



Town of Meredith, NH

Existing Conditions Analysis for the 2024 Master Plan Update

DRAFT

May 1, 2024



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INTRODUCTION

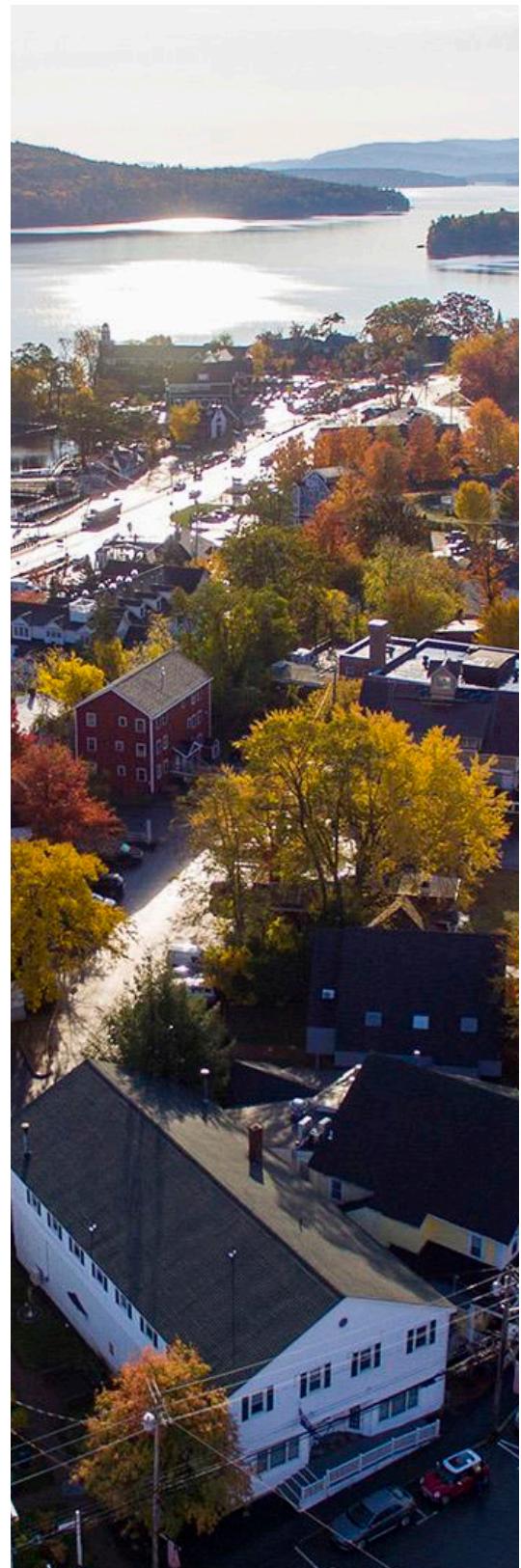
The purpose of this Existing Conditions Report is to provide a baseline understanding of Meredith as a community in 2024.

Analyzing the existing conditions of Meredith today represents the first phase of the Master Plan writing process. This report will be used to guide and inform the planning team, and to engage the Planning Board and the public in conversations about planning for the future of Meredith. It will be the main source of information used to inform community discussions and the basis for materials created to engage the public.

The intent is for this information to educate Meredith residents, business owners, workers, property owners, and others, so that they can help the Town identify a clear vision to work toward, and the many actions that must be taken as a community during the next decade to achieve that vision.

Each section of this Existing Conditions Report begins with a short profile that explains the significance of each topic and key findings that should be pursued further to inform this planning process. Following each profile is a longer inventory that includes more data, details, and analysis related to the topic. In each of these sections, information is presented that explains how Meredith is changing, and what emerging issues, challenges, and opportunities the town may wish to address in the Master Plan.

These inventories are intended to provide a more detailed explanation of the background sources used, data collected, additional context related to the issues identified, and, in some cases, questions and potential actions that should be explored later on in the planning process.



POPULATION AND HOUSING



Meredith, like many smaller New England towns with a very desirable second home market, saw rapid price escalation of both ownership and rental units during the pandemic. The town was already challenged with a tight housing supply given the number of seasonal homes as a share of its overall housing stock, but the pandemic brought a rapid escalation in sale prices and additional interest from investors looking to capitalize on the increased popularity of short-term rentals. While new housing units have been built in Meredith over the past decade, the demand for housing from the year-round population also continued, and there were changes in household size and composition. The combination of population growth and smaller households adds to the need for housing units, and is likely an indication of the need for a different mix of housing types.

As housing demand and prices continue to rise, it is becoming more difficult for lower income households to remain in Meredith. This impacts existing residents on fixed incomes as well as the business community's ability to attract and retain workers whose annual earnings are well below the town's median income. Without new affordable housing options, the pressures on existing housing stock will continue to grow as will the price of both owner occupied and rental units.

FACTS AND FIGURES



6,630 residents live in Meredith, based on the US Census Bureau's 2021 ACS 5-year estimates. This represents a 4.3% increase (276 residents) since 2012.



4,200 single-family housing units exist in Meredith, according to 2021 data. This equates to 81% of the housing stock. Between 2012 and 2021, the percentage of the total housing stock dropped from 85% to 81% due to new growth in other types of residential structures.



Since **2012**, the average home value in Meredith increased from \$283,700 to \$341,900, representing a 20.5% increase in ten years.



73% of all renter households are occupied by individuals that are aged 55 or older, which is significantly higher than the county and state.



79% of residents live in owner-occupied housing units, whereas 21% live in renter-occupied units.



There is a **1.3%** vacancy rate in Meredith. This reflects a tight housing market, showing that limited residential units are listed as vacant and available (for sale or for rent).

POPULATION AND HOUSING KEY FINDINGS

- Meredith's population is increasing, and is largely driven by older adults. Additionally, the number of people per household in Meredith continues to decline, particularly for renter households.
- The majority of Meredith's housing stock is comprised of single-family units which have been steadily increasing in price since 2012, exacerbated by pricing changes and overall demand from the pandemic. Since 2012, Meredith saw increases in the number of residential units in 3-4-unit buildings, buildings with more than 10 units, and additional mobile homes. While the town's housing stock appears to be increasing somewhat in its diversity, it is still dominated by single-family homes.
- Most year-round residents who live in Meredith reside in single family homes, while more owners who live outside Meredith have purchased homes on the waterfront or in condominium buildings. These properties tend to be more expensive and may be easier or more desirable to rent out.
- Demand for short term rentals in Meredith by both owners and consumers has increased over the past few years. The number of short-term rentals has grown, occupancy is very high, and daily rates for units has increased. Removing these units from the year-round housing stock limits available housing for residents and drives prices for ownership units up as investors are willing to pay higher prices and may come with more competitive offers.
- In Meredith, it is estimated that a total of 2,100 housing units are vacant for at least 6 months of the year or more. 92% of those vacant units have been identified as being for seasonal or recreational use. This equate to 1,943 units in town, which has increased 9.4% since 2012. Meredith ranks fourth highest in the number of seasonal units in Belknap County, behind Center Harbor, Alton, and Gilford.
- Spikes in seasonal home purchases occurred in 2020 from buyers ages 44-54 while more buyers ages 35-44 purchased investor properties in town.
- Meredith's age by tenure metrics follow typical patterns where most older adult households tend to be homeowners, and more of the younger adult households tend to be renters. This is particularly true in high-cost markets like Meredith and elsewhere in the Lakes Region where the barriers to entry into the ownership market are high. What is also interesting, and sets Meredith apart from the County and State, is the share of renter households headed by those over the age of 55. Those renter households account for over 53% of all renter households in Meredith. This compares to 40% for the County and 28% for the State.
- Rental units have seen steady price increases with median gross rent in Meredith growing from \$988 in 2012 to over \$1,200 in 2021. This equates to a 22% increase in the past ten years. The average earnings for jobs within the tourism and service-based sectors in Meredith are not high enough to afford rents across this price range.
- The majority of renter households in Meredith earn less than \$40,000 a year making it difficult for them to afford typical month rents in town. In terms of rental households, Meredith has a much smaller rental housing stock and thus fewer renter households, but of those who rent, over 60% (~334 households) spend more than 30% of their income on housing costs. HUD considers a household to be cost burdened if they are spending more than 30% of their monthly income on housing costs.
- Based on the data analyzed in the Lakes Region Housing Needs Assessment, it is estimated that Meredith should be prepared to accommodate demand for 274 housing units by 2030 and 397 units by 2040. Of these units by 2040, 266 should be for owners, with about 47% affordable to households with an income of 100% AMI and less. Another 130 should be for renters, with 44% of these being affordable to renters with an income of 60% AMI and less.

POPULATION AND HOUSING

Background

The Town of Meredith is faced with a lack of diverse housing options coupled with rapidly rising housing costs, which have created a shortage of affordable and attainable housing in the town. Meredith is unique in its location on Lake Winnipesaukee which has traditionally attracted a strong second home market. Housing costs particularly driven by this second home market were exacerbated by the migration patterns and market impacts of the COVID-19 pandemic. To better understand the town's housing supply, demand, and gaps; Meredith secured a Housing Opportunity Planning Grant (HOP) to conduct a housing needs assessment and create an updated housing chapter for the Master Plan. The housing needs assessment and additional research completed for the existing conditions phase of this master plan update were used to create this profile. The housing profile summarizes this analysis of the town's demographics, economic conditions, housing stock, ownership patterns, and affordability gaps.

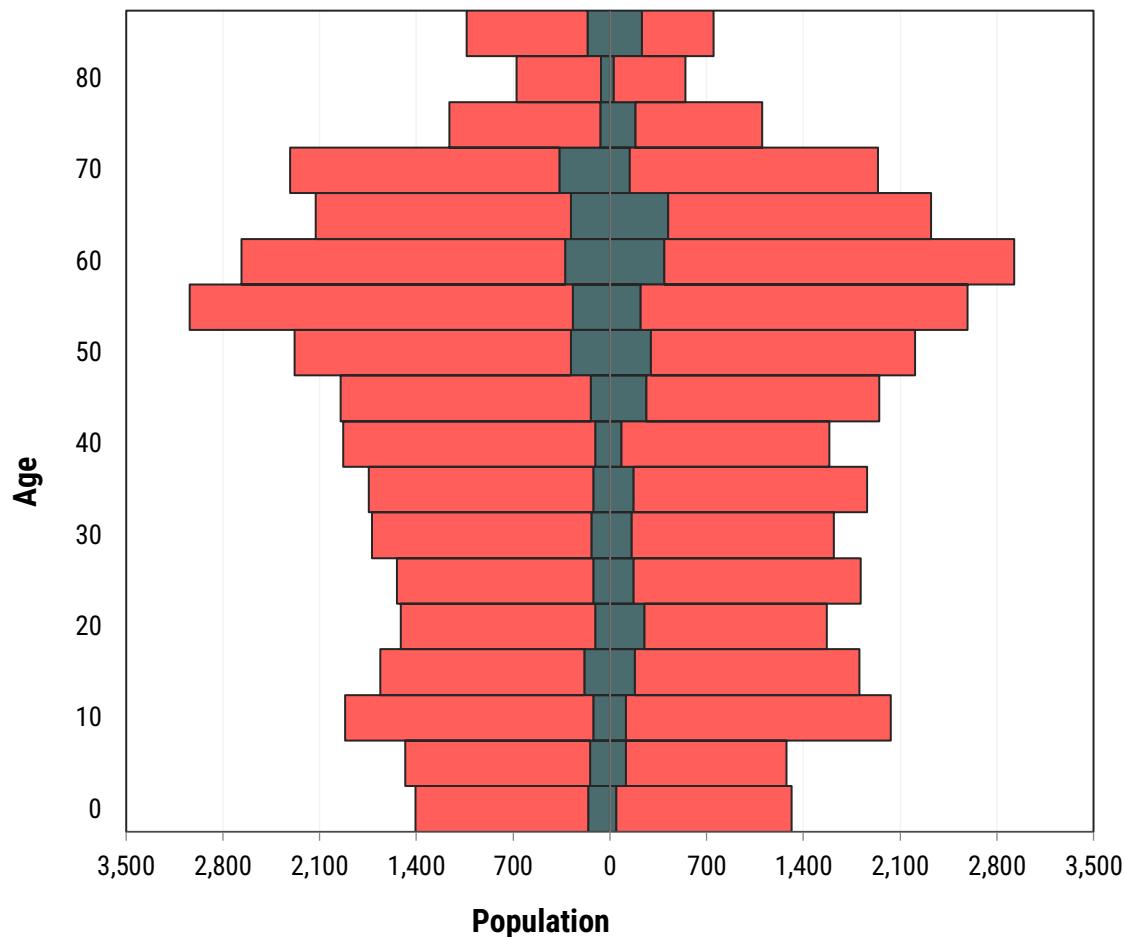
Demographics

Population

The US Census Bureau's 2021 ACS 5-year estimates put **Meredith's total population at 6,630** residents. This represents a 4.3% increase (276 residents) since 2012. Although Meredith's total population has increased over the past ten years, that population increase is not consistent across age cohorts. The town is growing significantly older with more than 700 more residents falling into the over 65 age group compared to ten years ago.

Over this same time period, Meredith also saw declines in residents under the age of 18, falling by 30% or 420 residents. This corresponded with a drop in adults ages 25-44 indicating families with children are comprising a decreasing share of households in town. This could be the result of children aging out of the community while parents age in place, or families leaving Meredith who have younger children.

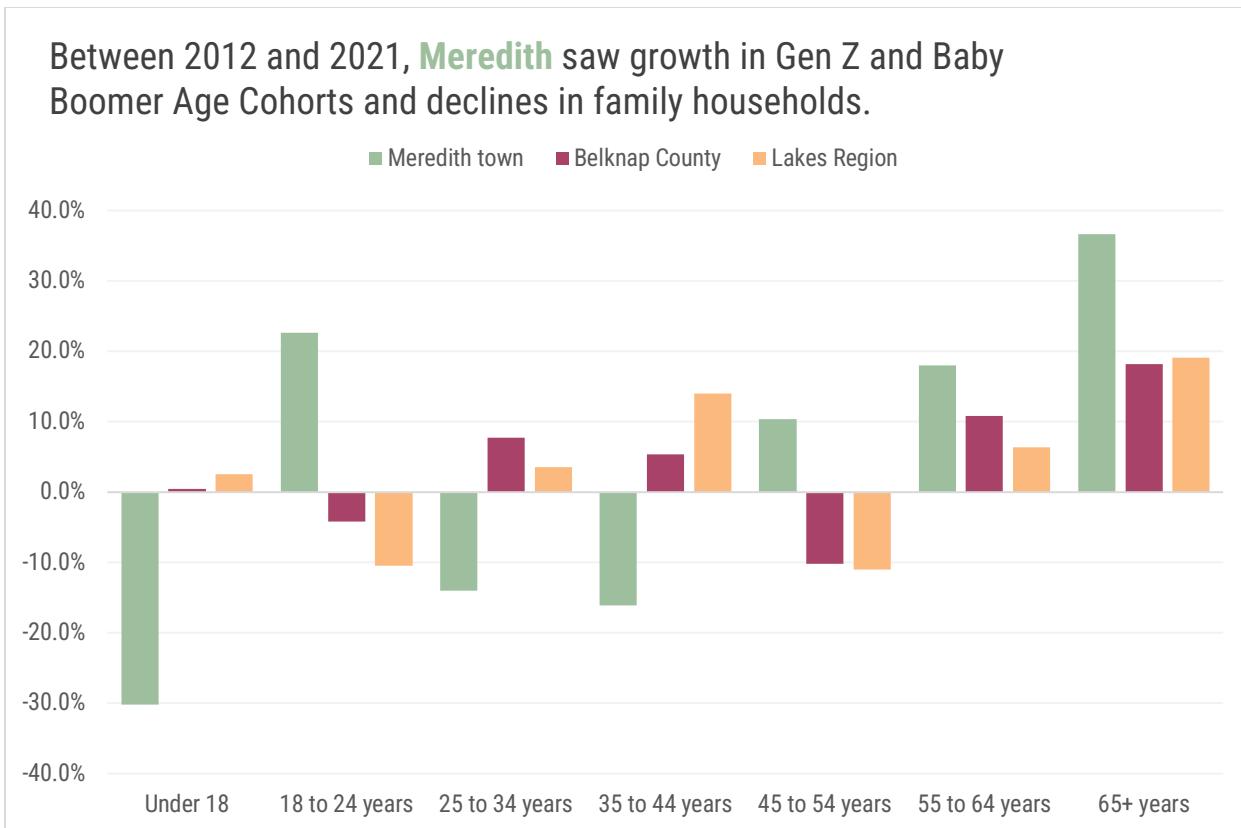
The population in both Meredith and Belknap County are aging.
 Town of Meredith & Belknap County



Source: US Census Bureau ACS 5-Year Estimates

Age Distribution

Looking more closely at population by age cohort and comparing the town to the County and Lakes Region, Meredith residents over the age of 65 are increasing much faster as a share of total population while residents under 18 are decreasing much faster. Interestingly, Meredith residents between the ages of 18 and 24 increased substantially compared to the County and Region possibly indicating older children living at home with their parents. The pandemic created unique situations where typical college-aged residents delayed going to school or opted out altogether. This may be an indicator for housing demand related to smaller unit sizes or possibly accessory dwellings available for the younger and older adult cohorts.

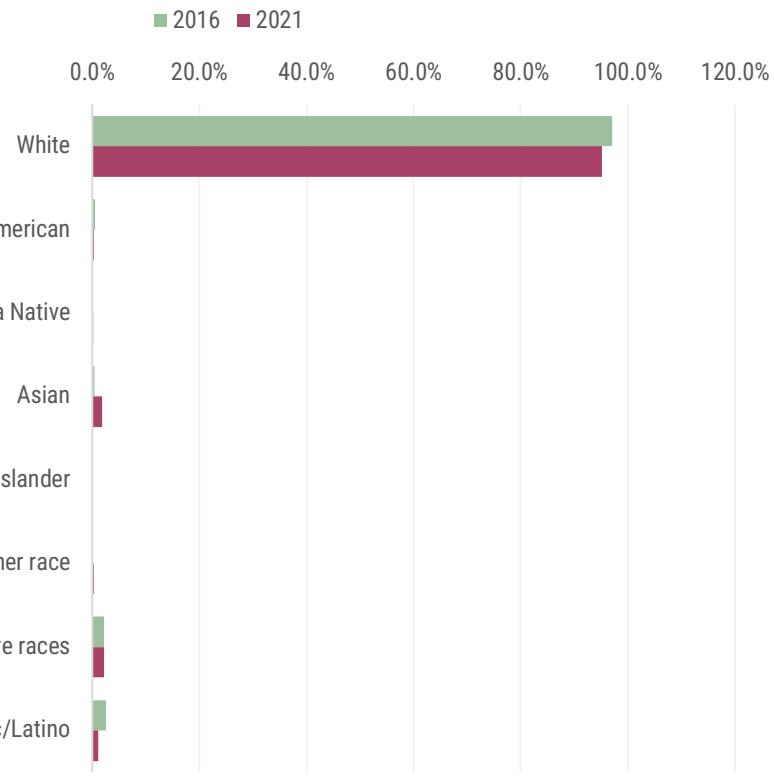


Source: US Census Bureau ACS 5-Year Estimates

Race and Ethnicity

The racial and ethnic diversity of Meredith's population mirrors that of the region and the state with 95% of town residents identifying as White. Although the percentage of residents identifying as White decreased since 2012, the percentage change only fell from 97% to 95%. The change in racial and ethnic composition was largely driven by an increase in residents identifying as Asian. Residents identifying as Asian increased from 23 to 124 since 2012. Interestingly, Meredith saw a decrease in the number of residents identifying as Hispanic or Latino, falling 52% (86 residents) since 2012.

Meredith's population remains predominately White, although the number of residents identifying as Asian did increase.



Source: US Census Bureau ACS 5-Year Estimates

Household Size

As Meredith's older adult population increased, the number of smaller households with 1 or 2 people increased substantially. As some families and children have left the community, smaller households remain in their place. Between 2012 and 2021, the average size of an owner-occupied household in Meredith shrank by 0.09 while renter households declined by 0.69. The drop in average household size correlates to the breakdown of households by size below. The graph that follows also shows the steep decline in households with 3 or more residents, while 2 person households increased substantially. Most of the declines in 3+ person households were seen in renter-occupied units. While much of the increase in small 1 and 2 person households was seen in owner-occupied households.



Average Household Size

Owner-Occupied - 2.24
Renter-Occupied - 1.73



Meredith's Housing Tenure

79%



21%

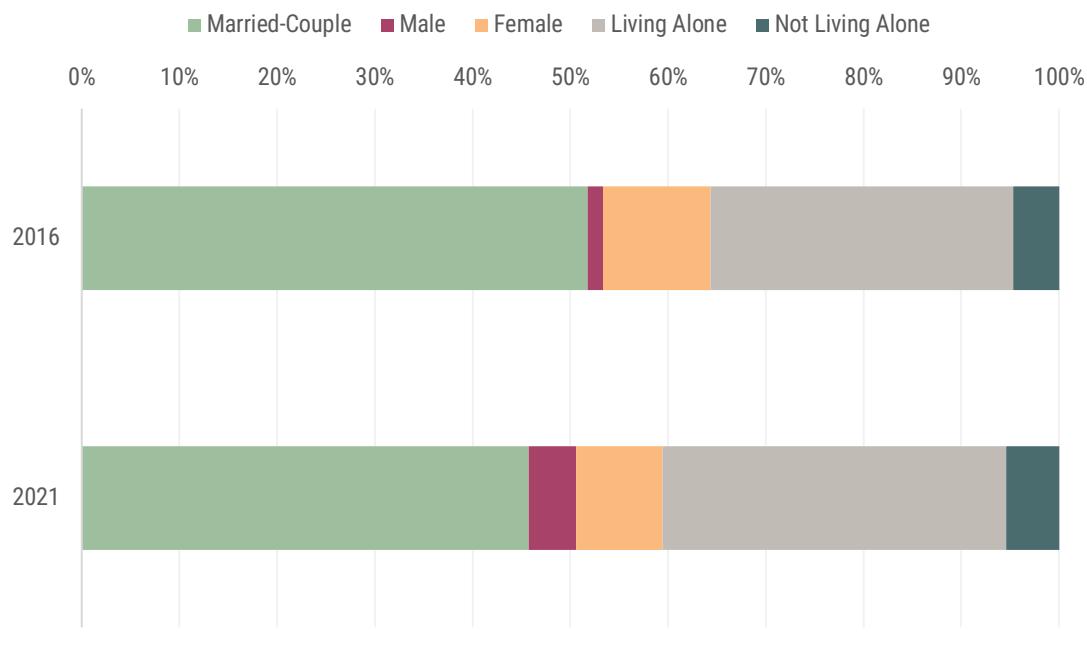
Source: US Census Bureau ACS 5-Year Estimates

Meredith's average household size is shrinking due to a decline in households with 3 or more people.



Source: US Census Bureau ACS 5-Year Estimates

An aging population often signals shrinking household size.

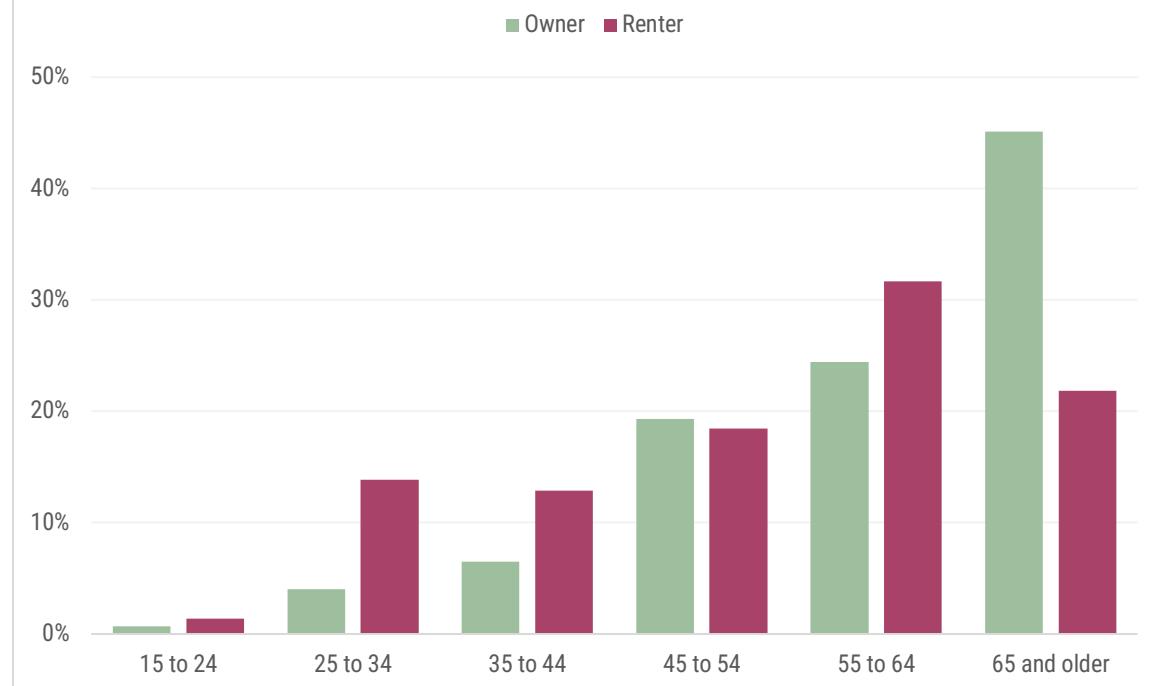


Source: US Census Bureau ACS 5-Year Estimates

Age by Tenure

Meredith's age by tenure metrics follow typical patterns where most older adult households tend to be homeowners, and more of the younger adult households tend to be renters. This is particularly true in high-cost markets like Meredith and elsewhere in the Lakes Region where the barriers to entry into the ownership market are high. What is also interesting, and sets Meredith apart from the County and State, is the share of renter households headed by those over the age of 55. Those renter households account for over 53% of all renter households in Meredith. This compares to 40% for the County and 28% for the State. This may again point to a need for smaller housing units, particularly on the rental side considering Meredith's continued aging population, shrinking household sizes, and lack of diversity in housing typologies.

Renter households are increasingly younger while **owner households** continue to age in place.

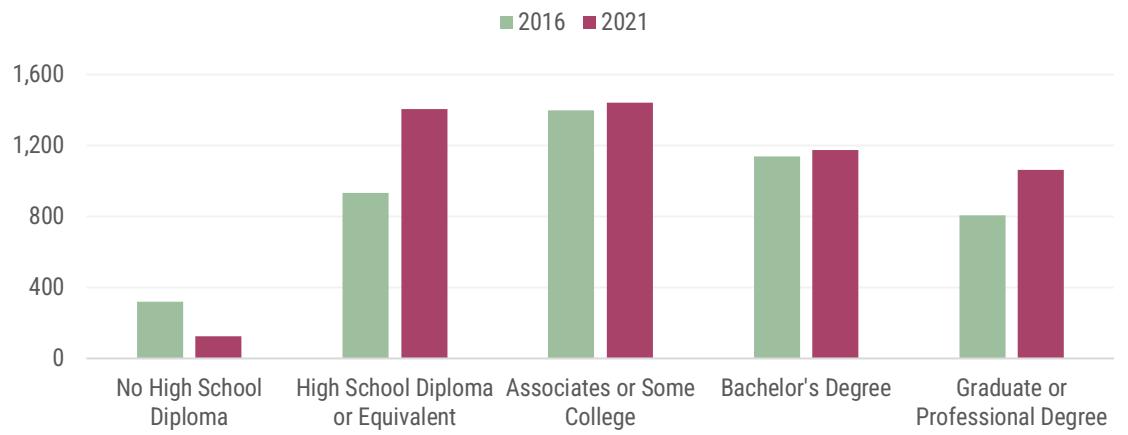


Source: US Census Bureau ACS 5-Year Estimates

Educational Attainment

With the influx of higher income households and the return of 18–24-year-olds to the community, the educational attainment of Meredith residents has also changed. Between 2012 and 2021, the number of residents with a graduate or professional degree increased 32% or just under 260 people. This percentage increase was greater than both the County and the State. These changing patterns in educational attainment do mirror both the County and the State with increases in those graduating from high school and those achieving a bachelors, graduate, or professional degree.

Meredith experienced growth in residents with a high school diploma and graduate degrees.



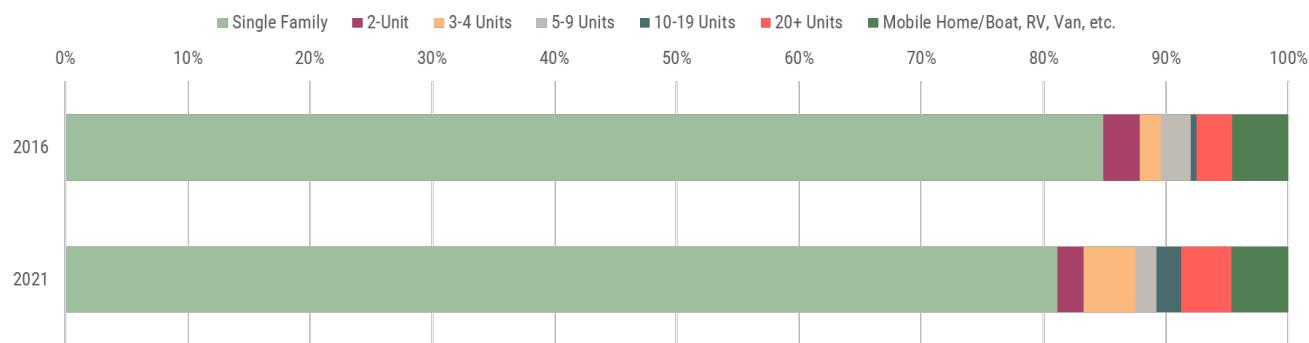
Source: US Census Bureau ACS 5-Year Estimates

Housing

Housing Stock

Meredith's housing stock is comprised of mostly single-family homes with just over 4,200 units as of 2021. This equates to 81% of the town's total housing stock. Interestingly, although the town saw an increase in single family housing units between 2012 and 2021, the percentage of the total housing stock dropped from 85% to 81% due to new growth in other types of residential structures. Over this time period, Meredith saw increases in the number of residential units in 3-4-unit buildings, buildings with more than 10 units, and additional mobile homes. While the town's housing stock appears to be increasing somewhat in its diversity, it is still dominated by single-family homes.

Meredith's housing stock is dominated by **single-family** homes followed by **mobile homes/other** and **3-4-unit housing**.

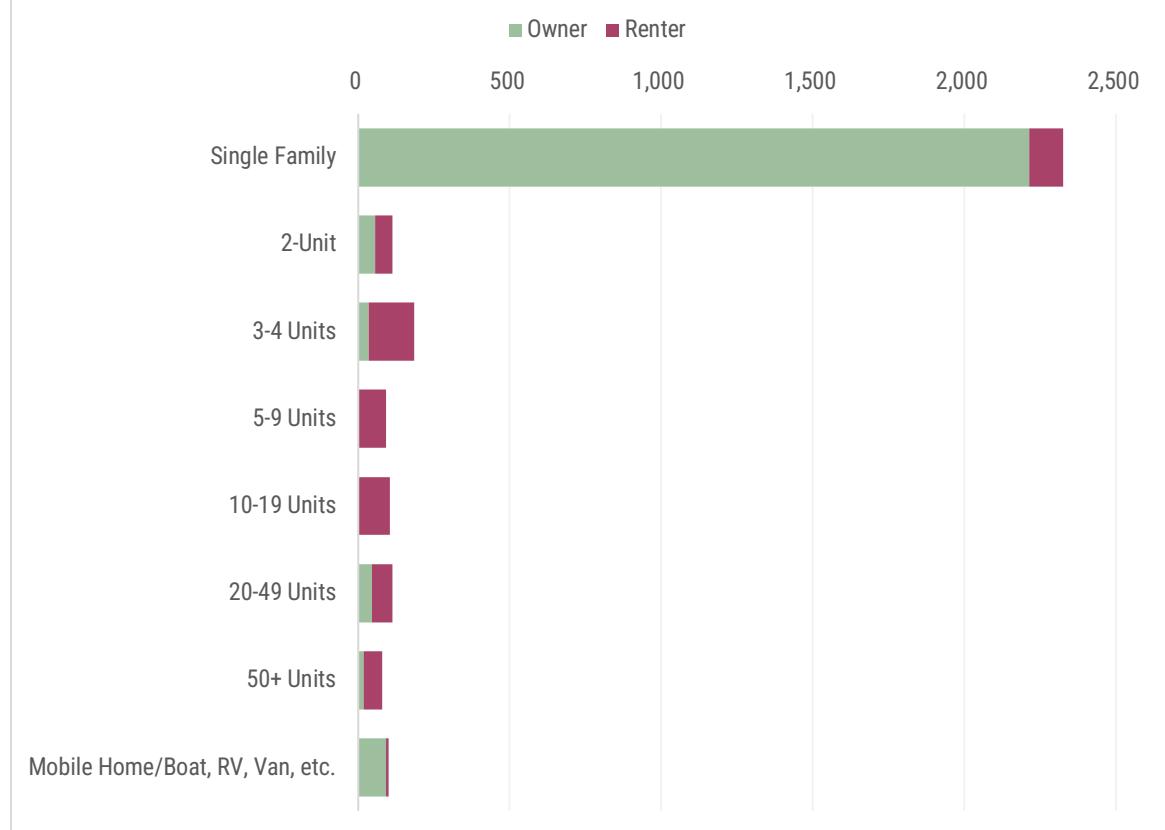


Source: US Census Bureau ACS 5-Year Estimates

Occupancy

The vast majority of owner-occupied housing in Meredith is in single-family homes, while the majority of rental units can be found in buildings with 3 or more units. This breakdown is very typical in most communities where most rental housing is found in multi-unit buildings and most ownership units are in single unit structures. The table on the following page shows residential structures in Meredith broken down by year built and tenure (ownership vs. rental). The data shows a fairly even split amongst time periods and a similar breakdown between owner and rental housing. Over 20% of Meredith's housing stock was built after the year 2000, which is unique for New England communities that tend to have a larger percentage of older residential structures.

Meredith's Year-Round Occupied Housing by Type



Source: US Census Bureau ACS 5-Year Estimates

Residential Buildings by Year Built and Tenure

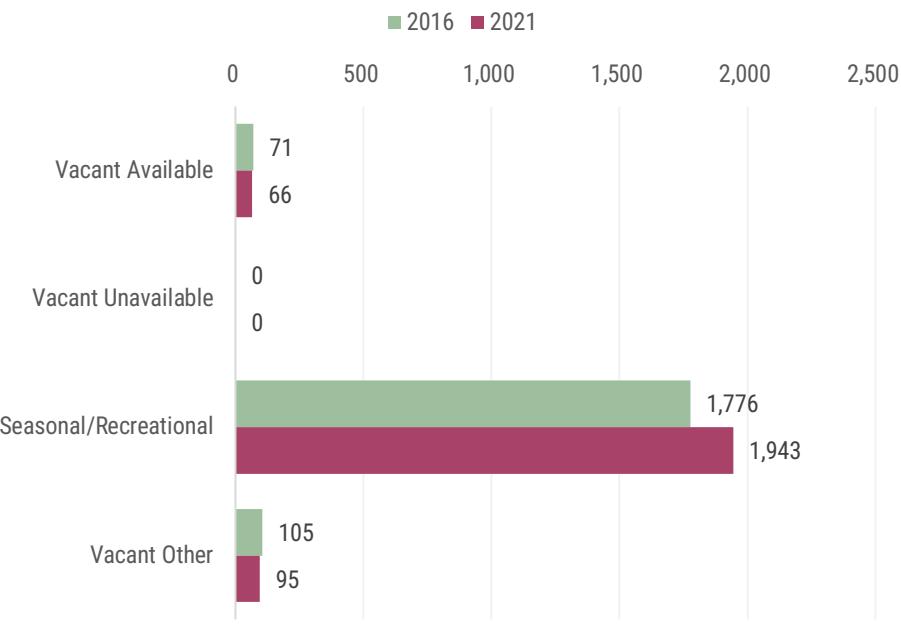
Year Built	#	%
Owner		
Built 2000 or later	590	24.0%
Built Between 1980 and 1999	604	24.6%
Built Between 1960 and 1979	753	30.6%
Built 1959 or earlier	511	20.8%
Renter		
Built 2000 or later	135	20.7%
Built Between 1980 and 1999	146	22.4%
Built Between 1960 and 1979	239	36.7%
Built 1959 or earlier	131	20.1%

Source: US Census Bureau ACS 5-Year Estimates

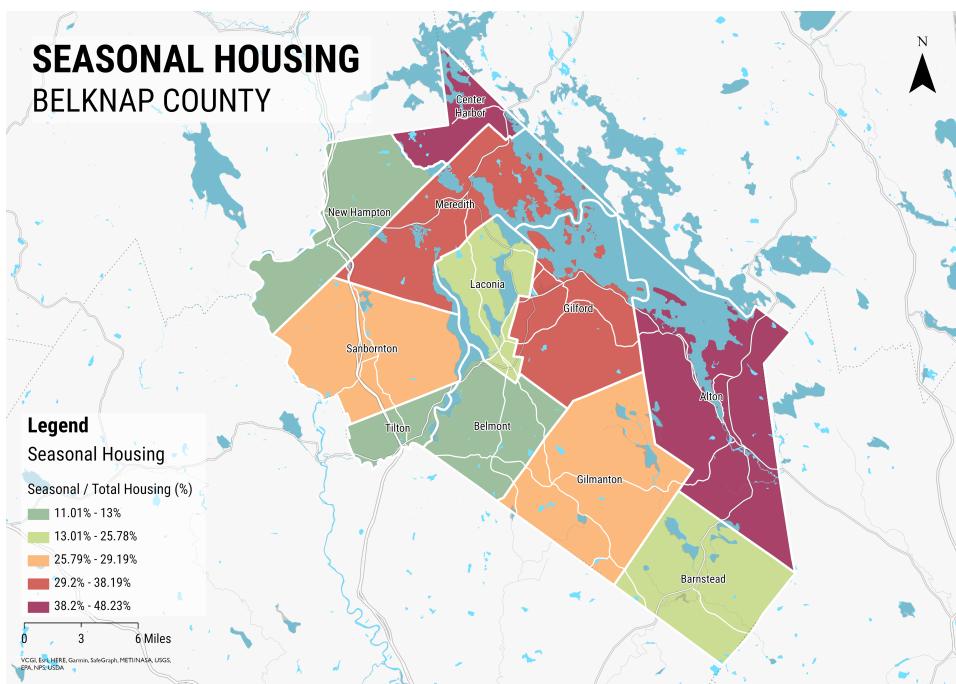
Vacancy

Vacancy data from the Census provides a good snapshot of how many units are unoccupied in a community for either part of the year (seasonally) or completely unoccupied for any number of reasons. In Meredith, it is estimated that a total of 2,100 housing units are vacant for at least 6 months of the year or more. 92% of those vacant units have been identified as being for seasonal or recreational use. That equates to 1,943 total units in town, which has increased 9.4% since 2012 or by 167 additional housing units. Meredith ranks fourth highest in the number of seasonal units in Belknap County behind Center Harbor, Alton, and Gilford. What is more striking is the extremely low number of residential units that are listed as vacant and available (for sale or for rent) in Meredith. These units comprise only 1.3% of Meredith's total housing stock, which is extremely low. A healthy vacancy rate for available units is typically in the 5% - 7% range.

An estimated 1,943 units of vacant housing in Meredith are seasonal and recreational homes.



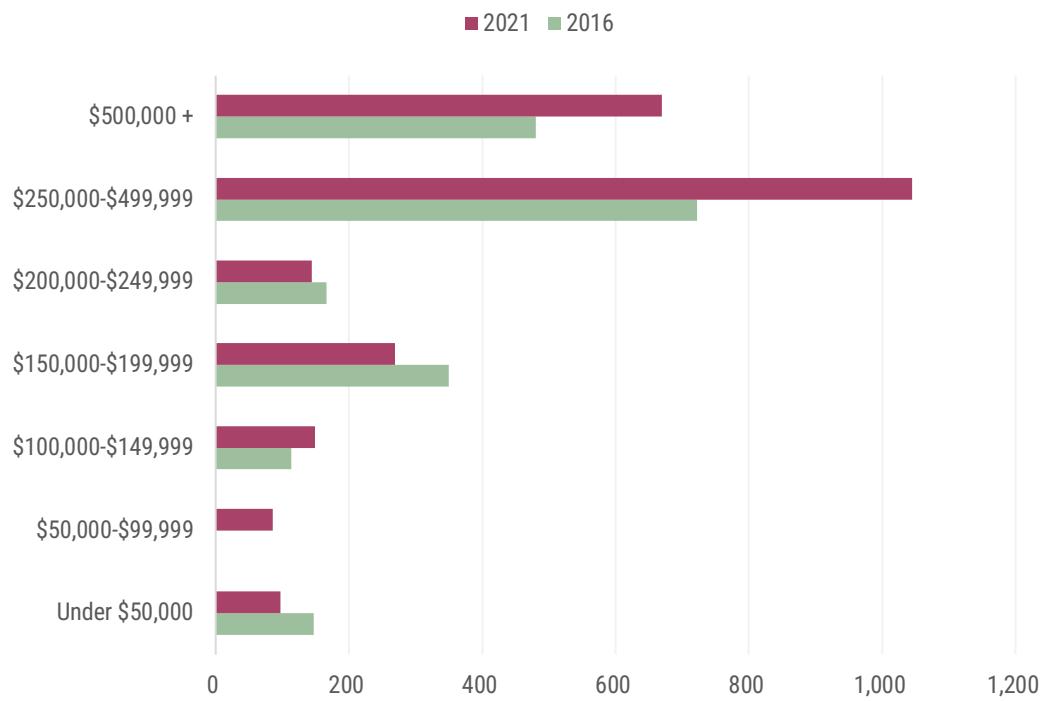
Source: US Census Bureau ACS 5-Year Estimates



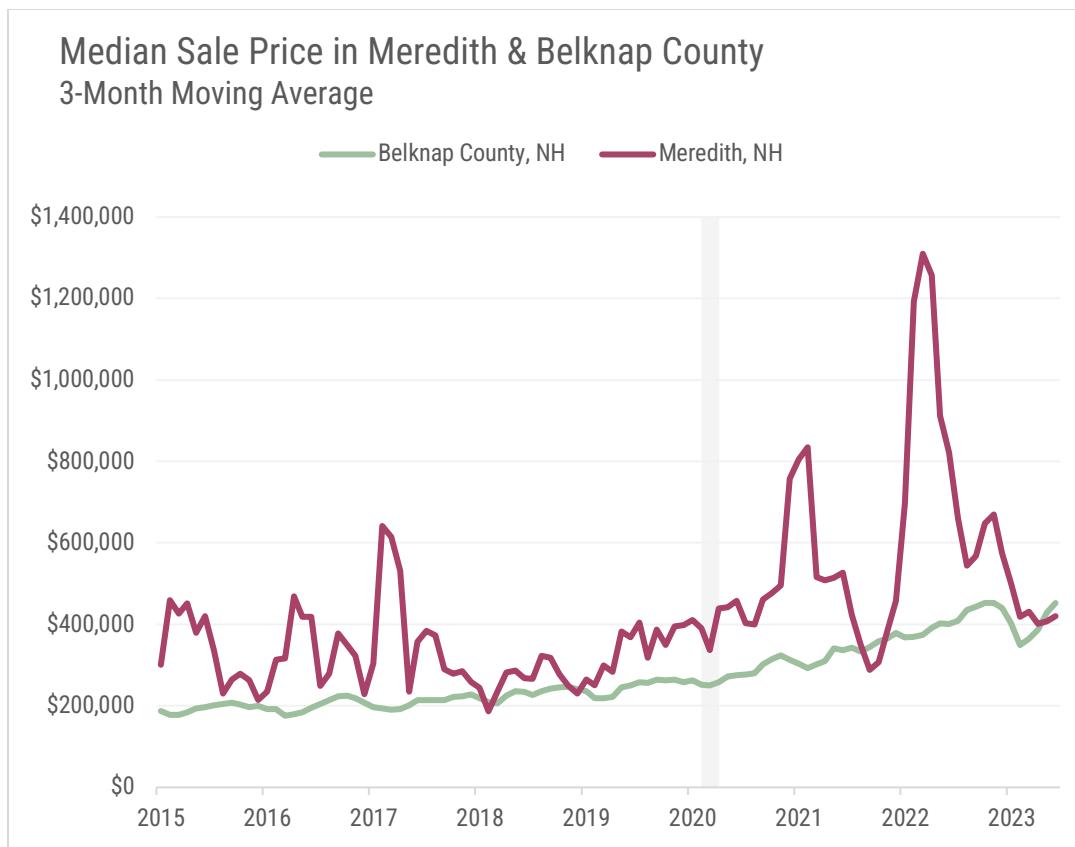
*Home Values***Compounding the extremely low vacancy rates are rapidly rising home values and sale prices in**

Meredith. Since 2012, the average home value in Meredith increased from \$283,700 to \$341,900, or a 20.5% increase in ten years. This shift in pricing is also reflected in actual sales data between 2015 and mid-2023 where sales prices for homes in Meredith have also been steadily increasing. This trend was consistent across Belknap County as well, although average sale prices were lower than Meredith overall due to the size of the inventory and diversity of ownership units. Of note is the dip in the sales price data in 2023, likely reflecting the rapid increase in mortgage interest rates. It will be interesting to see how high interest rates impact Meredith's homeownership market if they persist, particularly the second home and investor markets as high interest rates may constrain purchasing power if asking sales prices remain high.

Home values in Meredith have been increasing driven by growth in home values of \$250,000 or more.



Source: US Census Bureau ACS 5-Year Estimates; Redfin Market Data

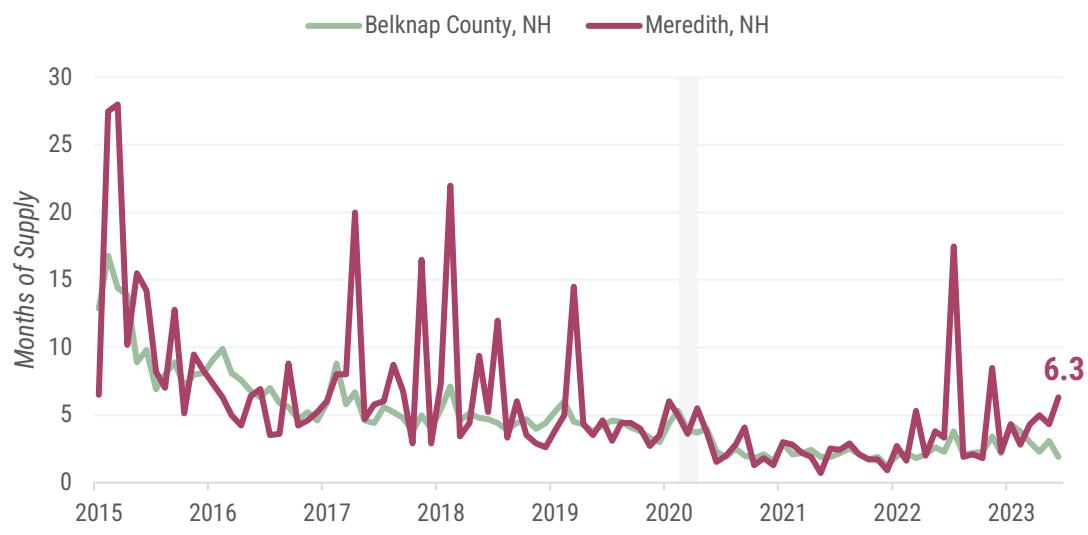


Source: US Census Bureau ACS 5-Year Estimates; Redfin Market Data

For Sale Housing Units

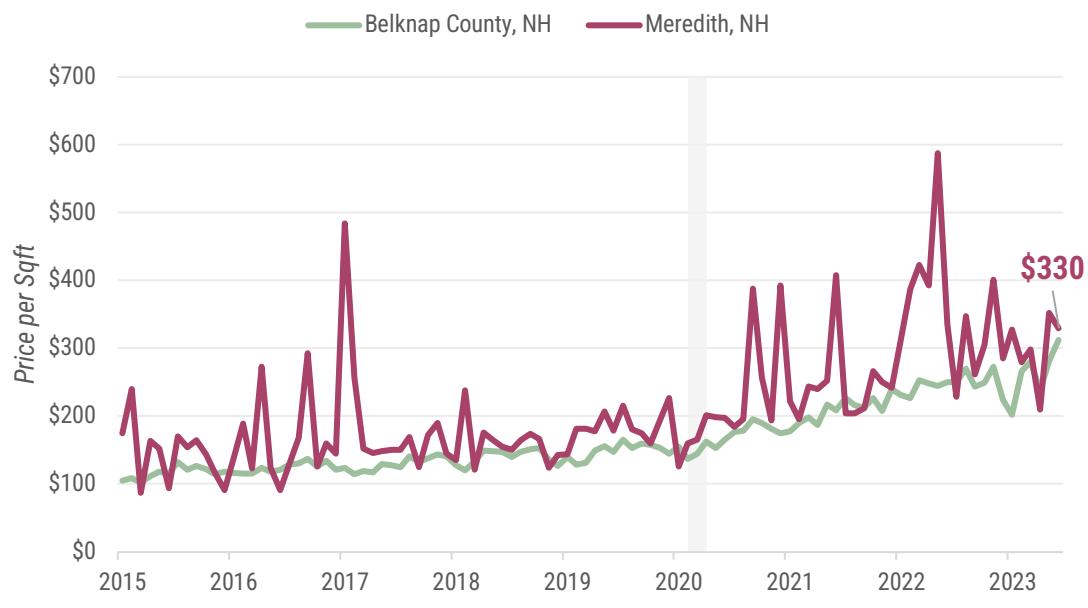
The impact of limited housing growth, high interest rates, and high sale prices is a constrained inventory of homes for sale. The overall inventory of homes on the market at a given point in time has been steadily decreasing since 2015, but the sharp decline in 2020 due to the pandemic is quite noticeable. As of mid-2023, there was just over 6 months of supply available on the market compared to 2015 when housing availability was closer to 12-15 months. The tight market and high demand for homes in locations like Meredith has led to much higher sale prices per square foot. In 2023, average sale prices were approaching \$330 per square foot which is up from around \$150 per square foot in 2015.

