

Waldoboro

Comprehensive Plan 2018

Table of Contents

Part One: Goals and Action Items

Comprehensive Plan Organization	Page #
Introduction.....	2
Previous Plans.....	2
Other Planning Activities.....	2
Committee Member Credits.....	2
Background.....	3
Vision.....	3
Plan Goals and Action Items.....	4
Demographics.....	5
Housing.....	6
Economy.....	8
Historic and Cultural Resources.....	11
Natural Resources.....	13
Recreation.....	15
Transportation.....	16
Municipal Services.....	18
Municipal Fiscal Capacity.....	20
Proposed Land Use Plan.....	22
General Recommendations.....	22
Land Use Ordinance Recommendations.....	23
Growth and Rural Areas.....	24
Specific District Recommendations.....	25
Land Use Map.....	29

Part Two: Plan Inventory

(After Land Use Map from Part One)

Section Title	Pages
Demographic Profile.....	1-1 to 1-6
Housing.....	2-1 to 2-10
Economic and Community Development.....	3-1 to 3-8
Recreation.....	4-1 to 4-6
Historic and Archaeologist Assets.....	5-1 to 5-9
Fiscal Capacity.....	6-1 to 6-10
Municipal Government Services.....	7-1 to 7-7
Transportation.....	8-1 to 8-35
Natural Resources.....	9-1 to 9-14
Existing Land Use.....	10-1 to 10-16

Town of Waldoboro Comprehensive Plan

Part One

Plan Goals and Action Items

Comprehensive Plan Organization

The Comprehensive Plan is organized into two sections. Part One of the Plan contains a vision statement, goals, policies, and implementation schedule, land use plan and capital improvements plan. Part Two of the plan contains the inventory section, which consists of a description of the many assets of the town. The information and data contained in this section provides the basis for the goals and policies.

Introduction:

The 2018 Waldoboro Comprehensive Plan is built upon the foundation of previous comprehensive plans, studies, and public forums and meetings. The new Comprehensive Plan was written to meet the contemporary needs of the community since the previous plan was adopted in 1998. Over the course of previous 20 years, a considerable number of things have changed, and new issues, problems, and community expectations have arisen. The Plan presents a way forward for the community to respond to our current times. A considerable amount of work and public participation has taken place to write the Plan and, upon its presentation at the June 2018 Town Meeting, will be considered for approval.

The planning phase is complete, and now it will be time to begin the work of putting the ideas and recommendations of this plan into action. This part of the Comprehensive Plan contains those action items and sets forth a path to direct existing and new town committees and staff to implement the plan. Some activities will be addressed in a short amount of time; many others will begin but take time to complete.

This phase in the process can be exciting because it asks the community to roll up its sleeves and begin making changes to improve our community.

Previous Plans

1968 Comprehensive Plan

The 1968 plan was the first formal plan developed by the Town that tackled some of the critical issues of the time and briefly addressed the most important functions of the community.

1998 Comprehensive Plan

The 1998 plan was developed in compliance with the Maine Comprehensive Planning Law and regulations with guidance from the State Planning Office. This was Waldoboro's first comprehensive plan, which addressed all facets of the municipal operations and functions. Notable components of the plan include recommendations for a new land use ordinance and land use plan, which are currently being used, which form the foundation for the 2018 plan.

Other Planning Activities

2010 Public Planning Session

A Waldoboro community visioning project titled "Re-Think, Re-Imagine, Re-Vitalize Waldoboro" was undertaken in 2010 and culminated in a final report in October 26, 2010. The visioning sessions were facilitated by Bruce Hyman in cooperation with the Community Visioning Steering Committee. A copy of the final report is included as an appendix to the Comprehensive Plan, and many aspects of this document have been included into the 2017 Comprehensive Plan Update. Two significant outcomes of this undertaking was to revitalize the Route One corridor and to make the Village into a destination.

Downtown Development Plan

A Downtown Development Plan created a comprehensive strategy to improve the downtown area while enhancing the Town's economy. The Plan provided detailed design options which were focused on improving access, enhancing economic activity, improving parking, and connecting the downtown to the Route One corridor. The Plan has not been fully implemented, however, its recommendations are still relevant. Some of the plan recommendations, such as improvements to outside public and building features and parking signage, have been installed.

Credits/Committee Members:

Barbara Boardman	George Seaver	Andrew Zulieve	Theodore Wooster
Caren Clark	Jann Minzy	Marcus Benner	Jen Merrit
Scott Lash	Michael Poli	Edward Fisher	

Many members of the public, municipal officials, town staff, and other committees have contributed to this Comprehensive Plan. A special note of appreciation to all members of the public who participated in the public meetings for sharing their ideas and suggestions.

Background

The Comprehensive Plan vision for Waldoboro will look ahead for the next 20 years, or more, and express our shared hopes and aspirations for our community. The Plan will also provide guidance to how the various strategies and recommendation proposed in the plan are to be understood and how they connect and relate to each other. The community vision can be viewed as an over-arching set of operating instructions that informs us how all the different pieces, ideas, suggestions, and recommendations contained in the Comprehensive Plan are supposed to fit harmoniously together.

The creation of today's community vision needs to be prefaced with an examination of where the town has been and where we currently find ourselves. Waldoboro, in its past, had been a prominent manufacturing hub for ship building, farming and food products, fishing, shell fish harvesting, and local shops. It can also be described as a rural community with a few small village centers as well as a place for summer residents to find solace from city summer heat. The town was also famous for its artists and fiber arts.

Moving into a contemporary time, we find that some former features in the town have faded away, such as the manufacturing jobs from Sylvania, Button factory, and the Cannery. However, others, such as shell fishing and new ventures in agriculture, are still important and growing features of the community. The area still provides a variety of jobs consisting of small or moderate sized businesses and services. Waldoboro's workforce is better educated and trained as compared to past years, and many people work not only in region, but in towns like Augusta, Bath, Brunswick, Rockland, and Belfast. An enduring quality of the Town is its many beautiful areas along the coast and inland, which provide residents a very desirable place to live and raise a family.

Vision

Placed in the context of our past and current situation, the following is our vision for Waldoboro during the coming 20 to 50 years:

- Waldoboro is a wonderful and enriching place to live and raise a family while making a living.
- The historic buildings and structures throughout the town, especially in the villages and downtown, are preserved and used for homes, businesses, and public places.
- The arts community is thriving and the Town is home to artist and craftspeople working in a variety of mediums.
- The Town is a locus for fiber processing, including sheep and alpaca breeding.
- High speed internet access in the Town has allowed new small business opportunities to grow, providing creative employment for new families.
- Young families are moving into Waldoboro attracted by affordable housing, ample recreational choices, and good schools.
- Small agriculture and food processing businesses are thriving and offer families a way to provide a sustainable income.
- Several medium sized commercial parks in the Town provide places for new manufacturing activity and are promoted through a combination of TIF funding, business loans from local banks, and economic development organizations.
- Aquaculture has expanded from shell fishing into new products, which is providing jobs and a supply of fish seafood for the regional market.

- The Route One corridor is a vibrant and attractive commercial area that welcomes people and encourages them to patronize local businesses.
- The downtown village is a vital and inviting heart of the community with distinctive shops, galleries, and restaurants creating an attractive destination for residents and tourist.
- Municipal government continues to develop ways to provide quality services, which are cost efficient and meet the needs of residents.
- Residents participate in local government which respects different points of view, and provides opportunities for citizens to become involved in decision making.
- The water quality in the Medomak River, and our other water resources, is excellent and supports an expanding economic fishing and aquaculture sector and numerous recreational opportunities.
- New economic and employment opportunities in Waldoboro and throughout the region provide stable incomes and attract new residents.
- A variety of cultural, social and educational opportunities are available to residents.
- Waldoboro is an active regional participant with its regional neighbors creating a vibrant Mid Coast.

Plan Goals and Action Items

Goals and action items are presented for each Comprehensive Plan Section. A list of some important issues discussed while developing each plan section precedes goals and action items.

The goals will help shape the vision for Waldoboro for the next 20 to 50 years. The goals set a direction and establish a blueprint for change and growth. The goals are broad statements and are designed to set the tone and communicate clearly the ideas and intent of the citizens of Waldoboro.

The goals will be further expanded in the form of action items, which are organized under the specific comprehensive plan section. The action items are concrete actions to turn the vision and goals into reality. Each action item will establish tasks to be accomplished by one or more individuals groups or committees. A specific time frame is also established to match the 20 year planning horizon.

The action items included in the Comprehensive Plan are intended to be addressed by the Town, however, it is important to remember that the final plan for each action item may evolve and change over time. This should be viewed as a natural outcome of this planning process. **New ways to achieve an objective, new problems, or circumstances may alter how solutions are proposed and implemented, the goals and action items should be reviewed and modified as needed at least every 5 years to account for new priorities.**

The timeline is a three part category as follows:

On Going: This indicates that the policy is a recommended standard operating procedure; will occur on a regular basis, such as an annual update to the capital improvements plan, or is a task which requires periodic attention.

Short Term: This is a task which is expected to be addressed/completed within 3 years.

Long Term: This is a task which is anticipated to take a considerable period of time to address and complete and for a variety of reasons such as, funding availability, planning /engineering requirements, or it is part of a multipart project with many interconnected pieces. Some of these task may be completed in phases.

Demographics

Demographic Issues:

- The population is continuing to age and the baby boomers are retiring. However, unlike previous generations the persons over 65 are more active, and will likely remain in the workforce at some capacity to supplement their income or to remain active
- The aging population will likely remain active in a variety of interests and can be a positive influence upon economic and community development.
- The decrease of the average household size, and the increase in the number of single households will drive a demand for housing.
- Demands for retirement housing will continue to increase especially for affordable units.
- Demand for affordable assisted living and nursing care will increase.
- The decreasing number of children will impact educational enrollments.
- The declining birth rates will impact economic opportunities due to a lack of new workers.
- Population is forecasted to decrease over the upcoming decades which is based upon the current trend of an aging population, declining births and a decline in young families moving into the town.

Goals:

To collect and understand demographic data as it becomes available from State and Federal sources to make prudent decisions about municipal operations, planning, infrastructure, and development.

To plan for orderly growth and development throughout the community, and to respond to changes in our population.

Demographic Action Items:

The town shall continue to monitor demographic changes especially when the 2020 census figures become available and make adjustments to the comprehensive plan policies based upon this information.

Timeline: Ongoing

Responsible Party: Planner

The town will continue to adapt and revise its municipal services to respond to changes in the population, especially in regard to an older population. Areas of particular concern include, emergency services, housing, recreational opportunities, and economic development.

Timeline: Ongoing

Responsible Party: Town Manager

The Town Planner shall annually submit to the Board of Selectmen, Town Manager, and municipal staff a summary of significant demographic changes.

Timeline: Ongoing

Responsible Party: Planner

The Town shall continue to make sure services and programs meet the needs of all of its citizens

Timeline: Ongoing

Responsible Party: Selectboard, Town Manager

The Town shall develop economic strategies to create new professional jobs by working with existing businesses and attracting new businesses.

Timeline: Short Term

Responsible Party: Economic Committee, Planner

The Town shall develop strategies to enhance Waldoboro's desirability for young persons and families to relocate to Waldoboro.

Timeline: Short Term

Responsible Party: Economic Committee, Planner

Housing

Housing Issues:

- An insufficient number of affordable rental units are available for both individuals and families.
- The housing requirements for our aging population need to include a variety of housing opportunities ranging from single family units, rental units, senior housing, assisted care, and nursing homes.
- Innovative and cost effective housing options will be required to meet the housing needs of our residents.
- Affordable housing opportunities are still available in town; however, rising real estate prices in other communities in Lincoln County may cause prices to rise in Waldoboro.
- Housing in poor condition affects some areas throughout the town, and negatively impacts neighboring properties and quality of life.
- Affordable housing provides opportunities for young families and helps to maintain a diverse demographic mix of town residents.
- Campers and inadequate mobile homes are being used as housing.
- Code Enforcement issues pertaining to housing conditions and land use violation

- Existing lots are still available in approved subdivisions, but new subdivision approvals over the previous 10 years have been sparse mostly due to the affects from the 2008 recession. Only a portion of the available subdivision lots will eventually be developed for a variety of reasons. New subdivision activity is likely to occur over the next 20 years.
- The Town is currently subject to the Maine State Building Code for both residential and commercial structures.

Goals:

Encourage and promote affordable, decent housing opportunities for all citizens of Waldoboro.

Encourage a variety of housing options for our elderly residents so they can remain in Waldoboro.

Identify programs to provide loans and grants to improve housing throughout the community.

Engage with local, regional, and state housing groups and organizations to provide a variety of services and opportunities in the community.

Housing Action Items:

The Town shall promote the availability of quality housing for all segments of the population and cooperate with private investors as well as non-profit, local, state, and federal agencies to make housing opportunities available.

Timeline: Ongoing

Responsible Party: Planner, Town Manager, Planning Board

The Town shall pursue housing grants, such as Community Development Block Grants, to increase the availability of affordable housing and to rehab unsafe housing.

Timeline: Ongoing

Responsible Party: Planner

The Town shall develop a strategy to address vacant, unsafe, and substandard housing to maintain safe and livable housing and neighborhoods. Municipal staff including the Town Manager, Planner, Assessor, Code Enforcement Officer, Police Chief, Fire Chief, and the Ambulance Director shall create strategy for consideration of the Selectboard

Timeline: Short Term

Responsible Party: Planner, Code Enforcement Officer

The Town shall promote the creation of local neighborhood groups and associations for citizens to take an active role in improving the quality of life in their neighborhoods and to improve housing.

Timeline: Short Term

Responsible Party: Planner, Town Manager

The Town shall, in cooperation with regional and state groups and organizations, identify ways to address the varied housing needs of an aging population. The Town's efforts on housing should be emphasized on affordability, aging in place, access to services and transportation, and both in-home care and nursing care facilities.

Timeline: Short Term

Responsible Party: Selectboard, Town Manager

The Town shall explore housing options, such as small/ tiny homes, smaller lot sizes, cluster housing, and other ideas to determine whether these options may be compatible with Waldoboro.

Timeline: Short Term

Responsible Party: Planning Board, Planner

Economy

Economic Issues:

- The town has one commercial development park, which lacks municipal sewer, and has limited space for future expansion.
- Land currently zoned for development along Route One has not been aggressively developed.
- The downtown village and the adjoining Route One developed strip are not connected in a way which promotes business and customer traffic flow.
- The town has not been a focus for new retail businesses. Most of the retail activity is directed into Damariscotta or the Thomaston/ Rockland areas, where municipal services and infrastructure are available.
- The Town has promoted the expansion of high speed internet services in some areas, particularly in the downtown village area, but customer sign-up for the service has been slow.
- Shell fishing continues to be a significant economic sector for the community, but the clams harvested in Waldoboro lack a brand name, local/regional marketing, and a local processing facility.
- The shell fishing sector is vulnerable to changes occurring in the Gulf of Maine and particularly the rising water temperatures.
- New aquaculture opportunities may offer new opportunities for the fishing industry.
- Traditional marine industries, which require water access, are not currently a dominant presence within the community. Industries, such as ship building and aquaculture, are of particular importance.
- Small scale agriculture activities, including food processing, are a growing economic sector within the community.
- Current educational attainment levels do not provide the town with a competitive advantage.
- The Town does not adequately capture the coastal tourist market
- The town lacks hotel, motel, and inn capacity.
- Outdated land use ordinance and inflexible Site Review process

- Lack of a clear economic development vision for the Route One corridor
- Route One development continues to be ‘Strip type development’.
- Vacant commercial properties.

Goals:

Promote an economic climate that increases job opportunities and overall economic well-being while staying consistent with the preservation of Waldoboro’s small town atmosphere, and diversify the tax base.

To develop strategies which support the retention and expansion of existing businesses.

To promote new business opportunities which build upon the Town’s existing strengths and character.

To identify one or more areas for a Tax Increment Financing District to promote new economic development and to seek state and federal funding for economic development

To promote new job creation in existing and new businesses, including home based businesses and micro businesses.

To promote cooperation among Waldoboro’s various non-profit, social, cultural, educational, and recreational organizations.

To promote economic opportunities in agriculture, fishing, and aquaculture.

To identify and market new tourist activities within Waldoboro in cooperation with neighboring communities along the Midcoast

Economic Action Items:

The Town Economic Development Committee shall continue to develop economic strategies and plans for the community, and shall work in concert with the Select Board, Town Manager, and the Town Planner.

Timeline: Ongoing

Responsible Party: Economic Committee

The Town shall continue to promote the availability and expansion of high speed internet service as a way to provide both commercial and residential users access to high speed service for new business activities and remote employment.

Timeline: Ongoing

Responsible Party: Economic Committee

The Town shall continue to participate in regional and state economic development ventures especially with the Midcoast Economic Development District and Lincoln County Regional Planning Commission.

Timeline: Ongoing

Responsible Party: Town Manager

The Town shall support and promote work force training opportunities for the existing workforce.

Timeline: Ongoing

Responsible Party: Planner, Town Manager

The Town, in cooperation with other local and state groups, shall identify ways to attract young families to move into the community.

Timeline: Ongoing

Responsible Party: Planner, Economic Committee

The town shall develop a Tax Increment Financing District Plan, target job creation, and other economic priorities as identified by the community.

Timeline: Short Term

Responsible Party: Selectboard, Town Manager, Planner

The Town shall identify several areas to promote economic development for the expansion of both existing and new business. These areas shall be placed in the Comprehensive Economic Development Strategy in order to be eligible for federal grants.

Timeline: Short Term

Responsible Party: Economic Committee

The Economic Development Committee shall create a Waldoboro Tourist Development Strategy to identify new businesses and opportunities to attract tourists, and to work in cooperation with neighboring Midcoast communities.

Timeline: Short Term

Responsible Party: Economic Committee

The Town shall annually convene a meeting with all the community non-profit, cultural, social, recreational, and other civic groups in the community to discuss a strategy to sequence local project fundraising in a way that gives everyone the most advantageous opportunity to raise funds for their project.

Timeline: Short Term

Responsible party: Town Manager

Revise the Site Review process to be more efficient and create a tiered level of review to reflect the complexity and type of commercial proposal.

Timeline: Short Term

Responsible Party: Land Use Committee

The Town shall continue to promote improvements in the downtown area including parking, lighting, sidewalks, building improvements, increased occupancy, access to the river, pedestrian trails, and new connections to the Route One Corridor.

Timeline: Long Term

Responsible Party: Economic Development Committee, Planner

The Town shall develop a plan to extend sewer to the Industrial Park on Route 32 and to the high school and middle school area.

Timeline: Long Term

Responsible Party: Planner, Economic Committee

The Town shall develop a commercial water dependent access strategy with other communities to provide locations for a variety of marine activities including fishing, aquaculture and boating.

Timeline: Long Term

Responsible Party: Planner, Economic Committee

Historic and Cultural Resources

Historic and Cultural Issues:

- The Town has a variety of historic structures and places, but lacks a way to protect these resources.
- The Town has several village areas including the downtown area.
- Subdivision and Site review Applicants are currently required to obtain a letter from the Maine Historic Preservation Commission indicating whether the proposed site contains any historic or archeological resources.
- Town residents value their historic resources.
- The Town has many scenic areas in both public and private ownership
- The Town does not have a municipal historic commission to promote historic buildings and structures

Goals:

Maintain and preserve Waldoboro's historic, rural, and maritime character.

Protect Waldoboro's historic structures, landscapes, and the unique patterns in the Town's villages.

Preserve and protect our archeological resources.

Historic and Cultural Action Items:

Encourage activities and groups to promote awareness and education about the value and importance of historic and archeological resources in Waldoboro.

Timeline: Ongoing

Responsible Party: Planning Board, School Board

The Town shall continue to support programs and activities of the Waldoboro Historical Society

Timeline Ongoing:

Responsible Party: Selectboard

The Town shall promote educational programs and activities that describe and illustrate Waldoboro's history

Timeline: Ongoing

Responsible Party: Selectboard

Amend the Land Use Ordinance to require new development to check with the available archeological location maps and predicated site maps prior to construction.

Timeline: Short Term

Responsible Party: Land Use Committee

Create a local historic preservation group to work with property owners interested in preserving and maintaining historic structures and places, and to identify and obtain funds to be used for historic preservation projects.

Timeline: Short Term

Responsible Party: Selectboard

The Town shall promote Living History programs and activities, especially with the schools, to save and preserve the experiences, stories, and history of our citizens.

Timeline: Short Term

Responsible Party: Selectboard

The Town shall continue to discuss with the downtown property owners the possibility of creating a historic district, as outlined in the Downtown Master Plan, which includes a description of historic properties in the downtown area.

Timeline: Short Term

Responsible Party: Planner

Natural Resources

Natural Resource Issues

- Previous efforts to improve water quality have created a thriving shell fish industry but more needs to be done to continue water quality improvements throughout the town.
- Some of the current land use ordinance performance standards do not reflect current state environmental regulations, such as storm water.
- The continued protection of shoreland areas protected under shoreland zoning are important to maintain water quality along the coast and inland waters.
- Development proposals are encouraged to use available environmental maps and data sources from Beginning with Habitat to identify critical environmental features in the early stages of project planning. For permit-related project review of natural resources features, the project plans should be sent to MDIFW and MNAP for review.
- Continuing education to promote wise land stewardship is important in maintaining our environment.
- The land trust has obtained easements and other protection of multiple properties to preserve areas throughout the Town.

Goals:

Protect the quality of all our water resources including lakes, aquifers, great ponds, estuaries, rivers, streams, and coastal areas.

Protect and enhance our maritime and agricultural resources which provide food, jobs, and economic opportunities for Waldoboro and the region.

Ensure that development occurs in a manner that does not damage the environment for current and future residents.

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

To protect our marine resource industry, ports, and harbors from incompatible development, and to promote access to the shore for commercial fisherman and the public.

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

Natural Resource Action Items

Continue to periodically update the Shoreland Zoning and FloodPlain Ordinance standards to reflect State revisions as needed.

Timeline: Ongoing

Responsible Party: Planner

Continue to work in cooperation with the Department of Environmental Protection, Marine Resources, and the Department of Agriculture to improve water quality and the shell fishing industry.

Timeline: Ongoing

Responsible Party: Shell Fish Committee, Selectboard

Continue to support the work of the Shell Fish Committee and adequately fund their operational budget.

Timeline: Ongoing

Responsible Party: Shell Fish Committee

Continue to promote our scenic resources and, whenever feasible, seek ways to enhance public access to these areas.

Timeline: Ongoing

Responsible Party: Planner, Planning Board

Use the Beginning with Habitat Maps and other resources when planning development applications to identify sensitive environmental areas. Review of final development applications should be completed by MDIFW and MNAP.

Timeline: Short Term

Responsible Party: Planner, Code Enforcement Officer

Revise and update the environmental performance standards in the Land Use Ordinance to reflect state environmental standards, and to create provisions which allow creative solutions to address environmental protection subject to appropriate scientific verification.

Timeline: Short Term

Responsible Party: Land Use Committee

To create a process to monitor all subsurface waste water disposal systems throughout the town in order to identify and correct malfunctions.

Timeline: Short Term

Responsible Party: Planner, Code Enforcement Officer

Revise the Land Use Ordinance to reflect new ventures and opportunities occurring in agriculture especially small scale farming, food production, and other tourist related ventures which promote farming.

Timeline: Short Term

Responsible Party: Land Use Committee

Revise the Land Use Ordinance to be consistent with contemporary state performance standards and regulations pertaining to storm water management erosion control, water quality, and other environmental standards.

Timeline: Short Term

Responsible Party: Land Use Committee

The Town shall develop a town wide watershed plan, to improve water quality affecting our rivers, streams, wetlands, coastal areas, which provide the environment for fishing and other aquaculture activities.

Timeline: Long Term

Responsible Party: Planner, Planning Board, Shell Fish Committee

To plan for and finance the replacement of all culverts which impede fish passage

Timeline: Long Term

Responsible Party: Town Manager, Public Works, Planner

Recreation

Recreation Issues

- The town offers a number of recreational and sports activities and has a recreational director.
- The Town lacks public swimming areas.
- The Town has several private and public accessible parks, preserves, trails, and trust lands for a variety of passive recreational activities.
- The Town does not have a community center
- The town lacks a town wide trail system.
- The town lacks tourist destination activities and sites.
- Life-long recreational activities need to be identified.
- Activities for seniors need to be developed
- Recreational use of the river while maintaining water quality
- Develop recreational programs for children and adults
- The Town does not have a master recreation plan for the community
- The Town recently recreated a full-time recreation director after moving the position to part-time.

Goals:

To promote a variety of recreational opportunities for all Waldoboro Residents

To promote and protect the availability of outdoor recreation opportunities for all Town Citizens including access to surface waters.

Recreation Action Items

The Town shall continue to support a full-time recreational director.

Timeline: Ongoing

Responsible Party: Selectboard

The Town shall actively pursue funding for additional recreational facilities and programs.

Timeline: Ongoing Responsible Party: Recreation Director

The Town shall create master recreation plan for the community and identify a capital financing strategy to implement the plan over the next 20-years.

Timeline: Short Term Responsible Party: Recreation Director, Conservation Commission

The Town shall develop a plan to create pocket parks in neighborhoods.

Timeline: Short Term Responsible Party: Conversation Commission

The town shall create a community wide recreational trail plan that connects the entire community and, to the greatest extent feasible, using existing trail corridors. The trail plan shall identify trails for the following activities: hiking, cross-country skiing, bicycling, mountain biking, horse riding, snowmobiles, ATV's, and a walking path along the Medomak River. The plan shall also address road shoulder upgrades along some key roadways to provide access for biking and pedestrians.

Timeline: Short Term Responsible Party: Planner, Recreation Director Conservation Commission

The Town shall, in cooperation with neighboring communities, develop swimming access for residents, and increase public access to both coastal and inland waterways.

Timeline: Long Term Responsible Party: Planner, Recreation Director

The Town shall, in cooperation with neighboring communities, develop programs for senior citizens to promote cultural, recreational, and health related activities.

Timeline: Long Term Responsible Party: Planner, Recreation Director

The Town shall develop new recreation programs and opportunities for children and adults.

Timeline: Long Term Responsible Party: Recreation Director

Transportation

Transportation Issues

- Investment/ funding for local road and infrastructure are not keeping pace with the demand for improvements. Additional funds are required to maintain and improve municipal roads and other transportation features.
- Safety improvements along local and state roads are needed in areas.
- Waldoboro has multiple high crash sites at intersections of local and state roads.
- Road paving has become a problem in residentially zoned areas, such as Friendship Road.
- Improvements for bike and pedestrian use is needed along some roadways.
- Few options for non-motorized transportation outside of downtown area.
- Transportation options for seniors and others without vehicles are needed.

Goals

To maintain an efficient and safe local transportation system.

To adequately fund transportation and traffic safety improvements.

To work in cooperation with the State and neighboring communities on transportation issues.

Transportation Action Items

The Town shall continue to work cooperatively with the Maine DOT on road and infrastructure issues pertaining to State and State Aid Roads, such as Route 1, Route 32, Route 220, and Route 235.

Timeline: Ongoing

Responsible party: Public Works Director, Planner

The Town shall continue to advocate for road and infrastructure improvements on Route 1, Route 32, Route 220, and Route 235, according to the recommendations contained in their corridor management plans for these roadways.

Timeline: Ongoing

Responsible Party: Public Works Director, Planner

The Town shall advocate for road safety improvements at high crash locations on state roads. Examples of high crash locations include the intersection of Route 1 and Manktown Road, the intersection of Union Road and Manktown Road, the intersection of Route 220 and Old Augusta Road, and the intersection of Route 32 and Main Street.

Timeline: Ongoing

Responsible Party: Public Works Director, Planner

The Town shall submit road improvement projects to be included on the Maine DOT Work Plan. The project will aim to improve the safety for motorized and non-motorized residents. This will either involve improving high crash sites or enhancing/ expanding the sidewalk system.

Timeline: Ongoing

Responsible party: Public Works Director, Planner

The Town shall provide adequate funds for road maintenance and improvements to keep roads in good condition according to a road capital plan

Timeline: Short Term

Responsible Party: Public Works Director, Town Manager

The Town shall advocate for expanded and improved services for public transportation, pedestrian ways, bike ways, boat access, and rail services in cooperation with Maine DOT, and other state and private organizations. The Town shall advocate for these amenities at various levels to improve local quality of life and to enhance accessibility to goods and services.

Timeline: Long Term

Responsible Party: Public Works Director, Planner

The Town shall improve walking and biking access on Route 32 and Route 220 through cooperation with the Maine DOT. The Town will explore possible grant and funding programs to help achieve this goal.

Timeline: Long Term

Responsible Party: Public Works Director, Planner, Town Manager

The Town shall update corridor management plans for Route 32 to address road safety hazards and improved pedestrian access. This includes addressing the intersection with Main Street that continues to provide a hazard for residents and improving the pedestrian access that can branch along Mill Street and Main Street.

Timeline: Long Term

Responsible Party: Public Works Director, Planner, Town Manager

Municipal Services

Municipal Service Issues

- The police department is understaffed and a full-time detective is needed.
- The police department lacks adequate space.
- Inadequate facilities for the ambulance staff.
- The fire department maintains an adequate roster of firefighters, however, the trend throughout the state is for a declining number of volunteer fire fighters.
- Public works equipment is not being replaced on an efficient schedule, which increase repair costs as equipment is kept in service longer.
- The Town already has a variety of regional agreements/policies in place for police, fire, and ambulance services.
- The transfer station is operated with two other communities and uses Lincoln County Recycling to handle household recycling.
- Waldoboro, like many other Maine Communities, is facing a crisis over drug use.
- Citizens enjoy the existing range of municipal services.

- The Town does not have a formal capital improvements plans.
- The community has identified town-wide symmetrical fiber optic internet service a valuable economic asset for all citizens.
- The fire department needs a new ladder truck.

Goals:

To provide municipal services in a cost effective and efficient manner.

To develop and operate municipal services to meet current demands, and to identify innovative strategies to improve services.

To adequately fund maintenance and improvements for the municipal treatment facility and water supply system

Municipal Service Action Items:

The town shall support updates and improvements to the municipal treatment facilities and collection system.

Timeline: Ongoing

Responsible Party: Town Manager

The Town shall continue to make sure the public water system meets the needs of the Town, and maintenance and improvements are planned and undertaken as necessary.

Timeline: Ongoing

Responsible Party: Town Manager

The Town shall make sure services and programs meet the needs of its citizens, and shall revise or change to respond to contemporary challenges.

Timeline: Ongoing

Responsible Party: Town Manager, Selectboard

The Town shall continue to work in partnership with other municipalities and organizations to provide cost effective and efficient services.

Timeline: Ongoing

Responsible Party: Town Manager

The Town shall continue to work cooperatively with the School District to improve educational quality and find ways to attract young families to the region because of our quality schools.

Timeline: Ongoing

Responsible Party: Selectboard

The Town shall continue to provide cost effective disposal of solid waste and improve recycling, in cooperation with Lincoln County, Municipal Review Committee, and Fiberight, and to identify ways to improve bulky waste reuse and recycling.

Timeline: Short Term Responsible Party: Town Manager, Selectboard

The Town shall upgrade the web site, and identify other ways to improve public outreach; to communicate public meetings, events, and other community issues. Creating municipal online services should be explored. A newsletter, or similar medium, for keeping the public informed should also be considered.

Timeline: Short Term Responsible Party: Town Manager

The Town shall continue to support police services, and determine if staffing levels are adequate to address public safety concerns in the community, especially drug activity and related activity.

Timeline: Short Term Responsible Party: Town Manager, Police Chief

The Town shall continue to support its existing regional affiliations and undertake a study/ forum to determine if new regional efforts and affiliations may be beneficial to the community. Regional opportunities should include a variety of areas such as economic development, tourist events, and social and recreational activities.

Timeline: Long Term Responsible Party: Selectboard

A strategic fire service plan shall be developed to address the long-term future of providing fire protection to include the following: volunteer staffing levels, equipment needs and improvements, facility needs, need for full-time staff, regional cooperation opportunities, and demographic changes in the town and region.

Timeline: Long Term Responsible Party: Town Manager, Fire Chief

The town shall develop an expansion plan for the municipal building to accommodate the ambulance and police departments

Timeline: Long Term Responsible Party: Town Manager

Municipal Fiscal Capacity

Municipal Fiscal Capacity Issues

- A capital improvements plan, which is updated annually, is essential for making wise capital investments
- The town has a number of reserve/capital accounts for various areas, which are funded year to year loosely based upon identified capital needs.
- The Town lacks a formal capital improvements plan.
- The Town lacks the flexibility to take advantage of opportunities to improve the community because it does not have a contingency fund.
- State funding, including municipal revenue sharing, has decreased over previous years.

Goals

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

To anticipate and plan for major capital improvements for public facilities and services with a capital improvements plan updated on an annual basis.

To seek the most cost effective and prudent strategies to finance public facilities and services.

Municipal Fiscal Capacity Action Items

The Town shall pursue regional programs and activities, whenever feasible, to provide municipal services if it can be shown to reduce costs and maintain a level of service and response at least equal to a locally operated program/service.

Timeline: Ongoing

Responsible Party: Town Manager

The Town shall pursue grant funds, whenever feasible, to finance capital projects and existing programs. Funds should be dedicated to provide grant matching requirements and identified in the capital improvement plan.

Timeline: Ongoing

Responsible Party: Town Manager

The Town shall make sure that municipal services are adequately funded, and infrastructure and capital items are planned for and financed as per a capital improvements plan.

Timeline: Ongoing

Responsible Party: Town Manager

The town shall develop a financial strategy for capital funding which is designed to eliminate spikes in the tax rate and provide a stable property tax rate.

Timeline: Short Term

Responsible Party: Town Manager, Finance Director

The Town shall continue to pursue an economic development strategy to increase new commercial activity to increase jobs and increase municipal valuation.

Timeline: Short Term

Responsible Party: Economic Development Committee

The Town shall develop an energy saving strategy to reduce overall energy consumption at all municipal facilities.

Timeline: Short Term

Responsible Party: Town Manager

The Town shall explore the use of a contingency fund line item in the budget to be used to take advantage of programs or activities, which would benefit the community and require immediate action.

Timeline: Short Term

Responsible Party: Town Manager

The Town shall develop a formal capital improvements plan, including a financial strategy.

Timeline: Short Term

Responsible Party: Town Manager

The Town shall develop a Tax Increment Financing Plan for consideration, which promotes economic development.

Timeline: Long Term

Responsible Party: Planner, Economic Development Committee

Proposed Land Use Plan

Purpose

The proposed land use plan presents how the community wants the town to grow and look over the next 20 years or more by establishing land use districts and defining what activities should occur in these areas. Accompanying the land use districts is a land use ordinance, which establishes regulations and standards guiding how development is shaped; how the environment is protected and how various activities coexist without creating nuisances. The proposed land use plan builds upon the foundation

established in the previous plan and likewise the existing land use ordinances. The recommendations contained in the land use plan are shaped by views expressed at the public visioning sessions, feedback from the public, municipal staff and the municipal boards, and our expectations about change and growth in the community.

Goals:

Encourage orderly growth and development in specific areas of the community, protect Waldoboro's rural character and small-town atmosphere, making efficient use of services, and preventing development sprawl.

Safeguard the Town's marine resource industry, ports, and harbors. To avoid incompatible development and to promote access to the shore for commercial fisherman and the public.

Safeguard the Town's natural, agricultural, water, and forest resources from development which threatens those resources.

Proposed Land Use Districts

Overview:

The existing Land Use districts and boundaries are retained, except for some minor changes. Land Use activities allowed in each district will mostly remain the same, however, some modifications will be required as a result of recommendations to update the Land Use chart activities and improve definitions.

General Recommendations:

The following are some general recommendations pertaining to the Land Use districts, boundaries, and mapping:

- Combine all the land use districts, including shoreland zoning districts, on a single map.
- Create a land use district map at a different scale to display the village area and portions of Route One to better illustrate boundaries.
- Where boundary lines for a district do not follow property lines, or other natural features, indicate the width or length of the district boundary.
- Revise/ clarify the boundary of the General Development District and the Limited Commercial Districts in the area along Jefferson Street south of the Irving Station taking into account the Route One Commercial District boundaries in the same area.
- The existing Shoreland Zoning Districts are retained.
- The area between Route 235 and the Medomak Valley Middle School and the High School is designated as a potential future growth area including housing subject to a sewer expansion into the area.
- The existing Route One Commercial District boundaries will be maintained, but specific changes are recommended to enhance development in the districts.

- Develop a plan for the future of Dutch Neck Marine Park respecting the existing marine and recreational activities at the Town Park.
- The existing boundaries of the industrial district encompassing the business park at One Pie Road along Route 32 should be expanded to accommodate additional development.
- Municipal sewer should be extended to the Waldoboro Business Park.
- A future industrial district should be considered based upon demand for industrial space. The location of this future district is not designated at this time.
- The rural quality, density and mixed land use activities in the rural district should be maintained and new agricultural uses encouraged.

Land Use Ordinance Recommendations

General Land Use Ordinance Recommendations:

- Create a Land Use Committee to implement the recommendations for the Land Use Plan consisting of at least 10-members appointed by the Selectboard to include representation from the Planning Board, Shell Fish Commission, Board of Appeals, Conservation Commission, and the Economic Development Committee in addition to members of the public.
- Redesign the Land Use Ordinance to create a more user-friendly document including, but not limited to, the following the areas: numbering system, definitions, review criteria, and performance standards.
- Revise the Use Chart to incorporate uses defined by scale and their potential development impact
- Break-out commercial activities into an impact/ development range or scale such as size, traffic, etc., and create a new review process for these activities.
- Update the Land Use Map to show all the land use districts including shoreland zoning on a single map.
- Clarify the relationship between the Land Use Districts and Shoreland Zoning Districts to make it clear that only the requirements of a Shoreland Land Zone apply to the land contained in the shoreland district.

Specific Land Use Ordinance Recommendations:

- Create separate sections for Site Review and Subdivision review.
- Develop review criteria for site review and include the State Subdivision Review Criteria in the subdivision review section.

- Update and revise agricultural performance standards and definitions to reflect contemporary agricultural operations and related accessory activities, such as event venues and hospitality, tourist and recreational uses, hospitality, and food processing.
- Update and revise the Land Use chart to include contemporary activities and provide definitions for each activity.
- Update and revise performance standards to provide additional guidance for how new development should be designed. Whenever feasible provide alternative and flexible options.
- Create a streetscape design standard for the Route One corridor.
- Revise the types of uses allowed in industrial and commercial districts to reflect contemporary activities and new ventures in food processing and production, agriculture, aquaculture, and similar activities.
- Create incentives for commercial development to locate near other existing commercial activities and not to concentrate building only at the existing road frontage.
- Increase the development density for commercial uses in the Route One A & B Districts to foster clusters of commercial developments.
- Incorporate traffic access provisions between adjacent commercial developments to allow vehicles to travel between lots instead of having to reenter the corridor.
- Create performance standards for event venues and include these activities in the Land Use chart.
- Update parking standards and provide incentives for shared parking.
- Allow for the creation of shared stormwater treatment designs to serve several locations.
- Include performance standards for commercial marine access and designate new areas for these uses
- The Town shall revise/ amend the Land Use Ordinance to reflect the recommendations contained in the Land Use plan.
- Develop provisions to assist the Code Enforcement Officer to enforce nuisance conditions.
- The Town shall periodically review and update the land use ordinance to respond to changing needs and priorities. The Planning Board, Town Planner, and the Code Enforcement Officer shall annually discuss the need for ordinance updates.
- Update the guidelines for Home Occupations to permit small businesses to grow in size and number of employees while respecting the needs of neighbors for privacy and quiet enjoyment of their property.

