

# TOWN OF UNION COMPREHENSIVE PLAN

---

DRAFT JANUARY 11, 2017

## TABLE OF CONTENTS

Introduction and Public Participation Summary	2
Vision Statement	3
Executive Summary	4
Historic and Archaeological Resources	6
Water Resources	18
Natural Resources	34
Agricultural and Forest Resources	46
Population and Demographics	58
Economy	65
Housing	82
Recreation	100
Transportation	110
Public Facilities and Services	130
Regional Coordination Program	147
Fiscal Capacity	151
Capital Investment Plan	156
Existing Land Use	159
Future Land Use Plan	168
Survey Results	180

## **INTRODUCTION AND PUBLIC PARTICIPATION SUMMARY**

### **Introduction**

### **Public Participation Summary**

The Comprehensive Planning Committee has been comprised of Town residents appointed by the Selectman. Monthly meetings have been open to the public and were held to review progress in the topic areas and solicit help and opinions from the public, Selectmen, Planning Board, and the Code Enforcement Officer. Meeting notices and agendas were available online and at the Town office. The recommendations of this plan are based upon the public opinion survey provided to residents and business and property owners in the Town. Drafts of the plan's chapters have been available at the Town office and online. Public informational meetings have been held, including public hearings and additional public meetings will be held before residents vote on this plan at a Town meeting.

## VISION STATEMENT

The residents of Union shared their vision of what they would like to see for the Town's future over the next ten-year period in the public opinion survey completed for this comprehensive plan update. They envisioned a community much as it is today, a beautiful New England village with most of the town in the rural zone. They envisioned a quiet and safe place to live. Included in their vision are the following attributes:

- Additional public access to the shore
- Small town atmosphere preserved
- Quality water and adequate sewage resources
- Create a recreational trail linking the school, village common and fairgrounds
- Strong local farming activity
- Improved Town services
- Attention to not allowing environmental pollution
- Encourage development in those areas set aside for both Residential and Commercial development
- Improved schools
- Level population growth with an older population served by required care and transportation facilities.
- Available reasonable cost housing appropriate for both young and older residents and efficient with respect to the use of land and energy, water and sewage.
- People are mostly satisfied with current public facilities and services

The policies and strategies contained in this comprehensive plan update have been drafted to enable the Town to achieve its vision over the next ten years.

## EXECUTIVE SUMMARY

The Town of Union has prepared this Comprehensive Plan to be used as a guide in overall future land use development during the next ten years. As noted, this plan was prepared by volunteer residents of Union and is based upon the results of a public opinion survey and state guidelines. The Mid-Coast Regional Planning Commission has been a consultant in this effort. The following paragraphs briefly describe the contents of each topic area.

### **Historic and Archaeological Resources**

This chapter presents the historical background of Union, and an inventory of the Historic/Prehistoric resources with comments as to condition. It presents strategies to achieve state and Town goals of identifying and preserving historic and archaeological resources.

### **Natural Resources (Natural and Water Resources)**

These chapters describe strategies for reducing pollution of surface and ground water. Regulatory and non-regulatory means of protecting natural and water resources are recommended.

### **Agricultural and Forestry Resources**

This chapter describes remaining forestry and agricultural resources in Union.

### **Population and Demographics**

This chapter relates the demographics of Union with its economy, development, and environment. The size and composition of the current and forecasted population impact the recommendations of this plan update.

### **Economy**

This chapter contains statistics that relate the economic climate to the potential for overall local economic well-being, and makes recommendations to improve local employment opportunities.

### **Housing**

The Town should encourage affordable housing opportunities to retain our vital inhabitants including both younger and older residents. To maintain its current character, Union should seek to make housing available in the Town for people in all age groups and economic backgrounds. If it does not, the trends already established will continue and the Town will lose its young, elderly, and many of its self-employed current residents who will be priced out of the marketplace.

### **Recreation**

The recommendations of this chapter seek to preserve and improve recreational opportunities.

## **Transportation**

A community depends upon a convenient, safe and reliable transportation system. This chapter reviews existing transportation conditions and plans for the efficient maintenance and improvement of Union's transportation system in order to accommodate existing and anticipated development.

## **Public Facilities and Services**

This chapter discusses maintaining public facilities and services in a manner that promotes and supports growth and development in identified areas.

## **Regional Coordination**

Comprehensive planning recognizes the importance of regional cooperation and coordination. The land uses in one community can impact another community, particularly when that land use is located near municipal boundaries.

## **Fiscal Capacity and Capital Investment Plan**

Stable municipal finances are always a fundamental responsibility of Town government. It is important for Union to handle diligently all yearly expenditures while at the same time plan for the Town's long-term objectives. The purpose of a capital investment plan (CIP) is to establish a framework for financing needed capital investments. A CIP guides budgeting and expenditures of tax revenues and identifies needs for which alternative sources of funding such as loans, grants or gifts will be sought.

## **Existing Land Use**

This chapter describes the current land use ordinances and the trends in development that have occurred in the Town.

## **Future Land Use Plan**

The purpose of this chapter is to outline strategies for improving municipal ordinances and non-regulatory recommendations to encourage the types of development and conservation the residents support and to preserve natural resources, property values, and public safety. This chapter makes recommendations based upon the inventory of the other chapters in this Comprehensive Plan and from the Union public opinion survey results.

## **Survey Results**

A summary and detailed description of the survey results are presented in this chapter.

## HISTORIC AND ARCHEOLOGICAL RESOURCES

### Introduction

This chapter outlines the Town's history, identifies known prehistoric and historic resources, and recommends steps for their protection. The history of Union is substantially based upon the natural resources that drove the local and regional economy, including forestry and agriculture. Early residents engaged successfully in a variety of businesses. Many current residents can trace their families back to the town's early days. The town's current land use ordinances offer limited protection of identified historic and archeological resources, especially in shoreland areas, where most archeological resources are found. However, professional surveys can help determine specific areas in need of additional protection. For these areas, ordinance amendments should be considered in order to protect such resources more fully.

### *State Goal*

*To preserve the State's historic and archeological resources.*

### *Analyses*

(1) *Are historic patterns of settlement still evident in the community?*

Yes, numerous buildings, predominantly dwellings, from the eighteenth and nineteenth centuries can be found in Union. Civic, religious and commercial buildings from this era are present especially in the village area around the Union Common. Sites of original and very early buildings are known and are celebrated with tours at least annually, mostly on Founders Day in mid-July.

(2) *What protective measures currently exist for historic and archeological resources and are they effective?*

Many of the Town's historic resources are found in the village area, while many prehistoric resources are found in shoreland zones. One of the purposes of the Village District as defined in the Land Use Ordinance is, "to preserve and protect historical and cultural structures and sites in the Union Common area." General Permit Standards in the Land Use Ordinance include, "Will protect Archeological and historic resources as designated in the Comprehensive Plan (1.12.6.6.6)."

Within the Site Plan Review standards of the Land Use Ordinance, is the following review criteria that new development, "Will not have an undue adverse effect on historic sites (2.5.7)." Furthermore, "In historical areas the Planning Board shall require new construction to harmonize with surrounding properties to be designed so as not to be architecturally incompatible (2.5.10)."

In the Shoreland Zoning provisions of the Land Use Ordinance one of the purposes is defined as, “to protect Archeological and historic resources...(4.1)” and the Change of Use of a Non-conforming Structure standard requires, “In determining that no greater adverse impact will occur, the Planning Board shall require written documentation from the applicant, regarding ... Archeological and historic resources...(4.12.3.6).”

The Shoreland Zoning provisions state that to approve an application and issue a permit, the Planning Board/Code Enforcement Officer must make a positive finding that the proposal: “Will protect Archeological and historic resources as designated in the comprehensive plan (4.16.4.6).” Shoreland Zoning provisions also state, “Any proposed land use activity involving structural development or soil disturbance on or adjacent to sites listed on, or eligible to be listed on the National Register of Historic Places, as determined by the permitting authority shall be submitted by the applicant to the Maine Historic Preservation Commission for review and comment, at least twenty (20) days prior to action being taken by the permitting authority. The permitting authority shall consider comments received from the Commission prior to rendering a decision on the application (4.15.20).”

In the Wireless Telecommunication Facility Provisions of the Land Use Ordinance, is this standard, “Historic, Cultural, & Archeological Properties: The proposed facility, to the greatest degree practicable, shall have no unreasonable adverse impact upon districts, sites, businesses, buildings, structures, or objects that are significant in local history, architecture, archeology, engineering or culture (3.7.2.14).”

The Subdivision Ordinance includes the statutory criteria that the subdivision will not have an adverse effect on historic sites (1.H). A provision allows for the, “Retention of Open Spaces and Natural or Historic Features” of up to 10% of the land area, and, “The Board may require that the development plans include a landscape plan that will show the preservation of ... historic...areas (10.B).”

The Floodplain Management Ordinance allows reconstruction of historic properties in floodplains, subject to limitations.

Taken as a whole, these ordinance provisions have been somewhat effective, predominantly in the village area and in shoreland zones.

- (3) *Do local site plan and/or subdivision regulations require applicants proposing development in areas that may contain historic or Archeological resources to conduct a survey for such resources?*

The Shoreland Zoning provisions of the Land Use Ordinance require, “written documentation from the applicant, regarding ... Archeological and historic resources.” This could take the form of a survey. In order to meet the requirements of the Land Use Ordinance in general, information on the location and a description of Archeological and historic resources is necessary. “A permit is not required for an Archeological excavation

as long as the excavation is conducted by an archeologist listed on the State Historic Preservation Officer's level 1 or 2 approved list...(4.16.2.2)." The subdivision ordinance does not require a survey but does require that appropriate measures for the protection of the historic resources be taken.

- (4) *Have significant historic resources fallen into disrepair, and are there ways the community can provide incentives to preserve their value as an historical resource?*

The following historic structures are in overall poor condition: Matthews Mill (12 Sunk Haze), Thurston Brothers Casket Factory (63 Thurston Lane), and the horse trough on the Common. See ***Conditions and Trends*** (3) below for inventory information.

The community can inform owners of historic properties about the Federal Historic Preservation Tax Incentives program. This program can foster private investment to rehabilitate certified historic structures (building listed individually in the National Register of Historic Places or a building located in a registered historic district and certified by the Secretary of the Interior as contributing to the historic significance of the district). As well, owners of historic properties can be informed that a Maine State taxpayer is allowed a credit equal to the amount of the Federal credit claimed by the taxpayer under Internal Revenue Code for rehabilitation of certified historic structures located in Maine. Individuals should check with the Maine State Historic Preservation Commission to see whether a project might qualify. (Often projects have been required to involve a commercial aspect.)

### ***Condition and Trends***

- (1) *The community's Comprehensive Planning Historic Preservation Data Set prepared and provided to the community by the Historic Preservation Commission, and the Office, or their designees.*

The data set prepared by the State has been incorporated into the following text on Union.

#### Prehistoric Period and Related Archeological Sites

Prehistoric archeological evidence has been found in several areas in Union. Late Archaic Age "Red Paint" Native American graves and artifacts of possible Susquehanna Tradition were found in 1961 on R. Bliss Fuller's farm at the east side of the St. George river where it leaves Sennebec Pond. Early of Middle Archaic Age plummets and slate spears found by Wendell Butler's ancestors, probably on their farm on the west side of Sennebec Pond near the Appleton Town line suggests that there may have been a "Red Paint" cemetery or campsite on that property.

Judson Josselyn Alden, a dentist in Union, worked with Warren K. Moorehead when he dug many "Red Paint" Native American cemeteries researching his 1922 book,

*Archeology of Maine.* Judson Alden's son, Edward Avery Alden, worked with his father and Moorehead one summer. Judson Alden sold many items of his own collection of Native American artifacts, but several are in the Matthews Museum on the Union Fairgrounds and archived at the Union Historical Society. On the former Oscar Upham farm on the east side of Pettengill Stream in North Union, in the early 1900s, plowing exposed a Native American campsite.

In South Union, along the east side of Seven Tree Pond and along the Crawford River, Native Americans camped and several local residents have small collections of artifacts. On the west side of Seven Tree Pond, along the St. George River and around Round Pond there are several more places where local people have found Native American tools. Moorehead's map of Knox County shows a Native American village on the shore of Crawford Pond. The rusty iron-rich soil over the nickel mineral prospect on the east side of Crawford Pond may possibly have been the source of the red paint used in area Native American burials. Only limited archeological surveys have been carried out, but the Historic Preservation Commission considers most of the shoreline of Union's several ponds to be likely sites for archeological remains of Native American activities.

The Maine Historic Preservation Commission surveyed most of Union in 1981 as part of the Knox County Architectural Survey. Only limited Archeological surveys have been carried out. There are seven known sites, numbered 27.12, 27.57, 27.62, 27.82, 27.83, and 28.01. Site 27.57 is not significant. The others are not sufficiently known to judge significance. The potentially significant sites, and undoubtedly others, are located on the shores of Sennebec, Seven Tree, and Crawford Ponds.

Unfortunately, as of 2016 no Archeological planning map is available from the Maine Historic Preservation Commission. A systematic professional survey of river and lakeshores in Union is needed.

#### Historic Period and Related Archeological Sites

The book, "History of the Town of Union, in the County of Lincoln, Maine, to the middle of the nineteenth century: with a Family Register of the Settlers before the Year 1800, and of Their Descendants", was written in 1851 by John Langdon Sibley, son of Dr. Jonathan Sibley, who moved to Union in 1799. He initially lived on the north bank of the St. George River between Round Pond and Seven Tree Pond. He later built a larger home on Sennebec Road.

The Matthews Museum of Maine Heritage was begun with a collection purchased from Edwards A. Matthews, author of "Horse and Buggy Days," a book about Union, published in 1950. The museum on the Union Fairgrounds is open from July 1 through Labor Day. It houses a large number of tools and pieces of equipment used in the 1800s and early 1900s on many of the farms in this area. A carriage made at the Wingate and Simmons company factory in Union village, a Brown Brothers organ made in a factory in South Union, and a collection of Moxie (an early tonic or soft drink invented by Union

childhood citizen Augustin Thompson) memorabilia are some highlights of the museum collections.

The museum is divided into several rooms to effectively display the articles. One room is set up as a cooper shop, another like a kitchen and a third like a stable. Many wagons, plows, harrows, and other pieces of horse-drawn farm equipment are displayed. Some articles of clothing from times long ago are there also.

The Hodge School, a circa 1864 one-room school, removed from Washington, Maine to the Union Fairgrounds, is a separate building outside the museum, which shows how children were housed and taught years ago.

An historical novel about the early settlers in Union, "Come Spring", was first published in 1940 by Ben Ames Williams. The first work party started clearing land for settlement in this area in 1772. Trees were felled, but only a crude camp was built. Dr. Taylor purchased the entire township in 1774 and immediately put a party to work felling trees on the same site for a mill and a house. Rye was sown on the first cleared ground in 1775 and the first log house was built across Seven Tree Pond from this site. Ben Packard and the work party first stayed the winter here in 1775-76, continuing the work of clearing Dr. Taylor's land. In 1776, the first family of settlers moved into the Packard log cabin.

From these early beginnings the settlement, known variously as Sterlington and Taylortown, grew and was incorporated in 1786 as Union.

In 1793, Charles Barrett was authorized to build a canal along the St. George River from tidewater in Warren to Barrettstown, now Appleton and Hope. General Henry Knox became the sole owner in 1795, before it was completed to Round Pond in Union. A dam and locks at Warren, bypassing the falls, made the river navigable for boats or rafts of lumber. The canal was unprofitable and it was neglected after Knox's death in 1806.