Months of supply has decreased meaning high demand and tight inventories.



Source: US Census Bureau ACS 5-Year Estimates; Redfin Market Data

High demand and tight inventory have contributed to an increase in sales price per square foot.

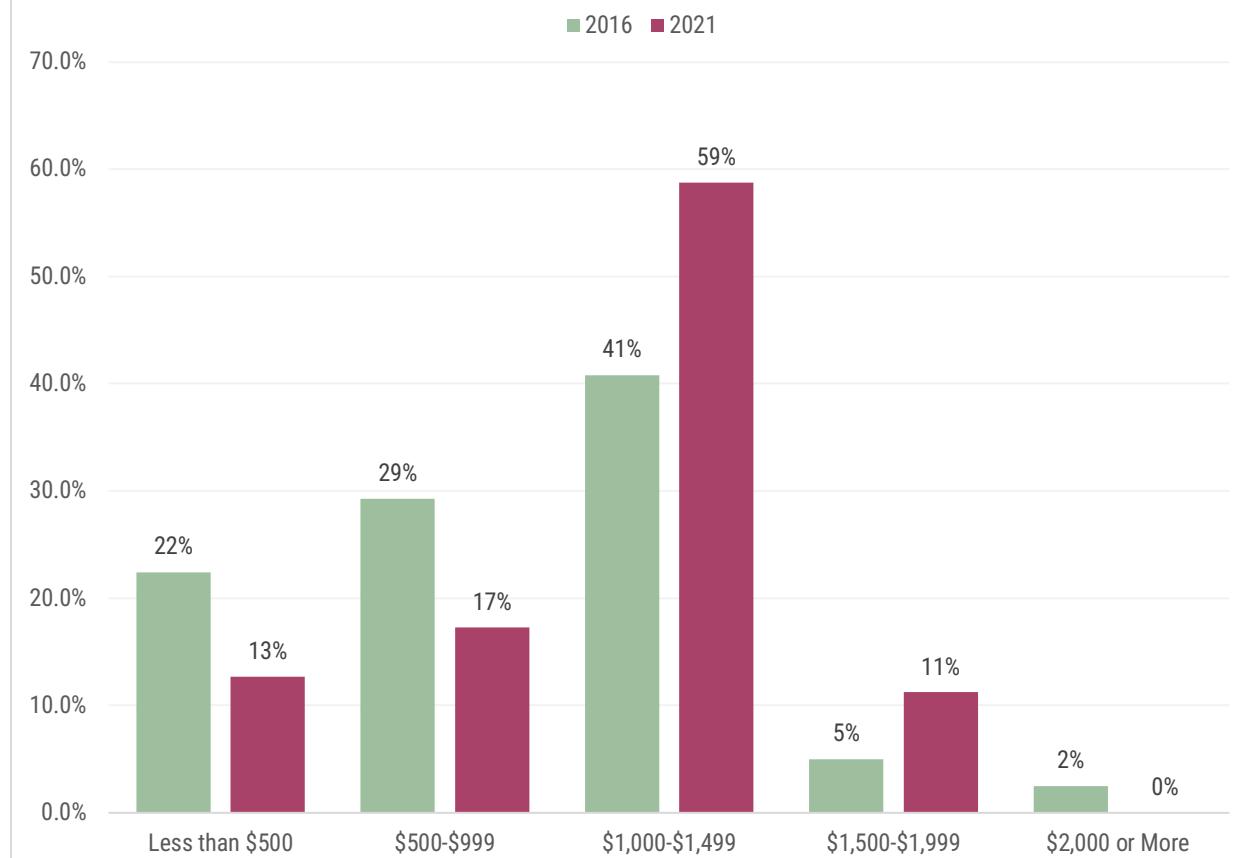


Source: US Census Bureau ACS 5-Year Estimates; Redfin Market Data

Rental Units

Similar to housing units that are for sale, rental units have also seen steady price increases with median gross rent in Meredith growing from \$988 in 2012 to over \$1,200 in 2021. This equates to a 22% increase in the past ten years. The major shift in rents occurred on units priced under \$1,000 a month that are now priced between \$1,000 and \$1,499 per month. The average earnings for jobs within the tourism and service-based sectors in Meredith are not high enough to afford rents across this price range. If rents continue to rise without the addition of more affordable housing units, these workers will continue to be priced out of Meredith increasing the already difficult hiring and retention situation employers experience today.

Gross rent in Meredith has increased over the last decade with 2021 rents centered around \$1,000 - \$1,499 a month.

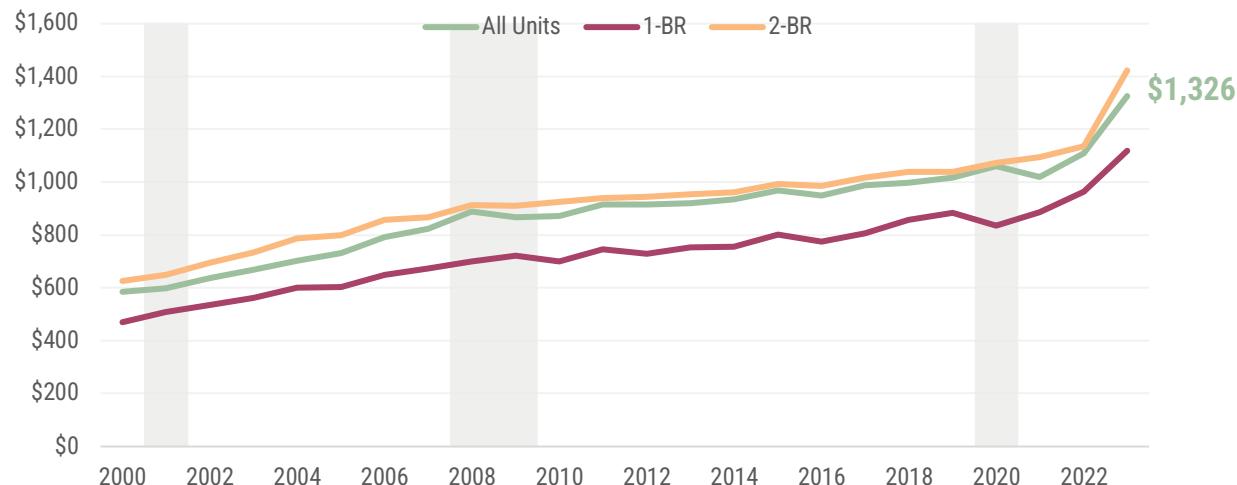


Source: US Census Bureau ACS 5-Year Estimates

Within the Lakes Region rents have been rapidly rising as well. Since 2012, average rents have increased to just over \$1,300 a month or a \$400 increase over ten years. As rents are increasing in the region, vacancy rates for rental housing are nearing all-time lows at just over 1%. This means households experiencing rent increases have almost no other options in the region for lower cost housing.

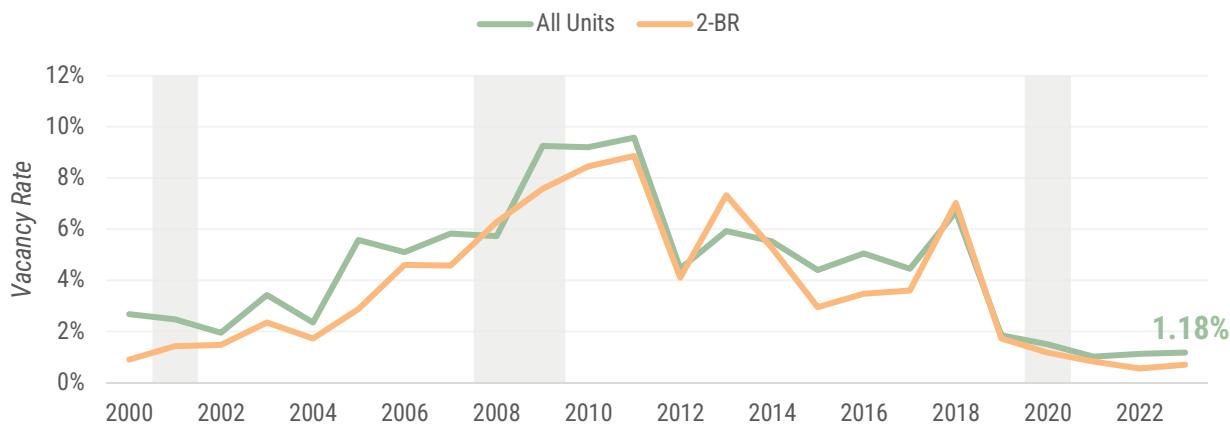
Households either must absorb the rent increases in their monthly budgets or may be forced to leave the region in search of a lower cost market. For those who choose to stay, that may mean spending less money on other essential monthly costs such as food, healthcare, or transportation.

Median Gross Rent in the Lakes Region has been rising faster since 2020.



Source: New Hampshire Housing Finance Agency Rental Cost Survey Report

Tight vacancy rates coincide with the rapid increase in rental costs since 2020.

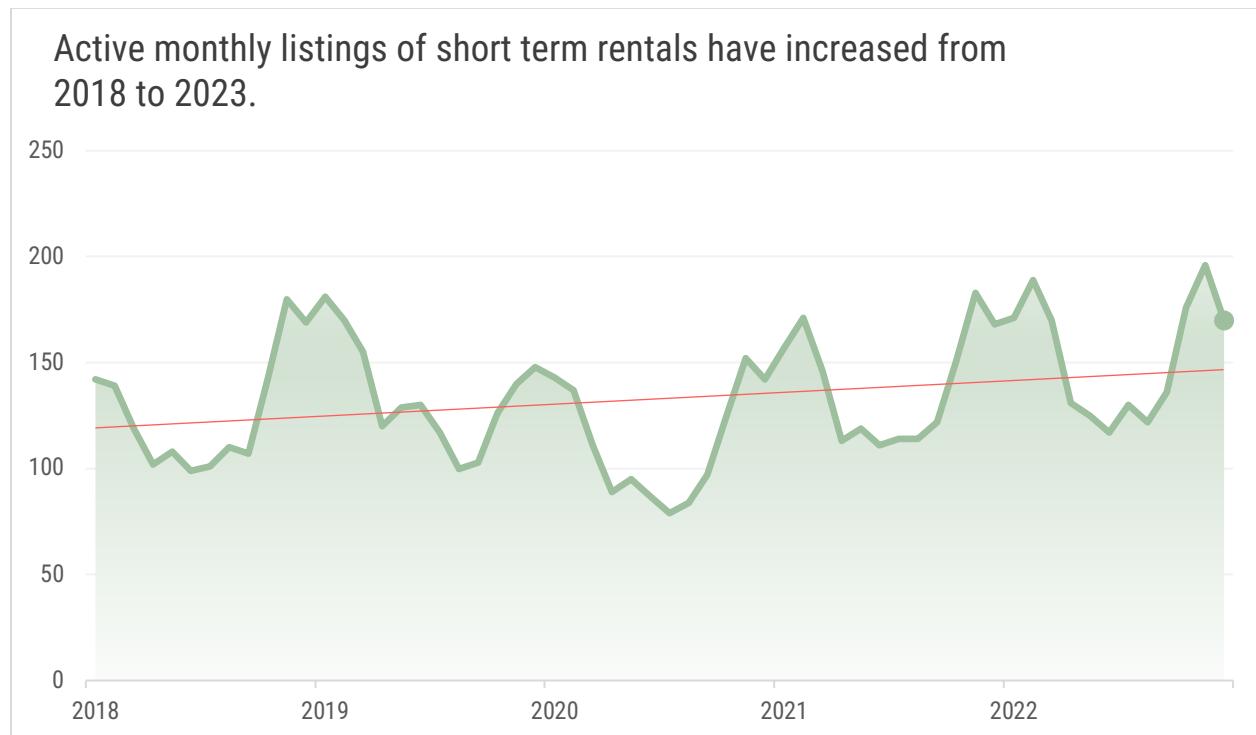


Source: New Hampshire Housing Finance Agency Rental Cost Survey Report

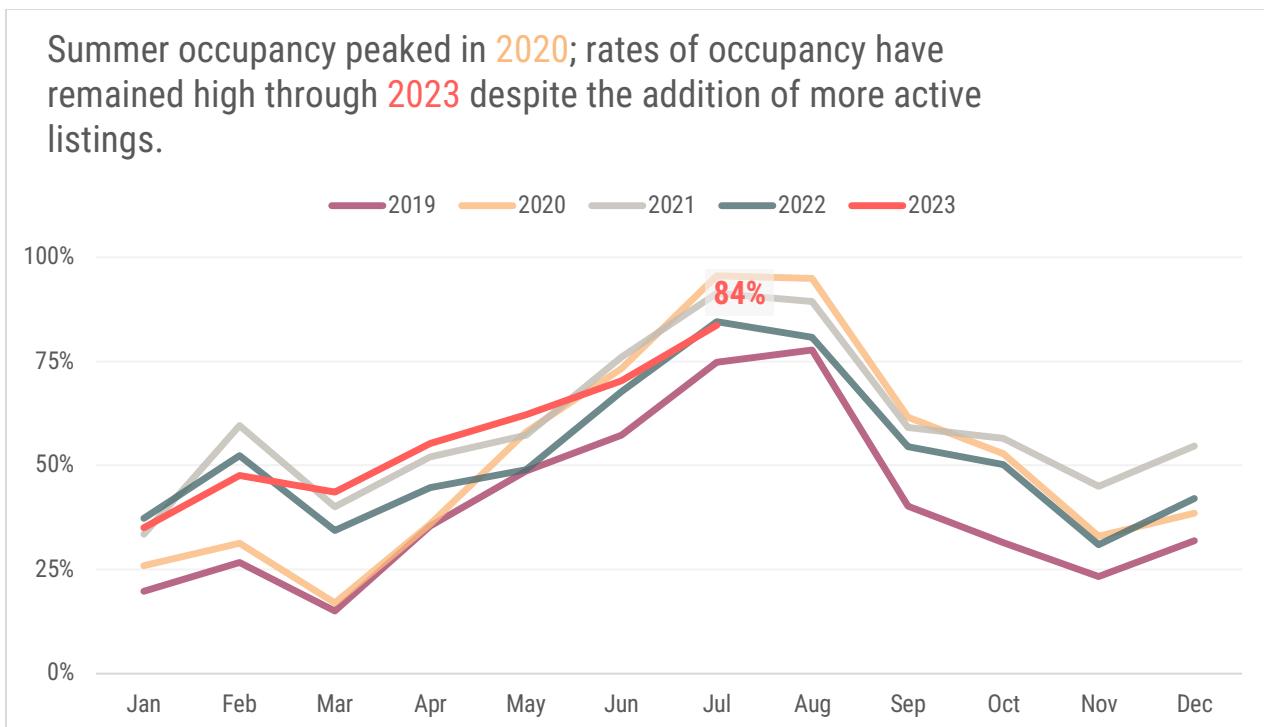
Short Term Rentals

Meredith, like many popular tourism and second home markets, must also contend with the housing pressures short term rentals place on the housing stock. Investors can often pay higher prices or come with cash payments to purchase homes knowing these are investment vehicles where income will supplement or offset these costs.

Data from AirDNA shows the steady increase in the number of monthly listings of short-term rentals and the extremely high occupancy rates of these units in the peak summer season. While summer occupancy is down a bit in 2023 compared to the peak in 2020, units are still 84% occupied indicating a very high utilization and a demand for short term rentals in town.



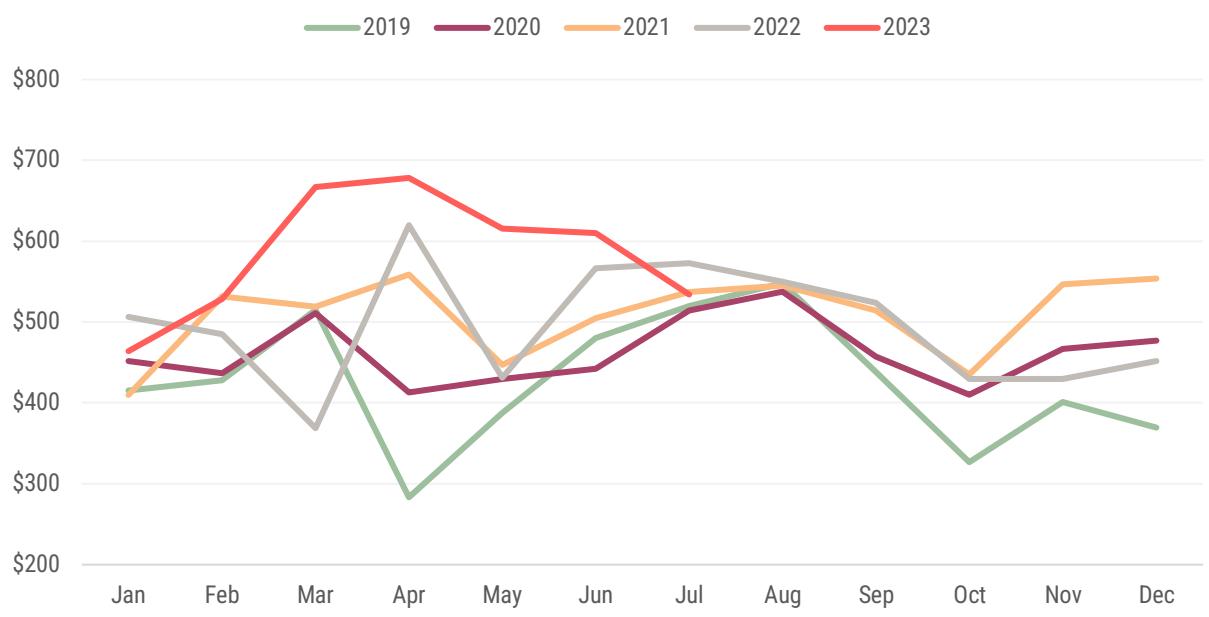
Source: AirDNA Market Data 2023



Source: AirDNA Market Data 2023

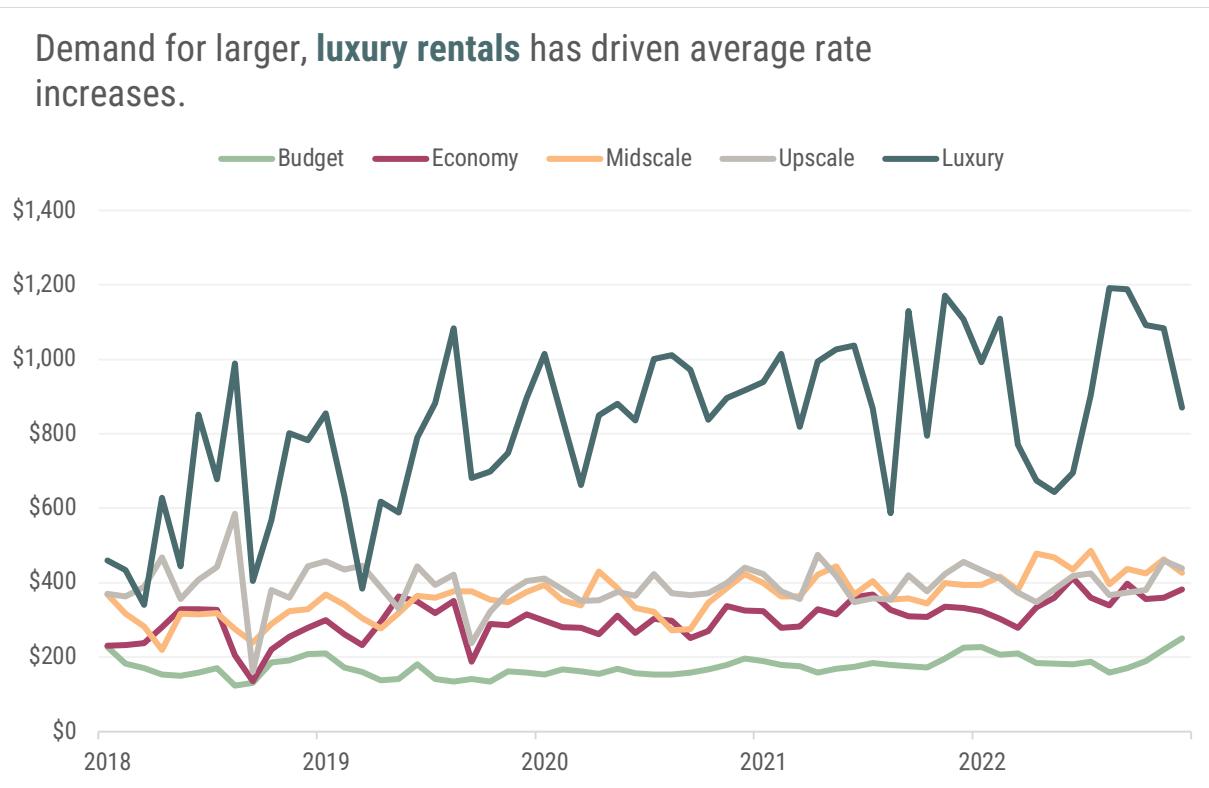
Even with the decrease in occupancy rates since 2020, prices for short term rentals in Meredith remain very high. In fact, the early part of 2023 saw significant increases in the average daily rate for short term rentals compared to 2019-2022 driven primarily by the “luxury” short term rental units which tend to book for over \$1,000 a day. The high occupancy figures and rental rates drive the demand for short term rental purchases by investors. This in turn removes more residential units from the market that could be occupied by year-round households.

Year over year the average daily rate for short term rentals has increased.



Source: AirDNA Market Data 2023

Demand for larger, **luxury rentals** has driven average rate increases.



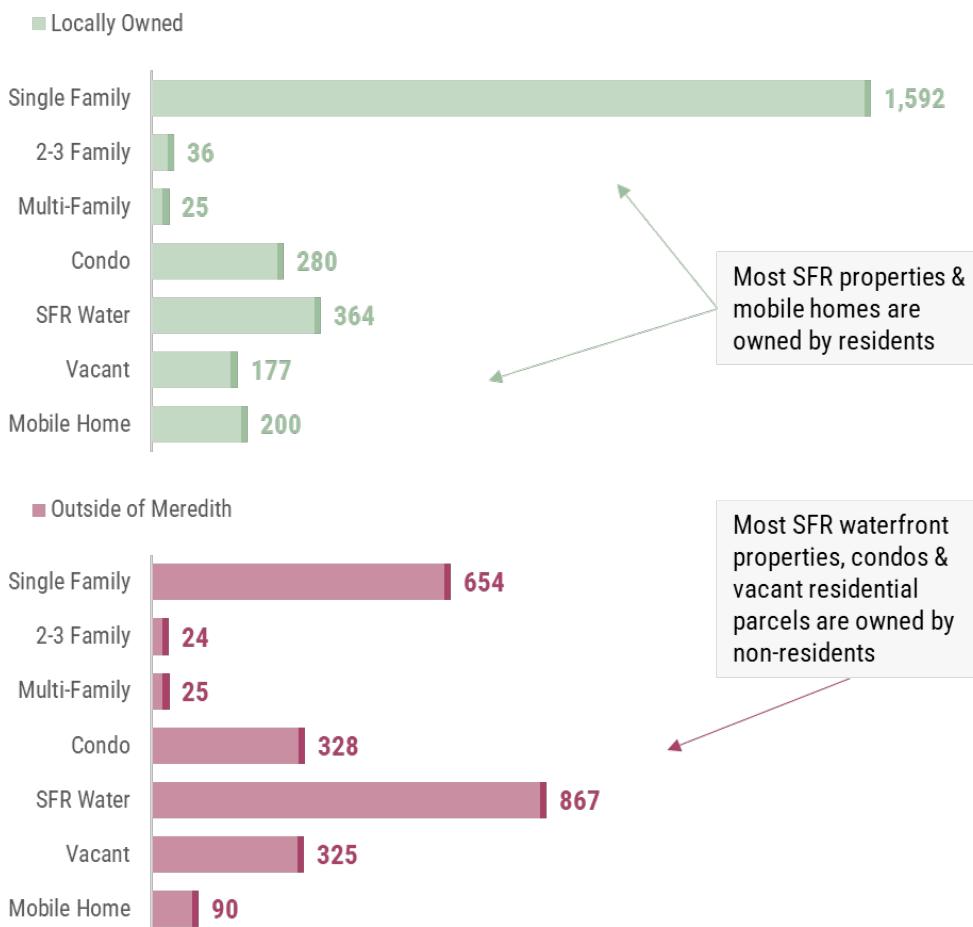
Source: AirDNA Market Data 2023

Ownership Analysis

Housing Types

It is helpful to understand the differences between homes owned by residents who live in Meredith year-round and those that list their primary residence as outside of Meredith. To better understand this the Town's parcel assessment data was analyzed. This required and matching the owner's address to a mailing address to determine the types of homes owned by each group. Most Meredith residents who live in town year-round own single-family homes. This is consistent with data from the Census which shows most owner-occupied units in town are single family homes. This is contrasted with most non-residents owning single family waterfront properties, condominiums, and units listed as vacant (seasonal or investor units). Single family homes still comprise the second largest number of non-resident owned properties, but that does fall below single family residential Waterfront properties which tend to be of high value and in high demand.

Non-Meredith residents own the majority of waterfront, condo and vacant properties in Meredith.



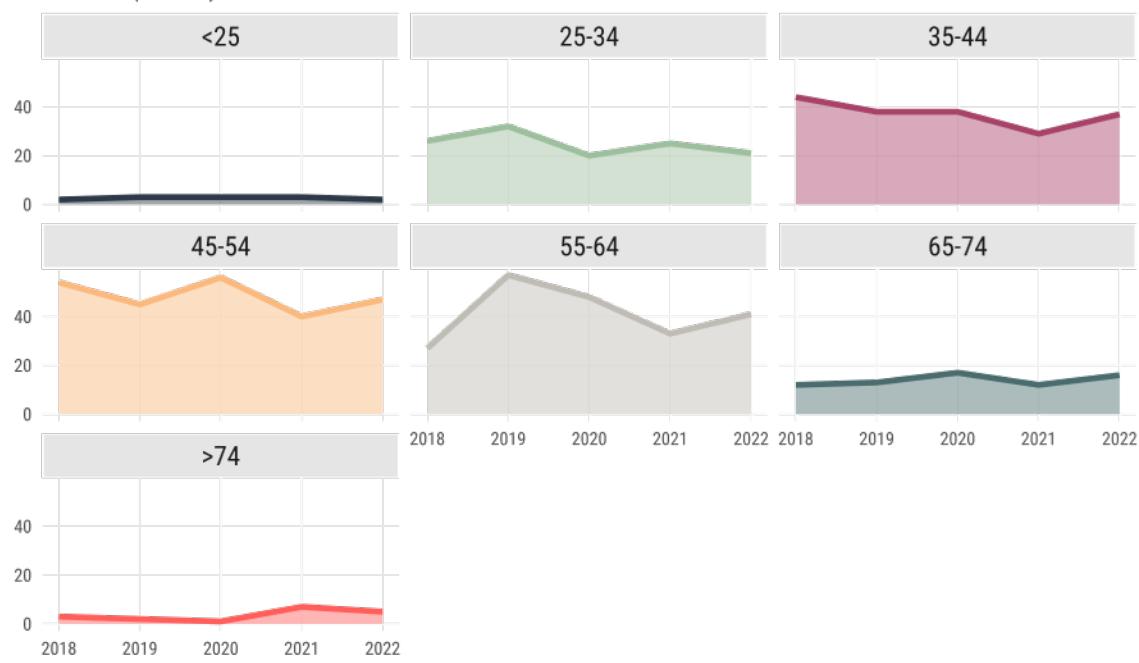
Source: Meredith Assessment Data 2023

*SFR = Single Family Residential

Home Buyers by Age

Using data from the Home Mortgage Disclosure Act (HMDA), the changes in the age of those purchasing homes between 2018 and 2022 in Meredith was compared to Belknap County. The data below, presented by the age of the purchaser, shows most homes in both Meredith and Belknap County were purchased by those between the ages of 35 and 54.

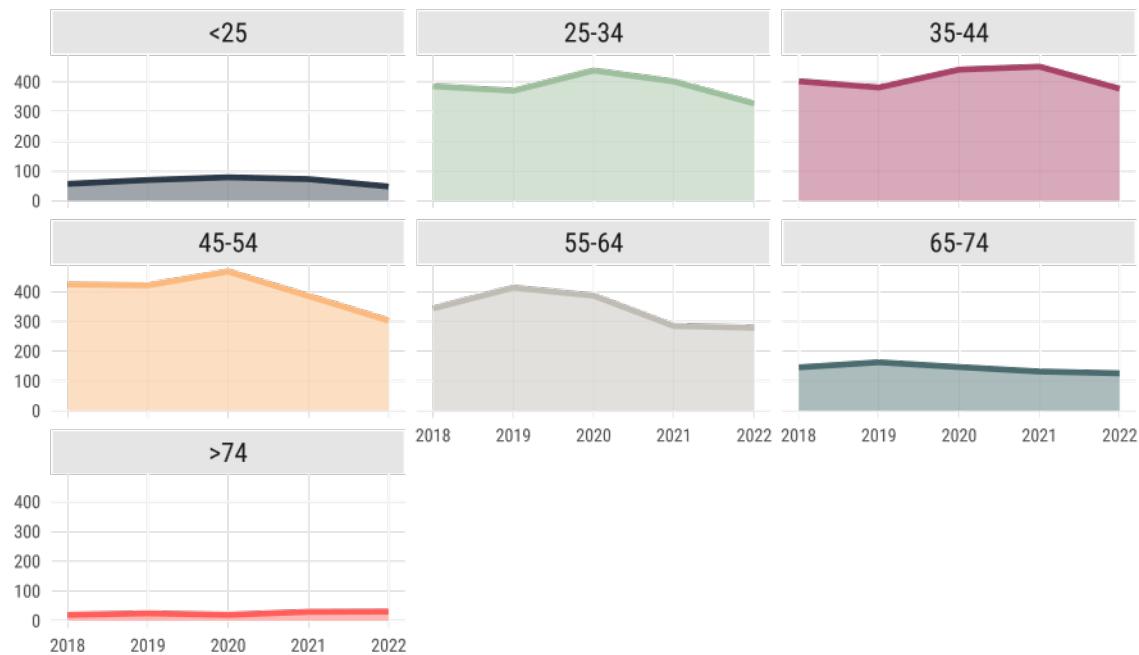
In Meredith, there was an interesting increase in purchases made by those over the age of 65 corresponding with the increases in age presented at the beginning of this analysis. There were also increases in purchases from buyers ages 35-44 which corresponds with seasonal home and investor purchases shown on the next page.

Single Family Home Purchase Loans by Applicant Age*Meredith (n = 856)*

Source: HMDA 2018 - 2022, RKG Associates

Single Family Home Purchase Loans by Applicant Age

Belknap County (n = 8,853)

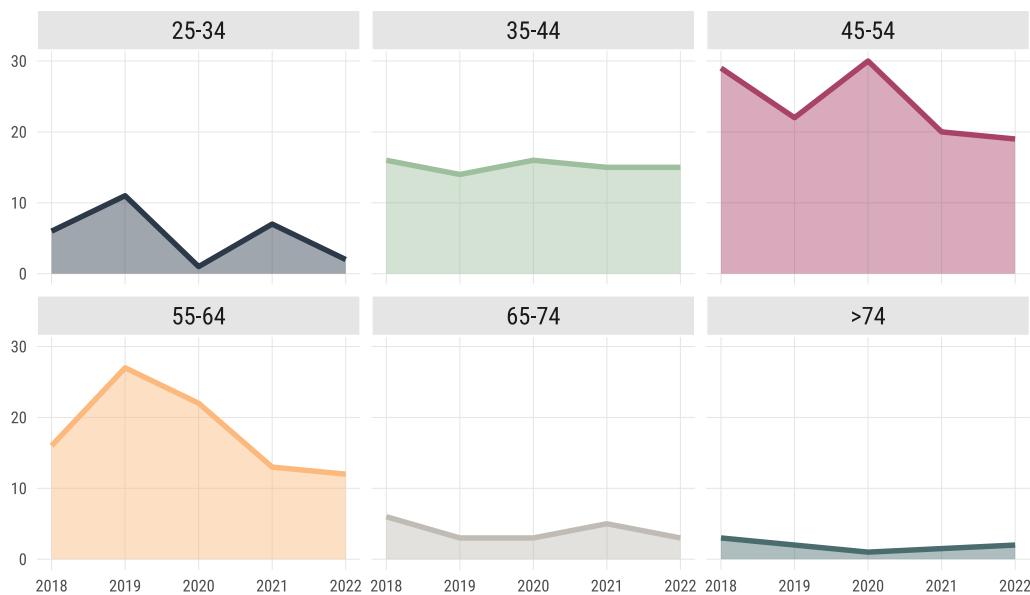


Source: HMDA 2018 - 2022, RKG Associates

Using HMDA data, it is possible to review second home and investor home purchases by age group to understand who is buying these homes and for what purpose. In both cases, the pandemic impacted home purchases for these two types of investments with spikes in 2020 for seasonal/second homes and spikes in 2021 for investor purchases. These are both responses to movement during the pandemic and those looking for second homes and the demand for short term rentals following the first year of the pandemic (2020). Most second home purchases are still being made by homeowners between 45 and 54 years of age while investor home purchases spiked for those ages 35-44 years of age.

Secondary Home Purchase Loans by Applicant Age

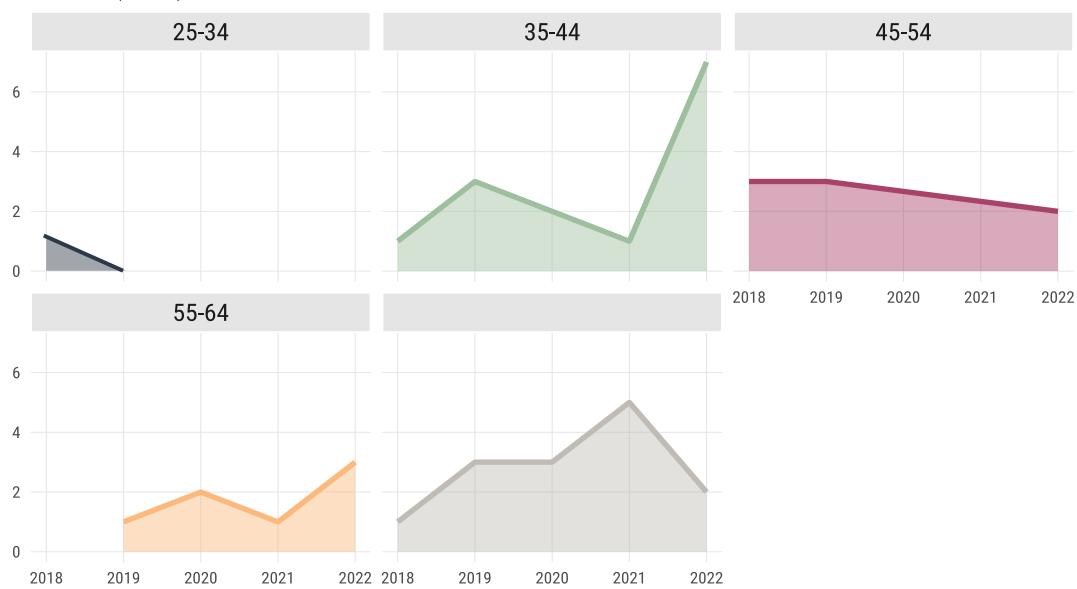
Meredith (n = 339)



Source: HMDA 2018 - 2022, RKG Associates

Investor Home Purchase Loans by Applicant Age

Meredith (n = 42)



Source: HMDA 2018 - 2022, RKG Associates

Affordability Gap Analysis

Cost Burden

HUD considers a household to be cost burdened if they are spending more than 30% of their monthly income on housing costs. The challenge for households spending more than 30% of their income on housing costs is that it leaves significantly less money to spend on other necessities such as food, transportation, education, healthcare, and childcare. Within the Town of Meredith, over the past decade, cost burdening has increased for over 100 households. In terms of rental households, Meredith has a much smaller rental housing stock and thus fewer renter households, but of those who rent over 60% (~334 households) spend more than 30% of their income on housing costs.



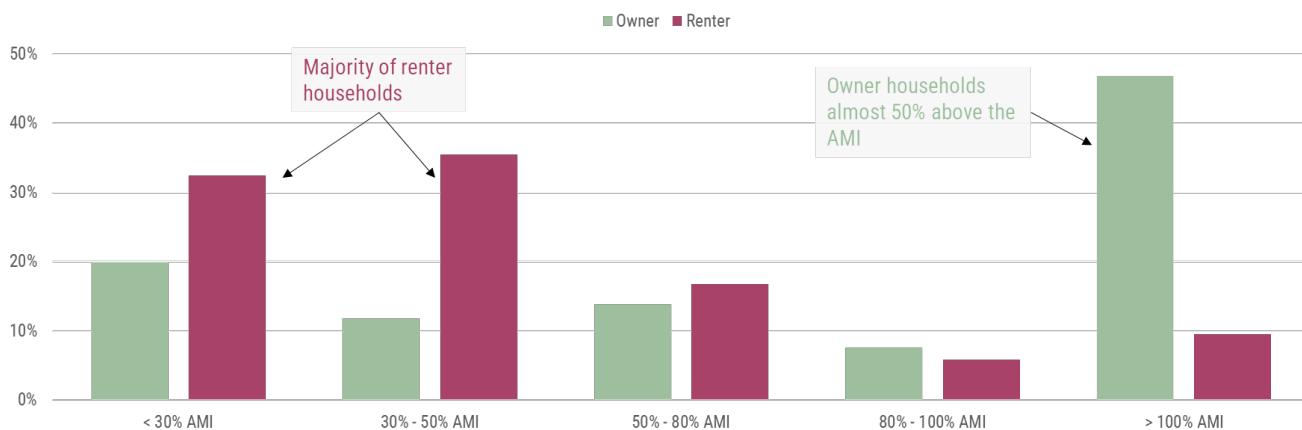
Source: ACS 5-Year Estimates

Households

Affordable housing is critical to supporting a diverse range of households in the community and ensuring residents have safe, accessible, and price appropriate housing choices. Looking at incomes across both renter and owner-occupied households provides a snapshot of the potential housing need based on what those households can afford to spend. In Meredith, nearly 90% of renter households earn less than the median income (100% Area Median Income) with nearly 68% earning less than 50% Area Median Income. That equates to an annual income of \$40,300 for a two-person household and an affordable rent of \$1,000 a month. As noted earlier, 70% of rental units in Meredith have gross rents over \$1,000 a month.

The affordability gap analysis compares the number of housing units at different price points to the number of households in the community that can afford to purchase or rent those units. If there are more units than households, there is a surplus of housing available. If there are more households than units, there is a deficit of housing available. This provides a quick snapshot of where additional housing may be needed in a community to address affordable housing shortfalls.

Over half of **owner households** in Meredith earn an annual income above the area median income (AMI) while roughly **90% of renter households** earn below it.

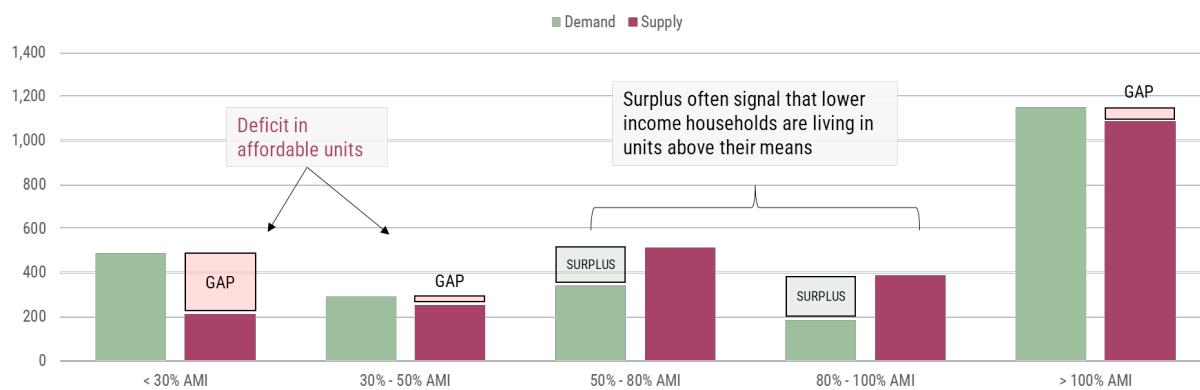


Source: HUD FY23 Income Limits, ACS 5-Year Estimates

Owner

This first analysis looks at housing affordability gaps for owner households in Meredith. Here we see gaps in ownership units affordable to households earning less than 50% of AMI and a small gap for those earning over 100% of AMI. This is very typical in many communities as it is very challenging to provide ownership opportunities for households below 30% of AMI. The surplus of ownership units between 50% and 100% of AMI indicates most lower income and higher income households are buying up and down in the market where most homes are priced in Meredith.

Comparing owner households by income level (**demand**) to owner units by affordability (**supply**), Meredith has a deficit in units affordable to households earning less than 50% of AMI or above 100% of AMI.

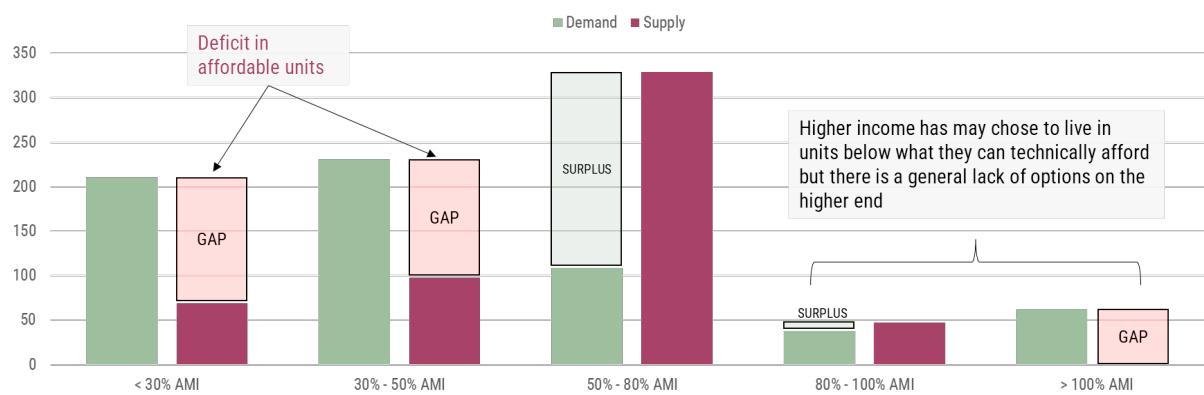


Source: HUD FY23 Income Limits, ACS 5-Year Estimates

Renter

The affordable housing gap for renter households shows a significant gap in units affordable to renter households earning at or below 50% of AMI. This gap is estimated at around 275 units. Looking at units priced to households at 50%-80% of AMI, we see a surplus of about 220 units indicating many households earning below 50% of AMI are likely renting units above what they technically can afford. While this is common in many communities, particularly as rents continue to rise faster than incomes, it represents a target for Meredith to help keep housing affordable to residents who are most vulnerable to rises in housing cost.

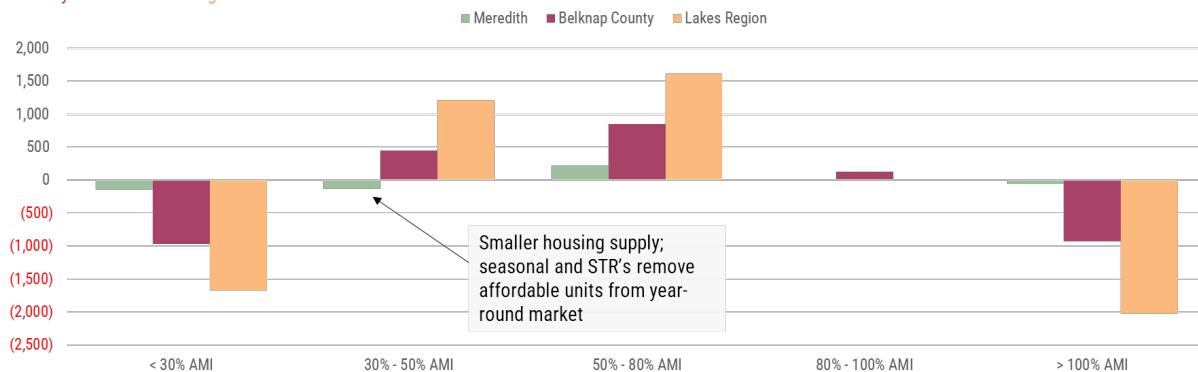
Comparing renter households by income level (**demand**) to rental units by affordability (**supply**), Meredith has a deficit in units affordable to households earning less than 50% of AMI or more than 100% of AMI.



Source: HUD FY23 Income Limits, ACS 5-Year Estimates

The next graph below shows the same affordability gap analysis for renter households, but compares Meredith to the County and the Lakes Region. We see very similar patterns in affordability gaps across all three geographies with gaps in rental units for households below 30% of AMI and above 100% of AMI. A majority of the rental housing supply is priced to households in the 30%-80% AMI range. One difference is Meredith has a gap in affordability for renter households at the 30%-50% AMI range where the County and Region do not. This may be related to the nature of Meredith's housing market where those lower value units are purchased by either seasonal or investor owners and then removed from the year-round housing market.

