treatment facilities which will be necessitated by the unwise development of unsuitable areas.*
4. *To prevent development on soils which will contribute to the pollution of surface and groundwater necessary to supply domestic water needs.*
5. *To preserve recharge areas necessary to maintain adequate groundwater supply and augment stream flow during dry periods.*
6. *To protect existing water quality*
7. *To protect presently existing natural wetland wildlife habitats.*
8. *To discourage chronic stress on wetland environments contributed by modification of water flow patterns and rates.*
9. *To encourage uses that can be safely and appropriately located in wetland areas*

This Wetland Ordinance requires a one-hundred-foot setback from a designated wetland boundary or from intermittent streams for:

- Waste disposal systems or buildings from which human or animal waste is generated (This does not apply to existing or replacement systems).
- All attached and detached residential or commercial garages (This does not apply to existing construction).

Floodplain Management Ordinance

The purpose of this district is as follows: *Certain areas of the Town of Atkinson, New Hampshire are subject to periodic flooding, causing serious damages to properties within these areas. Relief is available in the form of flood insurance as authorized by the National Flood Insurance Act of 1968. Therefore, the Town of Atkinson, New Hampshire has chosen to become a participating community in the National Flood Insurance Program, and agrees to comply with the requirements of the National Flood Insurance Act of 1968 (P.L. 90-488, as amended) as detailed in this Floodplain Management Ordinance.*

More information on floodplains and flood maps can be found in the Natural Hazards Profile of this Existing Conditions Report.