In 1846, another canal was incorporated and laid out from Warren to Quantabacook Lake in Searsmont. Improvements in Union included three locks, a dam below Hill's Falls, and two bridges. The canal and improved river navigation was completed to Sennebec Pond in the late fall of 1847, and to Quantabacook Pond in Searsmont in 1848. A canal boat, the *General Knox*, came down from Appleton to Warren on Christmas Day, 1847, arriving in Thomaston the next day. On July 4, 1848, the 23-ton steamboat *Gold Hunter* steamed to Sennebec Pond, but never made another trip. Gundalows were poled in the locks and rivers and sailed across the ponds. However, this canal also failed to pay its expenses and was largely abandoned by 1855. Remains of the canal can be seen east of the river in the lowlands west of Union Common and west of the river south of Sennebec Pond near Hill's Mills.

Mills using waterpower were built early in Union. The first was at Mill Stream from Crawford Pond to Seven Tree Pond, which had four dams in the early 1900s. There were two dams in East Union at Lermond's Mills, now the only mill operating in the town. There were two other sawmills on Lermond's Mill Stream below East Union. There were

one or more dams at Union Village at Bachelder's Mills on the St. George River and another dam at Hill's Mill below Sennebec Pond, which generated electricity at one time, as did the Thurston Brothers' dam at South Union well into the twentieth century. There was a dam on Pettengill Stream in North Union at Fossett's Mills and another dam on Mud Pond west of Round Pond. The Medomak River west of North Union had a dam; there was another dam near the Skidmore Road, and a third dam at Hager's Mill below present-day Route 17.

The Georges Valley Railroad was built in 1893 from Warren Station on the Maine Central Railroad, near South Pond, across the St. George River, and up the east side of Seven Tree Pond to a terminal below Union Common. In 1919, the line was extended one-half mile west to the Bachelder farm where the new owner, Great Northern Paper Company, opened a lime rock quarry. Great Northern had re-incorporated the line as the Knox Railroad when it purchased it in 1918. A station and sidings at South Union also served the village of East Union, and another spur reached limekilns south of the river in Warren. Following declines in service in the 1920s, the last train ran on November 30, 1932. Rails were pulled up a few years later.<sup>2</sup> Ownership of the right of way passed to the Lime Products Corporation after 1962 and owner, Harold Kaler, donated remaining portions of the right of way to the Union Historical Society. These small portions have been given to the owners of the land across which the right of way had been.

Through the nineteenth century the town prospered, attracting a wide variety of industries, developing roads and bridges, becoming an apple-growing center, and was the site of lime rock quarrying until the late 1980s.

After 1850, Union entered a period of population decline, which accelerated after the Civil War, reaching a low point in 1930. Some of the losses were due to the increasing mechanization of New England agriculture. Many of the farms were abandoned and industries, which had flourished here, closed. Population varied only slightly from 1920 through 1970. It took until 1990 to surpass the population recorded in the 1850 Census (1,970 persons). The Census estimated that 2,290 persons lived in Union in 2014. See the Population and Demographics Chapter. Much of the cleared land reverted to forest as farmlands less suited for agricultural use were abandoned. Today fewer full-time farms exist, industry is limited but the area still retains a good deal of its rural character. See the Agricultural and Forestry Resources Chapter.

#### Sources:

1. *Canals and Inland Waterways of Maine* Hayden L. V. Anderson, Maine Historical Society, Portland, Maine, 1982.
2. "The Doodlebug Railroad", Linwood W. Moody, *Down East*, January 1969, Camden, Maine.

To this date, two historic Archeological sites are documented in Union:

1. Jason Ware Homestead, Clarry Hill Road (near northwest shore of Round Pond) , domestic, ca. 1778 (ME 440-001)
2. American Canal opened in 1847 (east bank of St. George River, below Sennebec Pond (field identified, not surveyed) (ME440-002), Known locally as the Georges Canal.

No professional surveys for historic Archeological sites have been conducted to date in Union. Future Archeological survey 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 eighteenth and nineteenth centuries.

#### Historic Building / Structures / Objects

The following properties in Union are currently listed in the National Register of Historic Places:

1. Ebenezer Alden House, off Route 131, a well preserved and restored set of buildings from the late eighteenth century, including Union's first store (1797)
2. Dornan's/Morgan's Mill, East Union Village (1795)
3. (Former) Union Town House, 128 Town House Road, constructed in 1840 and enlarged in 1887-1888
4. George's River Canal (structures including canal depression, dams, locks, prisms), upper falls, Georges River in Warren to Union Town line, extending through Union to Quantabacook Pond (1790s)
5. Joseph and Hannah Maxcy Homestead, 630 South Union Road (1803)
6. The Common, between Common and Burkett Roads (1809)

#### Cemeteries

Cemeteries are also a cultural resource providing insight into the history of the community. An inventory of Union's larger cemeteries is listed below and shown on the Public Facilities Map.

- Common Cemetery (Ayer Hill) 1 acre
- Lakeview Cemetery 1 acre
- Sidelinger Cemetery 0.5 acre
- East Union Cemetery (Miller Rd) 1 acre
- Skidmore Cemetery (Skidmore Rd) 0.77 acre

#### Historical Society

The Union Historical Society, located in the Robbins House on the Common, meets monthly and preserves a wide variety of materials, provides the community with programs and assists visitors with research. Its members work diligently to ensure that future generations will have the opportunity to study and learn from the local past. The

Society owns Robbins House (1847), the Former Town House (1840) on Town House Road, and Cobb's Ledge across from the Former Town House.

The Robbins House was nicely restored in the 1970s and houses most of the Society's collections. The Former Town House (called the Old Town House locally) was painted, reroofed, and extensively restored inside in the 1990s and has been placed on the National Register of Historic Places. It is currently used for some society meetings and is for rent for special occasions. Cobb's Ledge was donated by the Brooks/Upham families. This property was the site of the original mustering ground, a powder storehouse, and a WW II aircraft lookout tower. The small parcels of right-of-way have in several cases been given to the owners of the parcels through which they pass; none of these are now owned by the Society.

Presently, the Society numbers over 260 members. Many of them meet ten times a year for formal meetings and programs. Programs usually involve topics of area history or general topics that might apply to mid-coast Maine. The society has an active role in the annual Founders Day, celebrating the July 19th date when Union was founded.

The Society has reprinted Sibley's "History of the Town of Union" mentioned earlier. It has reprinted "200 Years in Union" and the historical novel set in Union, "Come Spring". All have been well received. In 2003, the Society published a new book, "Bridges to the Past", primarily a photographic history utilizing previously unpublished old photographs and recent ones, often in a then-and-now format. "Bridges to the Past" was initiated due to the Society's growing files of photographs of Union's pre-1880 buildings.

Scientific investigation of the Ben Packard site, where Union's first settlers spent their first months, is also occurring. A climate controlled "archival" room is within the Society's Robbins House. Collections of local and area town histories and genealogies provide important resources for visitors. Grants from the State of Maine and MBNA Corporation have assisted the Society in its work.

Local cooperative organizations are the Matthews Museum of Maine Heritage and the Yellow Schoolhouse Museum. Visitors may drive through Union, following a recently developed road map that directs people to sites of the earliest settlement, mentioned in the well-researched historical novel, "Come Spring". The Historical Society also provides a social setting for increasing the number of people interested in Union's history.

- (3) *An inventory of the location, condition, and use of any historical or Archeological resource that is of local importance.*

See the list above of Prehistoric Archeological Sites and Historic Archeological Sites. The current general condition of select sites is noted in the next table.

<b>Inventory of Historic/Prehistoric Resources of Local Importance</b>	
<b>Resource Name</b>	<b>General Condition</b>
Ebenezer Alden House (off Route 131), set of buildings from the late eighteenth century, including Union's first store	Well preserved and restored
George's River Canal (structures including canal depression, dams, locks, prisms), upper falls, Georges River in Warren to Union Town line, extending through Union to Quantabacook Pond	
Horse trough on the Union Common	Poor
Joseph and Hannah Maxcy Homestead and eighteenth century barn (630 South Union Road)	Generally restored and updated
Dornan's/Morgan's Mill, East Union Village	Fair
Matthews Mill (12 Sunk Haze)	Poor
Thurston Brothers Casket Factory (63 Thurston Lane)	Fair
Union Common (between Common and Burkett Roads)	Regularly maintained
Union Fairgrounds	Regularly maintained
(Former) Union Town House (128 Town House Road), constructed in 1840 and enlarged in 1887-1888	Regularly maintained

Source: Town of Union

Union Common is on the National Register of Historic Places and is among the earliest public common in the State of Maine, deeded to the town in 1809. Along the length of Common Road and along its cross-streets is a collection of old houses, mostly well maintained. The neighborhood is one of "old homes" and a scattering of more recent ones, rather than the opposite. Hugging the green common are new and old homes and businesses, reflecting long history and today's commerce. On the green are an 1895 bandstand, a Civil War Memorial that is a monument to Union's soldiers, an old trough and stately trees which were thoughtfully planted to replace the elms of years ago. South Union and East Union also reflect the vitality of those communities and might be considered for listing as well.

Union's Yellow School served as the town's educational center from the 1930s until the 1980s. It now serves as a community center along with the adjacent Thompson Memorial Building (former town offices) and it serves as an example of what good things small towns might do with such structures. It continues as a place of learning and local involvement.

The Fuller House in South Union sits on the site where the Taylor Party first felled trees and camped, while surveying what would become Taylortown, Sterlingtown and now, Union. Founders Day commemorates that 1774 tree felling annually on July 19th. The house is a remarkable "presence" dating from the 1790s

The Maxcy House in South Union stands as a reminder of that neighborhood's earlier days, when South Union was an economic center. There were as many as eight factories

along today's quiet Crawford Brook, flowing from Crawford Pond to Seven Tree Pond. The house, completed before 1805, reflects styles and tastes very similar to the Alden House, and was undoubtedly partly built by Alden. It is in very good condition and has recently undergone structural and appearance restorations including replacement of the two-story ell to its rear.

Properties which, according to the Union Historical Society, should be considered for the National Register of Historic Places are listed below. They are not listed in order of importance.

- The Grusik House in North Union is unique in that neighborhood for its early date (c. 1805) and for its splendid front door. The door, probably Union's finest, is large and well-proportioned door with sidelights and a fan window of clear glass set in a curvilinear lead.
- Seven Tree Island, once boasting seven pine trees, provided the name for Union's largest pond (approximately 700 acres) and sat just offshore from the earliest settlements. It continues to be a focus for residents and visitors, as it is near the town recreation park (Ayer Park), and is widely visible from the pond's surface and from the many high-ground locations around the pond.
- People's United Methodist Church (1902) stands near the common and is Union's third Methodist Church. The exterior form is virtually unchanged; though now vinyl-sided, the educational wing has been added to the back without detracting from the original architecture. The interior is a tour de force of the tin/steel type of decoration. It, too, is in a superb state of preservation.
- A small building at 295 Common Road has been a blacksmith shop, a firehouse, an antiques business, and a realty office. Its recent restorations reflect its early functions. It dates from the mid-nineteenth century.
- The Thurston Brothers Factory produced caskets and furniture since the 1870s. It exemplifies the large wooden multi-storied structures built throughout New England along waterways. It is the only remaining large mill building in Union.
- Brae Maple Farms includes historic acreage as well as one of its oldest houses. Recognized by Land for Maine's Future and site of Master Gardener work, this property operates as a farm even today. The large, federal style house is one of Union's oldest, built before 1800.
- The Hawes Farm (233 North Union Road) remains in that family today. A Hawes was one of the original settlers of Union. The circa 1800 house, sited above Seven Tree Pond, and its many acres, still operate as a farm. The picturesque farm is a popular subject for photographers. The Maine Historic Preservation Commission notes that this property may be eligible for listing on the National Register.

The Birdhouse Road signs have been a Union trademark since their invention by Robert Heald in the 1970s. Celebrated locally and far away, and the subject of an ABC news special, they are a “sign” of our unique town and actual homes for birds, too.

- (4) *A brief description of threats to local historic resource and to those of state and national significance as identified by the Maine Historic Preservation Commission.*

Union’s history has left the town with a number of likely Indian settlement sites and much historic architecture. Like all old buildings, historic structures require regular, ongoing maintenance. They require ongoing upkeep to repair damage from heavy winds, rain and snow.

While some historically or architecturally significant buildings have been preserved or authentically restored by private individuals, others have fallen into decay or have been changed with inappropriate renovations that replace the original architecture.

**Policies**

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

**Strategies**

<b>Historic and Archeological Resources Strategies</b>	<b>Responsible Parties</b>	<b>Timeframe</b>
<i>(1) For known historic archeological sites and areas sensitive to prehistoric Archeology, through local land use ordinances require subdivision or non-residential developers to take appropriate measures to protect those resources, including but not limited to, requiring a professional survey of historic and/or archeological resources, modification of the proposed site design, construction timing, and/or extent of excavation.</i>	Planning Board, Ordinance Review Committee, Selectmen, and Town Meeting Vote	Immediate and Ongoing
<i>(2) Adopt or amend land use ordinances to require the planning board (or other designated review authority) to incorporate maps and information provided by the Maine Historic Preservation Commission into their review process, and other information on historic resources as included in this chapter.</i>	Planning Board, Ordinance Review Committee, Selectmen, and Town Meeting Vote	Immediate

<b>Historic and Archeological Resources Strategies</b>	<b>Responsible Parties</b>	<b>Timeframe</b>
(3) <i>Work with the local or county historical society and/or the Maine Historic Preservation Commission to assess the need for, and if necessary plan for, a comprehensive community survey of the community's historic and archeological resources, especially in shoreland areas and the Georges Canal (also known as American Canal); one of relatively few navigation canals in Maine.</i>	Planning Board, Union Historical Society, and Maine Historic Preservation Commission	Midterm
(4) Adopt design standards, as needed for the village area to preserve the architecture of historic structures and to encourage new development in keeping with the scale and character of traditional development.	Planning Board, Ordinance Review Committee, Selectmen, and Town Meeting Vote	Long Term
(5) Explore funding opportunities for preservation efforts from private donors and non-profit sources.	Town Manager, Union Historical Society	Long Term

Note: Strategies proposed in this Comprehensive Plan are assigned responsible parties and a timeframe in which to be addressed. Immediate is assigned for strategies to be addressed within two years after the adoption of this Comprehensive Plan, Midterm for strategies to be addressed within five years, and Long Term for strategies to be addressed within ten years. In addition, Ongoing is used for regularly recurring activities.

## WATER RESOURCES

### Introduction

Maintaining water quality is essential for the health of Union, its residents, businesses and environment. This chapter describes Union's water resources and offers strategies to maintain and enhance them.

### Goal

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

### Analyses

- (3) *Are there point sources (direct discharges) of pollution in the community? If so, is the community taking steps to eliminate them?*

There are no licensed locations with direct discharge into Union waterways.

- (2) *Are there non-point sources of pollution? If so, is the community taking steps to eliminate them?*

Runoff from rain falling on impervious surfaces, like buildings, pavement and bare ground, picks up and carries pollutants, and is defined as non-point source pollution. Most non-point pollution is residential in nature such as fertilizers and dumping on private land. In such runoff, pollutants occurring naturally like phosphorous, or from petroleum (motor vehicles and storage tanks), fertilizers and pesticides, in addition to untreated or insufficiently treated wastewater and sewage, can be transported into wetlands and waterbodies. Impervious surface percentage maximums, as set in shoreland zoning provisions, can reduce the amount of runoff into waterbodies. In especially sensitive areas, resource protection designations limit or prohibit development. Stormwater best management practices (erosion and sediment control) are found in the shoreland zoning and the subdivision ordinances. It is believed that shoreland zoning and related provisions are effective overall. They promote retention of stormwater on the property to minimize runoff off-site. Flooding is of concern especially in the Union Fairgrounds. Increased storm events have exacerbated flooding within portions of the Town, and so recommendations are made to enhance standards. See the **Strategies** section in this chapter and in the Future Land Use Plan Chapter.