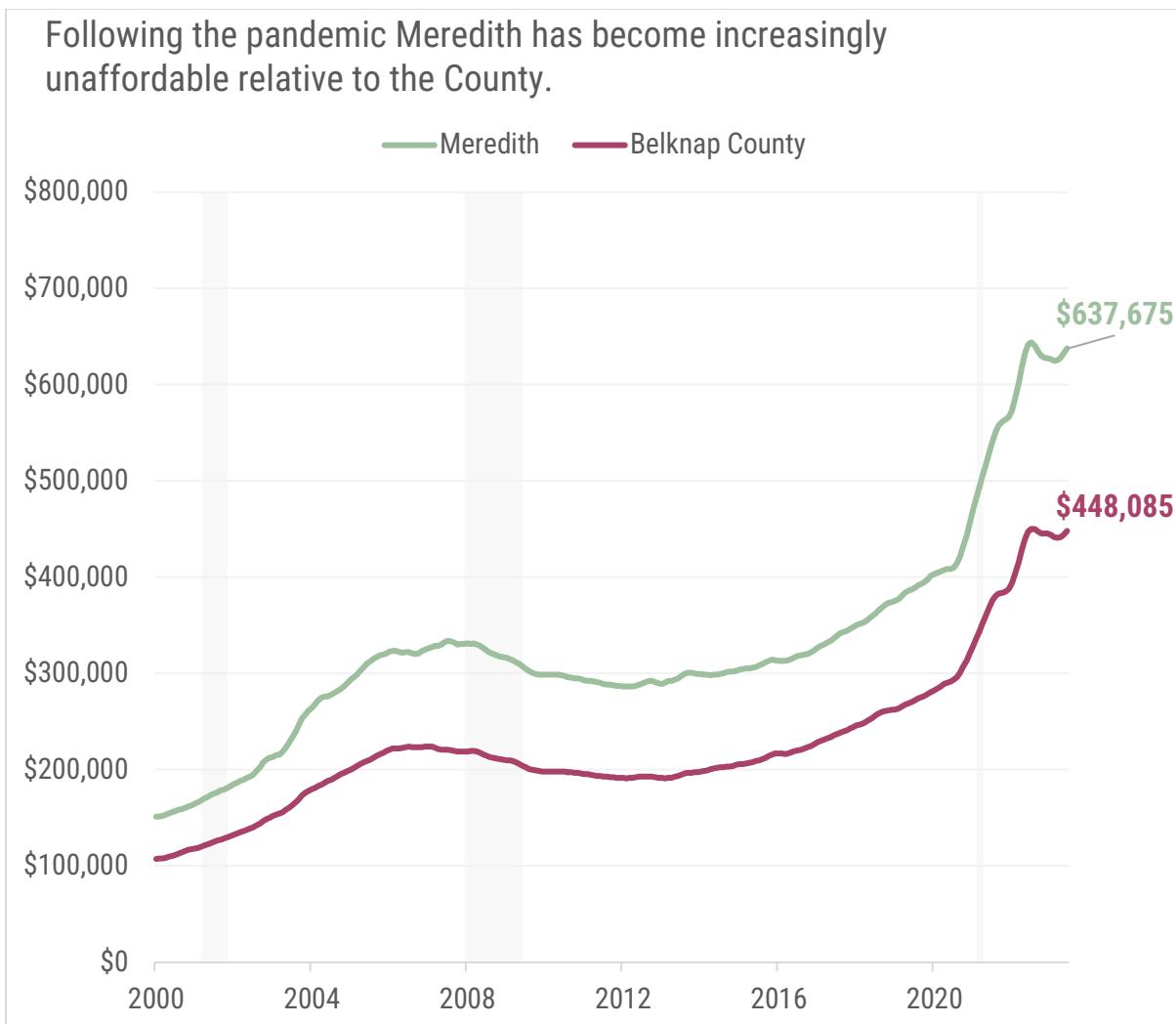
The affordability gap (supply – demand for each AMI band) highlights similar trends in affordability through out **Belknap County** and the **Lakes Region**.



Source: HUD FY23 Income Limits, ACS 5-Year Estimates

Value Growth

Rising home prices, rising rents, and increases in eviction filings are all highly correlated trends within the housing market. The Zillow Home Value Index is a useful gauge because it measures the value change for a typical home within the market meaning it adjusts for home values on the extreme high and low end capturing a rate of change that a typical household would experience. **Belknap County**, like the rest of the state, saw higher than historical average increases in home values following the COVID-19 pandemic. This trend was also true for **Meredith** but at a much higher rate, suggesting that while housing costs are increasing more broadly, some communities such as Meredith saw this trend more acutely.

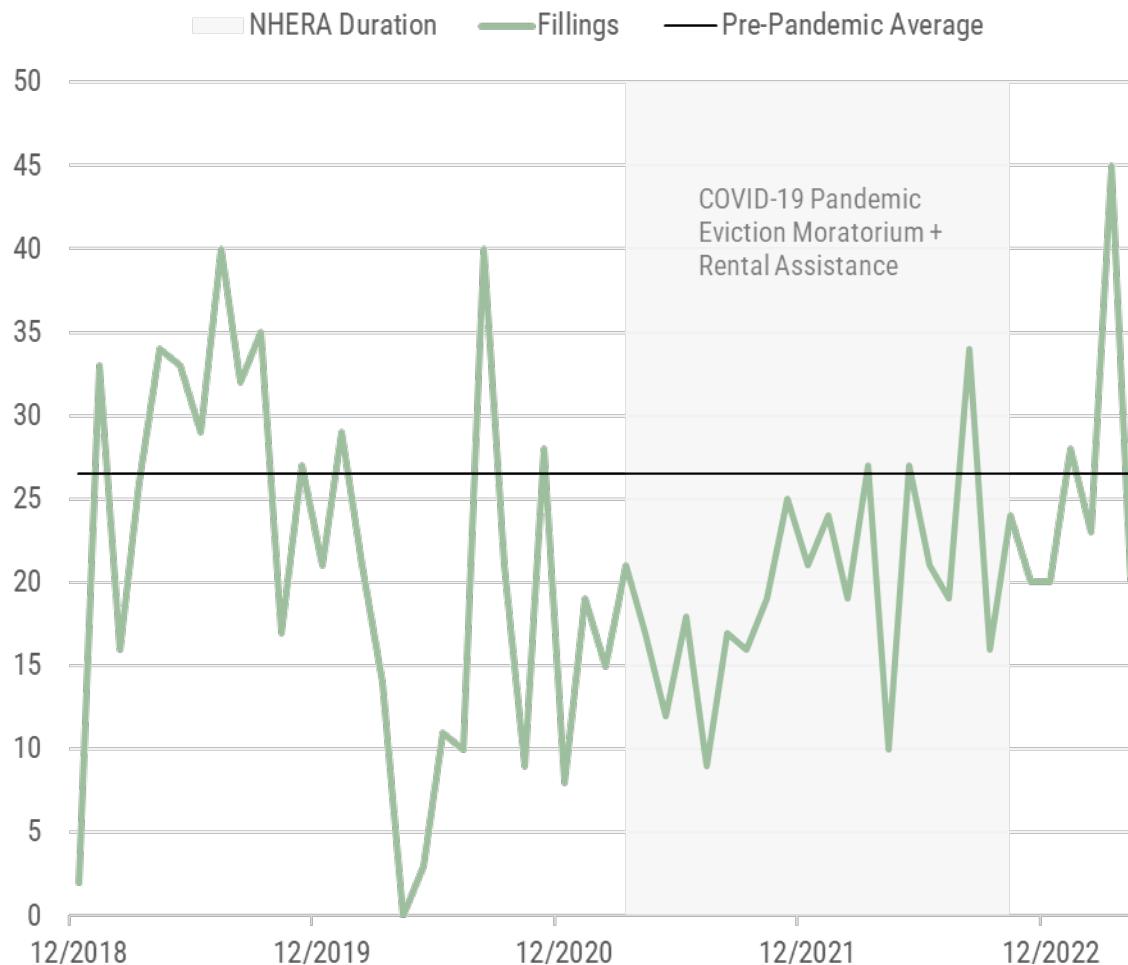


Source: Zillow Research Group; Zillow Home Value Index

Evictions

Throughout New Hampshire, Landlord-Tenant cases spiked coinciding with the end of the CDC's eviction moratorium and closure of the State's emergency rental assistance program (NHERA). In Belknap County, eviction filings have returned to pre-pandemic levels with a spike when NHERA stopped accepting rental assistance applications in October 2022. For towns such as Meredith with a limited available supply of rental housing, and increases in seasonal and short-term rental options, lower income households were more prone to moving to other communities with more rental units.

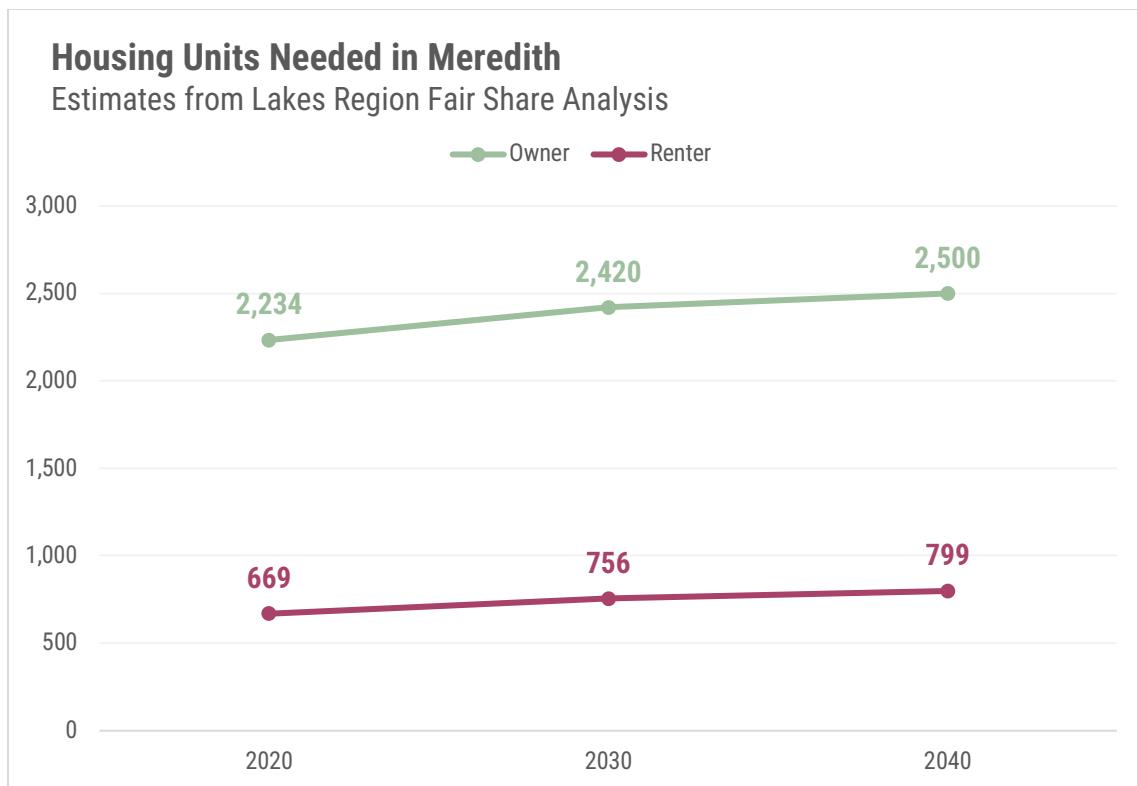
Eviction Filings Belknap County 12/2018 – 04/2023



Source: Civil Court Data Initiative. Legal Services Corporation, 2022. New Hampshire eviction filing counts accessed at <https://www.courts.nh.gov/media/data-reports>

Projections

Based on the Fair Share Tables from the Lake Region Housing Needs Assessment, it is estimated that Meredith should be prepared to accommodate demand for 274 housing units by 2030 and 397 housing units by 2040. Of these units by 2040, 266 should be for owners, with about 47% affordable to households with an income of 100% AMI and less. Another 130 should be for renters, with 44% of these being affordable to renters with an income of 60% AMI and less. Comparing the results of the fair share analysis with the affordability gap analysis it underscores the lack of housing availability for households earning less than 80% of AMI regardless of tenure.



*Projections based on Fair Share Analysis

Source: Lakes Region Housing Needs Assessment; Lakes Region Planning Commission

Meredith Estimates 2030

2030 New Units Total	Owners 2030	Below 100 % AMI	Above 100 % AMI	Renters 2030	Below 60 % AMI	Above 60 % AMI
274	186	89	98	87	40	48

Meredith Estimates 2040

2040 New Units Total	Owners 2040	Below 100 % AMI	Above 100 % AMI	Renters 2040	Below 60 % AMI	Above 60 % AMI
397	266	127	140	130	58	72

* Estimates are cumulative

Source: Lakes Region Housing Needs Assessment; Lakes Region Planning Commission

Emerging/Potential Actions

Find Ways to Partner with Area Businesses on Housing Challenges

- Identify potential opportunities for public-private partnerships or employer sponsored housing initiatives to support area businesses impacted by rising housing costs.

Identify Ways to Strengthen Policies on Short-Term Rentals

- Identify opportunities to strengthen local policies on short-term rentals to help maintain the year-round housing stock.
- Continue implementation of a rental registry and inspection process with a fee structure.

Identify Opportunities to Preserve and Improve Mobile Home/Manufactured Housing

- Mobile homes and manufactured housing can be a contributor toward affordable housing in a community. Find ways to encourage the upkeep and maintenance of these homes.

Continue to Work with Local and Regional Organizations Who Provide Affordable Housing

- Identify potential opportunities to expand upon or build new affordable housing in Meredith, particularly housing that is targeted to households at or below 50% of the area median income (AMI).
- Explore options for a local rental assistance program or voucher program to subsidize market rate housing units.
- Donate town owned land to create additional affordable housing units.

Look for Opportunities to Adjust Zoning and Permitting to Support Housing Development and remove barriers to housing production.

- Adjust minimum lot sizes in residential zones to encourage additional housing types.
- Review use tables to identify potential housing types that are not allowed today or are only allowed by special exception.
- Possibly allow the conversion of larger single-family homes into structures with multiple units if they are tied to affordability.
- Reduce permit fees or water/sewer hookup fees for affordable housing.
- Fast track the approval and permitting process for affordable housing developments.
- Review any density restrictions for housing in the zoning and adjust where appropriate.

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ECONOMIC DEVELOPMENT



Meredith is the fourth largest community out of the ten towns and one city that comprise Belknap County. The county is also part of the larger Lakes Region, which is a major center within New Hampshire for recreational opportunities, cultural resources, and supports a significant number of seasonal visitors and residents. The local economy is highly dependent on a few key industry sectors, some of which were greatly impacted by the COVID-19 pandemic. These include Accommodations and Food Services, Retail, and Health Care. We know nationally that these industry sectors were also impacted by early retirements, workers retraining for other sectors, and employees leaving the workforce altogether.

Filling jobs in these sectors has been challenging, particularly in high-cost tourism-based locales where workers must commute longer distances due to a lack of attainable and available housing. In Meredith, the story is the same. Since the 2008 recession, the town's overall labor force has declined and has yet to recover from the dip during the initial onset of the 2020 pandemic. This is occurring at the same time as the town, county, and region experience record low unemployment levels. With fewer people in the labor force and fewer people looking for work, filling vacancies in lower paying industry sectors is very challenging.

FACTS AND FIGURES



Meredith's median age is **53.1** years old, and has increased by 5.5 years since 2016. This is higher than both Belknap County (47.5 years) and New Hampshire (43 years).



About **43%** of Meredith residents aged 25 or older have a bachelor's degree or higher, which is a higher percentage than those in Belknap County (31%) and the Lakes Region (32%).



Meredith's median household income was **\$61,359** in 2021, which is lower compared to the county and the state at \$75,035 and \$83,449, respectively.



In 2022, Meredith had a labor force of **3,114** with 79 residents unemployed and an unemployment rate of 2.5%.



22% of all households make less than \$25,000, which is the largest income bracket cohort in town. This group increased by 88 households (15%) between 2016 and 2021. This trend specific to Meredith is likely influenced by increases in the older adult population.



373 more people entered town to head to work than left on a given day, while roughly 600 people both live and work in Meredith. This is according to commuting data from OnTheMap. The most common origins of workers in Meredith are from Meredith, Laconia, and Moultonborough.

ECONOMIC DEVELOPMENT KEY FINDINGS

- Meredith saw a modest population growth of 4% (276 residents) from 2016 to 2021, underscoring a steady but measured change in demographics marked by a substantial increase in residents over the age of 65. This has contributed to a rise in the median age to 53.1 years.
- Meredith's local economy is driven by tourism and service-based industry sectors that include accommodations, restaurants, retail, arts, and entertainment, which were all particularly hard-hit by the pandemic. While several sectors have recovered, employers are finding it challenging to recruit and retain employees as commute distances increase and housing prices become more unaffordable.
- The educational landscape in Meredith is favorable, with 43% of residents holding a bachelor's degree or higher, suggesting a well-educated local workforce. The growth in residents with graduate or professional degrees (32%) emphasizes the potential availability of specialized skills within the community. The rise in educational attainment also coincides with the increases in households across the highest income brackets. This could suggest middle-income residents are having a harder time finding affordable housing in town.
- Despite challenges posed by the COVID-19 pandemic, Meredith's labor force has proven resilient, with a low 2.5% unemployment rate as of 2022. Labor force participation rates have been recovering, but given the increase in Meredith's older adult population it may be difficult to achieve pre-pandemic levels.
- Commuting patterns suggest that Meredith is linked quite closely to the Lakes Region, economically. Meredith does experience a slight increase in its daytime population from workers entering town. It was also observed that there has been an increase in travel time to work showing those who are moving into Meredith are commuting farther for work, while those who work within or near Meredith are moving out or retiring. This may reflect the shifts in hybrid and remote work where people moving to Meredith have the flexibility to travel further into work if they are required to spend fewer days per week or month in the office.
- According to employment data from Lightcast, in the last quarter of 2023, Meredith had 3,213 jobs, a 2% decrease from 3,295 jobs since 2013. As of the end of 2023, the town's employment landscape is dominated by a few key industries such as Accommodation and Food Services, Retail Trade, and Health Care which form the backbone of Meredith's economy. The two highest employment sectors in Meredith, Accommodations and Food Services and Retail, also have the some of the lowest average earnings per job.
- The largest employers in Meredith reflect the retail, manufacturing, and government-focused industries that operate in the town. According to New Hampshire's Economic and Labor Market Information Bureau, Meredith's largest employers are the Inter-Lakes School System, employing 228 people, followed by the Meredith Village Savings Bank. Other large employers include Golden View, Hampshire Hospitality Holdings, and the Town of Meredith.
- Many jobs in Meredith do not pay above the average earnings in town and in many cases are not high enough to afford the median rent or sale price for a home. This has led to employers having to purchase homes for their employees to live in charging rents that are affordable. As more workers are forced to live further from Meredith, they may encounter other similar jobs in other communities where housing is more affordable and available

ECONOMIC DEVELOPMENT

Background

Enabling and sustaining the economy of a community is critical to providing opportunities for residents to work and businesses to thrive. A strong economy also helps ensure the stability of the tax base and fiscal health of the municipality. Though “economic development” is often taken to mean the physical development of jobs-producing spaces in a community, true economic development improves the quality of life for residents, workers, and visitors. Some of the factors that individuals and businesses consider when making decisions about where to locate and invest include existing employment and job types, the nature of established and growing industries, the real estate market, property tax rates, and the needs and abilities of the local population.

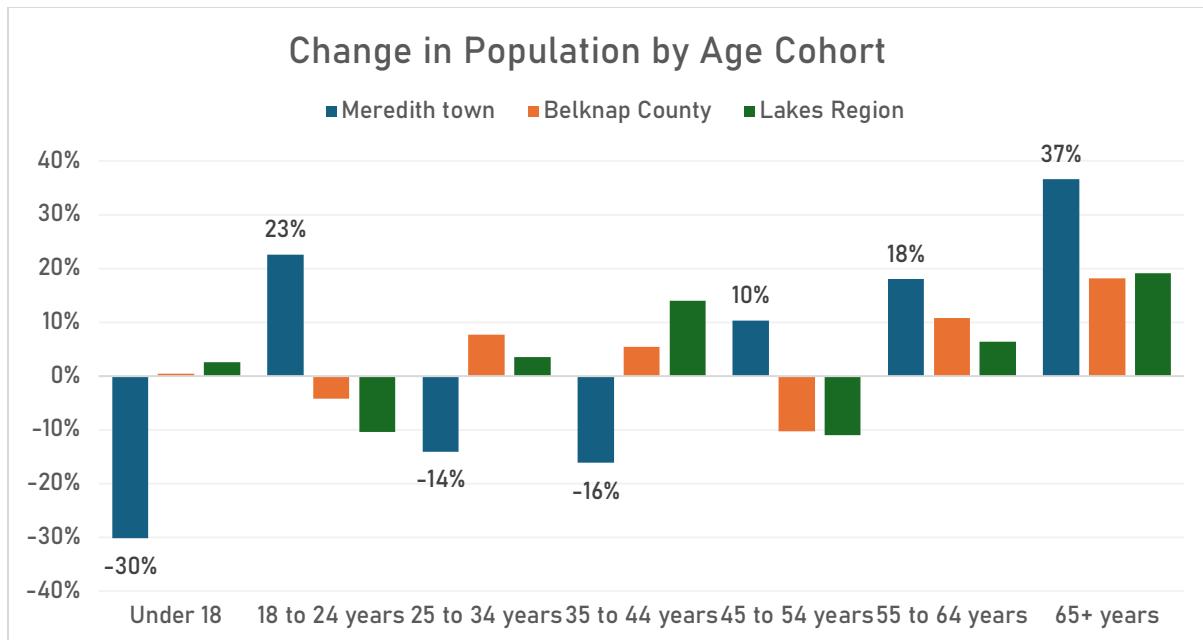
A comprehensive understanding of these existing conditions allows for the creation of forward-looking economic policies and interventions. This chapter provides a detailed analysis of the demographic, economic, and real estate trends that are working to shape and drive Meredith’s economy. Since the town’s local economy is influenced by the larger region, the analysis also compares the Meredith to Belknap County and the Lakes Region.

Population Trends

Age Distribution

The total population for the Town of Meredith was 6,534 in 2016 and grew to 6,630 according to the U.S. Census Bureau’s 2021 ACS 5-year estimates; with a net increase in population of 276 residents (+4%). However, that population increase was not consistent across age cohorts. The town is growing significantly older with an increase of more than 500 residents falling into the over 65 age category. Meredith, in comparison to both Belknap County and the Lakes Region, has a larger proportion of over 65-year-olds than the county or state. The median age in Meredith increased by 5.5 years since 2016, from 47.6 years to 53.1 years. This is higher than both Belknap County (47.5 years) and New Hampshire (43 years).

Over this same period, Meredith has also seen declines in residents under the age of 18, falling by 30% or 420 residents. This corresponded to a drop in adults ages 25-44 (-15% or -187 residents) indicating families with children comprise a decreasing share of households in the community. This could be the result of children aging out of the community while parents age in place, and families leaving Meredith who have younger children.

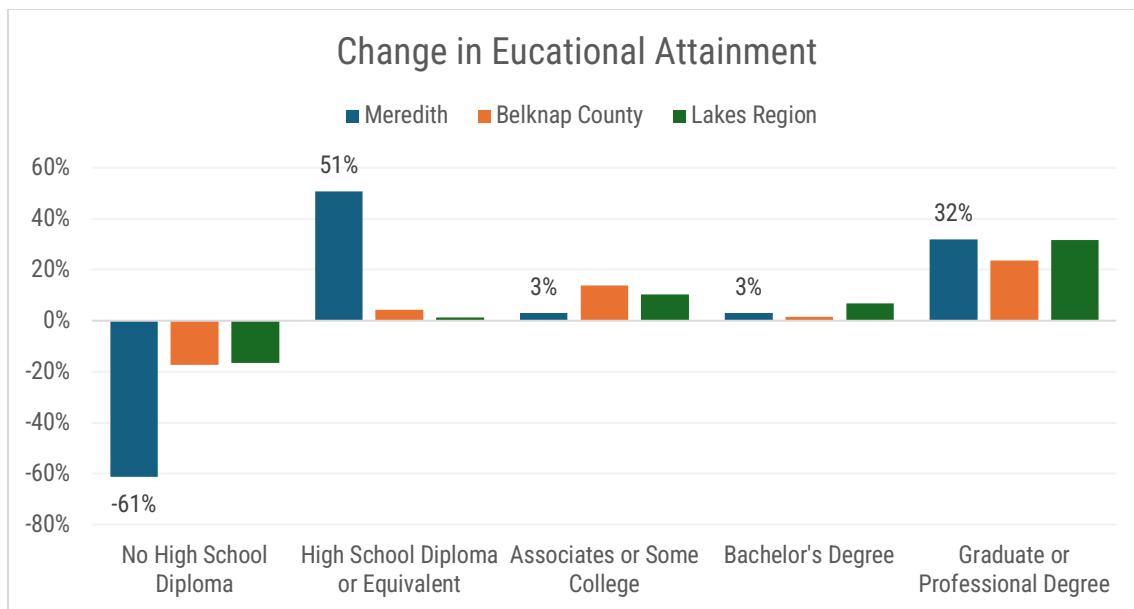


Source: 2016 and 2021 5-yr ACS

Educational Attainment

The educational attainment of the resident population is something many businesses consider when choosing where to locate. The availability of a suitably skilled workforce is one factor, and for consumer-facing businesses the spending potential of the local population – heavily influenced by income and education – is another factor.

About 43% of Meredith residents aged 25 or older have a bachelor's degree or higher, which is a higher percentage than those in Belknap County (31%) and the Lakes Region (32%). Meredith residents are also more likely to have at least a high school diploma compared to residents in the county and region. Like county and region trends, from 2016 to 2021 the number of residents with a graduate/professional degree increased significantly (+32% or 257 residents). However, Meredith had a significant decrease in residents with less than a high school diploma decreased (-61% or -195 residents).



Source: 2016 and 2021 5-yr ACS

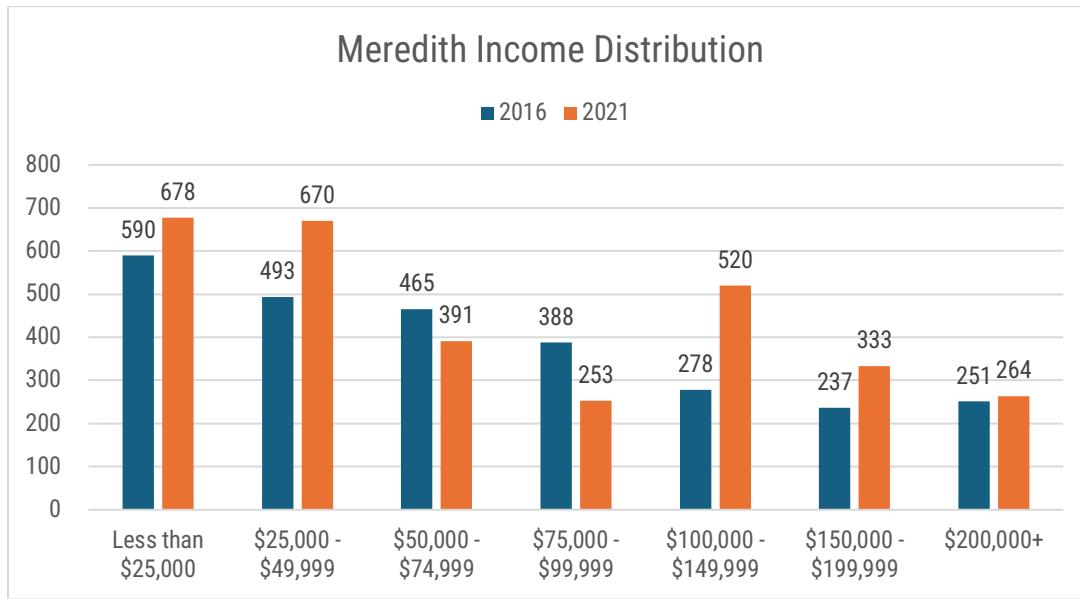
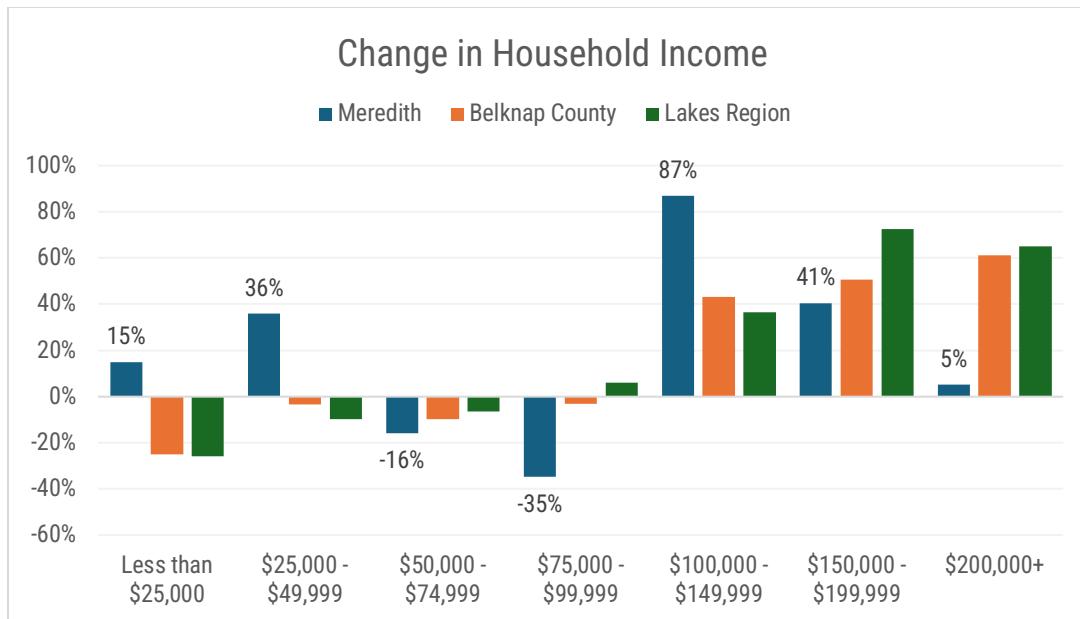
Household Income

As mentioned above, many consumer-facing businesses such as retailers and restaurants may strongly consider local median incomes when deciding where to locate, particularly regional or national chains with specific site selection criteria.

In Meredith, the median household income decreased from \$63,846 in 2016 to \$61,359 in 2021, which is lower compared to the county and the state at \$75,035 and \$83,449, respectively. The decrease in median household income in a community like Meredith is likely linked to older adults who lived in Meredith and retired. Those households may now be on a fixed income no longer reporting income from employment.

The largest income bracket cohort is in households making less than \$25,000, accounting for 22% of total households. This group increased by 88 households (15%) between 2016 and 2021. This is an outlier from county and regional trends, in which this income bracket decreased. This trend specific to Meredith is likely influenced by the increases in the older adult population.

Meredith households earning \$75,000-\$99,999 decreased by a net of 135 households (-35%), alongside a decrease of 74 households making \$50,000-\$74,999 (-16%). However, despite the decreasing median income, households making \$100,000-\$149,999 grew by 87% or 242. The rise in educational attainment of Meredith residents coincides with the increases in households across the highest income brackets. This may suggest middle-income residents are having a harder time finding affordable housing.



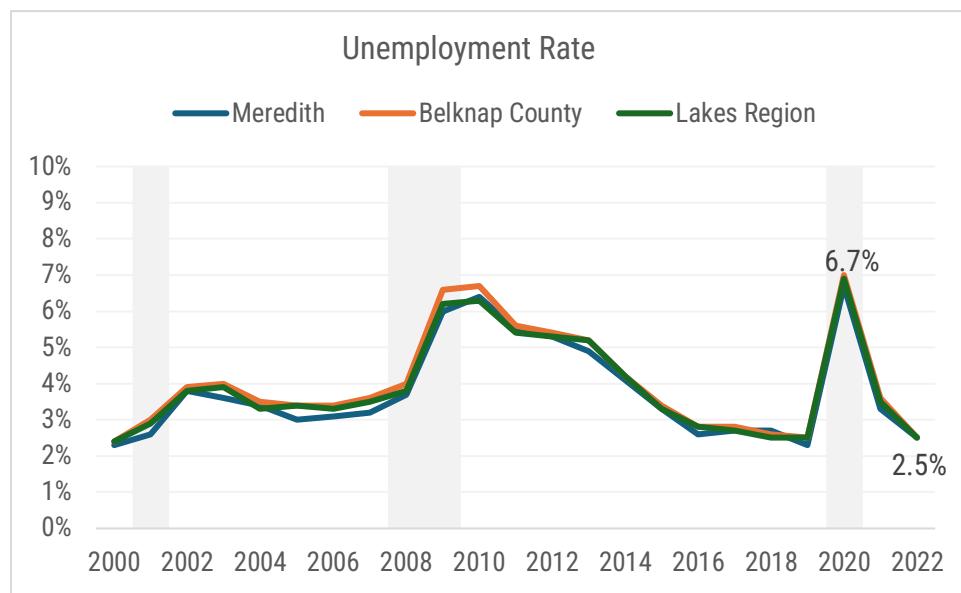
Source: 2016 and 2021 5-yr ACS

Labor Force

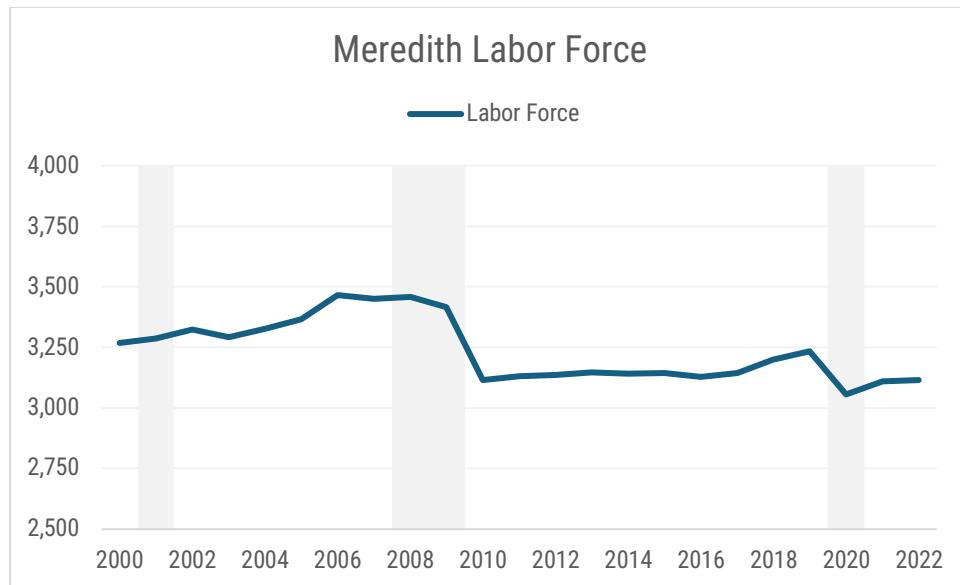
Two measures of participation in the economy that are commonly examined are the labor force participation and the unemployment rate. The labor force participation rate measures the percentage of the population aged 16 and over who are either employed or actively looking for employment. If this number is low, then there may be some elasticity in the labor market; if it is already high, then there may not be much flexibility and there are likely few options for employers looking to hire. Likewise, particularly low unemployment would suggest a strong labor market, which is good news for workers but may make hiring a challenge for businesses.

According to the New Hampshire Economic and Labor Market Information Bureau (NHELM), in 2022 Meredith had a labor force of 3,114, with 79 residents unemployed and an unemployment rate of 2.5%. This was the lowest annual average unemployment rate in the last decade. This is well within the range of what economists consider to be “full employment,” which indicates that people who are actively looking for jobs have found them. This can lead to increased wages as employers compete for talent, but it is an indicator that there is very little slack in the labor market and hiring is likely a challenge.

From 2010 to 2019, the labor force slightly increased from 3,115 to 3,235, paired with a lower unemployment rate. There was also a visible increase in unemployment in 2020 during the onset of the COVID-19 pandemic, in which the labor force dipped. Meredith’s labor force participation rates have not yet fully recovered to pre-pandemic levels.



Source: NHELM 2023



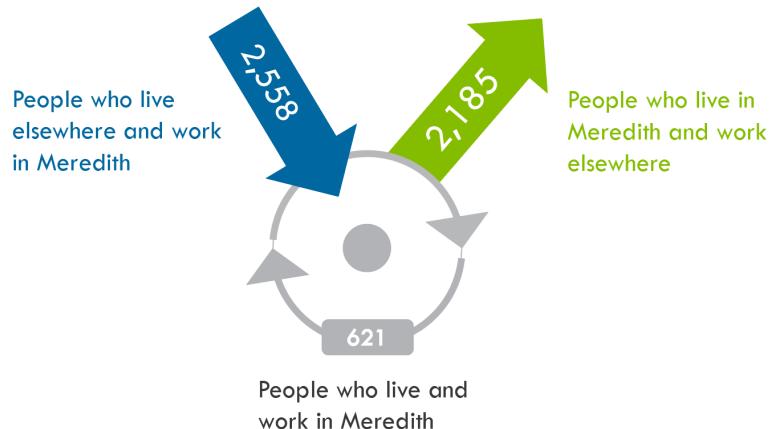
Source: NHELMI 2023

Local Employment

Commuting Patterns

Commuting patterns have important implications for economic development. Changes in the daytime population related to the inflow and outflow of workers and residents often impacts the viability and types of retail and other amenities in a community. Furthermore, the sources and destinations of workers can suggest opportunities for filling gaps in Meredith – in housing that is accessible to workers, or in industries that align with residents' skills.

Commuting Inflow-Outflow



Overall, Meredith has a near equal balance of those who are coming to work in town and residents who are leaving town for work. This means there is little change in the daytime population, just a difference in who is present during the day. According to commuting data from OnTheMap, 373 more people entered town to head to work than left on a given day. While roughly 600 people both live and work in Meredith.

The most common origins of workers in Meredith are from Meredith, Laconia, and Moultonborough. More than 300 people travel from Laconia to Meredith to go to work, followed by about 153 people from Moultonborough. About 20% of workers in Meredith live in Meredith. About 14% of Meredith's

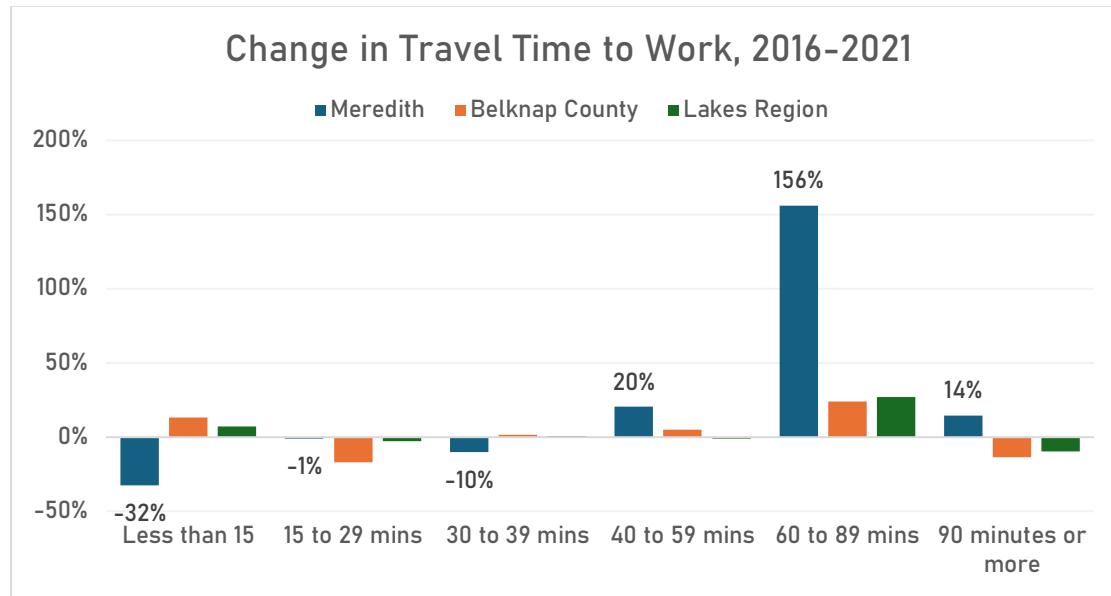
Commuting Patterns for Workers in Meredith & Meredith Residents

Home Area (Workers in Meredith)	Count of Workers	Share	Work Destination Area (Meredith Residents)		Count of Workers	Share
			Area	Count of Workers		
Meredith, NH	621	19.5%	Meredith, NH	621	22.1%	
Laconia, NH	310	9.8%	Laconia, NH	388	13.8%	
Moultonborough, NH	153	4.8%	Concord, NH	166	5.9%	
Gilford, NH	115	3.6%	Plymouth, NH	111	4.0%	
New Hampton, NH	111	3.5%	Gilford, NH	97	3.5%	
Belmont, NH	79	2.5%	Moultonborough, NH	95	3.4%	
Concord, NH	62	2.0%	Manchester, NH	89	3.2%	
Plymouth, NH	61	1.9%	Tilton, NH	66	2.4%	
Ashland, NH	58	1.8%	New Hampton, NH	51	1.8%	
Bristol, NH	55	1.7%	Portsmouth, NH	41	1.5%	

Source: US Census LEHD, OnTheMap, 2020

working residents commute to Laconia, followed by Concord (6%) and Plymouth (4%). These figures suggest that people who work in Meredith want to live in Meredith.

While most Meredith residents travel less than 40 minutes to get to work (79%), there was a 156% increase in residents commuting 60 to 89 minutes (+89). The increase in travel time to work indicates that those who are moving into Meredith are commuting farther for work, while those who work within or near Meredith are moving out or retiring. This may reflect the shifts in hybrid and remote work where people moving to Meredith have the flexibility to travel further into work if they are required to spend fewer days per week or month in the office.



Employment by Industry

According to employment data from Lightcast, in the last quarter of 2023, Meredith had 3,213 jobs, a 2% decrease from 3,295 jobs since 2013. The largest industry by employment in the town is Accommodation and Food Services with 679 jobs. Retail Trade is the next largest industry, at just under 474 jobs, while Health Care and Social Assistance is third with just under 400 jobs. Government, Construction, and Manufacturing each have between 230 and 400 jobs in town, while other industries are significantly smaller.

Construction experienced the largest absolute increase in employment (+109 jobs) while Administrative & Support & Waste Management & Remediation Services experienced the highest percentage growth (78%). Manufacturing and Government saw the largest decreases in total employment, losing 188 and 92 jobs, respectively.

Top Ten Highest Employment Industry Sectors, 2-digit NAICS

2-Digit NAICS	2013 Jobs	2023 Jobs	2013 – 2023 Change	2013 – 2023 % Change	2023 Location Quotient	Average Earnings per Job
Accommodation and Food Services	712	679	-33	-5%	1.61	\$34,526
Retail Trade	415	474	59	14%	0.80	\$44,456
Health Care and Social Assistance	463	399	-64	-14%	1.03	\$70,383
Government	484	392	-92	-19%	0.78	\$76,678
Construction	141	251	109	77%	1.36	\$94,671
Manufacturing	419	231	-188	-45%	0.95	\$75,470
Other Services (except Public Administration)	130	125	-4	-3%	0.85	\$42,345
Administrative and Support and Waste Management and Remediation Services	62	111	49	78%	0.92	\$53,457
Professional, Scientific, and Technical Services	115	107	-8	-7%	1.31	\$94,218
Arts, Entertainment, and Recreation	70	84	14	19%	0.85	\$35,630
All Others	283	354	82	29%		
Total, All Jobs	3,295	3,213	-82	-2%		\$61,167

Source: Lightcast QCEW – 2023.4 Town of Meredith

The two highest employment sectors in Meredith, Accommodations and Food Services and Retail, also have some of the lowest average earnings per job. These two sectors comprise a third of all jobs in town yet pay far less than what would be needed to afford many homes in Meredith. As housing prices have continued to rise, particularly with the spikes in prices during and since the pandemic, more employees are finding it challenging to live in town or even near town. This is making it very difficult for

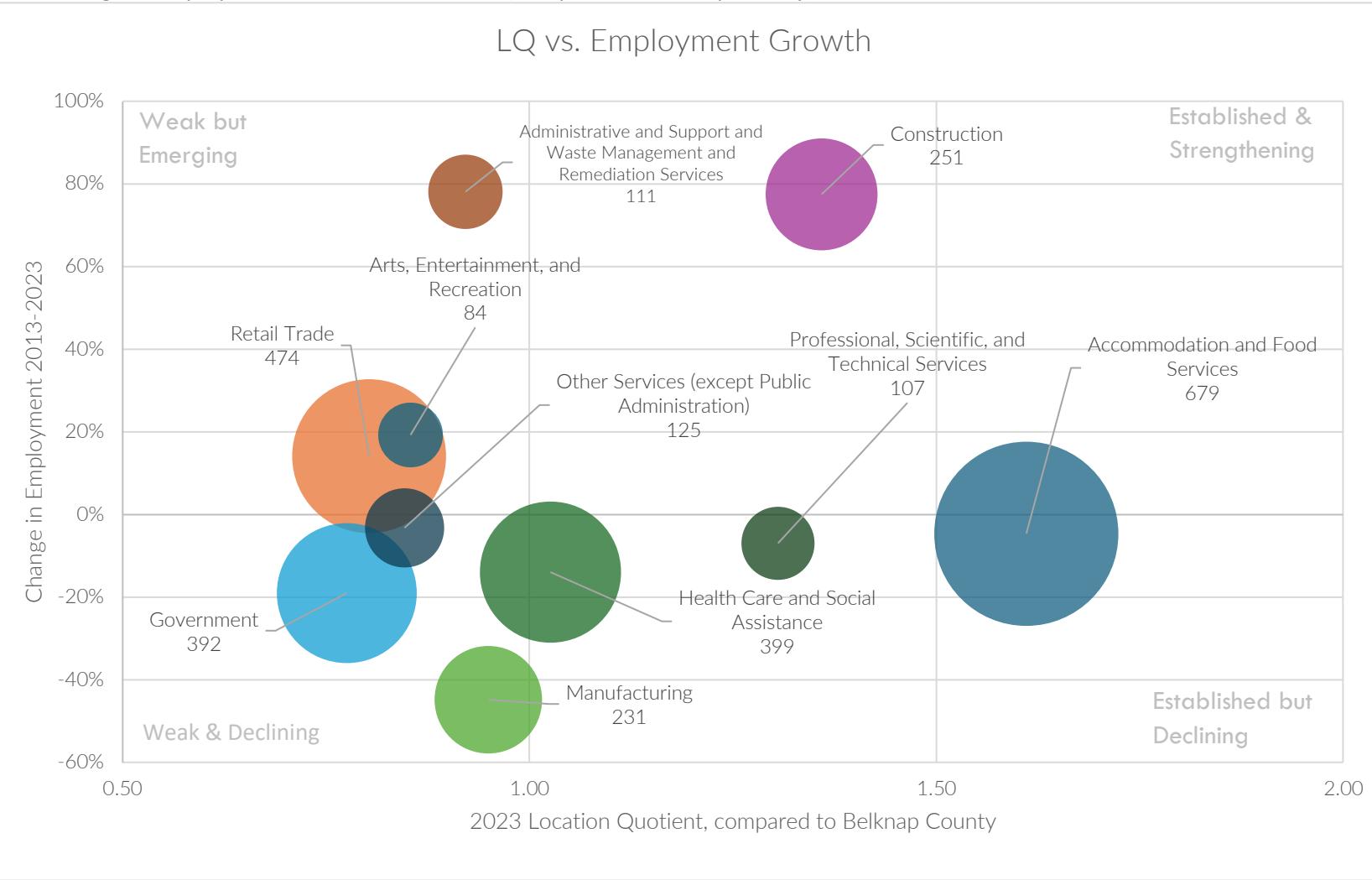
businesses within these industry sectors to recruit and retain employees. During interviews with local businesses, several noted they are actively subsidizing housing costs for employees, or even purchasing residential buildings to rent units to their employees at prices they can afford.

Location Quotients

Location quotients (LQs) compare employment by industry in two or more geographic areas. The location quotient is a ratio of the percentage of an industry's employment in one geography to that of a larger comparison geography. If the ratio falls between 0.80 and 1.20, then the proportion of jobs is very similar in both geographies. If the ratio is less than 0.80, then the identified industry sector is thought to be under-represented in the local economy. Conversely, a ratio greater than 1.20 can show a specialty within the local economy as compared to the larger geography. Location quotients can be useful in identifying opportunities for certain industry sectors to gain a larger share of the employment base, or to indicate when a community may be heavily reliant on one or two industry sectors. In some cases, a high location quotient may indicate a specialty area in the local economy. The comparison geography used for Meredith in this instance was New Hampshire.

Meredith has several industries that are over-represented compared to regional employment estimates. Accommodation and Food Services leads in this category, with an LQ of 1.61, meaning that jobs in this industry are 1.6 times as common in Meredith as in Belknap County. Other industries experiencing a local competitive advantage include Construction and Professional, Scientific, and Technical Services. Most larger industries in Meredith are shrinking, excluding Retail Trade and Construction. While Meredith enjoys a competitive advantage in several industries, acknowledging and addressing the challenges posed by declining sectors is crucial for achieving a balanced and sustainable economic development strategy. Balancing growth opportunities in leading industries with targeted interventions in shrinking sectors will contribute to the overall resilience and prosperity of Meredith's economy.

Figure 6-6. Change in Employment vs. Location Quotient (Compared to Belknap County)



Source: Lightcast, Industry Report, 2023.4 datarun

Local Businesses & Largest Employers

The largest employers in Meredith reflect the retail, manufacturing, and government-focused industries that operate in the town. According to New Hampshire's Economic and Labor Market Information Bureau, Meredith's largest employers are the Inter-Lakes School System, employing 228 people, followed by the Meredith Village Savings Bank. These and other large employers are included in the table below.