Growth and Rural Areas:

The growth and rural areas identified in the 1998 Comprehensive Plan will be maintained subject to the following modifications:

- The industrial district, located at the existing park on Route 32, is recommended to be expanded to serve additional uses and municipal sewer is encouraged to be extended.
- Depending on future opportunities, additional industrial designations should be considered.
- The Route One A & B commercial districts shall be maintained and incentives added to encourage the new development. Extending the district boundaries should be considered to provide additional space for development.
- To maintain the Village District as a residential growth area and maintain the current lot size and density standards.
- To consider creating a new residential area in the vicinity of the high school, subject to sewer expansion into the area, which would allow smaller lot sizes.

- The rural areas shall continue to be areas which allow low density housing and area for traditional rural and agricultural related activities.

Specific District Recommendations

Summaries of the purpose of the land use districts are listed below with specific recommendations pertaining to each district.

Downtown Business District

The intent of the Downtown Business District is to protect the downtown commercial area of Waldoboro by allowing commercial and residential uses in existing buildings or in new buildings that are consistent with the architecture of a 19th century New England village, as well as apartments, theaters, libraries, public uses and parking lots. In order to encourage compact-type urban developments, there are no lot size requirements.

Recommendations:

- Funds need to be sought to implement the Downtown Development Plan to improve the Village and the surrounding Historic Village District.
- Recreational access, such as river trails, should be developed, and these pedestrian ways should connect to adjoining sidewalks, pocket parks, and a larger town-trail system.
- The Downtown District and the commercial corridor along Route One should be interconnected to bring tourists, shoppers, and travelers into the downtown and the Medomak River area. An overall design strategy should be developed for the area.
- Develop a parking plan to accommodate future growth.

Historic Village District

The purpose of the Historic Village District is to preserve the 19th century architectural character of the area. The intent is to allow residential uses, home occupations and some businesses in existing or new buildings consistent with the historic architecture.

Recommendations:

- New uses permitted in existing buildings should be required to maintain the exterior character of the structures and improvements, such as parking, accessory buildings, and landscaping, and other exterior developments should be consistent with the 19th century architecture of the area. Development should be guided by ordinance design performance standards.

Industrial District

The purpose of the industrial district is to allow light industry/ manufacturing and heavy industry/ manufacturing into areas established for these activities.

Recommendations:

- The existing industrial district located on One Pie Road should be expanded to accommodate new growth. Sewer should be extended into this development to provide greater flexibility attracting development and to protect water quality.
- Activities permitted in the industrial district should be updated to reflect new commercial and manufacturing activities including aquaculture and agricultural uses such as food processing and greenhouse growing facilities.
- Lot size and density should be revised to allow the maximum development potential in the industrial districts as feasible after considering environmental conditions.

Residential District

The purpose of the Residential District is to retain the rural character of Waldoboro, and to protect residential properties values by allowing agriculture, forestry, home occupations and low density, single and two family residential development. The district applies to land areas on the water sides of Route 32 and 220 south of Waldoboro Village and areas within 400 feet of the landward side of Routes 32 and 220 south of Waldoboro Village.

Recommendations:

- Protect the health of the clam flats and ensure continued water access for the clamming industry.
- Preserve water views and open space and maintain the undeveloped shoreline areas
- Provide consistent code enforcement to address housing and related nuisance conditions.
- Promote opportunities to allow small business uses.

Route One Commercial A District

The purpose of the Route One Commercial A District, which applies to portions of Route One, is to discourage strip development with well-planned, attractive, and landscaped development to encourage a uniform street scape along the corridor. Vehicle connections between lots are encouraged to minimize roadway openings onto Route One. The district is designated for a mix of residential, commercial uses, light industry/manufacturing, agriculture, and forestry.

Recommendations:

- Encourage new development to locate near existing sites to create clusters of commercial activity.
- Encourage development to extend deep in to lot rather than remaining at the road frontage.
- Increase the lot density to promote commercial clusters
- Create provisions to allow the district boundaries to be extended into the adjacent district to accommodate development.
- Create performance incentives to promote well designed and attractive developments.

Route One Commercial B District

The purpose of the Route One Commercial B District is to allow business and light. Industry/manufacturing development along Route One with fewer restrictions than in the Route One Commercial A District.

Recommendations:

- See the recommendations for the Route One Commercial A District except residential housing is not allowed.

Rural District

The purpose of the Rural District is to retain the rural character of Waldoboro by allowing agricultural, forestry, aquaculture, home occupations and light industrial uses. Low density residential uses are also permitted.

The Rural District encompasses most of the land area in the Town and is intended for non-intensive uses. Traditional rural activities are subject to performance standards that preserve the character and density for open spaces, agriculture uses, forestry, areas for wildlife, and recreation.

Manufactured home parks are permitted only within a two mile radius of the intersection of Jefferson Street and Route One.

Recommendations:

- Continue to improve rural roads including gravel roads.
- Address road safety issues in the rural areas
- Promote open space and the protection of scenic areas.
- Encourage trail connections throughout the area in accordance with a town trail plan.
- Provide public access to area ponds and rivers.
- Develop performance standards which address noise, traffic and buffers for those commercial activities permitted in the rural district.

Rural Village Business District

The purpose of the Rural Business District is to encourage small scale residentially compatible business activities in Waldoboro Historic Rural crossroad neighborhoods.

Recommendations:

- Continue to promote Waldoboro's historic rural villages for appropriate small scale activities.

Village District

The purpose of the Village District is to retain and protect the character of Waldoboro Village and to provide for future growth consistent with existing land development patterns. The following uses are

encouraged: Single, two –family and multi-family residential, home occupations, municipal and institutional uses, churches, libraries, schools and small scale commercial activities.

Recommendations:

- Develop performance standards to guide the location of small scale commercial uses in the Village district which protect the existing size, scale and character of the district.

Wellhead Overlay Protection District

The purpose of the district is to protect the public water supply in Waldoboro from land uses that pose a threat to the quality and/or quantity of ground water being extracted from the wells that serve the public water system.

Recommendations:

- Update the district performance standards to bring them into compliance with applicable current State standards and regulations.

Shoreland Districts

The Shoreland Districts as designated by the Mandatory Shoreland Zoning Law shall continue to be used and as necessary be amended to reflect changes in the State law and/or the Model Shoreland Zoning ordinance.

Recommendations:

- Revise the shoreland zoning districts and standards as necessary to reflect changes in State law or the Model Shoreland Zoning Ordinance.

Demographic Profile

Purpose

The purpose of the demographic profile section is to identify significant facts and information, and to track changes in these areas over time in order to inform how the community will address a variety of municipal concerns. These concerns include, education, jobs, recreation, financial, and property tax issues, housing and transportation. Data about the town's residents, such as age, income levels, education housing costs, and ownership, provides critical facts that better inform how we, as a community, plan for both our current and anticipated needs. It will be important for the Town to stay updated with new demographic information, especially with the upcoming 2020 census.

Demographic Profile Summary

Demographics:

Source: 2010 Census & 2005-2009 American Community Survey

- Total population is 5,075 persons.
- Median age is 43.5 years
- Number of households is 2031 units
- Average household size is 2.34 persons
- Number of families is 1,399
- Number of non-family households is 632 units
- Average family size is 2.85 persons
- 297 persons are under 5 years of age (5.9%)
- 898 persons are between 5 and 19 years of age (17.7%)
- 544 persons are between 20 and 29 years of age (10.7%)
- 1,274 persons are between 30 and 49 years of age (25.1%)
- 1,173 persons are between 50 and 64 years of age (23.1%)
- 667 persons are between 65 and 79 years of age (13.1%)
- 272 persons are 80 years of age or older (4.4%)
- The population increased by 159 persons (3.2%) between 2000 and 2010.
- Waldoboro has the highest population in Lincoln County with 5,075 persons. The next highest population in the county is the county seat of Wiscasset with 3,732 persons.
- Waldoboro is a mid-sized community within Maine and is 63rd in population out of 488 municipalities

Housing:

Sources: 2010 Census, 2005-2009 American Community Survey & Maine State Housing Authority

- There are 2,651 total housing units. Housing increased by 291 (12.3%) units between 2000 and 2010.

- There are 2,171 occupied housing units. A total of 480 housing units are vacant, with 230 of these units classified for only seasonal occupancy. The net vacancy rate is 250 units.
- 79.1% of the population resides in owner occupied housing.
- Median House price is \$151,900.
- Our median income is \$44,186, and the income needed to afford a median home is \$41,648. The affordability index is 1.06. (Maine State Housing Authority, 2009)
- Average 2-bedroom rent is \$752. (Maine State Housing Authority, 2009)
- A variety of housing types and prices are available in the community. 49.8% of the housing is valued between \$100,000 and \$199,999.
- 958 houses (38.7%) were constructed prior to 1939 and 192 houses (44.1%) were constructed between 1970 and 1999.

Economic Characteristics:

Source: 2005-2009 American Community Survey

- Median Household income is \$42,641
- Mean Household income is \$58,677
- Per capita income is \$24,385
- Mean travel time to work is 27.2 minutes
- 1,501 (64.1%) private wage and salary workers
- 414 (17.7%) government workers
- 393 (16.8%) Self-employed workers
- 315 households (15.5%) have incomes between \$ 25,000 and \$34,999
- 429 households (21.1%) have incomes between \$35,000 and \$49,999
- 472 households (23.2%) have incomes between \$50,000 and \$74,999
- 178 households (8.8%) have incomes between \$75,000 and \$99,000
- 196 households (9.7%) have incomes above \$100,000
- Civilian employed population 16 years and older is 2,342 persons

Employment by Occupation and Industry

Source: 2005-2009 American Community Survey

Occupation: Total employed population is 2,342 persons

- 692 persons (29.5%) Management, professional, and related occupations
- 353 persons (15.1%) Service occupations
- 430 persons (18.4%) Sales and office occupations
- 274 persons (11.7%) Farming, fishing, and forestry occupations
- 328 persons (14%) Construction, extraction, maintenance, and repair occupations
- 265 persons (11.3%) Production, transportation, and material moving occupations

Industry: Total employed population is 2,342 persons

- 390 persons (16.7%) Agriculture, forestry fishing, hunting and mining
- 230 persons (9.8%) Construction
- 336 persons (14.3%) Manufacturing
- 49 persons (2.1%) Wholesale trade

- 292 persons (12.5%) Retail trade
- 76 persons (3.2%) Transportation, warehousing and utilities
- 14 persons (0.6%) Information
- 85 persons (3.6%) Finance, insurance, real estate, renting and leasing
- 113 persons (4.8%) Professional, scientific, management, administrative and waste management services
- 409 persons (17.5%) Educational services, health care, and social assistance
- 126 persons (5.4%) Arts, entertainment, recreation, accommodation, and foodservices
- 156 persons (6.7%) Other services, except for public administration
- 66 persons (2.8%) Public administration

Educational Attainment: Population 25 years and older (3,381 persons)

Source: 2005-2009 American Community Survey

- 2,958 persons (87.5%) are high school graduates or higher
- 760 persons (22.5%) have a bachelor's degree or higher
- 970 persons (28.7%) have an associate degree or higher
- 1,529 persons (45.2%) have a post-secondary degree or some college but no degree
- 1,429 high school graduates (42.3%)
- 559 have some college but no degree (16.5%)
- 208 have an associate degree (6.2%)
- 569 have a bachelor degree (16.8%)
- 193 have a graduate or professional degree (5.7%)

Seasonal Population

The seasonal population was determined by looking at the number of seasonal housing units and other residential uses commonly occupied in the summer months. According to the 2010 census, the Town has 259 seasonal housing units, which are likely located adjacent to the water. Based upon this information, the seasonal population between May and October can range between 500 and 700 persons depending upon occupancy. The seasonal population will likely peak over the 4th of July, Labor Day, and during the month of August.

Household Changes

The following table shows the differences in household characteristics between the 2000 and 2010 census. It is important to monitor changes in household size and composition because it affects many other areas, such as housing and municipal service demands. Some areas to observe include; household size, the number of single person households, and households with persons over 65 years old. It will be important to review how these household areas have changed when the 2020 census figures are available.

Household Changes between 2000 and 2010. Source: U.S Census

Category	2000 Census # of households	2010 Census # of households	Comments
Total households	1,983	2,171	Increase of 188 households
Family households	1,348	1,364	Increase of 16 households
Families with children under 18 years	618	541	Decrease of 77 households
Husband & wife families	1,080	1,019	Decrease of 61 households
Male only household/no female	-	94	This was not tabulated in the 2000 Census
Female household/no male	191	251	Increase of 60 households
Non-family households	635	807	Increase of 172 households
Householders living alone	510	644	Increase of 134 households
Households with a person 65 years +	543	655	Increase of 112 households
Average household size	2.45	2.34	This will impact housing demand

Components of Population Change

Waldoboro's population increased by 114 persons between 2000 and 2016 and is projected to decrease, according to population projections. Will these population projections prove to be reliable, or will our population experience a slight increase? The 2020 census will provide some new information to answer this question. Another important question is how are population changes influenced by people moving into the community and by local births and deaths?

The components of population change may consist of the following factors:

- Persons moving into the community
- New births
- People moving out of the community
- Deaths

Between 2000 and 2016, the number of births was 871 persons and, during the same period, the number of deaths was 925 persons. The net change in the population was a decline of 54 persons. Since the population did not increase due to having more births than deaths, the population increase was due to people moving into the community. We can also assume that some people moved out of the Town, however, the number moving into the town was higher because we experienced an increase of 114 persons.

Age Group Comparison between the 2000 and 2010 Census

Source U.S Census

Age Category	2000 Census	2010 Census	Difference
Total population	4,916	5,075	+159
Under 5	299	297	-2
5 to 9 years	312	286	-26
10 to 14 years	392	330	-62
15 to 19 years	358	282	-76
20 to 24 years	209	264	+55
25 to 34 years	557	550	-7
35 to 44 years	754	628	-126
45 to 54 years	695	794	+99
55 to 59 years	282	399	+117
60 to 64 years	251	356	+105
65 to 74 years	432	487	+55
75 to 84 years	260	288	+28
85 years and older	115	114	-1
Median Age	39.9 years	41.2 years	+1.3

Notes:

- Population of persons under 5 years only declined by 2 persons, so future school enrollments may stabilize.
- The school age population between 5 and 19 years old declined by 16 persons.
- Persons older than 45 years increased by 404 persons; however, the number of persons older than 85 years declined slightly.
- The next decade will continue to show the aging population entering their 60's.
- The counties of Knox, Lincoln, and Sagadahoc all have a high percentage of persons over 60 years of age, due in part to people being attracted to the Midcoast area for retirement.
- Unless the birth rate increases, or we experience an increase in new younger residents, the town's population will decrease.
- The lack of younger persons also will affect the economy of the town, region, and the state because businesses will lack workers to fill positions.

Population Trends and Projections

Determining future population projections is important for planning future schools, housing, and many other municipal services. The following data shows that the population in Waldoboro, and in Lincoln County, is declining. Likewise, the median age is also increasing and Lincoln County has the highest median age in the State of Maine.

Percent of Population Change in Lincoln County, Maine and Waldoboro between 1970 and 2014

Source: U.S. Census

	1970-1980	1980-1990	1990-2000	2000-2010	2010-2014
Lincoln County	25.1%	18.2%	10.7%	2.5%	-0.8%
State of Maine	13.2%	9.1%	3.8%	4.2%	0.1%
Waldoboro	26.7%	15.5%	6.8%	3.2%	-1.2%

Population Characteristics Percent of Total Population, 2010 Census

	Waldoboro	Lincoln County	Maine	United States
Under 5 years old	5.9%	4.7%	5.2%	6.5%
Under 18 years old	21.8%	18.8%	20.7%	24%
Persons 65 years	17.5%	21.5%	15.9%	13%
Foreign Born	2.8%	3%	3.5%	13.1%

Waldoboro Population Projections

Source: State of Maine

	Actual Population			Projections			
	1990	2000	2010	2016	2020	2025	2030
	4,641	4,907	5,063	5,030	4,763	4,600	4,413

Notes: The total population decline projected between 2010 and 2030 is 650 persons, which is a 12.8% decline. These projects are based upon trends identified and are currently underway; however, circumstance may change these projections. The most significant factors affecting these projections are the continued aging of the population, the lack of younger persons moving into the community, the future job market, and lack of affordable housing along the Midcoast.

Housing

Purpose

The purpose of the housing section is to inventory and describe the Town's housing stock with particular attention to affordable housing, housing condition, neighborhoods, and housing trends. Additional discussion about housing will be described in the existing land use section and the future land use plan.

Affordable Housing

Affordable housing costs for both ownership and rental housing is commonly described as being no more than 30% of a household income. Ownership costs include, monthly mortgage, house insurance, and property taxes. The Maine State Housing Authority provides data which illustrates both housing ownership and rental affordability by rating community affordability by a factor related to the median household income. A score of 1 or less shows that the area is less affordable, and a score of greater than one (1) indicates a greater number of affordable housing. This rating system provides an easy way to quickly determine the affordability status of a particular community and region. The following tables show the affordability ratings for Waldoboro and the other communities within the Waldoboro Labor Market Area.

2016 Housing Affordability Index for Waldoboro and Waldoboro LMA

	Index	Median House price	Median Income	Income needed to afford median house	House price affordable to median income
Damariscotta	0.70	\$222,500	\$45,127	\$64,537	\$155,581
Newcastle	0.74	\$254,000	\$54,816	\$73,923	\$188,347
Friendship	0.81	\$237,250	\$51,008	\$63,346	\$191,040
Alna	0.88	\$220,400	\$59,115	\$67,285	\$193,637
Bristol	0.93	\$250,000	\$59,671	\$64,490	\$231,320
Bremen	0.93	\$232,500	\$57,415	\$61,862	\$215,787
South Bristol	0.95	\$275,000	\$63,806	\$67,454	\$260,128
Maine	0.97	\$184,000	\$50,990	\$52,545	\$178,552
Waldoboro LMA	1.08	\$190,000	\$55,128	\$51,002	\$205,373
Waldoboro	1.13	\$159,450	\$51,389	\$45,574	\$179,793
Jefferson	1.43	\$153,000	\$60,238	\$42,053	\$219,160
Nobleboro	1.44	\$162,000	\$62,748	\$43,486	\$233,759

Households unable to afford a Median Home in Waldoboro, Waldoboro LMA & Maine 2016

	Total Households	# households unable to afford	% households unable to afford	Median House Price	Annual income needed to afford median home	Hourly income needed to afford median home
Waldoboro	2,247	1,003	44.6%	\$159,450	\$45,574	\$21.91
Waldoboro LMA	8,803	4,155	47.2%	\$190,000	\$51,002	\$24.52
Maine	564,989	296,838	52.5%	\$184,000	\$52,545	\$25.26

2016 Rental Affordability Index

	Index	Average 2 BR Rent	Renter Median Income	Income needed to afford average 2 BR rent	2 BR rent affordable to median income
Waldoboro	0.77	\$1,079	\$33,162	43,178	\$829
Maine	0.85	\$872	\$29,588	\$34,873	\$740
Waldoboro LMA	0.92	\$881	\$32,275	\$35,253	\$807
Newcastle	1.00	\$859	\$34,347	\$34,360	\$859
Damariscotta	1.01	\$760	\$30,704	\$30,386	\$768

Renter Households unable to Afford Average 2 Bedroom Rent

	Households unable to Afford average rent	Total Renter Households	Average 2 BR Rent	Annual income needed to afford average rent	Hourly income needed to afford average rent
Waldoboro	63% 335	532	\$1,079	\$43,178	\$20.76
Maine	57.4 % 92,705	161,601	\$872	\$34,873	\$16.77
Waldoboro LMA	55.1% 910	1,652	\$881	\$35,253	\$16.95
Newcastle	50.3% 86	171	\$859	\$34,360	\$16.52
Damariscotta	49.3% 171	347	\$760	\$30,386	\$14.61

Affordable single-family housing opportunities are available in Town; however, affordable rental units, unless they are one of the 133 rental assisted units, are not affordable for median income families. Most of the new housing constructed in the community is single-family units, and very few rental units have been constructed over the previous 20 years. Housing is expensive throughout the Midcoast region, and the availability of affordable housing will likely decrease unless an effort is undertaken to construct housing to attract middle income households. Housing also plays a significant role in attracting new people into the area to fill jobs and grow the economy. Steps to promote affordable housing will need to be undertaken both by Waldoboro and in towns throughout the Midcoast region to adequately address the demand for housing.

Waldoboro Housing

Waldoboro Housing 1970 – 2010 Source U.S .Census

Year	Total Housing	Change
1980	1,641 units	N/A
1990	2,039 units	+398 units
2000	2,360 units	+321 units
2010	2,510 units	+150 units
2016	2,627 units	+117 units
Total increase 1980- 2016		986 units

General Housing Facts: Source: U.S. Census

Description	Units/number
Total housing units	2,627
Occupied Housing units	2,071
Owner occupied units	1,537
Renter Occupied units	535
Seasonal, recreational or occasional use	526

Units in Structure: Source U. S .Census (Surveyed 2,627 housing units)

Type of Unit	Number
1-unit detached	1,690
1-unit attached	31
2 units	131
3 or 4 units	208
5 to 9 units	80
Mobile homes	397

Year Structure was built: Source U.S. Census (Surveyed 2,627 housing units):

Year	Number of units
2014 or later	0 units
2010 -2013	44 units
2000 - 2009	277 units
1990 -1999	353 units
1980 – 1989	597 units
1970 – 1979	373 units
1960 – 1969	69 units
1950 – 1959	36 units
1940 – 1949	38 units
Built prior to 1939	840 units

Year Householder Moved into Unit: Source U.S Census (Surveyed 2,071 occupied housing units)

Total Occupied Housing Units	2,071 units
Moved in 2015 or later	136
Moved in 2010 to 2014	380
Moved in 2000 to 2009	732
Moved in 1990 to 1999	498
Moved in 1980 to 1989	259
Moved in 1979 and earlier	66

Value of Owner Occupied Units 1990 – 2010 Source U.S .Census

	1990	2000	2010
Total owner occupied units	672	889	1807
Less than \$50,000	93 14%	34 3.8%	137 7.6%
\$50,000 to \$99,999	372 55%	440 49.5%	389 21.5%
\$100,000 to \$149,999	146 22%	301 33.9%	363 20.1%
\$150,000 to \$199,999	41 6.1%	44 4.9%	503 27.8%
\$200,000 to \$299,999	16 2.4%	31 3.5%	255 14.1%
\$300,000 to \$499,999	4 0.6%	34 3.8%	102 5.6%
\$500,000 to \$999,999	0	5 0.6%	45 2.5%
\$1,000,000 or more	0	0	13 0.7%
Median value	\$85,700	\$96,700	\$151,800

Gross Rent for units in Waldoboro: Source U.S Census (American Community Survey, 2016)

(Surveyed 534 occupied rental units)

Rent less than \$500	296 units
Rent between \$500 and \$999	148 units
Rent between \$1,000 and \$1,4999	68 units
Rent between \$1,500 and \$1,999	0 units
Rent more than \$2,000	22
Median Rent	\$470

Neighborhoods

A neighborhood, in broad usage of the term, may refer to a grouping of homes in an area with distinct boundaries with respect to natural or manmade features, transportation corridors, and types of housing, housing density or historic features/ attributes. Neighborhoods also vary with respect to the nature of the community, such as if it is rural, suburban, or a city. While only a dense grouping of housing may be defined as a neighborhood within a city; a rural town would typically have lower density. It is a neighborhood if the community regards it as such for whatever reason that is important to a particular community. The following are some of the residential neighborhoods within Waldoboro, each with a unique character.

Waldoboro Village:

The historic village and surrounding area consists of a mix of older historic structures mixed with both public and commercial activities.

West Village Neighborhood

An area on both sides of the Bremen Road, extending from Main Street to the intersection of the Dutch Neck Road. The area consists of a rural setting with older homes and pasture lands on both sides of the road. Properties on the east side of the road extend down to the river and a few have views of the water.

Gross Neck and Dutch Neck Neighborhood

The area consists of the land on each of the peninsulas, which extend down Gross Neck and Dutch Neck Roads. The area consists of older homes with farm and pasture space, and also has a number of housing located near the water. While most of the housing is in very good condition, a portion of the housing along Gross Neck are in poor conditions. Dutch Neck also has one of the Town's boat launch sites, which is used by shell fishermen.

South Waldoboro/ Back Cove Neighborhood

The residential neighborhood consists of housing near the water along Back Cove, Deaver Roads, and inland housing along the Friendship Road to the Town Boundary Line. The area also has farm and forest land with a few commercial activities.

Upper Winslow Mills Road Neighborhood

This small neighborhood is centered in the vicinity of Route 32 and Cross Street and extends southerly down Route 32 to the intersection of Route One. The housing is clustered along the road and has the forest area extend behind the housing. It also consists of a small village area in the vicinity of the Waldoboro Commercial Park on One Pie Lane.

North Waldoboro Village Neighborhood

This small neighborhood includes a cluster of homes at the intersection of Route 220 and the Old Augusta Road, and consists of a mix of older homes, farms, and open space.

Orff's Corner Neighborhood

This is a small village neighborhood located near the intersection of Route 32 and Orff's Corner Area consisting of older homes and a variety of rural activities

Other Residential Areas

Areas not identified as neighborhoods are generally rural housing mixed with other traditional rural activities, including farming, pasture, lands, forest, and a few small rural businesses. Waldoboro has many undeveloped rural areas, which have been developed for housing along existing road frontage, and a few small subdivisions. The majority of new housing development within the Town over previous decades has been in the rural parts of the town due to available and affordable land. Based upon past trends, this is expected to continue.

Mobile Home and Mobile Home Parks

A total of 397 housing units are mobile homes, which make-up 15% of the total housing stock. Most units (232 units) are located on individual parcels and the others (165 units) are located in one of the five mobile home parks in the community. Mobile homes are an affordable housing option for many households and will continue to be so in the future. The quality of construction of mobile homes have improved over the previous decades and are available with many amenities and options.

Mobile Home Parks

Name	Location	Number of Lots	Notes
Skyview Ridge Park	400 Friendship Street	44	
Brookside Mobile Home Park	2108 Friendship Street	25	
Medomak Mobile Home Park	Medomak Park	49	Cooperative ownership
East Ridge Park	170 Lady Slipper Lane	40	
Hathaway Park	Hathaway Mh Park	7	
Total Park Spaces		165 Spaces	

Apartments and Housing Developments

The Town contains a few housing developments designed for affordable housing. They are located within the downtown village area. These developments provide affordable housing for a variety of households with rent, structured according to monthly income.

Affordable Housing Units

Source: Maine State Housing Authority

Location	Housing Type	Type of Assistance	Total units
----------	--------------	--------------------	-------------

Cole's Hills Apts. 25 Old Route One	62 & older and persons with disabilities	Income based rent	24
Marble Oaks, Pond Circle & Lessner Road	Family	Rent restricted unit	16
Sproul Block 8 Friendship Street	62 & older and persons with disabilities	Income based rent	36
Waldoboro Woods 604 West Main Street	Family	Income based rent	12
Waldobourgh Village 1024 Main Street	Family	Income based rent	20
Andrew Cavanaugh 76 Marble Avenue			6
Waldoboro Green 17 Mill Street			6
Total Apartment Units			133 units

Other affordable rental housing assistance is available through the Section 8 Housing Choice Voucher program, which provides assistance in an apartment of your choice, subject to occupancy standards and funding availability. Income limits apply and rent is based upon 30% -40% of household income. This program is administered by the Maine State Housing Authority. The program has a waiting list of applicants and can take a considerable period of time to obtain a rental occupancy.

Subdivision Inventory:

(Subdivision names reflect ownership with application at the Waldoboro Town Office)

Name	Location	Number of lots	Developed lots	Vacant lots
McLoon Commercial Properties	30 Apple Barn Ln	6	6	0
Paul Rice	760 Atlantic Highway	3	1	2
George W Ilves	2770 Atlantic Highway	3	3	0
Mitchell & Velveta Ross	2870 Atlantic Highway	1	1	0
Jerry Grover	2920 Atlantic Highway	1	1	0
Keith Winchenbach	3413 Atlantic Highway	7	6	1

Carl Erickson Stephen Ralph	56 Back Cove Rd	6	6	0
Archie Letourneau	474 Back Cove Rd	9	3	6
Morton & Lydia Wheeler	475 Back Cove Rd	3	2	1
Robert M Faust Estate	920 Back Cove Rd	3	3	0
Olin Hoffses	1121 Back Cove Rd	10	10	0
William Levensaler	1264 Back Cove Rd	15	15	0
John & Blake Black	1 Backmeadow Rd	12	7	5
Broad Cove Builders Inc	8 Balsam Dr	4	4	0
Broad Cover Builders Inc	49 Balsam Dr	7	6	1
Maurice Dearborn	46 Bayville Ave	1	1	0
Richard Osier	80 Bedrock Point	1	1	0
Paul & Anna Leach, Abden & April Simmons	21 Beech Ridge	2	0	2
Parker & Patricia Spofford	796 Bremen Rd	12	0	12
Richard Osier	51 Broad Cove Rd	9	8	1
Richard Osier	5 Broad Cove Rd W	11	4	7
Richard Osier	38 Broad Cove Rd W	13	8	5
Craig & Diana Lewis	616 Castner Rd	1	1	0
Craig & Diana Lewis	636 Castner Rd	1	1	0
Craig & Diana Lewis	652 Castner Rd	2	2	0
Genthner	99 Crystal Cove Rd	6	5	1
Genthner	120 Crystal Cove Rd	14	9	5
George Thompson, Jane Farley, Harriet Wetherill	439 Deaver Rd	11	8	3
BC & AD Associates	7 Deer Run	14	10	4
David Kenniston	31 Dewdrop Ln	4	4	0
William & Mary Snow	390 Duckpuddle Rd	5	3	2
JT Mitchell Builders	89 Dutch Neck Rd	3	3	0
Leland & Judith Wallace	980 Dutch Neck Rd	3	3	0
Leroy & Dollis Jones	1262 Dutch Neck Rd	3	2	1
Carl Erickson & Stephen Ralph	695 Feylers Corner Rd	4	4	0
Anne MacLennan	1280 Feylers Corner Rd	2	2	0
James & Suzanne Grimes	35 Finntown Rd	4	4	0
Carl Winchenbach	242 Finntown Rd	4	3	1
Constance Hertel	270 Finntown Rd	3	3	0
Joseph & Rosanne Carey	31 Friendship Rd	1	1	0
Skyview Ridge LLC	400 Friendship Rd	44	37	7
Dominic & Nicholas Depatsy	402 Friendship Rd	1	1	0
W Scott Armstrong	783 Friendship Rd	3	2	1
Ruby Hoffses	915 Friendship Rd	17	16	1
Thomas & Louisa Winchenbach	37 Geele Ln	4	2	2
Timothy House	452 Genthner Rd	4	4	0
Paul Sidelinger	1031 Genthner Rd	1	1	0
Paul Sidelinger	1069 Genthner Rd	1	1	0
Margaret & Terry Ann McLead	250 Goshen Rd	5	4	1
Jerry Grover	71 Grover Ln	1	1	0
Lauri & Marie Hendrickson	370 Hendrickson Ln	5	4	1
Douglas & Jacqueline Fitts/ Bret Benway	24 Ice Pond Rd	15	9	6
Roberta Axelson	10 Indian Point	4	3	1
Wallace Walton	184 Jackson Rd	4	4	0
Broad Bay Realty Trust	226 Kalers Corner St	8	8	0
Wilmot Dow	90 Kalers Pond Rd	8	7	1
Frederick Bess	46 Lady Slipper Ln	2	1	1
Frederick Bess	170 Lady Slipper Ln	23	23	0

Roy & Cynthia Wichenbach	479 Main St	5	5	0
Cider Hill Farm LLC	777 Main St	3	0	3
Carl Erickson	1315 Manktown Rd	7	7	0
Erik & Mitchell Jura	15 Marble Ave	1	1	0
Robert & Jacqueline Joubert	11 Medomak Valley Est	2	2	0
Wayne, Dorcelle, Leroy & Lester Brown	500 N Nobleboro Rd	1	1	0
Wayne, Thelma & Leroy Brown	578 N Nobleboro Rd	1	1	0
Maine Modular & Manufactured Homes	170 Noyes Rd	6	6	0
Maine Modular & Manufactured Homes	1383 Old Augusta Rd	3	3	0
Douglas Meservey & Fred Klein	2294 Old Augusta Rd	4	4	0
Samuel & Harriet Cohen	2313 Old Augusta Rd	5	5	0
Percy Moody	472 Old Route One	1	1	0
Percy Moody	488 Old Route One	4	3	1
C.B. Parmalee Inc	1070 Old Route One	7	7	0
Medomak Land Company	26 One Pie Rd	1	1	0
Waldoboro Environmental Park	181 One Pie Rd	1	1	0
Waldoboro Environmental Park	141 One Pie Rd	1	1	0
Peter Richards	155 Perry Greene Hill Rd	3	0	3
Roger & Ronald Ralph	19 Pine Ridge Rd	8	8	0
Roger & Brenda Dever Kenneth & Patricia Smith	40 Reef Rd	5	5	0
Kevin Lappin & Diana Lashendock	1 River Bend Rd	5	2	3
Frank Giustra	175 Robinson Rd	2	0	2
Gerosimo Industries Inc	175 Robinson Rd	2	0	2
Gerosimo Industries Inc	216 Robinson Rd	3	2	1
B.C. Housing LP	14 Sara Ln	16	8	8
Douglas & Joan Severson	42 Severson Ln	4	4	0
Wayne, Thelma & Leroy Brown	30 Slab Pile Ln	2	2	0
Sylvia & John Crane III	640 Sprague Rd	2	2	0
Wayne Brown	91 Stage Coach Rd	2	1	1
Earle & Hazel Horton	44 Staley Ln	4	4	0
Wayne Brown	45 Sunset Ridge Rd	4	4	0
Dorcelle Brown	56 Sunset Ridge Rd	7	7	0
Wayne Brown	57 Sunset Ridge Rd	7	6	1
Wayne Brown	80 Sunset Ridge Rd	2	2	0
Wayne Brown	25 Turkey Ln	2	1	1
John Childers	1585 Union Rd	1	1	0
Christopher Armstrong	1659 Union Rd	1	1	0
Lawrence Morton	1745 Union Rd	9	9	0
Duncan Ferguson	1980 Union Rd	8	8	0
Duncan Ferguson	2090 Union Rd	3	1	2
Duncan Ferguson	2122 Union Rd	3	0	3
Bruce & Stormie Hendrickson	276 Violet Ln	1	1	0
Earle & Hazel Horton	1627 Wagner Bridge Rd	2	2	0
Lloyd & Dorothy Billings	418 Washington Rd	3	3	0
William & Pearl Swann	3364 Washington Rd	5	5	0
Theodore Mills	19 West Glen Dr	6	0	6
John Lichtman	1167 Winslows Mills Rd	2	2	0
Wayne, Darcelle, & Leroy Brown	1503 Winslows Mills Rd	1	1	0
W & S Wood Products Inc	3230 Winslows Mills Rd	1	1	0
Totals		423	306	117

Subdivision Lot Availability and Recent Subdivision Activity:

According to the existing subdivision inventory, there are potentially 117 undeveloped lots available. However, not all of these lots may be suitable or available for housing for a variety of reasons, such as environmental conditions or use by property owners for open space. A reasonable estimate of lots still available for new development is between 35 to 50 lots.

This indicates that future subdivision proposals may increase but considering the availability of non-subdivision lots for sale, and the inventory of existing subdivision lots, new subdivision applications will likely not be a significant housing growth factor for a while.

Housing Projections

New housing construction slowed since the economic downturn following 2008 and only recently began to rebound. Waldoboro's availability of affordable housing and selection has made existing residential structures much less expensive than building a new house. Other factors that affect housing construction include the ease and availability of financing, a dwindling household size increasing housing demand, and elderly households looking for other housing options instead of growing old in their existing home that may be larger than they require.

New housing between 1990 and 2010 ranged between 9 to 32 new housing units per year. Between 2010 and 2014, housing starts are 7 units per year. Many households delayed housing purchases and continued to rent while others took advantage of below market housing prices over the previous years due to foreclosures and other financial issues resulting from the 2008 recession.

A number of factors that indicate the need for additional housing starts including: demand after the slow-down in housing construction over the past 10 years, a declining household size, and a demand for affordable rental and owner-occupied housing. The demand for affordable housing is a growing concern throughout the entire mid coast region

While new housing construction is likely to rebound, it is not anticipated to reach previous levels and may range between 12 to 20 units per year. Unless a concentrated effort is made to promote affordable housing opportunities by the town, region, state, and federal levels, new affordable units will not be available to meet the demand.

Economic & Community Development

Purpose

The purpose of the Economic & Community Development section is to describe the Town's economic condition, listing both positive attributes and areas which limit future economic growth. Community desires and plans for future economic development and a strategy to reach these expectations will also be discussed.

Introduction

Waldoboro was incorporated in 1773 and developed a reputation as a ship building and port facility from the banks of the Medomak River. With a population of 5,035 (2014 American Community Survey) and a total land area of 73 square miles, Waldoboro is one of the largest towns in Maine's Midcoast region. The town's strong agricultural and fishing legacy is readily visible today with 11% of the Town's workforce involved in farming or fishing occupations. Waldoboro is home to a vibrant fiber industry consisting mostly of alpaca and wool production, which includes weaving and other fine fabric products.

The Medomak River extends through the middle of the town, which has miles of scenic coastline, many working farms, and ample forest and open spaces. Route 1 extends through the town connecting Rockland to the east, and Bath and Brunswick to the west. Located on the Maine Summer Tourist Corridor, Waldoboro businesses benefit from the increased traffic on Route 1 from May to October.

Waldoboro has become home to many artists, small professional businesses, and a growing number of innovative manufacturing activities. The beauty and benefits of living in a creative community along the Midcoast, which still retains its original charm, attracts many new residents who both live and work in the community.

Economic Environment Overview

Income levels in Midcoast Maine generally exceed the State average; Waldoboro falls well below the State and National average, with per capita income of \$20,077 in 2014 compared to the statewide average of \$27,332 and the national average of \$28,555. The percent of Waldoboro residents living in poverty is over 30% higher than the state average.

Waldoboro is the largest town, in Lincoln County, in terms of population and size – and it is also among the poorest. The median household income is approximately 93% of the County's and residents living in Waldoboro's downtown have a median household income that is only 54% of the County's. Poverty levels in the downtown are significantly higher than the Town and County (20% of families and 35% of individuals are below the poverty level, compared to 8.2% and 18.8% for the Town, and 7.3% and 11.5% in the County). At the nearby Miller Elementary School, the percentage of students eligible for free and reduced lunch is 68% compared to a County-wide rate of 45.4%.

Despite the poverty experienced by many Waldoboro residents, 18.5% of households have incomes exceeding \$75,000 and another 23.2% have an income between \$50,000 and \$74,999.

Since the early 2000's, Waldoboro has seen the closing of major employers (Sylvania Osram, Taction, Fieldcrest, Science Source, etc.) resulting in the loss of several hundred jobs. In 2012 Waldoboro received a HUD/ Community Development Block Program Slum and Blight designation for a portion of its downtown in anticipation of future applications for CDBG downtown funds.