- (3) *How are groundwater and surface water supplies and their recharge areas protected?*

Town wide, shoreland zoning provides protection around waterbodies and wetlands limiting impervious surfaces, pollution runoff, and certain uses within setbacks and districts that help to protect groundwater, surface waters and their recharge areas, as does

the Maine Plumbing Code regulations pertaining to subsurface wastewater disposal (septic) systems.

The Code Enforcement Officer/Licensed Plumbing Inspector issue permits for subsurface waste/septic systems and drinking water wells following State and local regulations. Additional protections, like increasing the amount of areas under conservation easements, and/or expanding resource protection zoning should be considered for groundwater protection.

- (4) *Do public works crews and contractors use best management practices to protect water resources in their daily operations (e.g. salt/sand pile maintenance, culvert replacement, street sweeping, public works garage operations)?*

The Town and contractors are aware of the need to use best management practices to protect water resources. The Town recently built new sand and salt storage buildings in compliance with Maine DEP regulations. The Town realizes that it needs to do more with culvert replacement and storm drainage repairs and replacement, but is currently constrained by budget pressures. The Town is attempting to deal with storm water runoff during the permitting process for new construction as well as trying to manage existing conditions.

- (5) *Are there opportunities to partner with local or regional advocacy groups that promote water resource protection?*

The Town has been working with the Georges River Land Trust and Medomak Valley Land Trust on several issues and plans to continue an ongoing relationship with the Knox-Lincoln Soil & Water Conservation District to improve the Town's water resource protection through water quality monitoring, education and conservation efforts.

### **Conditions and Trends**

- (1) *The community's Comprehensive Planning Water Resources Data Set prepared and provided to the community by the Department of Inland Fisheries and Wildlife, the Department of Environmental Protection and the Office, or their designees.*

The data set has been incorporated into the maps titled: Water Resources and Fish Passage Barriers, and in the data that follows.

Maine has four water quality classes of rivers and streams: AA, A, B, and C (Title 38 M.R.S.A. Section 465). Each classification assigns designated uses and water quality criteria (narrative and numeric), and may place specific restrictions on certain activities such that the goal conditions of each class may be achieved or maintained. Class AA waters are managed for their outstanding natural ecological, recreational, social, and scenic qualities. Direct discharge of wastewater, dams, and other significant human disturbances are prohibited. Class A waters must be of such quality that they are suitable

for the designated uses of drinking water after disinfection; fishing; agriculture; recreation in and on the water; industrial process and cooling water supply; hydroelectric power generation, except as prohibited under Title 12, section 403; navigation; and as habitat for fish and other aquatic life. The habitat must be characterized as natural. Limited direct discharges are permitted. Class B waters are general-purpose water and are managed to attain good quality water; aquatic life use goal approximately Tier 3 on the Biological Condition Gradient. Well-treated discharges with ample dilution are allowed. Union has both Class A and Class B waterways.

As of 2016, the Maine Department of Health and Human Services indicated that there are five public water systems (PWS) in Union as shown in the next table. The Maine Water Company, Union Division, serves much of the village area, about 113 houses. Nearly all other residents and businesses in the Town outside of the village area depend upon private wells for drinking water.

<b>Union Public Water Systems</b>				
<b>Name/Owner</b>	<b>ID-Type</b>	<b>Source</b>	<b>Depth</b>	<b>Type</b>
Crawford Commons/ Seven Tree Manor	ME0095190	drilled well	NA	C
Maine Water Company - Union Division	ME0091537- 101	bedrock well (farthest from road)	306 feet	C
	ME0091537- 102	bedrock well (nearest to road)	307 feet	C
	ME0091537- 103	bedrock well (middle)	400 feet	C
	ME0091537- 504	cannery well (emergency use)	NA	C
Mic Mac Cove Campground	ME0003551	drilled well	125 feet	NC
RSU 40 Union Elementary and-Middle Schools	ME0000640	drilled well	220 ft	NTNC
Thompson Community Center and Town Office	ME0092377	well	NA	NC

Source: Maine Department of Health and Human Services, Drinking Water Program

Notes: C=Community, NC=Non-Community, NTNC=non-transient non-community

The next two tables show state assessments of public water systems in Union, for the most recent year(s) that the state provided.

<b>Assessment of Maine Water Company - Union Division ME0091537 (4 wells)</b>				
<b>Categories/ID #</b>	<b>91537-101</b>	<b>91537-102</b>	<b>91537-103</b>	<b>91537-504</b>
Type	360' Bedrock Well	205' Bedrock Well	380' Bedrock Well	Blueberry Cannery Well-emergency
Wellhead protection radius around the well	500'	500'	500'	500'
Wellhead Protection Ordinance in effect	No	No	No	No
<b>Existing risk of contamination based on well type &amp; site geology</b>	Moderate risk	Moderate risk	Moderate risk	Low risk
Positive coliform test	No	No	No	No
Nitrate test greater than 5 ppm	No	No	No	No
Septic system within 300 feet of the well	Yes	Yes	Yes	No
<b>Existing risk of acute contamination</b>	Moderate risk	Moderate risk	Moderate risk	Low risk
No legal land control or legal control radius around well of less than 500'	Yes	Yes	Yes	--
<b>Future risk of acute contamination</b>	High risk	High risk	High risk	High risk
Detection of Chronic Chemical Contaminant	No	No	No	No
Name(s) of Chronic Chemical Contaminant(s) Detected	None	None	None	None
Total No. Potential Sources of Contamination within WHPA	10	11	11	None reported
Distance to nearest "Significant Potential Source of Contamination"	NA	300'	300'	None reported
Name of nearest "Significant Potential Source of Contamination"	Unknown	Septic system, septic waste disposal	Septic system, septic waste disposal	None or None Reported
<b>Existing risk of chronic contamination</b>	Moderate risk	Moderate risk	Moderate risk	Low risk
Legal control of Entire Wellhead Protection Area	No	No	No	No
Legal control of 2500 Phase II/V Waiver Radius	No	No	No	No
<b>Future risk of chronic contamination</b>	High risk	High risk	High risk	High risk

Source: Maine Department of Health and Human Services, Drinking Water Program

Note: Date of Assessment May 1, 2003

Assessment of Other Union Wells				
Name/Categories	RSU 40 Union Elementary and Middle Schools	Thompson Community Center/ Union Town Office	Mic Mac Cove Campground	Seven Tree Manor
ID	640101	92377101	3551101	95190101
Type	220' Bedrock Well	Unknown	125' Bedrock Well	Bedrock well
Wellhead protection radius around the well	900			300
Wellhead Protection Ordinance in effect	No			No
<b>Existing risk of contamination based on well type &amp; site geology</b>	Moderate risk	Moderate risk	Low risk	Moderate risk
Positive coliform test	Yes	No	No	No
Nitrate test greater than 5 ppm	No	No	No	No
Septic system within 300' of the well	Yes	No	Yes	Yes
<b>Existing risk of acute contamination</b>	High risk	Low risk	Moderate risk	Moderate risk
No legal land control or legal control radius around well of less than 500'	Yes	Unknown	The proprietor owns or controls all land within 300' of well	Yes
<b>Future risk of acute contamination</b>	High risk	High risk	Low risk	High risk
Detection of Chronic Chemical Contaminant	No	--	--	Yes
Name(s) of Chronic Chemical Contaminant(s) Detected	None	--	--	Cadmium
Total No. Potential Sources of Contamination within WHPA	7	--	--	6
Distance to nearest "Significant Potential Source of Contamination"	300'	--	--	120'
Name of nearest "Significant Potential Source of Contamination"	Underground oil storage tank	--	--	Aboveground oil storage tank
<b>Existing risk of chronic contamination</b>	Moderate risk	--	--	High risk
Legal control of Entire Wellhead Protection Area	No	--	--	No
Legal control of 2500 Phase II/V Waiver Radius	No	--	--	No
<b>Future risk of chronic contamination</b>	High risk	--	--	High risk
Date of Assessment	April 15, 2003	June 3, 2010	May 8, 2003	May 1, 2003

Source: Maine Department of Health and Human Services, Drinking Water Program (DWP)

In order to reduce the potential for activity and development that may degrade water quality, the Maine Drinking Water Program encourages suppliers to develop an active wellhead protection program including acquisition of land or easements on land that is currently undeveloped within their contributing area. They also strongly recommend that they work with municipalities to adopt and enforce a wellhead protection ordinance or equivalent provisions within a land use ordinance.

- (2) *A description of each great pond, river, surface drinking water supply, and other water bodies of local interest including:*
- a. ecological value;*
  - b. threats to water quality or quantity;*
  - c. documented water quality and/or invasive species problems.*

A great pond is defined in Maine statute as "any inland body of water which in a natural state has a surface area in excess of 10 acres...." Using that definition, there are six identified great ponds in Union: Crawford Pond (shared with Warren), Lermond Pond (shared with Hope), Mud Pond, Round Pond, Sennebec Pond (shared with Appleton), and Seven Tree Pond (shared with Warren).

Rivers and streams in Union include the St. George River, Meduncook River, Pettengill Stream, Mill Stream, Quiggle Brook, and several unnamed smaller/intermittent streams. See the maps titled: Water Resources for the locations of these waterways. Most of Union's rivers and streams are Class A, with the exception of portions of Quiggle Brook, which are Class B.

Note: For Union residents, drinking water comes entirely from wells, not from surface waters.

The Maine Department of Environmental Protection (ME-DEP) and the Volunteer Lake Monitoring Program (VLMP) have collected lake data to evaluate water quality, track algal blooms and determine water quality trends. This dataset does not include bacteria, mercury, or nutrients other than phosphorus.

Water quality monitoring datasets for Lermond Pond have been collected since 1984. During this period, 4 years of basic chemical information were collected in addition to Secchi Disk Transparencies (SDT). In summary, the water quality of Lermond Pond is considered above average based on measures of SDT, total phosphorus (TP), and Chlorophyll-a (Chla). The potential for nuisance algal blooms on Lermond Pond is low. It is a non-colored lake. Dissolved oxygen (DO) profiles show little DO depletion in deep areas of the lake. The potential for phosphorus to leave the bottom sediments and become available to algae in the water column (internal loading) is low.

Water quality monitoring datasets for Sennebec Pond have been collected since 1982. During this period, 5 years of basic chemical information was collected in addition to Secchi Disk Transparencies (SDT). In summary, the water quality of Sennebec Pond is considered slightly below average based on measures of SDT, total phosphorus (TP), and Chlorophyll-a (Chla). The potential for nuisance algal blooms on Sennebec Pond is moderate to high. It is moderately colored. Dissolved oxygen (DO) profiles show high DO depletion in deep areas of the lake. The potential for phosphorus to leave the bottom sediments and become available to algae in the water column (internal loading) is high.

Water quality monitoring datasets for Seven Tree Pond has been collected since 1981. During this period, 7 years of basic chemical information was collected, in addition to

Secchi Disk Transparencies (SDT). In summary, the water quality of Seven Tree Pond is considered to be below average, based on measures of SDT, total phosphorus (TP), and Chlorophyll-a (Chla). The potential for nuisance algal blooms on Seven Tree Pond is moderate to high. It is a moderately colored lake. Dissolved oxygen (DO) profiles show high DO depletion in deep areas of the lake. The potential for TP to leave the bottom sediments and become available to algae in the water column (internal loading) is high.

<b>Great Ponds in Union</b>						
<b>Name</b> (shared with)	<b>Crawford Pond</b> (Warren)	<b>Lermond Pond</b> (Hope)	<b>Mud Pond</b>	<b>Round Pond</b>	<b>Sennebec Pond</b> (Appleton)	<b>Seven Tree Pond</b> (Warren)
ID	4810	4800	5680	5684	5682	5686
Area (acres)	596	173	8	255	537	528
Perimeter (miles)	10.9	5.1	0.5	7	5.5	6.9
Mean Depth (feet)	20	14	N/A	17	19	24
Maximum Depth (feet)	57	30	N/A	34	57	45
Fishery Type	Coldwater, Warmwater	Warmwater	N/A	Warmwater	Warmwater	Coldwater, Warmwater
Invasive Aquatic Infestation	None known	None known	None known	None known	None known	None known
Water Quality	Above average	Above average	N/A	N/A	Below Average	Below Average
Flushing Rate per year	3.84	5.40	N/A	N/A	N/A	18.77
Total Phosphorus Overall Average	9 ug/L	6 ug/L	N/A	16 ug/L	16 ug/L	14 ug/L
Chlorophyll a Overall Average	4 ug/L	2.6 ug/L	N/A	6.4 ug/L	5.6 ug/L	6 ug/L
Color Overall Average	28 SPU	20 SPU	N/A	50 SPU	89 SPU	55 SPU
Conductivity Overall Average	45 uS	36 uS	N/A	46 uS	44 uS	44 uS
pH Overall Average	6.82 pH	6.96 pH	N/A	7.23 pH	6.96 pH	6.63 pH
Total Alkalinity Overall Average	8.4 mg/L	7.1 mg/L	N/A	10.5 mg/L	9.8 mg/L	9.7 mg/L
Adult Loons (in 2004)	13	4	N/A	2	3	2

Sources: Maine Dept. Environmental Protection, Maine Dept. Inland Fisheries & Wildlife

Note: N/A = Not Available

## Fish

Fish species known to be present in Union ponds:

1. Alewife, *searun Alosa pseudoharengus* (Round Pound, Sennebec Pond, and Seven Tree Pond)
2. American eel *Anguilla rostrata*
3. Banded killifish *Fundulus diaphanus*
4. Brook trout *Salvelinus fontinalis*
5. Brown bullhead *Ameiurus nebulosus*
6. Brown trout *Salmo trutta*
7. Chain pickerel *Esox*
8. Creek chub *Semotilus atromaculatus*
9. Golden shiner *Notemigonus crysoleucas* (Sennebec Pond)
10. Largemouth bass *Micropterus salmoides*
11. Landlocked salmon *Salmo salar sebago*
12. Minnows-carps *Cyprinidae*
13. Pumpkinseed *Lepomis gibbosus*
14. Rainbow smelt *Osmerus mordax*
15. Smallmouth bass *Micropterus dolomieu*
16. Sunfish *Lepomis*
17. White perch *Morone americana*
18. White sucker *Catostomus commersoni*
19. Yellow perch *Perca flavescens*

The following fish species are of greatest conservation need as determined by the Maine Department of Environmental Protection for the region including Union.