Largest Employers		
Company	2-Digit NAICS	Number of Employees
Inter-Lakes School System	Educational Services	228
Meredith Village Savings Bank	Finance and Insurance	210
Golden View	Health Care and Social Assistance	130
Hampshire Hospitality Holdings	Health Care and Social Assistance	115
Town of Meredith	Government	78
Remcon/North Corporation	Manufacturing	65
Meredith Harley Davidson	Retail Trade	64
Annalee Mobilitee Dolls, Inc.	Retail Trade	50
Ippolito's Furniture	Retail Trade	36

Source: NHELM Community Profile 2023

According to data from Moody's Analytics REIS (economic research and financial modeling platform with real region and market analytics data), most retail and office properties in Meredith are of an older generation with the most recently constructed retail property built in 2013. Aging office buildings may suggest outmoded building design, interior spaces, and amenities which are needed to attract new tenants should current ones vacate the spaces over time.

Real Estate Metrics				
Use Category	Number of Properties	Average SF	Average Year Built	Rent /SF
Office	35	5,149	1936	\$18.02
Retail	72	7,321	1941	\$25.53
Warehouse /Distribution	10	11,078	1994	\$4.59
Flex/R&D	1	2,792	2012	N/A
Industrial	14	14,114	1980	N/A

Source: Moody's Analytics REIS, 2023

Local Initiatives

Currently, Meredith does not have a town staff member focused solely on Economic Development programs or incentives for businesses in town. However, there are some existing organizations and initiatives currently in place such as:

- The **Greater Meredith Program** is a non-profit development organization that is heavily involved in Meredith's economic development, business, and workforce partnerships. Some of their programs include the Meredith Sculpture Walk. They also have committees focused on:
 - The **Design Beautification Committee** is involved with site improvements, local design assistance, landscaping projects, and pedestrian corridors.
 - The **Promotion Committee** is the marketing team for local businesses and events, such as the "Do the Loop" brochure that promoted Meredith businesses.
 - The **Economic Development Career Partnerships Committee** focuses on market opportunities and economic growth.
 - The **Finance and Fundraising Committee** focuses on fundraising and the financial management of the organization.
- The **Career Partnership Program** gives students the opportunity to explore future career planning through shadowing, internships, and work experiences in Meredith.
- The **Meredith Area Chamber of Commerce** has a **Small Business Development Center**, providing advisory services for business clients from all sectors.
- Art and the creative economy have been a developing sector in Meredith over the past decade. In 2012, **The Arts Collaborative** was established as the Lakes Region's only art complex that includes artist studios, an art education teaching studio, and gallery. The Winnipesaukee Playhouse, a nonprofit theater and performing arts center, founded in 2004, also opened a new theater in 2013 on Reservoir Road. These centers could continue to nurture the creative economy potentially drawing in younger residents and families to Meredith.

Emerging/Potential Actions

Look for Ways to Diversify Meredith's Year-Round Economy to Buffer Against Future Economic Disruptions

- The Town should conduct a more detailed market analysis and target industries study to identify ways of expanding its year-round economy with industry sectors that do not rely on seasonal tourism.
- Identify locations in town that could be suitable for an expansion of the commercial and industrial base.
- Consider incentives to attract and retain businesses that are not tourism-dependent.

Support the Creation of More Housing for the Local Workforce

- Identify ways to work with employers and developers to create more affordable housing geared towards supporting Meredith's lower wage workforce.

Assist Businesses with a Workforce Marketing Campaign

- Market Meredith to potential workers in concert with local businesses in specific industry segments (hospitality, food and beverage, personal services) to attract them to work in the town.
- Consider holding a job fair and recruiting events for employees in Meredith or as part of a regional effort to draw in workers.

Continue Making Improvements to Downtown Infrastructure, Placemaking, and Beautification

- In addition to the Lake, Downtown provides visitors and year-round residents with places to eat, shop, and gather. Identify ways to continue beautifying parts of Downtown and creating unique spaces for things like gathering, outdoor dining, and public art.
- Host events during the off-peak season to continue attracting people to the Downtown area when lake activities slow.
- Consider winter activities, festivals, and celebrations that involve the lake and Downtown to bring people together in winter months.

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TRANSPORTATION



Meredith's transportation system is comprised of local and state roadways, culverts, bridges, sidewalks, and other infrastructure that supports various modes of transportation that are used by residents, businesses, and visitors. The transportation network is also utilized to move goods within and through the community. Meredith's location within the Lakes Region creates additional demand on the local and state roadways. This is largely due to increased traffic volumes during peak seasons by visitors and seasonal residents, which results in traffic congestion when vehicle volumes are high. Lake Winnipesaukee is a major draw for visitors.

While much of the town is rural, Meredith Village is the town's more compact center and has the highest concentration of pedestrian infrastructure, like sidewalks and crosswalks. Town wide, the presence of water bodies and other natural resource constraints does impact how future transportation system improvements are made. The Town's current transportation system also impacts and is impacted by the overall land use pattern, and associated homes and businesses.

FACTS AND FIGURES



There are **154.4** total miles of state, municipal, and private roads.



There are **30** miles of state routes in Meredith.



64% of roads in Meredith are paved and **36%** of roads are unpaved.



There are **3** bridges in Meredith that have been identified by NH Department of Transportation as "structurally deficient". These include the bridge on Blake Road off NH 104, the bridge located in the parking Lot at 73 Main Street, and the bridge on NH 25 adjacent to Clough Park.



There are **56.2** miles of known trails in Meredith. Of the total miles of trail, 28 miles are specifically snowmobile trails.



19.6 miles of roadway in Meredith have been identified as recommended bike routes. They include NH Route 106, NH Route 104, US Route 3, and NH Route 25.



212 accidents were reported in 2023 to the Meredith Police Department.

TRANSPORTATION KEY FINDINGS

- Meredith's lakes, recreation opportunities, and other assets draw many visitors to the community, resulting in an increase in seasonal visitors and residents. Additionally, the state highways connect Meredith to other equally desirable areas in the region for tourism, such as Laconia, making it easy for tourists to travel between communities throughout the Lakes Region. This impacts traffic congestion, parking, and traffic safety during peak visiting seasons locally and beyond. The US Route 3 and NH Route 25 corridors are especially subject to seasonal congestion.
- Meredith has several state routes and major roadways maintained by the NH Department of Transportation. These include:
 - NH Route 104
 - US Route 3 (Daniel Webster Highway)
 - NH Route 25 (Whittier Highway)
 - NH Route 106 (Parade Road)
 - Meredith Center Road
 - Winona Road
 - Meredith Neck RoadAdditionally, Interstate 93 can be easily accessed, providing convenient access to the highway for residents and visitors. The majority of Meredith's roads are municipally maintained which gives the town control over their design and maintenance, but also the responsibility to maintain this infrastructure.
- Meredith is a beautiful, scenic community to drive through. Portions of US Route 3, NH Route 25, and NH Route 106 that pass through Meredith are part of the state-designated Lakes Region Tour Scenic Byway. Meredith also has many roads that have been designated as local scenic roads and provide views of Meredith's natural and cultural assets.
- According to the 2022 Pavement Condition Data from the New Hampshire Department of Transportation (NHDOT), most of Meredith's roadways are rated as having a good pavement condition. Currently, road maintenance is tracked by the Public Works Department and a road inventory is submitted annually for budgeting purposes.
- Between 2015 to 2022, three roadways in Meredith accounted for approximately 63% of all accidents that occurred. These include US Route 3 (Daniel Webster Highway), NH Route 25 (Whittier Highway), and NH Route 104. Meredith Police Dispatch data revealed that there is a notable increase in reported accidents on Fridays and Saturdays.
- Meredith has demonstrated the community's dedication to improving pedestrian infrastructure through the creation of the Meredith Village Pathway Committee. Their primary role is to plan and promote increased pedestrian activity by enhancing and expanding pathways that link recreational, civic and community destinations throughout Meredith Village and wider community. As a result, the town has extensive pedestrian infrastructure within Meredith Village. There are five designated pathways in Meredith's Village Center. These designated walking routes provide access to Waukewan Beach, Water St/Red Gate Lane, the Meredith Community Center, the Trail at Hawkins Brook, and along the Lakeshore. The Trail at Hawkins Brook is an off-road pedestrian trail that is universally accessible.
- The Greater Meredith Program is working with the Town of Meredith and other stakeholders, to connect Meredith Village to Weirs Beach by extending the WOW Trail (The Winnipesaukee-Opechee-Winnisquam Trail). The WOW Trail is a multi-use, non-motorized recreational pathway that expands just over nine miles long, stretching the length of the City of Laconia, to the Meredith and Belmont town lines.
- Meredith has limited access to local public transit options, however, there are some public transit opportunities in surrounding communities.
- One project in Meredith is listed on NHDOT's Transportation Improvement Plan which was approved in September of 2022. The project is focused on NH Route 25 intersection improvements at Laker Lane, True Road, Quarry Road, and Patrician Shore Circle.

TRANSPORTATION

Existing Transportation Network

Roadways

Meredith's transportation network is comprised of roadways, culverts, trails, bridges, and sidewalks. The existing roadway network includes 154.4 miles of state, municipal, and private roads as shown in Table 1. Classification descriptions are described on the following page.

Table 1: Miles of all Roadways by Classification

Road Class	Maintenance	Miles	Percent
0	Private	28	18%
I	State	10.4	7%
II	State	19.7	13%
V	Local	88.9	57%
VI	Unmaintained	7.4	5%
	Total	154.4	100%

Within Meredith, there are segments of the state highway network that are important to interstate travel, travel within the Lakes Region, and to access abutting properties. The length of state routes that extend through Meredith is approximately 30 miles. This includes NH Route 104, US Route 3 (Daniel Webster Highway), NH Route 25 (Whittier Highway), and NH Route 106 (Parade Road). NH Route 104 runs generally west-east and connects Interstate 93 to US Route 3 (north-south) and NH Route 25 (east-west) just outside of the Village area. There are approximately 2.61 miles of I-93 (North and South) that run through Meredith.

The state highway system also includes some secondary roads located in Meredith including Meredith Center Road, Winona Road, and Meredith Neck Road. Meredith's geographical location in the Lakes Region and the tourism that follows, causes a seasonal influx of population and results in Meredith's roadways being more congested at peak traffic volumes as well as other impacts related to parking. This often coincides with regional events and peak tourism seasons. To help address the congestion and lack of parking in key areas, the Meredith Board of Selectmen have decided to further evaluate the parking infrastructure. In 2023, the Board of Selectmen appointed a committee to evaluate parking on Meredith Neck. Another heavily congested area is Meredith Village, and the Board of Selectmen also intends to evaluate parking in this area.

Despite the many state-owned and maintained roads in Meredith, most of Meredith'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 according to New Hampshire's Department of Transportation (NHDOT).

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.

Roadway Condition

Although most roads in Meredith are paved, over a third of Meredith's roads are currently unpaved. According to NHDOT's 2022 Pavement Condition Data, the following state road segments were identified as poor to fair: portions of Meredith Center Road, portions of Pease Road, most of Meredith Neck Road, and some portions of NH 25.

It should be noted that these roadways are state-owned and maintained. Currently, local road maintenance is tracked by the Public Works Director and a road inventory is submitted for budget purposes each year. In 2022, the Highway Department repaved the following roads: Cattle Landing Road, Patricia Drive, Harris Road, Blueberry Hill Road, Reservoir Road, Cataldo Road, and a portion of Chemung Road. Additionally, Chase Road, Dolloff Brook Road, Eaton Avenue, Cummings Cove Road, Old Barn Road, Wotanda Lane, Douglas Drive, Ledley Lane, Powers Road, Little Road, and Fish Cove Road were sealed.

The Public Works Director strongly encourages the town to complete a Road Action Plan in order to have a complex inventory and clear plan on what roads need repair and when with a 10-20 year forecast; to track costs and when deferred, give cost estimates of what that deferral will do and how it

Table 3: Road Surface

Type	Miles	Percent
Paved	98.4	64%
Unpaved	56	36%
Total	154.4	100%

will impact the town budget; and to emphasize the funds needed to continue at the acceptable Pavement Condition Index (PCI) level for roads and budgets in Meredith.

Bridges and Culverts

There are a total of nine bridges in Meredith, located along and off Meredith Center Road, NH Route 25, I-93, NH Route 104, and US Route 3. This includes seven state-owned bridges and two municipally owned bridges. The concrete slab bridge on Blake Road, the timber bridge in the parking lot behind the Community Park on Main Street (73 Main Street), and the concrete box bridge on NH 25, were identified on the NHDOT 2022 Red List. The first two of these three bridges are municipally owned.

Table 4: Red List Bridges in Meredith

Location	Status	Deficiency
Blake Road off NH 104 (106/128)	Municipal Red List	Structurally Deficient
Parking Lot at 73 Main Street (180/144)	Municipal Red List	Structurally Deficient
NH 25 adjacent to Clough Park (189/150)	State Red List	Structurally Deficient

Routine maintenance and replacement of culverts is necessary and can help mitigate flooding by ensuring the culvert size is large enough to allow for a surge of water to flow through/beneath during heavy precipitation events. Culverts also act as critical crossings for some wildlife by providing enhanced connectivity. Meredith's Public Works Department maintains an extensive culvert replacement schedule and routine maintenance is conducted on these drainage systems. The Town of Meredith has a plan to increase culvert sizes as roads are rebuilt and culverts are replaced. Increased culvert size will accommodate larger storms, increase climate change resilience, and improve habitat connectivity. New Hampshire Department of Environmental Services (NHDES) legislation allows towns to replace culverts up to 48" with no permits if staff have taken the Culvert Certification Course through the University of New Hampshire T2 Program. Several Meredith Highway Department staff, including the Public Works Director, are certified.

Additionally, grading of gravel roads is conducted twice annually and ditching is completed to provide proper storm water runoff. Catch basins are also routinely cleaned out to ensure capacity and water quality.

Sidewalks and Trails

The existing sidewalks in Meredith are located throughout the village area and connect pedestrians to adjacent neighborhoods and other nearby destinations. A few other locations around the community also have isolated sidewalk and trail networks. One of the more recent initiatives undertaken to improve pedestrian safety in Meredith was led by the Planning Board who worked with a developer to install a HAWK beacon (High-Intensity Activated Crosswalk) also known as a "pedestrian hybrid beacon" on NH 25 in Meredith. A HAWK beacon is a traffic signal used to stop road traffic and allow pedestrians to cross safely. This was recently installed and completed in 2023.

One of the ways in which the Town of Meredith demonstrates the community's dedication to improving pedestrian and bicycle infrastructure, is through its Meredith Village Pathway Committee. This Committee was appointed by the Board of Selectmen as an advisory Committee to develop a pedestrian plan and promote pedestrian activity in the community. The Committee is accomplishing this by

enhancing and expanding pathways to link together recreational, civic and community destinations throughout Meredith Village and the community as a whole. The Meredith Village Pathway Committee (in collaboration with the Meredith Conservation Commission) has established five pathways in Meredith Center, these include:

Table 5: Pathways in Meredith Center		
Name	Location	Description
Pathway 1	Waukewan Beach	A walk to Waukewan Beach starting at the Town Docks
Pathway 2	Water St/Red Gate Lane	A 1.5-mile walk which has limited sidewalks, is more ambitious with sloping hills, and is suitable for biking.
Pathway 3	Meredith Community Center	A 0.6-mile sidewalk path to the Meredith Community Center.
Pathway 4	Laverack Natural Trail at Hawkins Brook	An off road pedestrian trail that is universally accessible. The trailhead begins at the back of Meredith Village Savings Bank (MVS) and the tennis courts at Prescott Park.
Pathway 5	Lakeshore Walking Path	A 0.5 mile walk along the lakeshore starting at the Town Docks and following the boardwalk north to Hesky Park.

For more information on Meredith's Village Pathways, please visit the Village Pathway Committee page on the Town's Website.

As identified in the State of New Hampshire's 2023 Pedestrian and Bicycle Plan, there are 47 miles of existing sidewalk infrastructure in the Lakes Region and the State recommends an additional desired 15 miles of sidewalk in the Lakes Region. The state recommends that additional sidewalk expansion be implemented on "state and local roadways that lack existing sidewalk on one or both sides, on locally-owned, numbered roadways through Urban Compact Areas where at least a modest level of residential and commercial density exists and where destinations are present, and sidewalks on both sides of the roadway are preferred except in cases where land development has yet to occur or where there are physical constraints on one side of the roadway".

The existing known network for trails in Meredith is approximately, 56.1 miles. Of the 56.1 total miles of trail, 28 miles are specifically snowmobile trails. Snowmobile trails are mainly maintained by snowmobile clubs and the remaining miles of trails in Meredith are mostly maintained by the Conservation Commission. More information on Meredith's trail network can be found in the Recreation Profile of this Existing Conditions Report.

Bicycle Infrastructure

Recommended Bicycle Routes

The New Hampshire Department of Transportation (NHDOT) maintains an interactive bicycle route map found here: (click here to visit the page to get the full web address

<https://nh.maps.arcgis.com/apps/webappviewer/index.html?id=49c702c328d84a29af3b4a27eb271b37>

Included on this map are NHDOT recommended bicycle routes. The state recommends these routes and indicates some as requiring advanced riding skills if the route has limited infrastructure or is considered challenging in other ways. 19.6 miles of paved bicycle routes are identified in Meredith including NH Route 106, NH Route 104, US Route 3, and NH Route 25. The state recommended bike routes can be seen on the NH State Bike Routes interactive map using the link above and are also shown in the Open Space and Recreation Map found at the end of the Recreation Profile of this Existing Conditions Report.

Pending Bicycle Infrastructure

Meredith is fortunate enough to have many active non-profit organizations and community groups in town including the Greater Meredith Program (GMP). The GMP is working with the Town of Meredith and other stakeholders, to connect to the WOW Trail (The Winnipesaukee-Opechee-Winnisquam Trail) located in the City of Laconia. The WOW Trail is a multi-use, non-motorized recreational pathway that expands just over nine miles long, stretching the length of the City of Laconia, to the Meredith and Belmont town lines. GMP is working to develop a bike path/rail trail that would extend the WOW trail to connect Meredith Village to Weirs Beach in Laconia.

Scenic Byway and Scenic Roads

The Lakes Region Tour Scenic Byway

The Lakes Region Tour Scenic Byway was established in 1994. In 2002, portions of US Route 3, NH Route 25, and NH Route 106 were designated by the State of New Hampshire as part of the Lakes Region Tour Scenic Byway and include historically and culturally significant landscapes and landmarks. This scenic route is part of a 97-mile scenic byway that travels through the communities of Alton, Ashland, Center Harbor, Gilford, Holderness, Laconia, Meredith, Moultonborough, Ossipee, Sandwich, Tamworth, Tuftonboro, and Wolfeboro.

The Lakes Region Tour also joins the River Heritage Tour Scenic Byway in Plymouth and provides access to both the Kancamagus and White Mountain National Scenic Byways via Conway. The Lakes Region Tour is designated under RSA 238:19 with the purpose to "provide the opportunity for residents and visitors to travel a system of byways which feature the scenic and cultural qualities of the state within the existing highway system, promote retention of rural and urban scenic byways, support the cultural, recreational and historic attributes along these byways and expose the unique elements of the state's beauty, culture and history."

Scenic Roads

Meredith has many roads that have been designated as local scenic roads. These include:

- Carleton Road (from Chemung Road at Y Corner to Saddle Hill Road)

- Chemung Road (from Tucker Mountain Road to R-15-47 including Eastman Road)
- Eastman Road
- Edgerly School Road (from Upper New Hampton at Tucker Mtn Rd to New Hampton town line)
- Follet Road
- Hermit Woods Road (from Carleton Road to Sanbornton town line)
- Higgins Road
- Keyser Road (from NH Route 25 to Center Harbor town line)
- Old Center Harbor Road (from (1) "from the top of Sunset Hill, northwesterly to the Center harbor Town Line where the road becomes Follett Road in Center Harbor"; and (2) "from the top of Sunset Hill, northerly to the Center Harbor town line where the road become Old Meredith Road in Center Harbor.)
- Pinnacle Ridge Road (from New Hampton town line to Sanbornton town line)
- Quarry Road
- Roxbury Road from Chemung Road to Camp Waldron Road)
- Saddle Hill Road (from Upper New Hampton Road to Sanbornton town line)
- Tucker Mountain Road (from Chemung Road to Upper New Hampton Road and Edgerly School Road)

Transit and Regional Transportation

Many segments of Meredith's population would benefit from greater access to public transit options. According to the Lakes Regional Planning Commission's 2015-2020 Regional Plan Transportation Chapter, "the region's population will age... and the Lakes Region has few transportation alternatives to the private automobile". Meredith is one of the communities located adjacent to the service area of one or more transit providers, however, it appears the lack of awareness of these services in the region has been challenging.

There are two transit bus systems that provide service to the Lakes Region; the Blue Loon (also known as the Carroll County Transit) and the Winnipesaukee Transit System. Both of these services provide buses that travel on designating routes according to an established schedule during the day, and also provides passengers with the option to deviate from the designated route within a quarter-mile of the original designated route. While these transit bus systems do not directly service Meredith, these buses serve the nearby communities of Laconia, Tilton, Franklin, and Belmont to the south and west; and Conway, Albany, Madison, Wolfeboro, Tamworth, Moultonborough, Ossipee, Sandwich, and Tuftonboro to the north and east.

Other transportation services offered in Meredith, Belknap County, the Lakes Region, or throughout the State (as identified in 2015-2020 The Regional Plan) are listed below.

- **C&J Bus lines** – provides service to Boston from three New Hampshire locations located in Dover, Durham (UNH), and Portsmouth. There is limited service provided by Concord Trailways with stops in Meredith and Tilton. Unfortunately, the stop times make it difficult to connect to the Winnipesaukee Transit System (WTS) during regular hours of operation. WTS will explore the possibility of providing a connector/feeder service for customers needing access to services in Concord.
- **Winnipesaukee Transit System (WTS)** – serves most of the City of Laconia and the US Route 3 corridor through Belmont, the shopping district in Gilford, and the business districts of Tilton and Franklin.

- **Interlakes Community Caregivers** – volunteer drivers provide local transportation for medical appointments, shopping, and other support services in the areas of Center Harbor, Meredith, Moultonborough and Sandwich to residents that are pre-registered.
- **Granite State Independent Living** – is a statewide independent living center that received a state contract from the Department of Education to transport low-income disabled clients who rely on mobility devices like wheelchairs or scooters. Trips are limited to shopping, social activities, or errand type trips for those eligible statewide.
- **Veterans Administration Service (VTS)** – provides non-emergency medical transportation to qualifying Veterans. Trips are scheduled through rider's primary care providers and must meet several administrative and medical criteria.

Air Travel

Laconia Municipal Airport is located in Gilford, approximately 9 miles south/southeast of the Meredith Village. Services available at the Municipal Airport include emergency medical services, aerial law enforcement and border control, agricultural functions, military training exercises, flight training, aviation and aerospace education, time sensitive air cargo services, and executive business and personal trips. In Meredith there are also four private airports. These include Bossey's Seaplane Base (sea planes have the ability to land on Meredith Bay in Lake Winnipesaukee), Morrison Heliport, Flying Ridge Heliport, and Smiling Jack Heliport.

Rail

There are two operating rail lines servicing the Lakes Region these include the New England Southern Railroad and the Winnipesaukee Railroad. The Concord/Lincoln Line on the New England Southern Railroad extends 73 miles from Concord to Lincoln and passes through Meredith. The New England Southern Railroad brings a limited amount of freight to the Laconia area. The Winnipesaukee Railroad is primarily utilized as a tourist railroad during the summer season with limited service in the fall, and it also provides limited freight service.

Circulation and Design

Meredith's transportation system requires long-term planning and good design objectives which may be informed by analysis of commuting patterns, traffic counts, accidents, traffic calming and access management needs, and identified bicycle and pedestrian infrastructure needs. The state highway network has a significant impact on Meredith's transportation system due to the major routes that pass through the town to provide access to the desirable Lakes Region.

Commuter Data

As identified in the 2023 Meredith Housing Assessment, the commuting patterns of working Meredith residents are related to their place of employment and their need for housing. For Meredith's working residents over the age of 16 commute times have increased. This means more residents are traveling longer distances to their place of employment. The shift in commuting may be due to more remote and hybrid workers moving to Meredith and the Lakes Region as a result of the 2020 pandemic. Conversely, workers employed in Meredith are now traveling from further away for jobs in the community. For more information, please visit the Population and Housing Profile of this Existing Conditions Report.

Traffic Counts

Meredith's most recent traffic count data for the roadways with the highest traffic volumes is included below in Table 6. This table depicts the most recent traffic data for these roadways (2022) in comparison to traffic count data from previous years. This data was collected by the New Hampshire Department of Transportation. In reviewing the traffic data from 2015 to 2022, it appears that, there has been a slight increase of traffic on the roads listed. Major state roadways such as NH Route 25 and US Route 3 have experienced an increase whereas roadways such as NH Route 104 and NH Route 106 have experienced slight declines in traffic counts.

Table 6: NHDOT Traffic Counts in Meredith

Location	Average Annual Daily Traffic (2015)	AADT (2018)	AADT (2019)	AADT (2020)	AADT (2021)	AADT (2022)
NH 25 (WHITTIER HWY) AT CENTER HARBOR TL	12,460	11,273	11,951	10,828	12,019	11,434
US 3/NH 25 (DANIEL WEBSTER HWY) NORTH OF MAIN ST	5,815	5,855	5,634	5,104	5,665	6,065
NH 25 (WHITTIER HWY) WEST OF PLEASANT ST	21,000	17,979	18,357	16,631	19,740	20,016
US 3 (DANIEL WEBSTER HWY) SOUTH OF NH 25	11,422	16,644	18,128	16,424	18,231	17,678
US 3 (DANIEL WEBSTER HWY) SOUTH OF NH 104	14,000	12,365	12,625	11,438	13,612	13,803
NH 104 WEST OF US 3	10,072	10,358	11,364	10,296	11,429	8,551
NH 106 (PARADE RD) AT MEREDITH TL	7,600	7,822	7,986	7,235	7,636	7,743
US 3 (DANIEL WEBSTER HWY) AT LACONIA TL	7,164	7,668	6,720	6,088	6,758	7,376

Transportation Studies

In 2007, an Access Management Study was developed for NH 104. The intent of this study was to “assess current conditions, identify potential safety improvements, assess future traffic demand related to potential land use development, and outline future strategies related to access management along the corridor”. The following locations were identified for recommended safety improvements:

- Residential/Commercial Area (Bobby's Girl Diner) at NH Route 104 (New Hampton)
- Meredith Woods/Clearwater Campgrounds Crossings (Meredith)
- NH Route 104 at Shingle Camp Road and I-93 Off-Ramp (New Hampton)
- Chase and Meredith Center Roads at NH Route 104 (Meredith)
- Town House Road (east) at NH Route 104 (New Hampton)
- Main Street at NH Route 104 (New Hampton)

Recently, intersection updates at NH 104 and Meredith Center Road were completed in _____. This project created a turn lane on NH 104 to provide safe and efficient turning onto Meredith Center Road.

In 2009, the US Route 3/NH Route 25 Improvements Transportation Planning Study was completed. This study analyzed the Route 3 corridor from NH Route 104 to NH Route 25, and the NH Route 25 corridor from US Route 3 to the Center Harbor town line. US Route 3 is primarily a two lane, north south highway that links NH Route 104 and NH Route 25. The purpose of this study was "to develop a solution to the specific traffic and transportation needs in the Town of Meredith that is compatible with the town's vision to maintain a village character for its downtown area along US Route 3 and a rural character along NH Route 25." This corridor is subject to seasonal congestion caused by the number of vehicles exceeding the route's capacity and a lack of other east-west regional routes. NH 25 is also utilized for the transportation of oil and other goods from Portland, ME to central and western portions of New Hampshire. This corridor presents conflicts between vehicles and pedestrians that compromise the safety and efficiency of the transportation system.

In order to address these issues, in 2020, the Town of Meredith submitted an additional Transportation Proposal to NHDOT for intersection improvements on NH 25. There were four intersections identified as needing improvements. These include Laker Lane, True Road, Quarry Road, and Patrician Shores Circle where they intersect with NH Route 25. The Town was selected for CMAQ Funding through NHDOT for improvements at NH Route 25 and Laker Lane including a stretch of sidewalk, and other NH Route 25 improvements. This project is listed in the NHDOT Transportation Improvements Plan.

In 2021, a Road Safety Audit (RSA) was completed for Meredith's Main Street and its intersections with Highland Street, Water Street, Dover Street, High Street, and Lake Street. There were five major safety issues identified by the RSA team along this segment of Main Street between Lake Street and Highland Street. These include sight distance, signing, pavement markings, congestion, and driver and pedestrian behavior. Suggestions for improvement are identified and described in the RSA report and have been categorized as near-term, medium-term, and long-term improvements based on the design and construction efforts, potential costs, and potential funding available. Since 2020, the Greater Meredith Program (GMP), in collaboration with the Town of Meredith, has also been working to develop a plan to improve Main Street's infrastructure by exploring a Main Street redesign of sidewalks, parking spaces, and related infrastructure. The GMP's Design Committee acts as a resource within the town, assists with design charrettes for town owned properties, and beautification plantings.

Accident Data

According to the call records provided by Meredith Police Dispatch, the number of calls that were reported as accidents within the Town of Meredith from January 1, 2018 through November 20, 2023, totaled 1,295. It should be noted that some calls reported to Dispatch are not listed as "Accidents", depending on the original nature of the report. Some of these may be due to, but not limited to the following circumstances: Assisting another Agency; DWI and/or Motor Vehicle Complaint; or Criminal Mischief/Vandalism. Accident analysis in Meredith Police Department's Records Management System shows an increase in the reporting of accidents between the hours of 7AM and 7PM, regardless of the day of the week. Accident analysis also shows that the accident count is

Table 7: Meredith Accident Data
Source: Meredith Police Dept.

Year	# of Accidents
2018	240
2019	234
2020	182
2021	202
2022	225
2023	212
Total	1,295

similar and steady from Sundays through Thursdays. There is, however, a definite increase in reported accidents on Fridays and Saturdays.

Of those 1,295 accidents, 4 resulted in fatalities. In these 5 years, 272 of these accidents resulted in injuries or possible injuries, 5 of which involved pedestrians, and 3 involved bicyclists. There are three roadways in Meredith that accounted for about 63% of all accidents:

- Daniel Webster Highway (US Route 3) = 331 accidents (26%)
- Whittier Highway (NH Route 25) = 283 accidents (22%)
- NH Route 104 = 193 accidents (15%)

Approximately 12% of all accidents during this five-year period were reported at intersections. The roadways with the most intersection related accidents also included US Route 3, NH Route 25, and NH Route 104. It is not surprising that these roads have the most accidents on them in Meredith because these roads connect Meredith to adjacent communities. These roads are state-owned, and the town does not have jurisdiction over them. To help address some of these safety related issues, in 2007 a roundabout was installed at the intersection of US Route 3 and NH Route 106.

Transportation Resources and Pending Infrastructure Projects

The Meredith Public Works Department, Selectboard, 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 2023-2032 New Hampshire Transportation Improvement Plan that was approved in September of 2022, identified the following pending project:

- Meredith (43533) NH Route 25 - Intersection Improvements for Laker Lane, True Road, Quarry Road and Patrician Shore Circle with NH Route 25. Estimated date of construction is 2032.

Longer term transportation projects that are not yet programmed in the state plan but have been identified as needs in the Lakes Region Planning Commission's 2019 Lakes Region Transportation Improvement Plan or by NHDOT include:

- Meredith – NH Route 25 Intersection Safety Improvements
 - Pleasant St to Center Harbor town line – intersection safety improvements, widen to a 4-foot shoulder, resurface.
 - This corridor segment includes nine intersections from Meredith Village to the Center Harbor town line. These multiple intersections experience significant seasonal traffic and freight truck traffic. The lack of accommodation for left turning traffic into the inter-lakes school district campus causes traffic backups.
 - This project will improve pedestrian and bicycle safety, and enhance access to the economic centers connected by the highway.
- Meredith – US Route 3 - NH Route 104 intersection updates and expansion

- Modernize and improve transportation capacity and combine two traffic signals to one. This project would combine the current two sets of traffic signals at the intersections, creating a circular intersection while improving and modernizing the intersection to increase vehicular capacity and decrease traffic congestion.

Emerging and Potential Actions

- Develop a Complete Streets Policy. The town has demonstrated interest in pursuing this action with the Board of Selectmen appointing the Meredith Village Pathways Committee.
- Encourage residents to utilize public transit options by providing educational and marketing resources to increase awareness of these services. Consider expanding public transit opportunities in Meredith by coordinating with public transit providers in the Lakes Region area.
- Expansion of public transit in Meredith could benefit residents of all ages.
 - Examples of approaches other communities have taken to expand public transit include vanpool programs, and working with interested volunteers to develop a non-profit organization or program that provides local service trips for residents aged 60 and older (ex: Atkinson Elder Services Transportation)
- Review stormwater management requirements in the town's site plan and subdivision regulations and ensure they meet contemporary best practices (such as promoting infiltration and the incorporation of green infrastructure system designs).
- Consider developing a Road Action Plan in order to have a complex inventory and clear plan on what roads need repair and when with a 10-20 year forecast; to track costs and when deferred, give cost estimates of what that deferral will do and how it will impact the town budget; and to emphasize the funds needed to continue at the acceptable Pavement Condition Index (PCI) level for roads and budgets in Meredith.
- Consider updating the existing road standards to include design standards for low-volume roads.

Sources

- 2002 Meredith Master Plan
- 2000 Visual Resource Inventory and Assessment
- 2015-2022 NHDOT Traffic Count Data
- 2007 NH Route 104 Access Management Study
- 2009 Meredith US 3/NH 25 Improvements Transportation Planning Study
- 2015-2020 LRPC Lakes Regional Plan
- 2014 Coordinated Public Transit and Human Service Transportation Plan
- 2015 Lakes Region Tour Scenic Byway Corridor Management Plan
- 2018-2022 Meredith Annual Town Reports
- 2022 New Hampshire Department of Transportation Data
- 2023-2032 NHDOT Ten Year Transportation Improvements Plan

- 2019 LRPC Lakes Region Transportation Improvements Plan
- 2023 New Hampshire Pedestrian and Bicycle Plan
- Meredith Village Pathway Committee
- Meredith Public Works Department
- 2021 Meredith Road Safety Audit – Main Street

NATURAL RESOURCES



Situated in the Lakes Region, Meredith is known for its proximity to Lake Winnipesaukee, other smaller lakes like Lake Winnisquam and Lake Waukewan, and its abundance of natural resources and outdoor recreation opportunities. They contribute to the unique character of the town and attract many visitors to the region every year. The challenge of protecting natural resources, maintaining a vibrant local economy, providing housing opportunities for community members, and other land use priorities often proves to be a difficult balancing act for municipalities. In Meredith's case, the amount of surface waters and many other natural resource features that encompass the town, contribute to the quality of life and the tourism-based economy. Due to this, the town has a history of placing a high priority on the protection of natural resources in the community. Meredith's geographic location in the Lakes Region of New Hampshire positions the town with a greater responsibility to work among other communities within the shared watersheds that also rely on these critical water resources. Because natural resources rarely align with political boundaries, it is important to understand the broader context of Meredith's role both within the town boundaries and beyond with neighboring communities.

FACTS AND FIGURES



Currently, **17%** of Meredith has been permanently conserved, much of which is either owned or managed by the town.



8% of the town's land areas accounts for "rare habitat types", which are important habitat types for specific kinds of wildlife. These include peatlands, temperate swamps, grasslands, and wet meadows/shrubland.



Meredith has a total of **21,208** acres of important farmland soils (prime, state, and local) that accounts for 83% of the town. Much of these are now forested or development.



There are **10** town forests in Meredith totaling 1,703 acres that provide wildlife habitat, outdoor recreation, and other ecological services.



There are **6** prime wetlands in Meredith that include Dolloff Brook, Blake Brook, Hatch Brook, Mill Brook, Page Brook, and Stoney Brook.



14% of Meredith is designated as the highest ranked habitat in New Hampshire, but only 19% of that habitat is conserved.



There are **13** lakes and ponds in Meredith.

NATURAL RESOURCES KEY FINDINGS

- Waterbodies and waterways are key natural resource features in the Town of Meredith, some of which include Lake Winnipesaukee (the largest lake in the state), Lake Winnisquam, Lake Waukewan, Lake Wicwas, Lake Winona, and Pemigewasset Lake. The majority of water flowing into the western corner of Lake Winnipesaukee flows through Meredith, which places a significant responsibility on the town and requires collaboration with other watershed communities.
- The Winnipesaukee River Watershed accounts for 84% of the entire town and the Pemigewasset Watershed accounts for 16% of the town.
- To monitor water quality at major waterbodies in the Lakes Region, Meredith actively participates in watershed plans and restoration plans. These include the Lake Waukewan and Lake Winona Restoration Plan, and the Watershed Plans for Lake Winnipesaukee and Lake Winnisquam.
- Drinking water in Meredith comes from a stratified drift aquifer covering 6% of the town. About 55% of Meredith properties utilize private wells as their primary water source. Meredith's Water and Sewer Department supplies water to about 767 residents and the Meredith Village business community. The official water supply for the town water system is Lake Waukewan.
- Meredith values its forested and scenic lands and has identified six areas in town as Critical Viewshed Areas (CVA). The largest of which is the Lake Waukewan – Meredith Bay region. Other significant viewshed areas include Leavitt and Ladd Mountains, and Page Brook on Meredith Neck, which lies between Route 104 and Route 3 surrounding the upper headwaters of Reservoir Brook. Critical Viewshed Areas (CVA) in Meredith total 11,392 acres or approximately 32% of the town.
- Currently 17% (4,418 acres) of the land in Meredith has been conserved. Of these conserved lands, 57% of them are managed or owned by the town, and this represents the largest percentage of municipal involvement in conservation efforts among neighboring towns. This displays how invested and engaged the Town of Meredith is in conservation efforts.
- Water quality impairment status including impairments for aquatic life, impairments for fish consumption, and impairments for primary contact recreation were identified by New Hampshire Department of Environmental Services (NHDES). According to New Hampshire Department of Environmental Services 2020/2022 Water Quality Assessment data, all of Meredith's waterbodies received a good assessment for potential public drinking water supply. However, the following waterbodies were rated as poor for other impairment:
 - Primary Contact Recreation at Lake Waukewan and Lake Winona was rated poor
 - Aquatic life integrity was rated poor at Lake Winnipesaukee, Lake Winnisquam, Lake Wicwas, Pemigewasset Lake, Randlett Pond, and Dolloff Brook.
 - The aquatic life integrity was rated severe at Lake Waukewan, Lake Winona, and Hawkins Brook.
 - All waterbodies received a poor grade for fish consumption because of mercury.
- Meredith's forests and fields provide habitat to wildlife in town. Fifty percent (12,891 acres) of the land in Meredith is important wildlife habitat according to NH Fish & Game Wildlife Action Plan. Of that, nearly 25% (2,944 acres) have been permanently conserved.

NATURAL RESOURCES

Introduction

This profile will explore Meredith's critical role in resource protection and stewardship in collaboration with surrounding watershed communities and the importance for collaboration to protect the watersheds that benefit the Lakes Region.

Ranked Habitat and Habitat Types

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:

Habitat land cover – shows where the different types of wildlife habitat are located throughout the state; and

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.

Meredith's Wildlife Action Plan map can be found at the end of this profile.

Habitat Types

Hemlock-Hardwood-Pine is the most common habitat type in Meredith as it makes up nearly 60% of the Town's land (14,920 acres). Of that, 19% of the Hemlock-Hardwood-Pine habitat is conserved in Meredith. . This habitat type 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.

The second largest habitat type is Appalachian oak-pine which covers 21% of the land in Meredith. Seventeen percent of the Appalachian oak-pine habitat is conserved. Because of their expansiveness, many large wildlife species depend on this habitat for part or all their life cycle including black bears.

Wet meadow/shrub wetland covers 747 acres or 3% of the total land area of Meredith, of which 32% are permanently conserved. Wet meadows/shrub wetlands are often grouped into three broad habitat categories: wet meadows, emergent marshes, and scrub-shrub wetlands and are important for flood management, are typically controlled by groundwater, and are vital food sources for many threatened and endangered wildlife species. New Hampshire considers wet meadow/shrub wetland to be a rare habitat in the state.

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

Grasslands, cover 643 acres or 3% of the total land area of Meredith, of which 18% are permanently conserved. Considering only 8% of grasslands in New Hampshire are currently under conservation easements (<https://www.wildlife.nh.gov/wildlife-and-habitat/wildlife-habitat-program/habitat-types-and-species>), Meredith is ahead in the conservation of this rare habitat. Comprised of grasses, sedges,

and wildflowers, grassland communities provide ideal habitat for state endangered and threatened species of wildlife including the American Bumble Bee, Eastern Box Turtle, Northern Leopard Frog and others.

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 Meredith, there are 322 acres of these swamps that make up 1% of the land in town. Almost a quarter, (22%) of the temperate swamps in Meredith are permanently conserved.

Peatlands, which the state has determined are extremely rare, are of extreme importance for carbon sequestration, and are vital to many rare plants and wildlife species that depend on them. There are 258 acres of peatlands in town. Twenty-eight percent of this extremely rare habitats permanently conserved in Meredith.

Peatlands, temperate swamps, grasslands, and wet meadows/shrub wetlands are rare habitat types in New Hampshire and together account for a total of 8% of Meredith's land area. Although these rare habitats all account for small percentages of town, they total nearly 2,000 acres (1,969 acres) of town. Of these rare habitats, on average 25% of them have been conserved. Although that is a good start, there are still lots of conservation opportunity for these rare habitats should the Town prioritize.

This opens up an important conservation consideration for the Town of Meredith. Nearly 80% of land in Meredith is hemlock-hardwood-pine and Appalachian oak-pine habitats, of which 18% have been conserved. Conversely, the rarer habitats (peatlands, temperate swamps, grasslands, wet meadows/shrub wetlands) account for 8% (1,969 acres) of the land in town, of which a quarter have been permanently conserved.

Ranked Habitats

As previously mentioned, the habitat types described above are identified as rare habitat types in the NH Wildlife Action Plan. If the town wants to focus conservation efforts on these habitats, Meredith could utilize the prioritized habitat sections described below to identify the largest unfragmented areas where these habitats are found. This helps determine the high priority areas relative to the town's conservation interests. Table 1 breaks out the three Wildlife Tiers in Meredith by the town's total land area (not including waterbodies). As identified in Table 1, Tier 1 habitats (those that are ranked the highest ranked habitat in the state) account for 14% of Meredith's total land area as classified in the Wildlife Actions Plan and 19% are conserved. For Tier 2 habitats (lands that are highest ranked in the biological region), Meredith has 1,869 total acres, which is 7% of the total area in Meredith. Tier 2 is Meredith's highest percentage of conserved lands at 39% conserved. Tier 3 habitats, also known as supporting landscapes, total 7,419 acres accounting for 29% of the town's total area and 21% are conserved. These Wildlife Tiers can be found on the Wildlife Action Plan Map found at the end of this profile.

Table 1: Wildlife Action Plan – Total Priority Habitat for all 3 Tiers (Land Acres in Meredith)				
WAP Tier	Land Acres in Town	% of town (land)	Conserved Land Acres	% of Conserved (Land)
Tier 1: Highest Ranked Habitat in State	3,603	14%	677	19%
Tier 2: Highest Ranked Habitat in Biological Region	1,869	7%	721	39%
Tier 3: Supporting Landscapes	7,419	29%	1,546	21%

Prioritized Wildlife 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 communities.

The NH Wildlife Corridors Map assists communities to identify the key surrounding areas, of these identified priority habitats, which may have development pressures; and in turn, impact these state identified priority habitat areas. Together, these resources can help drive community land use decisions and policy making based on the character and vision of the community. The identified prioritized wildlife areas in Meredith, that were identified by the state, are identified in Priority Habitat Blocks based on acreage. The subsections of this profile below present the 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 conserved in town. A visual of the priority habitat blocks and state identified habitat corridors can be found on the Prioritized Areas and Habitats Map found at the end of this profile.

Priority Habitat Blocks

Though the Meredith Conservation Commission already strives to conserve unfragmented parcels in town to provide a larger area for wildlife habitat, this section will further assist the town to identify Meredith's existing prioritized habitat locations and its corresponding conservation status which can help the town to make future conservation decisions. The state has identified 14 blocks in Meredith as priority habitat areas. Prioritized Habitat Blocks shows 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 higher acreage of those these areas of prioritized habitat.

Blocks 1, 2, and 3

As shown in Table 2, majority of the habitat that makes up Blocks 1, and 2, and 3 are composed of Hemlock-hardwood-pine which are common habitat types in the state. Though Hemlock-hardwood-pine habitat type is common in the state, these types of habitats still provide valuable homes and resources to wildlife and the town. No areas within blocks 1, 2 & 3 have been conserved.

Blocks 4, 5, 6, and 7

Table 3 shows priority habitat blocks 4, 5, 6 and 7. Nearly 70% of Block 4, and 50% of Block 6 are composed of Appalachian oak-pine, which is a common habitat in the state. All of Block 5 and Block 7 are composed of Hemlock-hardwood-pine habitat. However, 10% of Block 4 and 20% of Block 6 contain wet meadow/shrub wetland which is a rare habitat type in the state. It should be noted that 0% of Blocks 4,5,6 and 7 are conserved.

Table 2: Priority Habitat Blocks 1, 2, & 3

Block Number	Total block acres	Habitat type	Acres	Percent of total block
Block 1	63	Appalachian oak-pine	4	7%
		Developed Impervious	0.3	1%
		Developed or Barren land	1	2%
		Grassland	0.1	0%
		Hemlock-hardwood-pine	57	90%
Block 2	67	Developed Impervious	0.3	0%
		Developed or Barren land	0.2	0%
		Grassland	1	2%
		Hemlock-hardwood-pine	65	96%
		Temperate swamp	0.1	0%
Block 3	77	Appalachian oak-pine	0.5	1%
		Hemlock-hardwood-pine	75	98%
		Peatland	0.4	1%
		Wet meadow/shrub wetland	0.5	1%

Table 3: Priority Habitat Blocks 4, 5, 6, & 7

Block Number	Total block acres	Habitat type	Acres	Percent of total block
Block 4	86	Appalachian oak-pine	59	69%
		Hemlock-hardwood-pine	3	3%
		Open water	14	16%
		Temperate swamp	2	2%
		Wet meadow/shrub wetland	8	10%
Block 5	106	Hemlock-hardwood-pine	106	100%
Block 6	116	Appalachian oak-pine	58	50%
		Developed Impervious	0.2	0%
		Hemlock-hardwood-pine	2	1%
		Open water	28	24%
		Peatland	6	5%
		Temperate swamp	0.3	0%
		Wet meadow/shrub wetland	23	20%
Block 7	159	Hemlock-hardwood-pine	159	100%

Blocks 8 and 9

As identified in Table 4, though most of Block 8 is composed of Appalachian oak-pine (63%), there are also rare habitats including temperate swamp (15%) and wet meadow/shrub wetland (6%). The majority of Block 9 (78%) is composed of the hemlock-hardwood-pine habitat type; however, other more rare habitats exist, although in small acreages. About $\frac{1}{4}$ of Blocks 8 and 9 have been permanently conserved.

Blocks 10, 11, and 12

Table 5 identifies priority habitat blocks 10, 11, and 12. Almost all of Blocks 10 and 11 are composed of hemlock-hardwood-pine habitat. Although most of Block 12 is open water, 26% is made up of the two most common habitat types in the state. While more than two-thirds of Block 11 is conserved, only 6% of Block 10 and 2% of Block 12 is permanently conserved.