Workforce

Waldoboro is home to a trained and educated workforce, with over 22.5% having a bachelor or graduate degree, and 28.7% have an associate degree. An additional 16.5% of the workforce is in process of completing a degree programs. A total of 1,529 workers (45.2 % of the workforce) have either a post-secondary degree or are in process of finishing their degree.

Occupations, Industries, and Employment Characteristics

As of 2010, 29.5% of Waldoboro's workforce is involved in management, professional, and related occupations.

A variety of home occupations provide both full and part-time employment opportunities to many Waldoboro residents. Self-employed people account for nearly 17% of Waldoboro's workforce and span a variety of industries and occupations. Home-based businesses include authors, artist, craftsmen, carpenters, professionals, and internet-based activities. High speed internet, good access to delivery services, and reasonable ordinance standards for home-based occupations all contribute to making Waldoboro a popular place to work from home.

Waldoboro has a stable and growing agricultural base, which includes produce, hay, livestock, horse stables, blueberry fields, Christmas trees, and nursery operations. Our farms are on the forefront of the rebirth and revitalization of local agriculture including organic and value-added products.

Largest Employers

- Clam harvesting: 190 clam harvesting licenses are provided in Waldoboro.
- MSAD #40 includes the Miller Elementary School, Medomak Valley Middle School, and Medomak Valley High School located in Waldoboro
- Borealis Bread Bakery
- Hannaford Supermarket
- Moody's Diner
- Ocean Organics
- Custom Cortage
- Maine Antique Digest
- Storer Lumber

Our Economic Base:

The best description of our local economy is one provided by a local alpaca breeder, who compares our economic base to a bowl rather than a vase. Unlike a vase, with a narrow top with a few good paying jobs and a wide bottom with many lower paying jobs, he sees us more like a bowl with many decent paying jobs and healthy businesses making up a wide center. This description is very accurate and speaks to the business character of the community, which is comprised of many small, but well-run, profitable businesses.

Consider the following unique features of our economy:

- 16.8 % of our workforce is self-employed people involved in a variety of occupations.
- Waldoboro has a reputation for many fine fiber art products, which began with the Waldoboro style of hooked rugs back when the community was first settled. Today, we have many alpaca farms, which produce a variety of fiber, finished yarns, weaved rugs, and other clothing and goods, many of which are museum quality.
- The community is home to many artist, authors, and craftsmen of all types, which both reside and make their living here. Our galleries, restaurants and library are always filled with members of our artistic community.
- The Medomak River is the most productive clam flat in the State of Maine. The Medomak River clams are noteworthy for their fresh and succulent flavor and deliver over 4-million dollars into the local economy.
- 18.5% of households have incomes exceeding \$75,000 and another 23.2% have an income between \$50,000 and \$74,999.
- 29.5% of our workforce is involved in management, professional, and related occupations.
- A variety of home occupations provide both full and part-time employment opportunities to many of our residents. Home-based businesses include authors, artist, craftsmen, carpenters, professionals, and internet-based activities. High speed internet, good access to delivery services, reasonable ordinance standards for home-based occupations, and most importantly a beautiful place to live all contribute to making Waldoboro a popular place to work from home.

- Waldoboro has a stable and growing agricultural base that includes produce, hay, livestock, horse stables, blueberry fields, Christmas trees, and nursery operations. Our farms are on the forefront of the rebirth and revitalization of local agriculture including organic and value-added products.

Development Potential:

Waldoboro is ready for development and has the land, infrastructure, skilled workforce, fine schools, beautiful homes, and community character to provide a place for a variety of manufacturing, high-tech, service and retail opportunities. Consider these important attributes:

- Water and Sewer is available throughout the center core of the town and both systems have the capacity to provide service for many new business locations.
- Our industrial park is located on Route 32 and has over 50 acres available for development. A 7-acre portion of the park is currently approved for new businesses. The other portions of the park can also be developed to suit your needs.
- A traditional village business area is surrounded by picturesque homes and a variety of community services such as the Post Office, Waldo Theater, medical offices, the public library, and the Waldoboro Historic Museum. An eclectic mix of retail, restaurant, and service businesses comprise the village business area and there is space available for many new opportunities. The village is also located on the banks of the Medomak River which provides a view which makes you glad you live in Coastal Maine.
- The Route 1 corridor is zoned for a wide range of commercial activity and ample land is available for new commercial ventures. The corridor handles a minimum of 13,260 vehicles trips per day and is an ideal location for tourist, retail, overnight accommodation, office, and manufacturing activities.
- A trained and educated workforce with over 22.5% having a bachelor or graduate degree and 28.7% has an associate degree. An additional 16.5% of the workforce is in process of completing a degree program. A total of 1,529 workers 45.2 % of the workforce have either a post-secondary degree or are in process of finishing their degree.
- Waldoboro has a diverse housing stock, which provides families of all sizes and incomes an opportunity to find an affordable home of their choice.
- Waldoboro contains some unique vacant buildings that are ready for creative investors to locate new retail, manufacturing, office, or high-tech businesses. A few have breathtaking vistas of the Medomak River and are suited for a premier tourist, hospitality or eating establishment.
- Waldoboro is located in the heart of Maine's coastal corridor along Route 1 and offers multiple venues for retail and tourist opportunities.
- Waldoboro has a Comprehensive Plan and a Land Use Ordinance to guide new development. Applicants can be assured that a timely and professional process is in place to obtain all necessary approvals for their project. A full-time Planner and Development Director is on staff to assist you with your proposal and help to make your new venture successful.

Asset Based Economic Development Strategy

An asset based economic development strategy identifies the Town's existing economic features and strengths while seeking to build and expand from these strengths to identify new economic opportunities. The logic behind this approach is the following:

- Identify the existing economic features in the Town that are successful and thriving.

- New economic ventures linked/ connected to existing assets will share similar success conditions/ attributes
- A supply chain, employee base, and customer base will be shared between the existing businesses and the new ventures.
- Risk associated with any new business area reduced or at least mitigated.
- Financial institutions already have local experience dealing with similar businesses or economic sectors.

A far simpler way of expressing this strategy is to build upon the town's successful areas as opposed to venturing into unknown areas. This approach should not be used to halt a truly innovative new venture or someone taking a risk which may result in profitable outcomes.

Some of Waldoboro's existing economic assets/ attributes:

- Shell fishing is a dominant economic activity and exhibits growth potential
- The town has a productive and improving coastal environment, which has future potential for fishing
- Agricultural innovations in small farming operations and food production is growing
- The presence of artists and craftspeople is well established in the community
- Waldoboro continues to have a viable fiber arts sector
- Waldoboro is located along the Route One summer tourist corridor
- The Town has many small businesses and home occupations
- The Town has many coastal properties
- The Town has a growing member of public accessible trust land available for walking: some have water access.
- The Town has a diverse housing stock which offers housing opportunities for many household income levels.
- The Town has high speed internet access in portions of the community especially along the Route One corridor.
- The Town is accessible to all the cultural, educational and retail offerings in the Mid Coast.

The Economic Development Committee will need to further analyze these assets and develop a focused economic strategy to grow existing businesses and attract new ventures, however, an analysis of our assets indicates the following areas that may show possibilities for economic growth:

- Create a market plan for Waldoboro clams having a local processing and distribution facility
- Develop new aquaculture products which are suitable for our environment.
- Promote small scale farming and food production.
- Develop a tourist activity plan to identify and develop attractions within the community, especially our environmental features.
- Develop tourist related services including inns, bed& breakfasts, hotels, and similar activities.
- Use high speed internet to attract households who can work from home.
- Expand the marine trades sector including products made from sea vegetables.

Commercial and Industrial Zoned Areas

The Current Land use ordinance contains the following district specifically designed for commercial use:

Route One Commercial District A

Route One Commercial District B

Industrial District

The Shoreland Zoning section of the Ordinance also contains General Development and Commercial Marine Districts along few areas of the river which are already used for a mix of both commercial and residential use. Both of the Town boat launch areas on Pine Street and Dutch Neck Road are designated for commercial marine activity.

Other areas which allow some commercial activities include the Downtown Village area and the Rural District, which allows some traditional activities typically found in Maine communities.

Overall, most of the significant commercial activity is directed towards the Route One Corridor and into the existing Waldoboro Park located off of Route 32. Over the previous decade economic activity throughout the town has been modest. It will be prudent for the community to relook at its current strategy to direct development towards primarily the Route One Corridor.

Water Dependent Access for Commercial Activities

Waldoboro once was a prominent ship building community, however, today ship building is no longer a local activity. Other marine activities, such as shell fishing, retail marine supplies, and small businesses serving boat building, are located within the community. Other commercial activity which requires water access commonly referred to as water dependent are limited to the Town's two boat launches on Pine Street and on Dutch Neck Roads. Other suitably zoned areas are centered in the downtown village area along the river just south of Route One. Shell fishermen also use various pathways and easements to access the water throughout the Town, usually with private agreements with landowners.

Increasing the sites suitable for commercial water dependent activities will require zoning sites which allow a variety of marine related activities. This will not be an easy task since much of the land is privately owned and is used for residential use or is located in areas with primarily residential use. Despite the difficulty it is a discussion worthy to undertake since it will secure the future of marine activity within the community. It is also important to find ways to maximize the areas already zoned for marine activities and to explore the opportunities for sites not directly on the water but with access to the water.

Economic Development Funding Opportunities

The town does not have any local economic development incentive programs and relies on those available for the State of Maine such as the Economic grant available from the Community Development Block Grant Program and grants and loan programs available from the Federal Rural Development Programs.

Other avenues which the Town could develop are creating a tax increment Financing District (TIF) which allows the Town to capture new property assessments within the district to use towards allowable economic development activities within the district and in some situations throughout the community. This strategy would take time to create funds however it can be used for a period of 30-years and would provide new developments a way to obtain infrastructure for their sites.

The other avenue the town should pursue is to develop an economic project which will create new jobs for inclusion into the Comprehensive Economic Development Strategy (CEDS). Placing a project into the CEDS list makes it eligible to attract funding from the Economic Development Administration which can jump start job creating economic development activities in the community.

Educational Attainment

An educated workforce, especially with the capacity to acquire new skills over their working careers, is one of the most valuable assets in our current economy. The degree and pace of economic change will likely increase as new technologies and global impacts refocus and alter the economic landscape. A workforce with the appropriate educational capacity to relearn and adapt to a changing economy will benefit and prosper. New economic opportunities, largely due to high speed internet access in some sectors, will also make employment even less geographically dependent on certain locations, making the Midcoast competitive. The Midcoast will also be more appealing considering our quality of life, affordable housing, and coastal environment. The following are our current educational attainment levels.

Education Attainment: Percent of Population age 25 years and older Source: 2014 American Factfinder

	High School Graduate or Higher	Bachelor's Degree or Higher
Waldoboro	89.5%	24.3%
Lincoln County	92.7%	32.3%
Maine	91.3%	28.4%
United States	86.3%	29.3%

Educational Attainment Details: Persons 25 years and Older.
Community Survey

Source 2011-2015 American

Waldoboro: persons 25 years and over	3,647 persons
Less than 9 th grade	116 persons (3.2%)
9 th to 12 th grade	210 persons (5.8%)
High School graduate	1,603 persons (44%)
Some college, no degree	763 persons (20.9%)
Associates Degree	186 persons (5.1%)
Bachelor's Degree	494 persons (13.5%)
Graduate or professional Degree	275 persons (7.5%)

Waldoboro has a lower percentage of persons with a bachelor's degree or higher than Lincoln County and the State, which could affect its overall workforce economic competitive status, particularly when companies look at the availability of a skilled and educated labor force.

Labor Force Data

Labor Force Industry.

Source: 1990 & 200 Census and 2015 American Community Survey

Industry	1990	2000	2015
Civilian employed population over 16 years old	2,095	2,368	2,500
Agriculture, fishing, forestry, mining	128	222	149
Construction	244	174	250
Manufacturing	399	334	304
Wholesale	41	65	23
Retail	451	319	318
Transportation, warehousing, utilities	100	47	50
Information	-	-	19
Finance, insurance real estate	57	120	182
Professional, scientific management, administration	128	86	177
Educational services, health care, social services	310	522	604
Arts, entertainment recreation, food services	16	191	219
Other services	164	81	117
Public Administration	57	68	

Labor Force by Occupation.

Source: 1990 & 2000 Census and 2015 American Community Survey

Industry	1990	2000	2015
Management, professional, and related occupations	512	609	632
Service Occupations	278	423	480
Sales and Office	427	473	606
Farming, fishing, forestry	131	195	89
Construction, extraction, maintenance	318	254	304
Production, transportation, and material moving	388	321	389

Household Income. Source: 2011-2015 Community Survey

Total Households	2,035
Less than \$10,000	171 (8.4%)
\$10,000 to \$14,999	189 (9.3%)
\$15,000 to \$24,999	248 (12.2%)
\$25,000 to \$34,999	298 (14.6%)
\$35,000 to \$49,999	233 (11.4%)

\$50,000 to \$74,999	444 (21.8%)
\$75,000 to \$99,999	294 (14.4%)
\$100,000 to \$149,999	120 (5.9%)
\$150,000 to \$199,999	38 (1.9%)
Median Household Income	\$43,083
Per capita Income	\$20,761

Percent of Population Living in Poverty. Source: American Factfinder, 2014

Waldoboro	18.8%
Lincoln County	11.7%
Maine	14.1%
United States	14.8%

Percent of Persons without Health Insurance. Source: American Factfinder, 2014

Waldoboro	11%
Lincoln County	16.7%
Maine	12.3%
United States	12%

Unemployment Trends in Waldoboro, 2006-2014. Source: Community Survey, 2014

2006	2007	2008	2009	2010	2011	2012	2013	2014
4.8%	4.8%	5.9%	8.9%	9.6%	8.2%	7.3%	6.4%	5.2%

Average Weekly Wage in Waldoboro and Waldoboro Labor Market Area, 2006- 2014

	2006	2007	2008	2009	2010	2011	2012	2013	2014
Waldoboro	\$585	\$533	\$540	\$519	\$526	\$542	\$555	\$571	\$475
Waldoboro LMA	\$485	\$458	\$462	\$465	\$460	\$474	\$491	\$503	\$528

Recreation

Purpose

This section describes the various public and private recreational resources available in the Town and offers recommendations for new or expanded recreational features and programs. Recreation is a quality of life feature of the community and can provide residents enjoyable activities, which enhance their experience of living in Waldoboro. Recreational offerings include active and passive activities as well as other cultural and enriching events.

Recreation Department

The Recreation Department is staffed by a full-time director responsible for a variety of recreation programs and oversight of town recreation facilities. Activities are offered for both children and adults, and include sports and other events, such as bus trips. Maintenance for all public facilities is undertaken by public works and operating funds for programs are generated from municipal appropriations, user fees, and fund raising. The Department in 2017 regained a full-time director after a few years with part-time staff.

Recreation Activities, Programs and Events

The following is a list of current programs and activities:

- Youth Basketball
- MBL Pitch, Hit, and Run
- Summer Recreation Program
- Youth Soccer
- Adult Co-ed Softball
- Senior Bus Trip
- Tumbling Class
- Discount Amusement Park Ticket program
- Waldoboro Day

Municipal Recreation Facilities

The following is a list of municipal recreation facilities:

Waldoboro Recreation Complex: Located off of West Main Street, and adjacent to the Miller School, the complex contains multiple fields, which provide active sport venues.

Dutch Neck Marine Park: The 20-acre park located on Dutch neck Road contains a boat launch, parking area, and frontage on the Medomak River.

Medomak River Park: The 0.65-acre park is located on the east side of Route 32 and contains a picnic area.

Memorial Park: A 0.5-acre park at the intersection of Pine and Main Streets, this site contains a war memorial erected in the 1930's.

Philbrook Athletic Field: A 4.2-acre park is located adjacent to the former AD Gray School & contains a baseball field.

Pine Street Landing: The 1.85-acre site contains a boat launch, bulkhead, and large parking area.

Tennis Courts: The two tennis courts are located adjacent to the former AD Gray School.

Town Forest: A 66-acre site with trails is located off of Route One. The area contains several trails.

Town Quarry: This 321-acre site, located on Depot Street, contains trails, blueberry fields, and is managed by the Medomak Valley Land Trust for the Town.

Friendship Street School: the former school is now leased by the Headstart program and contains a playground. The location also contains a trail to the river.

AD Gray School: The former school building, until recently, was to be renovated by the YMCA and used as a community center. The project was halted and the ownership of the property returned to the Town. As of the time of writing the Comprehensive Plan, plans for the property are not finalized.

Other Private Recreational Facilities

- Medomak Valley Land Trust Sites
- Damariscotta YMCA
- Waldoboro Historic Museum
- Waldoboro Theater
- All-Play Bowling
- Sno-Crawlers Club

Inventory of Municipal and Public Recreational Facilities/programs

Table of Municipal and Public Facilities:

Description	# of Facilities	Notes/Location
Softball Fields	1	
Baseball Fields	2	
Soccer Fields	1	
Football Fields	1	
Tennis Courts	2	Former AD Gray School (Poor Condition)
Basketball Courts (outside)		
Basketball Courts (inside)		
Swimming Pools	0	Damariscotta YMCA is constructing a pool
Swimming Areas (outside)	0	Swimming areas/beaches are located in the region see list below
Picnic Areas/ Parks	1	Medomak River park contains 5 tables
Boat Launches	2	Pine Street and Dutch Neck Marine Park
Walking/ Hiking Trails	2	Town Forest, Quarry Hill
Handicap Facilities	0	
Playgrounds with equipment	0	Playground equipment is located at the Miller School and the Head Start facilities

Walking/Hiking/Bicycle and Multipurpose Trails

The following walking/ hiking areas are publicly available areas in Waldoboro

- Town Forest Trail: 1.5-mile trail
- Quarry Park Trail: 1.3-mile trail
- Sidewalk/ Downtown Village Area
- Waldoboro Village River Parl. Note: Trail is in the planning stage
- Peters Pond Trail 0.8-mile trail
- Riverbrook Preserve 1.5-mile trail
- Reef Point Preserve 1.4-mile trail
- Geele Farm 1.6-mile trail
- Clary Hill Trail 1.25-mile trail
- Goose River Trail 1-mile trail
- Mill Pond Trail 0.8-mile trail

There are no dedicated bicycling trails .Most state routes and town roads lack adequate paved shoulders to safely accommodate either bike or pedestrian traffic. Route One does have paved shoulders for biking and walking; however, vehicle speed and traffic volumes, especially in the summer, may not be comfortable for some.

Snowmobile Trail System

The Snowmobile trails in Waldoboro are managed by the Sno-Crawler Club, which are part of the State snowmobile trail system that allows riders to travel extensively throughout the region. Ridership activity has been dependent upon seasonal snow levels and duration, which have been disappointing for several years. Many snowmobile participants have traveled north to gain access to more reliable snow covered trails.

Traditional Outdoor Activities

Traditional outdoor recreational activities include fishing, hunting, cross-country skiing, and snow shoeing that are available throughout the town on both public and private lands. Public access onto private land for hunting and other activities is subject to the willingness of property owners to allow these activities. The courtesy and respect displayed by recreational users towards property owners will ensure that access will be available in the future. Waldoboro has ample rural undeveloped land, which offers the opportunity for outside recreation as long as private landowners continue to allow some or all traditional recreational pursuits on their land.

Boat Landing and Water Access

Two boat launches provide access to the Medomak River for both recreational boaters and fisherman. The Pine Street facility, which includes a parking area, is currently undergoing renovations to improve the launch and bulkhead. It is used extensively by fisherman. The second boat launch is located at the 20-acre Dutch Neck Marine Park, which is also used extensively by fisherman, and includes a gravel parking area. The site is not widely used by recreational boaters.

Some other boat launch sites in the region include the following:

- Damariscotta Lake in Jefferson
- Dyer Long Pond in Jefferson
- Clary Lake in Jefferson
- Long Pond in Jefferson
- Pemaquid Pond in Nobleboro
- Seven Tree Pond in Union
- South Pond in Warren
- Pemaquid River in Bristol

Water Access and Swimming

There are no public swimming areas in Waldoboro; however, several areas on the Medomak River are used by area residents. The following swimming areas are available in the immediate region and are subject to entrance fees.

- Damariscotta Lake State Park in Jefferson
- Lake St. George State Park in Liberty
- Popham Beach State Park in Phippsburg
- Reid State Park in Georgetown
- Pleasant Pond Peacock Beach in Richmond (Municipal Park)
- Chickawaukie Pond in Rockland (Municipal Park)

Regional Recreational Opportunities

The Midcoast region contains many private, municipal, and state recreational facilities, which include some of the following:

- Camden Hills State Park
- Ragged Mountain in Camden
- Reid State Park in Georgetown
- Popham Beach in Phippsburg
- Pemaquid Point Fort in Bristol
- Damariscotta State Park in Jefferson
- Lake St. George State Park in Liberty
- A variety of historic sites, forts, and buildings.
- Scenic coastal villages
- Trails located in Camden, Rockport, Topsham, Bath, and Brunswick
- Land Trust and land in conservation easements open to the public.
- Museums
- Boat tours
- Boat launch sites on both fresh and salt waters
- An assortment of cultural activities
- Continued education opportunities, including degree course offerings, adult education, private classes, and senior college
- Libraries, such as Waldoboro Public Library, offer a variety of programs and activities
- Art and craft activities, classes, fairs, and galleries

Waldoboro Recreation Plan

A significant amount of planning, fund raising, and work was required to create the Waldoboro Recreation Complex, which is now the center of active recreation in the community. The next step to

build upon this past accomplishment to create a recreation plan to address a range of activities for all age groups in the community. A component of the plan should include regional connections with area communities to provide opportunities that may not be available or easily obtained in the town.

A great source to be used for public opinion survey data about recreation is the 2014-2019 Maine State Comprehensive Outdoor Recreation Plan (SCORP). A few key public preferences that are valuable for Waldoboro's recreation plan include the following items:

- The top 5 most popular activities reported by U. S. participants include: Running, Fishing, Bicycling, Hiking, and Camping
- Top 7 activities Maine residents enjoy listed in order of participation: Driving for pleasure, Outdoor festivals, Visiting Historic Sites, Attending fairs, Sun bathing, Bird watching, and Sea Kayaking.

Other significant areas worthy of further consideration for the future recreation plan include the following:

- Creating on and off road bicycling trails. This should include improving road shoulders on key roads such as Routes 32, 220, and 235.
- Improve boat launch sites and swimming access in town and the region. Whenever feasible, coordinate locations with shell fishermen and others.
- Link recreational activities with tourism, whenever feasible
- Coordinate local events/ activities with other regional activities, whenever feasible
- Improve access to the Medomak River
- Develop a multi-use trail plan for the town that also connects to neighboring communities

Historic, Heritage & Archaeological Assets

PURPOSE

The purpose of this section is to identify Waldoboro's archeological and historic resources, and to identify strategies that will preserve the distinctive characteristics of the community. The task of preserving the places, buildings, and memories of the past is important for the legacy of the town. The remaining evidence of our ancestors, whether it consists of cemeteries, old homes, records, and books or prehistoric sites, all contribute to the individuality and identity of the town.

BRIEF HISTORY

Waldoboro was incorporated in 1773. By the period of 1837-80, the population had grown to 4,569. This growth was fueled by a prosperous lumber industry, a booming shipbuilding industry, profitable fishing, and a sustainable agriculture. During the 19th century, and the first part of the 20th century, there were as many as 37 lumber mills in Waldoboro at one time. By 1837, one-third of all Maine tonnage was built here. One-tenth of the U.S. tonnage was Maine-built, and the first five-masted schooner was built here in 1888. At one point, half of Maine's fishing fleet operated out of Friendship, Cushing, Bremen, and Waldoboro harvesting cod, mackerel, lobsters, and clams. As late as 1950, there were 90 poultry farms in Bremen and Waldoboro alone. The Medomak Canning Company operated seasonally until 1985, employing up to 120 people. Overcut forest, overfished waters, farmed-out land, high costs, and developing competition led to a general decline: by 1920-40, Waldoboro's population had dropped by half. According to the 1990 census, it has just regained its former size with a reported population of 4,601 and a population density of 64 per square mile, up from 55 in 1980 (U.S. Census). One purpose of this plan is to provide the thought, foresight, and planning to see that Waldoboro's future is one of steady economic growth.

Geographically, Waldoboro is situated in Midcoast Maine; 15 miles west of Rockland, 66 miles east of Portland, and 28 miles south of Augusta. Route One used to run through the village, but a bypass, which skirts the village itself, was built in 1933. The village still has ready access to Route One. Route 32, with direct access to Augusta, bisects the town. The Maine Coast Railroad runs west to east, providing easy access, and the Medomak River bisects the town north and south. The town consists of 73 square miles, one of the larger towns in the region, including many miles of coastline, acres of forest, and abundant number of open fields. It is fully served by a system of well-maintained roads giving ready access to all parts of the town.

Waldoboro has undergone a number of economic transitions, including timber harvesting in colonial times, the development of water power to run sawmills, the growth and decline of agriculture, and several related industries. Waldoboro's economy has changed with the rise and fall of the ship-building industry, as the development of a downtown retail center and early emergence of fishing and the shellfish industry have become a mainstay of the local economy, and the gradual changeover of Route 1 from a transportation corridor to a commercial strip.

An overview of some of the early economic history can be gleaned from the following italicized excerpts from "The Medomak River Watershed: A Natural Resource Inventory", prepared by Janet McMahon for Medomak Valley Land Trust:

"By the 1750s, the entire coast west of Pemaquid had been stripped of its forests up to 50 miles inland. To the east of Pemaquid, much of the forest land was still untouched. Ten years later, most of the coastal islands and immediate shoreline had been cleared, and there were at least twenty saw mills in the lower watershed producing lumber for Portsmouth and Boston markets. Every stream with a decent drop in elevation had a mill, and many had several; for example, Slaigo Brook had four. By the 1820s, there were 37 water-powered mills in Waldoboro alone. By this time, the economy had diversified, and saw

mills were producing shingles, barrel heads, staves, clapboards, and ship timbers. The peak of the lumber business in central Maine occurred around the 1850s.

"Although logging played a major role in most valley towns (forests had to be cleared, houses had to be built) until the early 1800s, the mainstay of the communities that developed along the Medomak River was agriculture. The original lots along the Medomak were laid out with farming in mind. They averaged 25 to 40 rods wide (372 to 660 feet) and 100 acres in size. Most extended from the river to the height of land and often over to the next major stream course.

"Staple crops on most farms were Indian corn, wheat, barley, hay, Irish potatoes, and livestock. Around the turn of the (20th) century, dairying and haying became more important than field crops, and after 1920, all agriculture experienced a rapid decline, a trend that still continues. By the 1950s, poultry and squash were two mainstays of agriculture in the region. In Waldoboro and Bremen alone, there were 90 poultry farms. And in the 1950s and 1960s, the Medomak Canning Company, which processed locally grown squash, blueberries, and a variety of other crops, employed about 120 people. Both of these industries collapsed in the 1970s; poultry primarily because of competition in other states, and the Canning Company because it couldn't comply with water quality standards for the Medomak River, which received effluent from the plant.

"With the benefit of hindsight, it is easy to characterize the economy of the valley as boom and bust. In Waldoboro, for example, shipbuilding had made it one of the largest and most prosperous communities in Maine in the mid-1800s. By 1839, one-third of Maine's tonnage and one-tenth of the United States' was constructed in Waldoboro, and there were at least twenty yards in Waldoboro and Bremen (Stahl, 1956). A few decades later, the steam engine had been invented, and played out soils and a depleted wood supply couldn't compete with the lure of richer farmlands out west or the industrial centers of New England. As a result, the 1860s and 1870s saw a major exodus west. Out migration continued until the 1920s and 1930s and was most severe in inland towns.

"The coast had a more diverse economy, and by the early 1900s, fishing, clamming, and, to a lesser extent, tourism, began to develop into major industries. As with other industries, fishing tended to be exploitative. Although clamming started to drop off by the 1930s (there weren't enough to supply the Burnham and Morrill clam factory in Friendship, which consequently shut down in 1932), it remains an important part of the economy of the lower watershed. Waldoboro is allegedly second only to Brunswick in bushels of clams harvested. "Two other fisheries that were important mainstays for shorter periods were drag netting for mackerel and seining for pogies (menhaden). Throughout the 1800s, mackerel was a staple commodity of the United States. In 1876, a fleet of 20 small schooners operated out of Friendship, Cushing, Waldoboro, and Bremen. This represented half of the Maine fleet. Mackerel were dressed, salted, and shipped to markets to the south (Goode et al. 1883). The pogy fishery came into prominence in the early 1900s. There were reported to be seven pogy factories in the lower watershed during this time (Richard Keene, personal communication).

"Like most coastal rivers, the Medomak supported runs of Atlantic salmon at the time of settlement. By 1778, salmon, shad, and alewife numbers were reduced to the point where the Town of Waldoboro imposed a one-year ban. In the early 1800s both salmon and shad populations were extinct. Complete obstruction of the river by dams was the initial cause of decline, followed by deterioration of water quality (Beland, 1984). Other anadromous species, including the alewife and smelt, and the catadromous American eel still inhabit the lower Medomak River, but in much smaller numbers. Until recently, several dams on the main stem of the Medomak River prevented these species from spawning in Medomak Pond and in other ponds in the upper watershed. As these dams were breached, some species returned to the middle reaches of the Medomak. For example, American eels again inhabit Storer Pond. By 1896, alewife numbers were reduced to 41,512 pounds (about 600 bushels) (Roimsefell and Stringer 1943). Fishing pressure reduced the population to about 15,000 pounds by the 1980s (Sam Chapman, personal communication). Smelt and eel populations have experienced similar declines over the past century and a half, although the river still supported a commercial smelt fishery into the 1950s (with more than a hundred shanties on the ice in an average winter)."

The overall settlement patterns in Waldoboro were heavily influenced by events that took place several hundred years ago. The following italicized excerpts from "The Medomak Valley Watershed: A Natural Resource Inventory," provide an insight into how these events shaped Waldoboro:

"The land use history of the Medomak Valley follows a pattern typical of most areas in New England. The first settlement in the watershed was an English trading post established at Pemaquid in 1625. Further settlement was intermittent and light until after the end of the French and Indian War in 1763. From this point on, the population of the valley towns exploded, with peaks occurring in the mid-1800s. By 1754, much of Dutch Neck was completely settled, and by 1790, there were 1,717 people in what is now Waldoboro (Stahl, 1956). In general, settlement patterns proceeded from coastal islands and ends of peninsulas inland, following rivers and wood supplies. Within a few decades, the landscape was completely transformed from trackless virgin forest to pasture and farmland. By the 1750s, the entire coast west of Pemaquid had been stripped of its forests up to 50 miles inland. To the east of Pemaquid, much of the forest land was still untouched. Ten years later, most of the coastal islands and immediate shoreline had been cleared and there were at least twenty sawmills in the lower watershed producing lumber for Portsmouth and Boston markets. Every stream with a decent drop in elevation had a mill, and many had several; for example, Slaigo Brook had four. By the 1820s, there were 37 water-powered mills in Waldoboro alone. The original lots along the Medomak were laid out with farming in mind. They averaged 25 to 40 rods wide (372 to 660 feet) and 100 acres in size. Most extended from the river to the height of land and often over to the next major stream course. Stahl (1956) describes the pattern of settlement along the Medomak estuary as follows:

"At the close of the French and Indian War, the Plantation of Broad Bay was a string of farms, in general one hundred acres each with a 25 rod frontage on the water, reaching from the tip end of Dutch Neck north along the river to about a mile above the lower falls (in Waldoboro Center), and from there, on the eastern bank, running south along the water and around the Bay to the Narrows."

"Until the 1770s and 1780s, there were very few roads. Most houses were located along the river and connected by foot paths. By 1790 most of the present roads were laid out along the Medomak and there were roads to Union and Warren. Because most farmers considered it a nuisance to have long driveways go through their fields, many farmhouses were moved back from the river and new houses were usually built along roads (Stahl, 1956), creating the striking long views that still exist along the Medomak estuary today."

HISTORIC VILLAGE AND VILLAGE DISTRICTS

The Waldoboro Land Use Ordinances designate both a Historic Village and Village District, place specific use, and, in the case of the Historic village, certain design performance standards to guide how development occurs and is designed in these areas. These districts were created in accordance with the recommendations of the 1998 Comprehensive Plan. Likewise, the creation of the Downtown Plan in 2012 strives to set the future stage for renewed development in the downtown village by respecting and enhancing the character of the architecture of the older village.

A designation of 3-Rural Village Business Districts, located at the intersections of Washington Road and the Old Augusta Road, Route 32, Cross Street, and the Friendship and the Finntown Roads, were also created at the recommendation of the 1998 Comprehensive Plan to acknowledge these 3 traditional village areas, which were significant places in our town's history. The Land Use District was designed to allow a mix of residential and some traditional commercial activities typical of a small village neighborhood center.

Historic Buildings and Structures

In 2011, it was determined by the Maine Historic Preservation Commission that there exist, within the commercial core of the Downtown Village area, a potential historic district, which is eligible for listing on the Maine Historic Preservation Commission and National Park Service National Register of Historic Places.

The following inventory data as of September 2011, compiled by Kirk Mohnney from the Maine Historic Preservation Commission, shows 7 properties listed in the National Register of Historic Places. The sites listed in the Register are:

- German Church, Bremen Road
- US Custom House and former Post Office, Main Street
- Waldoboro Town Pound, Main Street
- Godfrey Ludwig House, Route 32
- Hutchins House, Main Street
- Waldo Theater, Main Street
- Col. Isaac G. Reed House Glidden Street (The structure was, unfortunately, burned down in April 2017)

Other properties located at 317, 320, 330, and 348 Friendship and 2 Feylers Corner Road may also be eligible for placement in the national register, based upon architectural survey data at the Maine Historic Preservation Commission. The Maine Historic Preservation Commission recommends a comprehensive survey of Waldoboro's historic above-ground resources be conducted to identify other properties that may be eligible for nomination to the National Register.

WALDOBORO HISTORICAL SOCIETY

The Historical Society, founded in 1968, operates a museum located at 1164 Main Street. The museum consists of three structures, and is adjacent to the Town Pound, which is listed in the National Register of Historic Places. The museum is open between June and Labor Day and offers visitors many displays and artifacts in addition to a collection of Waldoboro Style hooked rugs.

OTHER BUILDINGS AND PLACES OF LOCAL IMPORTANCE

The following is a list of some buildings and places of local importance and significance that are valued by the community.

Button Factory (East bank of river, down steep hill off Friendship Road)

In 1888, this building opened as the Henry and Daniels Shoe Factory. The Town responded joyously with ringing church bells, a 50-gun salute, fireworks, bonfires in the streets, and a parade. Employment for many had arrived, seemingly, after the downswing of shipbuilding. By 1890, 100 people were employed. Sadly, management was not satisfied, and Mr. Daniels ordered the factory closed and removed all the machinery. Several other owners came to town, raised hopes, and moved out again after one or two years. By 1898, the shoe industry had closed for good. In 1920, the building opened again, this time as the Paragon Button Factory, up to 100 people were hired to turn out buttons from seashells imported from Australia. The industry continued up into the 1980's with plastic having replaced the shells as prime material.

Joseph Clark House (corner Pleasant and Friendship Streets)

Joseph Clark (1799 - 1875) was perhaps the town's most successful shipbuilder, constructing some 31 vessels in his yard on the east side, just down from the Main Street Bridge. Between 1830 and his death, Joseph made a vast fortune in ships, railroads, and land investments. His birthplace was in Jefferson, this location was the second house that he built. With his wife, Mary, he raised

seven children, some of them remained in the neighborhood in homes and on Clark-owned land. His son Edwin O., joined him in the shipbuilding business toward the end of his life. Son, Atherton, was a Civil War hero.

Spite House (Hall's Funeral Home, since 1958, Main Street)

Built by Captain Frank Hutchins and Mary Clark Hutchins in 1876 and is also known as the "Spite House". Mary Clark, young widow of Joseph Clark, used her new inheritance to break ground and construct a large home for her new husband, Captain Hutchins, and her daughter. From here, she could "look down" upon all the Clarks who had always disapproved of her. Mary also created a little private cemetery for her family very near to the large Clark mausoleum. Her husband, Frank Hutchins, developed the Clark farmland in back of the house and built a road through it. He named the road Marble Avenue after Maine Governor. And Waldoboro resident, Sebastian Marble.

Grand Army of the Republic Hall (GAR Hall Marble Avenue)

Built in 1893 and named Charles K. Keiser Post after a Civil War veteran of Company E of the 20th Maine, who died at Laurel Hill, Virginia. Mr. Samuel Miller, who had also fought with Company E at Gettysburg, was the driving force for fundraising through his newspaper that he created after the War, the Lincoln County News. After time, and all the old veterans had passed, the name of the building was changed to the Charles Lilly American Legion Post (Lilly being the first Waldoboro man to die in World War I). Around 1973, the Post moved to its new headquarters on Jefferson Street.

Haskell/Marble/Paine House (Brick mansion across Main Street from Customs House)

This house was built by George Sproul and presented as a wedding present for his daughter, Elzira, and her husband, Bela B. Haskell, August 20, 1832. Prominent in business (part owner in the Sproul family mill at the Lower Falls) and socially, the Haskells brought up two children, Harriet and Lowell. Harriet became one of the nation's foremost educators, ending up the last 40 years of her life as head of Monticello Seminary for Women in Godfrey, Illinois. Lowell's father-in-law was Sebastian S. Marble, Governor of Maine in 1889, who came here to live with his son and family around 1900. Another famous Waldoboro resident, Frederick Payne, who was Governor as well as U.S. Senator from 1948 to 1956, resided here during his time as senator from 1952-1956.

Waldo Theatre (Main Street)

Built in 1936 by the John J. Cooney family on the site of a large mansion owned by the Honorable Isaac Reed (celebrated lawyer, town moderator, powerful politician) and his son, shipbuilder A. R. Reed. A movie theater for years, the Waldo fell into disrepair until a recent revival through the efforts of many, but primarily by Ms. Kitty Fassett. Now, besides movies, it hosts plays, concerts, comedy acts, and lectures. Built to resemble Radio City Music Hall, New York, in miniature.

Customs House/Post Office/Library

This building was erected in 1855 by the U. S. government on the site of Hon. Isaac Reed's apple orchard. From 1855 to 1904, it existed as a customs house, handling all shipping business in the Waldoboro Customs District, an area from Bristol to Northport. By 1853, this district took care of more shipping business than any district in New England, with the exception of Bath and Boston. By 1900, however, shipping had declined precipitously and Waldoboro's office was closed. The structure remained open as a post office until 1963 when the current upper Main Street building came into being. At that time, the old Customs House became the Waldoboro Public Library and remained so until 2006 when the public library changed locations.

Glidden Stone Works (Glidden Street)

Started by J.T. Glidden in 1855 and continued by his son, E. A., this water-powered marble and cemetery stone works flourished for 50 years on this site, employing six workers. Later on, E. A. Glidden was one of the movers and shakers for the fledgling public library in Waldoboro.

Shirt factory (New England 800 building, Jefferson Street)

William G. Reed (1858-1914) owned this factory, which also housed IOOF Germania Lodge as well as Rebekah Lodge #72. Built around 1904, the shirt factory occupied two floors and featured a huge electric motor in the basement connected to drive shafts above. Women, men, and boys worked here, cutting patterns for collars and shirts.