1. American eel *Anguilla rostrata*
2. Atlantic salmon *Salmo salar*
3. Brook trout *Salvelinus fontinalis*

Crayfish and mussels known to be present in Union ponds:

1. No crayfish recorded (but may be present)
2. Eastern elliptio *Elliptio complanata*
3. Eastern floater *Pyganodon cataracta*
4. Tidewater mucket *Leptodea ochracea*
5. Triangle floater *Alasmidonta undulata*
6. Yellow lampmussel *Lampsilis cariosa*

Aquatic plant species known to be present in Union ponds:

1. aquatic moss spp. *aquatic moss spp.*
2. arrowhead, spp. *Sagittaria spp.*
3. bladderwort, common *Utricularia vulgaris*

4. bladderwort, floating *Utricularia radiata*
5. bladderwort, hiddenfruit *Utricularia geminiscapa*
6. bladderwort, large purple *Utricularia purpurea*
7. bulrush, Torrey's *Schoenoplectus torreyi*
8. bulrush, hardstemmed *Schoenoplectus acutus*
9. bur-reed, floating leaf *Sparganium fluctuans*
10. bur-reed, narrow floating-leaf *Sparganium angustifolium*
11. bryozoan colony (ectoprocta) *Bryozoa*
12. coontail *Ceratophyllum demersum*
13. golden pert *Gratiola aurea*
14. mannagrass, boreal *Glyceria borealis*
15. naiad, slender *Najas flexilis*
16. pickerel weed *Pontedaria cordata*
17. pipewort *Eriocaulon aquaticum*
18. pondweed, clasping-leaf *Potamogeton perfoliatus*
19. pondweed, fern *Potamogeton robbinsii*
20. pondweed, red-head *Potamogeton richardsonii*
21. pondweed, ribbon-leaf *Potamogeton epihydrous*
22. pondweed, spiral-fruited *Potamogeton spirillus*
23. quillwort *Isoetes spp.*
24. rush, bayonet *Juncus militaris*
25. rush, brown-fruited *Juncus pelocarpus*
26. rush, spp. *Juncus spp.*
27. sedge, nodding *Carex gynandra*
28. spatterdock *Nuphar variegata*
29. spikerush, creeping *Eleocharis palustris*
30. spikerush, needle *Eleocharis acicularis*
31. sponge, freshwater spp. *sponge, freshwater*
32. stonewort spp. *Nitella spp.*
33. swamp candles *Lysimachia terrestris*
34. sweetflag *Acorus americanus*
35. threeway sedge *Dulichium arundinaceum*
36. water lily, fragrant *Nymphaea odorata*
37. water lobelia *Lobelia dortmanna*
38. water marigold *Bidens beckii*
39. water-milfoil, whorled *Myriophyllum verticillatum*
40. waterweed, slender *Elodea nutallii*
41. watershield *Brasenia schreberi*
42. waterwort *Elatine minima*
43. wild celery (eel grass) *Vallisneria americana*

### **Invasive Species**

Maine DEP has recorded no invasive species in Union (exclusively, the eleven invasive aquatic plants that are listed by Maine law as imminent threats to Maine waters and Chinese mystery snails). Purple loosestrife is a known wetland invader and increasingly

common along the shoreline of Maine lakes and rivers. To date, occurrences of this invader has not been systematically inventoried or mapped by the State.

### **Aquifers**

According to the Maine Geological Survey, there are no areas of significant aquifers in Union. A “significant aquifer” is defined as one “capable of yielding 10 gallons or more of ground water per minute to a properly installed well.”

### **Wetlands**

Wetlands help to control erosion, store floodwaters, recycle nutrients, filter pollutants, and recharge groundwater. Union has several large wetlands and numerous smaller ones. Wetlands are habitat for fisheries, wildlife and plants. See the map titled Water Resources for the location of wetlands. See the Natural Resources Chapter for more information on wetland habitats.

### **Stream Crossing Barriers**

Barriers to fish and other aquatic animals occur where roadways cross over streams. The State has analyzed stream crossings on public roads: bridges, struts and culverts. Eight of these types of barriers was identified for Union, with an additional 14 potential barriers. Dams can also limit the passage of fish, and measures can be taken to remediate this impact. Two dams have been identified as barriers to aquatic habitat in Union. See the map titled Fish Passage Barriers for the location of barriers and potential barriers in Union. Replacing existing culverts and struts with adequately sized ones can improve fish passage and can reduce flooding in adjacent areas. Accordingly resizing should be considered when culverts need replacement. Likewise, dams can be designed to improve habitat movement.

### **Flooding**

Flooding is a concern in low-lying areas generally and in the Union Fairgrounds especially, as it floods on an annual basis. Increased storm events have exacerbated flooding within portions of the Town. See the Land Use Chapter and Future Land Use Plan Chapter for information on the floodplain management ordinance and recommended best management practices that better account for increased storm events.

- (3) *A summary of past and present activities to monitor, assess, and/or improve water quality, mitigate sources of pollution, and control or prevent the spread of invasive species.*

The Town, through its ordinances is working on controlling stormwater runoff. The Town has worked cooperatively with private owners to manage stormwater runoff through improvements to drainage systems. Monitoring of waterbodies has previously taken place through the efforts of state and regional conservation groups.

- (4) *A description of the location and nature of significant threats to aquifer drinking water supplies.*

A threat to water quality is non-point source pollution, primarily stormwater runoff. As mentioned, town ordinances have partially addressed this issue. The town may want to consider other measures such as implementing low impact development techniques that focus on catching stormwater before it leaves individual properties. A potential threat to water quality is from individual septic systems that fail. The Code Enforcement Officer reports two known failed septic systems in the past three years. The Town issues notices of violation and can provide assistance with remediation for low-income individuals.

- (5) *A summary of existing lake, pond, river, stream, and drinking water protection and preservation measures, including local ordinances.*

Municipal shoreland zoning provisions protect water quality in the shoreland zone along streams, ponds and wetlands. The floodplain management ordinance limits development in floodplains. See the Land Use Chapter for more information. Best Management Practices are required for development activities during and after construction, and for timber harvesting related to erosion and sediment control to protect waterbodies. State and federal laws that protect water resources are summarized below. Enforcement of these laws by State agencies can be limited due to agency staffing levels. Compliance with most State and federal environmental regulations is often left to individual landowners. Some of the most significant State laws affecting water resources, and other natural resources, include the following:

- Maine Erosion and Sedimentation Control Law – requires basic controls and stabilization when a project involves filling, displacing, or exposing earthen material. No permit is required, but the law sets minimum across-the-board standards that help prevent harm to surface waters.
- Maine Forest Practices Act – requires that landowners notify the Maine Bureau of Forestry of any commercial timber harvesting activities, and that commercial harvest activities meet specific standards for timber harvesting adjacent to waterbodies, clearcutting and forest regeneration following the timber harvest. If harvesting activities result in a clear-cut larger than five acres, there must be a separation zone between clearcuts, and regeneration standards must be met. This rule requires a harvest management plan developed by a licensed forester for clearcuts greater than 20 acres. The rules prohibit clearcuts greater than 250 acres.
  - Maine Natural Resource Protection Act (NRPA) – regulates activities in, on, over or adjacent to natural resources, such as lakes, wetlands, streams, rivers, fragile mountain areas, high and moderate value waterfowl and wading bird habitats, shorebird areas, high and moderate value deer wintering areas, significant vernal pools, and sand dune systems. Standards focus on the possible impacts to the resources and to existing uses.
- Maine Plumbing Code – rules pertain to materials, fixtures, vent and waste piping potable water supply piping, and approved subsurface wastewater disposal

(septic) systems necessary to protect the public health, safety, and welfare of the citizens of Maine.

- Maine Site Location of Development Law (Site Law) – regulates developments that may have a substantial impact on the environment (i.e., large subdivisions and/or structures, 20-acre-plus developments, and metallic mineral mining operations). Standards address a range of environmental impacts.
- Maine Storm Water Management Law – regulates activities creating impervious or disturbed areas (of size and location) because of their potential impacts to water quality. In effect, this law extends storm water standards to smaller-than Site Location of Development Law–sized projects. It requires quantity standards for storm water to be met in some areas, and both quantity and quality standards to be met in others.

DRAFT

**Policies**

- (1) *To protect current and potential drinking water sources.*
- (2) *To protect significant surface water resources from pollution and improve water quality where needed.*
- (3) *To protect water resources in growth areas while promoting more intensive development in those areas.*
- (4) *To minimize pollution discharges through the monitoring of existing septic system & education of the public.*
- (5) *To cooperate with neighboring communities and regional/local advocacy groups to protect water resources.*

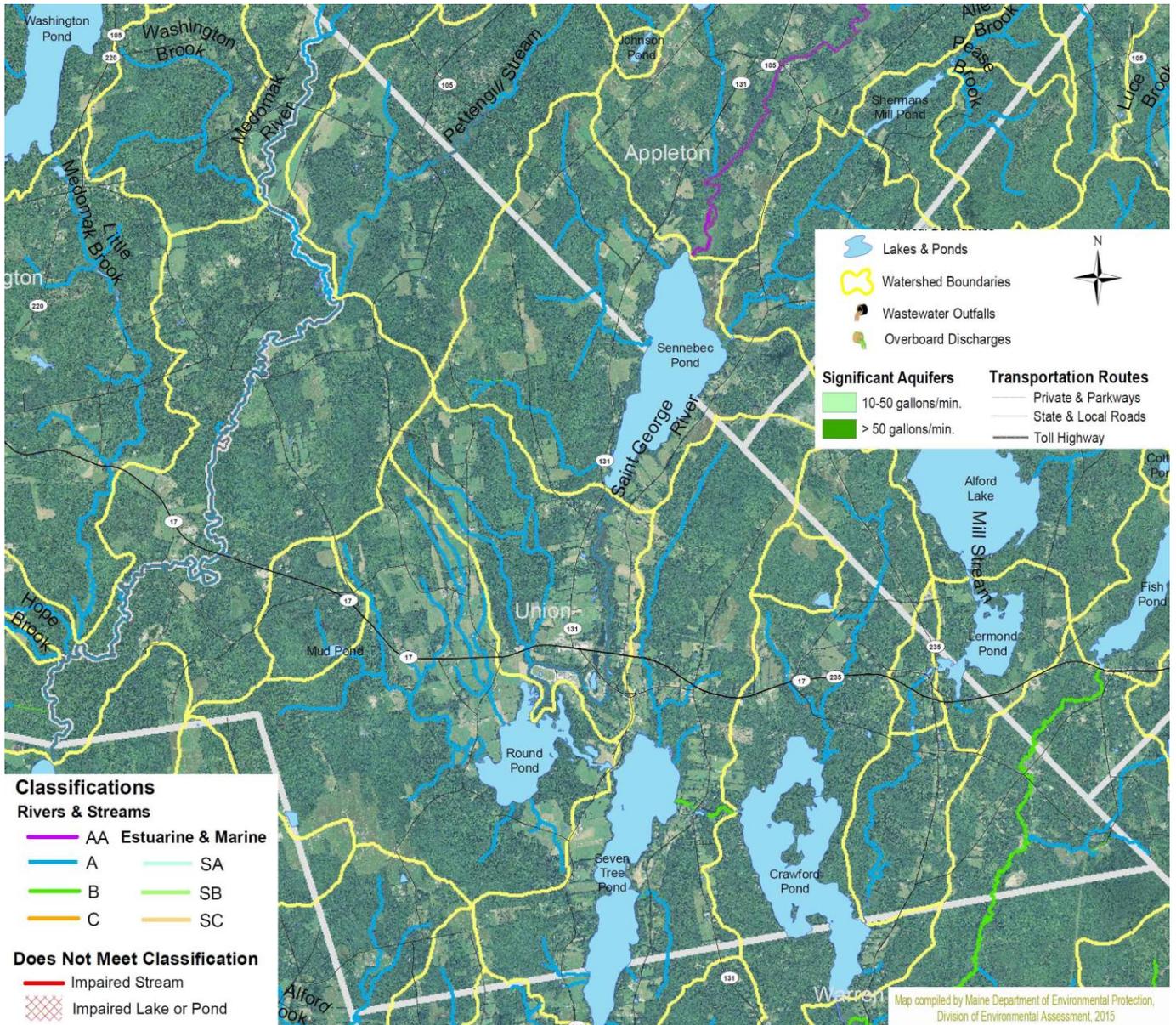
**Strategies**

<b>Water Resources Strategies</b>	<b>Responsible Parties</b>	<b>Timeframe</b>
<p>(1) <i>Adopt or amend local land use ordinances as applicable to incorporate storm water runoff performance standards consistent with:</i></p> <ul style="list-style-type: none"> <li>a. <i>Maine Stormwater Management Law and Maine Stormwater regulations (Title 38 M.R.S.A. §420-D and 06-096 CMR 500 and 502).</i></li> <li>b. <i>Maine Department of Environmental Protection's allocations for allowable levels of phosphorus in lake/pond watersheds.</i></li> <li>c. <i>Maine Pollution Discharge Elimination System Stormwater Program</i></li> <li>d. <i>Amend regulations for construction and development, which better protect against runoff on adjoining lands and roads through erosion control methods.</i></li> </ul>	<p>Selectmen, Planning Board, Code Enforcement Officer, and Town Meeting Vote</p>	<p>Midterm</p>
<p>(2) <i>Consider amending local land use ordinances, as applicable, to incorporate low impact development standards to reduce flooding on properties and on public roadways.</i></p>	<p>Selectmen, Planning Board, Code Enforcement Officer, and Town Meeting Vote</p>	<p>Midterm</p>
<p>(3) <i>Where applicable, develop an urban impaired stream watershed management or mitigation plan that will promote continued development or redevelopment without further stream degradation.</i></p>	<p>NA</p>	
<p>(4) <i>Maintain, enact or amend public wellhead and aquifer recharge area protection mechanisms in land use ordinances, remove nearby underground oil tanks, conduct hydro-geologic studies to delineate protection areas, and use conservation easements, if necessary for:</i></p> <ul style="list-style-type: none"> <li>• <i>Maine Water Company-Union Division (4 wells)</i></li> <li>• <i>RSU 40 Union Elementary and Middle Schools (1 well)</i></li> <li>• <i>Thompson Community Center/ Town of Union Office (1 well)</i></li> </ul>	<p>Selectmen, Planning Board, Code Enforcement Officer, and Town Meeting Vote</p>	<p>Midterm and Ongoing</p>

Water Resources Strategies	Responsible Parties	Timeframe
<p>(5) The Town will continue to <i>encourage landowners to protect water quality</i>. Union provides <i>local contact information at the municipal office for water quality best management practices from resources such as the Natural Resource Conservation Service, University of Maine Cooperative Extension, Soil and Water Conservation District, Maine Forest Service, and/or Small Woodlot Association of Maine</i>.</p> <ul style="list-style-type: none"> <li>• Inform residents concerning the proper maintenance of septic systems.</li> </ul>	<p>Selectmen, Planning Board and Code Enforcement Officer</p>	<p>Immediate and Ongoing</p>
<p>(6) The Town will continue to <i>adopt water quality protection practices and standards for construction and maintenance of public and private roads and public properties and requires their implementation by contractors, owners, and community officials and employees</i> that better account for the increased storm events observed.</p>	<p>Selectmen, Planning Board, Code Enforcement Officer, and Town Meeting Vote</p>	<p>Immediate and Ongoing</p>
<p>(7) The Town will continue to <i>participate in local and regional efforts to monitor, protect and, where warranted, improve water quality</i>.</p>	<p>Selectmen, Maine DEP, Conservation District, University of Maine</p>	<p>Midterm</p>
<p>(8) The Town will <i>provide educational materials at appropriate locations regarding aquatic invasive species</i>.</p>	<p>Town Clerk, Code Enforcement Officer</p>	<p>Ongoing</p>
<p>(9) The Town will evaluate the replacement of potentially substandard culverts that are subject to increased flooding and that might limit the movement of aquatic habitat. Dependent upon funding availability, the Town will seek to install stream smart crossings where appropriate to reduce flooding and improve habitats, and consider improvements to existing dams to facilitate the movement of aquatic habitat.</p>	<p>Selectmen, Maine DEP</p>	<p>Long Term</p>

Note: Strategies proposed in this Comprehensive Plan are assigned responsible parties and a timeframe in which to be addressed. Immediate is assigned for strategies to be addressed within two years after the adoption of this Comprehensive Plan, Midterm for strategies to be addressed within five years, and Long Term for strategies to be addressed within ten years. In addition, Ongoing is used for regularly recurring activities.