Table 4: Priority Habitat Blocks 8 & 9

Block Number	Total block acres	Habitat type	Acres	Percent of total block
Block 8	251	Appalachian oak-pine	159	63%
		Hemlock-hardwood-pine	13	5%
		Open water	20	8%
		Peatland	6	3%
		Temperate swamp	37	15%
		Wet meadow/shrub wetland	15	6%
Block 9	319	Appalachian oak-pine	42	13%
		Developed Impervious	1	0%
		Developed or Barren land	1	0%
		Grassland	0	0%
		Hemlock-hardwood-pine	250	78%
		Northern hardwood-conifer	0	0%
		Open water	5	2%
		Peatland	2	1%
		Temperate swamp	4	1%
		Wet meadow/shrub wetland	13	4%

Table 5: Priority Blocks 10, 11, & 12

Block Number	Total block acres	Habitat type	Acres	Percent of total block
Block 10	391	Appalachian oak-pine	1	0%
		Cliff and Talus	1	0%
		Developed Impervious	0	0%
		Hemlock-hardwood-pine	386	99%
		Open water	1	0%
		Wet meadow/shrub wetland	2	0%
Block 11	478	Hemlock-hardwood-pine	477	100%
Block 12	958	Appalachian oak-pine	109	11%
		Developed Impervious	23	2%
		Developed or Barren land	12	1%
		Grassland	1	0%
		Hemlock-hardwood-pine	141	15%
		Open water	658	69%
		Temperate swamp	1	0%
		Wet meadow/shrub wetland	13	1%

Blocks 13 and 14

Finally, Table 6 displays priority habitat blocks 13 and 14. It should be noted that though both of these have the largest acreage, much of the priority block is composed of open water. Priority Block 14 is the largest identified priority habitat area at 9,265 acres. This is because 7,249 acres of it or 78% is open water. 19% of Block 14 is composed of Appalachian-oak-pine and hemlock-hardwood-pine, the two most common habitats in the State. Seventeen percent of Block 13 is permanently conserved, while 4% of Block 14 is conserved (these numbers can be misleading considering the

Table 6: Priority Habitat Blocks 13 & 14

Block Number	Total block acres	Habitat type	Acres	Percent of total block
Block 13	1,284	Appalachian oak-pine	150	12%
		Cliff and Talus	4	0%
		Developed Impervious	25	2%
		Developed or Barren land	21	2%
		Grassland	10	1%
		Hemlock-hardwood-pine	221	17%
		Open water	678	53%
		Peatland	1	0%
		Temperate swamp	3	0%
		Wet meadow/shrub wetland	171	13%
Block 14	9,265	Appalachian oak-pine	995	11%
		Developed Impervious	128	1%
		Developed or Barren land	99	1%
		Grassland	6	0%
		Hemlock-hardwood-pine	736	8%
		Northern swamp	2	0%
		Open water	7,249	78%
		Peatland	15	0%
		Temperate swamp	17	0%
		Wet meadow/shrub wetland	17	0%

amount of open water in the respective blocks). As shown in the Meredith Priority Habitat Blocks Map found at the end of this profile, Block 13 is located along Meredith's shoreline on Lake Winnisquam and generally just north of Lake Winnisquam and majority of Block 14 is located at Bear Island and a few smaller islands that surround Bear Island.

Thinking back to one overarching conservation consideration for the Town of Meredith, [Where would the Town of Meredith like to focus conservation efforts?](#), this section provides a great deal of information.

- If the Town would like to expand conservation of common habitat types, any one of the Priority Habitat Blocks can be focused on. Hemlock-hardwood-pine and Appalachian oak-pine habitats are large percentages of all blocks.
 - Because of that, the next consideration could be whether the Town would like to expand conservation efforts in Blocks where conserved land already exists. If that is the case, focus should be placed on Blocks 13, 11, 9, and 8.
 - However, if the Town would like to direct efforts in areas that have little existing conserved areas, focus should be placed on Blocks 14, 12, 10, 7, 6, and 5.

- If the Town would like to focus conservation efforts in areas with more rare habitats including grasslands, temperate swamps, wet meadow/shrub wetlands, and peatlands, than Block 13 should be considered. This block contains 185 acres of those four rare habitat types. Beyond that, Blocks 6, 8, 9, and 14 have the next largest acreages of those rare habitat types.

Conservation Takeaways

After review of Meredith's habitat types and composition within the town, it is clear that the town plays a significant role in providing important land for wildlife habitat however, there are several identified prioritized habitat blocks that are not conserved. The state identified 14 Priority Blocks or areas in Meredith that can be used to guide future conservation efforts. In comparison to other towns in the state, Meredith has a larger number of state identified Priority Habitat Blocks. The total acreage of Meredith's 14 identified Priority Habitat Blocks is 13,620 in which only 1,336 acres (9.8%) is conserved. Though most of Meredith's habitat type is composed of Appalachian-oak-pine and hemlock-hardwood-pine which is a common habitat type across New Hampshire, some areas in Meredith contain rare habitat types that are vital for wildlife habitat including grasslands, wet meadow/shrub wetland, peatland, and temperate swamp. If the town wants to add to its conservation priorities, the town could consider conserving/protecting rare habitats.

Soils, Topography, and Slope

Soils

Soils rarely change over the course of a span of time since the last Master Plan. Meredith's economy was once agriculturally based and many residents relied on their farmland to provide. Overtime, industrialization, and other factors influenced Meredith's economy to transition to more tourist, recreation, and lodging based. Despite there not being many farms left in town, Meredith has a significant amount of locally identified important agricultural soils. The state and Meredith's Natural Resource Inventories (2005 & 2009) identify that Meredith'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. Meredith has a total of 591 acres of Prime Farmland soils or 2% of the town's total land area of which 16% or 97 acres is conserved.

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. Meredith has a total of 533 acres of Farmland of Statewide Importance soils or 2% of the town of which 11 acres are conserved.

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. Of the three categories, Meredith has the most identified farmland soils of local importance at 78% (20,084 acres) of the town land of which 16% (3,294 acres) is conserved.

In total, Meredith has 21,208 acres of important farmland soils (prime, state and local) that accounts for 83% of the town. However, in total only 16% or 3,402 acres is conserved.

Topography and Slope

Like soils, topography and slope are intertwined and likely have not changed overtime. Meredith's 2005 and 2009 Natural Resource Inventories and 2023 Hazard Mitigation Plan identify that Meredith's topography consists of rolling hills interrupted by narrow valleys and steep mountains. Many of Meredith's brooks that feed major waterbodies are located in areas of steep slopes. The majority of the steepest slopes are located in the southwestern portion of Meredith, where the highest peaks (Ladd Mountain, Leavitt Mountain, Saddle Hill, Bachelder Hill, and Meredith Hill) are located. The highest point in Meredith at an elevation of 1,414 feet is Leavitt Mountain and approximately 336 acres in Meredith lies at about 1,200 feet in elevation.

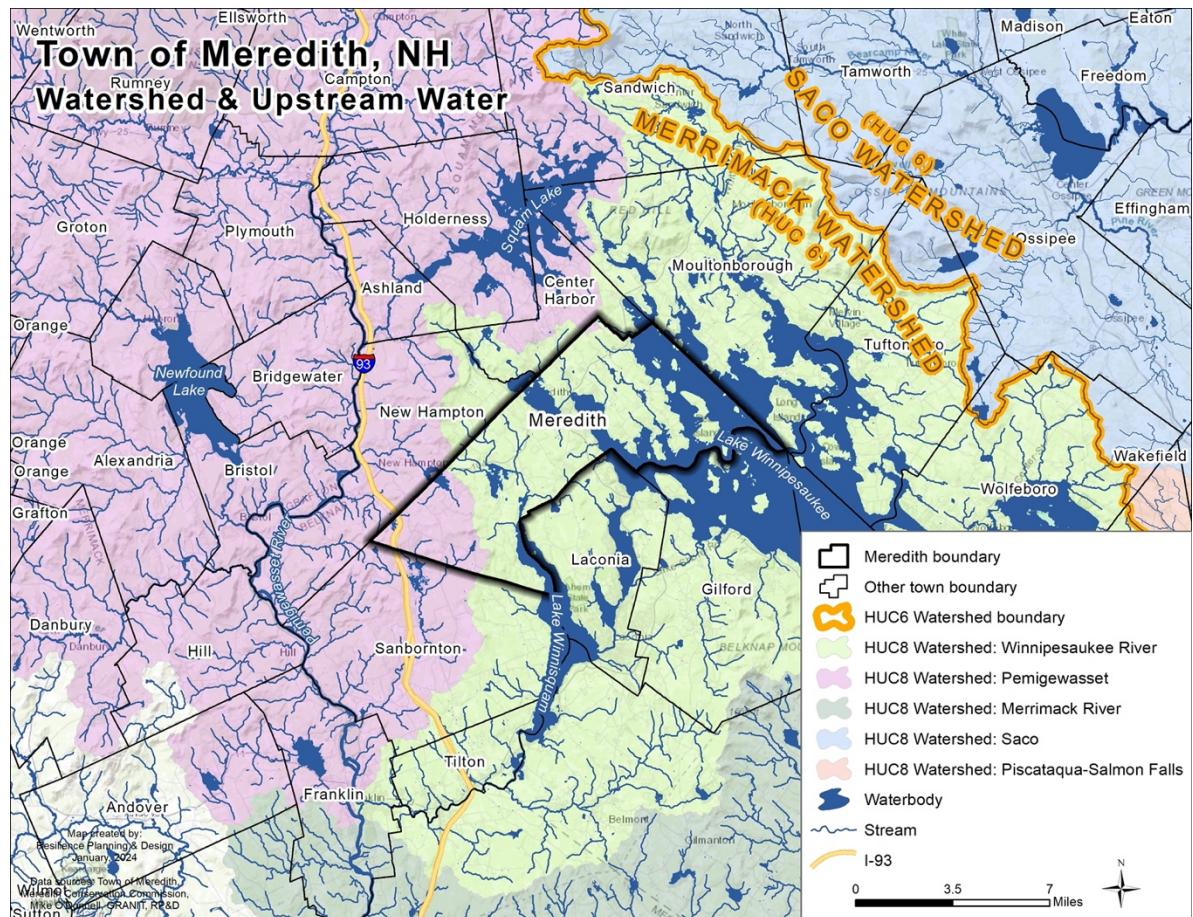
Water Resources

Meredith's water resources play a significant role in the services, health, and quality of life in town. In fact, about 27% of Meredith's total area is composed of waterbodies. It is important to analyze this critical resource further to identify the existing water supply, water quality, understand where Meredith lies within watersheds, and provide an inventory of Meredith's ample water resources and examining potential impacts to them. 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. It is important to analyze this critical resource further to identify the existing water supply, water quality, understand where Meredith lies within watersheds, and provide an inventory of Meredith's ample water resources and examining potential impacts to them.

Watersheds

The following section describes the watersheds that Meredith lies within, as well as provides an important understanding of how Meredith's geographical location within these watersheds influence the surface waters within and beyond the town's jurisdictional boundaries.

Meredith lies



within the Merrimack River Watershed (classified as a HUC6 watershed). The smaller the HUC number, the larger the watershed is. The Merrimack River is made up of several smaller subwatersheds and Meredith lies within two HUC8 watersheds: the Winnipesaukee River Watershed and the Pemigewasset Watershed. The Winnipesaukee River Watershed accounts for 84% of the entire town. Meredith's location within the Winnipesaukee River Watershed, and amount of the watershed that Meredith lies within, is significant because it means Meredith is directly responsible for the majority of water flowing into the western corner of Lake Winnipesaukee. From Lake Winnipesaukee, the water flows out through the 5th ordered Winnipesaukee River. Eventually, the Winnipesaukee River flows into the Merrimack River, one of the few 7th ordered streams/rivers in New Hampshire. For stream order classifications, the larger the number, the larger the stream or river size. Because this water then flows into the Merrimack River, it places a large responsibility on Meredith for the quality of two significant waterbodies in the state – Lake Winnipesaukee and Merrimack River.

A visual of where Meredith lies within the HUC 8 watersheds (the Winnipesaukee River Watershed and the Pemigewasset Watershed), and the town's upland streams is shown on the Town of Meredith, NH Watershed and Upstream Water Map above.

Surface Waters

This surface water section provides a brief summary of information related to the existing rivers, streams, wetlands, and other waterbodies in Meredith according to New Hampshire Department of Environmental Services; as well as provides insight on the importance of waterbody buffers and describes Meredith's land area containing surface waters.

Streams in Meredith

Nearly all of the perennial streams in Meredith are first or second order streams and the only third order stream is Mill Brook below Lake Wicwas. Due to Meredith's composition of relatively low elevation, hilly topography, and numerous lakes, the drainage that flow into the large water bodies in town are fairly short.

Table 7 identifies a list of the rivers and streams in Meredith according to NH Department of Environmental Services (NHDES).

Table 7: Designated Streams and Rivers in Meredith

NHDES Waterbody ID #	NHDES Stream Name	Watershed	NRI Geographical Location
NHRIV700020109-04	Mead Brook	Meredith Bay	Meredith Neck
NHRIV700020107-02	Page Brook	Sanders Bay	Meredith Neck
NHRIV700020105-04	Bartlett Brook	Center Harbor	Near Leavitt Park, crosses NH 25
NHRIV700020109-07	Owens Brook	Meredith Bay	Meredith Neck
NHRIV700020109-01	Hawkins Brook	Meredith Bay	Along Rt 3 N
NHRIV700020108-04	Reservoir Brook	Lake Waukewan	South of Lake Waukewan
NHRIV700010801-02	Merrill Brook	Bristol/New Hampton Tributaries	West of <u>Pemi</u> Lake
NHRIV700020201-03	Dolloff brook	<u>Winnisquam</u> Lake	North Central
NHRIV700020201-04	Blake Brook	<u>Winnisquam</u> Lake	West central
NHRIV700020201-25	Collins Brook	<u>Winnisquam</u> Lake	South central
NHRIV700020201-08	Mill Brook	<u>Winnisquam</u> Lake	Meredith Center
NHRIV700020201-06	Hatch Brook	<u>Winnisquam</u> Lake	West of Lake Waukewan
NHRIV700010802-04	Hermit Brook (Salmon Brook)	Salmon Brook	SW edge of town
NHRIV700020201-09	Stoney Brook	<u>Winnisquam</u> Lake	West of Lake Winnisquam

Open Water Resources

Within the Town of Meredith, open water (lakes and ponds) accounts for more than a quarter of the town (9,288 acres) and includes twelve named waterbodies that are shown in Table 8. It should be noted that not the entirety of all these waterbodies is contained solely to Meredith's jurisdictional boundaries. Some amount of the ponds and lakes, as shown in Table 8, fall within the town boundary. The most notable is Lake Winnipesaukee, of which only 16% of its waters are within Meredith, and Lake Waukewan, of which about 70% is contained within Meredith. Whereas other ponds/lakes such as Lake Wicwas, Spectacle Pond, and Randlett Pond are contained solely within Meredith.

In addition to the surface waterbodies listed in Table 8, Meredith also has a number of small vernal and seasonal pools that are ephemerally inundated during the winter and spring months. According to Meredith's 2005 NRI, vernal pools "contain open water for approximately 2 months or more during the growing season at a sufficient depth to support certain species of breeding amphibians and invertebrates. They do not generally contain fish, yet are an excellent intermediate habitat for small to medium-sized mammals, reptiles, and amphibians. Seasonal pools, by contrast, do not contain "obligate" species of breeding amphibians, but do typically contain a number of invertebrate species that support lower food chain wildlife".

Wetlands

As identified in Meredith's Natural Resource Inventories, Meredith has six identified prime wetlands. Table 9 displays Meredith's prime wetlands, their acreage, and brief description of their importance. Hawkins Brook was once considered a prime wetland in the first phase 2005 NRI however, it was recommended in Phase 2 2009 NRI that Hawkins Brook be reclassified as a designated wetland instead. After further research and field investigation was conducted through the 2009 NRI, it was recommended that Hawkins Brook be declassified as a prime wetland due to the degree of fragmentation and degradation. The Meredith Conservation commission agreed to reclassify from a prime wetland to a designated wetland status.

Table 8: Meredith Waterbodies
Source: Meredith's 2005 & 2009 NRI

Name	Acreage
Lake Winnipesaukee	44,586
Lake Winnisquam	4,264
Lake Waukewan	954
Lake Wicwas	334
Lake Winona	148
Pemigewasset Lake	259
Pickerel Pond	80
Randlett Pond	32
Page Pond	30
Spectacle Pond	29
Forest Pond	19
Swain's Pond	4
Mud Pond	3

Table 9: Meredith's Prime Wetlands

Source: 2005 & 2009 NRI

Name	Acreage	Description
Dolloff Brook	192.2	A 1 st order stream that descends from Dolloff Hill in New Hampton and is joined by an outflow stream from Forest Pond and flows into Lake Wicwas as its largest tributary. Dolloff Brook itself passes under NH 104 before entering Lake Wicwas and therefore carries some risk of transporting roadside pollutants into Lake Wicwas.
Blake Brook	143.2	Forms a highly irregular wetland complex west of Dolloff Brook on both sides of Route 104. It includes much of the watershed divide area between Lake Wicwas and Pemigewasset Lake. After Page Brook, this prime wetland contains the highest number of individual wetland units of any wetland complex in Meredith. Blake Brook has over 12 road crossings and is severely affected by road-related pollution associated with Route 104.
Hatch Brook	213	Lies between Winona Road and Hatch Corner Road and includes a historically dammed beaver flowage that drains southerly into Mill Brook on the south side of Route 104. It is the largest open wetland complex that is visible from Route 104 in Meredith and was one of the first prime wetlands to be nominated owing to its superb wildlife habitat for migratory waterfowl.
Mill Brook	132.9	Includes three large beaver meadows on either side of Mill Brook near Meredith Center. The Meredith Center Road is the only major roadway that crosses this wetland, yet several historic alterations to the wetland took place during the height of agricultural and silvicultural activity in Meredith Center in the early 19th century. Several old dams are still visible along the main course of Mill Brook
Page Brook	281.4	The largest and most complex wetland in town. Page Brook also has small ponds that are periodically inundated by beavers. The largest of these is called Page Pond (36 acres)
Stoney Brook	207.2	Is Meredith's second largest prime wetland. Most of the Stoney Brook wetland lies along the edge of Chemung Road, although Tucker Mountain Road and Weed Road cross portions of it as well.

The Shoreland Water Quality Protection Act (SWQPA)

The Shoreland Water Quality Protection Act (SWQPA) includes all lands in Meredith 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.

A 250-foot buffer was applied to each surface water resource meeting these criteria to create a 2,079 acre SWQPA area. Of that, 14% (300 acres) has been permanently conserved.

Water Quality Assessment

The 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 Meredith'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.

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

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 Meredith to better understand the role of agricultural pollution/runoff, the Town could contact NHDES for more information.

Table 11 shows the overall assessment for the major ponds, lakes, and streams in Meredith. 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 11, there appears to be concerns for Lake Waukewan and Lake Winona for Primary Contact Recreation as it was ranked as poor by the state. Additionally, the state rated the aquatic life integrity poor at Lake Winnipesaukee, Lake Winnisquam, Lake Wicwas, Pemigewasset Lake, Randlett Pond, and Dolloff Brook. The aquatic life integrity was rated severe according to NHDES at Lake Waukewan, Lake Winona, and Hawkins Brook. In order address these issues, NHDES developed Watershed Management Plans in collaboration with stakeholders within the watersheds. These watershed management plans included the Winnisquam Watershed Plan, the Winnipesaukee Subwatershed Plan, and the Waukewan-Winona Restoration Plan. These plans are

further discussed later on in this profile. Table 10 below simples the major waterbodies that the state considered impaired based on the NHDES assessments.

Table 10: Surface Waters with Impairments	
Waterbody	Impairment
Lake Waukewan	Dissolved oxygen saturation, Dissolved oxygen concentration, pH (aquatic life activity), Cyanobacteria hepatotoxic microcystins (Primary contact recreation)
Lake Winnipesaukee	Non-Native Aquatic Plants, pH (aquatic life integrity)
Lake Winnisquam	Non-Native Aquatic Plants, Turbidity, pH (aquatic Life integrity)
Randlett Pond	pH (aquatic life integrity)
Pemigewasset Lake	pH (aquatic life integrity)
Lake Wicwas	Dissolved oxygen saturation, pH (aquatic life integrity)
Dolloff Brook	pH (aquatic life integrity)
Lake Wicwas Outlet	pH (aquatic life integrity)

Note* all waterbodies are impaired for fish/shellfish consumption due to mercury.

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 here (<https://nh-department-of-environmental-services-open-data-nhdes.hub.arcgis.com/apps/NHDES::nhdes-2020-2022-surface-water-quality-assessment-viewer/explore>) This tool allows users to identify particular lakes, rivers, and waterbodies and their associated assessment every two years dating back to 2008.

Table 11: Major Ponds, Lakes, and Streams in Meredith

Waterbody ID#	Water Body Name	Watershed	Aquatic Life Integrity	Fish Consumption	Public Drinking Water Supply	Primary Contact Recreation	Secondary Contact Recreation	Wildlife	Assess. Unit Category
NHLAK7000 20110-02-19	Lake Winnipesaukee	Paugus Bay	4A-M	4A-M	2-G	2-M	2-M	3-ND	4A-M
NHLAK7000 20201-05-01	Lake Winnisquam	Winnisquam Lake	5-M	4A-M	2-G	3-PAS	2-G	3-ND	5-M
NHLAK7000 20108-02-01	Lake Waukewan	Lake Waukewan	5-P	4A-M	2-G	5-M	3-ND	3-ND	5-P
NHLAK7000 20201-04	Lake Wicwas	Winnisquam	5-M	4A-M	2-G	2-G	2-G	3-ND	5-M
NHLAK7000 20108-02-02	Lake Winona	Lake Waukewan	5-P	4A-M	2-G	5-M	2-G	3-ND	5-P
NHLAK7000 10801-01	Pemigewasset Lake	Bristol-New Hampton Tribs	5-M	4A-M	2-G	2-G	2-G	3-ND	5-M
NHLAK7000 20201-03	Pickerel Pond	Winnisquam Lake	3-ND	4A-M	2-G	3-ND	3-ND	3-ND	3-ND
NHLAK7000 10802-04	Randlett Pond	Salmon Brook	4A-M	4A-M	2-G	3-ND	3-ND	3-ND	4A-M
NHLAK7000 20107-01	Page Pond	Sanders Bay	3-ND	4A-M	2-G	3-ND	3-ND	3-ND	3-ND
NHLAK7000 10801-02	Spectacle Pond	Bristol-New Hampton Tribs	3-ND	4A-M	2-G	3-ND	3-ND	3-ND	3-ND
NHLAK7000 20201-01	Forest Pond	Winnisquam Lake	3-ND	4A-M	2-G	3-ND	3-ND	3-ND	3-ND
NHRIV7002 0109-04	Mead Brook	Meredith Bay	3-ND	4A-M	2-G	3-ND	3-ND	3-ND	3-ND
NHRIV7002 0107-02	Page Brook	Sanders Bay	3-ND	4A-M	2-G	3-ND	3-ND	3-ND	3-ND
NHRIV7002 0105-04	Bartlett Brook	Center Harbor	3-ND	4A-M	2-G	3-ND	3-ND	3-ND	3-ND
NHRIV7002 0109-07	Owens Brook	Meredith Bay	3-ND	4A-M	2-G	3-ND	3-ND	3-ND	3-ND
NHRIV7002 0109-01	Hawkins Brook	Meredith Bay	5-P	4A-M	2-G	3-ND	3-ND	3-ND	5-P
NHRIV7002 0108-04	Reservoir Brook	Lake Waukewan	3-ND	4A-M	2-G	3-ND	3-ND	3-ND	3-ND
NHRIV7001 0801-02	Merrill Brook	Bristol-New Hampton Tribs	3-PAS	4A-M	2-G	3-ND	3-ND	3-ND	3-PAS
NHRIV7002 0201-03	Dolloff brook	Winnisquam Lake	5-M	4A-M	2-G	2-G	2-G	3-ND	5-M
NHRIV7002 0201-04	Blake Brook	Winnisquam Lake	3-ND	4A-M	2-G	3-ND	3-ND	3-ND	3-ND
NHRIV7002 0201-08	Mill Brook	Winnisquam Lake	5-M	4A-M	2-G	3-ND	3-ND	3-ND	5-M
NHRIV7002 0201-06	Hatch Brook	Winnisquam Lake	3-ND	4A-M	2-G	3-ND	3-ND	3-ND	3-ND
NHRIV7001 0802-04	Hermit Brook (Salmon Brook)	Salmon Brook	3-PAS	4A-M	2-G	3-ND	3-ND	3-ND	3-PAS

Water Supply

This section highlights Meredith's existing water supply and issues related to water quality in town. Meredith's Water and Sewer Department supplies water and sewer to 1,367 Meredith residents. The department supplies water to about 767 residents and the Meredith Village business community. According to the Meredith Water and Sewer Department, approximately 45% of Meredith's resident population is serviced by the municipal water system. The water supply for the town water system is Lake Waukewan. Treatment of the lake water occurs at a modern filtration plant with a capacity of one million gallons per day. The water is treated to eliminate turbidity, to adjust pH, and to disinfect. The treated water is stored in a 1.5 million gallon water tower, which pressurizes the water distribution

system. The system has been extended and improved recently, and now includes approximately 17 miles of water mains.

Groundwater

This groundwater section provides information on Meredith's groundwater resources such as the types of aquifers in Meredith and their relative percentage of development or forested land cover based on NH Fish & Game's Wildlife Action Plan Habitats. 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. 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".

Only 6% of Meredith's land area is over stratified drift aquifers. Moderate producing aquifers are classified as those with between 1,000-2,000 sq/ft per day, with low producing aquifers less than 1,000 sq/ft per day. With that in mind, 8% of all land on top of aquifers has been permanently conserved. However, 27% of land above low producing aquifers and 42% of land above moderate producing aquifers have been developed. Conversely, an average of 36% of land above both low and moderate producing aquifers remains forested. There are many variables that determine the impact of development over aquifers including specific pollution compounds, upstream contaminants, soil type, and others. As discussed in Meredith's NRIs, the largest aquifer in Meredith is found along Hawkins Brook and is composed of a 126-acre medium-yield (1000 – 2000 acre-feet per day) aquifer surrounded by a 314-acre low-yield (0 – 1000 acre-feet per day) aquifer. The only other medium-yield aquifer is along Bartlett Brook next to Lake Winnipesaukee at the north edge of town. This 33-acre aquifer is surrounded by a 38-acre low-yield aquifer upstream. Both the Hawkins Brook aquifer and the Bartlett Brook aquifer areas are characterized by a fairly high density of residential homes. The Hawkins Brook aquifer, however, also holds several commercial developments including gas stations and garages, restaurants, and the town transfer station. Other stratified drift aquifers in Meredith are low-yield aquifers along drainageways and near lakes or ponds. A visual of Meredith's aquifers can be found on the Subsurface Resources and Development Map 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. These GA2 areas overlay 58% (158 acres) of the more productive stratified drift aquifers in Meredith and are located north of the Meredith Bay inlet starting at the US 3 and NH 25 intersection to the Center Harbor town line and a small area located near Leavitt Park. 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.

Potential Contamination

The following section discusses NHDES identified potential contamination sites in Meredith and explains the importance of monitoring these locations to prevent contamination in Meredith and its shared waterbodies. Identifying potential contamination sites in Meredith is critical to allow the town to monitor them. Some potential contamination sources can include above and underground storage tanks, nonsecure environmental monitoring sites, hazardous waste generators, solid waste facilities, and others. There are a total of eighteen active potential contamination sites within the 250-foot SWQPA buffer. Tables 12, 13, and 14 display the total active potential contamination sites in Meredith, within the SWQPA buffer, and within hydrologic areas of concern according to NHDES. Tables 12, 13, and 14 identify that 39% (52 total) of the active potential contamination sites in Meredith are underground storage tanks and that about 37% (49 total) are remediation sites. NHDES defines remediation sites as “removing polluted or contaminated soil, sediment, surface water, or groundwater to reduce the impact on people or the environment”. Site Remediation acts as a safeguard that is in place to prevent contamination by working to clean up areas impacted by pollution in the past and the present.

Table 12: Total Potential Contamination Sites in Meredith

Site type	Number active	Number inactive	Number declassified	Other	Total number
Aboveground Storage Tank	2				2
Air Facility Systems	1				1
Automotive Salvage Yards	1				1
Hazardous Waste Generators	9	17	8		34
Local Potential Contamination Sources	18				18
Remediation Sites	49	83			132
Solid Waste Facilities	1	1			2
Underground Storage Tank	52				52
Total	133				242

Table 13: Potential Contamination Sites within the SWQPA

Site type	Number active	Number inactive	Number declassified	Other	Total number
Hazardous Waste Generators	2	3	1		6
Remediation Sites	5	19			24
Underground Storage Tank	11				11
Total	18				41

Table 14: Potential Contamination Sites within the Hydrologic Areas of Concern

Site type	Number active	Number inactive	Number declassified	Other	Total number
Hazardous Waste Generators	1	6	3		10
Local Potential Contamination Sources	14				14
Remediation Sites	7	10			17
Underground Storage Tank	6				6
Total	28				47

NHDES has identified these local potential contamination sites/sources in town. These potential contamination sites/sources are somewhat dispersed throughout town however, they are mostly located in Meredith Village, just north of Meredith Village at the intersection of US Route 3 and NH Route 25, south of Meredith Village along US Route 3 on the west side of Meredith Bay, and the general area around Lake Waukewan. A visual of where these potential contamination sites in Meredith can be found is provided on the Potential Contamination Sites Map found at the end of this profile.

Wellhead Protection Areas

Using data from the NHDES identified potential contamination sites in Meredith, this section describes the identified types of potential contamination sites that fall within wellhead protection areas.

According to the Meredith Water and Sewer Department, approximately 45% of Meredith's resident population is serviced by the municipal water system. The remaining approximately 55% of Meredith's properties in town utilize private wells as their primary water source. The wellhead protection areas can be seen on the Potential Contamination Sites Map found at the end of this profile. There are four pockets of wellhead protection areas in Meredith located just north of Meredith Village at US Route 3 and NH Route 25, south of Meredith Village on US Route 3 on the west side of Meredith Bay, a small pocket near Leavitt Park, and on the southwestern tip of Meredith Neck. While there are potential contamination sites scattered around wellhead protection areas, it appears that there are two general areas of town that are main pockets: Meredith Village (including just north and south of the village) and parts of Meredith Neck.

Table 15 identifies that there are a total of 36 potential contamination sites located within wellhead protection areas in Meredith. However, there are a total of 20 active potential contamination sites within these wellhead protection areas.

Table 15: Potential Contamination Sites within the Wellhead Protection Areas

Site type	Number active	Number inactive	Number declassified	Other	Total number
Air Facility Systems	1				1
Hazardous Waste Generators	1	1			2
Local Potential Contamination Sources	3				3
Remediation Sites	7	15			22
Underground Storage Tank	8				8
Total	20				36

Water Quality Challenges

The following section identifies the water concerns in town and provides a synopsis of the Lake Waukewan and Lake Winona Restoration Plan, the Watershed Plan for Lake Winnipesaukee, and Lake Winnisquam Watershed Plan.

Lake Waukewan and Lake Winona Watershed Restoration Plan - 2016

The Lake Waukewan Watershed provides critical drinking water to the Town of Meredith and the natural attributes that lie upstream of the lake factor greatly into the quality and quantity of water that that lake is supplied with. The Lake Waukewan Watershed lies within the towns of Meredith, New Hampton, Center Harbor, Holderness, and Ashland. Lake Waukewan is the most prominent open water body in the watershed and is approximately 953 acres in size. Lake Waukewan lies at the bottom of the watershed and about 11 miles of its shoreline supports between 150 and 200 Meredith residences and camps.

Lake Winona is located northwest of Lake Waukewan in a mostly undeveloped watershed however there is some year-round and seasonal development on its shoreline. Lake Winona outlets to the Snake River, which flows approximately two miles before emptying into Lake Waukewan.

The goal of the 2016 Lake Waukewan and Lake Winona Watershed Restoration Plan was to identify the water quality issues in both lakes and provide a roadmap for improving the low dissolved oxygen concentrations in the bottom depths of both lakes by reducing pollutant and nutrient inputs, primarily phosphorus. The Plan identified three different sites as impacted by nonpoint source pollutants such as road sediment runoff:

1. Waukewan Lake - Waukewan Lake fails to support designated uses due to a severe dissolved oxygen (DO) and DO saturation impairment (5-P) and a cyanobacteria (hepatotoxic microcystins) impairment (5-M)
2. Waukewan Town Beach - Waukewan Town Beach fails to support aquatic life use due to a DO impairment (5-M).
3. Winona Lake - Winona Lake also fails to support aquatic life use as a result of a severe dissolved oxygen (DO) and DO saturation impairment (5-P).

This is also identified in NHDES's Water Quality Assessments. The Restoration Plan describes that both lakes are impaired for aquatic life use due to low dissolved oxygen concentrations and in the case of Lake Waukewan, cyanobacteria blooms. This 2016 Restoration Plan addresses the dissolved oxygen impairments by focusing on ways to reduce sediment and phosphorus input in the watershed. Potential threats to water quality and public drinking water supply include development pressure, recreation, erosion, aging septic systems and land use practices.

Meredith's 2022 Hazard Mitigation Plan identified water contamination concerns due to the proximity of Meredith's Water and Sewer Department treatment plant to the open waters of Lake Waukewan. Located directly across the street from the Waukewan Beach, the water treatment facility houses a sewer pumping station. Sewer line breaks in this area is a concern however, this risk is reduced due to the fact that the water intake is located approximately 1,700 feet from shore and 35 feet deep. Risk to Lake Waukewan is significantly higher than it is to other waterbodies in town since it is the municipal drinking water source.

Waukewan Watershed Advisory Committee

One of the efforts implemented that came out of the Restoration Plan was to appoint a local advisory committee to address water quality concerns in the Lake Waukewan Watershed. The Waukewan Watershed Advisory Committee is a volunteer advisory committee appointed by the Meredith Board of Selectmen. The Committee provides an organizational structure for citizens and local officials from the five (5) watershed communities to facilitate implementation of the Management Plan for the Waukewan Watershed. The Committee is responsible to enhance public awareness and facilitate education regarding water quality conservation issues throughout the watershed. While maintaining a diverse geographical and stakeholder structure, the committee works collaboratively with local watershed communities, state agencies, local associations, citizens and other partners in the implementation of the Plan.

Lake Winnisquam Watershed Based Plan - 2022

Lake Winnisquam is the fourth largest lake in New Hampshire and includes the towns of Meredith, Laconia, Sanbornton, Belmont, Gilford, New Hampton, and Tilton. From the outlet of Lake Winnisquam, water flows south to Silver Lake then west via the Winnipesaukee River until it joins with the Pemigewasset River to form the Merrimack River in Franklin, NH. It drains Lake Winnipesaukee through Paugus Bay and Lake Opechee via the Winnipesaukee River.

The purpose and overarching goal of the Lake Winnisquam Watershed-Based Plan (WBP) is to guide implementation efforts over the next 10 years (2022-2031) to improve the water quality of Lake Winnisquam such that it meets state water quality standards for the protection of Aquatic Life Integrity. Lake Winnisquam is classified as an oligotrophic, Class B waterbody in New Hampshire and was placed on the New Hampshire Department of Environmental Services (NHDES) 303(d) List of Impaired Waters for the designated use of Aquatic Life Integrity (ALI) due to excessive turbidity coming from Hueber Brook, a small tributary to the southeast side of Lake Winnisquam off Route 3 and near Sun Lake Drive. The Lake Winnisquam Watershed Based Plan identified that Elevated turbidity indicates that Lake Winnisquam is experiencing enhanced sedimentation or infill of sediment and other materials from the landscape. This sediment load is transported out into Lake Winnisquam where a visible 300-ft radius sediment delta has formed over the years. Sediment often transports nutrients such as phosphorus to

surface waters. Phosphorus impacts the water quality of the lakes. Phosphorus in the lakes can be from stormwater runoff from an urban area, shoreline erosion, erosion from construction activities or other disturbed ground particularly along roads, excessive fertilizer applications, illicit connections, failed or improperly functioning septic systems, leaky sewer lines, unmitigated agricultural activities, and pet, livestock, and wildlife waste.

A model was conducted for this Watershed Based Plan that analyzed the changes in phosphorus loading in lake phosphorus concentrations over time from pre-development thorough future conditions showing that the water quality of Lake Winnisquam is threatened by current development activities in the watershed and will degrade further with continued development in the future. During a field survey for this Plan, over 100 problem sites were identified in the watershed and the main issues were unpaved road and ditch erosion, waterfront park and beach erosion, buffer clearing, and untreated urban stormwater runoff. The Lake Winnisquam Watershed Based Plan identified three objectives that can be achieved by Watershed Structural BMPS, monitoring, education and outreach, other actions:

1. Objective 1: Reduce pollutant loading from Hueber Brook to remove Lake Winnisquam's impaired listing for ALI due to excessive turbidity.
2. Objective 2: Mitigate anticipated additional pollutant loading from future development in the watershed.
3. Objective 3: Reduce pollutant loading from existing development in the watershed, especially Black Brook Subwatershed.

A Watershed Plan for Lake Winnipesaukee Plan 1: Meredith, Paugus, and Saunders Bays – 2010

Lake Winnipesaukee is the largest lake in New Hampshire and is located in both Belknap and Carroll counties. The total watershed encompasses a total of eighteen communities eight of which have shoreline on the lake including Meredith. The goal of Watershed Plan "is to halt or minimize further water quality degradation attributable to nutrient inputs, primarily phosphorus in order to maintain our high quality water". During this study, Lake Waukewan and Meredith Bay subwatersheds were the two that contained the highest amount of phosphorus though still below the state level. The outcomes of this plan included how to address these water quality issues, and sixteen planning strategies were identified. Most of these planning strategies are the responsibility of the Planning Board in each community to implement. Some include housing keeping efforts such as integration of erosion and sediment control regulations with stormwater regulations and strengthening the erosion and sediment control plan by moving it from Site Plan Review and Subdivision Regulations to an ordinance. Others addressed increased pollutant load associated with landscape change by incorporating low impact development techniques into the zoning and regulations and requiring BMPs.

Conserved Lands

According to the University of New Hampshire Extension, conserved lands can be defined as "properties that are generally undeveloped and protected from future development". Meredith has a total of 4,418 acres of conserved land totaling 17% of the town's total land area. As shown in Table 16, in comparison with surrounding communities, Meredith's amount of conserved lands is about average. However, 2,530 acres or 57% of the total conserved land in Meredith is managed by the town, which is the highest amount of direct municipal involvement in conservation efforts among neighboring towns. This demonstrates how invested and engaged the Town of Meredith is in conservation efforts.

A deeper review of the management of conserved lands in Meredith is shown in Table 17. Worth noting is that 43% (1,888 acres) of all conserved lands in Meredith are managed by organizations other than the Town. These other entities include the New England Forestry Foundation, a regional forestry and conservation organization based in Massachusetts, that owns or manages 720 acres of conserved land in Meredith. The State of New Hampshire owns or manages 379 acres of permanently conserved land in town, the largest piece being the Chemung State Forest.

Table 16: Conserved Lands of Abutting Towns and Conserved Lands Managed by Municipality					
Towns	Total <u>Land</u> Acreage in Town	Conserved Acres	Percent Conserved	Conserved Acres Managed by Municipality	Percent Conserved by Municipality
Moultonborough	38,216	14,541	38%	186	1%
Gilford	24,780	8,383	34%	1,742	21%
Meredith	25,632	4,418	17%	2,530	57%
Sanbornton*	30,368	4,673	15%	546	12%
New Hampton*	23,571	3,428	15%	739	22%
Center Harbor	8,498	1,165	14%	-	0%
Laconia	12,716	1,233	10%	111	9%

*Town does not have shoreline along Lake Winnipesaukee

Of the 2,530 acres (or 57%) of conserved land in Meredith that the town oversees, 22 properties (1,804 acres) are owned by the town through fee-ownership, 13 properties (650 acres) are conserved and managed by the town through conservation easements (these are privately owned), and 1 property (76 acres) is managed by the town by set aside open space. Land that is protected by the set aside open space method is typically private property and is not open for public access. Terms of these conservation restrictions vary considerably, and specific details are identified within property deeds.

Table 17: Conserved Lands in Meredith by Owner

Owner	Acres	Percent of Conserved Lands in Meredith
Town of Meredith	2,530	57%
New England Forestry Foundation	720	38%
NH Dept. of Resources & Economic Development	379	20%
Lakes Region Conservation Trust	309	16%
Society for the Protection of NH Forests	253	13%
Bear Island Conservation Association	83	4%
Appalachian Mountain Club	32	2%
Squam Lakes Conservation Society	27	1%
NH Fish & Game	4	0.2%
Other	81	4%
Total	4,418	

Town Forests and the Conservation Commission

Meredith is fortunate enough to have ten Town Forests that total about 2,203 acres. It should be noted that there may be some conflicting data on the size of some of the Town Forest tracts found in Table 18 based on available parcel data. The Town Forests are overseen by the Conservation Commission and Forest Management Plans are implemented on Meredith's Town Forests. As identified on the Meredith Conservation Commission's webpage, town forests are generally managed for the health of the forest and the wildlife the forests supports. The town maintains forest and timber management on Meredith's forests and logging is done in accordance with these forest management plans and prepared with the town forester in conjunction with the Meredith Conservation Commission. Recently completed projects within the last 2-3 years of town forest properties and other properties managed by the Conservation Commission, can be found in the Recreation Profile of this Existing Conditions Report. Table 15 below displays anticipated Conservation Commission projects for 2024 and longer-term projects including the update of the forest management plans for Hamlin, Carleton, and Community Forest.

Meredith Conservation Commission

Meredith Conservation Commission is a volunteer organization empowered by state law to support the quality of life in Meredith through affordable and sustainable management of the town's natural resources. The Meredith Conservation Commission has ten members (seven board members and three alternates). The mission of the Conservation Commission is to "work in harmony with residents, town boards and state services to support projects that impact forests, agriculture, wetlands, and aquifers for long term benefits to the town of Meredith". The Commission actively decided to focus future conservation efforts on acquiring lands to prioritize providing unfragmented blocks of land for wildlife habitat rather than creating additional recreation trails to expand the town's trail network further. The following section can be used to help inform some of these conservation efforts should the town decide to prioritize.

Table 19: Meredith Conservation Commission Anticipated Projects

Year	Projects
2024	<ul style="list-style-type: none"> • Replace bridge on Four Ponds (Blue) Trail at Hamlin Town Forest • Update forest management plans for Hamlin, Carleton, and Community Forest • Complete stream restoration project on Stoney Brook • Install benches at rest stops along Page Pond accessible trail • Restore apple orchard at Page Pond Town Forest
Longer Term	<ul style="list-style-type: none"> • Achieve recommended percent of protected land of "30 by 30" with a focus on wetlands, unfragmented parcels, moose habitat, and water supply in conjunction with a town-wide open space plan • Advise Planning Board and Zoning Board of Adjustment regarding requests for variances and special exceptions • Complete repair of historic Mill Dam at Page Pond Town Forest • Extend Quarry Road accessible trail • Execute habitat and forest improvement timber cuts on all town forests • Create a surface and subsurface water supply protection plan • Continue management of invasive species throughout Meredith

Open Space in Meredith

Throughout Meredith's history, preserving open space in town has been an early priority. Previous master plans and efforts reveal the value Meredith places on open space resources in the community and how they benefit the town. Meredith's 2002 Community Plan stated that "the abundance and quality of our natural resources contributes to our quality of life in many different ways and open spaces reinforce our rural community character". In previous years, there were concerns related to development issues facing the town that could potentially affect the town's visual quality and character. To address this, in 2000 a Visual Resource Inventory and Assessment of critical viewpoints and viewed areas within the community was completed. The Visual Resource Inventory and Assessment identified that the total Critical Viewshed Area (CVA) in Meredith is a total of 11,392 acres or approximately 32% of the town. Six areas comprise the CVA, the largest of which is the Lake Waukewan – Meredith Bay region. Leavitt and Ladd Mountains, and Page Brook on Meredith Neck, are the third largest viewed areas that lies between Route 104 and Route 3 surrounding the upper headwaters of Reservoir Brook.

In addition to the open space areas that are identified in the 2000 Visual Resource Inventory and Assessment, and previously mentioned in this Natural Resource Profile, the town manages land through fee-ownership where the town is the owner of some open space lands such as parks and athletic fields. Additionally, though the town may not directly own the lands outright, they manage open space lands with conservation easements on them or lands that are classified as set aside open space which is typically a result of a Conservation Subdivision. Some of these lands can be classified as private common space (within the conservation subdivision) or as dedicated open space. Municipal open space can be found on the Open Space and Recreation Map found at the end of the Recreation Profile of this Existing Conditions Report.

Conservation Subdivision in Meredith

In 2008, the Town of Meredith implemented a Conservation Subdivision Design Ordinance that authorized the Meredith Planning Board to grant a conditional use permit to allow for Conservation Subdivision design in accordance with the requirements and standards set forth in its ordinance. One of the four purposes of the Conservation Subdivision Design Ordinance is to "encourage the permanent protection of open space including but not limited to unique natural features, wildlife habitat, prime agricultural land, green meadows, ponds, wetlands, scenic views, connected corridors of open space and other natural and cultural resource elements; and to encourage the preservation of substantial greenbelts, wetlands, and farmlands around the perimeter of the subdivision". Currently, the Conservation Subdivision Design Ordinance is optional at the discretion of the applicant and it is allowed by Conditional Use Permit in the zoning districts table in the Zoning Ordinance.

Emerging or Potential Actions

[Conservation](#)

- Prioritize conserving areas identified within the Prioritized Habitat Blocks, while creating wildlife corridors between conserved areas.
- Initiate and support land protection efforts on town, commercial, and privately owned property.
- Educate the public on the value and importance of participation in land use board meetings the importance of land conservation, and the impact and benefits of Meredith's shared natural resources.

- Consider acquiring funds to develop an Open Space and Land Conservation Plan to prioritize conservation efforts and plan for future stewardship needs.

Education

- Continue to educate local officials and the community on the town's natural resources and their environmental, economic, and cultural benefits.
- Encourage reduced fertilizer, pesticide, and herbicide use on town property and resident's lawns.
- Encourage residents and business owners to monitor/test underground sewage tanks to prevent leakage.

Water Resources

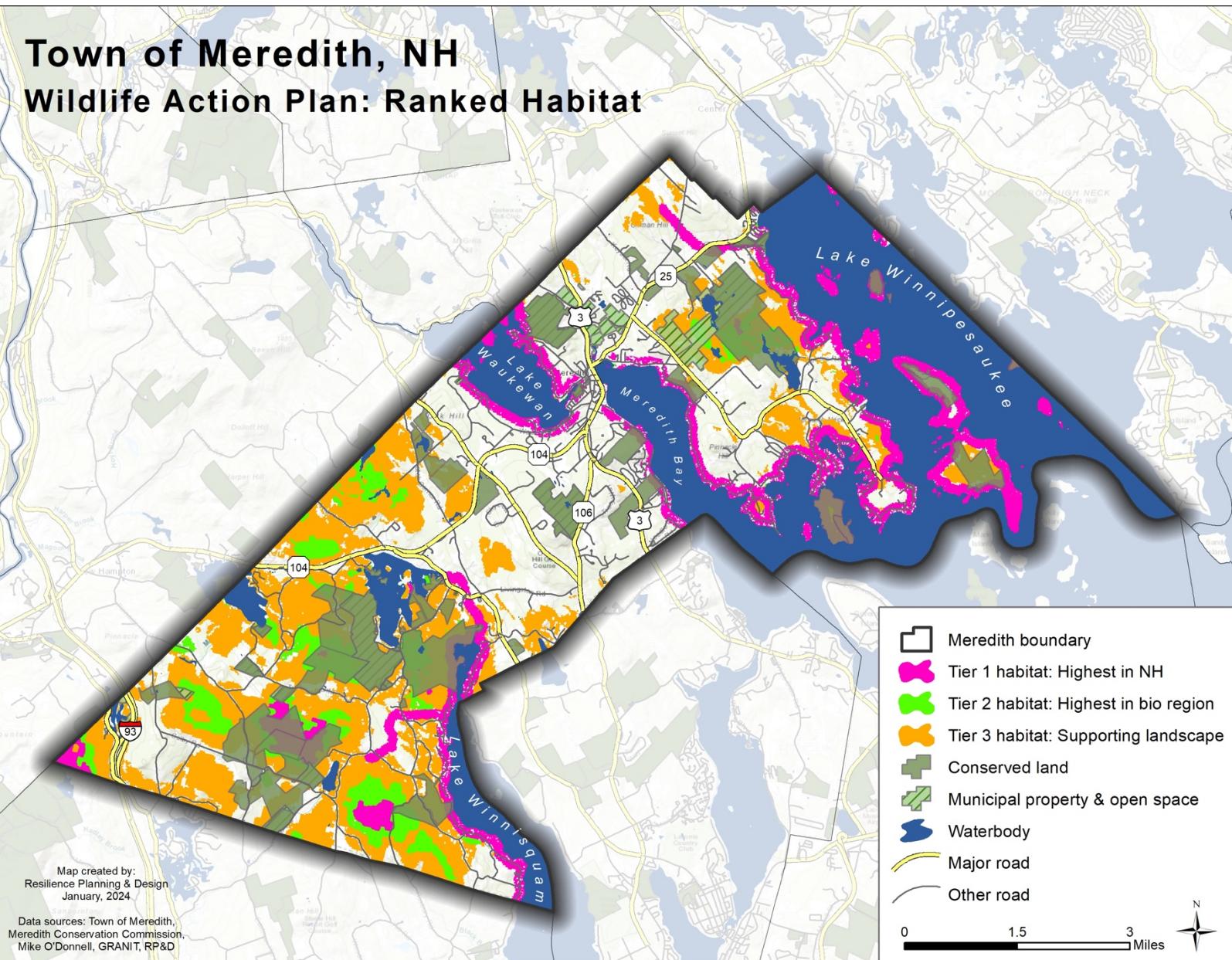
- Protect Hawkins Brook and Bartlett Brook, which support significant groundwater resources. Both the Hawkins Brook aquifer and the Bartlett Brook aquifer areas are characterized by a fairly high density of residential homes and the Hawkins Brook aquifer contains several commercial land uses such as gas stations, garages, and the town transfer station.
- Continue to keep waterfront and adjacent lands free of trash, debris, and dog waste.
- Continue to monitor water quality in the town.
- Protect Lake Waukewan and its watershed. Risk to Lake Waukewan is significantly higher than it is to other waterbodies in town since it is the municipal drinking water source.
- Consider implementing a Steep Slopes Overlay District to monitor development for sediment runoff contributing to phosphorus in major waterbodies.
- If the town identifies groundwater resources as a high natural resource priority, there are many measures that can be explored. Municipalities are authorized to develop local groundwater protection programs, a result of New Hampshire's Groundwater Protection Act from 1991.