M. M. Richards Pants Factory (North bank, Jefferson Street)

"Jobbers of domestic woollens"; this factory turned out 12,000 to 15,000 pairs of pants annually, 3,000 suits and overcoats, and employed 60 people. The business closed in 1923.

William and (son) Lewis White Everett and Fred Simmons (Bad Hair Day Building)

Landon Waltz (House to the right of True Value Hardware)

Ephraim White (Corner of Elm and Jefferson Streets)

Reed Mansion (Jefferson Street)

Begun by Reverend John Cutting in early 1800's but who was financially unable to complete job, nicknamed "Cutting's Folly." Cutting sold the unfinished house to a newcomer from Littleton, Massachusetts, Isaac Reed, who completed it in 1816. Isaac and wife Jane brought up seven children here, including Isaac the younger. Father Isaac was always known as "Colonel", young Isaac as "the Honorable." The Colonel was active militarily, but also became a kingpin in the law, owning land, beginning a church and politically, a "boss". The mansion graced Waldoboro until 2017 when an unforeseen fire destroyed the building.

Soule-Ewell Oakum and Carding Mills (Middle Falls)

On the west bank, the firm of Soule and Ewell operated a carding mill on the east bank, an oakum (caulking material for wooden ships) mill. By 1900, these industries had been replaced by the Waldoboro Steam Laundry (east), and G. O. Waltz, woodworker (west).

Rufus Achorn Flour and Saw Mill (Upper Falls)

Around 1800, this mill area was operated by the Kinsell family. In 1877, it was bought and modernized by Rufus Achorn. In 1904, the mill was replaced by Waldoboro's first electric light plant, supplying electric power during daylight hours only. In the 1940's, it was the site of Phillip Cohen's poultry processing plant.

Twitchell-Chapman Canning Factory (corner of Mill Street and Route 32)

Opened in 1888, this factory employed 20 (mostly girls) in the late summer. Production eventually moved to Greene, Maine.

Lovell House (left side at end of Elm Street)

Captain Harvey Lovell, skipper of Waldoboro clipper ship *Wings of the Morning* (built by Edwin Achorn) fell in love with and married Sophronia Bulfinch. In 1858, Lovell had this house constructed on property across the road from his in-laws. Later, he purchased more land from his father-in-law for \$500 and had beautiful gardens laid out on the property sloping down to the river. It is said that the Lovells entertained the rich and famous who would arrive in splendor. The Lovell family, now moved away, still owns the property.

Bulfinch House (right side at end of Elm Street)

Squire John Bulfinch (1791-1884) arrived in Waldoboro in 1823 from Massachusetts and, although small in physical stature, made up for it in energy, becoming a leading citizen in the fields of law, education, land and property management and business. He was an advisor to Henry Knox, an eminent attorney, the founder of a private academy, and a respected scholar.

THREATS TO HISTORIC INTEGRITY

The downtown village, though located on the picturesque Medomak River at head of tide, has topographical challenges. Years of deferred maintenance and a lack of infrastructure investments and loss of manufacturing jobs within the village has led to chronic vacancies in both first floor retail and professional spaces and upper story residential units. A lack of public parking facilities and attractive public spaces has diminished pedestrian traffic. The downtown village lacks a "magnet" of regional retail, services, or cultural significance. Low income subsidized housing in the downtown village without a balance of non-residential uses has contributed to a perception that the downtown village lacks vibrancy. Although the 19th Century architecture has been kept intact, it has been allowed to deteriorate over the years through the lack of investment and, as a consequence, distracts from the economic sustainability of the Downtown Village area.

Prehistoric Archeological Sites

Prehistoric archeological sites reveal information about the Native American inhabitants, which did not leave any written records. The following four types of sites are significant:

- Habitation workshop sites are next to canoe-navigable waters.
- Lithic quarries are places where stone raw materials are gathered.
- Cemeteries are found on well-drained sandy or gravelly sandy soils usually near a river or lake.
- Rock art sites are found immediately next to canoe-navigable waters on bedrock outcrops.

The inventory data as of September 2011 compiled by Arthur Spiess from the Maine Historic Preservation Commission shows 27 known prehistoric archeological sites in Waldoboro. Ten of the sites are considered significant. The sites are located in the shoreland zone, which is the shore along the tidewater. All of these 27 sites have been surveyed by a professional archeologist.

Many archeological sites occur adjacent to waterbodies and are afforded some protection from the setback regulations contained in Shoreland Zoning. The State Subdivision law also requires applicants to identify archeological and historic sites that could be impacted by their development plans.

The Maine Historic Preservation Commission recommends that further survey, inventory, and analysis conducted by a professional archeologist of the Medomak River Valley, and the gravelly and sandy soils on the Medomak Valley margins be undertaken to check for further prehistoric and archeological sites.

HISTORIC ARCHEOLOGICAL SITES

Historic archeological sites are mostly European-American and include English and French trading post, forts, and homesteads of the 1600's and 1700's. Since water bodies, especially rivers and streams, could provide essential uses, such as water power and transportation, most historic archeological sites are near lakes, ponds, rivers, and streams. Other sites may be found along the early roadways.

The following inventory data as of September 2011, compiled by Leith Smith from the Maine Historic Preservation Commission, shows 6 historic archeological sites.

Site Name	Site #	Site type	Period of Significance
R Storer Farmstead	ME453-003	Farmstead	Unknown
J Mink Homestead	ME453-004	Domestic	Unknown
George W. Newbert Homestead	ME453-005	Domestic	1828-1900
Stahl Farm Road Foundation	ME453-006	Domestic	Late 18th through 19th century
Mayo-Stanwood Pottery	ME453-001	Industrial, Pottery	1866-1890
Melissa Trask	ME453-002	Wreck, Schooner	22-Sept-22

The Maine Historic Preservation Commission recommends that further survey, inventory, and analysis be undertaken because no professional town-wide survey for historic-archeological sites have been completed in Waldoboro. Future archeological surveys should focus on the identification of potentially significant resources associated with the town's agricultural, residential, and industrial heritage, particularly those associated with the earliest Euro-American settlement of the town in the 18th and 19th centuries.

Handwritten text at the top of the page, possibly a title or header.

Handwritten text in the middle section of the page.

A large, dense block of handwritten text, possibly a list or a detailed note, occupying the lower middle portion of the page.

Vertical handwritten text on the right side of the page, possibly a margin note or a list of items.

Fiscal Capacity

Introduction

The purpose of this section is to describe the Town's fiscal situation, and to find out whether the Town can meet future costs for growth and development. A key component of this analysis will be the development of a Capital Investment Plan for financing the replacement and expansion of public facilities, infrastructure, and services required to meet projected growth and development. It is also important to consider different needs and priorities of the Town, especially with respect to demographic changes. Other important areas to be discussed are the way citizens of the Town wish to spend their present and future tax dollars to meet anticipated needs.

Property Tax Base

The property tax is the main source of revenue for the Town. All property and structures in the Town are assigned a value based as closely as possible upon the current market conditions. Certain forms of personal property, such as business and industrial equipment, are also assigned a value for taxation.

The total value of all taxable property, including land, buildings and personal property, is called the valuation. The money required to finance town government is called the tax commitment. Outside revenue income sources, such as the excise tax and state revenue sharing monies, are subtracted from the total amount of money needed to operate the town government. The amount of funds remaining after all the outside revenue income sources are subtracted is called the tax commitment. The tax commitment is then divided by the valuation to obtain the annual tax rate. The annual tax rate is expressed in mills. A mill is dollars per thousand dollars of valuation.

The annual mill rate is used to figure out how tax each property owner must pay to fund government services. For Example: A person owning property valued at \$63,000 with a town mill rate of 0.01525 would pay \$960.75 in property taxes. ($\$63,000 \times 0.01525 = \960.75)

Components of the Town Valuation

The valuation of the Town consists of many taxable categories that include: land, buildings, structures, production machines and equipment, business equipment, and other forms of personal property. The following table shows the valuation listed in each category for the 2016 tax year as reported in the 2016 Municipal Valuation Return Statistical Summary, which contains 100% valuation figures for all Maine Municipalities.

Valuation Category Table

Source: 2016 Municipal Valuation Return Statistical Summary

Category	Amount	Percent of Total Valuation
Total municipal valuation	\$478,110,500	100%
Land values	\$202,780,500	43%
Building values	\$268,983,800	56%
Machinery & equipment	\$1,895,400	0.04%
Business equipment	-0-	0%
Other personal property	-\$9,433	0.002%

Land and building values amount to a valuation of \$237,967,655, which is 89% of the Town’s total valuation.

Other types of property, including federal, state municipal, and nonprofit organizations, are exempt from taxation. Their property is assigned a value, but taxes are not assessed. The following is a breakdown of the major tax-exempt properties in the Town:

State: \$	1,623,000;	Municipal: \$	42,261,900
Churches: \$	1,495,700 ;	Waterfront:	\$182,000
Veterans: \$	1,273,800;	Literary & Scientific: \$	2,088,000
Fraternal:	\$150,000;	Tree Growth:	\$1,078,281
Farmland:	\$51,502,779;	Open Space: \$	1,456,389

The exempt properties in Waldoboro are fairly typical for a community of this size and character. Usually, service center communities, such as Brunswick, Bath, and Augusta, have a much higher number of exempt properties from educational institutions, government buildings, and other non-profits.

Historical Valuations.

Source S

tate Valuation History, 2012 – 2017

2012	2013	2014	2015	2016	2017
\$501,100,000	\$492,185,000	\$472,950,000	\$475,700,000	\$476,150,000	\$493,500,000

Comparison of Area Municipalities

Source: 2016 Municipal Valuation Return Statistical Summary

Town	Population	Total Valuation	Commitment	Tax Rate	Valuation per capita
Waldoboro	5,075	\$478,110,500	\$7,745,390	0.01620	94,208
Alna	709	\$70,365,132	\$1,438,967	0.02045	99,245
Boothbay	2,165	\$989,571,891	\$8,708,232	0.00880	457,077
Boothbay Harbor	3,120	\$602,793,890	\$6,751,292	0.01120	193,203
Bremen	806	\$173,127,700	\$2,181,409	0.01260	214,798
Bristol	2,755	\$803,385,693	\$6,346,747	0.00790	291,610
Damariscotta	2,218	\$336,231,900	\$5,789,913	0.1722	151,592
Dresden	1,672	\$123,894,893	\$2,180,550	0.01760	74,099
Edgecomb	1,249	\$211,810,087	\$3,505,457	0.01655	169,583
Jefferson	2,427	\$334,634,300	\$4,266,587	0.01275	137,879
Newcastle	1,752	\$254,964,250	\$4,602,105	0.01805	145,527
Nobleboro	1,643	\$314,966,000	\$3,433,129	0.01090	191,701
Somerville	548	\$50,017,800	\$915,326	0.01830	91,273
South Bristol	892	\$754,070,700	\$2,526,137	0.00335	845,370
Southport	606	\$747,026,950	\$2,920,875	0.00391	1,232,717
Westport Island	718	\$222,552,957	\$1,602,381	0.00720	309,968
Whitefield	2,300	\$189,929,874	\$2,848,948	0.01500	82,578
Wiscasset	3,732	\$459,583,700	\$8,598,811	0.01871	123,146

The table compares Waldoboro to communities in Lincoln County. This type of comparison can be difficult, but the valuation per capita numbers are useful because they highlight the relationship between total property valuation and population. Towns with high valuations and low or modest populations will have a higher ratio and usually lower mil rates. Waldoboro, as compared to towns with similar valuations and populations, appears to have higher spending as compared to others. However, these municipalities do not have the same level of municipal services or have a developed downtown/ village.

Property Tax Commitment Components. Source: Town Records, 2012 -2016

	2012	2013	2014	2015	2016
Land Values	\$239,611,900	\$240,100,700	\$239,619,500	\$240,945,300	\$222,790,200
Building values	\$301,340,700	\$302,177,200	\$303,194,900	\$305,228,900	\$284,116,700
Personal property values	\$6,513,700	\$6,248,500	\$6,767,700	\$6,837,900	\$6,479,100
Blind Exemption	-35,200	-39,600	-35,200	-26,400	-26,400
Farmland	-3,932,300	-3,986,900	-3,880,100	-4,485,600	-2,910,600
Homestead	-17,126,610	-17,116,200	-16,954,200	-16,786,600	-16,643,200
Open Space	-2,889,000	-3,143,500	-3,144,500	-3,516,300	-2,578,300
Tree Growth	-7,415,200	-7,421,100	-7,405,700	-7,391,200	-5,535,900
Veterans	-1,353,000	-1,376,600	-1,293,600	-1,293,600	-1,260,600
Working waterfront	-66,000	-66,000	-66,000	-66,000	-46,000
Animal Waste storage	-188,000	-188,000	-188,000	-66,000	-63,000
Taxable Value	\$514,649,000	\$515,376,500	\$516,802,800	\$519,380,800	\$484,323,000
Tax Rate	0.01310	0.01350	0.01360	0.01370	0.01530
Tax Raised	\$6,741,901	\$6,957,582	\$7,028,518	\$7,115,516	\$7,410,141

	2012	2013	2014	2015	2016
Appropriations	\$3,547,873	\$3,650,446	\$3,710,002	\$3,858,333	\$4,044,079
MSAD 40	\$4,343,387	\$4,542,522	\$4,620,898	\$4,560,644	\$4,832,997
County	\$543,697	\$543,868	\$565,468	\$571,778	\$612,794
Overlay	\$317,107	\$267,527	\$129,949	\$122,496	\$58,514
Total Commitment	\$8,752,065	\$9,004,182	\$9,026,318	\$9,113,252	\$9,548,384
Transfer Balance	-0-	\$25,000	\$25,000	\$35,000	\$179,450
Revenue Sharing	\$320,809	\$326,918	\$204,000	\$204,000	\$204,000
Excise tax	\$720,981	\$702,028	\$767,384	\$738,400	\$741,300
Revenues	\$849,713	\$870,505	\$878,910	\$898,592	\$877,453
Homestead & BETE	-0-	\$122,148	\$122,506	\$121,743	\$136,039
Total revenues & transfers	\$1,891,503	\$2,046,599	\$1,997,800	\$1,997,735	\$2,138,242
Total charged to tax collector	\$6,860,562	\$6,957,582	\$7,028,518	\$7,115,516	\$7,410,141

Comparison of Selected Municipal Budget Revenues and Expenditures

General Fund Revenues.

Source: Town Records Budget Years, 2013 -2017

	2013	2014	2015	2016	2017
Taxes	\$748,626	\$746,153	\$796,153	\$811,568	\$834,733
Licenses & permits	\$52,739	\$56,180	\$56,180	\$54,655	\$59,040
Intergovernmental	\$357,582	\$354,328	\$231,821	\$233,269	\$454,647
Charges for services	\$571,627	\$614,919	\$614,969	\$584,930	\$625,104
Fines& Fees	\$1,001	\$50	\$50	\$50	\$50
Other Revenues	\$55,930	\$54,952	\$54,952	\$54,534	\$54,462
Other Financing Sources	\$127,841	\$134,038	\$116,172	\$266,019	\$356,452
Total Revenues	\$1,915,355	\$2,010,621	\$1,870,298	\$2,005,026	\$2,384,733

Revenue Category Explanation:

- Taxes include: Excise tax, watercraft excise, interest taxes, and tax liens costs
- Licenses & permits: Fees collected from various fees and permits
- Intergovernmental: Municipal Revenue sharing, other state assistance, local government, Homestead, and BETE
- Charges for Service: General government, Public Safety, and Community Development
- Other Revenues: Interest, Registration Fees, Rentals, Miscellaneous
- Other Financing Sources: Highway block grant, Comprehensive plan reserve, Recreation facility reserve fund, Shellfish Reserve Fund, EMA reimbursement, and Ad Gray Reserve Fund
Utilization of Fund balance

General Fund Expenditures

Source Town Records Budget years 2013-2017

	2013	2014	2015	2016	2017
General Government	\$537,681	\$556,326	\$556,326	\$576,479	\$575,401
Public Safety	\$1,456,928	\$1,485,263	\$1,485,263	\$1,531,318	\$1,615,028
Public Works	\$689,673	\$707,817	\$707,817	\$740,555	\$743,600
Human Services	\$54,856	\$45,150	\$45,150	\$47,541	\$46,632
Community Services	\$151,419	\$144,405	\$1,244,405	\$142,467	\$161,964
Community Development	\$73,465	\$67,993	\$67,993	\$60,916	\$75,218
Property & liability Insurance	\$48,425	\$47,251	\$47,251	\$49,520	\$49,670
Debt Service	\$57,595	\$113,987	\$113,987	\$124,003	\$123,884
Other Financing Uses	\$570,551	\$700,141	\$690,141	\$778,447	\$975,332
Total Expenditures	\$3,641,350	\$3,868,322	\$3,858,332	\$4,051,244	\$4,366,727

	2013	2014	2015	2016	2017
Property taxes	\$1,725,995	\$1,857,711	\$1,988,034	\$2,046,218	\$1,981,994
Property Tax levy limit	\$1,686,439	\$1,860,597	\$1,686,439	\$1,923,756	\$2,012,888
Over property tax levy limit	\$39,565	(\$2,886)	\$301,595	\$122,462	(\$30,894)

Municipal budgets have been stable with minor increases. The debt costs have gone down and will continue to be reduced as two more existing loans are retired within the next two years.

- The Town needs to make sure that adequate funds are placed in the budget to address infrastructure needs especially roads and other major projects.

Revenue and Expenditure Comparison

Analysis

The municipal tax base consists of the following:

- 16% is commercial and industrial
- 26% is seasonal properties
- 58% is residential

Improving the commercial and industrial tax base will help to reduce the impact for residential properties. The town's valuation per capita, especially considering Waldoboro's population and municipal services, is low as compared to neighboring communities, which have lower populations and higher valuations.

Reserve Funds:

The Town currently maintains a number of reserve funds identified for department needs and other municipal areas. Consideration for funding these accounts are made annually and are dependent upon budget deliberations. The Town currently lacks a formal capital improvements plan to inform how these reserve accounts should be funded to meet capital needs. Funding the reserve accounts based upon a capital improvements plan will enable the town to make prudent and economical financial decisions and take advantage of grants, low interest rates, and other opportunities.

The 2016 Municipal Audit states that the Capital Reserve Fund balance was \$1.14 million which represents an increase of \$81,527 from the previous Year.

Debt:

The 2013 Municipal Audit states that, as of June 30, 2016, the Town had a total of \$1,761,152 of outstanding general obligation debt. State law provides an overall debt limit for the Town of 15% on state equalized valuation of real and personal property. As of June 30, 2016, the Town's outstanding indebtedness is only 0.45% of the State's equalized valuation.

The Town has the option of carrying additional debt to undertake one of more capital improvements, or to respond to a major unanticipated need.

Capital Improvement Projects

Recommendations in the Comprehensive Plan

The following table contains the capital improvements recommended in this Comprehensive Plan. The list includes items to address deficiencies, aging equipment, or to meet new demands. The town will need to incorporate these items into its capital item list.

Capital Item	Estimated Cost	Timeline/notes	Priority	Funding
Expansion to the Municipal building for additional space for emergency Medical staff and police functions.	Estimate \$300,000	5 years (Design and cost estimates need to be developed)	High, based on (municipal) growth	General Fund
Develop a master recreation plans	Estimate \$6,000	1 year	Low, not based on growth	General Fund
New ladder truck	\$500,000	3 years	Low (Purchased)	General Fund
Road improvements	Unknown	On-going	High, based on growth and area.	General Fund, Grants, TIF.
Sidewalk improvements	Unknown	On-going	High, based on growth and area.	General Fund, Grants, TIF
Trail plan	Estimate \$5,000	1 year	Low, not based on growth.	Grants, TIF.
Community center	\$1.5 million	Private funding to be included timeline unknown	High, based on growth.	Private funds, General Fund.
Purchase Police vehicles	\$22,000	On-going replacement schedule	High, not based on growth.	General Fund.
Public work vehicles	\$100,000	On-going	High, not based on growth	General Fund.
Sewer expansion to the Route 32 Industrial park	Estimated 3 million	5 years	Low, based on growth.	TIF, Industrial Park.
Sewer Expansion to the High School and Middle School	Estimate 5 million	Long term	Low, based on growth.	TIF, General Fund.
Replace culverts which impede fish passage	Unknown	Long term	High, not based on growth	Grants, General Fund.

Capital Improvement Planning (CIP)

Capital improvement planning is a method to identify equipment and other major capital items, such as buildings, structures, and transportation infrastructure, which will need to be improved, purchased, or rebuilt. The plan should list all major capital expenses over a certain dollar value, which will eventually need to be replaced within a certain time frame, such as over a 20-year period. This provides the Town with the information needed to anticipate and plan for these expenses in a prudent and fiscally sound manner. The plan should also be updated annually to reflect new priorities and to make adjustments.

Currently, the Town does not use a formal capital improvements plan strategy to address large capital expenditures. However, the town does have reserve accounts targeted toward various capital projects. A

recommendation to the Town Manager and the Board of Selectmen will be to develop a CIP. Another important component of the CIP is to identify grants and other financing methods, which could supplement municipal funding for major expenses. The above listed items in the Capital Improvement projects recommend in the comprehensive plan should be included in the Town's formal CIP.

Typical items to be in the CIP include: public work trucks and other vehicles, police vehicles, fire trucks, improvements, and expansions of municipal buildings, structures, computer and related upgrades, bridge replacements, road rebuilding, major maintenance, recreational infrastructure, and other similar items.

Regionalization of Services and Programs

Regional or interlocal agreements between municipalities may offer opportunities to create economies of scale and cost savings for some town services. The Town already participates in a number of municipal partnerships and takes advantage of regional programs, such as Lincoln County Regional Planning, fire department mutual aid, Ambulance Service agreements, cooperative purchasing, and membership in Midcoast Economic Development.

Other types of service affiliations could be possible and should be explored to determine if they will save money and still offer the same or greater levels of service. Identifying opportunities for shared or regional services can lessen increases in some municipal services and programs.

Another strategy is to explore operational and infrastructure efficiencies such as reducing energy cost, road maintenance, and repair cost and the use of new products or methods which can reduce cost. This approach will require the participation of municipal staff to find creative cost saving approaches and the willingness of the Select Board and Waldoboro citizens to consider the investment usually required to initiate these methods.

Demographics and Cost of Services

The age of residents, household size, and other demographic realities within a town influence what type of services citizens will need and expect. We all recognize that our young persons need to be educated and an increase in the birth rate will require additional spending for schools and teachers. However, other demographic factors, such as an aging population can also affect municipal service demand and expectations. Services, such as emergency response, access to health care, transportation services, assisted living and nursing care, recreation programs, and new types of housing, will need to evolve and change. The Town should anticipate these changes and make the appropriate revisions in a thoughtful manner and cost-effective fashion.

Tax Increment Financing

Waldoboro does not have a TIF program, however, it has been discussed in previous years. Creating one or more TIF districts would help to finance some of the economic development strategies proposed in this plan especially public infrastructure such as sewer and water expansions.

A recommendation is included in the Economic and Community Development section to create TIF committee to explore how using this program could promote economic development projects and work in concert with other funding opportunities such as grants.

The TIF program allows the Town to capture the new valuation created in the district and use those funds for economic development activities according to a work plan which conforms to State laws and regulations. The captured value from a TIF district is not counted in the Town's valuation as calculated by the State which is used to determine municipal Revenue Sharing, School funding and county taxes. Without a TIF program, all new property tax revenue, which increases the Town's valuation, affects how much funds it receives for education and revenue sharing and likewise pays for county taxes. High valuation means less funding and higher county taxes. The benefits of TIF program are established for a specific time period, which can be for 30 years.

Municipal Government and Services

Purpose

The purpose of this section is to examine the current public facilities and services offered by Waldoboro, and to determine the needs for new services or expansion of existing ones in the next 20 years. Opportunities for continuing regional cooperation are also explored in this section. Additional information related to municipal services can be found in the fiscal capacity and transportation plan sections.

General Government Services

The Town of Waldoboro operates under a Selectboard//Town Meeting/Town Manager Form of Government. The Selectboard consist of 5-members and a full time Town Manager. Municipal Staff consists of: Finance Director, Two Municipal Clerks, I.S Manager & Executive Assistant, Planner, Assessor, Code Enforcement Officer, Recreation Director, Emergency Management Director, Police Department, Emergency Services Department, Public Works Department, and Fire Department. Other services provided in the community include municipal water district, sewer utility district, and library.

A variety of elected and appointed boards and committees serve the Town including: Planning Board, Board of Appeals, Shell Fish Committee, Conservation Commission, Economic Development Committee, Communication Technology Committee, Transfer Station Committee, and the Budget Committee

A majority of municipal offices are located in the municipal building, which was constructed in 1979. The Public Works, which is located at the public works garage, is the only municipal office not at the municipal building. There is a need to expand the building to accommodate the ambulance department and to address the space requirements for the both the police and ambulance departments. Energy efficiency improvements, such as lighting, heating, and cooling upgrades, are also necessary. A solar system was installed at the former land fill in 2017 that will provide a portion of the municipal electrical requirements, and other options are currently being discussed to further reduce the electrical demand at the municipal building. The town is also interested in cooperating with the local school district on energy improvement strategies to install energy improvements in order to reduce operating costs.

The Town provides many municipal services, which the residents have become accustomed, and over the years, the town budget has pared back some services, especially capital improvements to respond to property tax concerns and slow economic conditions. Road maintenance has been especially impacted by funding reductions for ongoing road upgrades. The Town is currently beginning to address the backlog of capital improvement needs and is creating a capital improvements plan to sequence these items over time.

Fire Department

The Waldoboro Fire Department is located at the municipal building and is an all-volunteer department with 28 members. The Department is a member of the Knox County Mutual Aid Association and the Lincoln County Fire Chief's Association. All members of the department are certified at the State mandated Basic Fire Firefighter Level, which qualifies them for interior firefighting. Thirteen members

are certified at the national standard of Firefighter II. The department trains at least twice monthly, which requires a great deal of dedication. New volunteers are always encouraged, especially during daytime hours.

Major equipment includes:

- 1981 American LaFrance 100-foot ladder Vehicle (Needs replacement)
- Four Engine/ Pumper vehicles
- Rescue Vehicle
- Forestry Jeep
- Haz-Mat Team vehicle

Police Department

The Waldoboro Police Department provides 24-hour protection and consists of 7 full-time officers, 3 part-time officers, and 2 part-time Shellfish wardens. The full-time members of the department include a chief, patrol sergeant, 4 patrol officers, and one School Resource Officer. Vehicles include 3 marked patrol cars and one unmarked vehicle, which are replaced at regular intervals due to high miles.

The department responds to approximately 5,500 and 6,000 calls per year, which include motor vehicle stops, property checks, complaints, thefts, and assaults. Another increasing problem in Waldoboro, which is also faced by other communities throughout the State, is drug abuse and all the related ways it has impacted crime, and damaged individuals and families. The department is participating with others in the community to deal with these issues.

Emergency Medical Services

Waldoboro operates a 24-hour emergency medical service, which includes a Community Paramedicine Service. The coverage area includes Waldoboro, Friendship, and most of Jefferson. Back-up service is provided for Union, Washington, Warren, Nobleboro, and Somerville. Staff consist of a mix of full-time, part-time, and on-call members located at the Waldoboro Municipal building. Accommodations for staff is limited and there is a lack of space to serve night operations. The staff certification consist of 18 paramedics, 6 advanced EMT's and 10 basic EMT's.

The current fleet of vehicles includes:

- 2004 Ford Med TEC
- 2010 Ford PL Custom
- 2012 Mercedes Sprinter
- 2014 Chevrolet AEV
- 2015 Chevrolet PL Remount

The annual volume of calls has risen to over 1,600 and the department has seen a steady rise in service calls over the previous years. Further increases will require additional staff and vehicles.

Public Works

Waldoboro has a full service public works department that consists of 8 employees. In addition to road maintenance, snow plowing, and maintaining public property, also operates the Transfer Station & maintains its vehicles. The department is located at its own building, which also contains the salt and sand shed. Major equipment, in addition to trucks, includes:

- 30-year old grater
- 20 year old excavator
- 25 year old bulldozer
- 3 year old loader

Future equipment needs include a grater, excavator and bulldozer. Other capital needs include additional funds for road repair, rebuilding, and drainage work.

Public Library

The Waldoboro Public Library, founded in 1916, is governed by a Board of Trustees and, in addition to its own fund raising, also receives support from the Town. The library has a collection in excess of 23,000 items, consisting of books, audio books, DVDs & videos, magazines, reference materials, and a historical collection. Services include borrowing books, adult literacy assistance, wireless internet access, interlibrary loan program, and a variety of programs, such as children's story hour. Currently, the library is planning a building addition to provide additional space for programs, meetings, and materials.

Transfer Station

The Transfer Station is operated in partnership with Waldoboro, Friendship, and Cushing, and accepts solid waste and recycled materials including household trash, household recyclables, wood, electronic products, bulky materials, and food waste. The facility is operated by Waldoboro Public Works and a Transfer Station Committee.

The facility's current solid waste is 2,514 tons and 1,463 tons of recycled materials. Recycling is improving, resulting in the reduction of the cost of disposal and environmental benefits. Household recyclables are handled by the Lincoln County Recycling facility in Wiscasset; meanwhile, the Transfer Station is responsible for handling other recyclables like wood, electronic equipment, and waste oil.

A food waste recycling program is also available, which removes food materials that can be composted into a beneficial planting material from being disposed as solid waste. Identifying recycling improvements and cost-efficient measures are a constant challenge for the Transfer Station Committee.

Education

Waldoboro is a member of Regional School Unit 40, which also includes Friendship, Warren, Washington, and Union. A School Board consisting of members elected from each municipality govern the RSU with administration provided by a professional staff. RSU is responsible for a budget, educational programs, staff, and facility maintenance. Municipal participation in the RSU is through the School Board and at public hearings. Advocacy for educational programs and recommendations from Waldoboro Municipal Officials and residents is through the School Board.

The educational facilities include the following:

- Medomak Valley High School (558 students)
- Medomak Valley Middle School (269 students)
- Miller Elementary School (334 students)
- Friendship Elementary School (86 students)
- Prescott memorial School (Washington) (97students)
- Union Elementary School (127 students)
- Warren Elementary School (360 students)

The RSU also participates in the Midcoast School of Technology and the Alternative Middle School in Union

Municipal Sewer

The Waldoboro Utility District provides sewer service to an area containing the Village District and adjacent portions of Route One. The treatment facility and offices are located at 850 Union Road. The lagoon wastewater treatment system, located at the site, replaced a facility located on the Medomak River and has been responsible for making significant water quality improvements enabling the growth of the shellfish industry.

The system currently treats 37.5 million gallons and has the capacity to treat additional development. Upgrades/ maintenance at the facility is necessary to replace aging equipment, which will require borrowing. The utility has a capital plan to address these capital needs.

Service expansion has been recommended in the Comprehensive Plan and input from the utility is essential as these expansion discussions proceed.

Municipal Water

The Waldoboro Water District provides water to the Village District and adjacent portions of Route One. The district is operated by Maine Water. The district has total assets of 4,261,906 and operating revenues of \$240,929. The water sources are three ground water wells, a water treatment facility located on Cross Street, and a water storage tower/ tank located in the village off Friendship Street.

Waldoboro has 11 active public water system: 1st Baptist Church of Waldoboro, Brookside Mobile Home Court, Bullwinkles Family Steakhouse, Captain's Fresh Idea, Coastal Christian School, East Ridge Mobile Home Park, Moody's Diner, Moody's Motel, MSAD 40 Medomak Valley Middle School and High School. These connections rely on the groundwater resources in Waldoboro.

Regional Connections

Purpose:

The regional connections discussion includes Waldoboro's relationships with the state, county, municipalities, quasi-municipal organizations, and other public and private groups and organization, such as cultural, social, educational, or economic entities. Identifying existing regional connections can, in some circumstances, lead to potential beneficial affiliations to expand and further comprehensive plan goals. A recommended action item will be to identify some new ways for the Town to connect/cooperate/link with others to promote projects and programs important for Waldoboro citizens.

Federal and State Government

The Town interacts with both federal and state governments in a variety of ways in the everyday course of performing its municipal operations, and involves statutory requirements, grants, programs, transportation, and services. A state relationship dealing with shell fishing and water quality are worthy of special attention because it involves a cooperative working relationship between the Waldoboro Shell Fisherman, Town Officials, Department of Marine Services, Department of Environmental Protection and the Department of Agriculture. This partnership works together to find ways to clean our waters, expand fishing opportunities, and create usable data for the local fishing industry. The outcome has been better water quality and more days open for shell fishing, which increases the economic vitality of the community.

County Government

Lincoln County provides a number of services which are used by the town and it includes:

- County Sheriff and regional jail
- Emergency Management
- Lincoln County Planning and Economic Development
- Lincoln County Recycling (Waldoboro Transfer Station sends its recyclable materials to the county)

Municipal Operations

The following municipal departments have regional agreements/ programs:

Police Department:

The Police Department services the Town of Waldoboro and works in cooperation with the Lincoln County Sherriff and the Maine State Police.

Fire Department

The Department has 25 volunteer firefighters on the roster and is a member of the Knox County Mutual Aid Association and the Lincoln County Fire Chiefs Association. Mutual aid partnerships are essential to turn-out an adequate number of fire fighters to respond to an emergency especially during daytime hours.

Ambulance/Rescue

The Ambulance Department responds to 1,600 calls per year and serves Waldoboro, Friendship, and the eastern portion of Jefferson.

Recreation

The Town Recreation Department provides a variety of programs and sport opportunities for youth and adults. Some of the programs/ events area also used by area residents.

Public Works/Transfer Station

The Transfer Station is cooperatively used by Waldoboro, Cushing, and Friendship. Recycled materials are taken to the Lincoln County recycling center to be processed and shipped.

Sewer Department

The Waldoboro Sewer Utility is operated by a Sewer Board and is administered by a director, who also works for the Thomaston Sewer District.

RSU 40

Waldoboro is part of RSU #40, which also services the communities of Warren, Friendship, Union, and Washington. The district has a high school, middle school, 5-elenentary schools, and sends students to the Midcoast School of Technology and the Riverside Alternative Middle School.

Waldoboro Library

The Waldoboro Library is an independent organization that receives annual funding from the Town of Waldoboro and through the inter-library lending program and other events reaches beyond the boundaries of the town.

Other Affiliations:

Some other regional affiliations which play an ongoing role in municipal affairs include the following organizations:

- Medomak Land Trust
- Waldoboro Business Association
- The Waldoboro Business Association is one of 6 chambers in the Midcoast Region along with: Penobscot Region Chamber of Commerce, Southern Midcoast Chamber of Commerce, Damariscotta Region Chamber of Commerce, Boothbay Region Chamber of Commerce, and the Union Area Chamber of Commerce.
- Headstart Program
- Soil and Water Conservation District
- Maine Cooperative Extension
- Midcoast Economic Development District

Future Opportunities:

Some future areas that may hold a promise of beneficial regional cooperation for the Town include the following:

- Creating regional solutions to address affordable housing
- Creating a regional strategy to identify water dependent sites for commercial marine activities.
- Midcoast tourism promotion and coordination of local and regional events
- Joint economic development projects and coordinating projects of mutual benefit among municipalities.

TRANSPORTATION

Purpose

The purpose of this chapter is to plan for the efficient maintenance and improvement of Waldoboro's transportation network in order to accommodate existing and anticipated development within the community over the next ten-year period. The format of this chapter follows the State Comprehensive Plan Criteria Rule, as amended on 8/6/11. State provisions are italicized.

State Goal

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

Analyses

What are the transportation system concerns in the community and region? What, if any, plans exist to address these concerns?

Waldoboro has excellent highway connections to other towns in the Midcoast via one arterial (US Route 1) and three numbered state highways (Routes 32, 220 and 235). Together, these highways provide good access to Bremen, Nobleboro, Jefferson, Union, Warren, and Friendship. In addition, four state-aid roads (Main Street, Jefferson Street, Manktown Road, and Finntown Road) accommodate traffic circulation within Waldoboro and to adjacent communities. See Figure 1 for a map of these road connections. Routes 32 and 220 are evacuation routes for Waldoboro and coastal communities to the south.

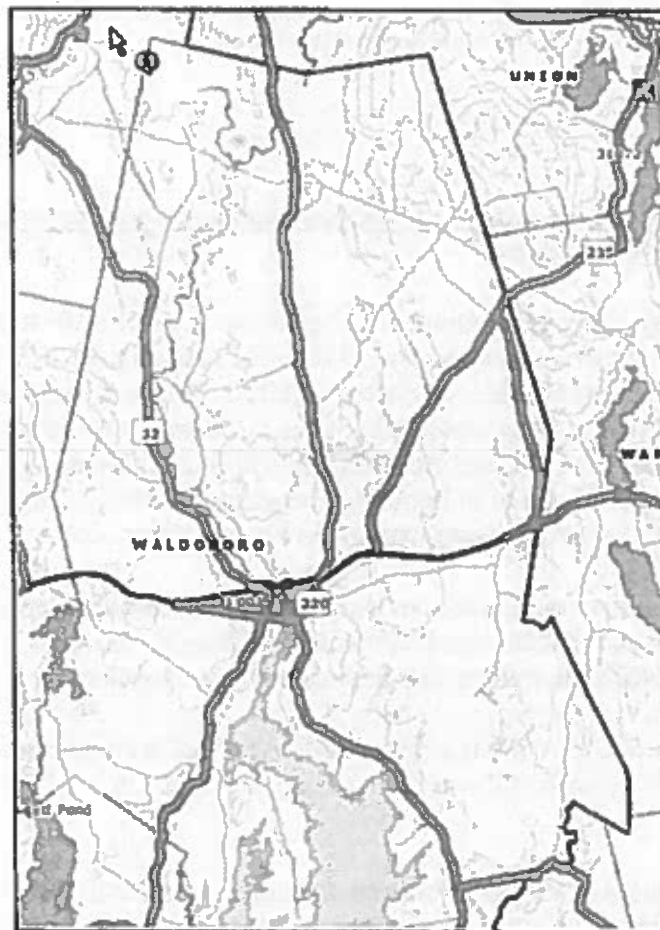
The principal transportation system concerns in Waldoboro are ensuring that road travel surfaces are kept in good condition, and that state and state-aid roads outside of the village and downtown area are improved with paved shoulders so that pedestrians and bicyclists can have more secure access to the transportation system. Figure 2 shows those state and state-aid roads (in gray) that have been resurfaced since 2011. While this demonstrates MDOT's attention to maintaining good road conditions in the community, with the exception of the Route 1-Jefferson Street intersection.

Figure 3 presents the location of traffic accidents during the period 2010-2014 while Table 1 summarizes accident statistics for those intersections and road segments that experienced 4 or more accidents during the same period. None of the intersections are classified by MDOT "high accident locations" (8 or more accidents within a 3-year period).

Are conflicts caused by multiple road uses, such as a major state or U.S. route that passes through the community or its downtown and serves as a local service road as well?

Most of the village and downtown area were relieved of significant traffic conflicts when Route 1 was relocated to a new corridor north of Main Street in the 1960's. The new Route 1 corridor was developed without access control, so many businesses located along the new highway frontage with no provision was made. However, for residents to safely walk or bike to these businesses, MDOT, in 2011, constructed a crosswalk at Jefferson Street to allow residents and students to safely cross Route 1, but the corridor still lacks sidewalks along the highway.