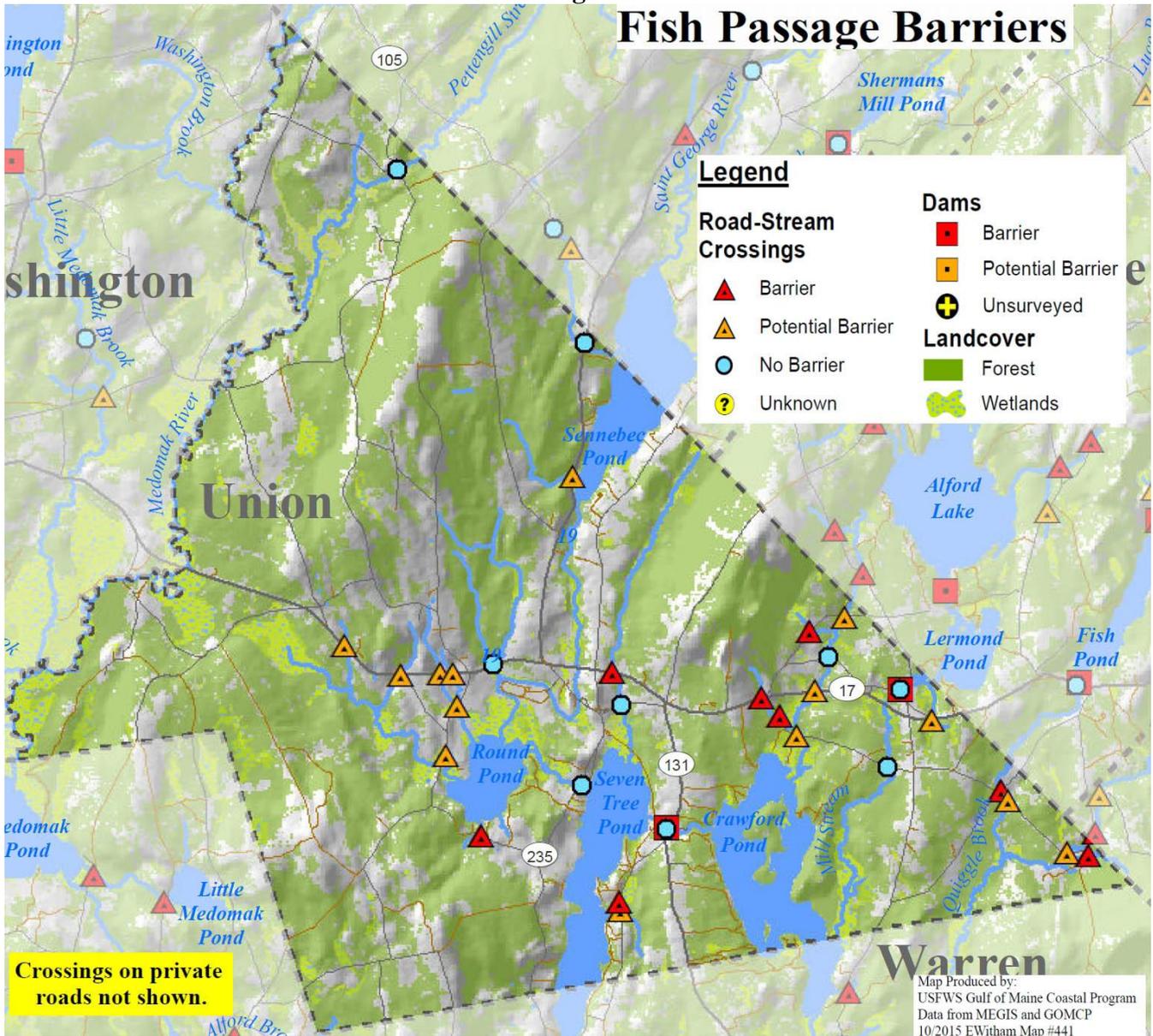
# Water Resources



Source: Maine DEP, 2015 (excerpt of state-prepared map)

### Fish Passage Barriers

# Fish Passage Barriers



Source: Maine DACF, 2015 (excerpt of state-prepared map)

## NATURAL RESOURCES

### Introduction

Critical natural resources define much of the physical character of Union. Natural resources are also described in the Agricultural and Forestry Resources Chapter and the Water Resources Chapter.

### *State Goal*

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

### Analyses

- (1) *Are any of the community's critical natural resources threatened by development, overuse, or other activities?*

Many of the identified critical natural resources in Union are in wetlands and shoreland zones and accordingly are protected by relevant ordinance provisions. Residential development has been relatively modest and small-scale around wetlands, allowing for the continued protection of larger habitats. Commercial development has occurred along existing roadway corridors, primarily in the village area and along portions of Routes 17 and 131, outside of most critical resource areas, with the exception of the Union Fairgrounds.

- (2) *Are local shoreland zone standards consistent with state guidelines and with the standards placed on adjacent shorelands in neighboring communities?*

The Town's shoreland zoning standards are consistent with state guidelines and with the standards placed on adjacent shorelands in neighboring communities.

- (3) *What regulatory and non-regulatory measures has the community taken or can the community take to protect critical natural resources and important natural resources?*

By updating its ordinances and through the recommendations in this Comprehensive Plan, the Town is attempting to continue to protect critical natural resources. The shoreland zone ensures a good measure of protection of waterbodies and wetlands. As noted, many of the Town's critical natural resources are found in the shoreland zone and in wetlands. Protection for critical natural resources could be improved by incorporating the map information included in this chapter into the land use ordinances and the permitting process. See the Water Resources Chapter and Land Use Chapter for more information on municipal ordinances and state regulations that help to protect natural resources.

Non-regulatory measures include working with property owners and land trusts to promote the voluntary use of conservation easements in areas with critical natural resources. The use of conservation easements or purchases may be more acceptable to residents and voters than increased regulations. Easements and conservation purchases result in permanent protection while municipal ordinances are subject to future amendments or repeal. Parklands currently held by the Town of Union, include these properties: Ayers Park, Union Common, and Founders Park on Crawford Stream.

Preserves owned and managed by the Georges River Land Trust include Pool Preserve (three acres along the St. George River), Stickney Preserve (no public access), and 100-Acre Island on Crawford Pond (access only available through private lands). The Georges River Land Trust also holds conservation easements for other private lands the do not allow public access, approximately 283 acres.

Medomak Valley Land Trust is active in Union as well. They manage 65 acres on Clarry Hill in Union and more land in Waldoboro. The Carroll Farm Trail is located on a 70-acre parcel known as Sweetgrass Farm Winery and Distillery. The farm is under private ownership, and is open to the public year-round for low-impact recreation, while the Medomak Valley Land Trust maintains the trail.

*(4) Is there current regional cooperation or planning underway to protect shared critical natural resources? Are there opportunities to partner with local or regional groups?*

The Town has worked with state agencies, the Georges River Land Trust and Medomak Valley Land Trust to protect shared natural resources like the St George River, Medomak River, Crawford Pond, and Clarry Hill. The Town has worked with state agencies regarding conservation efforts and easements in other parts of the community as well.

### **Conditions and Trends**

*(1) The community's Comprehensive Planning Natural Resources Data Set prepared and provided to the community by the Department of Inland Fisheries and Wildlife, Department of Environmental Protection and the Office, or their designees.*

The data set has been incorporated into this chapter and in the state-prepared excerpted maps titled Critical Habitat (includes High Value Plant and Animal Habitats), USFWS Priority Trust Species Habitats, Wetlands Characterization, and Undeveloped Habitat Blocks. See also, the Water Resources Chapter.

Areas of special concern include these threatened species in Union: tidewater mucket and yellow lampmussel (freshwater mussel), spotted pondweed, upland sandpiper, and swamp white oak. Species of special concern in Union include the bald eagle and wild garlic. Along a portion of the southwestern border with Washington are wetlands termed

by the state as an Appalachian- Acadian Basin Swamp Ecosystem. Atlantic Salmon spawning and rearing habitat are found along the St George River from Sennebec Pond to Round Pond. Significant wildlife habitats, as defined by the State, are present in Union consisting of candidate (approximate) deer wintering areas and inland waterfowl and wading bird areas, which are found in wetlands and shorelands. See the map titled Critical Habitat (includes High Value Plant and Animal Habitats).

Wetlands (freshwater emergent, freshwater forested/shrub) are found throughout the Town adjacent to lakes, ponds and rivers. See the map titled Wetlands Characterization.

A sizeable amount of area between roadways is an un-fragmented habitat block that benefits multiple species. See the map titled Undeveloped Habitat Blocks.

**State Definition of Critical Natural Resources** (105 Chapter 208 CP Review Criteria Rule)

*“Critical natural resources” means the following natural resources which under federal and/or state law warrant protection from the negative impacts of development:*

1. *Resource Protection District areas as set forth in MDEP Guidelines for Municipal*
  - a. *Shoreland Zoning Ordinances (Chapter 1000 § 13.A) pursuant to the Mandatory Shoreland Zoning Act (38 MRSA §438-A, subsection 1);*
2. *Wetlands of special significance as defined in MDEP Wetlands and Waterbodies Protection Rules (Chapter 310 § 4);*
3. *Significant wildlife habitat as defined in the Natural Resources Protection Act (38 MRSA §480-B(10))*
4. *Threatened, endangered and special concern animal species habitat as identified and mapped by MIFW pursuant to the Maine Endangered Species Act (12 MRSA, Chapter 925);*
5. *Significant freshwater fisheries spawning habitat as identified and mapped by MIFW or MDMR;*
6. *Natural communities that are critically imperiled (S1), imperiled (S2) or rare (S3) as defined and mapped by MNAP;*
7. *Areas containing plant species declared to be threatened or endangered by the MDOC.*
8. *Coastal sand dune systems as defined in the Natural Resources Protection Act (38 MRSA §480-B(1));*
9. *Fragile mountain areas as defined in the Natural Resources Protection Act (38 MRSA §480-B(3)); or*
10. *National Natural Landmarks designated by the National Park Service pursuant to its National Natural Landmark Program (36 Code of Federal Regulation, Section 62).*

- (2) A map or description of scenic areas and scenic views of local importance, and regional or statewide importance, if available.

The physical character of much of Union is enhanced by its scenic resources, which contribute to the local quality of life and the value of surrounding properties. Perhaps the most important scenic water views and vistas are those visible to the public from public roads and public parks.

<b>Scenic Resources in Union</b>		
<b>Site Name</b>	<b>Feature (s) Seen from Site</b>	<b>Protection Status Ownership/Easement</b>
Ayers Park	Seven Tree Pond	Town-owned
Carroll Farm Trail	Medomak River	Privately-owned, with Medomak Valley Land Trust easement
Clarry Hill	Fields	Medomak Valley Land Trust Preserve with Maine DACF easement
Coggins Hill	Fields	
Founders Park	Crawford Stream	Town-owned
Overlock Hill	Fields	
Union Common	Village	Town-owned
Land Use Ordinance 3.14 (pg. 88&89)	Around town	Privately-owned

Source: Town of Union

**Policies**

- (1) *To conserve critical natural resources in the community.*
- (2) *To coordinate with neighboring communities and regional and state resource agencies to protect shared critical natural resources.*

**Strategies**

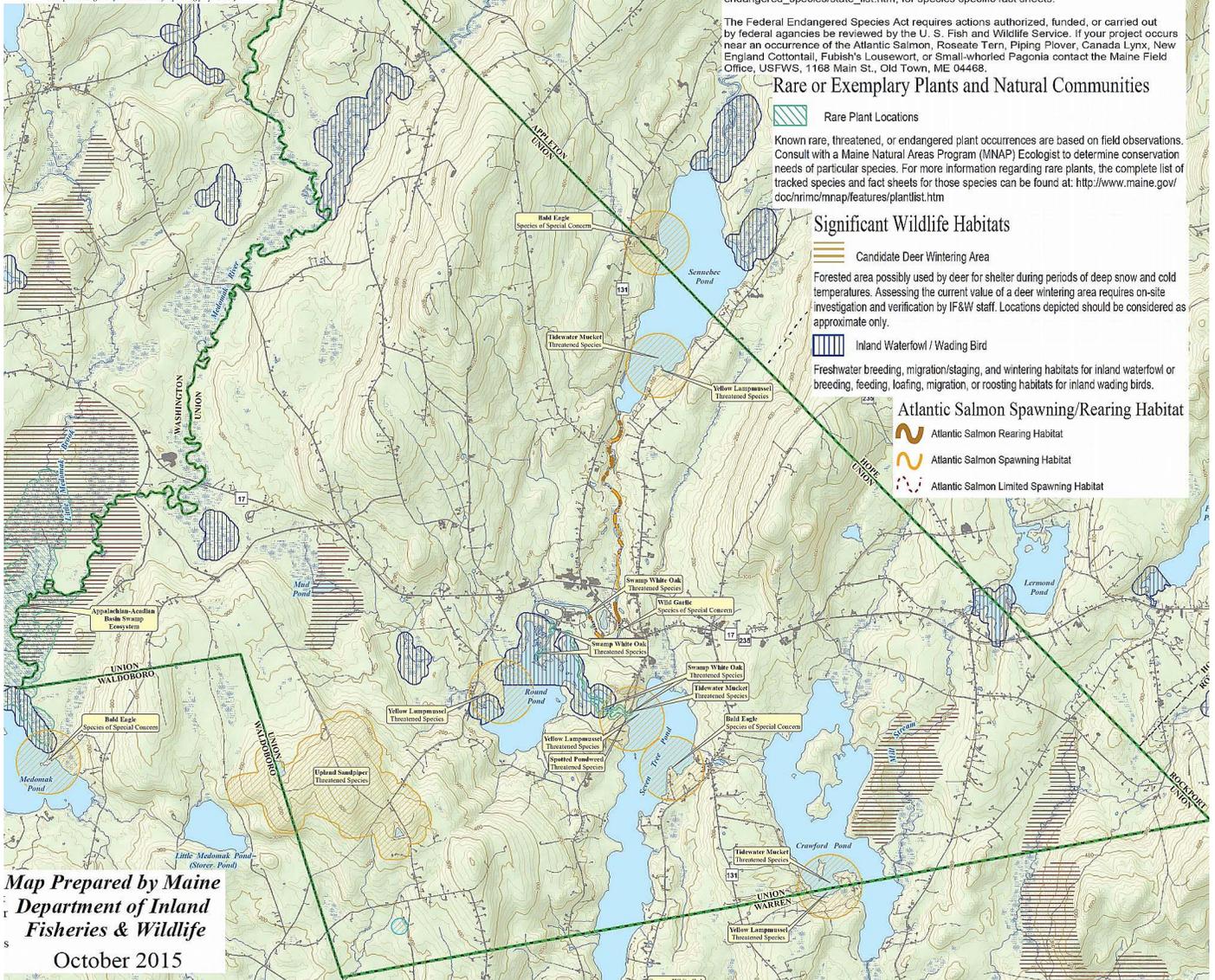
<b>Natural Resources Strategies</b>	<b>Responsible Parties</b>	<b>Timeframe</b>
(1) <i>Ensure that land use ordinances are consistent with applicable state law regarding critical natural resources.</i>	Select Board, Planning Board, Code Enforcement Officer, Ordinance Review Committee, Town Voters	Immediate and Ongoing
(2) <i>Designate critical natural resources as Critical Resource Areas in the Future Land Use Plan.</i> <ul style="list-style-type: none"> <li>• Additional development should be concentrated close to existing “village” centers, where soil, drainage and other conditions allow and in order to protect and preserve natural resources. Review the Land Use Ordinance to encourage development to occur primarily in village areas, not in Critical Resource Areas.</li> </ul>	Comprehensive Planning Committee	Immediate And Ongoing
(3) <i>Through local land use ordinances, require subdivision or non-residential property developers to look for and identify critical natural resources that may be on site and to take appropriate measures to protect those resources, including but not limited to, modification of the proposed site design, construction timing, and/or extent of excavation.</i>	Select Board, Planning Board, Code Enforcement Officer, Ordinance Review Committee, Town Voters	Midterm
(4) <i>Through local land use ordinances, require the planning board (or other designated review authority) to include as part of the review process, consideration of pertinent BwH maps and information regarding critical natural resources.</i>	Select Board, Planning Board, Code Enforcement Officer, Ordinance Review Committee, Town Voters	Immediate and Ongoing
(5) <i>Initiate and/or participate in interlocal and/or regional planning, management, and/or regulatory efforts around shared critical and important natural resources.</i> <ul style="list-style-type: none"> <li>• Consult and cooperate with neighboring communities by (a) drafting land use ordinance amendments that harmonize environmental performance standards to protect shared critical</li> </ul>	Select Board, Town Manager, Planning Board, and Code Enforcement Officer	Midterm and Ongoing

Natural Resources Strategies	Responsible Parties	Timeframe
habitats and water bodies, and by (b) notifying neighboring planning boards of proposals for large developments near their borders and/or on shared natural resources.		Long Term and Ongoing
<i>(6) Pursue public/private partnerships to protect critical and important natural resources such as through purchase of land or easements from willing sellers.</i>	Select Board, Town Manager, and Property owners	Long Term and Ongoing
<i>(7) Distribute or make available information to those living in or near critical or important natural resources about current use tax programs and applicable local, state, or federal regulations.</i>	Town Clerk and Code Enforcement Officer	Immediate and Ongoing

Note: Strategies proposed in this Comprehensive Plan are assigned responsible parties and a timeframe in which to be addressed. Immediate is assigned for strategies to be addressed within two years after the adoption of this Comprehensive Plan, Midterm for strategies to be addressed within five years, and Long Term for strategies to be addressed within ten years. In addition, Ongoing is used for regularly recurring activities.