Sources

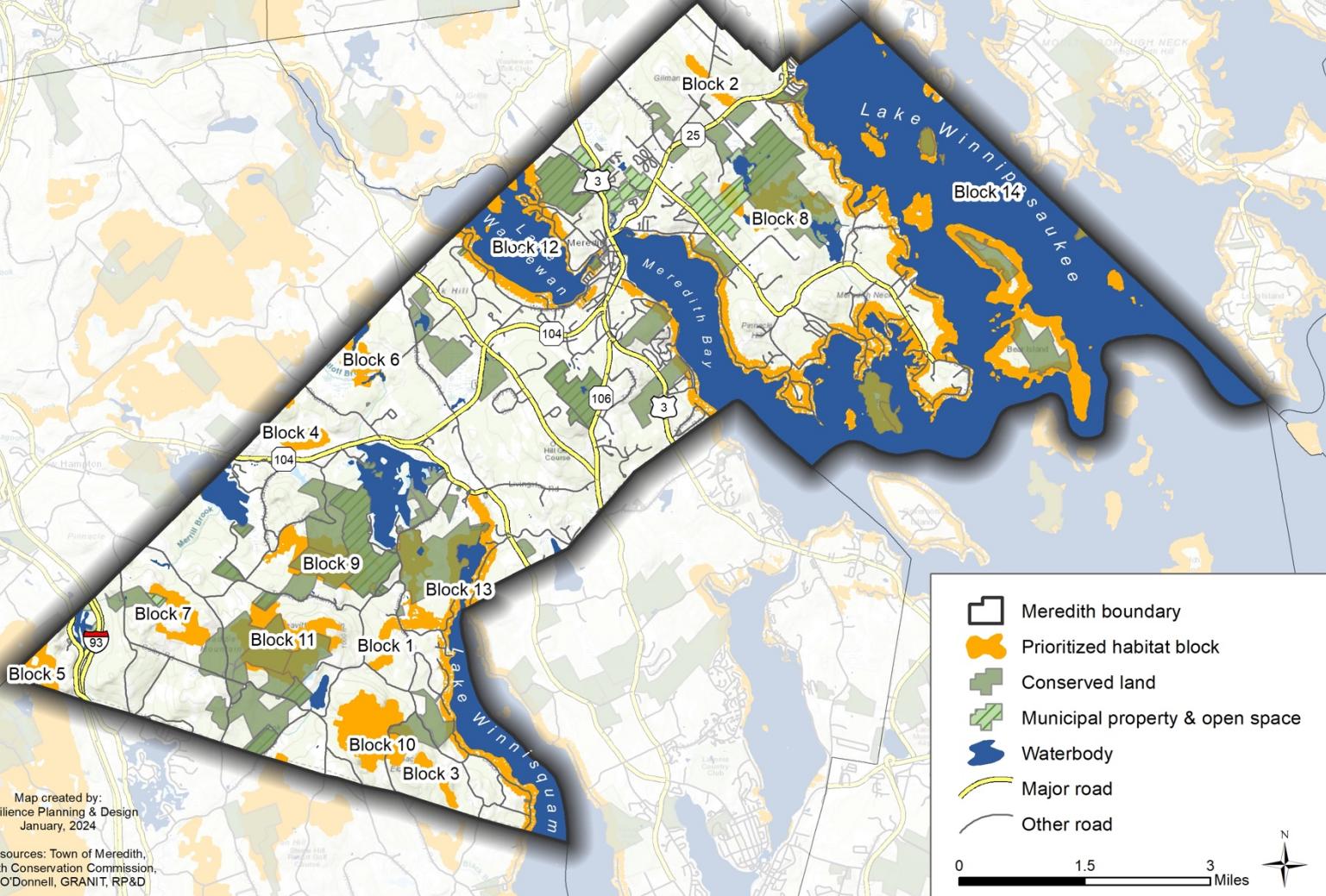
- NH Wildlife Action Plan
- NH GRANIT
- Meredith Conservation Commission
- 2022 Annual Town Report
- 2022 Meredith Hazard Mitigation Plan
- 2015-2020 The Lakes Region Plan
- 2005 Natural Resource Inventory
- 2009 Natural Resource Inventory
- NHDES's Groundwater Resources in New Hampshire: Stratified-Drift Aquifers
- NHDES's Assessments of Public Water Supply Sources – Meredith
- Assessments of Public Water Sources
- Meredith Bay: Lake and River Assessments
- Sanders Bay: Lake and River Assessments
- Lake Waukewan: Lake and River Assessments
- Bristol/New Hampton Tributaries: Lake and River Assessments
- Winnisquam Lake: Lake and River Assessments

- Salmon Brook: Lake and River Assessments
- Center Harbor: Lake and River Assessments
- Paugus Bay: Lake and River Assessments
- 2010 - A Watershed Plan for Lake Winnipesaukee Plan 1: Meredith, Paugus, and Saunders Bays
- 2016 Lake Waukewan and Lake Winona Watershed Restoration Plan
- Waukewan Watershed Advisory Committee
- NHDES's Drinking Water Source Assessment Program (DWSAP) Plan
- Shoreland Water Quality Protection Act (SWQPA) Summary

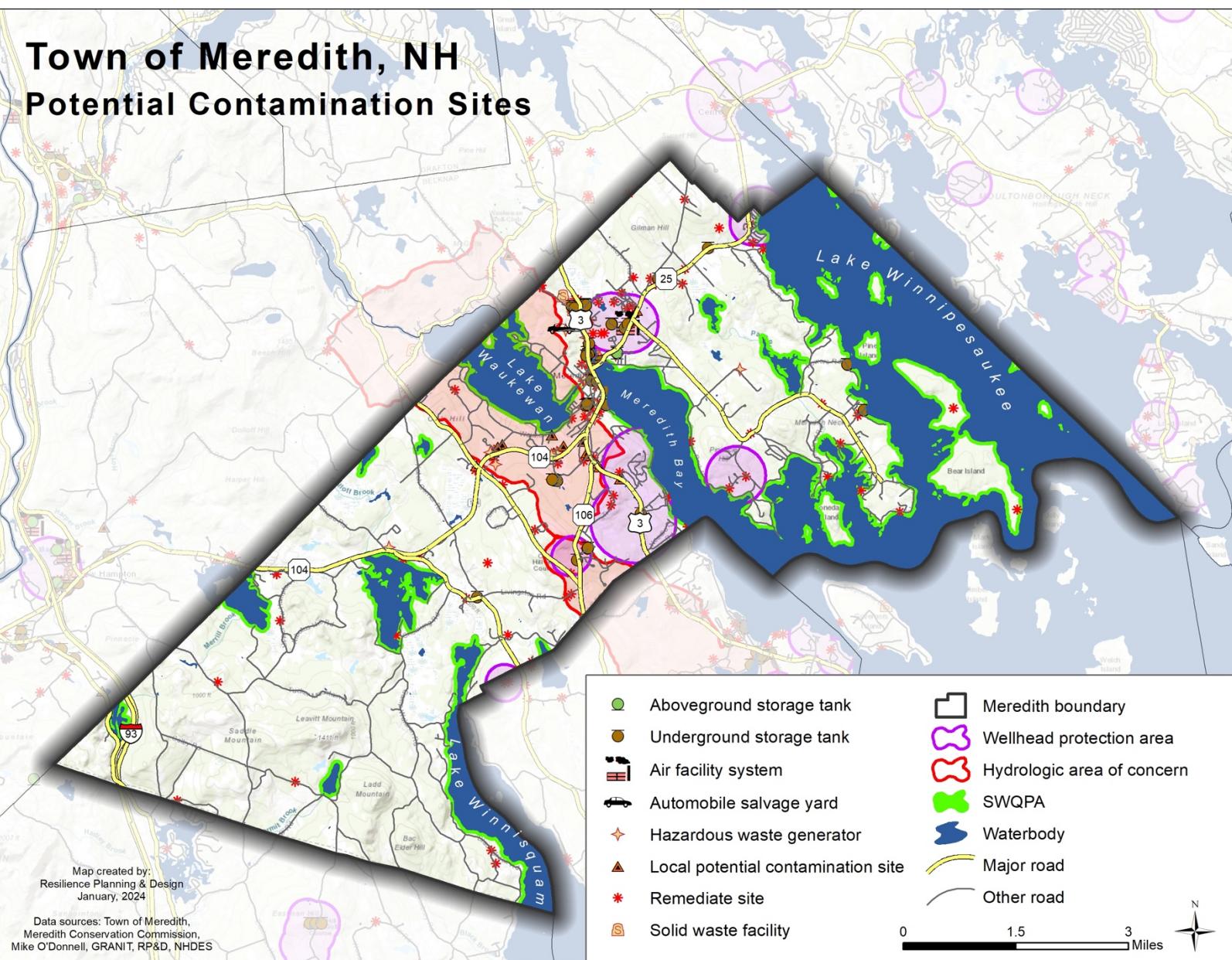
Town of Meredith, NH Wildlife Action Plan: Ranked Habitat



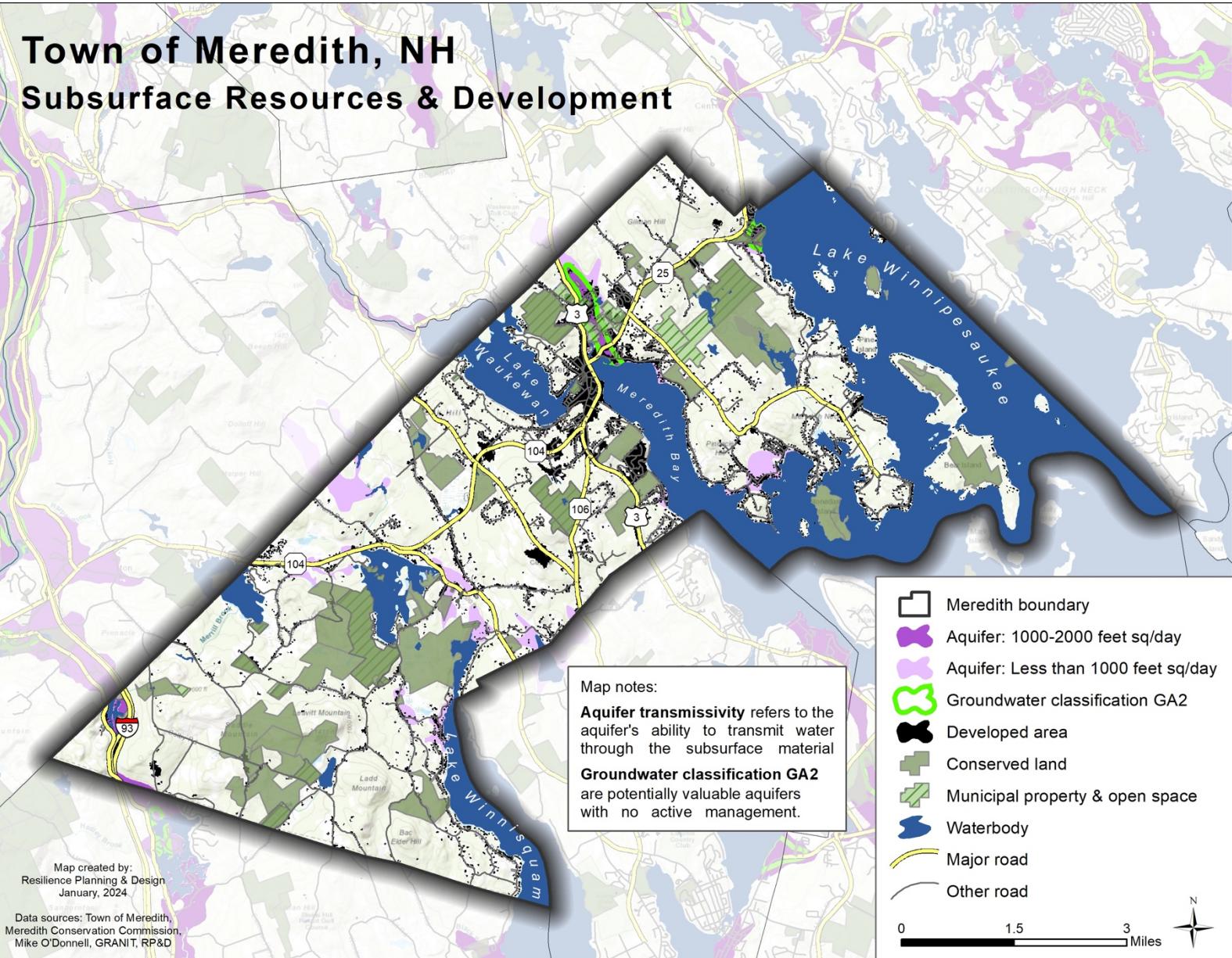
Town of Meredith, NH Prioritized Habitat Blocks: Greater than 50 acres



Town of Meredith, NH Potential Contamination Sites



Town of Meredith, NH Subsurface Resources & Development



TOWN FACILITIES AND SERVICES



Meredith's town facilities and services are critical services to residents and community members whether its the transfer station that provides a place for trash disposal and recycling, the library that provides items to borrow and a variety of programming, police and fire that provide response services for emergencies, or the community center that provides a place for gathering and recreation.

All of these services are funded, in part, by taxpayers and are meant to be provided to residents effectively and efficiently. Despite being a small, fairly rural community, the town provides a wide breadth of facilities and services to its residents and, in some cases, to visitors and the wider region.

As the town looks ahead, it must consider how the community wishes to see its facilities and services improved upon, how the capital improvement planning process can be best utilized to plan for future necessary expenses, and how investments should be prioritized over time.

FACTS AND FIGURES



There is **89,400** square feet of municipal building space within Meredith, not including school facilities owned and operated by the InterLakes School District.



Meredith manages **9** municipal facilities including the Town Hall and Annex, the Police Station, two Fire Stations, the Public Works Complex, Water and Sewer Department, the Community Center, and the Public Library.



There are **14** different town departments and service providers.



In 2022, there were **46,224** Library visitors and 56,900 items were circulated.



There are **18** miles of water lines, 100 hydrants, and the town's 1.5-million-gallon water tower.



There are **8** parks and recreation facilities managed by the Town of Meredith.



There are **2** primary cemeteries Meredith Village and Lang Street and 89 smaller, outlying cemeteries the Town is responsible for maintaining.

TOWN FACILITIES AND SERVICES KEY FINDINGS

- Several municipal buildings have undergone modernization, such as the Police Station, in the past 10-20 years, but facilities like Town Hall and the annex still need modernization.
- The town has a robust Capital Improvement Program that evaluates requests from Departments on an annual basis and prioritizes funding for maintenance, repairs, fleets, and upgrades.
- The town has invested considerably in IT infrastructure over the past year and should continue to work on creating a modernized system that is reliable, updated, and secure for town employees.
- The town does not have an online payment system or point of sale system in place for some facilities. This may be desirable as online and credit card payments increase over time.
- While a separate entity, the Interlakes School District manages three school facilities in the town including an elementary school, middle school, and regional high school. By measures of school enrollment, the two school facilities have relatively low enrollment but this is likely reflective of the rapidly aging population in Meredith and nearby Lakes Region communities. Enrollment for schools in the Inter-Lakes School District have been trending downward since around 2006. However, since 2017, enrollment at the Elementary School has been steadily increasing. This increase, however, has been offset by enrollment declines at both the middle and high School, which saw a combined decrease since 2016. Decreasing enrollment is exacerbated by the pandemic, demographic and household composition changes, and the ever-increasing cost of housing in Meredith.
- The Town of Meredith has a robust and busy Parks and Recreation Department which oversees beaches, parks, fields, and the town's Community Center. The Parks and Recreation Department offers a very robust set of programs and services for town residents, including older adults living in Meredith.
- According to call volume data from the 2023 Fire Services Study, call volumes have steadily increased each year from 2010 to 2022, and are projected to continue to increase based on past trends. Over the 12-year period where actual call volumes are available, calls have increased 51% or 174 calls per year.
- In 2022, 39,147 electronic books (E-Books) were circulated at the Library. This number is up from 21,863 just five years ago. Similarly, audio downloadable units went from 17,132 in 2017 to 34,889 in 2022 which is more than double in five years. More than doubling of digital media checked out over this period of time continues to accelerate trends in how residents consume public services.
- While water and sewer services are available to many parts of Meredith, investments are needed in the water system to ensure an efficient and high-quality service to rate payers.
- The regional treatment facility has a capacity of 11 million gallons per day while the communities served by the facility only utilize about 8.5 million gallons during peak summer periods. This indicates that the regional facility has capacity to accommodate additional growth in the region.
- A recent water report conducted by the State of New Hampshire specific to Meredith noted 123 million gallons of water pass through the town's system, but only 80 million gallons are actually going through water meters meaning 40 million gallons are leaking out through the system on its way to homes and businesses. This results in high treatment costs for water flowing through the system that isn't actually needed or being paid for by customers. To address this, the Department is undertaking a water detection study to identify where leaks are and to create a plan to fix them over time.

FACILITIES & SERVICES

Introduction

The public facilities and services element of the Master Plan serves as an inventory of existing municipal property that has been improved to serve a public purpose or a municipal service such as provision of sewer, water, or other public utilities. This element should help guide future decisions for improvements to or expansions of public facilities and services to meet the needs of the Town's population today and into the future.

The way services are delivered, and facilities are adapted depend heavily on future changes to population, employment, and the natural and built environment. As residents and the business community change over time, so may the expectations for facilities and services. Over time, new facilities and services may be needed to accommodate a changing population which may impact the way services are delivered, the facilities that house them, and the staff that administers them. These changes will require Meredith to continue its process of forward-thinking capital planning, a commitment to adequately invest in routine maintenance, and proper funding for capital and operation costs.

Local Government

The Town of Meredith operates under a town form of government providing for an Open Town Meeting. Meredith hosts an Annual Town Meeting in March for consideration of all warrant articles. The Town is governed by a five-member Select Board that meets twice a month with the Town Manager who oversees day-to-day operations. The role of the Select Board is to oversee and provide policy-level direction that informs and guides the work of the Town Manager. The Town itself manages facilities and administers services for its residents through 14 different departments and service providers.¹ These include:

- Administrative Services
- Community Development
- Executive
- Human Resources
- Library
- Tax Collector
- Town Manager
- Assessing Department
- Conservation Commission
- Fire Department
- Parks & Recreation
- Public Works
- Town Clerk
- Water & Sewer

¹ Meredith Town Website. <https://www.meredithnh.org/departments>

In addition to the town departments and service providers, Meredith has a variety of elected boards working on a wide range of efforts in town. While the Town's executive branch is made up of an elected Select Board, there are eight other elected positions and boards in town which include:

- Town Moderator
- Treasurer
- Town Clerk
- Board of Selectmen
- School Board
- Board of Library Trustees
- Supervisors of the Checklist
- Trustees of the Trust Funds Inter-Lakes

Meredith also has a number of volunteer boards, commissions, and committees within town which include:

- Planning Board
- Conservation Commission
- Village Pathways Committee
- Waukewan Watershed Advisory
- Zoning Board of Adjustment
- CIP Advisory Committee
- Energy Committee

Town Facilities

The Town of Meredith has approximately 89,400 square feet of municipal building space, not including school facilities owned and operated by Inter-Lakes, within the town's borders. Table 1 shows a list of town owned facilities, their locations in Meredith, and the approximate size of each facility. The location and size of each building was compiled using the Town's property tax records.

Table 1: Town of Meredith Facilities Overview

Facility	Address	Size (Square Feet)
Town Hall	41 Main Street	4,200
Town Hall Annex	5 Highland Street	4,100
Public Works	347 Daniel Webster Highway	3,800
Police Department	400 Daniel Webster Highway	13,000
Downtown Fire Station	286 Daniel Webster Highway	13,300

Meredith Center Fire Station	101 Meredith Center Road	3,400
Community Center	1 Circle Drive	18,000
Meredith Public Library	91 Main Street	24,000
Water & Sewer	50 Waukewan Street	5,600
TOTAL BUILT SPACE:	89,400	

Town Hall and Annex

Meredith has two buildings, both located adjacent to each other in the downtown area, that house general government functions. The main Town Hall building is located at 41 Main Street just west of Route 3 and the Lake. This building is approximately 4,200 square feet in size and was built in 1915.

Town Hall includes office space for several town departments including administrative services, assessing, executive, human resources, tax collector, town clerk, and the town manager. Adjacent to the Town Hall building up Highland Street is the Town Hall Annex building. This building is approximately 4,100 square feet in size and was built in 1786, but sold to the town in 2004 to house community development and conservation.

Both buildings are quite old, although some renovations and accessibility improvements have occurred over time. As part of the Selectboard's goal setting in 2023, Category #5 discusses the goal of renovating Town Hall to incorporate the community development functions currently in the Town Hall Annex building. There is also an individual goal of building a new Annex building over time.

IT Services

Meredith does not have a standalone IT department or staff, and currently contracts out IT support services. The new provider has been working with the Town since June 2023 in a full-time capacity. Prior to the current provider, the Town did have a dedicated person on staff followed by an arrangement with another private IT provider. Since June 2023, the current IT provider has focused on upgrading the IT infrastructure of the town including:

- Upgrading workstations,
- Upgrading software and security,
- Creating separate servers for police, fire, and general town government functions, and
- Working on implementing a new cloud based financial tracking system (MUNIS).

One major challenge faced by the new IT provider was creating a stable, highspeed internet connection loop for all town buildings and the new DPW facility. Prior to this project, the internet was very slow, the connections were unstable and there was no backup generator for the system in case of power outages. To fix these issues, a new 1 gigabyte connection was established, and a process is underway to connect all town buildings to the new DPW facility where a new generator, battery back-up system, and server room are located. This will provide town buildings with high-speed stable internet that can be backed up and secured even during power disruptions.

The IT provider is also undertaking a process to install more building security features such as a key FOB system across town buildings such as the community center, fire, town hall, the annex, and the Meredith center fire station for secured, controlled access. The Police Station and DPW have separate systems already in place. The new security features also include camera systems for all buildings with film backup for each location. Lastly, the IT provider is undertaking assessments of all technology systems, software, and hardware to develop an upgrade list and a schedule for replacement to get IT needs on a more predictable maintenance and replacement schedule.

Inter-Lakes School District Facilities

Meredith is a member of the Inter-Lakes Regional School District which provides education services to the towns of Meredith, Center Harbor, and Sandwich. The District consists of three schools which include the Sandwich Central School, Inter-Lakes Elementary School, and Inter-Lakes Middle/High School. Two of the schools, Inter-Lakes Elementary School and the Inter-Lakes Middle/High School, are located on Laker Lane in Meredith off Whittier Highway. As shown in Table 2, the Inter-Lakes Elementary School was built in 1991 as a single story 75,000 square foot facility while the Inter-Lakes Middle/High School was built in 1957 as a two-story 94,000 square foot facility. Both buildings are part of a school campus with the High School fronting Whittier Highway and the Elementary School located at the rear of the property buffered by the football field and track between the two buildings.

By measures of school enrollment, the two school facilities have relatively low enrollment but this is likely reflective of the rapidly aging population in Meredith and nearby Lakes Region communities. This may also be an indication of the relative affordability of these communities for a family with children.

Table 2: Inter-Lakes Regional District School Breakdown²

Facility	Grades	Year Built	Students (2022-23)	Avg. Class Size
Inter-Lakes Elementary School	PreK-6	1991	421	15.0
Inter-Lakes Middle School	7-8	1957	150	N/A
Inter-Lakes High School	9-12	1957	287	N/A

Enrollment Trends

Enrollment for schools in the Inter-Lakes School District have been trending downward since around 2006 (per data provided by Inter-Lakes). However, a few more recent items are worth noting. Since 2017, enrollment at the Elementary School has been steadily increasing hitting a near 20-year peak of 421 students. This increase, however, has been offset by enrollment declines at both the Middle and High School, which saw a combined decrease of almost 200 students since 2016. Even more recently, as with many districts across the country, enrollment dropped by over 100 students during the COVID-19 pandemic going from 1,021 to 919 students in a one-year period, representing a 10% decrease.

² Inter-Lakes Regional School District, 2023.

Discussions with the Inter-Lakes School District Superintendent confirmed the recent drop in total enrollment across the district exacerbated by the pandemic, demographic and household composition changes, and the ever-increasing cost of housing in Meredith. Since Meredith comprises the highest proportion of enrollment, changes to demographics in the town will have an outsized impact on enrollment compared to the other two communities. The other trend noted by the Superintendent related to enrollment changes is the complexity of educating an increasing number of students with special needs. Although school enrollment is down and intuitively space would be available inside the buildings, the space needs continue to grow to accommodate the educational requirements of children with special needs. This results in excess space being repurposed to accommodate those children.

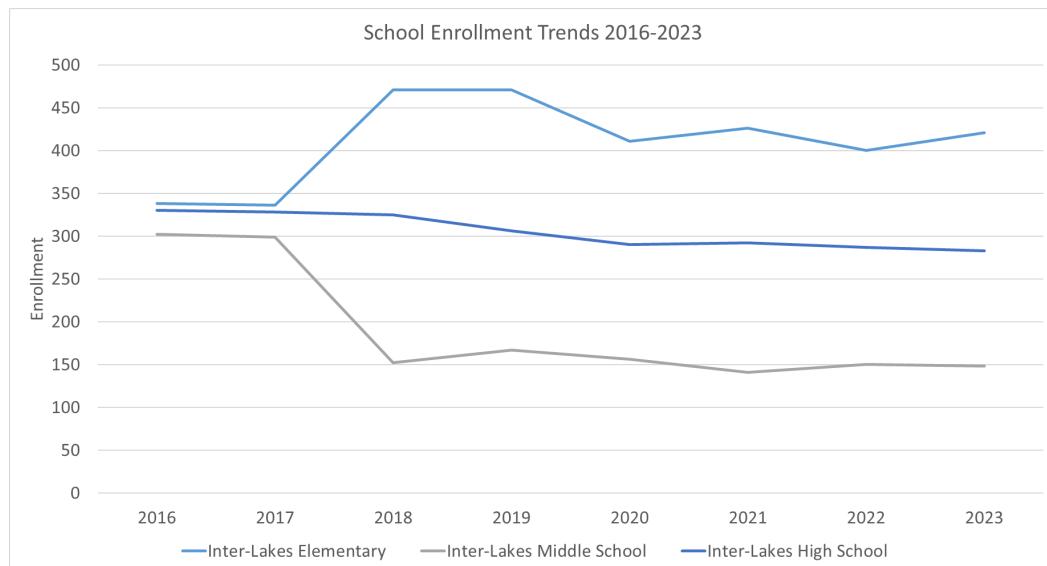


Figure X: School Enrollment Trends 2016-2023. Source: Inter-Lakes Regional School District, 2023.

School Facilities

Although the two school buildings in Meredith are both older, they have been well maintained. The Superintendent noted that there are some modifications to the buildings that would be desirable to implement over time. Those include modernizing locker rooms and bathrooms to today's school standards, and reworking interior spaces to support special needs learning. It was also noted that although the District has busing, only about 400 students actually take the bus while the rest are picked up and dropped off. The added traffic in the morning and afternoon around the school campus is a challenge and the District has to utilize a police detail during these times. Exploring what could be done with Whittier Highway and access points to the school property is a priority.

To keep the school facilities clean and operational, the School District has in-house custodial staff and a Facilities Director who takes care of the buildings. The District has a building systems technician, a maintenance staff person (certified electrician), and 13 custodial staff. The maintenance of the school grounds is contracted out to a private company that also takes care of snow removal. Fields on school

grounds are shared among the schools and the town, but the schools maintain the schedule and get the right of first use. The large turf field on campus was replaced two years ago and is in good shape.

Public Safety

Police Department

The Meredith Police Department's primary function is to enforce the laws and protect the people and property in the Town of Meredith. The Police Department is committed *"to the protection of our citizens, the maintenance of community awareness and the preservation of order. The Department actively patrols approximately 100 miles of paved and dirt roads, as well as taking an active role in emergency response to several islands in our jurisdiction. The Department works closely with the Belknap County Sheriff's Department, the New Hampshire State Police, the New Hampshire Fish & Game Department, the New Hampshire Marine Patrol, our bordering City/Town agencies as well as maintaining a well-working relationship with all Law Enforcement agencies within and outside our great State. It is our duty and pleasure to be able to provide those emergency services to our residents and visitors alike in a continued effort to make living here, working here and playing here safe and inviting."*³

The Police Department operates out of their own 13,000 square foot building (including Sally Port) located at 400 Daniel Webster Highway which was constructed in 2007. This is the only police station in town and serves the department's needs for detention, personnel space, vehicle storage, and property and records storage. Discussions with the Police Chief indicated the facility currently meets the needs of the officers and personnel working inside although building systems such as the generator and sprinkler system need replacement soon. The Town just built a full kitchen and did the training room over which could offer the ability to host regional training sessions in addition to training for local Meredith officers. Since on-boarding the new IT provider in June 2023, upgrades have been completed to separate the Police Department's IT systems from the Town's.

To serve the community and respond adequately to calls for service, the Police Department uses twelve vehicles, and has them on a 2–3-year replacement cycle as cars hit 80,000 to 90,000 miles. Older cars are moved over to training cars or detail cars before being retired permanently. Six months ago, the Police Department purchased its first hybrid car as a test case in consideration of changing over the fleet over time. Given the location of Meredith on Lake Winnipesaukee, the Police Department also has a police boat for responding to any incidents that occur on the islands under the town's jurisdiction but not on the water itself.

Staffing

In addition to the Police Chief, the Department currently employs fifteen full-time officers and one 30-hour school resource officer. In the past five to six years, the Department went through a substantial period of retirements with additional retirements forthcoming. Although the pool of applicants for open positions in recent years has dwindled (a national trend), the Police Chief noted officers want to work in Meredith. Applicants will often look for openings in Meredith and even meet with the Chief before applying for any openings to learn about the job and the town. The Police Chief did note that the

³ <https://www.meredithnh.org/police-department>

staffing of the Department has not increased since 2003, and when compared to nearby towns that are even smaller Meredith is considered understaffed.

The Police Department is staffed 24 hours a day, seven days a week and provides dispatch service in house between the hours of 8AM and 12AM. After 12AM, calls are sent through the County Sheriff's Department. There have been discussions over the years of regionalizing dispatch services with some of the smaller surrounding towns, but nothing has been implemented to date.

Calls for Service

Call data provided in the 2022 Meredith Town Report indicates that calls for service has averaged about 12,000 annually between 2020 and 2022, or about 33 calls per day. Between 2020 and 2022, total calls for service decreased by 1,468 calls or 12%. The Police Department breaks out some calls into specific categories such as accidents, offenses, arrests, and felonies. While arrests were down in 2022, the number of vehicular accidents, offenses, and felonies all increased between 2021 and 2022.

Fire Department

Fire protection services in Meredith are handled by the town's Fire Department which is a volunteer/on-call fire service organization. The Department is staffed by one full-time Fire Chief and 26 staff members including 14 active personnel, 4 interns, 10 per diems, a Chaplin, and a boat operator technician.⁴ The Department operates a call fire department where the Chief has tried to maintain staffing at the stations during the daytime hours at peak periods during the year. This has become more difficult, particularly with COVID, resulting in a drop of volunteer firefighters. While the staff can respond to a variety of call types, they do not currently provide any Emergency Medical Services (EMS) responses.

According to call volume data from the 2023 Fire Services Study, call volumes have steadily increased each year from 2010 to 2022, and are projected to continue to increase based on past trends. Over the 12-year period where actual call volumes are available, calls have increased 51% or 174 calls per year.

According to the 2023 Fire Services Study, the Meredith Fire Department has modern and appropriate apparatus consisting of one ladder truck, four structural engines, one rescue truck, three forestry trucks, three ambulances, a boat, and a command unit car. Recently, a new engine three has been ordered and is scheduled for delivery in 2025. The Fire Services Study notes two reasons the fleet is in such good condition: first, the town has invested in the fire departments capital and equipment needs over time and two, the Department has an in-house Chief Engineer that works to keep equipment in good shape saving time and money for the town by completing maintenance and service in-house.

Fire Stations

The Meredith Fire Department has two station buildings. The Downtown Station is located at 286 Daniel Webster Highway and was renovated and expanded in 2008/2009. This is the largest station housing administrative offices, training rooms, and dormitories as well as apparatus and equipment. Given the updates to this station, the 2023 Fire Services Study found the facility to be adequate. The second station, Meredith Center Station, is located at 101 Meredith Center Road and was built in 1985/1986 and is used to house fire apparatus only. This station is in the center of Meredith and is used as a call firefighter station, and not generally staffed except during emergencies. This station was found to be

⁴ "Fire Services Study", Meredith, NH. Municipal Resources Inc. August 2023.

well maintained and functional, but if the Department were to switch to more full-time paid positions there may need to be consideration given to installing dormitories, a kitchen, and offices that could be used for staff.

Meredith Public Library

The Meredith Public Library was built in 1901 with a first addition in the 1980's, and a new addition in 2021 bringing the library's total size to about 24,000 square feet. Not only was an exterior addition completed in 2021, but an entire interior renovation and modernization were completed as well. The library building is located at 91 Main Street in Downtown Meredith and is open to the public Tuesday through Thursday from 9am to 8pm, Friday from 9am to 5pm, and Saturday from 9am to 2pm. Unlike other town-owned buildings in Meredith, the Library has its own custodial services through a combination of a part-time 20-hour a week custodian and a private cleaning company that comes three times a week. Maintenance and grounds are also hired out to private contractors including interior maintenance, landscaping, and snow removal.

Staffing, Visitation, and Circulation

The Meredith Public Library is staffed by five full-time and five part-time staff. Full-time staff include the director, assistant director, a children's librarian, an adult services staff member, and a technical services staff member. Part-time staff include a young adult librarian and four aides for the circulation desk and other part-time functions. As noted above, there is also a part-time 20-hour a week custodian for the building.

Staff welcomed 46,224 visitors to the library in 2022 and processed the circulation of over 56,900 items.⁵ Library visitation was severely impacted by the pandemic essentially closing the library off to in-person visitation for much of the year. In Meredith, the pandemic plus the major addition and renovation also impacted both circulation of physical and digital materials as well as visitation.

Discussions with the Library Director indicated the library is most heavily used by older adults in Meredith followed by younger parents with children. The library has seen an increase in the number of teenage residents using the facility, particularly after school when the bus drops kids off. Staff are also targeting the "new adult" demographic consisting of residents ages 18 to 40 by offering video games, a function room with a television, and some new creative programming and social media marketing campaigns.

Libraries around the country are shifting their focus from institutions that primarily lend books and periodicals to community facilities that not only circulate materials but serve as locations for gathering, learning, training, and programs. Libraries have greatly expanded their offerings for general circulation. Residents can find books and periodicals, but also many non-print resources such as DVDs, music CDs, audiobooks, eBooks, software, and more at local libraries. This concept, often called "The Library of Things", is transforming the way libraries offer services and has changed the interior layouts of many libraries and the security and tracking systems used with more expensive equipment for in-house use and those that leave in circulation. The Meredith Public Library has seen a trend toward content consumed in digital formats and having more digital media available for download and consumption.

⁵ Meredith Town Report, 2022.

Statistics pulled from the NH State Library Statistics⁶ shows this trend in circulation more clearly for the Library. The total number of electronic books (E-Books) available in 2022 was 39,147 which is up from 21,863 just five years ago. Similarly, audio downloadable units went from 17,132 in 2017 to 34,889 in 2022 which is more than double in five years. More than doubling of digital media checked out over this period of time continues to accelerate trends in how residents consume public services.

As libraries continue to offer more 21st Century material with increases in technology, demand for digital media will rise as will demand for other types of physical materials. To that end, Meredith's Public Library has begun the process of collecting a Library of Things (LoT) which provides a host of different items residents can check out to use. These might include internet hot spots, cookware, bakeware, tools, gardening equipment and more. The library has a list of items they are looking to have donated on their website and hopes to build out the LoT over time.

Programming

In addition to providing materials in circulation, libraries are also places to gather, meet, and enjoy with people in the community. Meredith's Library offers programming for residents of all ages from the story time with young children to art club and board games for teens. The library also includes a maker space and media lab with the ability to create your own podcasts. The library works with the Altrusa Club to offer homebound services to residents including free delivery and pickup of library materials. Lastly, the library offers spaces for local clubs, organizations, and groups to meet including a camera club, a Shakespeare group, the garden club, and even hosting meetings of the Lakes Region Planning Commission.

Parks and Recreation

The Town of Meredith has a robust and busy Parks and Recreation Department which oversees beaches, parks, fields, and the town's Community Center. Existing facilities under the auspices of the Parks and Recreation Department include:

- Lower and Upper Prescott Park
- Community Center
- Circle Drive Park
- Childs Park
- Waukewan Highlands Community Park
- Leavitt Beach
- Waukewan beach
- Swasey Park

To manage these facilities and all the programming, the Department has five full-time positions which include the Director, the Program Director, a Maintenance Supervisor, a full-time Laborer, and a full-time Administrative Assistant. The Director not only serves as the primary person for all parks and recreation services, but is also the de facto senior center director as well since the town does not have a dedicated position working with the older adult population in Meredith. During the summer peak

⁶ NH State Library Statistics Reports, <https://www.nhsl.dnrc.nh.gov/librarians/library-statistics>

season, Parks and Recreation also has 15 to 20 part-time employees who assist with the full day summer camp and staff the front desk at the Community Center.

Parks and Recreation manages all of their own programming in house and maintains their own fields and facilities including turf management, seeding, mowing, and fertilizing. In 2017, the town completed a Parks and Recreation Master Plan that looked ahead fifteen years and assessed the physical conditions of each facility under the Department's purview as well as appropriate levels of staffing today and into the future. Discussions with the Parks and Recreation Director noted that after the 2017 plan was released and capital needs identified, the town did not provide much funding to implement recommendations. and ended up cutting some funding for staff including beach staff. This resulted in a reduction, and ultimately the closure, of the swimming programs Meredith had historically offered to kids. More recently, the new Town Manager has considered how to jumpstart the implementation of the 2017 plan including a recommendation to the Capital Reserve Committee to place \$100,000 into the extendable trust fund for recreation/facility improvements. The Town is also pursuing a complete renovation of Prescott Park.

The Parks and Recreation Department does charge for field rentals, space rentals, camps, the after-school program, and sports sessions to create revenue to pay employees and cover costs. In many communities these revenues are often directed to an Enterprise Fund where revenues can be tracked and aligned with annual expenditures to run the programs and maintain the facilities. In Meredith, revenues generated by the Department go directly to the Town's General Fund making it more difficult to directly link revenues and costs. As demand for new programs, particularly for adults and older adults, continues to grow the Town should consider how best to track funding and also consider moving to a modern point of sale system that can accept credit cards as well as an online payment system. Today the Community Center can only accept cash or check.

Town Infrastructure and Utilities

Department of Public Works

The Department of Public Works (DPW) is responsible to the residents and businesses of Meredith for the maintenance and management of the public infrastructure that has been constructed over the course of the town's history. According to DPW staff, the Department is responsible for maintaining 60 miles of paved roadways and 35 miles of unpaved roadways along with cemeteries, public buildings and grounds, and the transfer station.⁷ To manage the infrastructure in town, DPW is divided up into the following sub-programs:

- **Highway** – responsible for road maintenance, paving, chip seal, drainage, brush cutting, road reconstruction, grading and ditching, catch basins, sweeping, sidewalk maintenance, plowing and sanding, road dust proofing, culvert pipe installation and road and public safety signage. DPW mechanics maintain, repair and service all town vehicles in all town departments.
- **Solid Waste** – charged with the operation and maintenance of the town's transfer facility for residents as well as a recycling store where residents can bring used items that are sold at a small price.

⁷ Interview with DPW staff, November 2023.

- **Building and Grounds** – responsible for interior and exterior maintenance of Town buildings and grounds properties, including waterfront parks and docks. Personnel take care of trash removal, routine maintenance and repairs, emergency repairs, shoveling, mowing, sweeping of town grounds, sidewalks and parking lots, and issue facility use permits for use of town parks and properties for events.
- **Cemetery** – maintains the Meredith Village Cemetery on Route 3 as well as Lang Street cemetery, and 89 small outlying cemeteries. Personnel handle burials, perform year-round maintenance of stones, monuments and grounds, keep all cemetery records and sell cemetery plots.

Highway

The Highway Division within the DPW is the largest in terms of staffing with 16 staff members including the Director, Assistant Director, Secretary, and labor staff. The Division employs two full-time mechanics who take care of over 200 pieces of equipment. Fleet maintenance typically carries about \$100,000 a year in budget, but the COVID-19 pandemic resulted in an increase in costs of parts and equipment. The town does not have an in-house engineer, but the Director is able to do some road design and manage construction projects. The Highway Division can conduct basic roadway and infrastructure projects such as pavement removal, grading, and rolling but does hire out for larger jobs like milling and paving.

Solid Waste and Recycling

Solid waste disposal in Meredith is handled one of two ways: residents can purchase a sticker (good for two years) and bring trash and recycling to the Transfer Station, or residents can opt for private trash hauling through their own contract with a service provider. The Transfer Station is open Monday and Tuesday and then again Thursday to Sunday between the hours of 8:00am to 3:00pm. Permits are available for purchase at a cost of \$20 every two years. An additional permit for another vehicle for the same household is free, and each one after that is \$20. The Transfer Station serves as the drop-off point for recycled paper, plastics, and other commonly accepted recyclables. Residents can also dispose of other items including, but not limited to, yard waste, clothing, construction debris, batteries, and more. Each item is charged separately using a fee established by the Town. In addition to accessing the Transfer Station, the purchased permit also provides access to Leavitt Beach and the two public boat ramps.

Buildings and Grounds

This Division within DPW is responsible for maintaining several of the town owned buildings including the Town Hall, the Town Hall Annex, the DPW building, the police headquarters, the highway garage, and solid waste buildings. There are four employees responsible for maintaining and repairing buildings in Meredith which include both internal and external repairs and routine maintenance. The Division does have to hire contractors for all licensed services such as electrical, plumbing, and HVAC. Most smaller scale repairs are done in house, but anything requiring licensing or major improvements will be subcontracted. Buildings and Grounds is responsible for outdoor maintenance at the waterfront parks and some outlying parks in Meredith, but not fields or recreation parks.

Cemeteries

This Division is responsible for the maintenance and upkeep of the cemeteries in Meredith. One employee takes care of the primary cemeteries at Meredith Village and Lang Street, and is also responsible for oversight on 89 small outlying cemeteries spread across the town. Cemetery staff handles all things related to cemeteries including burials, maintenance of stones and monuments, grounds, record keeping, and plot sales.

Water and Sewer

The Water and Sewer Department in Meredith services over 1,300 customers with over 800 customers utilizing both water and sewer, 400 utilizing sewer only, and 145 utilizing water only. The local sewer collection system consists of about 20 miles of sewer mains and five pump stations. The waste collected in Meredith (and nine other Lakes Region communities) is pumped and piped to a regional treatment facility in Franklin that is owned and operated by the State of New Hampshire. The regional treatment facility has a capacity of 11 million gallons per day while the communities served by the facility only utilize about 8.5 million gallons during peak summer periods. This indicates that the regional facility has capacity to accommodate additional growth in the region.

Meredith's drinking water system consists of 18 miles of water mains, 100 hydrants, and the town's 1.5-million-gallon water tower. Drinking water for Meredith comes from Lake Waukewan and is treated at the town's water treatment plant. The water treatment plant was built in 1988, and according to a discussion with the Water and Sewer Superintendent, has had little maintenance over the past 35 years. The town recently began a process of conducting an asset management program which will take 12-18 months to complete. This will provide the Department and town with more information on the state of facilities, repair and replacement needs, timing and costs. Prior to the FY24 town budget, there was never a pipe replacement program in place which resulted in a lack of consistent maintenance and replacement of old, leaky pipes. A recent water report conducted by the State of New Hampshire specific to Meredith noted 123 million gallons of water pass through the town's system, but only 80 million gallons are actually going through water meters meaning 40 million gallons are leaking out through the system on its way to homes and businesses. This results in high treatment costs for water flowing through the system that isn't actually needed or being paid for by customers. To address this, the Department is undertaking a water detection study to identify where leaks are and to create a plan to fix them over time. The study is expected to take a year to complete.

The water and sewer system and services are overseen by a five-person department that includes the Superintendent, Chief Water Operator, Clerk, and technicians. All technical personnel are certified and licensed to operate both water and sewer systems. Staff work seven days a week and are on-call 24 hours a day for emergencies. Staff can take care of minor repairs and upgrade issues at the plant and in the field, and contract out for major repairs. All engineering, design, and major construction services are contracted out as the Department does not have all the equipment required for repairs. The Superintendent noted it has been challenging to fill positions in the Department, and succession planning is important as there is a lot of internal knowledge about the plant and systems.

The water and sewer systems are supported by the rate payers and each system has its own enterprise fund. In Meredith, the water and sewer enterprise funds are mixed in with the town's General Fund which can make it more difficult to track revenues and expenditures directly related to the systems. The

town has a goal of having the water and sewer enterprise funds stand on their own with revenues from the system itself covering staffing costs, maintenance, and replacement over time. Rates have not been raised since 2010, but a study is currently underway to look at updating rates and connection fees.

Lakes Region Public Access Television

The Lakes Region Public Access Television (LRPA) is a nonprofit, noncommercial public access TV station and community media center located in Laconia, NH. They provide programming to nearly 12,000 viewers in Belmont, Gilford, Laconia, Meredith, and Northwood. They also provide livestream programming to anyone who may wish to watch. LRPA's mission is to empower community members to produce content that⁸:

- Fosters free speech and the open exchange of ideas.
- Encourages artistic and creative expression.
- Promotes a well-informed public through governmental transparency.
- Unites communities through the power of media and technology.

LRPA has three dedicated cable channels for programming which include a dedicated channel for Inter-Lakes School Board and Laconia School Board as well as bulletins for non-profits and community events (Ch.24). They also have a community programming channel that provides non-governmental programming (Ch. 25) as well as a channel dedicated to the public meetings that occur in each town (Ch. 26).

Emerging/Potential Actions

Continue to Invest in Modernizing Facilities and Systems

- The Town should continue to invest in modernizing its facilities and systems to bring them up to the 21st century. This should include a continued focus on modernizing the IT system across all departments and town buildings with upgraded computers, software, camera systems, door entry systems, and cyber security.
- The Town should consider the implementation of an online payment system and/or point of sale system at any town building where payments for services, fees and fines are accepted. This should be extended to the Community Center where only cash and checks are currently accepted.
- The Town should consider options for combining the town hall and town hall annex buildings and functions into a single, modernized facility. This could happen within the existing buildings in Downtown, or the town could consider building a new facility elsewhere in Meredith and disposing of the two downtown sites for development.

Focus on Funding Maintenance and Repairs

- The Town should focus on adequately funding the maintenance and repairs of town facilities and infrastructure, with a near term emphasis on critical infrastructure related to water and sewer, roadways, culverts, bridges and dams.

⁸ <https://lrpa.org/>

Consider Separating General Fund Revenues and Expenditures and Enterprise Funds

- The Town should work toward separating General Funds from Enterprise Funds for water, sewer, and parks and recreation to more accurately track whether these services and departments can fund themselves going forward.

Consider Moving Toward a Full-Time Staffed Fire Department

- The 2023 Fire Study recommended that the town work toward establishing more full-time positions within the Fire Department beyond the Fire Chief. As call fire fighters become more difficult to recruit and retain the need will grow for having a full-time dedicated staff for call response. The Town should begin now to plan and execute this transition as it will take added budget and possibly some modernization of the Center Fire Station if it is to be staffed on a more full-time basis.