Figure 2 State and State-Aid Road Projects 2011-2015



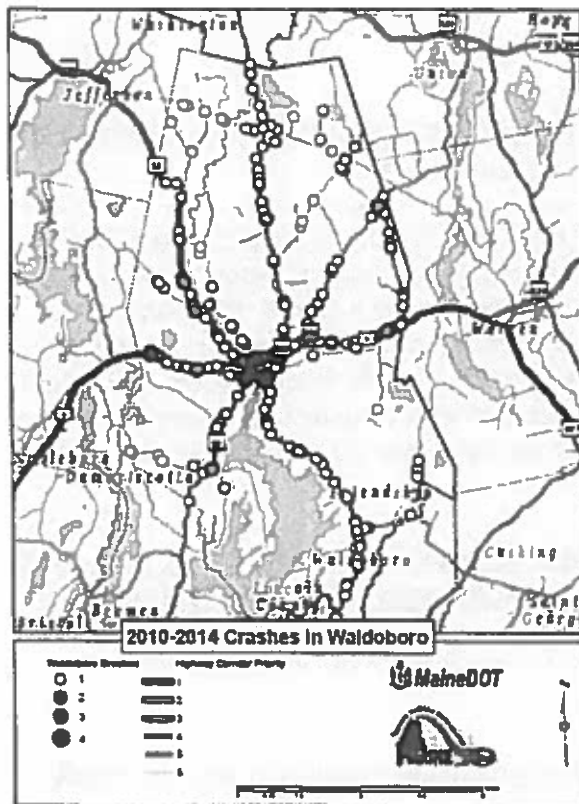


Figure 3 2010-2014 Crashes in Waldoboro

Table 1 2010-2014
Crash Summary

Intersection		2010-2014 Crashes (4 or more)	Intersection Movement	Rear End/ Slideswipe	Head-on/ Slideswipe	Went Off Road
Route 1	Jefferson Street	6	4	1		1
Main Street	Jefferson Street	6	4	1	1	
Route 1	Route 32	5	2	2		
Route 32	Main Street	5	4	1		
Route 1	Route 220	5	1	4		
Route 1	Route 235	4	1	1	1	
Route 1	Old Route 1	4		3		1
Route 1	Main Street	4	2	1		
Route 235	Manktown Road	4				
Road Segment						
Depot Street @ RR Tracks	Depot Street @ Cross Street	8		3	1	3
Gentner Road @ Duckaudle Road	Gentner Road @ Ralph Wink Road	5	1			3
Nobleboro Road @ Pierpont Lane	Nobleboro Town Line	4	1			2
Route 32 north of Route 1	Route 32 @ Cross Street	10	2	4	1	3
Manktown Road @ Route 235	Manktown Road @ Miller Road	6		2		4
Route 235 @ Castner Road	Route 235 @ Route 1	12	3	1	1	7
Route 220 @ Finntown Road	Route 220 @ Mayo Road	5	1	2		2
Route 220 @ Glenhurst Lane	Route 220 @ Spruce Lane	4		2		2
Route 220 @ Hoak Road	Route 220 @ Bogues Corner	15		3	2	7
Route 220 @ Meyer Road	Route 220 @ RR Tracks	5		3		1
Jefferson Street @ Main Street	Jefferson Street @ School Street	5		1	1	2
Route 32 @ Idges Circle (S)	Route 32 @ Dutch Neck	6		2	1	3
Route 32 @ Dutch Neck	Route 32 @ Old County Road	7	1	1	2	3
Route 1 @ Main Street (w)	Route 1 @ Nobleboro Town Line	14	2	2	1	7
Route 1 @ Route 220	Route 1 @ Route 235	14	6	3		3
Route 1 @ Town Office	Route 1 @ Route 220	9		4		3
Route 32 @ North Nobleboro Road	Route 32 @ Wagner Bridge Road	5	2			2
Route 1 @ Route 235	Route 1 @ Old County Road	17	2	4	1	6
Route 1 @ Old Route 1	Route 1 @ Manktown Road	6		3		3

To what extent do sidewalks connect residential areas with schools, neighborhood shopping areas, and other daily destinations?

As shown in Table 2 and Figure 4, which is from the Waldoboro Bicycle and Pedestrian Plan <http://www.waldoboromaine.org/index.php/departments/planning-code/239-bicycle-pedestrian-plan>, Waldoboro has an extensive network of sidewalks in the downtown and village area with 3.5 miles of paved sidewalks. They connect all major in-town neighborhoods, the elementary school on Kalers Corner Road, and the downtown commercial area. Although improvements were recommended in the plan, currently, pedestrian access along the Route 1 commercial area is limited as previously discussed.

How are walking and bicycling integrated into the community's transportation network (including access to schools, parks, and other community destinations)?

New sidewalks are in the Waldoboro Bicycle and Pedestrian Plan. The web URL posted above provides more details.

How do state and regional transportation plans relate to your community?

MDOT has completed a Highway Corridor Prioritization (HCP) process for all non-local roads within Waldoboro (local roads were not evaluated because they do not qualify for state assistance). Customer Service Levels (CSLs) were also completed for all non-local roads utilizing the following factors:

- **Crash History.** This measure includes the two types of motor vehicle crashes most likely related to the highway- head-on and run-off-road crashes. The A-F scale compares these crash rates with the statewide average.
- **Paved Roadway Width.** This measure compares total paved width (lane plus shoulder) with minimum acceptable widths by Highway Corridor Priority (not new design standards). If a highway segment fails this minimum, the Safety Customer Service Levels for that segment is decreased one letter grade.
- **Pavement Rutting Safety.** This measure looks at wheelpath rutting, since excessive rutting holds water and contributes to hydroplaning and icing in winter. The A-F scale set points vary by Highway Corridor Priority, and are based on hydroplane tests.
- **Bridge Reliability.** This measure is pass/fail. If a highway segment contains a bridge with a Condition Rating of 3 or less (excluding non-overpass decks), the Safety Customer Service Level is decreased one letter grade. These bridges are safe, but may require increased inspection or remedial work that could affect traffic flow.
- **Pavement Condition.** This measure uses the Pavement Condition Rating (PCR), a 0-5 scale that is composed of International Roughness Index, rutting, and two basic types of cracking. The A-F scale varies by Highway Corridor Priority.
- **Roadway Strength.** This measure uses the results of the falling weight deflectometer, a device that estimates roadway strength. The A-F scale is uniform across Highway Corridor Priority, since even low-priority roads must support heavy loads in Maine's natural resource-based economy.
- **Bridge Condition.** This measure converts the 0-9 national bridge inventory (NBI)

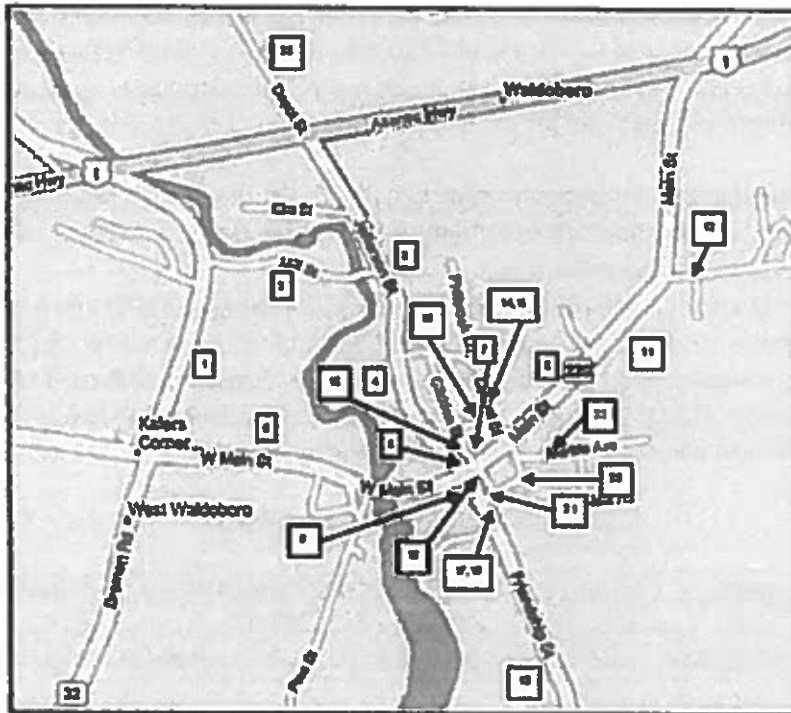
condition ratings to pass or fail; it is uniform across Highway Corridor Priority.

- **Ride Quality.** This measure uses the International Roughness Index (IRI), which is expressed in inches per mile of deviation. IRI is the nationally accepted standard for passenger comfort, and the A-F scale varies by Highway Corridor Priority.
- **Posted Road.** Each year, MaineDOT posts more than 2,000 miles of road during spring thaw to protect their longevity, but some posted roads directly affect Maine's economy.
- **Road segments that are permanently posted** get a D, those with seasonal postings get a C.
- **Posted Bridge.** This measure uses load weight restrictions to arrive at an A-F score that varies by Highway Corridor Priority.
- **Congestion Service.** This measure uses the ratio of peak traffic flows to highway capacity to arrive at an A-F score for travel delay. Peak summer months are specifically considered to capture impacts to Maine's tourism industry. This scale is uniform across Highway Corridor Priority, since tourist travel is system-wide and sitting in traffic affects customer service similarly on all roads.

Table 2 Waldoboro Sidewalks

#	Street	Segment		Side	Length (feet)	Type	Width (feet)	Condition	Comments
		from	to						
1	Bremen Road	Main Street	N of school crosswalk	E	1000	asphalt	2.5-3	F-G	dropped catchbasins
2	Mill Street	Bremen Road	bridge	S	1000	asphalt	3	P-F	sidewalk slumped below curb
3	Jefferson Street	Route 1	S of School Street	E	1800	asphalt	5	VG	
4	Jefferson Street	S of School Street	N of Main Street	W	820	asphalt	5	VG	
5	Jefferson Street	N of Main Street	Main Street	E	40	asphalt	5	VG	
6	Main Street	Bremen Road	Jefferson Street	N	2270	asphalt	4-5	F-G	
7	Main Street	Jefferson Street	School Street	N	310	asphalt	6	VG	
8	Main Street	School Street	Old Route 1	N	1660	asphalt	4-4.5	VG	
9	Main Street	Friendship Road	S of Friendship Road			asphalt	5'	G	
10	Main Street	Friendship Road	Sproul Block	S	60	asphalt	3	G	private?
11	Main Street	Pleasant Street	Old Route 1	S	1590	asphalt	4-5	F-G	sidewalk slumped below curb; some cracking
12	Old Route 1	Main Street	Coles Hill	S	220	asphalt	4	F-G	cracking; cold patch repair; groundwater seepage
13	Glidden Street	Main Street	Shady Avenue	E	230	asphalt	4-5	VG	
14	School Street	Main Street	N of Shady Avenue	E	220	asphalt	5	VG	
15	School Street	Main Street	Philbrook Lane	W	550	asphalt	5	VG	
16	Shady Lane	School Street	Glidden Street	N	270	asphalt	5	VG	
17	Friendship Road	Main Street	S of Pleasant Street	W	300	asphalt	8-9	F	
18	Friendship Road	S of Pleasant Street	Osram	W	3560	asphalt	4	P-F	dropped catchbasins; transition to poor paved shoulder
19	Friendship Road	Main Street	S of Pleasant Street	E	270	asphalt	8-9	F	
20	Pleasant Street	Main Street	Friendship Road	E-S	610	asphalt	4	G	
21	Pleasant Street	Friendship Road	Sproul Block	N	70	asphalt	7	P-F	
22	Marble Avenue	Pleasant Street	E of Oak Street	S	620	asphalt	4	F-G	
23	Depot Street	Route 1	S of RR crossing	E	1100	asphalt	4	G	

Figure 4 Waldoboro Sidewalks



See <http://www.maine.gov/mdot/about/assets/search/> for CSLs for non-local roads in Waldoboro.

As shown in Table 3, MDOT is responsible for 42.4 miles of roads in Waldoboro. Route 1, which is the busiest road in the community, is classified by MDOT as Highway Corridor Priority (HCP) 1, the highest priority classification in Lincoln County. MDOT maintains these roads to the highest level of care. Route 32 north of Route 1 (Winslows Mills Road) is classified as HCP 3, ensuring that it receives overlays and rehabilitation on a regular basis. All other state and state-aid roads in Waldoboro are classified as HCP 4 or 5 and do not receive the same level of summer maintenance as HCP 3 highways. For example, they will generally receive light capital paving and minor drainage work every seven years or so to maintain a reasonable travel surface. All other public roads in Waldoboro as classified as HCP 6 and are the responsibility of the Town of Waldoboro.

MDOT will continue to rebuild existing roads, as funds are available. However, its top priority will continue to be its pavement preventive maintenance (PPM) program. The condition of a well-paved road tends to be stable for the first 5-10 years. Then, as cracks form and water gets into pavement and base, the rate of deterioration quickens. The PPM program focuses on applying lighter, less expensive pavement treatments earlier and more frequently in a pavement's life, thereby avoiding the point at which the pavement quickly deteriorates and the cost of repair accelerates.

MDOT released its 2015-2017 Statewide Transportation Improvement Plan in January 2015. As

outlined in the plan in Table 4, Route 32 south of Route 1 and Route 220 north of Route 1 received light capital paving in 2015, and the Pine Street Landing is scheduled to be reconstructed in 2018-2019. Projects previously completed by MDOT include light capital paving of Route 235 (2011), Main Street (2012), Friendship Road (2012), Finntown Road (2013), Route 32 north to Jefferson (2013) and Manktown Road (2014), and improvements to the Jefferson Street-Route 1 intersection (2011).

Table 3 State and State-Aid Roads in Waldoboro

Name	Function	HCP Class	Length (mi.)
Route 1	Arterial	1	6.76
Washington Road (Route 220)	Major Col	4	7.38
Friendship Road (Route 220)	Major Col	4	7.00
Main Street (Route 220)	Major Col	4	0.67
Main Street	Major Col	4	0.46
Main Street	Minor Coll	5	1.21
Winslows Mills Road (Route 32)	Major Col	3	3.61
Kalers Comer (Route 32)	Major Col	4	0.47
Bremen Road (Route 32)	Major Col	4	5.80
Union Road (Route 235)	Minor Coll	5	4.18
Jefferson Street	Major Col	4	0.51
Finntown Road	Minor Coll	5	1.28
Manktown Road	Minor Coll	5	3.03
<i>Total</i>			<i>42.4</i>

Table 4 MaineDOT 2015-2016-2017 Work Plan

Town	Year			Location	Project	Description	MDOT Funding
	2015	2016	2017				
Waldoboro	X			Route 1	Highway Preliminary Engineering	Located 0.38 of a mile easterly of Winslows Mills Road	\$45K
Waldoboro		X	X	Route 220	Drainage Improvements	Beginning at Jefferson Street and extending easterly 0.10 mile	\$175K
Waldoboro		X	X	Pine Street Landing	New Construction	Replace bulk head, replace and expand boat ramp, including curbing and drainage improvements for parking area and new facility	\$252K
Waldoboro	X			Route 32	Drainage Maintenance	Replacing culverts on Route 32, located 0.07 of a mile south of intersection with Route 1	\$30K
Waldoboro	X			Route 32	Light Capital Paving	Beginning at Route 1 in Waldoboro and extending south to Bremen townline	
Waldoboro, Washington	X			Route 220	Light Capital Paving	Beginning at Route 1 in Waldoboro and extending northeasterly 10.00 miles.	\$426K

What is the community's current and approximate future budget for road maintenance and improvement?

The Town of Waldoboro annually appropriates funds for road improvements and related work is based upon budget restraints. The town maintains a record of all past road projects and develops an annual informal plan based, in part, on the age and condition of road surfaces. Unforeseen events, including storm damage, weather delays, rising fuel, and pavement costs, etc., can have significant impacts on planned projects.

If there are parking standards, do they discourage development in village or downtown areas?

The Town Code includes minimum off-street parking requirements for a full range of new and expanded residential and non-residential uses. In the Downtown Business District, however, there are no minimum parking requirements. While this provision permits greater flexibility in the downtown areas that have little land available for development of new parking, it can lead to greater pressure on the supply of public on- and off-street spaces as the downtown continues to develop. See Table 16 for the number and location of public parking spaces.

Do available transit services meet the current and foreseeable needs of community residents? If transit services are not adequate, how will the community address the needs?

There is no fixed route bus system that serves Waldoboro. Coastal Trans, Inc., offers door-to-door demand-response transportation to all towns in Lincoln County and is available for grocery shopping, personal business, and medical appointments for low-income families. This service was provided directly by Coastal Trans, but in 2013, Coordinated Transportation Solutions, Inc. (CTS) began brokering the service for Maine Care members. Transportation was provided by bus, van, or automobile for Maine Care members to medical appointments for clients who cannot arrange their own medical transportation. Agency and or volunteer drivers provide medical transportation. The Maine Department of Health and Human Services previously identified the lack of adequate transportation (both personal and public) as negatively affecting the health care of many low-income individuals in the Midcoast.

Reports of widespread complaints about the service provided by CTS have reportedly further impacted access to alternative transportation for Lincoln County residents and led the state to replace CTS with Waldo Community Action Program in 2014.

For seniors and disabled residents, Coastal Trans has a limited Transportation Coupon program that provides taxi rides for one-half the normal fare. In 2015 and 2016, Lincoln County Healthcare is using special grant funding to help Lincoln County patients with transportation to medical appointments, available through Lincoln Medical Physician offices, such as Medomak Family Medicine.

Concord Coach provides twice-daily service both north- and south-bound. The bus picks up and drops off customers at the Big Apple Store on Route 1 in Waldoboro, Huber's Market in Wiscasset, and on Main Street near Reny's in Damariscotta.

If the community hosts a transportation terminal, such as an airport, passenger rail station, or ferry terminal, how does it connect to other transportation modes (e.g. automobile, pedestrian, bicycle, transit)?

Waldoboro does not host a transportation terminal nor is the community served by ferry services. There have been discussions, within the community, about developing a new passenger rail facility off Depot Street or Route 220; however, with the 2015 announced cancellation of seasonal passenger rail service on the Maine Eastern Rail Line and the cancellation of the 2018 passenger rail testing to Rockland, it is very unlikely any such facility will be developed in the foreseeable future.

If the community hosts or abuts any public airports, what coordination has been undertaken to ensure that required airspace is protected now and in the future? How does the community coordinate with the owner(s) of private airports?

Not applicable.

If you are a coastal community, are land-side or water-side transportation facilities needed? How will the community address these needs?

Waldoboro, along with Damariscotta, Nobleboro, Newcastle, and Edgecomb, developed the Route 1 Corridor Management Plan in 2014. While this plan recommended further evaluation of the above-mentioned passenger rail facilities, it did not identify any need in Waldoboro for a new transportation facility.

Does the community have local access management or traffic permitting measures in place?

MDOT has adopted an Access Management Rule that controls the development of driveways and entrances on all state and state-aid roads (Table 3). A driveway is an access that serves up to 5 dwelling units or other uses that generate less than 50 vehicle trips per day, while an entrance includes anything that exceeds these driveway thresholds.

Any person proposing a driveway or entrance on one of the state-aid roads must apply for a permit from MDOT. This requirement is in addition to any local permits. All such accesses must meet minimum standards for sight distance, minimum distance to intersections, maximum width, drainage controls, backing up onto the highway, among others.

Because the Access Management Rule is primarily intended to ensure safe use of and access to roadways, towns are encouraged to adopt similar standards for development on municipal roads. Minimum sight distance requirements, drainage improvements, and width standards, are just as important for the safe use of local roads as for state highways. Many of Waldoboro's roads have horizontal and vertical curves that limit visibility of vehicles exiting driveways. Waldoboro has General Performance Standards for the development of all driveways and roads. These standards govern design, location, number, sight distance, permitting, and other requirements of driveways and roads. In addition, a traffic impact analysis demonstrating the impact of a proposed project on the capacity, level of service, and safety of adjacent streets is required if a project or expansion will provide parking for fifty (50) or more vehicles or generate more than one hundred (100) trips during the a.m. or p.m. peak hour.

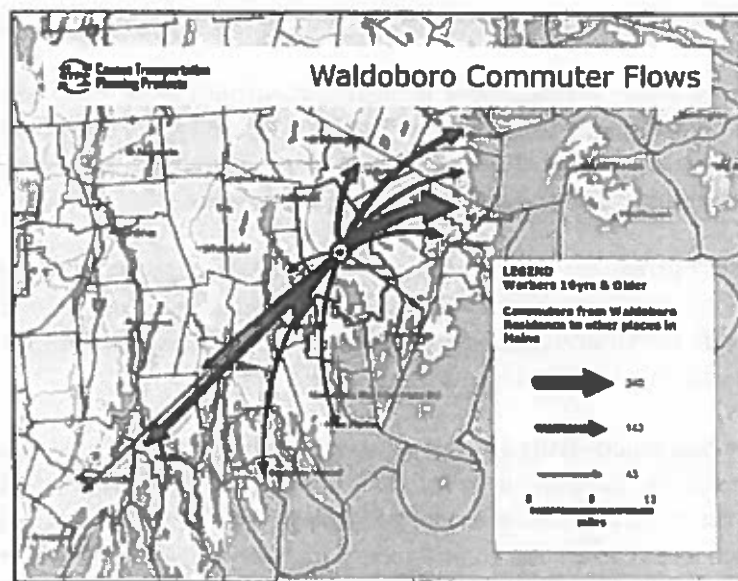
Do the local road design standards support the community's desired land use pattern?

The Waldoboro Road Standards differentiate road design based upon seven categories: arterial, collector, minor, and commercial/ industrial public streets and major, intermediate, and minor private streets. When a third dwelling is added to a private driveway, it must be upgraded to a private street. The Planning Board has the authority to require two road connections with existing public roads or roads on an approved development plan as part of subdivision or site plan review. Where topographic and other conditions allow, provision shall be made for circulation driveway connections to adjoining lots of similar or potential use to facilitate fire protection or to allow the public to travel between uses without traveling on a public road.

The Land Use Ordinance permits development of open space subdivisions in which land is set aside for open space use within a subdivision in exchange for modifications to lot size, density, minimum frontage, and other provisions. Importantly, the Planning Board has the authority to eliminate minimum frontage for such developments, thereby resulting in significant reductions in road length and more compact developments.

With a relatively low employment base, many residents commute to work. Figure 5 presents the commuting pattern for Waldoboro residents.

Figure 5 Employee Destinations



Do the local road design standards support bicycle and pedestrian transportation?

The Land Use ordinance requires that sidewalks be constructed as part of all development with the designated urban compact area. While the intent of this provision is to expand the sidewalk network in the village area, Waldoboro does not actually have a "designated urban compact area", so the provision is not valid. This discrepancy should be addressed by changing the affected area to one or more existing land use districts. Table 5 presents the prioritized project

recommendations from the Waldoboro Bicycle- Pedestrian Plan approved by the Board of Selectmen in 2011. The full plan is available at <http://www.waldoboromaine.org/index.php/departments/planning-code/239-bicycle-pedestrian-plan>.

Table 5 Recommendations from the Waldoboro Bicycle-Pedestrian Plan

Rank	Bike-Ped Project Recommendation
1	Route 1 crosswalks @ Route 32, Jefferson/Depot Streets and Main Street/Route 220
2	Extend Main Street sidewalk (Route 220) to Route 1
3	Medomak River walkway for walking/running/biking
4	Extend Bremen Road sidewalk from Miller School to Route 1
5	Extend Main Street sidewalk to recreation complex entrance
6	Manktown Road sidewalk or paved shoulders to MVHS
7	Route 1 sidewalk from Route 32 to Moody's Diner
8	Cross-country walking path between Route 220 and Manktown Road
9	Route 32 sidewalk or paved shoulders from Route 1 to Winslows Mills
10	Main Street stop signs at Friendship/Jefferson Streets
11	Extend Bremen Road sidewalk or paved shoulders to Dutch Neck
12	Extend Friendship Road sidewalk south

Other recommendations from the plan:

- Residents use the sidewalk system year round. To adequately meet the community's needs, sidewalks must be maintained on a year round basis. This means that sidewalks must be plowed and sanded in winter at the same time the village's streets are sanded and plowed.
- Property owners should be prohibited from maintaining their properties in a manner that adversely affects adjacent sidewalks, such as plowing snow onto sidewalks and failing to trim back vegetation overhanging sidewalks.
- The Waldoboro Bicycle-Pedestrian Plan should be incorporated as an amendment to the comprehensive plan. Article 6 of the Land Use Ordinance should be amended to require the construction of new bicycle and/or pedestrian facilities and their connection with existing or planned facilities for developments that are in proximity to planned facilities or that are anticipated to create demand for pedestrian and/or bicycle facilities.

- An official policy for construction or maintenance of paved road shoulders should be established. As new pedestrian and bicycle facilities are constructed in the community, a formal maintenance policy will be an important step in ensuring that the spending of scarce local financial resources on the system will be optimized.
- Fund the annual budget for improvements to existing bicycle and pedestrian facilities, and construction of new facilities on Town owned roads.
- Establish a dedicated annual maintenance budget, including striping of crosswalks, winter maintenance, and spring sweeping of Town owned roads. This could include the purchase of equipment specifically dedicated to winter sidewalk maintenance.
- When any state or state-aid road is reconstructed, the shoulder and travel lanes should be sufficiently dimensioned to accommodate pedestrians and bicyclists.
- New bike racks should be installed in the following locations: downtown (one or more), post office, Hannaford, town office, Moody's Diner, Route 1 location.
- Depressed drainage grates, including those on Bremen and Friendship Roads, should be reset to improve safety for bicyclists

Conditions and Trends

Minimum data required to address Analyses:

The community's Comprehensive Planning Transportation Data Set prepared and provided to the community by the Department of Transportation.

Note: This data set has been incorporated and updated in the Transportation Network map, the Analyses section of this chapter, as well as in the items that follow.

Location and overall condition of roads, bridges, sidewalks, and bicycle facilities, including any identified deficiencies or concerns.

The Transportation Network is dominated by vehicular traffic traveling on the community's network of public and private roads. The maintenance responsibility for these roads depends on the principal use of the roadway and falls on private individuals, the Town of Waldoboro, or the State of Maine.

Figure 6 presents Waldoboro's public and private road network. As of 2015, there were 130 miles of public and private roads in Waldoboro (tables 6 and 7). These roads vary in function and character from high-speed arterials to private gravel roadways.

Arterial Roadways

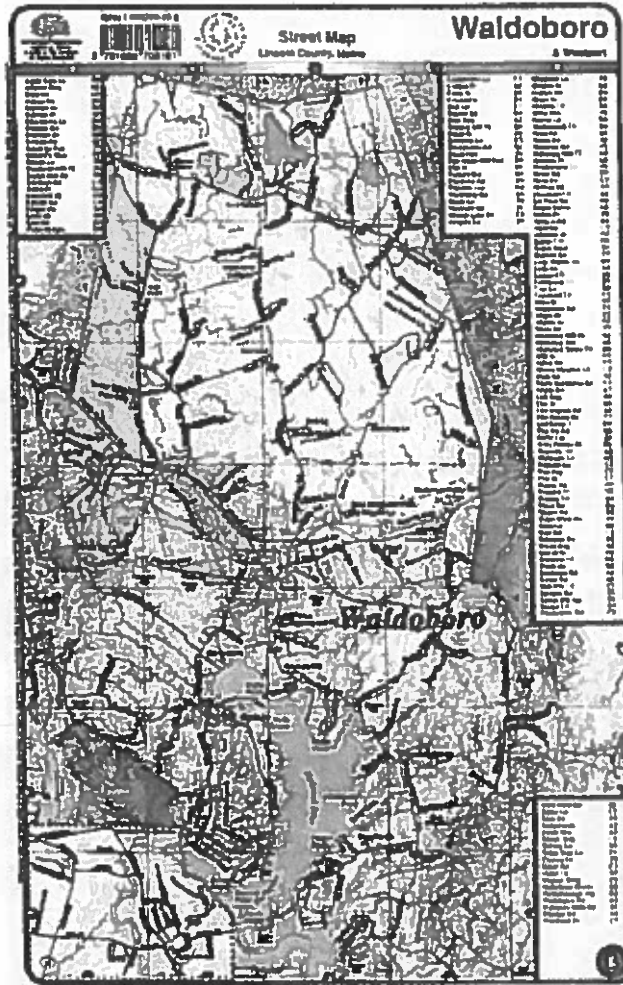
Arterial roadways are defined by MDOT as travel routes that carry high-speed, long distance traffic usually with a US Route number designation. In Waldoboro there are 6.76 miles of arterial highway consisting of Route 1.

Collector Roadways

Collector roadways are defined by MDOT as travel routes that collect and distribute traffic from and

to arterials, serving places of lower population densities and somewhat removed from main travel routes. In Waldoboro, the 35.6 miles of collector roadways include Route 220, Main Street east of Route 32, Route 32 (major collectors), Route 235, Finntown Road, and Manktown Road Main Street west of Route 32 (minor collectors).

Figure 6 Waldoboro Roads



Map courtesy of Tay Vaughan, Timestream Multimedia,
Appleton, Maine. 207-785-5511

Table 6 Waldoboro Public Roads

Name	Function	HCP Class	Length	Summer Maint	Winter Maint	Paved	Gravel	Condition (P/F/G/E)	Comments	Local Concerns	Roadway Character	
			(mi.)									
Route 1	Arterial	1	6.78			6.78		G-VG	G east of R220 where repairs have been made			
Washington Road (Route 220)	Major Col	4	7.38		7.38	7.38		VG	New overlay			
Friendship Road (Route 220)	Major Col	4	7.00		7.00	7.00		F-G	Some vert cracking, H+V curves			
Main Street (Route 220)	Major Col	4	0.87		0.87	0.87		F-G	Deteriorated shoulder, pavement to Old Rt 1	Lack of sidewalk to Old Rt 1	Village setting	
Main Street	Major Col	4	0.46		0.46	0.46		G			River views	
Main Street	Minor Col	3	1.21		1.21	1.21		F	V cracking, base			
Whitcomb Mill Road (Route 12)	Major Col	3	3.01			3.01		VG	New overlay		Rural, farm views	
Kalens Corner (Route 12)	Major Col	4	0.47		0.47	0.47		VG	Recent overlay, some areas limited cracking			
Bramen Road (Route 12)	Major Col	4	5.80		5.80	5.80		VG	New overlay			
Union Road (Route 221)	Minor Col	5	4.18		4.18	4.18		G	Recent pavement repairs			
Hansen Street	Major Col	4	0.51		0.51	0.51		VG			Village setting	
Fintown Road	Minor Col	5	1.28		1.28	1.28		F-G	Some pavement deter, some V cracking			
Mantown Road	Minor Col	5	3.03		3.03	3.03		G-VG	Recent overlay, areas of light cracking			
Back Cove Road	Local	8	2.07		2.07	2.07		G	Some uneven pavement		Water views	
Bowden Road	Local	8	0.45		0.45	0.45		P	Deteriorated pavement			
Sunkist Mill Road	Local	8	0.06		0.06	0.06	0.06	P-F	Narrow, H+V curves			
Burham Road	Local	8	0.54		0.54	0.54		F-G	Some H+V cracking, some base deterioration			
Catbier Road	Local	8	1.52		1.52	1.52		F-G	Some H+V cracking			
Chapel Road	Local	8	1.36		1.36	1.36		F-G	Some H+V cracking, some V curves			
Clary Hill Road	Local	8	0.42		0.42	0.42	0.42	G	Narrow, some surface drainage damage			
Cross Street	Local	8	0.40		0.40	0.40		F-G		Equipment operating on road	River views	
Deaner Street	Local	8	0.82		0.82	0.82	0.82	H	H+V curves, some drainage across road			
Deget Street	Local	8	1.82		1.82	1.82		G-VG	New overlay, limited areas of pavement deterioration			
Duck Puddle Road	Local	8	1.18		1.18	1.18		VG	H+V curves, occasional flooding		Rural, water views	
Duch Neck Road	Local	8	3.08		3.08	3.08		F-VG	VG to Gevie Lane, then F due to H+V cracking		Pastoral, water views	
Elm Street	Local	8	0.15		0.15	0.15		P	Poor pavement, narrow		River view	
Faylor Corner Road	Local	8	3.21		3.21	3.21		F-G	H+V cracking, H curves, some base deter			
Fintown Road	Local	8	2.83		2.83	2.83		F	Pavement deterioration			
Flanders Corner Road	Local	8	1.14		1.14	1.14	1.14	G	Good surface, crowned, V curves, narrow above Flanders Corner		Rural views	
Gevie Lane	Local	8	0.12		0.12	0.12		P-F	Narrow			
Genther Road	Local	8	2.12		2.12	2.12		VG	H+V curves		Rural views	
Luce Road	Local	8	0.23		0.23	0.23		P-F	Narrow			
Giddon Street	Local	8	0.05		0.05	0.05		G	Narrow		Village setting	
Graham Road	Local	8	2.23		2.23	2.23		P-F-G	Deterioration increasing towards end, H+V curves		Rural, farm views	
Gross Neck Road	Local	8	2.08		2.08	2.08		P-F	Pavement deterioration, H+V curves	Very deteriorated housing yards near beginning		
Hoyer Road	Local	8	0.27		0.27	0.27		G	Narrow			
Jackson Road	Local	8	2.31		2.31	2.31	2.00	F-G	Paved area G, gravel F, narrow			
Heak Road	Local	8	0.70		0.70	0.70	0.50	G	Some H+V cracking			
Kosiers Road	Local	8	0.12		0.12	0.12		F-G	Narrow			
Ludges Circle	Local	8	0.51		0.51	0.51		G	Some V cracking			
Marble Avenue	Local	8	0.13		0.13	0.13		P-G	End P			
Marine Park	Local	8	0.28		0.28	0.28		P	Deteriorated pavement			
Mayo Road	Local	8	0.31		0.31	0.31		G	Narrow			
Madomak Terrace	Local	8	0.17		0.17	0.17		P	Narrow		Village setting	
Madomak Valley Estates	Local	8	0.18		0.18	0.18		G				
Mill Street	Local	8	0.25		0.25	0.25		G	Some cracking		River views	
Miler Road	Local	8	0.87		0.87	0.87		F-G	G to school, F thereafter, cracking			
Neak Road	Local	8	0.32		0.32	0.32	0.32	G				
North Nobletans Road	Local	8	1.79		1.79	1.79		G	Some H+V cracking		Farm views	
Noyes Road	Local	8	0.70		0.70	0.70	0.70	F	Drainage across road in places			
Old Augusta Road	Local	8	5.90		5.90	5.90		G-VG	G to R 220, G-VG thereafter		Rural, farm views	
Old County Road	Local	8	3.17		3.17	3.00	1.98	G-VG	VG where paved, F east gravel section, P west gravel section		Rural views	
Old Route 1	Local	8	4.11		4.11	4.11		G-VG	Limited areas of some cracking		Rural, forested views, tree canopy	
Orin's Corner Road	Local	8	2.18		2.18	2.18		F-G	Some V cracking, base OK		Rural, farm views, tree canopy	
Pine Street	Local	8	0.40		0.40	0.40	0.40	P	Deteriorated pavement, narrow			
Pleasant Street	Local	8	0.12		0.12	0.12		VG				
Pischer Road	Local	8	0.32		0.32	0.32	0.32	G	Narrow			
Ralph Wick Road	Local	8	0.73		0.73	0.73	0.73	VG	Narrow			
Rail Road	Local	8	1.58		1.58	1.58		G	Some areas of deteriorated pavement			
Robinson Road	Local	8	0.70		0.70	0.70	0.70	G	Some drainage deterioration		Rural setting	
School Street	Local	8	0.23		0.23	0.23		G	G to Philbrook Lane, narrow to Jefferson Street		Village setting	
Shelby Avenue	Local	8	0.05		0.05	0.05		G	Narrow		Village setting	
Simon Road	Local	8	0.47		0.47	0.47		G	Narrow, some V cracking			
Spruce Road	Local	8	0.81		0.81	0.81		F	Narrow			
State Road	Local	8	0.05		0.05	0.05		G				
Storer Mountain Road	Local	8	1.18		1.18	1.18	1.18	G	Some washboard, some drainage on spill		Rural, water views	
Veigler Bridge Road	Local	8	2.00		2.00	2.00		G	V + some H curves		Water views	
Winston Road	Local	8	0.74		0.74	0.74		F	Narrow			
Totals			183.18		84.79	88.79	80.87	8.71				

Table 7 Waldoboro Private Roads

Road	Length (ft)	Road	Length (ft)	Road	Length (ft.)
Apple Barn Lane	1090	Hahn Road	1400	Poverty Lane	940
Balsam Drive	790	Hanna Road	550	Prock Road	1080
Bayville Avenue	450	Harriman Road	720	Quarry Road	2750
Bedrock Point	280	Hathaway MHP	240	Ralph Wink Road	1670
Blue Heron Lane	790	Havener Point	4800	Reed Lane	1540
Blueberry Lane	1890	Hendrickson Lane	5980	Ridge Road	300
Bowman Drive	1080	Hofises Road	1390	River Bend	950
Broad Cove East	1200	Horscents Lane	2100	Rocky Ridge	980
Broad Cove West	1770	Ice Pond Road	1600	Sara Lane	430
Brooks Lane	3760	Indian Meadows	410	Severson Lane	1410
Brockside MHP	1190	Indian Point	600	Sidellinger Road	2260
Burket Mill Road	2890	Jared Road	660	Skyview MHP	2400
Butler Point	3030	Kalers Pond	2560	Slab Pine Lane	810
Campbell Hill	520	Lady Slipper Lane	990	Sprague Road	2770
Cole Road	4750	Laila Lane	1630	Sproul Block Apartments	100
Coles Hill Apartments	140	Levanseler Lane	2090	Stagecoach Road	1850
Controversy Lane	4660	Lois Lane	440	Stahl Farm Road	1480
Cottage Point	3710	Lonewolf Lane	4260	Staley Lane	600
Crystal Cove	2480	Maple Drive	3790	Stonywoods	780
Dail Lane	470	Medomak MHP	1890	Sunset Ridge	1530
Deaver Road	3740	Moose Meadow Lane	1990	Tammy Lane	720
Deer Run	2800	Noyes Road	4110	Teddy Bear Lane	2390
Dewdrop Lane	520	Oak Ridge	1870	Thomas Drive	960
East Ridge MHP	1360	Oak Street	380	Turkey Lane	570
Gergely Lane	1180	One Pie Road	1750	Violet Lane	2400
Glenhurst Lane	3840	Perry Greene Hill	1080	Waldoboro Woods	150
Glidden Street	610	Petrovitz Lane	1070	Waldoboro Village	640
Grace Avenue	790	Philbrook Lane	440	Woodland Drive	1100
Grover Lane	780	Pierpont Lane	1870		
Hackmatack Lane	410	Pine Ridge	960		
				Total	26.9 mi

Local Roads

Local roads are defined by MDOT as all roadways not classified as an arterial or collector and include 55 roads totaling 60.8 miles in Waldoboro. All local roads are maintained by the town.

Private Roads

Private roads are maintained by individuals, associations, or private businesses, and include 88 roads totaling about 26.9 miles in Waldoboro.

The Town of Waldoboro is responsible for summer maintenance of 60.8 miles of roadway consisting of 51.1 miles of paved road and 9.7 mile of gravel road. As indicated in Table 6, some of these roads have fair or poor travel surfaces due to age, pavement cracking, insufficient base material, steep grades, poor drainage, heavy truck use, and maintenance costs will rise with further deterioration. Based on the comments provided in Table 6, it may be necessary to reconstruct, rehabilitate, or repave a number of local roads. By encouraging or permitting development in areas that are served by adequate roads, increased maintenance costs associated future capital outlays may be avoided or at least delayed. Conversely, continued subdivision and lot-by-lot residential development off rural roads will cause further road deterioration and result in increased maintenance costs.