# Critical Habitat (includes High Value Plant and Animal Habitats)

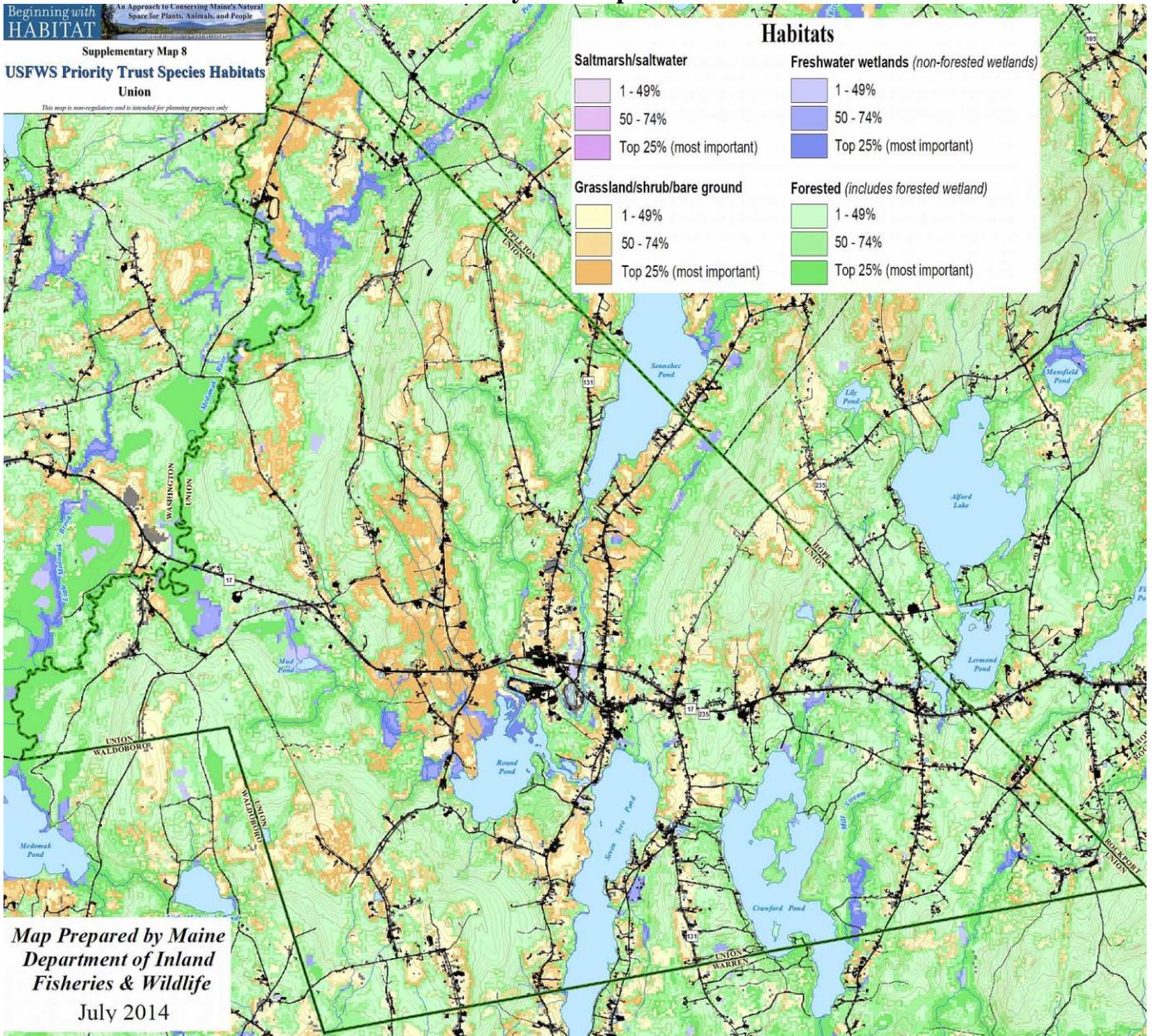
**Beginning with HABITAT**  
 An Approach to Conserving Maine's Natural Space for Plants, Animals, and People  
**Primary Map 2**  
**High Value Plant & Animal Habitats Union**  
*This map is non-regulatory and is intended for planning purposes only.*



**Map Prepared by Maine Department of Inland Fisheries & Wildlife**  
 October 2015

Source: Maine IF&W, 2015 (excerpt of state-prepared map)

# USFWS Priority Trust Species Habitat



Source: Maine IF&W, 2015 (excerpt of state-prepared map)  
Note: Map legend continues on next page.

## Legend for USFWS Priority Trust Species Habitat Map

### Priority Trust Species

The 91 USFWS Gulf of Maine Priority Trust Species include animals and plants that regularly occur in the Gulf of Maine watershed and meet any of the following criteria:

- + Federally endangered, threatened, or candidate species;
- + Migratory birds, sea-run fish and marine fish that show significant and persistent declining population trends, or have been identified as endangered or threatened by 2 or 3 states in the Gulf of Maine watershed;
- + Species of concern as identified in the U.S. Shorebird Conservation Plan, Colonial Waterbird Plan or Partners in Flight.

An asterisk (\*) following the name in the list of priority species below indicates that high value habitat depicted on the map at left has the potential to support that species.

#### **BIRDS**

American bittern\*  
 American black duck\*  
 American oystercatcher  
 American woodcock\*  
 Arctic tern  
 Bald eagle\*  
 Baltimore oriole\*  
 Bay-breasted warbler  
 Bicknell's thrush  
 Black scoter  
 Black tern  
 Black-bellied plover  
 Blackburnian warbler\*  
 Blackpoll warbler  
 Black-throated blue warbler\*  
 Blue-winged warbler  
 Buff-breasted sandpiper  
 Canada warbler\*  
 Cape May warbler  
 Chestnut-sided warbler\*  
 Common loon\*  
 Common tern  
 Eastern meadowlark  
 Field sparrow  
 Golden-winged warbler  
 Grasshopper sparrow  
 Hudsonian godwit  
 Killdeer\*  
 Least sandpiper  
 Least tern  
 Little blue heron  
 Little gull  
 Louisiana waterthrush

#### **BIRDS (cont'd)**

Marsh wren\*  
 Nelson's sparrow  
 Northern flicker \*  
 Northern goshawk\*  
 Northern harrier  
 Olive-sided flycatcher  
 Osprey\*  
 Peregrine falcon  
 Pied-billed grebe\*  
 Piping plover  
 Prairie warbler  
 Purple sandpiper  
 Razorbill  
 Red crossbill  
 Red-headed woodpecker  
 Red knot  
 Red-shouldered hawk\*  
 Roseate tern  
 Ruddy turnstone  
 Saltmarsh sparrow  
 Sanderling  
 Scaup (greater and lesser)  
 Seaside sparrow  
 Sedge wren  
 Semipalmated sandpiper  
 Short-billed dowitcher  
 Short-eared owl  
 Snowy egret  
 Solitary sandpiper  
 Spruce grouse  
 Surf scoter  
 Tricolored heron

#### **BIRDS (cont'd)**

Upland sandpiper  
 Veery\*  
 Whimbrel  
 Whip-poor-will  
 White-winged scoter  
 Wilson's Snipe\*  
 Wood duck\*  
 Wood thrush\*  
 Yellow rail

#### **FISHERIES**

Alewife\*  
 American eel\*  
 American shad\*  
 Atlantic salmon\*  
 Atlantic sturgeon  
 Blueback herring\*  
 Bluefish  
 Horseshoe crab  
 Shortnose sturgeon  
 Winter flounder

#### **PLANTS**

E. prairie fringed orchid  
 Furbish's lousewort  
 Robbins' cinquefoil  
 Small whorled pogonia

#### **MAMMAL**

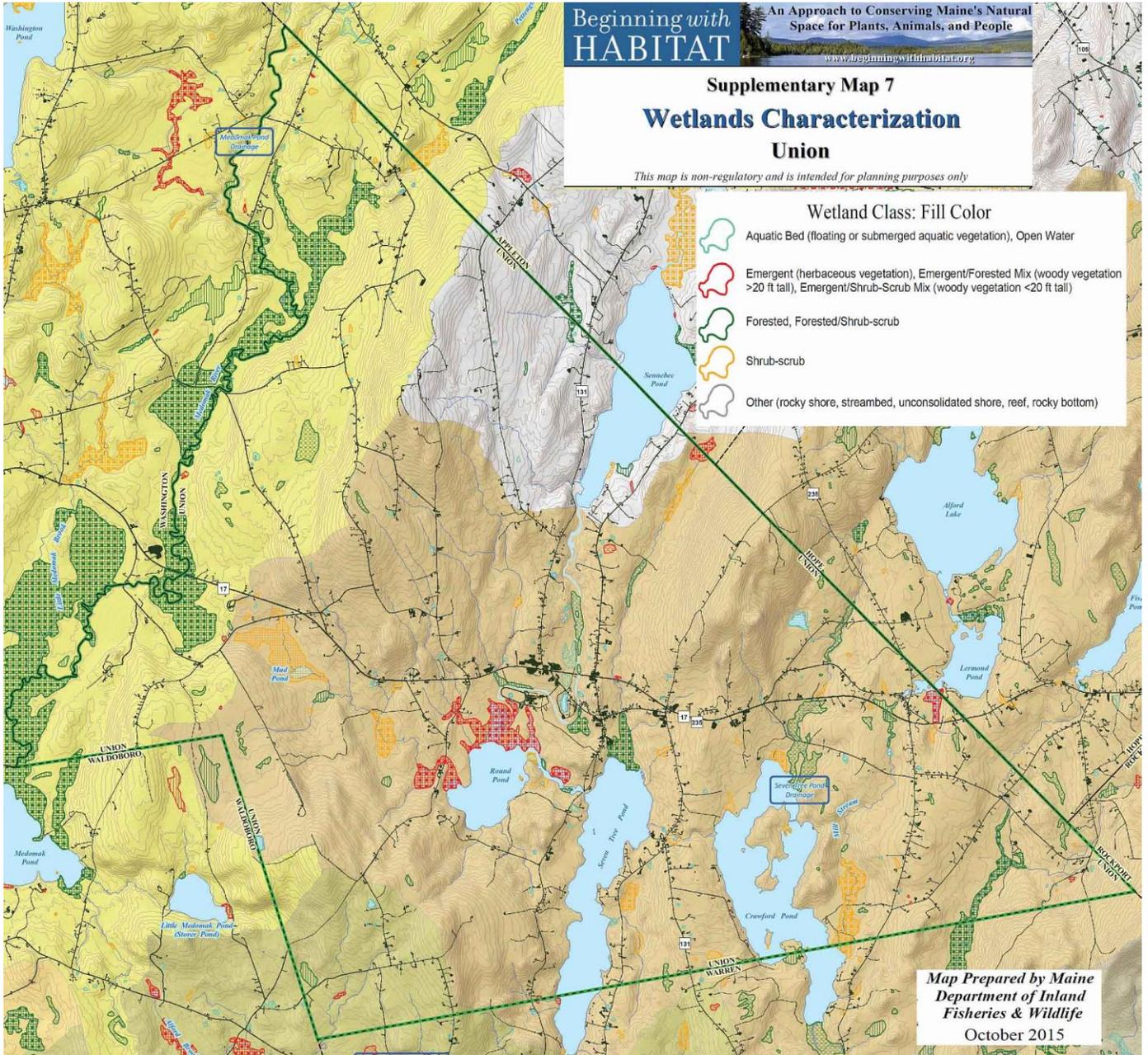
Canada lynx

#### **REPTILE**

Plymouth redbelly turtle

Source: Maine IF&W

# Wetlands Characterization



Source: Maine IF&W, 2015 (excerpt of state-prepared map)  
Note: Map legend continues on next page.

# Legend for Wetlands Characterization Map

## LEGEND

This map depicts all wetlands shown on National Wetland Inventory (NWI) maps, but categorized them based on a subset of wetland functions. This map and its depiction of wetland features neither substitute for nor eliminate the need to perform on-the-ground wetland delineation and functional assessment. In no way shall use of this map diminish or alter the regulatory protection that all wetlands are accorded under applicable State and Federal laws. For more information about wetlands characterization, contact Elizabeth Hertz at the Maine Department of Conservation (207-287-8061, elizabeth.hertz@maine.gov).

The Wetlands Characterization model is a planning tool intended to help identify likely wetland functions associated with significant wetland resources and adjacent uplands. Using GIS analysis, this map provides basic information regarding what ecological services various wetlands are likely to provide. These ecological services, each of which has associated economic benefits, include: floodflow control, sediment retention, finfish habitat, and/or shellfish habitat. There are other important wetland functions and values not depicted in this map. Refer to [www.maine.gov/dep/water/wetlands/ipwetfv2.html](http://www.maine.gov/dep/water/wetlands/ipwetfv2.html) for additional information regarding wetland functions and values. Forested wetlands and small wetlands such as vernal pools are known to be underrepresented in the National Wetlands Inventory (NWI) data used to create this map. The model developed to estimate the functions provided by each wetland could not capture every wetland function or value. Therefore, it is important to use local knowledge and other data sources when evaluating wetlands, and each wetland should be considered relative to the whole landscape/watershed when assessing wetland resources at a local level.

-  **Organized Township Boundary**
-  **Unorganized Township**
-  **Selected Town or Area of Interest**
-  **Developed:** Impervious surfaces including buildings and roads



**Subwatersheds-** The shaded, background polygons are subwatersheds (areas that drain to a particular lake, wetland, pond, river, stream, or the ocean). The subwatersheds are shaded to show topographic relief. This "hillshading" assumes the sun is shining from the northwest, so ridgetops and northwest-facing slopes appear light, whereas valleys and southeast-facing slopes appear dark. Because many areas of Maine are relatively flat, the topographic relief shown here has been exaggerated to make the details easier to see.