Look for New Ways to Generate Revenue from Seasonal Users

- Meredith's seasonal and tourism economy attracts thousands of captive visitors annually, most looking to utilize the lake. The town should consider if there are ways to capture additional revenue from lake users through boat ramp fees, charging for parking, increasing transfer station fees for non-residents, etc. These fees could go into a specific fund that could help mitigate impacts of seasonal populations or go toward specific improvements that could attract more economic investment.

Improve Communication Tools between the Town and Residents

- The town has little to no modernized forms of communication with residents and businesses in Meredith. The town should consider utilizing social media, email, emergency alert systems, and/or a newsletter to communicate with residents.

Sources

- Meredith Town Report, 2022.
- Fire Services Study, Municipal Resources, Inc., 2023
- Meredith Parks and Recreation Department Master Plan, 2017.
- Town of Meredith website: <https://www.meredithnh.org/>.
- NH State Library Statistics, <https://www.nhsl.dnrc.nh.gov/librarians/library-statistics>.
- School Enrollment, Inter-Lakes Regional School District, 2023.
- Interviews with Department Heads conducted by RKG Associates in November 2023.

HISTORY AND CULTURE



Meredith's history and cultural assets, including its lakes, islands, farms, historical sites, public art, and development pattern, contribute to the town's unique character and reinforce a sense of place residents and visitors love and appreciate. Meredith has been shaped by its history of agricultural activity, light manufacturing along its waterways, and a booming tourism economy, which is visible in its summer camps, lodging, restaurants, and cottages. This pattern can still be recognized today and is a key aspect of Meredith's identity as a Lakes Region community.



Protecting Meredith's unique historic and cultural resources helps to preserve the small-town, rural character of the community and retains what is special about Meredith. As Meredith looks into the future, there is great potential to harness these historic and cultural resources for continued community and economic development, to highlight the town's history to reinforce community identity, and to encourage partnerships between the various community groups in town to celebrate all that Meredith is.

FACTS AND FIGURES



The Town of Meredith was incorporated in **1768**. It was named after Sir William Meredith, 3rd Baronet, a member of Parliament who opposed taxation on the colonies.



There are **10** groups of islands surrounding Meredith including Bear Island, the second largest on Winnipesaukee, and Stonedam Island.



In **1848** the Boston, Concord, and Montreal Railroad was expanded and improved accessibility of Meredith to the rest of the region, ultimately leading to the town becoming a summer resort community.



In **1950**, the Meredith Historical Society was formed to preserve and promote Meredith's history and heritage.



There is **1** property in Meredith on the National Register of Historic Places - the First Free Will Baptist Church/the Oak Hill Meetinghouse located on Winona Road.



In **1998**, the Meetinghouse was converted into the Farm Museum, which displays the annual life cycle of farmers by season, to honor Meredith's agricultural history.



There is **1** property listed on the State Register of Historic Places - St. John's on the Lake Chapel located on Bear Island.

HISTORY AND CULTURE KEY FINDINGS

- Meredith's history is documented in resources and collections maintained by the Meredith Historical Society (MHS) and the Meredith Public Library.
- The Western Abenaki Native Americans are the primary indigenous nation that has significant ties to Meredith and the Lake Winnipesaukee region.
- Meredith has a strong agricultural history and was once a main source of income for the community. Today, three active farms reflect this heritage and provide local food to residents and visitors. They include Moulton Farm, Picnic Rock, and Muddy Dog Farm.
- Meredith also has a manufacturing past. By 1859, Meredith Village had a sawmill, gristmill, shingle mill, blacksmith shop, harness-maker's shop, and tannery. Situated at the outlet of Wickwas Lake, Meredith Center also had a sawmill, gristmill and blacksmith shop. Hydropower powered the mills, which were a central part of Meredith's commerce during this time.
- Once the inter-state railroad was expanded in the mid 1800s, Meredith became a bustling summer resort town. By the late 1800s, out-of-state vacationers began buying lots and building cottages on the Meredith islands and along the shoreline of Meredith Neck. In the early 1900s, camps started becoming established, and rental cabins, cottages, and boarding houses soon followed. This shifted Meredith's economy towards hospitality services, recreation, and tourism.
- Meredith History Fun Facts:
 - Dudley Leavitt, a Meredith resident, developed the Farmers Almanac in 1797 and was continued to be published annually.
 - In 1872, the famous Meredith Mystery Stone was discovered by workmen digging near the mouth of Corliss Brook. Years later, the egg-shaped and engraved stone was given to the New Hampshire Historical Society where it is still on display today.
- Tourism is a significant part of the town's unique history and heritage, and has contributed to the evolution of Meredith's local economy.
- In 1955, the Meredith Historical Society was a charter member in organizing the "Association of Historical Societies in New Hampshire".
- Meredith's Historical Society is very involved in efforts to educate the public about Meredith's history. They maintain two town museums (Main Street Museum and Farm Museum), coordinate the speaker series, and maintain an informative website. The Meredith Historical Society partners with other non-profit/civic organizations in Meredith to implement projects and further education.
- Meredith is fortunate enough to have several active cultural organizations and popular community events such as the Greater Meredith Program, the Meredith Lions Club, the Community Garden Club, the Fishing Derby, pond hockey, parade events, and others that bring residents together, reinforce the town's identity, and build a greater sense of community.
- Meredith is part of the New Hampshire Lakes Region Tour Scenic Byway and features many scenic, historical, cultural, recreational, and natural resources along portions of US Route 3, NH Route 25, and NH Route 106.
- The Greater Meredith Program, an organization that works to enhance economic vitality, historic and cultural heritage, and town-wide beautification, created the Meredith Sculpture Walk in 2012, which brings local artist's displays to the public along a walking path through Meredith Village.

HISTORY AND CULTURE

Introduction

This profile identifies and describes Meredith's many historical and cultural resources. It looks back at the history of Meredith including its indigenous people, its first colonial settlers, the evolution of Meredith's economy, the history of Meredith's unique islands, and the cultural groups and organizations that shaped Meredith into the vibrant community it is today. Historic and cultural resources add to the unique character of the town and help to distinguish Meredith 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).

Historic Background and Timeline

First Peoples

The Western Abenaki Native Americans settled in the Lake Winnipesaukee area. The tribe inhabited Vermont, New Hampshire, and Southern Quebec regions as early as 800BC. Lake Winnipesaukee's name was derived from the Western Abenaki Native Americans. Winnipeasaukee (wiwninbesaki) is Abenaki for "the lake between or around land or islands". According to New Hampshire Folklife, The Abenaki tribes set up villages along rivers and lakes where they had access to water and could fish and hunt and farm using traps called weirs. Places like the Weirs at the mouth of Lake Winnipeasaukee drew thousands of people for yearly spawning of shad, salmon and alewife. During the 1600's many Native Americans were decimated due to diseases such as smallpox and influenza and European settlers began claiming Abenaki land. Due to these settlement pressures and diseases, the Native Americans were pressured to move from their homes and hunting grounds and retreated to their homeland - the Missisquoi Region of Vermont near Lake Champlain. It has been estimated that by 1760, the Native American population in New Hampshire had been reduced by 94% to a population of only 700.

However, there is still Abenaki presence in the region today through the Nulhegan Abenaki tribe, which is one of the largest Abenaki tribes remaining. The Nulhegan Abenaki tribe is located among the lakes, rivers, and forests of N'dakinna's northern range and headquartered in the Northeast Kingdom at Barton, VT. The Nulhegan Band of the Coosuk Abenaki Nation has a mission to strengthen their government; to build their community and ensure sustainability; to protect their customs and traditions; and to continue to promote their culture and celebrate their heritage while sharing it with those around them.

Early Settlement – 1600s-1700s

The first European Colony was granted to John Mason in the 1620s and established in New Hampshire which included the Lakes Region area we know today. By 1744, Mason's Grant (land) was sold by his heir to twelve wealthy NH Seacoast men (who became known as the Masonian Proprietors), giving them ownership of a large territory including the Lakes Region. The Masonians then began giving away 'townships' to groups of interested colonists. The groups became known as 'Township Proprietors' and were responsible for developing a township according to parameters laid out and monitored by the

Masonian Proprietors. In 1750, the town was formally named Salem by its Township Proprietors and changed to New Salem by 1753.

The land was then surveyed and divided into shares and lots and by 1766, nine houses had been built and fifty acres were cleared. Two years later, New Salem was formally incorporated as the Town of Meredith, named by Governor Wentworth after Sir William Meredith, a prominent member of the English Parliament.

As noted in the 2002 Meredith Community Plan, A “Plan of Meredith” was prepared in 1770, and subdivides the town into divisions, ranges, lots, inter-connecting roads, and land dedicated for various public purposes including a public common. The town center was located on a high point of land, which in later years would be referred to as Meredith Parade. The first bridge was built across the Winnipesaukee River and a saw mill was constructed nearby. The location became known as Meredith Bridge (now downtown Laconia). A grist mill was built on the outlet of Wicwas Lake at what became Meredith Center. Province Road was expanded through Meredith by the late 1700s. The local economy was agriculturally based, and consisted of small, largely self-sufficient farms. Settlement began to evolve around saw and grist mill sites located near reliable sources of waterpower, including Mill Brook at Meredith Center, Swasey’s Canal at Meredith Village, and the Winnipesaukee River at Meredith Bridge.

Meredith’s Economy

Agriculture was once a main source of income in the community. It continued to be a main part of the economy through the middle to late nineteenth century, after which subsistence level farming was replaced by production-scale farming. During this time, Meredith as a farming town was only surpassed by a few other towns in the State. Due to the marked rise in agriculture, a manufacturing base was developed in Meredith Bridge and Meredith Village to utilize the town’s water resources by harnessing its water flow to provide power to the mills. This upgrade and improvement to Meredith Village triggered a business expansion that led to the Village to become one of the leading commercial centers in the Lakes Region. The Meredith Village and Meredith Bridge village centers provided retail trade, lodging, and professional services, that would develop around their industrial centers. In 1848, the Boston, Concord, and Montreal Railroad was expanded and dramatically improved accessibility of both villages to the rest of the region and acted as centers for residential, commercial, and industrial development. Due to Meredith’s scenic natural beauty, tourism played a large role in Meredith’s history and continues to do so today.

In 1855, the southeasterly portion Meredith, including the original settlement area of Meredith Parade and the industrial village center at Meredith Bridge, was separated by an act of the New Hampshire Legislature. The new town was incorporated as the Town of Laconia and this significantly reduced Meredith’s population during that time. Meredith Village became the recognized center of the town thereafter.

A Shift in Meredith’s Economy

Significant economic shifts during the later half of the 19th century and the early 20th century shifted the local economy in town from industry and agriculture based to tourism based. Like most New Hampshire communities, agriculture in Meredith experienced a gradual decline due largely to the inability to compete with the agricultural productivity of mid-western states. There are still some active farms that

remain today and contribute to the agricultural activity in the community. Table 1 lists Meredith's active farm operations in the community as of 2023 which have a commodity and/or service they provide.

Meredith's manufacturing base remained strong into the mid-twentieth century. During the 1870s to 1920, the agriculture and manufacturing interests in New England migrated to other regions of the country and Meredith's population experienced a decline. During this period, vacationers were attracted to Meredith to utilize the town's waterfront properties for seasonal and recreational use and the emergence of

tourism played a significant role in Meredith's local service economy. In the mid-1880s, out-of-state summer vacationers first began buying lots and building cottages on the Meredith islands and the shore front on Meredith Neck.

After World War I, advances in transportation, such as the advent of the automobile, allowed greater accessibility to Meredith and the Lakes Region as a whole. Due to Meredith's central geographic location, and advances in transportation technology and accessibility, the town's economy transitioned to a local, service-oriented economy. In 1912, Camp Passaconway for boys was established on Bear Island and the location is now owned by the Lawrence YMCA and houses Camp Nokomis for girls. These summer camps owned by seasonal residents expanded the lodging industry in Meredith. Soon, rental cabins and cottages, hotels, boarding houses, and youth camps were developed that led to Meredith's shift towards hospitality services, recreation, and tourism. As identified by John Hopper in the 2002 Meredith Community Plan, "The decades following World War II brought dramatic change to both the demographic and the physical make-up of the community. The construction and realignment of modern highways in the late 1940's, followed by the completion of the Interstate system by the early 1960's, had a profound impact on the community. During the twenty-year period from 1960 to 1980, Meredith experienced an unparalleled explosion in residential population growth and second home waterfront development".

Meredith's Islands

Like many other towns of the Lakes Region, Meredith is dominated by several large bodies of water and in Meredith's case, the town is also surrounded by several groups of islands. These include Bear Island, the second largest on Winnipesaukee, and Stonedam Island, along with dozens of smaller islands that are a part of or surround Meredith. These islands contribute to Meredith's unique sense of character. Table 2 provides a brief description and history of each island group.

Table 1: Active Farms in Meredith 2023

Name	Location	Product
Moulton Farm	18 Quarry Road	The farm provides a Farm Market (fresh produce, farm made foods etc.), Farm Kitchen (bakery/seafood), Garden Center, and seasonal attractions such as corn maze, hayrides, and other family farm activities.
Picnic Rock	85 Daniel Webster Hwy (US 3)	Specializes in fresh fruits and vegetables, jams and jellies, baked goods and other products.
Muddy Dog Farm	56 Tucker Mountain Road	Small Farm that has fresh eggs, Maple Syrup, Wool, and sometimes Honey. The farm breeds Jacob Sheep, Gloucestershire Old Spot Pigs, and Great Pyrenees dogs.

Table 2: History of Meredith's Islands

Island Group Name	Description/History
Beaver Island	The Beaver Island group consisted of 5 islands; there are four today: Big Beaver, Beaver, Middle Beaver, and Little Beaver. During the 1900's two of the islands were connected by a causeway that formed Middle Beaver. The Beaver Islands Group are located northwest of Three Mile Island.
Carry Cove Islands	Located on the west side of Bear Islands facing Meredith Neck, these islands are in Carry Cove; today these islands are known as Rock, Shepard, Palmer, and Little Pine. These islands began to draw attention during the last two decades of the 19th century when the vacation era began on the lake. Rock Island was the first of the Carry Cove Islands to be occupied.
Dollar Island	This tiny island played no part in early settlement however, in the late 1800's, the Quinby family purchased the island and built the first house on the island.
Dolly Islands	During the late 1800's, the Dolly Islands (known today as Dolly Island, South Dolly Island, Little Dolly Island, and Penny Island) were collectively known as the Aunt Dolly Islands. During the summer vacationer's era, these islands attracted tourists, and by 1890 there were five separate camps on them, nearly all were occupied by local men from Gilford.
Five Mile Island	The island was designated by the Masonians in 1781, however the island's name was not given until the mid-1800s. The name of the island is derived from the island's distance from Center Harbor. In 1998, the island was purchased by the Lakes Region Conservation Trust.
Goose Island	A tiny island located in the channel between Pine Island and Meredith Neck. The first owner of record was the Pine Island Outing Club (PIOC) and in 1906, the PIOC sold the Island (formally known as Pine Cone Island). A house was already placed on Goose Island once acquired by Follet and in 1902. The New England Telephone and Telegraph Company had placed a pole on the island to facilitate getting its wires to Pine and Bear Island.
Horse Island	Located just across the channel from the Dolly Islands. First recorded ownership was George W. Sanders in the late 1900s but by 1900s the island eventually was sold to Robert Moses, a Meredith resident that constructed the unique two-story, octagonal building on the island. Eventually by the 1910's the island was a summer home to Camp Winnipesaukee until 1939. The structure burned in 1950.
Loon Island	A small island in about two acres in size. Sometime before 1901, Ede T. Gordon, a blacksmith and farmer from Laconia, acquired the island and constructed the first house on the island however a new house was built on loon in 1906. Eventually, Loon became one of the stops for the new mail boat service on the lake in 1902, and it remains one today.
Pine Island	Pine Island is the 15 th largest island in Winnipesaukee at 72 acres. The Island was once informally divided into three lots back in the 1840's but by 1898, the PIOC (owners of the island at the time) commissioned a surveyor to prepare a survey and subdivision plan of Pine Island. By 1901, the plan resulted in a 20-lot subdivision with a commercial center in which the PIOC sold all 20 lots to members and their families. Pine Island had transitioned into the summer vacation era by the end of 1901 and remain today. The lots are now privately owned.
Stonedam Island	The 8 th largest island in the lake at 141 acres. Stonedam Island was included in the 1781 island lottery held by the Masonian Proprietors and by the late 1700's a dam was constructed on the island connecting the island to Meredith Neck and the island was annexed to the Town of Meredith. The island changed ownership several times thereafter but by 1982 the Lakes Region Conservation Trust raised funds to purchase about eighty percent of Stonedam Island, and about 26 acres on the southern end of the island is privately owned.

The Lakes Region Tour Scenic Byway

As described in the Transportation Profile of this Existing Conditions Report, Meredith is part of the Lakes Region Tour Scenic Byway. The 2015 Lakes Region Tour Scenic Byway Corridor Management Plan identifies that, the scenic byway includes the following scenic, historical, cultural, recreational and natural resources in Meredith along its route:

- Community Park/Waukewan Canal
- Meredith Historical Society Museum
- town docks, ramp boardwalk, and gazebo
- Hesky Park
- Scenic Park, Clough Park
- Indian Island
- Interlakes Summer Theatre
- Leavitt Park
- Meredith Bay Public Waterfront
- Meredith Community Center
- Meredith Community Forest
- Meredith Public Library
- Moulton Farm
- Page Pond and Forest
- Picnic Rock Farm
- Prescott Park, Storer Memorial Forest
- Sweeney Park
- The Winnipesaukee Playhouse
- Visitor Information Center
- Waterfall
- Waukewan Highlands Park

For more information, please visit the Transportation Profile.

Historic and Cultural Organizations and Traditions

Throughout the years, Meredith's historical and cultural organizations have evolved and expanded, while some traditions have remained over time. Table 3 shows a list of the organizations and groups in Meredith. (More recreation type programs and organizations can be found within the Recreation Profile of this Existing Conditions Report). Below is an inventory of some of these historical and cultural organizations and groups and community traditions/events in Meredith.

Table 3: Historical and Cultural Organizations, Groups, and Community Traditions/Events

Community Service/Civic Organizations	
Altrusa	Kiwanis
Astra	Latchkey Charities, Inc.
American Legion Griggs-Wyatt Post No. 33	Meredith Lions Club
Community Garden Club	Meredith Historical Society
Greater Meredith Program	Meredith Fire Department Auxiliary Meredith Area
Inter-lakes Alumni Association	Chamber of Commerce
Inter-lakes Parent-Teacher-Student Assoc.	Meredith Food Pantry
Meredith Rotary International Club	Wicwas Lake Grange No. 292
Meredith Caregivers	Friends of the Meredith Public Library
Lake Winnipesaukee Watershed Association	Friends of the Meredith Parks and Recreation Department
Youth Development Groups	
Boy Scouts Troop/Pack 55, Daniel Webster Council	Inter-lakes Got Lunch Program
Girl Scouts of the Green and White Mountains	-
Religious Groups (Churches)	
Meredith Calvary Bible Church	Saint Charles Borromeo Church
First Baptist Church of Meredith	Union Church of Meredith Neck
First Congregational Church	Meredith Trinity Episcopal Church
Meredith Center Baptist Church	Saint John's on the Lake
Meredith Full Gospel Assembly	-
Community Traditions/Events	
Fishing Derby	Pond Hockey
Craft Fairs (2-3 per year)	Parades
Street Dances (2 per year)	Rubber Ducky Race Fundraiser
Historical Society Speaker Series	4 th of July fireworks

Meredith Historical Society

In 1950, the Meredith Historical Society was incorporated as a volunteer-based, 501(c) (3) charitable organization. The mission of the MHS is to “preserve, develop, and promote the knowledge and awareness of the unique history of Meredith, New Hampshire to all interested parties.” To maintain this mission, the MHS maintains two of Meredith’s oldest and most historic buildings, collects, preserves and displays a wide range of materials and media in two Meredith Historical Society museums. The MHS also undertakes several related activities including developing educational programs; supporting original historical research; and convening various programs and events that further the understanding of the town’s history. The MHS operates and maintains two museums in town which are described below. Additionally, the MHS provides a Speaker Series each year.

Farm Museum

In 1955, the Historical Society acquired the Oak Hill / Pottle Meetinghouse on Winona Road. In 1998, this old meetinghouse was converted into a Farm Museum. Today, the Farm Museum is open for special

events only. The Farm Museum displays depict the annual life cycle of New Hampshire farmers by seasons and contains a collection of antique tools enhanced by pictures and educational descriptions.

Main Street Museum

In 1994, the MHS purchased the former Ladd Building at 45 Main Street in downtown Meredith where it still serves as a tourist attraction and museum today. The Main Street Museum is open Saturdays 10am-3pm spring through fall however, hours of operation appear to change seasonally. The museum displays Meredith's antiques and memorabilia ranging from a Seneca Ladd melodeon to period specific clothing to Civil War and World War II artifacts to numerous other exhibits that change periodically. The collection includes original detailed town inventory and tax books that date back to the early 1800s. The collection also includes a newspaper collection and other articles.

Meredith Village Historic Walking Tour

The MHS, in collaboration with the Meredith Village Pathways Committee, created a self-guided walking tour and corresponding guide map to explore the history and heritage of Meredith. This walking tour identifies sixteen properties located on Main Street, Highland Street, Waukewan Street, and Lake Street. The properties identified on the Meredith Village Historic Walking Tour are identified in Table 4.

Table 4: Meredith Village Historic Walking Tour Properties

Name	Location
Historical Society Museum	45 Main Street
Congregational Church	4 Highland Street
Sanborn House/Drugstore	51 Main Street
Town Halls & the "Great Catastrophe"	92 Main Street & 73 Main Street
Baptist Church	89 Main Street
The Civil War Memorial & Meredith Public Library	91 Main Street
The Humiston School	103 Main Street
John Bond Swasey House	109 Main Street
Jonathan C. Everett House	4 Waukewan Street
William Morse House	17 Lake Street
The Swasey Stone	South corner of Main and Dover Streets
Lang/Mansfield/Grad's Store	48 Main Street
The First Inn	23 Main Street
The Horne Block & Lower Main Street	14 Main Street
Waukewan Canal & Village Mills	Daniel Webster Hwy
Waterfront	Hesky Park, Scenic Park to Clough Park

For more information on the Meredith Historical Society, its museums, and Meredith history, please visit the Meredith Historical Society Website: <https://meredithhistoricalsocietynh.org>.

Greater Meredith Program

The Greater Meredith Program (GMP) is a 501(c)3 community non-profit development organization that was founded in 2004. The mission of the GMP is "to enhance economic vitality, historic and cultural heritage, and town-wide beautification". Along with the GMP's Board of Directors, the organization has many volunteer committees including the Meredith Sculpture Walk Committee, Design and Beautification Committee, Promotions Committee, Economic Development Committee, Financing and

Fundraising Committee, and Career Partnership Committee. The GMP provides funding and volunteer assistance to enhance Meredith's unique history, scenic beauty, and natural resources to provide a one-of-a-kind experience to Meredith's residents, visitors, and community members by coordinating with other town boards and organizations such as the Meredith Historical Society and the Meredith Conservation Commission, and Meredith Village Pathways Committee. Below are GMP implemented projects in Meredith.

- *Meredith Sculpture Walk* – began in 2012 as an initiatives to reach out to local artists to create a sculpture display along a walking path through Meredith Village. Artists can display their sculptures for up to two years, however, the sculptures have to be juried the second year. The GMP Meredith Sculpture Walk (MSW) is celebrating its tenth year with the 2023-24 exhibit and is available year-round. Every year, GMP's Meredith Sculpture Walk Committee develops and publishes a brochure and walking map, both hardcopy and an interactive online map which can be accessed here: <https://greatermeredith.org/gmp/sculpture-walk/>. The sculptures are positioned in high visibility areas along Main Street, the Mill Falls Marketplace, and in the lakeside, Hesky and Scenic Parks. A self-guided Brochure/Walking Map is available in kiosks found at the entrance to Hesky and Scenic Park, the Courtyard on Main Street, in front of the Post Office and inside the courtyard at the Mill Fall Marketplace as well as Town Hall, the Meredith Library and various businesses throughout the walk.
- *Do the Loop* – The GMP also develops a "Do the Loop" brochure that navigates Meredith Village and provides a directory of shops, entertainment, dining, services, Meredith's recreation trails, and a Historic Meredith Village Loop. The Historic Meredith Village Loop is a self-guided walking tour that follows along Main Street, Lake Street and Daniel Webster Highway (US 3). For more information please visit: <https://greatermeredith.org/gmp/do-the-loop/>

National Register of Historic Places

There is one property in Meredith that is recognized and listed on the National Register of Historic Places. This includes the First Free Will Baptist Church in Meredith / the Oakhill Meeting House located at 61 Winona Road. Today, the structure is utilized as the Meredith Historical Society's Farm Museum.

State Register of Historic Places

There is one property in Meredith that is recognized and listed on the State of New Hampshire Register of Historic Places: St. John's on the Lake Chapel located at 278 Bear Island.

Emerging/Potential Actions

- Continue to support popular cultural initiatives like the Sculpture Walk.
- Promote the local history of Meredith through educational programs and other initiatives.
- Identify opportunities to strengthen the town's land use regulations to better protect the historic resources and character of Meredith.

Sources

- National Register of Historic Places
- New Hampshire Division of Historical Resources (NHDHR)
- 2022 Meredith Community Master Plan
- Meredith Historical Society
- Greater Meredith Program
- Local Historians - Ruth VanVeghten and John Hopper

NATURAL HAZARDS



With the impacts from climate change continuing to persist throughout the region and state, it is crucial for the Town of Meredith to identify and prepare for potential natural hazards that can occur within the community. This includes mitigating the negative impacts on infrastructure, facilities, and development by increasing the community's resilience and efficiently responding to emergencies. This is often the focus of hazard mitigation planning, which allows communities to identify and reduce potential and future losses from natural, technological, or human caused hazardous events.

Over several decades, the frequency and intensity of natural hazards, including flooding, extreme weather events, warmer temperatures, and drought, have increased within the region, and it is essential that Meredith identify weaknesses in its infrastructure and develop mitigation strategies to increase its resiliency. These natural hazards have the potential to impact the town's transportation infrastructure, agriculture, energy, water resources, and the health and wellbeing of the community.

FACTS AND FIGURES



In Meredith, **22** roadways are prone to flooding.

Drought conditions occurred within **11** years of a twenty-year timeframe between 2000 and 2020. In fact, it appears the intensity of drought events has increased in more recent years (2020-2023), as New Hampshire experienced an extreme drought statewide - Recent data shows that Belknap County mostly experienced extreme drought in 2020/early 2021.



The state's temperatures have risen more than **3** degrees since the beginning of the 20th century. The greatest warming has occurred in the winter, with an increase of more than 4°F since 1900. This is according to 2022 NOAA New Hampshire Climate Summary.



Over the last **30** years, weather records for New Hampshire indicate that the number of heavy rainfall events (greater than 4" in 24 hours) per decade has increased and is projected to continue to increase..

NATURAL HAZARDS KEY FINDINGS

- The most imminent natural hazards that Meredith is facing include extreme temperatures, drought, dam failure, and flooding.
- The effects of climate change are increasing the severity of weather events and the amount of precipitation resulting in flash flooding and other impacts.
- Areas of greatest concern for flooding are the waterfront properties on Meredith's three largest waterbodies: Lake Winnipesaukee, Lake Winnisquam, and Lake Waukewan (as well as their associated tributaries). Impacts to the community from flooding could include damage to property and infrastructure, potential contamination of waters from the release of hazardous chemicals and pesticides into flood waters, and other impacts.
- The flood zones in Meredith are generally located along the perimeter of waterbodies such as Lake Winnipesaukee (Meredith Bay, and Meredith Neck), Lake Winnisquam, Lake Waukewan, Lake Wicwas, Pemigewasset Lake, as well as several smaller ponds, and along the associated tributaries. Flood zones or Special Flood Hazard Areas (SFHA) can be defined as an area having a special flood, mudslide, and/or flood-related erosion hazards, and shown on FEMA's Flood Insurance Rates Map (FIRM) as zones A or AE.*
- According to the Meredith Hazard Mitigation Plan, the town has twenty-two buildings that are required to abide by the National Flood Insurance Policy (NFIP) program. Of these, eighteen are residential properties and four are non-residential. Fifteen of the insured properties are in the A-Zone (1% chance of an annual flood – High Risk Areas), the seven other properties are in the B, C, and X Zones (less than 1% chance of an annual flood - Moderate to Low-Risk Areas).
- According to the 2022 NOAA New Hampshire Climate Summary, New Hampshire's temperatures have risen more than 3 °F since the beginning of the 20th century this has resulted in less predictable winter conditions, and an expanding mud season impacting local roads.
- The 2022 U.S. Drought Monitor indicated that most of Belknap County experienced extreme drought conditions in 2020/early 2021. Potential impacts of drought conditions on the community could include loss of crops, dried up wells, health problems related to poor water quality or the lack of water, health problems related to dust and pollen, more frequent wildfires, and others.
- There are a total of 26 dams in Meredith, of which 15 are active. Of the 15 active dams in Meredith, one is classified as being a "high hazard" (Waukewan Dam), one is a "significant hazard", five are "low hazard", and the remainder are considered either non-menace hazard dams or exempt dams. The four dam hazard classifications (Non-Menace, Low Hazard, Significant Hazard and High Hazard¹⁵) are based on the potential losses associated with a dam failure.
- The Waukewan Dam has a formal NH Department of Environmental Services' Emergency Action Plan (EAP). In New Hampshire, owners of "high hazard" or "significant hazard" dams are required to develop and maintain an EAP that addresses the areas of concern and identifies procedures to be initiated in the instance of a dam failure. High (H) and Significant (S) Hazard dams have the highest potential for damage; this could include damage to state or municipal roadways as well as structures.

NATURAL HAZARDS

Introduction

Over several decades the frequency and intensity of natural hazards has increased within the region, and it is essential that Meredith identify weaknesses in its infrastructure and develop mitigation strategies to ensure resiliency. Meredith has already identified several general Hazard Mitigation goals in the 2023 Hazard Mitigation Plan, which are listed below:

- Improve upon the protection of the residents of Meredith and its visitors from all hazards, raise general awareness, and reduce the liability to the town from hazard events.
- Reduce the potential impact of hazard events on Meredith's critical support services, facilities, and infrastructure.
- Improve emergency preparedness.
- Improve the response and recovery capability of Meredith to hazard events.
- Reduce the potential impact of hazard events on private and public property, the natural environment, and economic resources.

Natural Hazards in Meredith

In this section, some of the more pressing potential hazards that were identified in Meredith's Hazard Mitigation Plan and the New Hampshire State Hazard Mitigation Plan are addressed.

Extreme Temperatures

As identified in the 2023 New Hampshire State 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

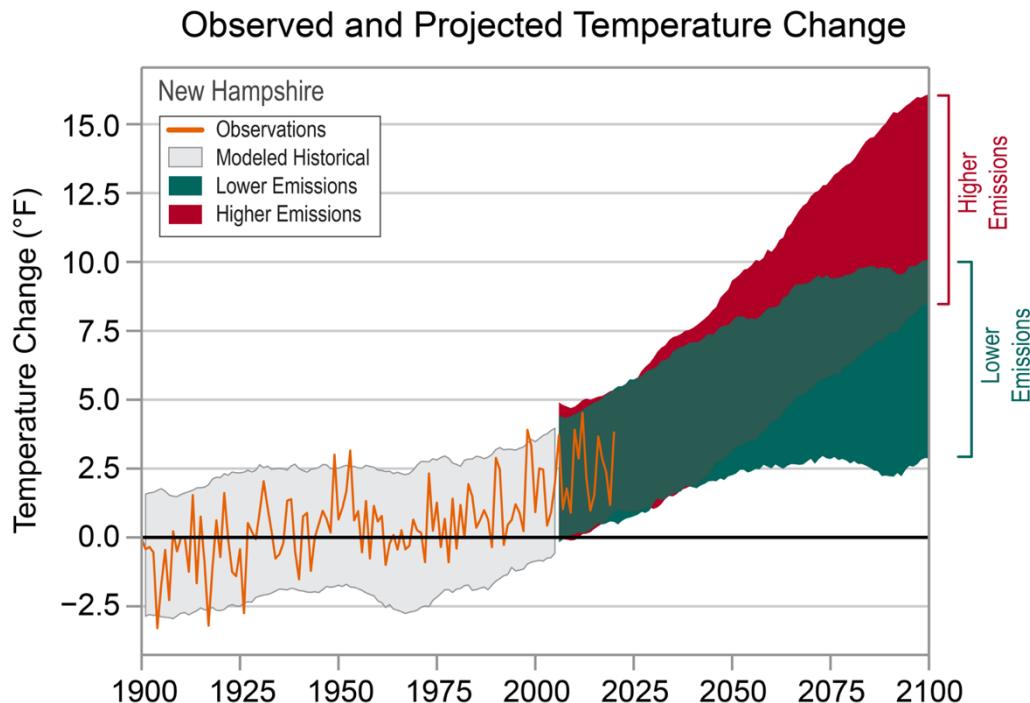
Currently, the State of New Hampshire averages between two and ten days per year where the heat index reaches or exceeds 95 degrees. According to Climate Solutions New England in collaboration with the University of New Hampshire, it is predicted that the number of days per year where the heat index is over 95 degrees will increase by twelve days in northern New Hampshire, and twenty-two days in southern New Hampshire by the year 2070. This increase in temperature is predicted for longer durations of time and Meredith will be impacted. As described in the State's Hazard Mitigation Plan (SHMP), extreme heat occurs ***"as a result of above normal temperatures which often coincide with high relative humidity, that increase the likelihood of heat disorders with prolonged exposure or strenuous activity"***. The impacts to Meredith due to warmer temperatures are identified in Table 1.

Table 1: Impacts from Extreme Heat Events

Source: State of NH Hazard Mitigation Plan

Category	Impacts
Health	Risk of heat related injury or death to humans, pets, and livestock. Risk to the elderly, especially those who do not have air conditioning. Risk to individuals with functional needs. Risk to individuals who work outdoors or who already work in hot environments. Risk to athletes and outdoor recreationists.
Transportation	Highway and road damage – asphalt roads soften, concrete roads can shatter. Cars and trucks – increased stress on vehicle cooling systems, increased potential for mechanical failure, refrigerated goods experience a significantly greater rate of spoilage. Rail – increased stress on locomotive cooling systems, train rails may develop kinks and distort.
Agriculture	Livestock and birds can be severely impacted and killed. Milk production and cattle reproduction also slow down during heat waves. Crop production can be slowed, damaged, or destroyed during extreme heat events.
Energy	The demand for electricity increases because of the need for air conditioning and more power being required by components. Demand on electricity heats up power lines causing transmission and distribution lines to sag. Sagging powerlines can short out causing power outages and brownouts.
Water Resources	The demand for water increases as a result of increased human and animal needs, and to cool equipment and structures. The demand for water can also negatively impact firefighting operations due to a lack of available water or a lack of water pressure. A rise in water temperature can result in lower water quality, can affect fish populations, and can result in the death of other organisms.

According to the 2022 NOAA New Hampshire Climate Summary, New Hampshire's temperatures have risen more than 3 °F since the beginning of the 20th century. The highest multi-year average of extreme heat temperatures (9 days) occurred in 2015 and 2020. The greatest warming has occurred in the winter, with an increase of more than 4°F since 1900. In recent years this has resulted in an earlier and longer mud season impacting local roads. NOAA's Observed and Projected Temperature Change Graph shows the state's historical data while showing the projected change in temperatures over time based on project high or low emissions scenarios. Under NOAA's higher emissions projected temperature change, Meredith would see dramatically increased pressure placed on the town's transportation network, agriculture, water resources, energy, and overall health of the community as further described in Table 1.



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 defined in the 2023 New Hampshire State Hazard Mitigation Plan, extreme cold during winter months, also known as cold snaps, are caused by the southern transport of arctic airmasses into the northeast. The impacts of colder temperatures to Meredith are identified in the Table 2 on the following page. Additionally, it is important to acknowledge that winters in Meredith have become increasingly unpredictable, which has its own challenges on municipal budgets, the local economy, and community events. For example, oscillating temperatures from extreme cold to periods of warm temperatures reduce lake ice that often attracts many visitors to attend annual events in Meredith such as the pond hockey tournament. It should be noted that colder temperatures can result in severe winter weather that can impact Meredith resources, facilities, and services. The entire State of New Hampshire is susceptible to severe winter weather (which often includes snow, high winds, and ice), which impacts Meredith at the local level. Many of these severe winter weather hazards impacting Meredith and the region are defined here:

- **Heavy snow** – snowfall accumulating to 4" - 6" or more in depth within 12 hours or less; or snowfall accumulating to 6" - 8" or more in depth within 24 hours or less.
- **Blizzard** – a snowstorm with the following conditions that is expected to prevail for a period of three hours or longer. Sustained wind or frequent gusts to 35mph or greater; and, considerable falling and/or blowing snow that frequently reduces visibility to less than one-quarter mile.
- **Snow squall** – an intense, but limited duration, period of moderate to heavy snowfall, accompanied by strong, gusty winds, near zero visibilities, and possibly lightning.
- **Sleet** – pellets of ice composed of frozen or mostly frozen raindrops, or refrozen partially melted snowflakes.

- **Nor'easter** – large cyclonic storm that tracks north/northwest along the East Coast of North America.
- **Ice storm** – typically occur with warm fronts, where warm air rises up and over a shallow mass of cold air near the earth's surface.

With more blizzards, Nor-easters, and ice storms Meredith's town budget could be impacted. For example, the need to budget for more sand/salt to maintain roadways, accounting for challenges encountered by municipal staff if winter storms produce more snowfall/ice and ensuring equipment is sufficient to handle these severe winter weather events. Some of the impacts of colder temperatures to Meredith are identified in the Table 2 below.

Table 2: Impacts from Extreme Cold
Source: State NH Hazard Mitigation Plan

Category	Impacts
Health Impacts	Risk of cold related injury or death to humans, pets, and livestock. Risk to the elderly, especially those who do not have adequate heating sources or already live in cold buildings. Risk to individuals with functional needs. Risk to individuals who work or recreate outdoors.
Transportation	Vehicles, batteries, and fuels can become stressed and/or damaged. Roads and bridges can become damaged due to freezing or wind.
Agriculture	A freeze or frost early or late in the growing season can quickly become an agricultural disaster driving up the cost of products and economically impacting farmers. Livestock can be affected if not properly protected from cold temperatures.
Energy	Energy use can also rise significantly in extreme cold, and the power grid is more susceptible to outages.
Water Resources	Extreme cold temperatures can freeze water resources, pipes, and drainage systems, which not only stops people and animals from accessing water, but can also significantly damage infrastructure.

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”***. Due to New Hampshire's plentiful water resources throughout the state, especially in Meredith, it is often misperceived that the occurrence of drought is rare. However, in recent years, the State of New Hampshire has experienced increased drought levels over longer periods causing significant impacts, requiring community adaptation and implementation measures. For the state to successfully monitor and respond to drought conditions, New Hampshire has been divided into 5 drought management areas - Belknap County falls within the “Southern Interior” drought management area. The impacts drought conditions pose to Meredith are identified in the next table under three categories: economic, social, and environmental.

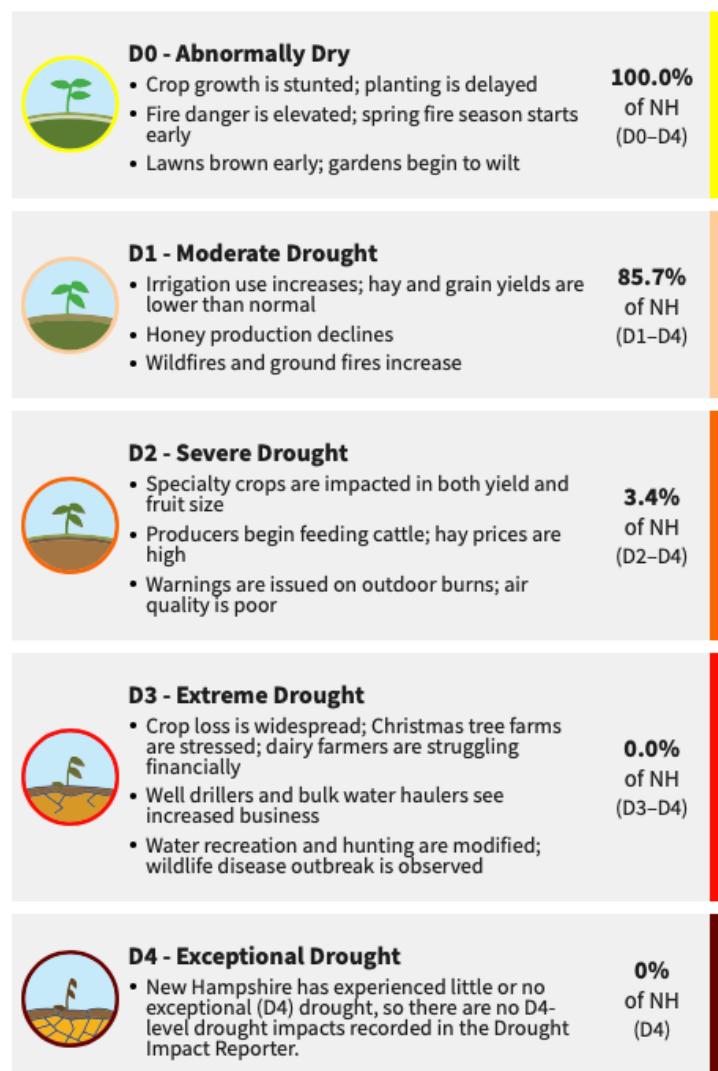
Table 3: Impacts from Droughts

Source: State NH Hazard Mitigation Plan

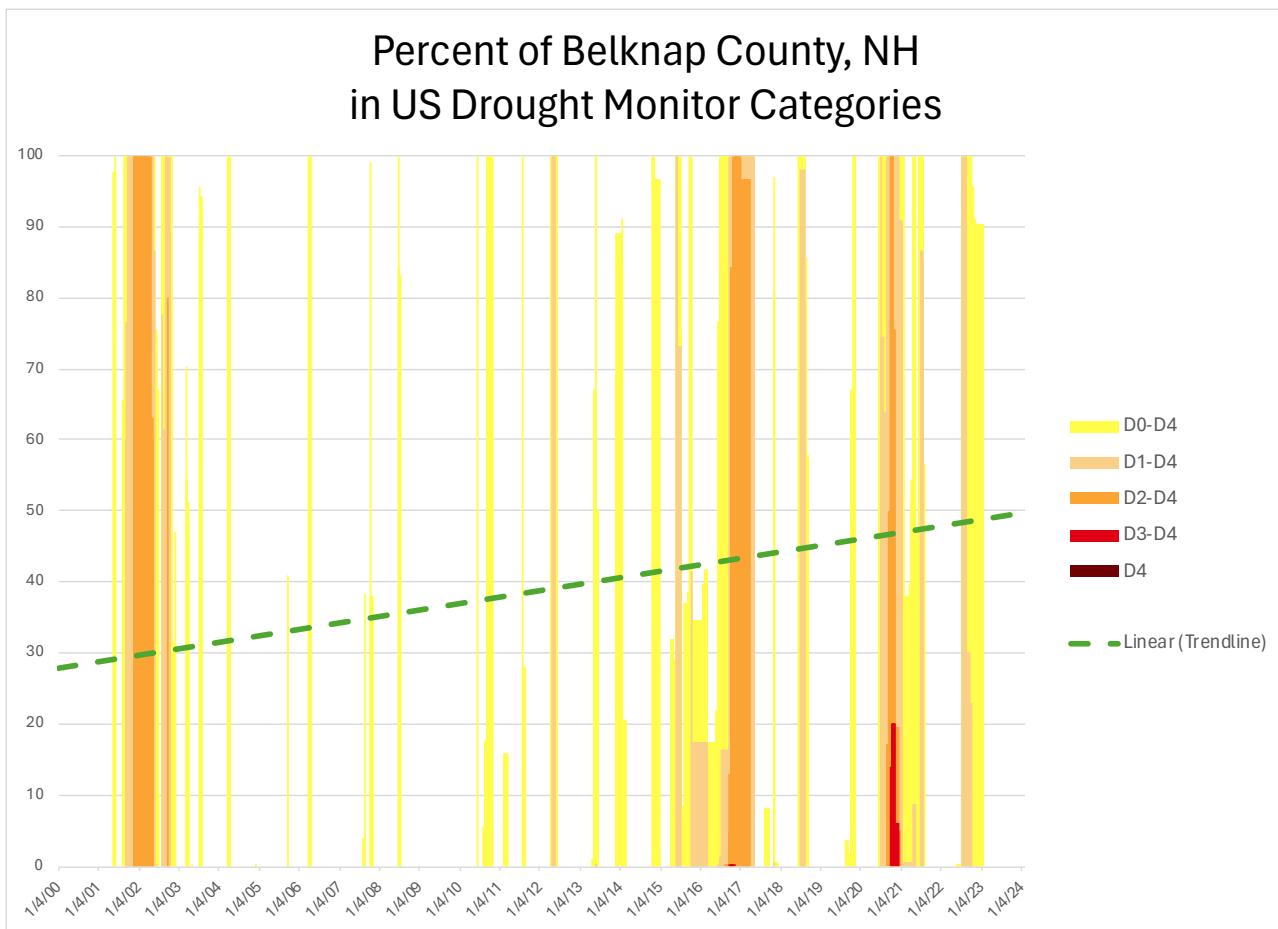
Category	Impact
Economic Impacts	<p>Destruction of crops affecting farmers and driving up food costs for consumers.</p> <p>Cost of irrigation and drilling new wells.</p> <p>Farmers spending more money on water and feed for animals.</p> <p>Businesses that rely on farming, such as tractor and feed suppliers, may lose income.</p> <p>Timber industry workers may be affected if wildfires exacerbated by drought destroy timber.</p> <p>Businesses that sell boating and fishing equipment may lose business due to impacted surface waters.</p> <p>Power companies that utilize hydroelectric power have to spend money on other fuel sources, and customers may also have to pay more for power.</p> <p>Water companies and private well owners may need to spend money on new or additional water supplies.</p>
Social Impacts	<p>Anxiety or depression related to economic losses caused by drought.</p> <p>Health problems related to poor water quality or the lack of water.</p> <p>Health problems related to dust and pollen.</p> <p>Loss of life.</p> <p>Threat to public safety from an increased number of wildfires.</p> <p>Reduced incomes.</p> <p>People may have to relocate.</p> <p>Fewer recreational activities.</p>
Environmental Impacts	<p>Loss or destruction of fish and wildlife habitat.</p> <p>Lack of food and drinking water for wild animals.</p> <p>Increased stress on and possible extinction of endangered species.</p> <p>Lower water levels in reservoirs, lakes, and ponds.</p> <p>Impacts to wetlands.</p> <p>More frequent wildfires.</p> <p>Wind and water erosion of soils.</p> <p>Poor soil quality.</p>

According to the New Hampshire Department of Environmental Services, drought conditions occurred within eleven years of a twenty-year timeframe between 2000 and 2020 for the entire state of New Hampshire. In fact, it appears the intensity of drought events has increased in more recent years (2020-2023), as New Hampshire has experienced an extreme drought statewide. This was identified in the history of drought events in the State's Hazard Mitigation Plan. The drought of the 1960s, was the worst on record in the state, and since then the population has more than doubled, which has increased demand for the state's water resources. Additionally, because of climate change, temperatures are increasing at an accelerated rate, which can increase the severity of drought. Droughts are classified on a scale of D0-D4, which are described in the image to the right. In 2020, the entire state experienced D1-D3 drought designation.

Recent data shows about 20% of Belknap County experienced extreme drought in 2020/early 2021 with the rest of the county experiencing severe drought. The graph below is derived from the U.S. Drought Monitor (USDM), which 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. As shown in the Percent of Belknap County, NH in US Drought Monitor Categories graph on the following page, there is evidence to support that between 18 and 20 individual drought events have occurred in Belknap County since 2001. Severe drought (D2) events and greater have occurred four times in Belknap County over the last 20 years. When drought conditions exist amongst local communities, generally the whole county is affected.