As indicated in Table 6, all of state and state-aid roads are in good to very good condition with the exception of Main Street west of Route 32 and portions of Friendship Road, both of which have areas of vertical cracking. The fact that both roads were paved as recently as 2012 likely indicates poor base conditions, drainage problems, or both.

Town roads vary but are generally in good condition. Of the 60.8 miles of paved and gravel town roads in Waldoboro, 32.3 miles, or about half, were rated as in good or very good condition, 20.1 miles, or about 35%, in fair or fair-to-good condition, and 8.4 miles, or about 15%, in poor or poor-to-fair condition. Poor or fair road conditions appear to be mostly due to surface deterioration as a result of inadequate base, poor drainage, significant horizontal and vertical relief, and heavy truck traffic. In addition, roads in rural Waldoboro that were formerly very lightly used now support a significant amount of residential development with its attendant increase in traffic.

While these road conditions can be remedied by full reconstruction of the roads and road segments, this is both cost-prohibitive and financially unjustifiable due to very significant amount of town road mileage, especially when compared to other communities in Lincoln County, as indicated in table 8. Currently, the Public Works Department uses its available funds to pave and complete limited drainage improvements on several roads each year. At the rate of current funding for this work, roads may deteriorate faster than can be improved.

Transportation planning is now done regionally. In 2005, The Lincoln County Planning Office (now LCRPC), the Midcoast Council for Business Development and Planning (now Midcoast Council of Governments) and MCEDD prepared a Regional Transportation Assessment (RTA), which identified Corridors of Regional Economic Significance and listed potential improvements to the corridors (corridors in this context does not only mean a vehicular roadways but includes related transportation facilities such as bike-ped routes, rail corridors, ferry lines and related support facilities). Route 1 and Route 32 north of Route 1 are Corridors of Regional Economic Significance in Waldoboro and Corridor Management Plans were completed in 2014 and 2010, respectively (see <http://www.waldoboromaine.org/index.php/departments/planning-code/427-route-1-corridor-management-plan> as well as the http://lcrpc.org/uploads/visual_edit/route-32-

corridormanagement-1.pdf). The Route 1 plan was completed jointly with Nobleboro, Newcastle, Damariscotta, and Edgecomb, while the Route 32 plan was completed with Jefferson.

Table 9 presents the Waldoboro-specific recommendations from the Route 1 plan, while Table 10 presents the corridor-wide recommendations from this plan. Table 11 presents the recommendations from the Route 32 plan.

Table 8 Comparison of Public and Private Road Statistics in Selected Communities

Town	Land Area ¹	All Public Roads		Town Roads								Private Roads		Ratio Public To Private Roads
				Summer Maintenance		Winter Maintenance		Paved		Gravel				
				total miles	miles/mi ²	total miles	miles/mi ²	total miles	miles/mi ²	total miles	miles/mi ²			
Waldoboro	78.9	103.15	1.31	60.79	.77	89.70	1.14	90.97	1.15	9.71	.12	26.9	.34	3.83
Damariscotta	18.1	26.36	1.46	15.77	0.87	21.75	1.20	26.36	1.46	0.0	0.0	25.4	1.40	1.04
Jefferson	52.7	67.21	1.28	30.7	0.58	48.45	0.92	26.59	0.5	4.19	0.08	53	1.01	.99
Whitefield	46.8	66.86	1.43	39.23	0.84	58.91	1.24	28.58	0.61	10.65	0.23	n/a	n/a	
Newcastle	29	53.72	1.85	28.77	0.99	42.16	1.45	27.38	0.94	4.56	0.16	n/a	n/a	
Alna	20.9	30.42	1.46	14.76	0.71	30.42	1.46	9.46	0.45	5.3	0.25	2.22	0.11	13.70
S Bristol	13.2	26.3	1.99	15.27	1.16	26.18	1.98	15.96	1.21	0.24	0.02	28.41	2.15	.92
Nobleboro	19	36.69	2.09	25.7	1.35	32.69	1.72	24.43	1.29	1.27	0.07	36.29	1.91	1.01
Boothbay Harbor	6.5	31.8	4.89	22.3	3.43	31.3	4.82	31.0	4.77	0.30	.05	11.90	1.83	2.67

**Table 9 Route 1 Corridor Management Plan - Waldoboro
Recommendations**

Improve visibility of Route 235 intersection; improve shoulder and lengthen turning pocket	Safety - improve safety of exiting and entering vehicles	MaineDOT	Immediate
Widen and pave shoulders on Main Street west of Route 32	Safety - improve safety of bicyclists and pedestrians using corridor	MaineDOT	Long-term
Improve road surface between Route 220 and the Warren town line	Safety - deteriorated shoulders and travel surface affect driver safety and comfort	MaineDOT	Immediate
Request safety study of Route 220 intersection and give consideration to creating facing left turn lanes on	Safety – improve safety of vehicles and bicyclists using intersection	MaineDOT	Immediate

Route 1 and making right east bound lane the through lane; provide a left turn lead at the light to improve traffic flow			
Request safety study and corrective actions at Route 32 intersection and give consideration to better aligning intersection, using delays in the signal to allow traffic from each leg of Route 32 to enter intersection alternately and address issue of traffic using the Dunkin Donuts lot to bypass the intersection	Safety – improve safety of vehicles and bicyclists using intersection	MaineDOT	Immediate
Consider expanding or reconfiguring the Waldoboro Park and Ride lot to provide additional capacity	Economy – accommodate additional park and ride users in facility, which is near capacity	MaineDOT	Mid-term
Install paved shoulders on the south side of Route 1 between the town office and the Route 220 intersection and in west Waldoboro where the passing lane exists west of the lower Main Street intersection	Safety – improve safety for bicyclists	MaineDOT	Mid-term
Widen Route 1 eastbound at the Route 32 intersection to accommodate bicyclists	Safety – improve safety for bicyclists	MaineDOT	Mid-term
Widen Medomak River bridge or install adjacent bike-ped bridge to accommodate bicyclists and pedestrians	Safety – improve safety for bicyclists and pedestrians	MaineDOT	Mid-term
Extend the Main Street (Route 220) sidewalk in Waldoboro from the downtown to Route 1	Safety – (see related rail recommendation)	MaineDOT	Immediate
Install pedestrian enhancements at the Route 32 intersection and construct sidewalk from Route 32 to Route 220	Safety – improve safety for pedestrians	MaineDOT	Mid-term

Table 10 Route 1 Corridor Management Plan - Corridor-wide Recommendations

Encourage limiting access to one per lot exiting onto Route 1 where possible	Safety - maintain posted speed through controlled development	Towns	Immediate
Reduce curb cuts where possible	Safety - maintain posted speed through controlled development	MaineDOT /Towns (as appropriate)	Immediate
Encourage common points of access	Safety - encourage shared entrances to reduce curb openings	Towns	Immediate
Reduce curb cut widths where practical	Safety - better define access for entering, exiting traffic	Towns	Immediate
Encourage internal access between adjacent properties	Safety - reduce unnecessary vehicle movements onto highway	Towns	Immediate
Consider enhancing site development standards for all development on Route 1 including landscaping, parking lot location, buffering, etc., to increase the attractiveness and improve the desirability of property on Route 1.	Environmental - improve visual appearance of corridor	Towns	Mid-term (immediate Damariscotta)
Each town should be encouraged to include in land use ordinances protection of scenic views recognized in each community as significant	Environmental - improve visual appearance of corridor	Edgecomb, Damariscotta, Nobleboro, Waldoboro	Mid-term
Conduct feasibility studies for seasonal bus service linking Route 1 communities with the Boothbay and Bristol peninsulas	Safety and economy - evaluate the feasibility of establishing seasonal bus service from Damariscotta to improve the tourist economy	MaineDOT	Immediate
Conduct traffic study to determine locations for or improvements to turning lanes	Safety - improve safety of exiting and entering vehicles	MaineDOT	Immediate
Request MaineDOT to advise towns of road work well in advance of onset in order to accommodate municipal utility improvements	Economy - by coordinating state and local work the cost of utility work can be reduced	MaineDOT	Immediate
Route 1 should be marked as a no passing zone in all commercial areas to reduce the possibility of collision as vehicles turn onto Route 1 from a business.	Safety – avoid conflicts between passing vehicles and those entering Route 1 from access drives in congested areas	MaineDOT	Immediate

<p>MaineDOT should incorporate into any future Route 1 plans “Dig Once”, the federal initiative to leverage highway construction and maintenance efforts by installing conduit with segregating sleeves or inner ducts when street openings occur or new road construction is undertaken.</p>	<p>Economy - by coordinating state and local work the cost of utility work can be reduced</p>	<p>MaineDOT</p>	<p>Immediate</p>
<p>In developing any future Route 1 plans, MaineDOT should accommodate potential extensions of water mains between adjoining water districts.</p>	<p>Economy - by coordinating state and local work the cost of utility work can be reduced</p>	<p>MaineDOT</p>	<p>Immediate</p>

Table 11 Route 32 Corridor Management Plan Recommendations

Descriptions/ Recommendations	Town	Location(s)	Rationale	Responsible Party(ies)	Timeframe
Access management controls for new entrances strengthened	Waldoboro Jefferson	Throughout	Safety - maintain posted speed through controlled development/redevelopment of entrances, encourage shared entrances, assure safe sight distances	Towns, MDOT	Midterm
Identify pedestrian areas with signs, pavement markings, crosswalks	Waldoboro Jefferson	Route 1 intersection, Jefferson village, Washington Road, Winslows Mills	Safety - install signs where pedestrians, especially children, frequent. These would include the Davis Stream bridge and Jefferson elementary school	MDOT, Towns	Immediate
Encourage shared entrances for new businesses and shared points of access for new residences	Waldoboro Jefferson	Throughout	Safety - fewer new entrances will reduce the number of conflicts between through traffic and vehicles entering and exiting properties	Towns, MDOT	Immediate, ongoing
Grade changes - reduce vertical curves	Waldoboro Jefferson	Route 17 at Peaslee's Store, vicinity of Eames Road, Village Street, Orff's Corner	Safety - poor sight distance	MDOT	Longterm
Guardrails	Jefferson	Route 17 at Peaslee's Store	Safety - reduce damage due to vehicles running off the road into deep ditches	MDOT	Midterm
Intersection realignment	Jefferson	Waldoboro Road-Augusta Road intersection	Safety - convert to "T" intersection or increase radius of slip lane to reduce speed of vehicles using slip lane, thereby improving safety of adjacent accesses	MDOT	Immediate
Intersection realignment, signage	Waldoboro	Orff's Corner Road intersection	Safety - relocate or reconfigure intersection to improve radius of turning movement of vehicles exiting Orff's Corner Road and install signage alerting drivers to trucks entering from Orff's Corner Road	MDOT	Midterm
Intersection improvement	Jefferson	Village Street intersection	Safety - consider installing raised median or pavement markings on the west side of the Route 32-Village Street intersection to improve sight distance of vehicles turning north on Village Street	MDOT	Immediate
Intersection study	Waldoboro	Route 1 intersection	Safety - conduct turning movement study at intersection and Dunkin Donuts drive-thru, which serves as a de facto bypass, to determine if intersection realignment or installation of left turn arrow for east-bound Route 1 traffic is warranted	MDOT	Immediate
Intersection sight distance improvements	Jefferson	Washington Road, East Pond Road	Safety - remove vegetation within right of way to improve sight distance	MDOT	Immediate

Intersection study	Waldoboro	Route 32 at Main Street	Safety - evaluate whether two-way stop should be reversed or converted to four-way stop	MDOT	Immediate
Emergency activated warning light	Jefferson	Jefferson Fire Department entrance	Safety - install warning light for emergency vehicles exiting fire department	MDOT	Midterm

Investment Descriptions/ Recommendations	Town	Location(s)	Rationale	Responsible Party	Timeframe
Road realignment	Jefferson	Jefferson village	Safety - evaluate feasibility and impact on adjacent residences of relocating Route 32 between the Davis Stream bridge and the ice cream shop further south in order to increase parking and maneuvering area at the store and eliminate vehicles from parking partly within right of way	MDOT, Town	Midterm
Reconstruct road	Waldoboro Jefferson	Throughout	Safety - drainage problems, poor base and deteriorated shoulders are creating safety problems for vehicles	MDOT	Immediate
Install paved shoulders for pedestrian, bike use, "share the road" signage	Waldoboro Jefferson	Throughout	<ul style="list-style-type: none"> • Route 213 at Wavus to Crescent Beach - 4' • Route 17 to Waldoboro Road - 2' • Jefferson Village (Washington Road, Village Street) - 4' • Crescent Beach to Orff's Corner - 2' • Orff's Corner - 4' • Orff's Corner to Winslows Mills - 2' • Winslows Mills - 4' 	MDOT	Longterm
Environmental Impact Study	Jefferson	North Nobleboro Road to Damariscotta State Park	Environmental - evaluate impact of deicing chemicals on lake water quality and divert runoff if necessary	MDOT	Midterm
Scenic view preservation	Waldoboro	Waldoboro - Orff's Corner, Cunningham Farm, Views to Medomak River	Revise local ordinances to consider impact of new development on scenic and pastoral views	Town	Midterm
Speed survey	Jefferson	Jefferson village, near Route 1	Safety - evaluate whether existing speed limits are appropriate, including whether existing 25 and 35 M.P.H. zones near Route 1 should be combined into a single zone	MDOT	Immediate

Economic development	Waldoboro	Winslows Mills, Route 17 intersection	Economy - evaluate expanding industrial district around Waldoboro Environmental park and evaluate commercial development potential of land on the east side of Route 32 at Route 17	Towns	Midterm
Reduce horizontal and vertical curves as appropriate	Waldoboro	700 Winslows Mills Rd 920 Winslows Mills Rd 1600 Winslows Mills Rd 2800-2900 Winslow Mills Rd	Safety - hills and/or curves creates severe sight distance limitation	MDOT	Midterm

Bridges

Table 12 lists bridges in Waldoboro, all but one of which are owned and maintained by the state. No bridge improvements are planned by MDOT at this time.

Identify potential on- and off-road connections that would provide bicycle and pedestrian connections to neighborhoods, schools, waterfronts, and other activity centers.

See Table 5 for recommendations from the Waldoboro Bicycle and Pedestrian Plan.

Identify major traffic (including pedestrian) generators, such as schools, large businesses, public gathering areas/activities, etc. and related hours of operations.

The most significant generators of traffic in Waldoboro are the businesses along Route 1 and in the downtown, schools, residences along major routes and through traffic, especially along Routes 1 and 32.

MDOT counts traffic volume on a rotating schedule. Because traffic counts are taken throughout the non-winter months, they must be statistically adjusted so that they can be made comparable regionally and state-wide. In addition, peak traffic occurs at different times in different areas of the state. The Department, therefore, applies factors to the traffic counts to produce Average Annual Daily Traffic (AADT). The most recent available counts in Waldoboro are presented in Table 13.

Table 12 Bridges in Waldoboro

Location	Name	Topo Feature	Owner/ Maintainer	Year Built	Deck Condition	Superstructure Condition	Substructure Condition
Route 220	Goose River	Goose River	MDOT	1952	Satisfactory	Satisfactory	Good
Finntown Road	Middle	Goose River	MDOT	1964	N/A	N/A	N/A
Duck Puddle Road	Duck Puddle	Duck Puddle Stream	Town	1981	N/A	N/A	N/A
Route 220	Medomak River	Medomak River	MDOT	1972	Satisfactory	Good	Good
Old Augusta Road	Walters Mill	Medomak River	MDOT	1970	Good	Good	Good
Manktown Road	Stratton Corner	Levensalor Brook	MDOT	1959	Satisfactory	Satisfactory	Good
Mill Street	Soule	Medomak River	MDOT	1952	Satisfactory	Good	Satisfactory
Winslows Mills Road	Winslows Mills	Medomak River	MDOT	1922	Poor	Poor	Satisfactory
Route 1	New Medomak	Medomak River	MDOT	1932	Satisfactory	Satisfactory	Satisfactory
Route 1	US 1/MDOT RR	Allen's Siding	MDOT	1997	Very Good	Very Good	Good
Route 32	Wagner #2	Hook Brook	MDOT	1929	Poor	Poor	Poor
Route 220	Thomas Hill	Slaigo Brook	MDOT	1953	Satisfactory	Satisfactory	Satisfactory
Main Street	Main Street	Medomak River	MDOT	1968	Satisfactory	Satisfactory	Fair
Wagner Bridge Road	Wagner #1	Medomak River	MDOT	1982	Good	Very Good	Good

Table 13 - Traffic Counts Waldoboro

Road	Count Location	2010	2012	2013
Route 1	W of Route 32	9350	9350	9720
Route 1	E of Route 32	11910	11810	13120
Route 1	E of Jefferson St.	12610		
Route 1	W of Route 220	11490	11400	12450
Route 1	E of Route 220	11290	11040	11690
Route 1	Warren TL	10340	11920	10930
Route 1	E of Route 235	10310		10670
Main St.	W of Route 32			1440
Main St.	W of Jefferson St.			2660
Route 32	S of Route 1	3240	3420	3200
Route 32	N of Route 1	2890	2540	
Route 32	N of N. Nobleboro Road	1790		1810
Route 32	S of Main St.	2300		2340
Finntown Road	E of Route 220	660		710
Jefferson St.	S of Route 1	1890		2080
Jefferson St.	N of Main St.	2200		
Depot St.	N of Route 1	1040		1020
Old Augusta Road	E of Route 220	750		780
Old Augusta Road	W of Route 220	560		600
Manktown Road	N of Route 1	1200	2230	1930
Route 220	N of Route 1	2470	2220	2200
Route 220	S of Route 1	2090	1960	1980
Route 220	S of Finntown Road	1570		1560
Route 220	S of Old Augusta Rd.	1220		
Route 235	N of Route 1	1610		1550

Table 13 indicates that, overall, Average Annual Daily Traffic on selected Waldoboro roads appears to be increasing to varying degrees from a post-recession low-point in 2010. While adverse weather conditions or road work could have some effect on traffic counts, the fact that increases were experienced on most of the roads for which comparable data is available is probably reflective of an improvement in the local and regional economy. As economic conditions continue improve in the future, traffic on state and local roads will likely increase, potentially accelerating surface deterioration.

Table 14 presents traffic counts from permanent MDOT traffic counting stations. They record traffic volumes 24-7 year-round so the AADT at these locations is not estimated but actual trends in Boothbay, the closest station to Waldoboro, are similar to results from other Midcoast locations. Traffic volumes increased through the 1990s and peaked in the mid-2000s. This pattern is statewide, as shown by the trends in vehicle-miles traveled (VMT) during the same period. Statewide VMT peaked in 2005 and had not fully recovered by 2010. The 2010 VMT is

not much different than the 2000 VMT.

Table 14 24/7 Traffic Counts from Midcoast Permanent Counting Stations

Year	Route 27 Boothbay	Route 1 Rockport	Route 3 Trenton	Statewide (billions)
2010	6,540	13,090	13,360	14.5
2005	6,650	13,860	13,640	14.9
2000	6,470	14,500	13,460	14.3
Change 2005-2010	-1.7%	-5.6%	-2.0%	-2.7%

Identify policies and standards for the design, construction and maintenance of public and private roads.

Waldoboro is concerned that all roadways and bridges be well engineered and built to last so that potential damage will be minimized from flooding and adverse weather and vehicular use. Substandard design or construction will result in higher costs to taxpayers and/or subdivision associations for repair and remediation. Road damage from flooding, adverse weather conditions and from use, especially heavy trucking activity, requires that roads be built to appropriate standards, including sufficient sub-bases, drainage systems, and grading. While this may result in higher development costs upfront, in the long-term it will reduce costs for the taxpayers, residents, and business owners, all of whom depend on the road network.

Waldoboro has adopted standards for the design and construction of all public and private roads, road extensions and back lot driveways. Road design standards are presented in Table 15.

Table 15 Waldoboro Street Design Standards

Description	Arterial	Collector	Minor	Industrial/ Commercial ¹	Major Private Street	Intermediate Private Street	Minor Private Street
Minimum Right-of-Way Width	80'	50'	50'	80'	50'	36'	36'
Minimum Traveled Way Width	44'	20'	18'	36'	18'	16'	12'
Sidewalk Width	5'	5'	3'	5'	3'	3'	3'
Minimum Grade	.5%	.5%	.5%	0.5%	.5%	0.5%	0.5%
Maximum Grade	5%	8%	10%	5%	10%	12%	12%
Minimum Centerline Radius	800'	230'	75'	230'	75'	75'	75'
Minimum Tangent between curves of reverse alignment	300'	200'	60'	300'	N/A	60'	60'
Roadway Crown	1/2"ft	1/2"ft	1/2"ft	1/2"ft	N/A	1/2"ft	1/2"ft
Minimum angle of street intersections	90°	90°	75°	90°	75°	75°	75°
Maximum grade within 60 ft of intersection	2%	2%	2%	2%	2%	2%	2%
Minimum curb radii at intersections	30'	20'	15'	20'	N/A	15'	15'
Minimum r/o/w radii at intersections	20'	10'	10'	10'	10'	10'	10'
Minimum width of shoulders (each side)	6'	3'	2'	6'	2'	2'	2'

The road standards require that a professional engineer certify that a proposed public street complies with all applicable street design requirements.

List and locate municipal parking areas including capacity and usage.

Table 16 Public parking Spaces in Waldoboro

<i>Location</i>	<i>Number</i>	<i>Type</i>
<i>Main Street</i>	<i>19</i>	<i>On-street</i>
<i>Waldo Theater</i>		<i>Off-street</i>
<i>Friendship Street</i>		<i>On-street</i>
<i>Pleasant Street</i>	<i>4</i>	<i>On-street</i>
<i>Jefferson Street</i>		<i>On-street</i>
<i>Glidden Street</i>		<i>On-street</i>
<i>Main Street Lot</i>		<i>Off-street</i>

Identify airports within or adjacent to the community and describe applicable airport zoning and airspace protection ordinances in place.

There are no general aviation airports in Waldoboro. The closest airports that serve the community are the Wiscasset Airport and the Knox County Regional Airport. Other airports are the Maine State Airport in Augusta, the Portland International Jetport, and Bangor International Airport. The Augusta, Bangor, Knox County, and Portland airports offer scheduled air service. Various improvements are planned at these airports as part of MDOT's 2015-2017 Work Plan.

(1) Identify bus and van services.

See Section B.9.

(2) Identify existing and proposed marine and rail terminals within your community including potential expansions.

The Rockland Branch, which is owned by the Department of Transportation and operated by the Maine Eastern Railroad, runs through Waldoboro on a route roughly parallel to Route 1. The railroad provides limited freight service from a station located off Water Street in Wiscasset. Seasonal and special event passenger rail service was provided in Wiscasset and Newcastle, but service was terminated in late 2015. Waldoboro historically was served by rail at a passenger depot off Depot Street and a freight siding between Route 220 and the Route 1 overpass. Both facilities were discontinued a number of years ago and there are no plans to re-establish them.

The Waldoboro Environmental Park, an industrial park south of North Nobleboro Road and adjacent to Route 32, has extensive frontage along the rail line as well as land likely suitable for development of a rail siding. Based on analysis in the Route 1 Corridor Management Plan, this is likely the only feasible location for a new rail siding in Lincoln County.

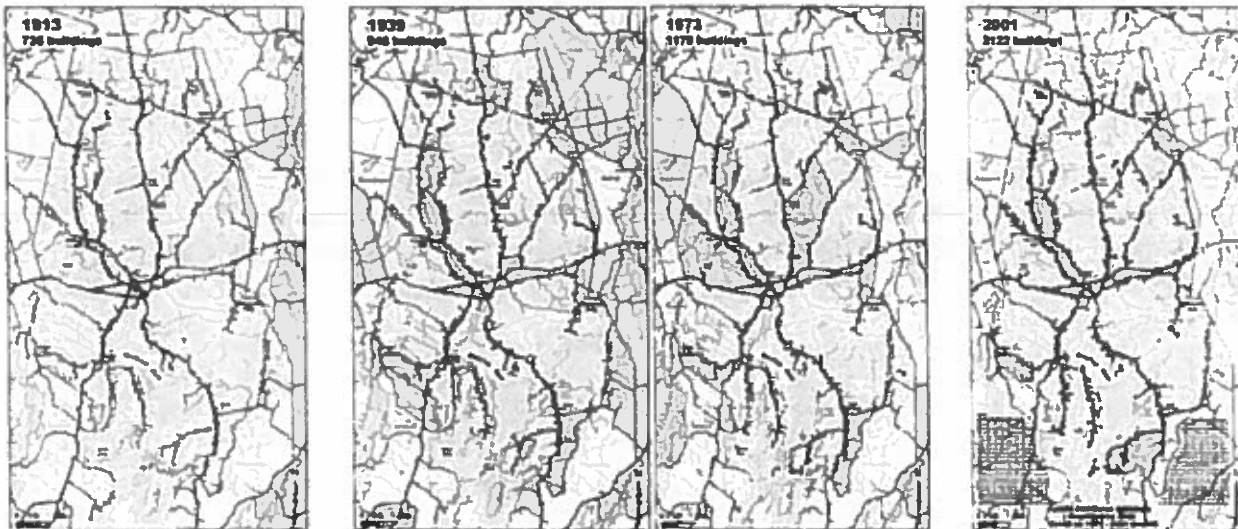
If coastal communities identify public ferry service and private boat transportation support facilities (may be covered under Marine Resources with cross reference) including related water-side (docks/piers/wharves) and land-side (parking) facilities.

There are no ferry services in the community. Pine Street landing serves fishermen and clambers off-loading their catch. It has a ramp and parking for cars, trucks, and trailers. The Town and MDOT will be jointly reconstructing the landing in 2016-2017.

(3) Environmental Impacts of Transportation Facilities

There has been very little development of new public roads in Waldoboro in the past 30-40 years although there have been a number of private roads constructed during this same time period. Most of the private roads serve rural subdivisions although there are also a number of roads providing access to waterfront developments. The History of Growth Maps presented in Figure 7 demonstrate that most recent residential construction has occurred along Waldoboro's public roads outside of the downtown.

**Figure 7 Waldoboro
History of Growth
Maps**



Waldoboro has provisions encouraging open space subdivisions, which can be an effective tool in preserving undivided open space when residential subdivisions are developed and reducing the amount of road construction necessary to support new development, but, as of the writing of this, no open space subdivisions have been developed.

No records are maintained regarding transportation-related wildlife mortality although between 2010 and 2014 collisions with animals represented 8% of all vehicular accidents in Waldoboro. Given the relatively high speeds on many of Waldoboro's rural highways, the lack of roadway lighting, and extensive wooded land and farm fields, this data is not surprising.

Waldoboro's scenic, historic, and cultural resources are important to the community and the Medomak River Land Trust has been instrumental in preserving and protecting important local and state historic resources as well as providing opportunities for residents and visitors to enjoy these resources. Figure 8 presents the community trail and open space network in Waldoboro.

Waldoboro does not specifically exempt from regulation noise generated by transportation activities but it does have regulations that address noise associated with commercial developments. There have been few transportation-related noise complaints over the years.

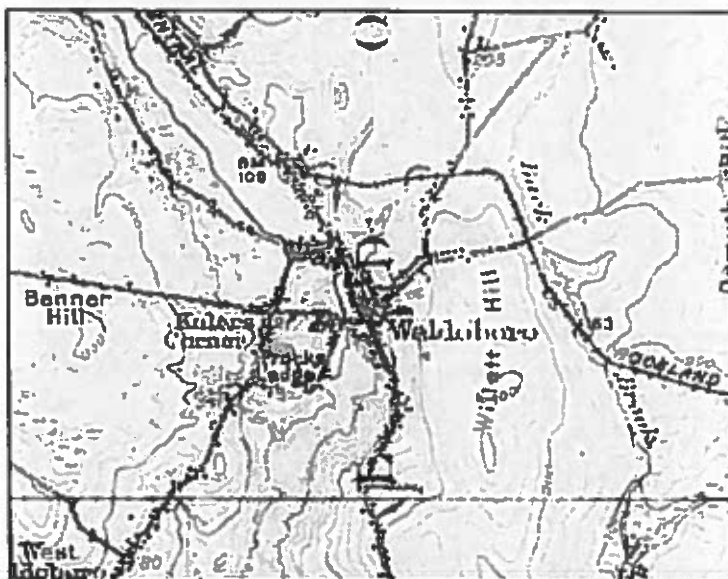
Traffic Control Devices

The only traffic control devices employed in Waldoboro are traffic signals at the Route 1-Route 32 and Route 1-Route 220 intersections as well as stop signs at all intersections and flashing lights near the schools. MDOT has not indicated the need to install additional traffic control devices within the community.

Land Use Districts

Waldoboro has a distinct and well-developed downtown adjacent to the Medomak River. Until Route 1 was relocated in the 1960's all coastal vehicular traffic between Brunswick and Rockland ran through the downtown and there was a wide variety of services available on Main, Jefferson, and Friendship Streets. Figure 9 shows Waldoboro village as it existed in 1915.

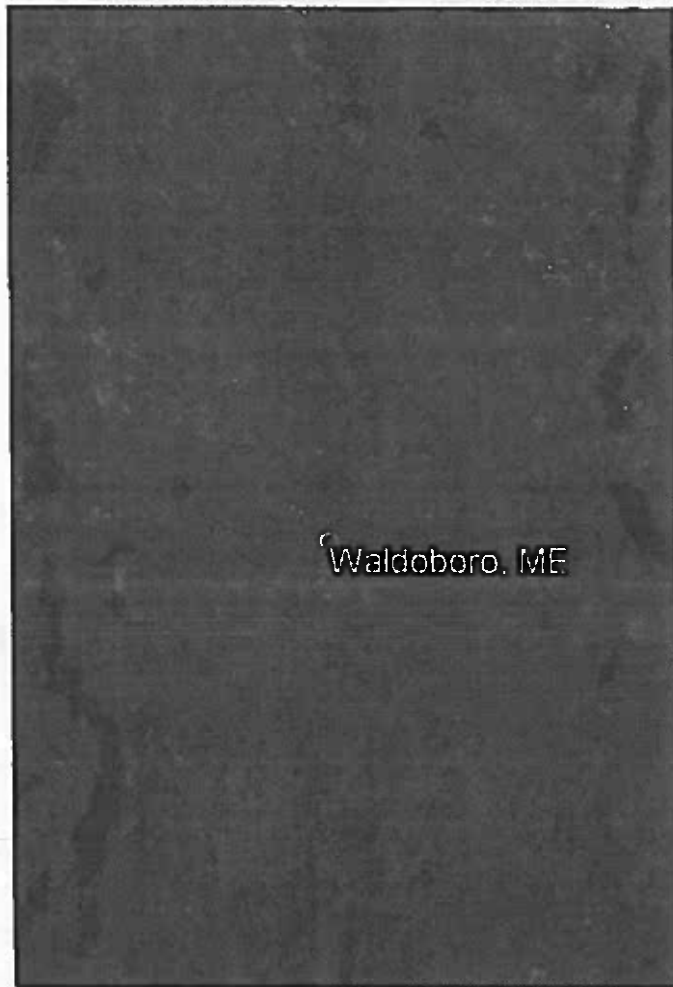
**Figure 9 Waldoboro
Village 1915 USGS
Map**



With the exception of farms in the rural portions of the community almost all residential development in the late 19th century was located in the village or along limited portions of the coastline with very little in the interior of the community. This is typical of fishing and shipbuilding communities, where shipbuilding takes place close to the river, and fishermen prefer to store their boats and gear close to shore.

Beginning in the mid-20th century, and continuing today, new residences have been increasing sited away from the historic village, instead utilizing forested and agricultural land along state and town roadways. As illustrated on the following Google Earth based parcel map of Waldoboro, many parcels with frontage on public roads are very narrow and deep, adversely affecting their suitability for residential subdivisions. This has resulted in the predominate strip residential development pattern illustrated in the History of Growth Maps and which is prevalent along most of the community's rural roads. This development pattern has consequences for traffic safety in that each residential driveway represents a potential point of conflict between vehicles entering or exiting the driveway and vehicles traveling along the adjacent road. Safety can be further impacted if the road is characterized by vertical or horizontal curves that affect sight distance.

**Figure 10 Waldoboro
Parcel Map**



Scenic Byways and Special Views

There are no scenic byways in Waldoboro. Roads with scenic character are identified in Table 5.

The Lincoln County Planning Office, now part of the Lincoln County Regional Planning Commission, the Midcoast Council for Business Development and Planning, now the Midcoast Council of Governments, and MCEDD prepared the 2005 Regional Transportation Assessment with the assistance of MDOT. The purposes of the Assessment included:

- Identification and prioritization of major transportation corridors within the MCEDD region
- Inventory of significant land uses, economic conditions and transportation facilities
- Identification of local and regional concerns related to the corridors
- Identification of significant constituencies such as freight carriers, transit riders, and business and tourism interests

A survey was developed and distributed it to a wide variety of local officials and conducted two forums. The purposes of the forum were to review and comment on the results of the survey, the preliminary prioritization of corridors and objectives of each corridor. The Assessment was based on the following assumptions:

- Maine's population will continue to grow, resulting in more people using the same roads.
- Migration of people from cities to rural areas will continue, resulting in more frequent and longer trips to work and shop.
- Vehicle miles of travel and traffic will continue to grow faster than the population.
- There will be increased traffic delays and congestion.
- Insufficient planning will continue to be a problem. Some municipalities have comprehensive plans that designate growth areas on arterials. Other communities have no long-range plans.
- Public transportation will continue to be absent in many areas.
- Strip commercial development along Route 1 and some other arterials will result in more curb cuts, turning vehicles, reduced speed limits and more accidents.
- BIW and BNAS (since closed) will continue, but, if not, there could be more traffic resulting from any redevelopment of the properties.
- Funds for new road construction will be limited.

The significant transportation corridors identified in the Assessment are, in order of priority:

- Route 1 corridor
- Route 24 corridor
- Route 196 corridor
- Route I-295 corridor
- Route 27 corridor
- Route 32 corridor

The only corridors within Waldoboro are Route 1 and Route 32 north of Route 1.

The following table shows the results of the experiment. The first column is the number of trials, the second column is the number of correct responses, and the third column is the percentage of correct responses. The fourth column is the number of trials that were not completed.

Trial	Correct	Percentage	Not Completed
1	1	100%	0
2	1	100%	0
3	1	100%	0
4	1	100%	0
5	1	100%	0
6	1	100%	0
7	1	100%	0
8	1	100%	0
9	1	100%	0
10	1	100%	0
11	1	100%	0
12	1	100%	0
13	1	100%	0
14	1	100%	0
15	1	100%	0
16	1	100%	0
17	1	100%	0
18	1	100%	0
19	1	100%	0
20	1	100%	0
21	1	100%	0
22	1	100%	0
23	1	100%	0
24	1	100%	0
25	1	100%	0
26	1	100%	0
27	1	100%	0
28	1	100%	0
29	1	100%	0
30	1	100%	0
31	1	100%	0
32	1	100%	0
33	1	100%	0
34	1	100%	0
35	1	100%	0
36	1	100%	0
37	1	100%	0
38	1	100%	0
39	1	100%	0
40	1	100%	0
41	1	100%	0
42	1	100%	0
43	1	100%	0
44	1	100%	0
45	1	100%	0
46	1	100%	0
47	1	100%	0
48	1	100%	0
49	1	100%	0
50	1	100%	0
51	1	100%	0
52	1	100%	0
53	1	100%	0
54	1	100%	0
55	1	100%	0
56	1	100%	0
57	1	100%	0
58	1	100%	0
59	1	100%	0
60	1	100%	0
61	1	100%	0
62	1	100%	0
63	1	100%	0
64	1	100%	0
65	1	100%	0
66	1	100%	0
67	1	100%	0
68	1	100%	0
69	1	100%	0
70	1	100%	0
71	1	100%	0
72	1	100%	0
73	1	100%	0
74	1	100%	0
75	1	100%	0
76	1	100%	0
77	1	100%	0
78	1	100%	0
79	1	100%	0
80	1	100%	0
81	1	100%	0
82	1	100%	0
83	1	100%	0
84	1	100%	0
85	1	100%	0
86	1	100%	0
87	1	100%	0
88	1	100%	0
89	1	100%	0
90	1	100%	0
91	1	100%	0
92	1	100%	0
93	1	100%	0
94	1	100%	0
95	1	100%	0
96	1	100%	0
97	1	100%	0
98	1	100%	0
99	1	100%	0
100	1	100%	0

BIOLOGICAL DIVERSITY AND NATURAL RESOURCES

Geologic Overview

About 700 million years ago, a long, narrow belt of active volcanoes extended from present-day Newfoundland to Alabama and included parts of coastal Maine. As the volcanic mountains eroded, an apron of sediments was deposited at their base. These sediments were then compressed into a thick belt of metamorphic rock formations, known as the Casco Bay Group, that extends from Saco northeastward to the vicinity of Belfast.

Around 300 million years ago, in the early Devonian period, another major period of upheaval and volcanic activity occurred that dramatically altered the face of Maine. Beneath the surface, the sedimentary rocks of the Casco Bay Group were recrystallized (metamorphosed) into harder schists, gneisses, and quartzites. Deeply depressed sediments began to melt, forming larger quantities of magma that intruded under great pressure into the metamorphic rocks, squeezing into joints, cracks and crevices. As the magma gradually cooled and crystallized, huge masses of granite were formed, along with relatively small amounts of pegmatite rock, with its larger crystals of quartz, feldspar, and gem minerals, such as garnets and tourmaline.

These huge plutons of granite rock, including a large mass known as the Waldoboro Pluton Complex, which underlies much of the Medomak watershed, were then located several miles beneath the surface. As millions of years passed, rock and overburden were eroded and carved by rivers, revealing the granitic bedrock that is so ubiquitous in Maine today. While general landforms can be attributed to bedrock geology, the landscape that we see today has been sculpted by the series of glaciers that have advanced across Maine every 100,000 years or so for the past 2.5 million years. The "drowned" coastline of Muscongus Bay and the marine clays and veneer of gravelly till that carpet the land are the handiwork of the last glacier, which covered all of Maine with a mile of ice about 25,000 years ago. By 21,000 years ago, the edge of the ice extended out to the present continental shelf at Georges bank, which was dry land at the time because such vast quantities of the earth's water were tied up as ice. By 13,000 years ago, the glacier had receded to a position north of Waldoboro. Because the weight of the glacier had depressed the earth's crust nearly 400 feet below its present elevation, lowland areas were flooded by marine waters from the Gulf of Maine even as the earth's crust began to rebound.

Meltwater from the glacier deposited stratified sands and gravels into glacial landforms, such as moraines, eskers, and outwash plains. In the southern half of the watershed, till was deposited as a series of washboard moraines. Washboard moraines are clusters of regularly spaced, crescent shaped ridges that range from five (5) to 15 feet in height. These moraines, which appear to march across the landscape, are readily visible from the air. They are responsible for the rough hummocky terrain that is typical in the lower watershed. The most notable glacial deposit in the Medomak watershed is an old glacial lake delta that extends from the settlement of Globe to Medomak Pond. This delta provides material for the extensive Globe gravel pits.