### Wetland Functions: Fill Pattern

*Some wetlands may have more than one function (fill pattern)*



**RUNOFF / FLOODFLOW ALTERATION**

Wetlands provide natural stormwater control capabilities. As natural basins in the landscape, wetlands are able to receive, detain, and slowly release stormwater runoff. Wetland shelves along stream banks naturally regulate flood waters by providing an area for swollen stream flows to expand and slow, thereby protecting downstream properties. This map assigns Runoff/Floodflow Alteration Functions to wetlands that are (a) contained in a known flood zone, (b) associated with a surfacewater course or waterbody, and (c) with slope < 3%.

**AND/OR**

**EROSION CONTROL / SEDIMENT RETENTION**

Wetlands act as natural sponges that can hold water, allowing suspended particles such as sediment to settle out. The dense vegetation in most wetlands helps to stabilize soil and slow water flows, thereby reducing scouring and bank erosion. This map assigns Erosion Control / Sediment Retention functions to wetlands with (a) slope < 3%; (b) emergent vegetation; and (c) close proximity to a river, stream, or lake.



**FINFISH HABITAT**

Wetlands with documented finfish populations, including wetlands adjacent to a river, stream, or lake.

**AND/OR**

**SHELLFISH HABITAT**

Inland wetlands and streams can directly affect the status of coastal shellfish harvest areas. Fecal coliform bacteria and waterborne nutrients resulting from land use changes away from the coast can travel via surface water to harvestable flats. One failed septic system near a stream could close a mudflat several miles away. Excessive nutrients can reduce water clarity and stimulate epiphytic growth that degrades eelgrass meadows. Conservation of freshwater wetlands and stream buffers in coastal watersheds is a key component in marine resource conservation. This map assigns a Shellfish Habitat function to wetlands within 0.5 miles of (a) identified shellfish habitat, (b) identified shellfish closure areas, or (c) mapped eelgrass beds OR palustrine wetlands directly connected by a stream of < 0.5 mile in length to (a) identified shellfish habitat, (b) identified shellfish closure areas, or (c) mapped eelgrass beds.



**PLANT/ANIMAL HABITAT**

Nearly all wildlife species, and many of Maine's plant species, depend on wetlands during some part of their life cycle. For the purposes of this map, wetlands containing open water or emergent vegetation, 3 or more wetland vegetation classes (see below), and within ¼ mile of a known rare, threatened, or endangered plant or animal occurrence, within ¼ mile of a mapped significant or essential habitat, or within ¼ mile of a rare or exemplary natural community have been assigned this function. Rare element occurrences and mapped habitats can be found on Map 2 High Value Plant & Animal Habitats.



**OTHER FUNCTIONS**

**CULTURAL/EDUCATIONAL.** Wetlands within ¼ mile of a boat ramp or school have been assigned this value as these wetlands are likely candidates for use as outdoor classrooms, or similar social benefit. Wetlands rated for other functions listed above may also demonstrate cultural/educational values although not expressly shown.

**OR**

**NO DOCUMENTED FUNCTION.** The basis of this characterization is high altitude aerial photos. Photo quality often limits the information that can be interpreted from small wetland features, or those with dense canopy cover. Although not assigned a function under this study, ground surveys may reveal that these wetlands have multiple functions and values.

### Wetland Class: Fill Color



Aquatic Bed (floating or submerged aquatic vegetation), Open Water



Emergent (herbaceous vegetation), Emergent/Forested Mix (woody vegetation >20 ft tall), Emergent/Shrub-Scrub Mix (woody vegetation <20 ft tall)



Forested, Forested/Shrub-scrub



Shrub-scrub

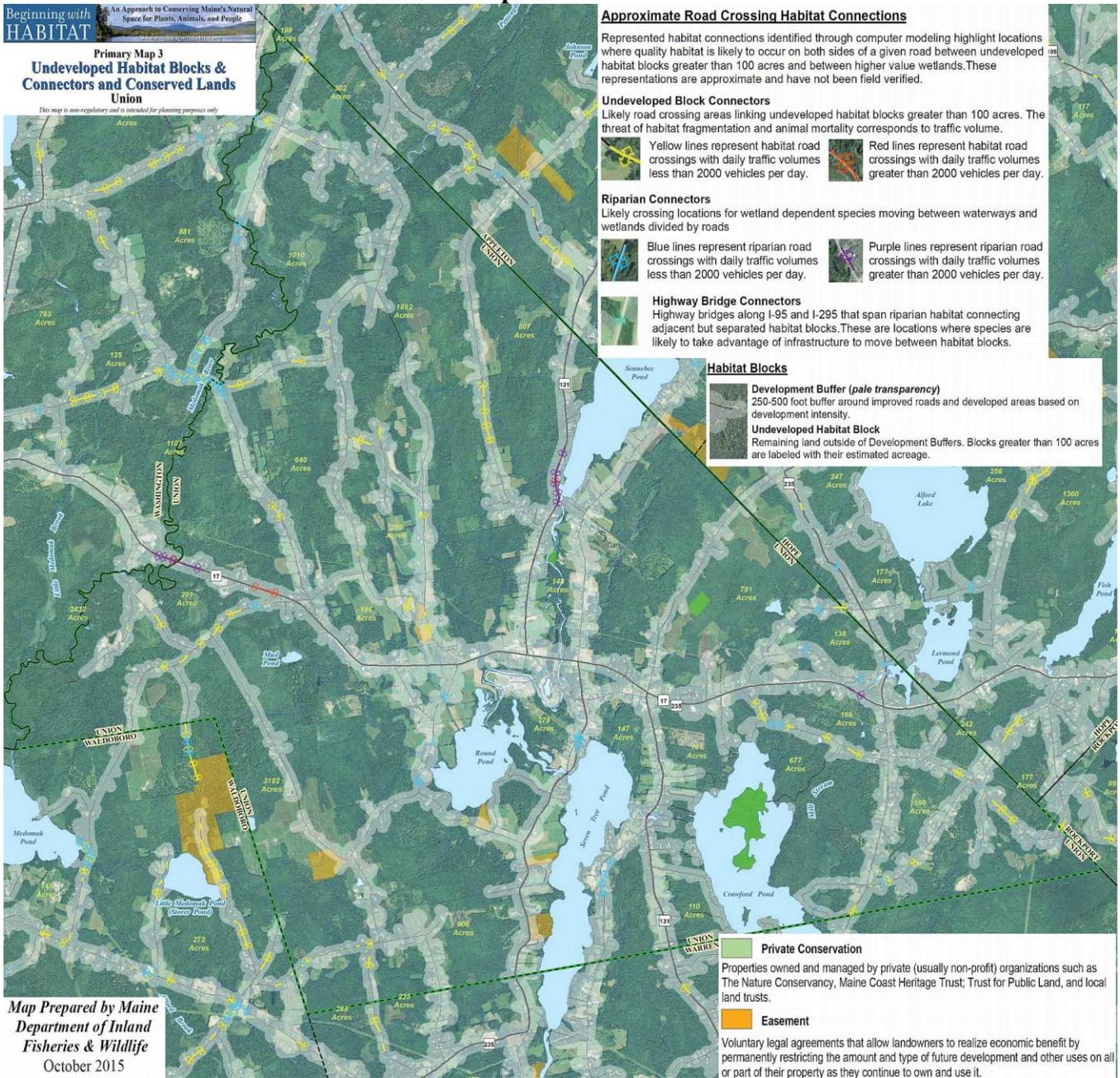


Other (rocky shore, streambed, unconsolidated shore, reef, rocky bottom)

National Wetlands Inventory (NWI) maps (the basis of wetlands shown on this map) are interpreted from high altitude photographs. NWI Wetlands are identified by vegetation, hydrology, and geography in accordance with "Classification of Wetlands and Deepwater Habitats" (FWS/OBS-79/31, Dec 1979). The aerial photographs document conditions for the year they were taken. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, State, or local government. NWI maps depict general wetland locations, boundaries, and characteristics. They are not a substitute for on-ground, site-specific wetland delineation.

Source: Maine IF&W

# Undeveloped Habitat Blocks



Source: Maine IF&W, 2015 (excerpt of state-prepared map)

Notes: This map does not include all public land and private land under conservation easements in Union. Most lands under conservation easement in Union do not presently include public access. However, any landowner has the right to offer public use with permission.

## AGRICULTURAL AND FORESTRY RESOURCES

### Introduction

Union has an important agricultural base. Some farms have returned to forests, fallow fields or have been developed over the years. However, several farms are active currently growing blueberries, hay, vegetables, raising poultry, cattle, sheep and horses. The higher value of organic, heirloom and similar niche farming could increase future agricultural activities in the Town. Modest timber harvesting occurs on a regular basis and is likely to continue. This chapter outlines existing resources and offers strategies to enhance agriculture and suitable forestry activities.

### Goal

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

### Analyses

*1. How important is agriculture and/or forestry and are these activities growing, stable, or declining?*

The Town recognizes the benefits of its forests and farmland although some farms have become inactive over recent decades. Fields and forests provide open spaces, scenic beauty, wildlife habitat, and recreation. They can also improve surrounding residential property values.

There are many areas in the Town with farmland soils as shown on the state-prepared map titled Farmland Soils: Prime and of Statewide Importance. Prime farmland is the land that is best suited to producing food and feed crops. It has the soil quality and moisture supply needed to produce a sustained high yield of crops. Prime farmland is a limited natural resource as no more of it is being created.

Most of the land that is not developed within the Town is forested or wetlands. Some former farm fields have returned to forests. Forested areas assist in the recharging of groundwater and should be viewed as resources to be protected. They also have significant wildlife habitat. See the map titled Land Cover for areas of forests (about 13,379.9 acres), wetlands/wetland forests (about 1,028.9 acres), grasslands (about 307.8 acres), and cultivated lands (about 4,467.6 acres) among other categories. The cultivated lands figure includes cultivated crops and pasture/hay fields. See the Water Resources Chapter for information on wetlands. See the Natural Resources Chapter for information on natural habitats. Small-scale farming activities have increased in recent years, which has somewhat offset longer-term declines. More information is provided in the sections that follow.

2. *Is the community currently taking regulatory and/or non-regulatory steps to protect productive farming and forestry lands? Are there local or regional land trusts actively working to protect farms or forest lands in the community?*

Agricultural and forestry uses are regulated in the Union Land Use Ordinance. Farming activities, including crop and dairy farming, animal husbandry, and outdoor storage of agricultural products are allowed town wide with no permit required outside of shoreland zones. There are some limitations based upon resource protection near waterbodies as regulated through shoreland zoning. Agricultural products storage and distribution are allowed in the Rural District with no permit required and in the Commercial and Industrial Districts with planning board review. Agricultural and related heavy equipment sales and associated services are allowed in the Commercial District with planning board review. Forest management and timber harvesting are allowed town wide with some limitations based upon resource protection near waterbodies as regulated through shoreland zoning. Site Plan Review provisions do not apply to agricultural and forest management practices.

Land trusts have been active with Union farms in the recent period including the Georges River Land Trust, which holds a conservation easement for farmlands on Come Spring Lane, North Union Rd and Route 235. Medomak Valley Land Trust has lands under protection as well. The Carroll Farm Trail is located on a 70-acre parcel known as Sweetgrass Farm Winery and Distillery. The farm is under private ownership, and is open to the public year-round for low-impact recreation. The Medomak Valley Land Trust has worked with landowners to conserve over 500 acres of land on Clarry Hill in both Union (65 acres) and Waldoboro. Fields on the Boyington and Mank Preserves, which are owned by the Land Trust and comprise 75 acres, are leased to a local farmer who keeps them in active blueberry production. The remaining 425 acres are privately owned and protected with conservation easements held. See the Natural Resources Chapter.

3. *Are farm and commercial forest landowners taking advantage of the State's current tax law?*

Farmland is eligible for the Farmland Current Use Tax Program (Title 36, M.R.S.A., Section 1101, et seq.) if that farm consists of at least five contiguous acres, is utilized for the production of farming, agriculture or horticulture activities, which can include woodland and wasteland in its calculation. The tract must contribute gross earnings from farming activities of at least \$2,000 (which may include the value of commodities produced for consumption by the farm household) during one of the last two years or three of the last five years. Union has about 3,312 acres of land enrolled in the Farmland Program as of 2015. Since 2005, a net of 461 acres have been added to the Farmland Program.

The Maine legislature enacted changes to the Tree Growth and Open Space Property tax programs which took effect August 1, 2012 as Public Law Chapter 618 (LD 1138) which provides for tax advantages as under the old statute 36 M.R.S.A. Section 574. Union has

1,301 acres of land enrolled in the Tree Growth Program as of 2015, consisting of 28 parcels.

The Open Space Current Use Tax Program has no minimum lot size requirements and the parcel must be preserved or restricted in use to provide a public benefit by conserving scenic resources; enhancing public recreational opportunities; promoting game management or preserving wildlife habitat. Union has about 610 acres enrolled in the Open Space Program, consisting of 12 parcels. This statute was revised in August 2012 to also include areas in forest management. Since 2003, one parcel was added in the Open Space Program; two parcels were withdrawn.

*4. Has proximity of new homes or other incompatible uses affected normal operations of farms or woodlot owners?*

This has not been apparent in the recent period.

*5. Are there large tracts of industrial forest land that have been or may be sold for development in the foreseeable future; if so, what impact would that have on the community?*

Union does not have large tracts of industrial forestland, but large-scale development inland would have an impact on forestland wildlife habitat; and, although regulated by land use ordinances, might also have an impact on groundwater.

Care should be taken in any application for a subdivision to maintain as much forestland as possible for both groundwater recharge and for the preservation of habitat. Proper forest management should be encouraged. Loss of forestland can be attributed to development and to irresponsible harvesting techniques. When forestland is fragmented, both public and wildlife access become more restricted. Fragmentation occurs with the construction of new roadways and development in areas with large blocks of forests. Accordingly, in these areas road construction and development proposals should be reviewed very carefully and where appropriate redirected to areas better suited for such development. Additionally, the Town should take special care in high elevation forested areas.

*6. Does the community support community forestry or agriculture (i.e. small woodlots, community forests, tree farms, community gardens, farmers' markets, or community-supported agriculture)? If so, how?*

The Town has been supportive of the agricultural activity occurring and woodlot management. The Union Farmers Market is held on Fridays from late May to early October, from 3pm to 6pm, on the Union Common. In 2015, they had 13 vendors from area farms. Union also has a few farm stands. Several local farms engage in Community Supported Agriculture (CSA) in which consumers buy local, seasonal food directly from a farmer through a membership or subscription arrangement. The Union Fair is held in late August and features agricultural exhibits, shows and sales of agricultural related

products. There is sufficient area for home gardening and small-scale, niche farming, so there is no immediate need for community gardens.

7. *Does the community have Town or public woodlands under management, or that would benefit from forest management?*

The community has one town forest under management, about 30 acres on Bump Hill Rd. It has a timber harvesting management plan in place.

**Conditions and Trends**

1. *The community’s Comprehensive Planning Agriculture and Forestry Data Set prepared and provided to the community by the Department of Agriculture, the Maine Forest Service, and the Office, or their designees.*

The data set has been incorporated into this chapter and the maps titled Farmland Soils: Prime and of Statewide Importance, and Land Cover. See the next table for timber harvest data.