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



Inland Flooding

The New Hampshire Department of Emergency Management's Hazard Mitigation Plan defines flooding, including inland flooding as, ***"a high flow, over flow, or inundation by water, which causes or threatens damage".***

Increased Precipitation

The effects of climate change are increasing the severity of weather events and the amount of precipitation resulting in flash flooding and other impacts. Flash flooding is defined as, ***"a flow with 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 is also caused by ice dams and rapid snow melt. An extreme precipitation event can be identified as those where more than one inch of rain falls within 24 hours, or more than 2-4 inches falls in 48 hours. According to the 2021 New Hampshire Climate Assessment, it is predicted that there will be an increase in the total annual precipitation as well as the frequency and intensity of extreme precipitation events. As identified in the 2023 Meredith Hazard Mitigation Plan, most of the flooding that has occurred in Meredith recently has been in upland areas and was associated with extended or heavy rainfalls. Weather records for the region indicate that the number of heavy rainfall events (greater than 4" in 24 hours) per decade has increased over the last thirty years and is projected to continue to increase. This projected increase in precipitation can impact

Meredith's waterbodies and waterways causing flooding of roadways, neighborhoods, and damage to other infrastructure such as culverts and bridges.

Riverine erosion, scouring, and flooding

Increased precipitation and flash flood events, combined 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. In Meredith's case, area of greatest concern are the waterfront properties on the three largest waterbodies,

Lake Winnipesaukee, Lake Winnisquam and Lake Waukewan and the associated tributaries. Other areas of past and potential future flooding are:

- Page Pond
- Weed Pond
- Camp Waldron Road
- Winona Shores Road
- Winona Road
- Reservoir Dam
- Randlett Pond Dam
- Wickwas Lake Dam.

Also, washouts have occurred under the railroad trestle at Monkey Pond. Scouring typically occurs downstream of bridges and culverts and other structures within rivers such as retaining walls and riprap revetments. The USGS (United States Geological Survey) describes scour as "***occurring when water erodes the sediments that surround the base or support structures for bridges, roads, and other man-made buildings. Scour is often caused by fast-moving water, so scour often occurs during floods***". The threats to Meredith due to flooding are identified in the next table with the following categories of impact: during flood, after flood, overtime, environmental, and economic.

Table 4: Impacts from Flooding

Source: State NH Hazard Mitigation Plan

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, housing units, roads, stormwater infrastructure, bridges, culverts, power and utility lines.
Overtime	Damage to structures causing rot and degradation.
Environmental	Release of hazardous chemicals and waste into flood waters contaminate those waters; downstream water quality issues result from the storm drainage systems in developed areas being overwhelmed and inundated; disrupts the balance of the existing ecosystem, kills animals/plants/insects.
Economic	Damage to structures, loss of commerce due to business closure or inaccessibility, and rebuilding and mitigating related costs.

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) as 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. The Meredith Flood Insurance Rate Maps (FIRM) show the flood boundaries in the event of a 100-year flood, defined as a having a one percent chance of flooding each year. These maps are dated June 3, 1988. The age of these maps has been a challenge for town boards, staff, and developers. Most New Hampshire communities have access to newer digital FIRMs.

As previously mentioned, floodplains exist in Meredith along nearly every stream in town, and along several of the lakes and ponds due to the topography and the amount of surface water. There are three primary flood zone types in Meredith including:

- Zone A: – 1% annual chance flood (100-year floodplain with no Base Flood Elevations determined.)
- Zone AE – 1% annual chance flood (100-year floodplain with Base Flood Elevations determined.)
- Zone X – 0.2% annual chance flood (also known as the 500-year floodplain)

The Meredith FIRMs identified 22 roadways that are prone to flood in town. It should be noted that there is no length of roadway (that lie within the flood zone) available due to the age of the FIRM data. These prone roadways include:

- Boynton Road
- Chase Road
- Chemung Road
- Collins Road
- Edgerly School Road
- Hatch Corner Road
- Hermit Woods Road
- Jenness Hill Road
- Livingstone Road
- Meredith Center Road
- Meredith Neck Road
- Oak Island Road
- Old Stage Road
- Pickering Road
- Reservoir Road
- Robinson Pond Road
- Roxbury Road
- NH Route 25
- US 3
- NH Route 104
- Stone Dam Island Road
- Upper New Hampton Road

Due to the town's extensive surface waters, Meredith is at greater risk than some communities to be impacted and experience losses from flooding, which led the Town to join the National Flood Insurance Program (NFIP). The program involves providing full insurance coverage to flood hazard zone areas, based on risk, to the community. Communities participating in the NFIP must agree to adopt a Floodplain Development Ordinance and enforce regulations to protect the floodplain from future development impacts. As a result, Meredith has adopted a Floodplain Development Ordinance, and the details of this regulatory tool is briefly described in the next section. In 1988, the FEMA FIRM map for Belknap County was updated. However; they have not been updated since then and no digital maps have been developed. Due to a lack of available data from FEMA, the entire Belknap County floodplain data is not up to date and therefore Meredith still utilizes FIRM maps from 1988 where Meredith's floodplains can be found.

However, in recent contact with the New Hampshire Office of Planning and Development (February 2024), FEMA is in the process of updating FIRM maps/data in Belknap County, along with the rest of the country. They have finished the bulk of their initial analysis and have published preliminary FIRM maps with the disclaimer that *"preliminary data are for review and guidance purposes only... [and] that the information provided is preliminary and subject to change...[and] are not final. FEMA intends to remove the preliminary data once effective data is available"*. The preliminary FIRM maps are available on the

FEMA Flood Map Service Center website and FEMA is working with local communities to review these preliminary FIRM maps to work towards a final update.

Meredith Floodplain Development Ordinance

Meredith's Floodplain Development Ordinance was last revised in 2010. The Ordinance's purpose is to regulate the areas in Meredith that are subject to periodic flooding and, therefore, cause serious damages to properties within these areas. The ordinance is also required to comply with the requirements of the National Flood Insurance Act of 1968 (P.L. 90- 488, as amended). Area of Special Flood Hazards are identified in the Floodplain Development Ordinance as ***"the land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year. The area is designated on the FIRM as zones A or AE."***

Existing Meredith Flooding Issues

As identified in the 2023 Meredith Hazard Mitigation Plan, more non-traditional areas of flooding are a continuing concern including areas of steep slopes and soils with limited capacity to accept higher volumes of rainwater rapidly. A significant threat in Meredith has been 'sheet flow' or flash flooding in recent years. Another concern identified by the Meredith Hazard Mitigation Committee is the flooding of localized culverts. Specific areas of concern include sections of Chase Road, Hermit Woods Road, and Waukewan Road. Short-term flooding occurs along Bonny Shores Road, Sawmill Shores Road, Chemung Road, Reservoir Road, Black Brook Road, Wall Street, Meredith Neck Road, and at the intersection of US Route 3 and NH Route 25 in the village area. Many of the culverts of concern are located on less traveled roads in town. It was recommended in the Plan that areas of greatest concern should be prioritized and included in a Local Transportation Improvement Plan.

Dam Failure

Dams and levees provide recreation, water supply, floodplain management, energy, and other important functions to a community. In Meredith, there are 26 dams of which 15 are active. Floodplain areas downstream of large dams are susceptible to flood and erosion damage in the event of dam failure. Dams in New Hampshire are classified by the New Hampshire Department of Environmental Services (NHDES) Dams Bureau and are based on the potential losses associated with a dam failure. These consist of four dam hazard classifications: Non-Menace, Low Hazard, Significant Hazard, and High Hazard. Of the 15 active dams in Meredith, one is classified as a High Hazard, one is a Significant Hazard, five are Low Hazard, and the remainder are either Non-Menace Hazard dams or exempt dams. The Dam Bureau at NHDES provides information such as areas that are at risk to flood inundation, areas downstream of dams, and dams that have formal Emergency Action Plans (EAP). The Dam Bureau requires that dams that are classified as Significant or High Hazard, whose failure could result in loss of life and significant damage to property and critical infrastructure, have an EAP.

In Meredith, there is one dam that is classified as a High Hazard, the Waukewan Dam, for which NHDES has a formal Emergency Action Plan. Waukewan Dam is located at the 35-foot drop in elevation between Lake Waukewan and Lake Winnipesaukee. At the top of this elevation decline and the dam is an engineered surge and overflow structure. The Waukewan Dam is owned by Hampshire Hospitality Holdings, LLC (HHH), a private entity. The Waukewan Dam is also the control structure for the town's public drinking water source, and provides potential flood mitigation from high lake and stream levels in

Meredith, Center Harbor, and New Hampton. The Town of Meredith works with the dam owners, HHH, and is included as a partner in the current 2022 Emergency Action Plan (EAP). A formal inundation pathway map detailing the pathway of floodwaters in the event of a failure and the potential losses is included in the 2022 Lake Waukewan Dam Emergency Action Plan (EAP). The Waukewan Dam EAP also addresses risks, vulnerabilities, and short- and long-term strategies for the ongoing mitigation of High Hazard Potentials (HHPD) and key Meredith personnel are included in the DES Operation, Maintenance and Response Form (September 2021) which notes dam maintenance monitoring.

Climate Resiliency

Over the course of 10 years, a team from The Nature Conservancy (TNC) developed the best available climate resilience data to help local communities and conservation organizations begin planning for the changing climate. At present, this is the best available data providing information related to a landscapes ability to “sustain biodiversity and ecological functions into the future under a changing climate.”

The Town of Meredith plays an important role in New Hampshire and the region given its location and shoreline along Lake Winnipesaukee. With that in mind, Meredith’s ability to adapt and sustain during a changing climate is increasingly critical. An analysis of the Town of Meredith was done with this climate resilience data from TNC. In this analysis, climate resilience refers to “the capacity to maintain species diversity and ecological function as the climate changes.” The inputs for this data include the following:

- Landscape diversity
- Local connectedness
- Fragmenting features
- Geology and soils
- Elevation
- Landforms
- Migration space for tidal habitat (this input does not impact Meredith)

The analysis done for this Natural Hazards Profile simplified the resulting TNC data covering all land in Meredith into three categories – more resilient land, average resilient land, and less resilient land. The Climate Resilience Map found at the end of this profile shows the distribution of these resilient lands in Meredith.

Of the 25,632 total land acres in Meredith, 35% (8,910 acres) are considered more resilient, most of which exist in the western half of town. The majority of these more resilient lands (more than 6,700 acres) are found west of Meredith Center Road and north of Route 104 at the intersection of Meredith Center Road. These lands are mostly contiguous with relatively minor fragmentation from roads. East of Meredith Bay and south of Route 25 is another smattering of more resilient lands accounting for nearly 1,700 acres; however, these have a higher degree of fragmentation from both roads and residential development. Nearly one-quarter (24%) of all more resilient lands have been permanently conserved, most of which are in the western parts of town – west of Meredith Center Road.

Less resilient lands account for 13% (3,290 acres) of Meredith’s land area. Nearly 60% of these are found within a half mile of the core downtown roads in Meredith including Routes 3, 25, and 106, as

well as the eastern section of Route 104 and Pease Road. The remaining less resilient lands are scattered in relatively small patches east of Meredith Bay, in the northern corner of town, and near Interstate 93. These areas will likely have the highest impact on Meredith's community and economy as they are less able to adapt to increases in frequency and severity of significant precipitation and flood events.

Emerging or Potential Actions

- Consider developing a Steep Slopes Overlay District to implement regulations that would mitigate runoff, erosion, and development on soils with limited capacity to accept volumes of rainwater rapidly.
- Continue to minimize development in areas likely impacted by inland flooding or that lie within the flood zone.
- Participate in groundwater rise and surface water related studies and conduct initial town-specific risk assessments in Meredith to take inventory of Meredith's water assets. For example, work with the Meredith Water and Sewer Department to determine if emergency water interconnections with neighboring towns are an option to send water from one public water supply to another during an emergency.
- Consider coordinating information sessions on the more prevalent natural hazards in town, such as flooding, to spark dialogue related to emergency management and mutual aid.
- When natural disasters strike, such as storm surge flooding, the town could consider identifying areas in town where there is no connectivity and implementing emergency evacuation routes through the enhanced connectivity of roads.
- Once FEMA FIRM maps are updated, consider inventorying the length of roadways in Meredith that lie within flood zones and identifying areas that need to be addressed because of flood risk.

Sources

2022 Town Annual Report

2023 Meredith Hazard Mitigation Plan

2023 New Hampshire State Hazard Mitigation Plan

The U.S. Drought Monitor (USDM)

2022 NOAA New Hampshire Climate Summary

NHDES Bureau of Dam

2015-2020 The Lakes Region Plan – Natural Hazard & Climate Change

2023 Town of Meredith Zoning Ordinance

NH Granit Data

Lakes Regional Planning Commission (LRPC)

United States Geological Survey (USGS)

2016-2023 National Integrated Drought Information System

New Hampshire Department of Environmental Services

The Nature Conservancy Resilient Land Mapping Tool

RECREATION



Meredith provides diverse recreation opportunities that contribute to the quality of life of community members, visitors, and residents of all ages. Having offerings for residents to get outside, connect with each other, exercise, and learn new skills creates healthier and more resilient communities.

Though Meredith is well-known for its lakes, the town provides many types of recreational uses and facilities. The rates of active resident involvement, volunteerism, and participation, demonstrates that the town values its recreation facilities, programs, and lands. This includes conservation lands and designated open space areas along with more traditional recreation facilities, like athletic fields, community parks, and indoor structures. The community has also become a destination for large regional recreation events including the annual Meredith Rotary Ice Fishing Derby and the Pond Hockey Classic, which draw visitors from throughout the region. Looking ahead, Meredith should consider building on its recreation assets, expanding facilities as appropriate, and improving maintenance when needed.

FACTS AND FIGURES



There are over **30** programs offered by the Meredith Parks and Recreation Department for all ages at 11 different sites throughout town including built structures such as the Hart Memorial Skate Park, natural areas, like town beaches, and designated open space, such as the athletic fields.



There are approximately **56.1** miles of trail in Meredith offering a diversity of recreational opportunities that include, but are not limited to, hiking, snowshoeing, cross country skiing, fishing, picnicking, snowmobiling, birdwatching, and a few designated handicap accessible trails.



There are **2** town beaches in Meredith - Leavitt Park and Waukewan Beach.



In **2023**, the Conservation Commission partnered with the Meredith Rotary Club to create an accessible trail and accessible viewing platform on Quarry Pond at the Page Pond Town Forest.



In **2021**, the Conservation Commission installed a kiosk and trail maps at key trail intersections in the Page Pond Town Forest to guide hikers as they explore the property.

RECREATION KEY FINDINGS

- Meredith's Parks and Recreation Department offers a variety of recreation programs for all ages. This includes:
 - Senior Programs - such as senior yoga, free computer classes, walk fit, and others.
 - Adult Programs - including pickleball, basketball, and open climbing wall hours.
 - Youth Programs - including an after school program, soccer, camps, and others.
 - Community Events - including the community holiday craft fair, Halloween party, and others.
- There are also recreation opportunities offered by local organizations in town such as the Boy Scouts Troop/Pack 55, Girl Scouts of the Green and White Mountains, and the Sno-Streakers Snowmobile Club.
- Meredith has several parks and recreation facilities located throughout town that are mostly overseen and maintained by the Parks and Recreation Department and the Conservation Commission. The Public Works Department (Buildings and Grounds Department) maintains the town-owned waterfront recreational facilities.
- Meredith's local parks include Lower and Upper Prescott Park, Childs Park, Circle Drive Park, Waukewan Highlands Community Park, Pinnacle Park, and Community Park, Hesky Park, and Scenic Park/Clough Park. Each provides different facilities and recreation opportunities including walking paths, picnic areas, boat launches, mountain biking trails, waterfront viewing, athletic fields, and more. Community events are often hosted at these facilities including holiday events at the Community Park and special events at Hesky park.
- The Community Center is one of the primary places where indoor and outdoor recreation occurs in town. The Community Center has a playground, picnic area, full-size multi-purpose gym, a game room, an arts and crafts room, a large meeting room, and a commercial kitchen.
- Meredith has access to many other nearby outdoor public and private recreational areas including the Inter-Lakes Elementary School and High School, the Oak Hill Golf Course, a fitness/wellness studio, and several marinas.
- Meredith has three privately-owned campgrounds including the Harbor Hill Camping Area, Clearwater Campground, and Meredith Woods.
- Meredith's trail network offers residents places to recreate outside and connect to the town's natural landscape. Trails take residents and visitors to local gems like the Meredith Community Forest, Page Pond Community Forest, Laverack Natural Trail at Hawkins Brook, and others.
- The Meredith Conservation Commission is very active in town. They host "Tuesday Trail work" days where volunteers collectively work to maintain Meredith's trail network. They steward many open space parcels from Bear Island in the east to Hermit Woods Forest in the west. They educate the public on Meredith's natural resources, and have developed a self-guided walking tour along some of Meredith's trail network. Looking out to the next 10 years, one of the Conservation Commission's priorities related to recreation includes extending the Quarry Road accessible trail.
- Data suggests a high usage of Meredith's roads and trails for recreation throughout the year including Plymouth Street, Pinnacle Park Road, Pease Road, Winona Road, and Meredith Neck Road.
- NHDOT has identified 16.9 miles of recommended paved bicycle routes in Meredith which include NH Route 106, NH Route 104, US Route 3, and NH Route 25.

RECREATION

Introduction

Meredith is a hub for recreation opportunities in the Lakes Region. Regardless of the season, residents and visitors take advantage of all the outdoor recreation the town has to offer. Additionally, the Town and other local partners maintain many parks and recreation facilities and offer diverse recreation programming that enhance the quality of life for residents of all ages.

Recreation Facilities and Programs

Meredith has several municipal parks and recreation facilities located throughout town that are mostly overseen and maintained by the Parks and Recreation Department and the Conservation Commission. However, the Public Works Department (Buildings and Grounds Department) maintain the town-owned waterfront recreation facilities. Collaboratively, the Parks and Recreation Department and the non-profit organization, Friends of Meredith Parks and Recreation, maintain and provide recreational programming for all demographics in the community. The unique recreation opportunities in town illustrate the rural and historical character of the community. The town's abundant natural resources, including its renowned lakes and local trails, provide many opportunities for community members and visitors to engage with the outdoors. The town's parks and recreation facilities offer residents places to participate in sports, healthy exercise, and other recreation programming. Table 1 provides an inventory of the recreation sites and facilities located in Meredith. Although there are a wide variety of programs provided in town, Table 2 shows a list of some of the programs provided by the Parks and Recreation Department and other local organizations.

Table 1: Recreational Locations in Meredith

Site Name	Recreational Facilities	Location	Maintained By
Meredith Parks and Recreation Facilities			
Lower Prescott Park	Tot lot playground, volleyball court, basketball court, baseball diamond, softball fields, batting cage, ice-skating rink, and skate park.	Located on Daniel Webster Highway, Route 3 North.	Parks & Rec Dept.
Upper Prescott Park	Tennis courts, soccer fields, baseball diamond, walking loop (.43miles/lap), and public restrooms are available. Parking for upper park located at Inter-Lakes Elementary School and High School. Park can be accessed by the North and South trails.	Located on Daniel Webster Highway, Route 3 North.	Parks & Rec Dept.
Childs Park	Playing field, basketball court, tot lot playground, and ice-skating rink. Public restrooms available.	Located in Meredith Center	Parks & Rec Dept.
Circle Drive Park	Small 1-acre partially wooded park.. Picnic tables available.	Located on Circle Drive across from the Meredith	Parks & Rec Dept.

		Community Center.	
Leavitt Beach	Beach, picnic area, barbecue grills, playground area, and public canoe/kayak launch. Seasonal public restroom and showers available.	Located on Lake Winnipesaukee - Leavitt Park Rd. off Route 25.	Parks & Rec Dept.
Swasey Park	7 acre wooded park along waterfront on the Waukewan Canal, and picnic area.	Located on High Street off Main Street.	Parks and Rec Dept.
Waukewan Highlands Community Park	190-acre managed forest, 3 miles of trails maintained for hiking, jogging, mountain biking, snow shoeing, cross country skiing, and horseback riding. Also includes an interpretive trail. Hart's Pond is the centerpiece of the area and once served as Meredith's reservoir. Camping and motorized vehicles prohibited. Park closes at dusk.	Located off Parade Road, Route 106.	Parks and Rec Dept.
Waukewan Beach	Free public boat launch within walking distance. Seasonal public restroom and showers available.	Located on Lake Waukewan on Waukewan St.	Parks and Rec Dept.
Meredith Community Center	Features a playground, a stairway leading to Lower Prescott Park, picnic tables and benches, full size Multi-Purpose Room (Gym) with stage, climbing wall, Game Room, an Arts & Crafts Room, a Large Meeting Room (Portable walls allow to be divided into 3 meeting rooms), Commercial Kitchen, and Parking. Capacity: 90 parking spaces (plus Additional 5 Handicap Spaces).	One Circle Drive	Parks and Rec Dept.
Pinnacle Park	Small beach on Meredith Bay.	35 Pinnacle Park Road	Buildings and Grounds Dept.
Community Park	Home of many community-wide special events, such as craft fairs, concerts, dances, and holiday events. Public restrooms available.	Main Street	Buildings and Grounds Dept.
Hesky Park	Site of many concerts and special events. Includes waterfront park, public docks, and boat launch. Offers views of Lake Winnipesaukee.	Located on Meredith Bay, Daniel Webster Highway, Route 3	Buildings and Grounds Dept.
Scenic Park/ Clough Park	Waterfront parks that provide walkways, picnic areas, and breathtaking views.	Located on Meredith Bay on Route 25 and Pleasant Street	Buildings and Grounds Dept.

Shep Brown's Public Boat Launch	Boat launch with Meredith Facility Use Sticker required.	Located at the end of Lovejoy Sands Road	Buildings and Grounds Dept.
Schools			
Inter-Lakes Elementary School	Track/football & soccer field, North/South trail leading to Upper Prescott Park	21 Laker Lane	School Board
Inter-Lakes Middle/High School	Track/football & soccer field	1 Laker Lane	School Board
Privately-Owned			
Oak Hill Golf Course	9-hole course	159 Pease Road	-
Clearwater Campground / Meredith Woods	A wooded tent and trailer campground on Lake Pemigewasset. Secluded sites, large sandy beach, boat rentals.	26 Campground Road	-
Harbor Hill Camping Area	Private seasonal campground	189 NH 25	-

Table 2: Meredith Parks and Recreation Department List of Programs

Senior Programs	
Free Computer Classes	Walk Fit
"Hooks & Needles"	Hearing Clinic
Blood Pressure/Foot Clinic	Sassy Step and Stretch
Senior Yoga	
Adult Programs	
Thursday night pickleball (all levels)	Adult Advanced Volleyball
Adult Basketball	Novice Pickleball Court
Intermediate Pickleball	Advanced Pickleball
Friday Night Climbing Wall (all ages)	
Youth Programs	
Afterschool Program	Climbing Wall
Soccer	Full Day Camps
Vacation Camps	
Community Events	
Halloween Party	Community Holiday Craft Fair
Holiday Movie Night	Mother & Son Game Night
Programs Run by Local Organizations	
Inter-Lakes Youth Soccer League	Boy Scouts Troop/Pack 55, Daniel Webster Council
Bill Lamper Youth Basketball League	Girl Scouts of the Green and White Mountains
Lakes Region Youth Baseball/Softball League	Inter-Lakes Got Lunch Program
Babe Ruth Baseball League	Sno-Streakers Snowmobile Club

Regional Recreation Events

Rotary Fishing Derby

Each year, the Meredith Rotary Club sponsors “The Great Meredith Rotary Fishing Derby” held on Lake Winnipesaukee. 2024 will mark the 45th year of this annual event. The fishing derby is typically a two-day (weekend) event held in February and attracts many ice fishers and families to the area to partake.

Derby tickets are purchased and there are seven potential top categories participants can win based on size, weight, and corresponding fish species caught. From the group of seven top category prize winners, three top prizes are drawn whose eligibility is determined by those who had the largest fish in each category during the Derby weekend. There are also other cash drawings at the event that do not require participating in ice fishing. The Squam Lakes Natural Science Center in Holderness uses all unclaimed Derby fish to feed otters, bears, eagles, and other animals at the Center throughout the winter. The Meredith Rotary Club utilizes the funds from the cost of the fishing derby tickets to give back to the communities of Meredith, Sandwich, Moultonborough, and Center Harbor through scholarships, community projects, and supporting local non-profit organizations. For more information, please visit <https://icefishingnh.com/>

Pond Hockey Classic

The Pond Hockey Classic (PHC) is a grassroots sports event management company that specializes in managing pond hockey events in North America. The mission of the PHC is “to provide the hockey community with a competitive, traditional and nostalgic pond hockey experience”. Across the country through PHC, over 275 pond hockey teams compete in 500 plus games across 26 rinks. One of these major PHC events is the New England Pond Hockey Classic annual event that has occurred on Waukewan Lake in Meredith since 2010. This event attracts several tourists to the area that are participating or supporting New England PHC. For more information please visit:

<https://www.pondhockeyclassic.com/newengland>

Trail Network

Throughout Meredith’s history, recreation has played a key role in the tourism industry, the character of the community, and the high quality of life for all residents. The Meredith Conservation Commission maintains an extensive trail network throughout town, accommodating a variety of recreational uses including:

- Hiking
- Bicycling
- Cross-country skiing
- Dog walking
- Scenic viewing
- Picnicking
- Hunting
- Birdwatching
- Snowmobiling
- Handicap accessible walking trails.

Permitted uses are determined by property and trail system. Most of Meredith's recreational trails are located on conserved lands and are maintained by the Conservation Commission. However, the Waukewan Highlands Community Park trails are maintained by the Meredith Parks and Recreation Department, and the Laverack Natural Trail at Hawkins Brook is maintained by the Meredith Village Pathways Committee with the assistance of the Conservation Commission when needed. The permitted uses for each trail system in Meredith can be found in Table 3. Meredith's total trail network encompasses 56.1 miles of publicly accessible trails for a variety of recreation uses including hiking, snowshoeing, cross country skiing, fishing, picnicking, snowmobiling, birdwatching, and a few designated handicap accessible trails. This approximation does not include trails on privately developed properties. Of the 56.1 total miles of trail, 28 miles are specifically snowmobile trails maintained by the Meredith Sno-Streakers, a snowmobile club in town. The snowmobile trail network in Meredith consists of snowmobile club trails that connect to primary and corridor snowmobile trails expanding through Meredith to surrounding communities of Sanbornton, Ashland, Holderness, Center Harbor, and Laconia. A visual of Meredith's trail system can be found on the Open Space & Recreation Map at the end of this profile.

In addition to the recreation trails listed in Table 3, the Meredith Village Pathways Committee, an advisory committee appointed by the Board of Selectmen, were tasked to develop a pedestrian plan to promote pedestrian activity and improve pedestrian experiences in the community. The Village Pathways Committee identified five pedestrian pathways in Meredith Village. These include routes in and around Meredith Village utilizing both paved and un-paved paths, sidewalks, and trails. For further information about these pathways, please visit the Transportation Profile of this Existing Conditions Report.

Table 3: Recreational Trails in Meredith

Site Name	Approx. Total Trail Miles	Location	Approx. Total Acreage of Land	Permitted Uses and Facilities
Hamlin-Eames-Smyth Recreation and Conservation Area	10 miles	Located on Chemung Road, Meredith Center.	713 acres	Hiking, snowshoeing, cross country skiing, scenic views, dog walking, kayak launch, swimming, fishing
Meredith Community Forest	5 miles	Parking on Jenness Hill Road near the transfer station	207 acres	Hiking, snowshoeing, cross country skiing, bicycling, snowmobiling, dog walking
Laverack Natural Trail at Hawkins Brook	0.5 miles	Located off NH Route 25 (Winnipesaukee Rd)	3 acres	Handicap accessible trail, benches, outdoor class room, dog walking
Page Pond Community Forest/Sherman Easement	9 miles	Quarry Road, Barnard Ridge Rd, and Blueberry Hill Rd	765 acres	Hiking, cross-country skiing, scenic views, dog walking, accessible trail, and bird watching

Swasey Park	1 mile	High Street	7 acres	Dogs permitted, kayak/canoe launch, seasonal restrooms, picnic benches, hiking
Waukewan Highlands Community Park	3.1 miles	Located off Parade Road, Route 106.	191 acres	Hiking, snowshoeing, biking, cross-country skiing, dog walking, fishing, and picnicking

Maintenance and Recent Trail Work

Overtime, Meredith's Conservation Commission has worked to expand the trail system in the community to what it is today. With several successful trail systems established in town, the Conservation Commission focuses its efforts on maintaining and expanding trails where appropriate, and is prioritizing the acquisition and conservation of additional unfragmented lands for wildlife habitat.

The Meredith Conservation Commission hosts "Tuesday Trail work" days where volunteers collectively work to maintain Meredith's trail network. Additionally, the Commission stewards' parcels ranging from Bear Island in the east to Hermit Woods Forest in the west. The Conservation Commission also works to educate the public on Meredith's natural resources, and has developed a self-guided walking tour along some of Meredith's trail network. The self-guided walking tour consists of interactive maps that can be viewed on a computer or a mobile device. These interactive maps will guide the public on their hike, while locating points of interest along the way with the option to utilize GPS on a smart phone. Recent work the Conservation Commission has completed in the last three years can be found in Table 4 below. Looking out to the next 10 years, the Conservation Commission's priorities related to recreation include extending the Quarry Road accessible trail. Other long term Conservation Commission projects and be found in the Natural Resources Profile of this Existing Report.

Table 4: Recent Meredith Conservation Commission Projects

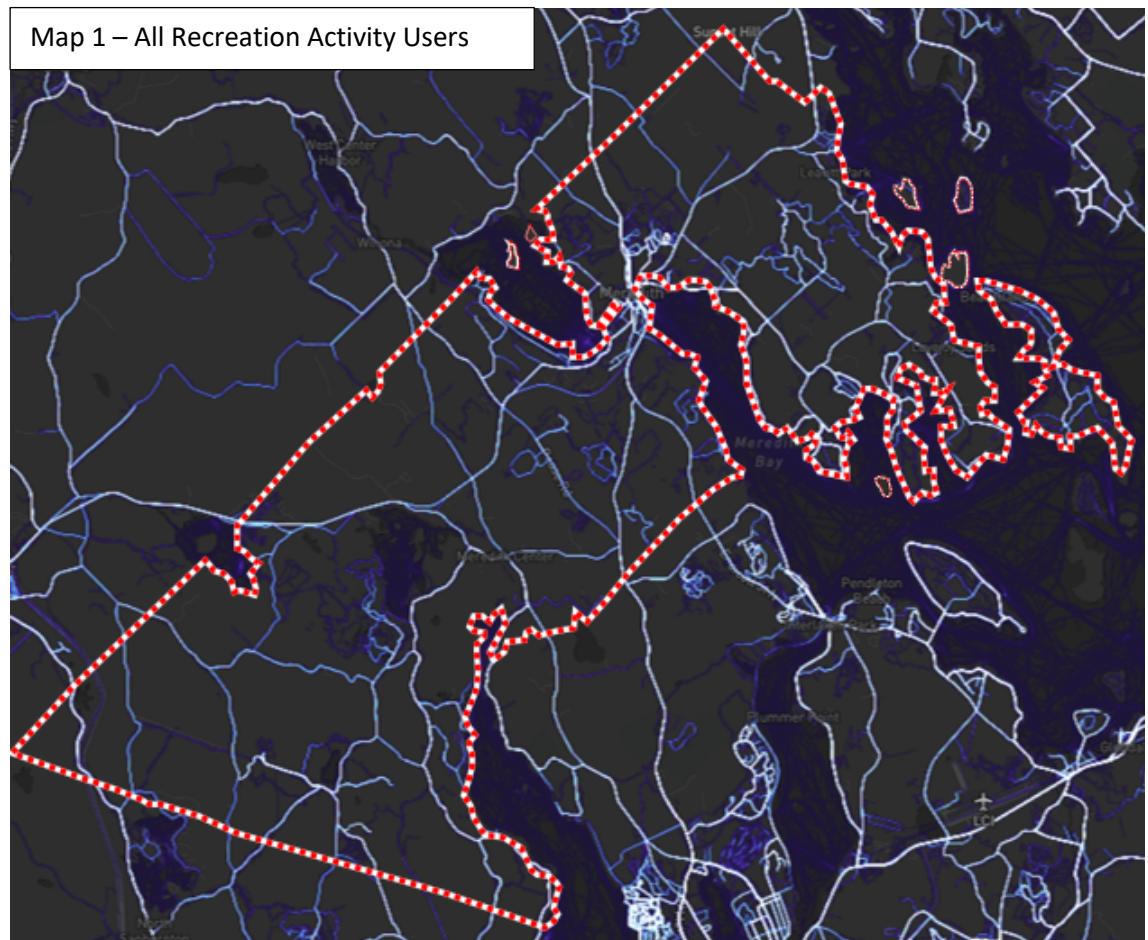
Source: Meredith Conservation Commission

Year	Projects Completed
2023	<ul style="list-style-type: none"> Partnered with the Meredith Rotary Club to create an accessible trail and accessible viewing platform on Quarry Pond at the Page Pond Town Forest. Initiated a long-term invasive species management project in the fields at Barnard Ridge Road at Page Pond. Started a stream restoration project with Trout Unlimited and the Belknap County Conservation District on Stoney Brook in the Hamlin Town Forest. Assessed the large bridge on the Four Ponds (Blue) trail in the Hamlin Town Forest and contracted with the Appalachian Mountain Club Trail Crew to replace it in the fall of 2024. Raised and reinforced the long beaver-bog bridge on the Yellow Trail in the Page Pond Town Forest.
2022	<ul style="list-style-type: none"> Performed a forestry assessment with our Town Forester and executed a habitat cut in the Quarry Road area of the Page Pond Town Forest. Engaged a stone mason to assess the condition of the historic Mill Dam at Page Pond, received an estimate for needed repairs, and identified funding avenues for the repairs. Installed water bars at the Hamlin Town Forest to prevent erosion, and improved existing water bars in the Community Forest.

	<ul style="list-style-type: none"> Completed a stream restoration project with Trout Unlimited and the Belknap County Conservation District on Reservoir Brook from Waukewan Highlands to Lake Waukewan.
2021	<ul style="list-style-type: none"> Long term management of invasive Autumn Olive restored the fields on Barnard Ridge Road and resulted in a pair of bobolinks nesting in the field. Trail maps installed at key trail intersections in the Page Pond Town Forest to guide hikers as they explore the property. New kiosk maps created and installed at all three Page Pond trailheads. A plaque in memory of long-time Conservation Commissioner Peter Miller who passed away in 2020 was dedicated at a ceremony at the Hamlin Town Forest.

Recreation Uses

One way of observing and understanding the popularity of recreation activities and the usage of specific areas, is by assessing Strava Heat Maps. These maps indicate areas in Meredith where recreation users are frequently participating in a variety of recreation activities further described in the following paragraph. 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”* and 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 and how their users recreate. It should be noted however, that not all Meredith recreation participants utilize Strava, and this data is not intended to represent all recreational users in Meredith. It does help indicate

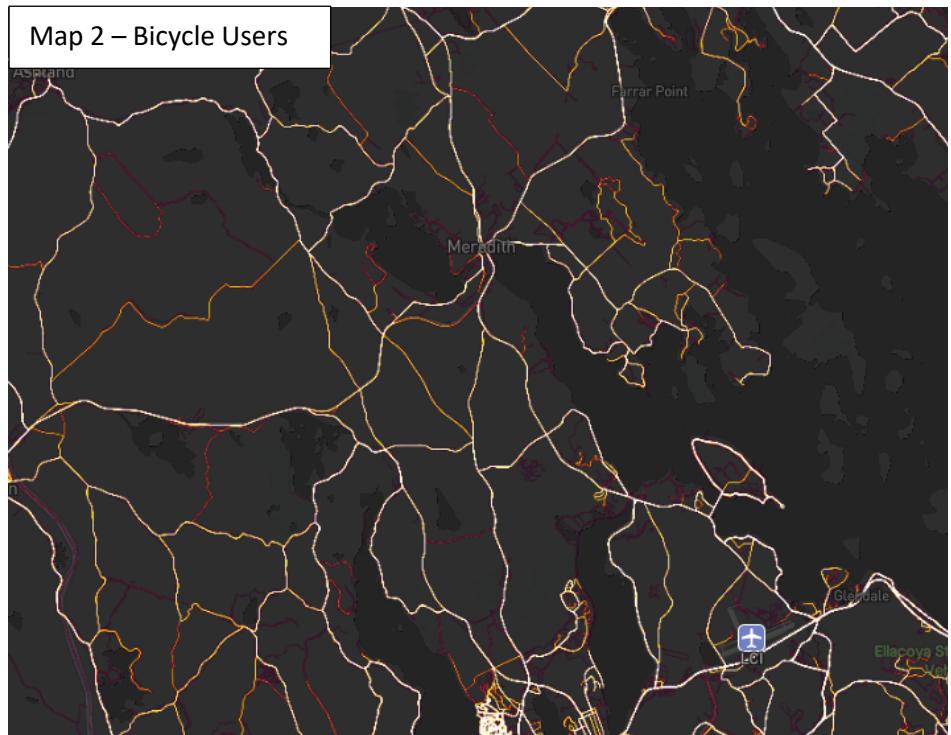
trends for further investigation. To learn more about Strava Heat Maps, visit <https://www.strava.com/heatmap#7.00/-120.90000/38.36000/hot/all>

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

Bicycle Recreation Usage

It should be noted that many of Strava's users already seem to be using roads for recreation that were identified by NHDOT as recommended bike routes. As seen on Map 2, Meredith's most popular roads for bicycling are: NH Route 104, NH Route 106, NH Route 25, US Route 3, Plymouth Street, Pinnacle Park Road, Pease Road, Winona Road, and Meredith Neck Road. It appears that US Route 3 is being utilized by many users to and from Laconia and Center Harbor. Images like the one shown in Map 2 provides the town with a visual illustrating the demand the broader community has on existing 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.



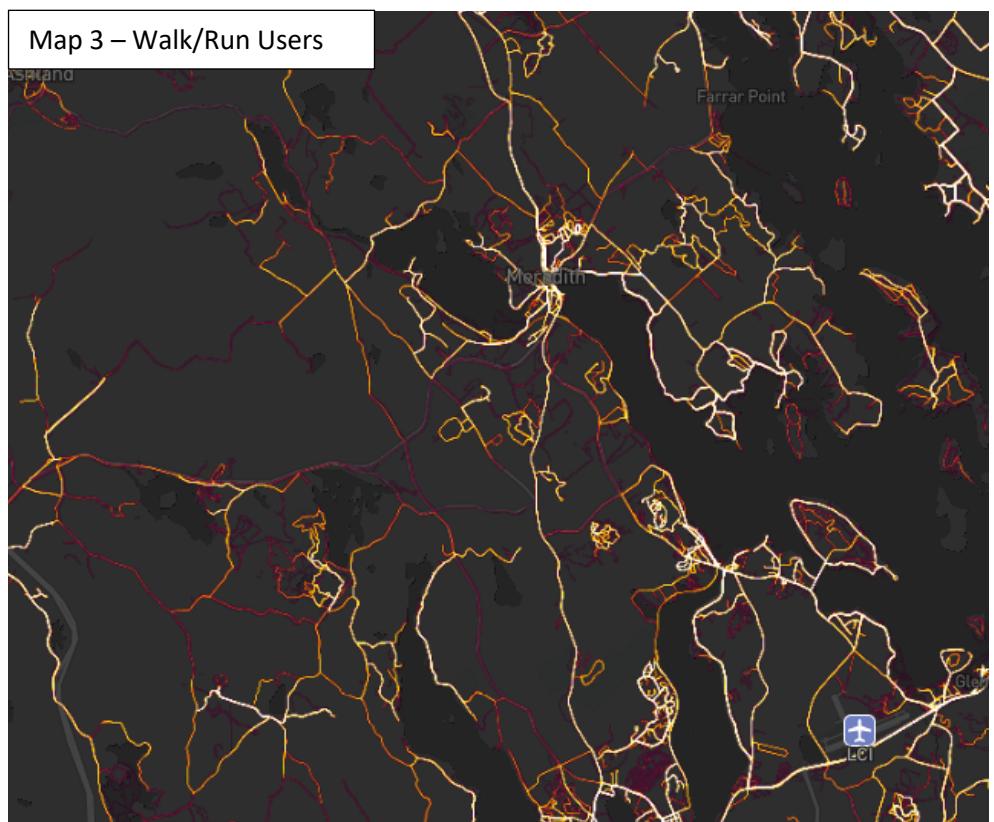
Walk/Run Recreation Usage

Map 3, shown on the following page, depicts the pedestrian recreation usage throughout Meredith. There appears to be particularly high run/walk recreation activity in and around Meredith Village where sidewalks, pedestrian pathways, and other infrastructure such as the Lavarack Trail at Hawkins Brook, and the Inter-Lakes Regional High School. Meredith's roadways also appear to support high usage of pedestrian activity on Gould Ave, Meredith Neck Road, and on Bear Island as well as within many small neighborhoods. This may be an indication that if more sidewalk infrastructure was available, additional residents would utilize Meredith's roadways for running/walking. Map 3 also shows high run/walk recreation activity at the Hamlin-Eames-Smyth Conservation area, Meredith's Town Forests, and along Lake Winnipesaukee, Meredith Bay, and Lake Waukewan.

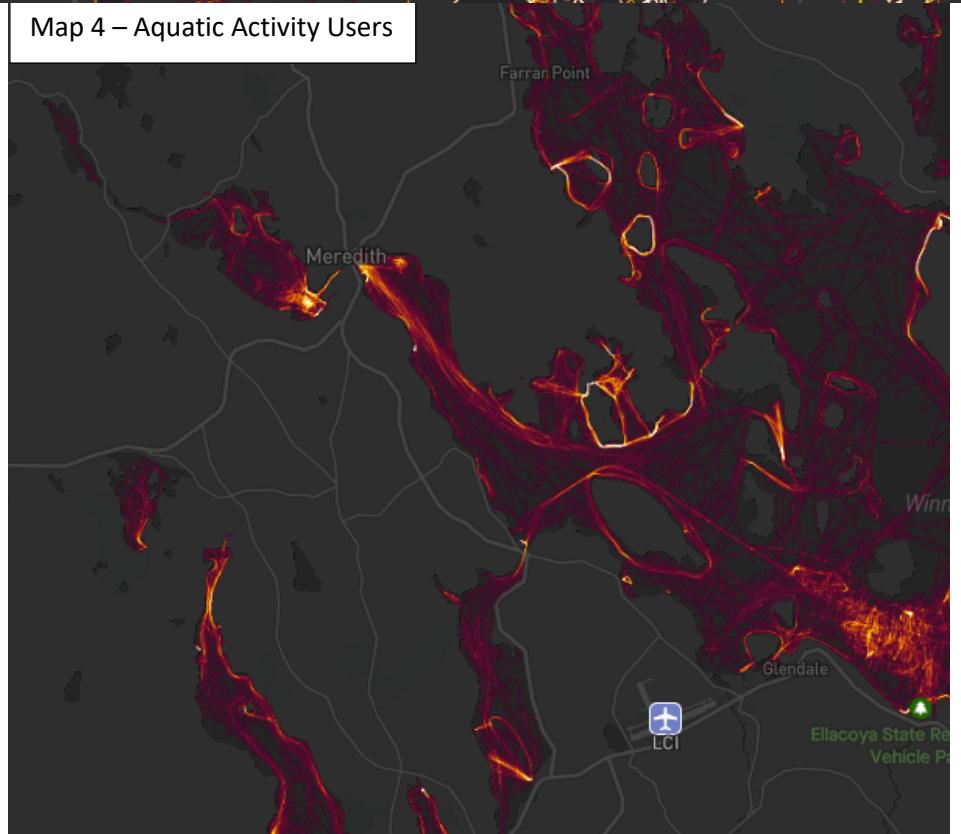
Aquatic Recreation Usage

Meredith's geographical location provides ample opportunities for aquatic recreation users on Lake Waukewan, Lake Winnipesaukee, Lake Wicwas, Pemigewasset Lake, Meredith's islands, and other surface waters. Aquatic recreation in these areas include swimming, stand up paddling, canoeing, and kayaking, boating, and others. As shown on Map 4, data shows significant aquatic recreation activity from Strava users at Scenic

Map 3 – Walk/Run Users



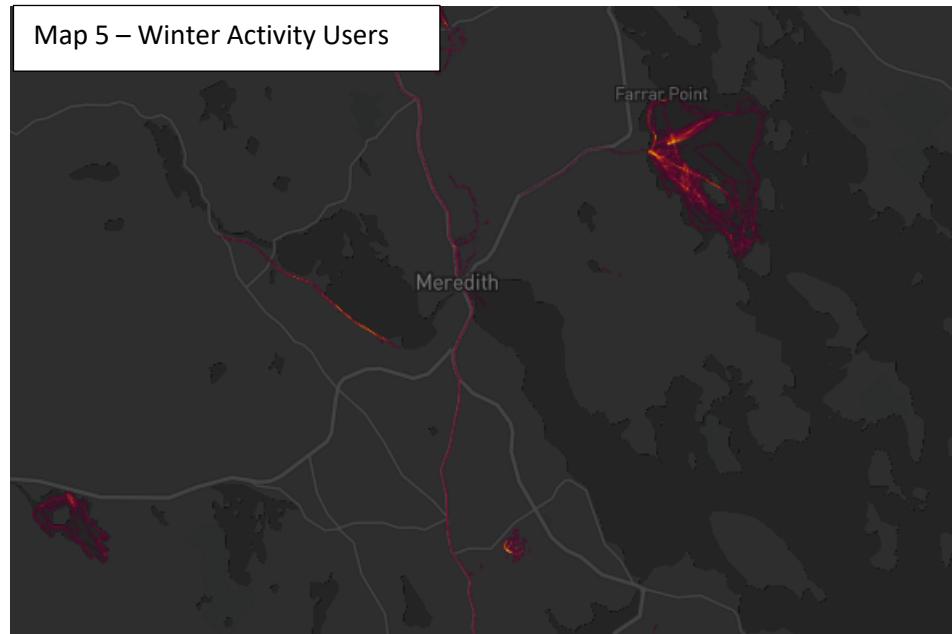
Map 4 – Aquatic Activity Users



Park/Clough Park, Waukewan Town Park and Beach, Swasey Park, Leavitt Park, and Bear Island. This indicates that Meredith's surface waters are heavily utilized for recreation.

Winter Recreation Usage

Map 5 shows that there is significant winter recreation activity in Leavitt Park, Waukewan Highlands Community Park, Upper Prescott Park, and on Lake Winnipesaukee and Pemigewasset Lake. Winter recreation activity includes ice skating, snowshoeing, ice fishing, ice sailing, snowmobiling, and cross-country skiing. This indicates that Meredith's recreational resources are utilized year-round by some users.



Recommended Bicycle Routes

The New Hampshire 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 recommends these routes and indicates some as requiring advanced riding skills if the route has limited infrastructure or is considered challenging in other ways. 16.9 miles of paved bicycle routes are identified in Meredith including NH Route 106, NH Route 104, US Route 3, and NH Route 25. The state recommended bike routes can be seen on the NH State Bike Routes interactive map using the link above and are identified on the Open Space and Recreation Map found at the end of this profile.

Potential and Emerging Actions

- There is high demand for pedestrian and bicycle usage on state roads in Meredith as well as some town owned roads. The town should consider collaborating with NHDOT to explore potential bicycle and pedestrian infrastructure improvements on these roadways.
- Due to the high demand of winter activities shown from the Strava data, the Parks and Recreation Department may want to consider providing more outdoor winter recreation programs and activities.
- Meredith should consider completing a recreation needs assessment to better understand user conflicts, capacity issues, infrastructure needs, programing needs, and more for the town recreation facilities, beaches, and conservation areas. This could be completed in coordination with an Open Space and Recreation Plan.
- The Town should identify opportunities for on and off corridor trail connections between the various recreation facilities and trail systems. This would expand recreation opportunities while providing additional non-motorized transportation alternatives.

- Continue supporting the regional recreation events that are so integral to Meredith's identity and that enhance community life.
- Identify ways to better promote the town's recreation opportunities to residents and visitors such as through social media, signage in town, and other promotional means.

Sources

- 2017 Parks and Recreation Department Master Plan
- Meredith Parks and Recreation Department
- 2005 & 2009 Natural Resource Inventory
- Meredith Conservation Commission
- NH GRANIT
- 2022 NHDOT Bike Routes Recommendations
- Lakes Regional Planning Commission
- 2022 Annual Town Report
- Strava Global Heat Map
- Meredith Town Website
- Meredith Village Pathways Committee

Town of Meredith, NH Open Space & Recreation

Hamlin-Eames-Smyth
Recreation and
Conservation Area

Page Pond
Community
Forest

Meredith
Community
Forest

Swasey
Park

Lake Winnipesaukee

Waukewan Highlands
Community Park

Chemung
State Forest

Lake Winnisquam

Map created by:
Resilience Planning & Design
January, 2024

Data sources: Town of Meredith,
Meredith Conservation Commission,
Mike O'Donnell, GRANIT, RP&D