At lower elevations, clays and silts were transported to the ocean, where they settled to form extensive deposits of glaciomarine clay, known as the Presumpscot Formation. As the ice melted, the land began to rebound. By about 12,000 years ago, most of coastal Maine had emerged from the sea. Today, the blue-gray clays of the Presumpscot Formation are found at elevations as high as 300 feet above sea level. Even so, the land is still depressed about a hundred feet below its pre-glacial elevation.

Water Resources

The Medomak River and Estuary

The Medomak River and Estuary are located in Midcoast Maine, between the St. George River Valley to the east and the valleys of the Damariscotta and Pemaquid Rivers to the west. As the crow flies, the center of the Medomak watershed is located about 50 miles from both Portland and Mount Desert Island. From its headwaters in Liberty, Appleton, and Searsmont, the Medomak flows in a southerly direction for just over thirty miles before reaching the head of tide in the Town of Waldoboro. The estuary, which includes water that is measurably diluted by salt water, extends for another nine miles and eventually merges with the more saline waters of Muscongus Bay. Together, the tributaries that feed into the river, its estuary and western Muscongus Bay drain portions of 13 towns including Appleton, Bremen, Bristol, Cushing, Friendship, Jefferson, Liberty, Nobleboro, Searsmont, Union, Waldoboro, Warren, and Washington. With its 14 ponds and lakes, 65 coastal islands, and dry ledges, the Medomak River watershed encompasses about 90,000 acres.

Approximately 71% of the Town of Waldoboro, or 33,033 acres, lies within the Medomak River watershed. The Town of Waldoboro thus accounts for about 37% of the watershed. The Medomak River meanders through a broad valley, falling gently at the rate of about 20 feet per mile. The width of the watershed varies from about seven miles at its northern boundary to only about 2.6 miles near Orff's Corner.

The headwaters of the Medomak include Medomak Stream, Fish Brook, Pettingill Stream, and their tributaries. These are joined by Little Medomak Brook, which flows out of Washington Pond, the largest lake in the watershed. Below its confluence with the Little Medomak, the river widens and meanders across an old glacial lake delta that surrounds Medomak Pond.

From Medomak Pond to Winslows Mills, the river is characterized by long winding stretches of deadwater, which are interrupted by short riffles and three rapids. Below Winslows Mills, the river alternates between riffles and deep pools and then slows to deadwater for the last two miles before the rapids and falls between Route 1 and tidewater. The average width of the river in this section is 75 feet.

From (Winslows Mills), the river winds its way to Waldoboro (village), where it cascades over a series of falls and ledges (falling), 15 feet over a distance of about 100 feet. The average flow near the river's mouth is low, averaging less than 100 cubic feet per second, and it varies with the season. During winter thaws and the spring freshet, more than ten times the average volume of water courses through the river channel, and during the summer months, volumes of less than 50 cubic feet per second are typical. There are 18 dams with visible remains left on the Medomak and its tributaries. All have been breached.

The Medomak River, and to a lesser extent the Goose River, which forms the boundary between Waldoboro and Friendship, are the major sources of freshwater to the estuary. The estuarine/marine boundary for the Medomak is delineated by a line that extends from the north end of Hungry Island to the southern end of Jones Neck and across to Keene Neck at the north end of Hockomock Channel. Most of the estuary is well mixed, with low salinities only at the head of tide.

Marine Economy

Fishing and clamming are important to Waldoboro's economy. Equally important is the extent to which the Town has been active in managing the quality of the Medomak River and estuary, as well as fish and clam populations. The following is a brief summary of these efforts which began in 1990.

The Department of Marine Resources closed 70% of the Town's clam flats because of contamination from sewage. The Selectmen re-activated the Conservation Commission and charged it with the responsibilities of monitoring and improving the quality of the Medomak River. The Commission was also tasked with identifying sources of pollution and working with appropriate agencies to eliminate pollution sources. The Board of Selectmen appropriated funds for laboratory testing equipment, and a water quality testing laboratory was established in the old Friendship Street School. The Conservation Commission identified several pollution sources, including leakage from the sanitary sewer into the storm sewer system. The Town applied for and received several grants to help address pollution problems. Initiatives of the Waldoboro Alewife Project included stocking 750 alewives into Kaler Pond and 300 into Storer Pond, and research into hatching and releasing shad into the Medomak River.

The Conservation Commission established baseline information for the continued efforts to monitor the quality of the River, and increased bi-weekly tests from 12 sites to over 40 sites on the River. The Commission worked with the Code Enforcement Officer to conduct a septic system survey and correct a number of malfunctioning systems. The Commission identified three major sources of pollution, including a defective section of the municipal sewer on Main Street, and discharges from two mobile home parks. The system at one of the parks was corrected, and an engineering study was prepared for the second park. A number of high school students participated in water quality monitoring efforts. In terms of fisheries, 450 alewives were stocked into Kaler Pond. With donations from several businesses and funds from the Lloyd Davis Fish Trust, the Town's fish agents purchased a small hatchery system, as well as 300,000 fertilized shad eggs. While the eggs hatched and were transferred to rearing ponds, the fry did not survive.

The Commission worked with the Department of Marine Resources and successfully persuaded officials to conditionally open the remaining clam flats. The Town enacted a Shellfish Ordinance and hired a Code Enforcement Officer to enforce it.

The Sewer District completed the replacement of the faulty downtown sewer lines. The Conservation Commission continued its water quality monitoring program in cooperation with High School students. The Commission continued its septic system survey with the Code Enforcement Officer, and the Town continued to administer a program of grants and loans to assist homeowners who were financially eligible for repair or replacement of their systems. The Maine Legislature reclassified the Medomak River above the Wagner Bridge to "Class A." The Shellfish Committee issued 208 commercial licenses, including 173 resident licenses and 35 non-resident licenses. The Committee also issued 246 resident and 23 non-resident recreational licenses.

By a vote of 717 to 237, in 1995, the Town voted to maintain the Shellfish Ordinance with a number of changes. The Shellfish Conservation Committee planted approximately one million seed clams at Stahls Bar. The Committee also acquired a "tidal upweller" from Brunswick, which was repaired and floated down river off "Arthur's Cove" to start the process of growing an additional four million seeds.

The long-term outcome of these efforts has been an ongoing spirit of cooperation between the Town of Waldoboro, the Department of Marine Resources, and other State Agencies to work on ways to improve water quality, remove pollution sources, and open clam flats to harvesting. The Waldoboro Shell Fish Committee has led the Town's effort in this work and is continuing to identify ways to improve shell fishing in the Medomak River.

Medomak River Estuary- Economic Importance

The Medomak River and its estuary is perhaps the most important economic resource of the community, but the estuary is currently underutilized as a community resource. It has great potential for recreation and aquaculture if water quality can be maintained. Mussels and oysters could be grown in the deeper water, as in Damariscotta. If the sewage treatment plant is moved away from the river, the clam flats immediately below it could be opened to harvesting; they are now required to be closed for a certain number of feet, in case of malfunction. However, moving the treatment plant may not necessarily result in the opening of all presently closed clam flats. Osram Sylvania still discharges to the river, and non-point source pollution can result in the closure of clam flats.

Currently, there is no centralized marketing effort. There is a large market for clams in distant locations (e.g. clams cost about \$300/bushel in Chicago) if the transportation problem can be solved.

The Shellfish Committee wants to encourage recreational use of the River. In 1993, new navigational buoys were placed in the upper estuary for the first time. The Coast Guard sets the buoys in June and removes them in November because of ice. Committee members feel that Waldoboro may need a harbormaster if boating increases. The Shellfish Committee has obtained a design and cost estimate (\$14,858) from Prock Marine for a ramp and float at the village Town landing for use by recreational boaters as well as clambers.

The river offers the potential for aquaculture and possibly sightseeing tours. Recreational boaters could use local restaurants and bed and breakfast establishments. The scenic qualities of the river could attract business offices to locations within the village.

Within the past years, catching elvers (baby eels) has grown into a large seasonal industry. In the past, fishermen have attached nets to the Town landing bulkhead and Storer's to catch the elvers, and this has obstructed navigation and other uses of the new bulkhead. The large number of elver fishermen, fishing day and night for three months, impacts the congested village and residential areas near the head of tide in several ways: increased traffic flow, parking problems, erosion of river banks, and noise in a quiet residential area. Additionally, the environmental impact on the river itself, its fish and wildlife, remains to be seen. The Town should have some degree of control over the fishery.

Ponds

There are five great ponds in Waldoboro lying totally within the corporate limits of the Town (Kalers pond, Little Medomak (Storers) Pond, Medomak Pond, Peters (Gross) Pond, and Sidensparker Pond) and four which lie partially in Waldoboro (Duckpuddle Pond, Havener Pond, Pemaquid Pond, and Tobias Pond). There are a number of ponds less than 10 acres in size, one of which is Jones Neck Ice Pond (5 acres).

The most striking feature of the ponds is the lack of development along their shorelines. This can be attributed in part to large stretches of swampy and marshy shore along many ponds. Much of the shoreline of Medomak Pond, for example, is active floodplain. It is also remarkable that only Medomak Pond has public access. The lack of access may contribute to the relatively pristine condition [of the remaining ponds]. Table 4-3 contains a summary of major characteristics of Waldoboro's nine great ponds.

Major characteristics of lakes and ponds in Waldoboro

Ponds Located Totally Within Waldoboro:

<i>Pond</i>	<i>Acreage</i>	<i>Depth Max ft.</i>	<i>Shoreline Feet</i>	<i># of shoreline Structures</i>	<i>Public Access</i>	<i>Drainage area Acres</i>	<i>% of drainage area in Town</i>
<i>Kalers</i>	87	12	6,864	4	None	365	100%
<i>Stores</i>	75	26	7,392	1	None	610	81.7%
<i>Medomak</i>	237	25	15,000	6	Boat launch	1,734	5.7%
<i>Peter's</i>	12	59	3,000	None	None	n/a	n/a
<i>Sidensparker</i>						936	17.3%

Ponds Located Partially Within Waldoboro

<i>Pond</i>	<i>Acreage</i>	<i>Depth Max ft.</i>	<i>Shoreline Feet</i>	<i># of shoreline Structures</i>	<i>Public Access</i>	<i>Drainage area Acres</i>	<i>% of drainage area in Town</i>
<i>Duckpuddle</i>	242	23				3,575	71.8%
<i>Havener</i>	98	12	8,400	2	None	383	41%
<i>Pemaquid</i>	1440	61				420	7%
<i>Tobias</i>						22	12.1%

Source: The Medomak River Watershed, a Natural Resource Inventory, Medomak Valley Land Trust, 1994, and Department of Environmental Protection.

Water Quality

Need to update

Medomak Pond

The second aquifer straddles the Waldoboro/ Warren line (the bulk of the aquifer is located in Warren and encompasses the site of the Warren solid waste facility). The portion lying in Waldoboro is roughly located in the area between the Old Augusta Road and Route 235, extending into Waldoboro about 3/4 of a mile from the Waldoboro/ Warren line. Within the Waldoboro portion, depth to water table is about 50 feet and the depth of the deposit ranges between eight (8) and 25 feet. There are three gravel pits located in the Waldoboro portion of this aquifer. The third aquifer is located just south of Havener Pond along the Goose River near the Waldoboro/Friendship/Warren lines. The aquifer is located primarily in Waldoboro, but extends into a portion of Friendship. There are three gravel pits located in the Waldoboro portion of the aquifer. No other data is available.

While not on the Maine Geological Survey's maps, a report prepared by a geologist identified a gravel aquifer, which runs along the Medomak river on the east side in the Winslows Mills area, crosses the river, then runs along the west side. The engineers for the water system study identified this aquifer as a potential location for a new water system well, and suggested a well location near the Lincoln County Fish and Game building. A very high capacity well at the former Medomak Canning Company presumably taps into this formation.

A bedrock aquifer map is not available for Waldoboro. The nature of the bedrock ground water resource is complicated by the nature of ground water flow through crystalline bedrock. This flow is controlled by the distribution and characteristics of brittle fractures in the bedrock. Brittle fracture systems cannot be mapped as easily as coarse sand and gravel deposits present at or near the surface. Estimating the hydraulic properties of brittle fracture systems is also difficult. At the present time, the Maine Geological Survey's bedrock ground water resources program primarily involves collecting, analyzing and publishing information on bedrock wells drilled by commercial well drillers.

Based on the Bedrock Ground Water Resources Basic Data Map- Well Yields, there are a large number of commercially drilled bedrock wells located throughout Waldoboro with yields ranging from 10 gallons to more than 50 gallons per minute.

Flood Plains

The floodplains of the Medomak River watershed from its headwaters to Winslows Mills are currently undeveloped, and thus serve to store excess water during flood events, thereby minimizing damage to downstream properties.

The Federal Emergency Management Agency (FEMA) prepared a Flood Insurance Study for the Town of Waldoboro, which was published in 1984. The Medomak River and Little Medomak Pond Outlet Stream, Medomak Pond and Little Medomak Pond were studied by detailed methods. Approximate methods of analysis were used to study the tidal flats, Alford Brook, Benner Brook, Levensaler Brook, Back Brook, Demuth Brook, Waterman Brook, the Goose River, and numerous unnamed streams

According to the study, the land within the Medomak River watershed is approximately 75% forest land, 21% open land, 3% water area, and 1% urban. Flooding within Waldoboro occurs most frequently in early spring when heavy rains on snow covered or frozen grounds produces greater than normal runoff. One of the more recent floods occurred in March, 1977, when more than four inches of rain fell on snow covered ground and resulted in general high-water conditions throughout the area. The most serious flooding occurred at the Route 1 bridge over the Medomak River. Ice and floodwaters damaged the bridge deck, causing traffic to be re-routed through the village center. Flooding also occurred on Route 32 and at a mobile home park where several mobile homes had to be evacuated. The picnic area immediately downstream of Route 1 was flooded to a depth of approximately two feet. A number of business parking lots were also flooded. Based on high-water marks in the study area, the recurrence interval of this flood was estimated to be approximately 25-years.

Biological Diversity & Resources

Biological diversity can be defined as the variety of life in all its forms - from genes and species to communities and ecosystems. Although we have no way of knowing how many species were lost or displaced when the forests were first cleared for farmland in the 1880s, the Medomak watershed appears to support a diverse and healthy native flora and fauna. Many forest species that were locally extirpated, such as moose, bear and beaver, have returned. Coastal water bird populations, such as eiders, herons, gulls, and cormorants, have rebounded. Game species are generally plentiful, and other species have expanded their ranges northward or eastward into Midcoast Maine, such as mockingbirds, cardinals, turkey vultures, coyotes, and opossums.

A natural community can be defined as the plants and animals of a particular environment, such as a red maple swamp, salt marsh, or headwater stream. The watershed is also diverse at the natural community level. It is likely that one quarter of the 120+ natural communities that have been described for Maine occur in the Medomak watershed including upland communities, such as spruce fir forests and acidic balds; wetlands, such as red maple swamps and freshwater marshes; marine habitats, such as the rocky shore; mudflats and sand beaches; and a variety of stream and lake types.

The valley landscape is, for the most part, unfragmented. A close look at property ownership patterns shows that more than 90% of the watershed is composed of lots that are greater than 20-acres in size, and most of these are contiguous. Small lots are, for the most part, restricted to the village centers, or are found along the major roads between towns. Based on aerial photo interpretation, more than 80% of the riparian corridor along both fresh and salt water appears to be forested and undeveloped. This stands in stark contrast to the situation nationwide, where more than 80% of the riparian corridor area has been developed or cleared during the last 200 years.

The availability of high-quality habitat for plants, animals, and fish is essential to maintaining abundant and diverse populations for both ecological, economic, and recreational purposes. Waldoboro is home to many plant and animal resources, including several rare species, Significant Wildlife Habitats such as Inland Waterfowl and Wading Bird Habitat and Deer Wintering Areas, and exemplary natural communities. Beginning with Habitat (BwH), a collaborative program of federal, state and local agencies, and non-governmental organizations, is a habitat-based approach to conserving wildlife and plant habitat on a landscape scale. The goal of the program is to maintain sufficient habitat to support all native plant and animal species currently breeding in Maine. BwH compiles habitat information from multiple sources, integrates it into one package, and makes it accessible to towns, land trusts, conservation organizations and others to use proactively.

Focus Areas of Statewide Ecological Significance

Beginning with Habitat (BwH) Focus Areas are landscape scale areas that contain exceptionally rich concentrations of at-risk species and natural communities and high-quality common natural communities, significant wildlife habitats, and their intersection with large blocks of undeveloped habitat. These non-regulatory areas are intended as a planning tool for landowners, conservation entities, and towns. BwH Focus Areas, unlike some other habitat values, are tied to specific environmental settings and are not geographically transferable. These thus warrant place-specific conservation attention through a variety of methods ranging from conservation acquisition to focused implementation of best management practices. Waldoboro contains about 550-acres in and around Sidensparker Pond of the 9000-acre St. Georges River and Associated Ponds Focus Area, of statewide significance for assemblage of rare plants, invertebrates, and natural communities.

Wetlands

Wetlands cover substantial areas of Waldoboro. These areas serve important ecological, aesthetic, and practical functions. Because of their ability to absorb large amounts of water, wetlands act as catchment areas, containing excessive amounts of water during flood conditions. As a result, wetlands serve to reduce the level of flood crests and minimize flood destructiveness by reducing erosion. Wetlands release their water slowly into the soil, bedrock, and/or surface waters, thus recharging the water table.

Wetlands also play a critical role as natural water treatment systems. They trap sediments that are washed into them from the air and land, and help purify polluted runoff. Wetlands are among the most biologically diverse and productive ecosystems. Wetlands support rich diversity of plants and animals, some of which are relatively rare. They are critical nesting, feeding and resting areas for birds, and act as nurseries for fish. They are important sources of food for many species, and may contain unique, scientifically significant areas.

There are literally thousands of wetlands in the Medomak River watershed, ranging in size from a fraction of an acre to nearly one thousand acres. Based on the National Wetlands Inventory, which has documented all wetlands greater than an acre in size, about 10% of the watershed is composed of wetlands. (The Medomak Valley Land Trust, McMahon 1994) has identified ten different wetland community types, including hardwood floodplain forest, red maple swamp, northern white cedar swamp, spruce swamp, forested bog, dwarf shrub bog, beaver flowage, shrub swamp, sedge meadow, and vernal pool. Most of the larger wetlands are actually assemblages of several community types and are typically associated with the floodplains of streams and ponds. Small, one- or two-acre swamps and marshes are found wherever topographic depressions occur over poorly drained soils. Perhaps the most ubiquitous and overlooked wetland type in the watershed is the vernal pool. These ephemeral wetlands, which are only a fraction of an acre in size, dot upland forests in the spring and provide critical breeding habitat for frogs, salamanders, and turtles. Vernal pools were not included on the National Wetland Inventory maps because they are generally too small to be detected in aerial photographs. Three of the five largest wetlands in the watershed are located in whole or in part in Waldoboro.

The wetlands are remarkably intact and include:

Medomak Pond to Rice Heath (partially in Waldoboro, but mostly in Washington)

This is the largest wetland complex in the watershed, measuring more than 990-acres in size. It includes the northern shoreline of Medomak Pond, a hardwood floodplain forest, red maple swamps, spruce swamps, open meadows, alder

and willows, and bog. The Maine Department of Inland Fisheries and Wildlife has identified high value areas for deer and waterfowl within this system. The Maine Natural Areas Program (MNAP), within the Department of Agriculture, Conservation and Forestry has identified an exemplary Appalachian-Acadian Basin Swamp Ecosystem here, and about 65 acres of this nearly 590-acre ecosystem are within Waldoboro. In addition, MNAP has identified an exemplary Bulrush Bed along the southern and western shorelines of Medomak Pond.

Wetlands west of Peter's Pond

This approximately 150-acre wetland complex occurs in a steep-sided basin and includes a bog at its center, surrounded by swamps of tamarack and spruce.

Goose River Floodplain (located in Waldoboro and Friendship)

This approximately 500-acre wetland contains the watershed's most extensive example of a red maple swamp community, which has been identified as an exemplary occurrence by MNAP because of its good condition and typical diversity. There are also pockets of spruce, cedar and tamarack, shrub swamp, and open meadow. It provides wintering habitat for deer, as well as habitat for waterfowl. Approximately 50 acres are within Waldoboro.

A generalized description of the marine, subtidal and intertidal habitats of the watershed follows:

Marine Habitats

The diversity and distribution of plants and animals of marine and estuarine ecosystems are strongly influenced by physical parameters, such as substrate, waves, currents, salinity, depth, tidal regime, and temperature. 59 different marine and estuarine habitats in Maine, ranging from exposed rocky shore to mud and sand flats to shallow channels and salt marshes. Although an inventory has not been conducted in the Medomak Estuary and Muscongus Bay, a series of maps of coastal marine geologic environments suggest that more than 50 of these habitat types occur in the watershed.

Subtidal habitats

Within the estuary and bay, the bottom can be classified into four types: rock, gravel, sand and mud. Near shoals, around offshore islands, and just below the low tide line, the bottom is rock. These rocks are typically covered by many species of red, brown, and green algae, and usually a forest of large kelps. In the deeper channels, where the tidal current is strong like the Hockomock Channel, the bottom consists of loose gravel and shell fragments, with virtually no algae. Sand bottoms are relatively rare. Most of the floor in the upper part of the bay is covered by fine, black mud.

Eelgrass (*Zostera Marina*) beds on muddy substrates are common throughout the estuary and bay. The most extensive beds occur off the public landing at Dutch Neck, between Sampson Cove and Long Cove, and in Hatchet Cove. Eelgrass beds are thought to provide important spawning grounds and nursery areas for a variety of fish and marine invertebrate species. As a result, special protection has been recommended for this habitat type in a number of Atlantic seaboard states. The functional role of eelgrass beds in Maine has not been studied.

Intertidal Habitats

The shoreline of most of the estuary above The Narrows can be classified as low energy rock shore. As one travels toward Pemaquid Point and the islands offshore, exposure to wind and waves increases, producing the classic zonation

of the high energy rocky shore (an upper splash zone of blue-green algae, a periwinkle zone, a barnacle zone, and a rockweed zone). The most conspicuous habitats in the lower watershed are the mudflats that are exposed at low tide. There are nearly 2,000-acres of mudflats in the estuary and western Muscongus Bay, with more than 700 acres in Waldoboro alone. As of 1993, most of this acreage was open to clamming, except during periods of high runoff when bacteria counts typically exceed healthy levels.

The influence of humans on marine habitats is difficult to evaluate, since there is no baseline that describes original species composition and abundances. In spite of this, there is no doubt that many benthic habitats in the watershed have been greatly altered. The greatest threats to their biological diversity appear to be related to over-harvesting, rather than land-based sources of pollution. For example, kelp and rockweed are often taken for commercial purposes, yet little is known about the effects of the taking of these and other seaweeds on associated species. Clam and baitworm digging is so extensive that finding an undisturbed mudflat community is virtually impossible (Brown, in press). Large portions of the bottom in Muscongus Bay are regularly dredged or trawled, primarily for urchins and scallops. As a result, we have little idea what a natural, undisturbed subtidal community looks like.

Inland Fisheries.

Inland fisheries are freshwater habitats, such as streams, rivers, lakes, and ponds, with existing or potential value to fish. These habitats are considered areas of special concern because of their importance as recreational or economic resources to the State.

Aquatic habitats are also some of the most sensitive and vulnerable. Land use activities that directly affect water quality can significantly alter or destroy the value of these areas for fish. Land clearing or development in the adjacent upland habitat, or "riparian" zone," can also degrade fisheries. Riparian habitat functions to protect water quality and fisheries values by filtering out excessive nutrients, sediments, or other pollutants leaching in from upland areas, by maintaining water temperatures suitable for aquatic life, and by contributing vegetation and invertebrates to the food base. Riparian habitat is also important as cover for the many species of wildlife attracted to aquatic systems, and serves as a protective travel corridor for movement between undeveloped tracts of land. MDIFW has identified 23 inland fisheries in Waldoboro (see Table 4-4). Only one of these, the Medomak River, has been identified as a high value habitat area. Moderate value fisheries include Kalers Pond, Little Medomak Pond, Medomak Pond, Peters Pond, Sidensparker Pond, Havener Pond, and Little Medomak Pond Outlet. The remaining fisheries have not been rated.

Deer Wintering Areas.

Winter has long been considered a bottleneck for survival of white-tailed deer in the northeast. During winter, deer in northern climates often subsist on limited quantities of low-quality foods, while simultaneously coping with low temperatures, chilling winds, and higher energy requirements. When confronted with these conditions, deer must produce more heat to stay warm and they must conserve energy to survive. In Maine, studies indicate that mortality of deer can exceed 35% of the wintering herd during severe winters. Frequent severe winters or marginal winter habitat may reduce a deer population to a small fraction of its summer potential.

The primary behavioral mechanism for deer to conserve energy during winter is to move to traditional wintering areas or "yards." These wintering areas provide deer with shelter from radiant heat loss as well as improved mobility in snow. The softwood canopy in a deer yard moderates the effects of winter by maintaining warmer than average temperatures and by reducing wind velocities. The softwood cover also intercepts much of the snowfall and ground accumulations become firmly packed. This makes travelling much easier for deer and decreases their energy demands. MDIFW has identified 15 deer wintering areas in Waldoboro. These have all been assigned an "indeterminate" value by MDIFW, which means they have not been formally surveyed under wintering conditions.

Inland Waterfowl and Wading Bird Habitat.

Aquatic habitats, such as fresh and saltwater marshes, bogs, wet meadows, seasonal vernal pools, shallow lakes and ponds, wooded swamps, and tidal flats, are very important to a wide variety of fish and wildlife. Many species of birds, mammals, reptiles, amphibians, fishes, and invertebrates spend part or all of their life cycles tied directly to these areas. Waterfowl, wading birds, songbirds, shorebirds, seabirds, and raptors are just some of the different kinds of birds using wetlands for nesting and feeding. Small and large mammals, including muskrat, beaver, mink, otter, moose and deer, are attracted to these areas because of the availability and abundance of food and cover.

These areas are also extremely important habitats for reptiles and amphibians, such as frogs, toads, salamanders, snakes, and turtles. A rich fauna of aquatic invertebrates and fish species, in addition to aquatic vegetation, provides an essential food base in aquatic systems. Coastal salt marshes and tidal flats are important habitat for commonly sought shell and fin fish worth millions annually to Maine fishermen.

MDIFW has identified 44 waterfowl and wading bird habitat areas in Waldoboro. Two of these, the north end of Duckpuddle Pond and the area between Duckpuddle Pond and Pemaquid Pond, are considered high value areas .

Tidal Waterfowl and Wading Bird Habitats.

Tidal Waterfowl and Wading Bird Habitats have been identified by MDIFW as important habitat for wildlife in Maine's coastal waters. These areas are special because of the abundance and diversity of wildlife they support, and also because of their importance to rare species. Many different kinds of birds and several different kinds of marine mammals are commonly found in coastal waters during part or all of their life cycles. Waterfowl, wading birds, shore birds, seabirds, ospreys, loons, bald eagles, and seals are just some of the wildlife depending on Maine's coastline for feeding, resting, wintering, breeding, and migration habitat.

These habitats offering an abundance of food or protection from weather and predators often support large numbers of marine birds and seals. These concentrations of one or many species are indicators of an area's importance to wildlife.

MDIFW has identified five tidal waterfowl and wading bird habitats in Waldoboro including the Medomak River (Class A), Broad Cove (Class A), Back River (Class C), Jones Neck (Class C), and Goose River (Class C).

Seal Haul-Outs

Maine has the largest population of harbor seals on the Atlantic Coast, and supports the only significant breeding population in the Eastern United States. Gray seals, which are much larger than harbor seals, are uncommon, but regular visitors, to Maine, and usually are found around remote offshore ledges and islands. Gray seals are known to breed in Muscongus Bay. Although pups are occasionally seen, they have probably dispersed from birth places around Sable Island or the Gulf of St. Lawrence in Eastern Canada.

Populations of both species were severely depleted by overharvesting throughout the middle of this century, but have increased dramatically during the past 20 years in response to protective legislation. Maine's population of harbor seals has more than doubled since 1973 to an estimated 13,000 plus animals in 1986.

Seal haul-outs are ledges, beaches, and coastal islands traditionally used by seals for pupping and resting. These sites are necessary for the survival of both adults and young. Whelping or pupping sites are used from year to year by the same breeding females, many of which were probably born on these ledges. Direct access to high quality feeding areas, and lack of human disturbance, are important characteristics of seal haul-outs.

Reptiles and Amphibians

According to Hunter et.al, which documents presence and absence of amphibian and reptile species by town, the following 20 species have been documented in the towns of the watershed, and at least 5 other species listed as "probable" are likely to occur here.

Species that have been formally documented in one or more watershed towns, such as blue-spotted salamanders and gray treefrogs, are likely to be widespread throughout the watershed. However, statewide trends suggest that populations of many formerly abundant species, such as the leopard frog and snapping turtle, may be declining. Explanations range from habitat loss, filling of wetlands and vernal pools, more and more road kills as the density of roads and traffic increase, and atmospheric pollutants, such as ozone and acid rain. The status of the amphibian and reptile populations in the Medomak watershed is unknown.

Freshwater, anadromous, and catadromous fish

A variety of warm and cold water fish inhabit the Medomak River watershed. Storer Pond supports both warm and cold-water species. The remaining ponds are inhabited by warm water species, such as yellow perch, chain pickerel, and largemouth bass. Also, of significance is the Medomak River alewife fishery, which ranks fifteenth in the State (Sam Chapman, personal communication). The river also supports a winter smelt fishery and runs of American eel and sea run brown trout.

The spring smelt run occurs between April and early May. Streams supporting spring runs of rainbow smelt include German Cemetery Brook, Slaigo Brook, and Farnsworth Brook and the Goose River.

Rare and Exemplary Botanical Features

The MNAP, within the Department of Agriculture, Conservation and Forestry, documents rare, threatened, or endangered plant species along with rare and exemplary natural community. In addition to the exemplary Appalachian-Acadian Basin Swamp Ecosystem along the Medomak River north of Medomak Pond, the Bulrush Bed at Medomak Poond, and the Friendship Red Maple Swamp, Waldoboro includes two rare Salt-hay Saltmarshes. The larger of these is along the Medomak River south of the head of tide in the village and is largely low marsh dominated by saltwater cordgrass, with high marsh areas dominated by salt meadow cordgrass, black-grass, and transitional areas dominated by alkali bulrush, chaffy sedge, and fresh-water cordgrass. A slightly smaller Salt-hay Saltmarsh is at Broad Cove along the Eastern Branch and mouth of Western Brook and has similar zonation. No rare plants have been mapped by the MNAP within Waldoboro.

Soils

Prime farmland is defined as land that is best suited to producing food, feed, forage, fiber, and oilseed crops. It has the soil quality, growing season, and moisture supply needed to produce a sustained high yield of crops, and cultivation of these soils results in the least damage to the environment. About 13% of soils in Lincoln County are considered prime farmland.

In the Medomak watershed, prime farmland comprises less than 10% of the valley's soils. The predominant prime farmland soils are in the Boothbay, Buxton, Marlow, and Peru series, with occasional units of Eldridge and Madawaska scattered throughout the watershed. All of these soil types are either silt loams or fine sandy loams on gently sloping land. The relatively small amount of prime farmland in the Medomak watershed can be attributed to its low relief - marine clays were deposited over much of the valley as the glaciers receded, and most upland soils have low fertility

and are naturally acidic due to the parent material of coarse tills and granite. Where moisture is adequate, these areas are typically used for pasture, while excessively drained ridges and slopes, which contains more than 30% of the watershed, are suitable only for blueberries or forests.

Historical and current locations of farms are a good indication of where prime farmland soils are located. The best soils are often located along major roads, such as Routes 32 and 220, on middle and upper slopes of ridges. Adequate drainage for septic systems, proximity to roads, and ease of site preparation make sites on these soils also ideal for commercial and residential development. Much of the development that has taken place in the Medomak watershed during the past two decades has occurred on prime farmland soils.

Updates

Quarry Hill

2007. The Town of Waldoboro voted to place a 320-acre tract of land, which was owned by the town, under an easement that would preserve the open space, agricultural resources, and natural habitat for the use and enjoyment of the citizens of Waldoboro. A portion of the easement allows limited agriculture and recreational development, and includes the Quarry, 20-acres of blueberry barrens, 15-acres of cornfield, and two embedded private homes. The easement specifies the rest of the preserve shall be kept forever wild, allowing only trail development and timber management that would not degrade the quality of the forest.

2008. The Waldoboro Conservation Commission, which had been discontinued in the 1980's was reinstated under the state statute in 2008 to manage the Preserve, as well as other town-owned sites.

Medomak Valley Land Trust

Medomak Valley Land Trust (MVLT) is a non-profit organization dedicated to the permanent protection of land for the benefit of the public and future generations in the Medomak River watershed. MVLT owns 800-acres that include forests, blueberry fields, wetlands, and river frontage. These lands are managed to protect wildlife habitat and sensitive resources, while also providing opportunities for low-impact recreation. They also hold conservation easements on 2,166 acres of land. MVLT has developed and maintains over 8 miles of trails on their protected properties and abutting lands and is committed to creating additional trails and opportunities that connect people to the river and foster an appreciation of the land and an active interest in protecting it. The land trust has experience working with landowners, in siting and managing trails, and in mapping.

Challenges

The Medomak River is a tremendous asset to the Town of Waldoboro, and offers economic, recreational, and scenic value. Water from the river provides essential habitat for wildlife and serves natural resource-based industries, recreation and the overall health of the local ecosystem and landscape.

As the largest producer of softshell clams in the State of Maine, the River provides employment for a significant number of shellfish harvesting. River for purposes of shellfish harvesting, an inch of rain fall in a 24 hour pe, much of the River

is closed to shellfish harvesters. The duration and frequency of closures varies and at times, have spanned over half of the shellfish harvesting season.

The 2013 project focused on sampling in the Medomak River estuary, along the river in Waldoboro village and upstream. Data revealed a significant source of pollution located upstream in the river, adjacent to North American Kelp's (NAK) facility on Cross Street. This sampling site frequently tested high for bacteria, even without a rainfall event. NAK has repaired the leak and cleaned the evaporator system. Recent tests show that bacteria has been reduced to undetectable levels in the evaporator discharge and were not being increased in the cooling water.

The Town and the Waldoboro Utility District have also played important roles in this effort by providing information concerning the ownership and historical uses properties, locations of small streams and drainage ditches and pipes and the wastewater system. The Town has also taken the lead in working with town residents to repair failed septic systems.

The response to this educational activity has been positive and has assisted in the mitigation of harmful bacteria which lead to detrimental shellfish flat closures. Improving water quality water can be achieved by simple activities such as increasing amount of grass cover left in a pasture, increasing setbacks to sensitive features, or improving buffering characteristics.

Natural Assets

Quarry Hill

A 320-acre tract of land that is owned by the town under an easement preserving the open space, agricultural resources, and natural habitat for the use and enjoyment of the citizens of Waldoboro.

Boyington Preserve

A 25-acre parcel of blueberry fields on Clarry Hill. The parcel is leased to and harvested by local blueberry farmers.

Burkett Mill Preserve

395-acres with a mix of cut-over woodland, more mature forests, and several wetlands.

The Osborn-Finch

A nature preserve on Dutch Neck consisting of red spruce, northern red oak, and balsam fir. The preserve borders a field with frontage on the Medomak River.

Reef Point Preserve

55-acres of wooded property with nearly 1,000 feet of frontage on the Medomak River.

Goose River Peace Corps Preserve

A 54 acre wooded parcel with a looping trail and wetlands. Includes 700 feet of frontage on the Goose River.

Beginning with Habitat

The Beginning with Habitat maps and data provide key environmental data about Waldoboro and are valuable resources for understanding our natural resources, identifying water, plant, animal and fish habitats, resources, and for planning development in a manner that respects our natural resources. The maps attached with the comprehensive plan are reduced; however, full size maps are available at the Town office for Public review and are also available online. These maps are essential tools for understanding our environmental unique features and to plan developments in responsible manner.

High Value Plant and Animal Habitats

The map displays deer wintering areas and Inland Waterfowl and Wading Bird Habitats. The following Significant Wildlife Habitat areas identified:

- Bald Eagle Nest
- Location for Upland Sandpipers
- Location for Tidewater Mucket
- Location for Scarlet Blue

Water Resource and Riparian Habitats

The maps show rivers, ponds, streams, and wetlands throughout the Town.

Wetland Character

The map identifies wetland types such as emergent, forest, shrub and other wetlands

Undeveloped Habitat Blocks

The map displays the developed and undeveloped areas in Waldoboro and identifies the type of undeveloped areas such as forested or open. A total of 25,657 acres of undeveloped area is shown.

Regional Landscape Map

The map displays some of the key natural resource features in the towns surrounding Waldoboro and especially areas of State Wide Ecological Significance

The maps that have been mentioned in this section can be found at:

https://www.beginningwithhabitat.org/the_maps/status-w.html

Existing Land Use

Purpose

The existing land use section of the plan describes the existing development trends within the community and also reviews current Land Use Ordinances and other planning strategies used by the town to guide residential and commercial development. This information will provide the foundation for the future land use plan and how the community wants to direct new development for the next 20 or more years.

Historical Overview

The overall settlement patterns in Waldoboro were heavily influenced by events that took place several hundred years ago. The following italicized excerpts from "The Medomak Valley Watershed: A Natural Resource Inventory," provide an insight into how these events shaped Waldoboro:

"The land use history of the Medomak valley follows a pattern typical of most areas in New England. The first settlement in the watershed was an English trading post established at Pemaquid in 1625. Further settlement was intermittent and light until after the end of the French and Indian War in 1763. From this point on, the population of the valley towns exploded, with peaks occurring in the mid-1800s. By 1754, much of Dutch Neck was completely settled, and by 1790, there were 1,717 people in what is now Waldoboro (Stahl, 1956).

In general, settlement patterns proceeded from coastal islands and ends of peninsulas inland, following rivers and wood supplies. Within a few decades, the landscape was completely transformed from trackless virgin forest to pasture and farmland. By the 1750s, the entire coast west of Pemaquid had been stripped of its forests up to 50 miles inland. To the east of Pemaquid, much of the forest land was still untouched. Ten years later, most of the coastal islands and immediate shoreline had been cleared and there were at least twenty sawmills in the lower watershed producing lumber for Portsmouth and Boston markets. Every stream with a decent drop in elevation had a mill, and many had several; for example, Slaigo Brook had four. By the 1820s, there were 37 water-powered mills in Waldoboro alone.

The original lots along the Medomak were laid out with farming in mind. They averaged 25 to 40 rods wide (372 to 660 feet) and 100 acres in size. Most extended from the river to the height of land and often over to the next major stream course. Stahl (1956) describes the pattern of settlement along the Medomak estuary as follows:

"At the close of the French and Indian War, the Plantation of Broad Bay was a string of farms, in general, one hundred acres each with a 25-rod frontage on the water, reaching from the tip end of Dutch Neck north along the river to about a mile above the lower falls (in Waldoboro Center), and from there, on the eastern bank, running south along the water, and around the Bay to the Narrows."

"Until the 1770s and 1780s, there were very few roads. Most houses were located along the river and connected by foot paths. By 1790, most of the present roads were laid out along the Medomak and there were roads to Union and Warren. Because most farmers considered it a nuisance to have long driveways go through their fields, many farmhouses were moved back from the river and new houses were usually built along roads (Stahl, 1956), creating the striking long views that still exist along the Medomak estuary today."

Physical Setting. Waldoboro, which is comprised of 47,996 acres (74.99 square miles), is one of the largest communities in the State, covering more land area than any other community in Lincoln, Knox, or Sagadahoc Counties. The Town offers a rich diversity of landscapes ranging from a densely developed village center, several smaller village areas, sparsely developed rural areas, a busy thoroughfare (Route 1), heavily forested areas throughout Town, numerous small ponds, and extensive coastal shorelines.

Waldoboro is primarily rural in nature, but Waldoboro Village would appear to meet the statutory definition of an urban area, in part because of the density of existing development, the presence of residential, commercial, and industrial structures and a well-defined downtown, and the fact that the Village is served by central water and sewer systems. Route 1 could also be considered a growth area based on the amount of commercial growth that has taken place during the past ten to twenty years. There are several small village areas in the community, such as Orff's Corner, Winslows Mills, West Waldoboro, and South Waldoboro, but these areas are not served by central water and sewer systems.

The overall analysis of land use patterns contained in Waldoboro's 1967 Comprehensive Plan (page 11-3) is still largely relevant today:

"The existing land use in Waldoboro clearly shows the historic development of the community. The effect of the railroad in Waldoboro, the relocation of Route 1, and the decreased economic activity in boat building have all had their influence on today's townscape. Main Street, once the major shopping area at the head of Medomak Bay, was a flourishing business section. However, with the advent of the automobile, and the removal of the main thoroughfare from the business sector of the community, automobile oriented and other business establishments have located outside what was once the business center. The difficult topography in the downtown area, of course, has had an adverse effect.

Places like Winslows Mills, at one time, were flourishing communities. Today, they are less vital, and what remains is largely a residential settlement serving as bedroom sectors of the community and nearby employment markets.

Residential Land Use

Residential uses is allowed throughout the town subject to different lot size and density requirements. Areas serviced by municipal and water offer the potential for smaller lot sizes and can be found in the Village District. Over the years, housing has been located throughout the town and, until recently, much has been located in subdivisions. Subdivision approvals have been very slow over the previous 10 years, and the existing subdivision lot inventory has dwindled, leading to the possibility that some new subdivision development may occur.

The projected housing growth is projected to be modest and could range between 12 and 20 homes per year. This would consume a minimum of between 20 to 40 acres of land per year.

Commercial Land Use

Commercial activities are primarily directed into the Route One Commercial Districts, Downtown, and the Village Districts. Some traditional rural commercial activities are permitted in the rural areas. Home occupations are allowed throughout the town, except in the Industrial District.

Industrial Land Use

The Town has two industrial land use districts and also allows some industrial activities in the Route One

Commercial Districts. The future land use plan proposes to expand one of the industrial districts to accommodate future development. And to cluster industrial activities into a defined area.

Municipal/Public Land

The major Town-owned parcels of land include nine properties totaling 224.3 acres and three school properties totaling 99.3 acres, for a sum of 323.6 acres. The largest parcel is Medomak Valley High School (87 acres), owned by School Administrative District #40. The Town-owned land includes parcels that relate strictly to municipal services (transfer station, Town garage, municipal building), properties supporting the cultural life of the community, such as Friendship Street School, and properties which either provide recreational opportunities and/or support those who make their livelihood from the sea (athletic field, tennis court, public landing, marine park).

Land Use Ordinance

The current Land Use Ordinance, developed after the 1998 Comprehensive Plan, has been updated and revised over the years, but still serves the town. The ordinances are comprehensive and include performance standards, dimensional requirements, Shoreland Zoning, FloodPlain management, and subdivision standards. The Town also complies with the State Building code for both residential and commercial structures. A Code Enforcement Officer and a planner provide the capacity to administer the Land Use Ordinances.

Agricultural Land

Farming and related activities still play a significant role throughout the Town's Rural Lands. The following list shows the land area designated as farmland.

Farmland (agricultural): Source; Tax Assessor

Tops'l Farm, R5/12 (364 Bremen Road), 83 acres

Anderson/ Wilson, R22/30 (317 Orffs Corner Rd), 10 acres

Baker/ Fischer, R7/55 (71 George Luce Rd), 80 acres

Banfield, R24/1 (40 Horscents Ln), 9.63 acres

Barstow, R12/2 (686 Goshen Rd), 69.39 acres

Benner/Ward, R19/11 (1529 Manktown Rd), 7.78 acres

Bess, R14/15 (739 Union Rd), 76.16 acres

Bowden, R13/24 (Warren Town Line) and R13/28 (155 Goshen Rd), 44 and 83 acres

Britain, R11/30 (1647 Finntown Rd), 32.59 acres

Brown, R17/58 (1501 Winslows Mills Rd), 5.57 acres

McNeil, U6/19 (99 Old Route 1), 20.92 acres

Cloud Hollow, R7/2 (559 Friendship Rd), 19.64 acres

Creamer Spear, R7/5B (715 Friendship Rd), 28.60 acres
Cross, R23/11A (3160 Washington Rd), 7.78 acres
Cunningham, R17/38 (2191 Washington Rd), 154 acres
Del Coro, R4/53 (1239 Old County Rd), 106 acres
Dickey, R15/67A (251 Quarry Hill Rd), 10 acres
Duck Blue LLC, R24/36 (602 Sidelinger Rd), 39.5 acres
Eastman, R7/4 (675 Friendship Rd), 18.65 acres
Gladu, R9/19 (732 Back Cove Rd), 22.35 acres
Hinkley, R20/39 (156 Clary Hill Rd), 71 acres
Johnson, R17/27 (2312 Winslows Mills Rd), 43 acres
Kanewske, R22/19 (3 Orffs Corner Rd), 42.41 acres
Karas, R17/19B (2464 Winslows Mills Rd), 38.30 acres
Leach, R24/43 (600 Sidelinger Rd), 116.53 acres
Loughlin, R10/27 (3142 Friendship Rd), 104.90 acres
Lupien, U2/9 (288 Friendship Rd), 54.91 acres
McDowell, R5/36 (660 Bremen Rd), 17 acres
Medomak, R23/8C (3582 Washington Rd), 267.5 acres
Merrifield, R7/30 (72 Spruce Ln), 2.08 acres
Meyer, R8/14 (335 Mayo Rd), 16 acres
Medomak, R23/8D (3581 Washington Rd), 3.5 acres
Newbert, R18/1B (1175 Washington Rd) and R20/51 (882 Old Augusta Rd), 69.74 acres and 133.76 acres
Nolan, R17/9A (340 Reef Rd), 55.91 acres
Orff, R22/34 (21 Flanders Corner Rd), 265 acres
Phillbrook, R19/35 (475 Castner Rd) and R20/22C (417 Chapel Rd) and R20/27 (415 Chapel Rd), 36.55 acres and 10.58 acres and 51 acres
Piper, R20/26 (432 Chapel Rd), 15.1 acres
Post, R17/57 (1580 Winslows Mills Rd), 69.87 acres
Post, R17/57A (1500 Winslows Mills Rd), 49.43 acres
Price, R10/16 (150 Pitcher Rd), 9.3 acres
Riley/Stragham, R8/3 (1920 Friendship Rd), 128.4 acres

Scott, Dale, R13/36 (391 Goshen Rd) and R13/49 (157 Goshen Rd), 152 acres and 13 acres

Scott, Larry, R6/33 (200 Stahl Farm Rd) and R13/35 (343 Goshen Rd) and U2/26 (133 Stahl Farm), 169 acres and 20 acres and 12.29 acres

Skov, R13/45 (1241 Old Route 1), 40 acres

Skov, R14/63 (437 Miller Rd), 178 acres

Sorenson, R2/70A (750 Dutch Neck Rd) and R2/71A (785 Dutch Neck Rd), 8.69 acres and 3.5 acres

Stark, R2/71 (786 Dutch Neck Rd), 10.87 acres

Stewart, R4/60 (1044 Old County Rd) and R4/62A (900 Old County Rd) and R4/67A (984 Old County Rd), 132 acres and 7 acres and 19 acres

Storer, R12/4 (775 Goshen Rd) and R13/77 (440 Cole Rd) and U4/119 (78 Friendship Rd), 260 acres and 101 acres and 359 Rd)

Thompson, R17/25 (2388 Winslows Mills Rd), 30 acres

Tonken, R16/4 (278 Winslows Mills Rd), 50 acres

Wheeler, R1/41 (275 Hariiman Rd), 133.5 acres

Wieluns, R23/9 (3645 Washington Rd), 57 acres

Williams Maloney, R21/30 (13 Robinson Rd), 20 acres

Wallace, R5/38 (690 Bremen Rd), 13 acres

Total acres: 3,736.70

Open Space Land

Land area designated as open space consists of parcels held in trust or conserved through other means. Some are designated for agriculture, recreation, or to remain undeveloped while other areas are designed to protect natural resources.

Open Space: Source: Tax Assessor

Lawrence, R2/81A (979 Dutch Neck Rd), 8 acres

Beverly, R1/43-1 (650 Gross Neck Rd), 8.5 acres

Beverly, R1/43-3 (750 Gross Neck Rd), 14 acres

Black, R10/38 (3339 Friendship Rd), 18.29

MDVLT, R1/43 (701 Gross Neck Rd), 79.6 acres

Hermann, R1/43-2A (700 Gross Neck Rd), 3.19 acres

Hitzrot, R20/42 (208 Winston Rd), 184 acres

Kalina/Skos, R7/49 (1662 Friendship Rd), 233 acres

Coach House on Dutch Neck LLC, R2/66 (645 Dutch Neck Rd), 22 acres

Medomak, R12/13 (81 Burket Mill Rd), 391 acres

Meyer, R8/14 (335 Mayo Rd), 16 acres

National Audubon, R9/94-5 (550 Deaver Rd), 9.1 acres

National Adubon, R9/94-6 (551 Deaver Rd), 5.3 acres

Spofford, R5/53 (795 Bremen Rd), 460.72 acres

Total 1,152.7 Acres

Timber Harvest Information between 1991 and 2016 Source Maine Forest Service

Year	Selection harvest acres	Shelterwood harvest acres	Clearcut harvest acres	Total harvest acres	Change of land use acres	Number of active notifications
1991	447	0	20	467	0	21
1992	487	5	18	510	8	20
1993	483	108	15	606	17	17
1994	623	5	0	628	0	24
1995	475	33	22	530	22	29
1996	465	90	56	611	60	23
1997	843	50	21	914	20	22
1998	1,243	11	0	1,254	3	37
1999	720	65	0	785	5	61
2000	890	60	44	994	20	22
2001	454	0	5	459	2	37
2002	623	3	0	626	85	32
2003	894	20	0	914	0	36
2004	519	33	0	552	22	30
2005	316	100	0	416	17	26
2006	286	85	0	371	20	32
2007	700	65	0	765	23	38
2008	471	51	0	522	0	34
2009	529	20	0	549	0	33
2010	672	0	3.5	675.5	11	31
2011	556	145	0	701	0	36
2012	1,029	112	16	1,153	75	50
2013	351	280	0	631	5	34
2014	723.75	0	0	723.75	13	41
2015	978	75	0	1,053	0	41
2016	900	180	0	1,080	0	40
Total	166,77.75	1,596	220.5	18,490.25	450	896
Averages	641	61	8	711	17	34

Tree Growth Program Source 2013 Municipal Valuation Return Statistical Summary

Number of parcels:	53 parcels
Softwood Acres:	733 acres
Mixed Wood Acres:	1,362 acres
Hardwood Acres:	622 acres
Total Acres:	2,717

Rural Land

The vast majority of Waldoboro is in a rural land use district, which consists of low density residential development, farming, forest, and undeveloped/open space. The rural land use district allows traditional rural commercial activities and limits the size and intensity of these activities.

Scenic Resources

Waldoboro is blessed with significant scenic resources, which add to the quality of life in the town and boosts property values. These views range from bucolic farmsteads to remote ponds, to undeveloped stretches of the freshwater Medomak River, as well as long views of the tidal Medomak. Scenic roadways and pristine recreational areas are particularly important to the health and well-being of the citizens of the town, as well as the economic benefit from tourists during all seasons. Development should be sensitive in context of these public assets, as it is in regard to other natural resources. In developing ordinance provisions, the town should consider balancing property rights with the effect that proposed development might have on existing scenic resources.

In particular, the following scenic resources are considered particularly significant as having public value:

Scenic Resource or Viewpoint(s)	Type of Resource	Description of Primary View of Significance	Rated Significance
Pine Street Public Landing	Public Recreational Access Point with parking and ramp.	Long southerly views, largely uninterrupted by development.	Critical
Marine Park off of Dutch Neck Rd.	Public Recreational Access point with parking and ramp.	Long views in every direction across Broad Bay, up and down river.	Critical
Saltwater Medomak River Between Pine Street Landing and Marine Park	Public Recreational boating resource.	Long views in every direction across Broad Bay, up and down river.	Critical
Duckpuddle Pond	Unimproved public access at bridge on Duckpuddle rd. with hand carry and private boating access.	Long North/South views, largely uninterrupted by development.	Moderate

Medomak Pond	Unimproved public access at bridge on Washington Rd. with hand carry and private boating access.	From pond, views in every direction, with rolling hills largely uninterrupted by development.	High
Freshwater Medomak River	Unimproved public access at bridge on Washington Rd. with hand carry and private boating access.	Canoe or kayak opportunity with approximately 8 miles of wilderness feel. Mix of flat water and minor rips. Largely uninterrupted by development.	High
Corner of Washington and Old Augusta Rd.	Scenic Road/Intersection. Historical crossroads, rural village district.	North across Medomak Pond to hills of upper St. George Valley, Washington and Liberty	Moderate
Old Augusta Rd.	Scenic Road	Intermittent open rolling hills, farmsteads, forestland and open wetland areas.	Moderate
Winslows Mills Rd.	Scenic Road	Intermittent open rolling hills, farmsteads, forestland and open wetland areas with glimpses of Medomak River.	Moderate
Bremen Rd.	Scenic Road	Intermittent open rolling hills, farmsteads, forestland and open wetland areas with glimpses of Medomak River.	Moderate
Friendship Rd.	Scenic Road	Intermittent open rolling hills, farmsteads, forestland and open wetland areas with glimpses of Medomak River.	Moderate
Washington Rd.	Scenic Road	Intermittent open rolling hills, farmsteads, forestland and open wetland areas with glimpses of Medomak River.	Moderate

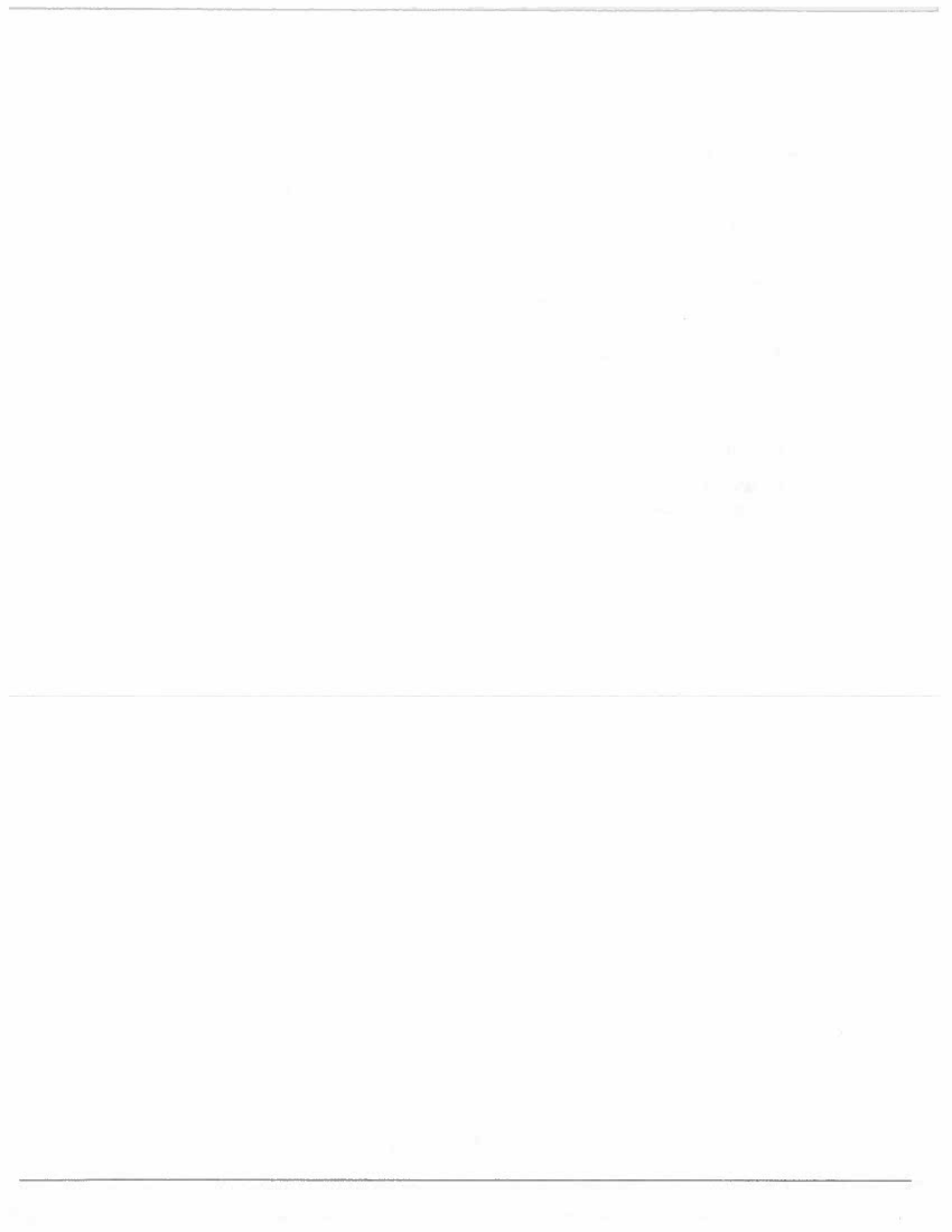
Waldoboro Area Maps

The following Maps show areas throughout Waldoboro that feature the following items:

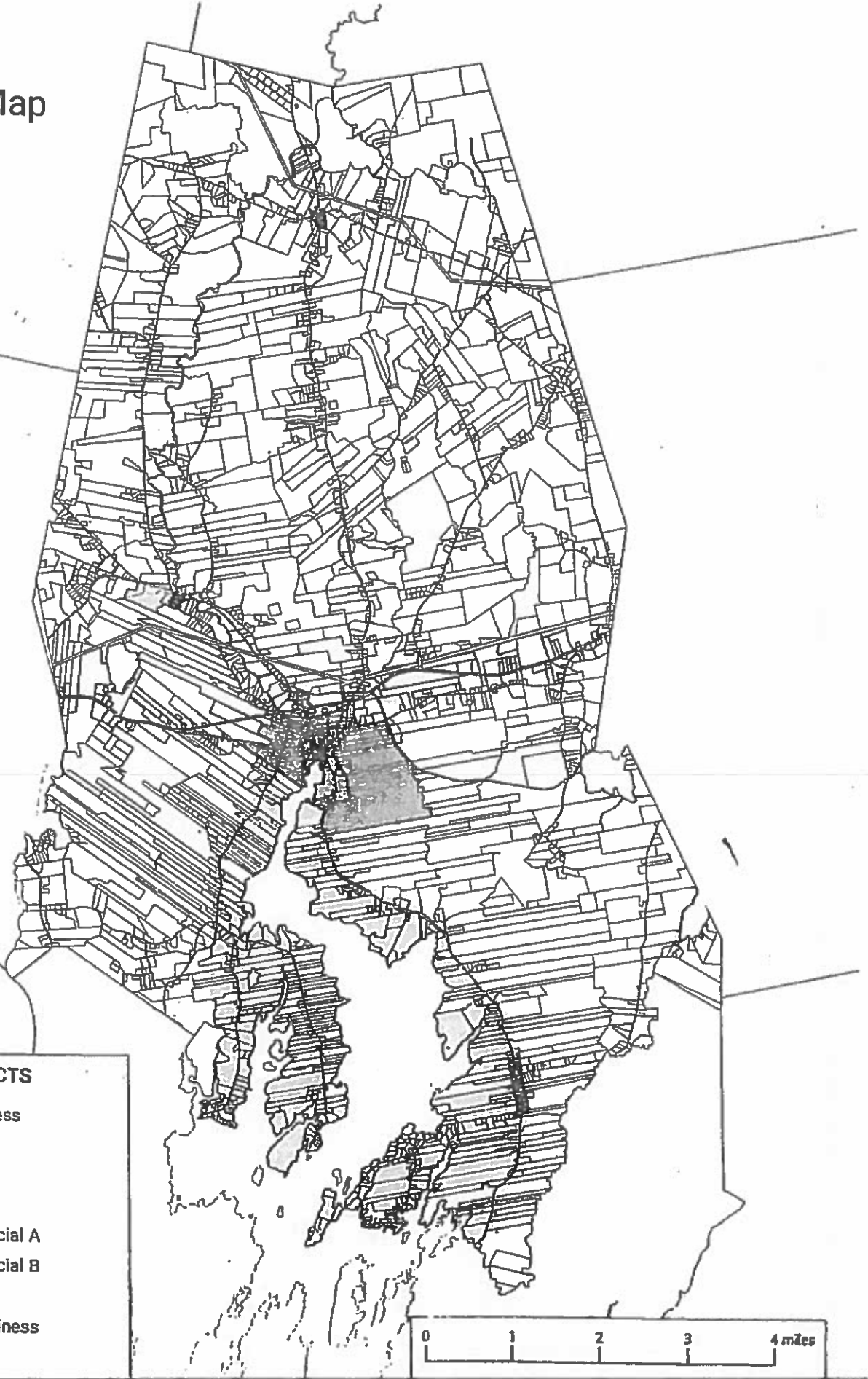
- Existing land use Districts
- Conservation lands
- Wetlands
- Major Waterbodies.
- Development which occurred between 1990 and 2017

The following maps are included:

- Route One Corridor
- Waldoboro Village and West Waldoboro
- Gross Neck and Dutch Neck
- South Waldoboro & Jones Neck/Back Cove
- Orffs Corner
- Winslows Mills
- North Waldoboro



Waldoboro Land Use Map





Gross Neck & Dutch Neck

Community Visioning Goals:

UPPER GROSS NECK

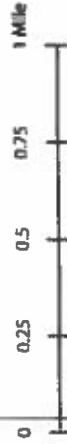
- Continued affordability
- Uniformity of code enforcement

LOWER GROSS NECK

- Productive clam flats
- Bucolic feel of the neighborhood

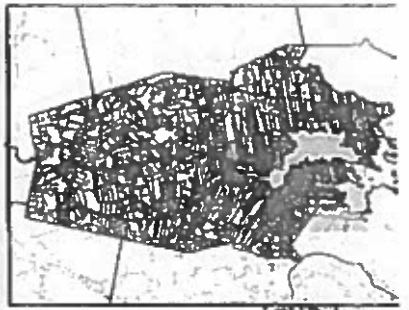
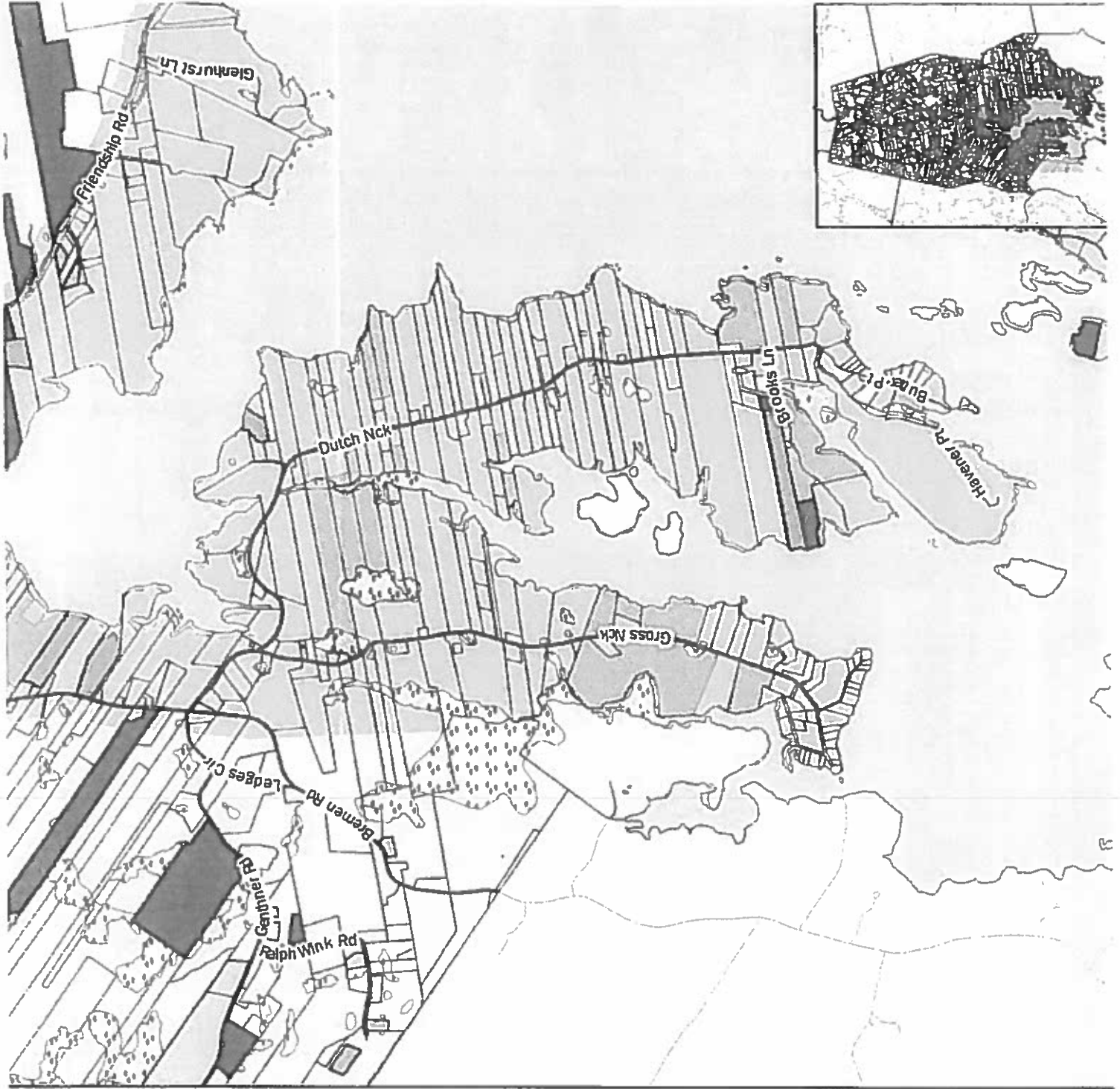
DUTCH NECK

- Preserve water views & open space
- Maintain undeveloped shoreline
- Ensure public access for



Legend

Year of Construction	Land Use Districts
2015 - 2017	Downtown Business
2010 - 2014	Historic Village
2005 - 2009	Industrial
2000 - 2004	Residential
1990 - 1999	Rte1 Commercial A
	Rte1 Commercial B
	Rural
	Rural Village
	Village
	Natural Resources
	Conserved Lands
	Wetlands



The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every entry should be supported by a valid receipt or invoice. This not only helps in tracking expenses but also ensures compliance with tax regulations.

Furthermore, it is advised to review these records regularly to identify any discrepancies or errors. Promptly addressing these issues can prevent larger problems down the line. The document also mentions the benefits of using digital accounting software, which can streamline the record-keeping process and reduce the risk of human error.

In addition, the text highlights the significance of keeping receipts for a sufficient period. This is particularly important for businesses that are subject to audits. Having all necessary documents readily available can significantly ease the audit process and minimize the time and cost involved.

The second section of the document provides a detailed overview of the various types of receipts and invoices that businesses should use. It explains the differences between them and offers guidelines on how to properly issue and receive them. For instance, it notes that receipts should be issued for all cash transactions, while invoices are typically used for credit sales.

The document also discusses the legal requirements for these documents, such as the need to include certain information like the date, amount, and the names of the parties involved. It stresses that using standardized forms can help ensure that all necessary details are captured and that the documents are consistent and easy to understand.

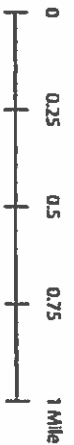
Moreover, it touches upon the importance of maintaining a clear and organized system for storing these documents. Whether using physical folders or a digital cloud-based system, the goal is to ensure that all records are easily accessible and well-protected from loss or damage. This systematic approach is crucial for maintaining the integrity of the business's financial data.

Finally, the document concludes by reiterating the overall importance of diligent record-keeping. It serves as a reminder that accurate and complete records are the foundation of sound financial management and are essential for the long-term success and stability of any business.

Route 1

Community Visioning Goals:

- Creates a positive image of Town
- Safe for all Route 1 travelers
- Improved visual quality of Route 1 development
- Eliminate 'strip style' development
- 'Gateway'/connection to the Village
- Access to the river & trails
- Wooded sections retained
- Better signage



Legend

- | | |
|-------------------|-------------------|
| 2015 - 2017 | Downtown Business |
| 2010 - 2014 | Historic Village |
| 2005 - 2009 | Industrial |
| 2000 - 2004 | Residential |
| 1990 - 1999 | R1 Commercial A |
| Natural Resources | R1 Commercial B |
| Conserved Lands | Rural |
| Wetlands | Rural Village |
| | Village |

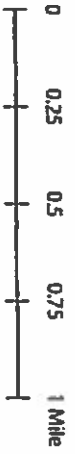




North Waldoboro

Community Visioning Goals:

- Improved & safer roads
- Preserve views, open spaces & large parcels
- Trail connections
- Boat access to Medomak Pond
- More active farmland
- Preserve rural character
- Retain residential hamlet feel
- Encourage: farm stands; convenience/comer store; deli; etc.



Legend

- | | |
|-----------------------------|---------------------------|
| Year of Construction | Land Use Districts |
| 2015 - 2017 | Downtown Business |
| 2010 - 2014 | Historic Village |
| 2005 - 2009 | Industrial |
| 2000 - 2004 | Residential |
| 1990 - 1999 | Rite1 Commercial A |
| Natural Resources | Rite1 Commercial B |
| Conserved Lands | Rural |
| Wetlands | Rural Village |
| | Village |





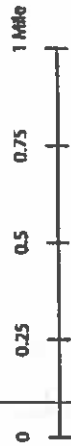
Offs Corner

Key businesses:

- Prock Ridge Farm
- Flame Grilling Products
- Wreaths of Maine

Community Visioning Goals:

- Maintain distinctive historic neighborhood feeling
- Keep working farms intact
- Preserve historic homes & buildings



Legend

Year of Construction	Land Use Districts
2015 - 2017	Downtown Business
2010 - 2014	Historic Village
2005 - 2009	Industrial
2000 - 2004	Residential
1990 - 1999	Rte1 Commercial A
	Rte1 Commercial B
	Rural
	Conserved Lands
	Wellands
	Rural Village
	Village





Winslows Mills

KEY BUSINESSES:

- Ocean Organics
- Custom Cordage
- North American Kelp
- Acadia Harvest

Community Visioning Goals:

- Improved access to Village
- Build on proximity to river & rail
- More residential development • extend sewer & water?
- Grow employment opportunities by expanding the business park with compatible industries



Legend

Year of Construction	Land Use Districts
2015 - 2017	Downtown Business
2010 - 2014	Historic Village
2005 - 2009	Industrial
2000 - 2004	Residential
1990 - 1999	Rte1 Commercial A
	Rte1 Commercial B
	Rural
	Rural Village
	Village
	Natural Resources
	Conserved Lands
	Wetlands





South Waldoboro & Jones Neck/Back Cove

Community Visioning Goals:

SOUTH WALDOBORO

- Maintain views
- Maintain & expand preserved & open landscapes
- Welcoming to business

JONES NECK/BACK COVE

- Maintain economic & social diversity of residents
- Manage growth
- Cooperation/collaboration with Friendship

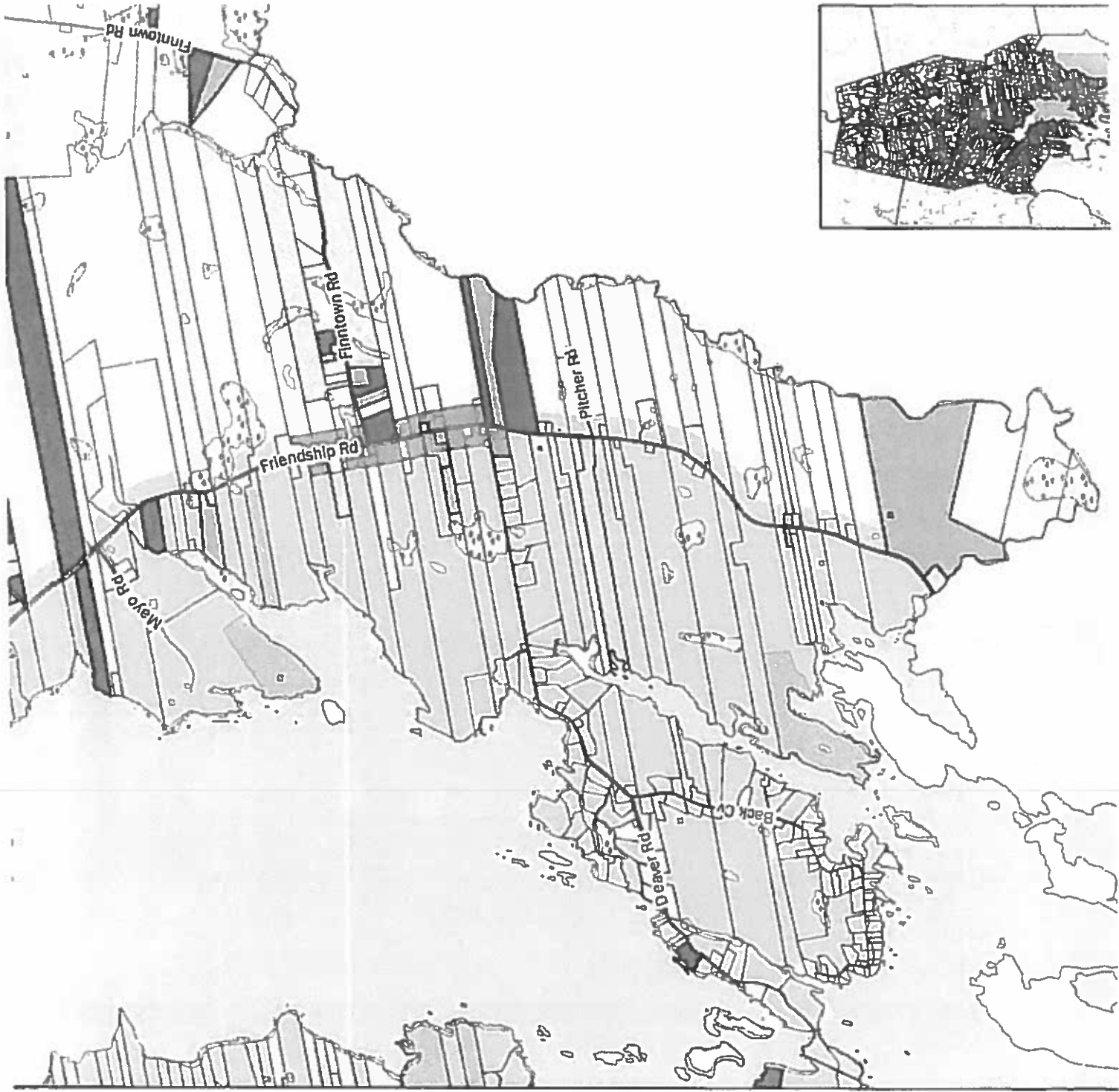
MEDOMAK ESTUARY

- Ensure continued access for clamming industry



Legend

Year of Construction	Land Use Districts
2015 - 2017	Downtown Business
2010 - 2014	Historic Village
2005 - 2009	Industrial
2000 - 2004	Residential
1990 - 1999	Rte 1 Commercial A
	Rte 1 Commercial B
	Rural
	Rural Village
	Village
	Conserved Lands
	Wetlands



1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes that this is crucial for ensuring transparency and accountability in the organization's operations.

2. The second part of the document outlines the various methods and tools used to collect and analyze data. It highlights the need for consistent data collection procedures and the use of advanced analytical techniques to derive meaningful insights from the data.

3. The third part of the document focuses on the role of technology in data management and analysis. It discusses how modern software solutions can streamline data collection, storage, and processing, thereby improving efficiency and accuracy.

4. The fourth part of the document addresses the challenges associated with data management, such as data quality, security, and privacy. It provides strategies to mitigate these risks and ensure that the data remains reliable and secure throughout its lifecycle.

5. The fifth part of the document concludes by summarizing the key findings and recommendations. It stresses the importance of ongoing monitoring and evaluation to ensure that the data management processes remain effective and aligned with the organization's goals.

6. The sixth part of the document provides a detailed overview of the data management framework. It includes a description of the data sources, the data flow, and the various stages of data processing, from collection to analysis and reporting.

7. The seventh part of the document discusses the importance of data governance and the role of the data management team. It outlines the responsibilities of the team members and the policies that govern the use and protection of the data.

8. The eighth part of the document provides a detailed description of the data management system. It includes a list of the system's features, capabilities, and performance metrics, along with a comparison to other available solutions.

9. The ninth part of the document discusses the implementation and deployment of the data management system. It outlines the steps involved in the implementation process, from system configuration to user training and system testing.

10. The tenth part of the document provides a detailed description of the data management system's architecture. It includes a diagram of the system's components and their interactions, along with a description of the system's scalability and flexibility.

11. The eleventh part of the document discusses the future of data management and the role of emerging technologies. It highlights the potential of artificial intelligence, machine learning, and cloud computing to revolutionize data management and analysis.

12. The twelfth part of the document provides a detailed description of the data management system's security and privacy features. It outlines the measures taken to protect the data from unauthorized access and ensure compliance with relevant regulations.

13. The thirteenth part of the document discusses the impact of the data management system on the organization's operations. It highlights the benefits of the system, such as improved data accuracy, faster data processing, and better decision-making.

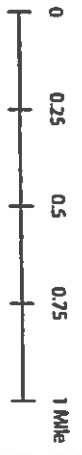
14. The fourteenth part of the document provides a detailed description of the data management system's user interface. It includes a list of the system's features and a description of the user experience, along with a comparison to other available solutions.

15. The fifteenth part of the document discusses the future of data management and the role of emerging technologies. It highlights the potential of artificial intelligence, machine learning, and cloud computing to revolutionize data management and analysis.

Waldoboro Village & West Waldoboro

Community Visioning Goals:

- WALDOBORO VILLAGE**
 - Maintain architectural integrity of buildings
 - Improve/increase access to parking
 - Parks & open space; public restrooms
 - Create a Riverwalk/trail; river access
 - Vibrant mix of retail & services
 - Village as a destination
 - Streetscape improvements
 - Rehabilitation of key anchor buildings
 - More close-knit residential development
- WEST WALDOBORO**
 - Protect health & access to clam flats
 - Preserve & expand farmland
 - Improve safety of roads



Legend

- | | |
|-------------------|--------------------|
| 2015 - 2017 | Downtown Business |
| 2010 - 2014 | Historic Village |
| 2005 - 2009 | Industrial |
| 2000 - 2004 | Residential |
| 1990 - 1999 | Rte 1 Commercial A |
| Natural Resources | Rte 1 Commercial B |
| Conserved Lands | Rural |
| Wetlands | Rural Village |
| | Village |