<b>Summary of Timber Harvest Information for Union</b>						
<b>Year</b>	<b>Selection harvest, acres</b>	<b>Shelterwood harvest, acres</b>	<b>Clearcut harvest, acres</b>	<b>Total Harvest, acres</b>	<b>Change of land use, acres</b>	<b>Number of active Notifications</b>
1991	196	0	1	197	0	6
1992	284	5	51	340	3	15
1993	102	0	39	141	5	10
1994	164	0	0	164	0	9
1995	99	0	10	109	10	8
1996	205	0	8	213	0	11
1997	188	0	0	188	0	14
1998	256	0	6	262	0	17
1999	362	120	5	487	19	25
2000	177	24	0	201	32	35
2001	250	0	0	250	1	25
2002	143	20	0	163	50	21
2003	222	0	0	222	43	18
2004	352	15	0	367	33	26
2005	233	0	0	233	82	23
2006	158	50	0	208	21	24
2007	399	10	0	409	40	29
2008	204	74	0	278	0	21
2009	62	0	12	74	39	23
2010	251	60	20	331	0	22

Summary of Timber Harvest Information for Union						
Year	Selection harvest, acres	Shelterwood harvest, acres	Clearcut harvest, acres	Total Harvest, acres	Change of land use, acres	Number of active Notifications
2011	412	20	75	507	0	26
2012	215	64	5	284	8	22
2013	186.9	110	0	296.9	8	22
2014	309.5	0	1	310.5	0	24
Total	5,430.4	572	233	6,235.4	394	476
Yearly Average	226	24	10	260	16	20

Source: Maine DACF - Maine Forest Service, provided in 2015

Note: To protect confidential landowner information, data is reported only where three or more landowners reported harvesting in the Town.

Town level agricultural data is not available from the USDA Census of Agriculture. County level data is shown in the next table. The number of farms and acreage has increased modestly. By acreage, the top products include forage (hay) and vegetables. In Union, blueberries are a notable crop.

Knox County Farm Stats			
Category	1997	2007	2012
Number of farms	275	304	314
Total land in farms (acres)	28,581	30,100	29,407
Average size of farms (acres)	104	99	94
Median size of farms (acres)	70	40	44
Estimated market value of land & buildings:			
Average per farm	278,992	382,856	355,739
Average per acre	2,833	3,867	3,798
Total cropland (acres)	12,164	12,050	7,510
Market value of crops, including nursery and greenhouse crops	\$5,046,000	\$6,175,000	\$5,431,000
Forage - land used for all hay & all haylage, grass silage, and greenchop (acres)	6,405	7,580	4,205
Vegetables harvested for sale (acres)	329	282	312

Source: USDA Census of Agriculture, 1997, 2002 and 2012 (Issued May 2014)

2. *A map and/or description of the community's farms, farmland, and managed forest lands and a brief description of any that are under threat.*

The Town has several private commercial agricultural operations. Most forests are not managed for timber harvesting. See the map titled Land Cover for areas of forests (about 13,379.9 acres), wetlands/wetland forests (about 1,028.9 acres), grasslands (about 307.8 acres), and cultivated lands (about 4,467.6 acres) among other categories. The cultivated lands figure includes cultivated crops and pasture/hay fields, among other categories.

In 2015, there were 51 property owners (65 parcels) with lands assessed in the farm space class, under these categories: pasture, blueberry, orchard, horticultural, and soft, mixed and hardwood. The next table shows some of these farms and related operations in Union.

<b>Selected Agriculture and Agriculture-Related Businesses in Union</b>		
<b>Name</b>	<b>Address</b>	<b>Products</b>
Brae Maple Farm	233 N Union Rd	certified organic produce
Come Spring Farm	187 Come Spring Lane	cattle and horses
Freyenhagen's Family Farm	51 Wotton's Mill Rd	maple syrup, produce
Frostfire Farm	314 Collinstown Road	vegetables, blueberries, wool
Guini Ridge Farm	1353 N Union Road	lamb, yarn, vegetables
Herbal Revolution Farm and Apothecary	410 N. Union Rd	certified organic produce
Hunter Hill Farm / Hunter Hill Equestrian Center	1073 S Union Rd	horse boarding facility
Morgan's Mills	168 Payson Rd	certified organic grains
Hammond Tractor	1987 Heald Hwy	tractors
Savage Oakes Vineyard and Winery	175 Barrett Hill Rd	vineyard/winery
Sweetgrass Wine and Distillery/Carroll Farm Trail	347 Carroll Rd	vineyard/winery, recreation
The Stand On Common Road	437 Common Rd	market
Union Farm Equipment, Inc.	1893 Heald Hwy	tractors

As noted, several local farms engage in Community Supported Agriculture (CSA) in which consumers buy local, seasonal food directly from a farmer. In this arrangement, the farmer offers a certain number of "shares" to the public. Typically, the share consists of a box of vegetables, but other farm products may be included. Interested consumers purchase a share (membership or a subscription) and in return receive a box (bag, basket) of seasonal produce each week throughout the farming season.

Threats to non-shoreland areas that are suitable for farming and forestlands are small given the amount of development seen in the recent period in rural portions of the Town. . Shorelands are regulated by shoreland zoning provisions that seek to protect vegetation near waterbodies thereby limiting pollution/runoff from development and agricultural activities.

*3. Information on the number of parcels and acres of farmland, tree growth, and open space enrolled in the state's farm, tree growth, and open space law taxation programs, including changes in enrollment over the past 10 years.*

Union has about 3,312 acres of land enrolled in the Farmland Program as of 2015. Since 2005, a net of about 461 acres has been added to the Farmland Program.

<b>Summary of Farmland Program Information for Union</b>							
Year	# of Parcels	Acres		Cropland Valuation	Woodland Valuation	Acres Withdraw	Penalties Assessed
		Cropland	Woodland				
2013	62	1,742	1,413	\$650,280	\$358,822	0	\$0
2015	65	1,781	1,531	\$654,188	\$394,659	6.5	\$450

Sources: Maine Revenue Services, Union Assessor

Notes: Cropland includes cropland, orchard, pasture, blueberry fields, and horticultural land.

Woodland includes softwood, mixed wood, and hardwood.

Figures rounded.

Union has about 1,301 acres of land enrolled in the Tree Growth Program as of 2015, consisting of 28 parcels. Since 2005, 121 acres were added to the Tree Growth Program; 72 acres were withdrawn and placed in the Farmland Program.

<b>Summary of Tree Growth Information for Union</b>								
Year	# of Parcels	Acres				Tree Growth Total Value	Acres Withdraw	Penalties Assessed
		Soft Wood	Mixed Wood	Hard Wood	Total			
2013	27	267	423	582	1,272	\$301,797	0	\$0
2015	28	246	465	589	1,301	--	72	NA-Moved to Farmland Program

Sources: Maine Revenue Services, Union Assessor

Notes: Figures rounded.

Union has about 610 acres enrolled in the Open Space Program, consisting of 13 parcels. This statute was revised in August 2012 to also include areas in forest management. Since 2005, almost 380 acres were added to the Open Space Program and no parcels were withdrawn.

<b>Summary of Open Space Program Information for Union</b>					
Year	# of Parcels	Enrolled Acres	Total Valuation	Acres Withdraw	Penalties Assessed
2015	12	610	\$304,990	0	\$0

Source: Union Assessor

Notes: Figures rounded.

4. A description of any community farming and forestry activities (e.g. community garden, farmer's market, or community forest).

The Union Farmers Market is held on Fridays from late May to early October from 3pm to 6pm, on the Union Common. In 2015, they had 13 vendors from area farms. For more information, see: <http://www.unionfarmersmarket.org>.

The Union Fair is held in late August and features agricultural exhibits, shows and sales of agricultural related products. For more information, see <http://www.unionfair.org/>. See also, the Economy Chapter and Recreation Chapter.

There are also a few private farm stands seasonally. The Town has no community gardens. Union has one town forest, about 30 acres on Bump Hill Rd, currently under a timber harvesting management plan.

**Policies**

1. To safeguard lands identified as prime farmland or capable of supporting commercial forestry.
2. To support farming and forestry and encourage their economic viability.
3. To promote the use of best management practices for timber harvesting and agricultural production.

**Strategies**

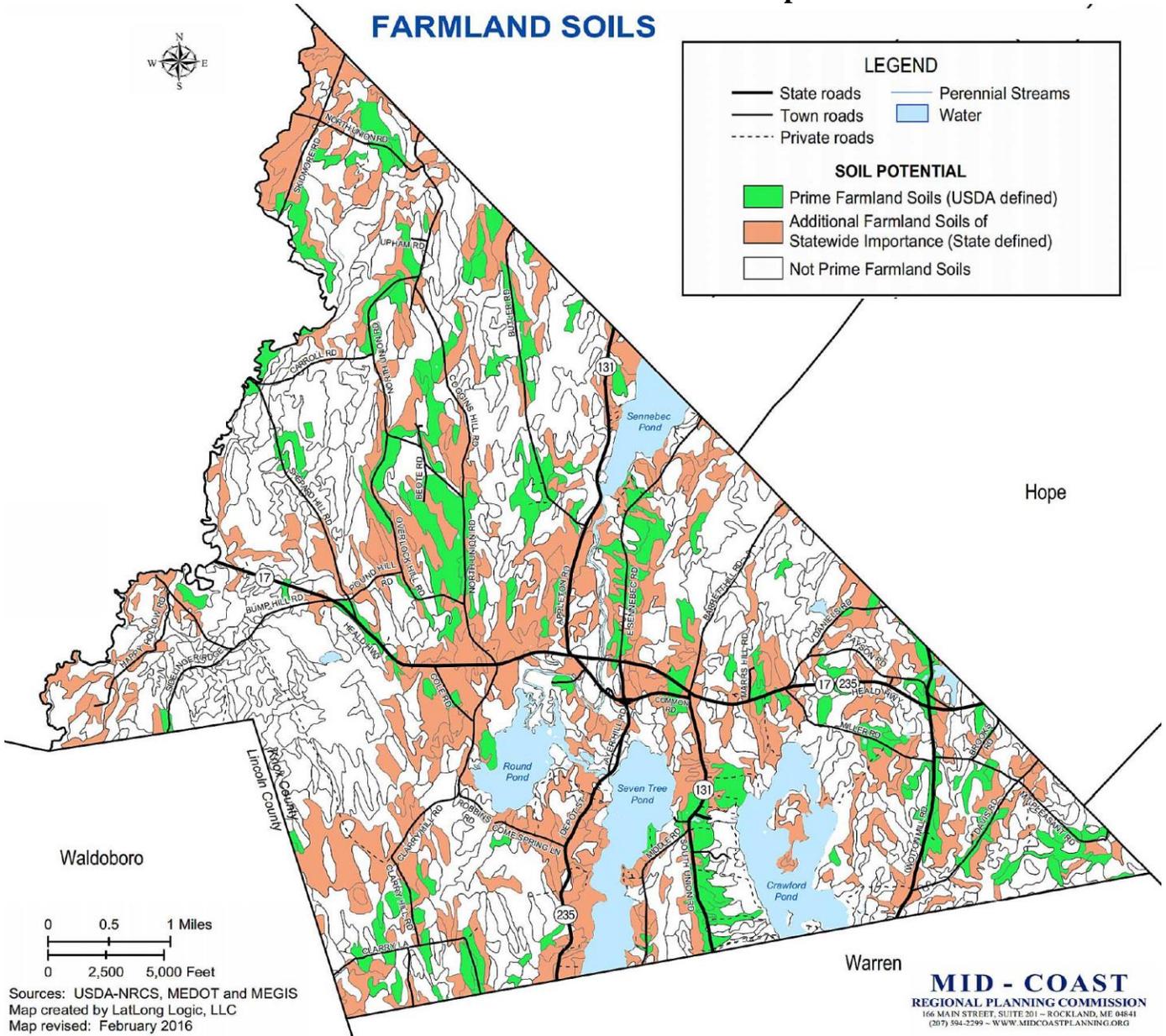
<b>Agricultural and Forestry Resources Strategies</b>	<b>Responsible Parties</b>	<b>Timeframe</b>
(1) Consult with the Maine Forest Service district forester when developing any land use regulations pertaining to forest management practices as required by 12 M.R.S.A. §8869.	Code Enforcement Officer, Planning Board, and Ordinance Review Committee	Immediate and Ongoing
(2) Consult with Soil and Water Conservation District staff when developing any land use regulations pertaining to agricultural management practices.	Code Enforcement Officer, Planning Board, and Ordinance Review Committee	Immediate and Ongoing
(3) Amend land use ordinances to require commercial or subdivision developments in critical rural areas, if applicable, maintain areas with prime farmland soils as open space to the greatest extent practicable. <ul style="list-style-type: none"> <li>• Establish minimum buffers/setbacks from existing farming operations for new residential, institutional or commercial development to minimize conflicts/nuisances between these uses.</li> <li>• Continue to allow agricultural uses in most areas of the Town. Continue to allow roadside stands, greenhouses and pick-your-own operations.</li> </ul>	Select Board, Ordinance Review Committee, Planning Board, Code Enforcement Officer, Town Voters	Immediate
(4) Limit non-residential development in critical rural areas (if the Town designates critical rural areas) to natural resource-based businesses and services, nature tourism/outdoor recreation businesses, farmers’ markets, and home occupations.	Select Board, Ordinance Review Committee, Planning Board, Code Enforcement Officer, Town Voters	Midterm
(5) Encourage owners of productive farm and forest land to enroll in the current use taxation programs.	Select Board, Town Manager, Planning Board, and Code Enforcement Officer	Immediate and Ongoing
(6) Permit land use activities that support productive agriculture and forestry operations, such as roadside stands, greenhouses, firewood	Select Board, Planning Board, Code Enforcement Officer,	Midterm

<b>Agricultural and Forestry Resources Strategies</b>	<b>Responsible Parties</b>	<b>Timeframe</b>
<p><i>operations, sawmills, log buying yards, and pick-your own operations.</i></p> <ul style="list-style-type: none"> <li>• Continue reduced permit fees for agriculture-related development.</li> </ul>	Town Voters	
<p>(7) <i>Include agriculture, commercial forestry operations, and land conservation that supports them in local or regional economic development plans.</i></p> <ul style="list-style-type: none"> <li>• Continue to use local produce for community events/meals. Encourage the sale of local produce in grocery store. Consider using local food supplies for school lunches.</li> <li>• Consider economic incentives to improve agricultural support industries and encourage new ones.</li> <li>• Refer farmers to economic development programs of the Maine DACF, USDA Rural Development, and Maine Farmland Trust to connect people looking to farm with farmers who are searching for options to sustain their farms.</li> </ul>	Town Manager, Chamber of Commerce	Long Term
<p>(8) Review model programs in other areas, consider options and design a package of conservation techniques to protect farmland and sustain agriculture. Conduct a survey in the community to identify and assess socio-economic impact of farms.</p>	Farmers, Interested Citizens	Long Term

Note: Strategies proposed in this Comprehensive Plan are assigned responsible parties and a timeframe in which to be addressed. Immediate is assigned for strategies to be addressed within two years after the adoption of this Comprehensive Plan, Midterm for strategies to be addressed within five years, and Long Term for strategies to be addressed within ten years. In addition, Ongoing is used for regularly recurring activities.

# Farmland Soils: Prime and of Statewide Importance

## FARMLAND SOILS



Sources: USDA-NRCS, Maine DOT and MeGIS

# Land Cover

## LAND COVER

Land Cover	Sq. Miles	Acres
Developed Land	0.88	564.10
Cultivated Crops and Pasture/Hay	6.98	4,467.65
Forest (Mixed, Deciduous and Evergreen)	20.91	13,379.91
Grasslands/Herbaceous and Scrub/Shrub	0.48	307.84
Wetlands and Wetland Forest	1.61	1,028.94
Open Water	2.20	1,409.22
Other	1.40	896.88
<b>Total</b>	<b>34.5</b>	<b>22,054.54</b>

Note: Figures rounded.

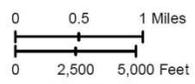
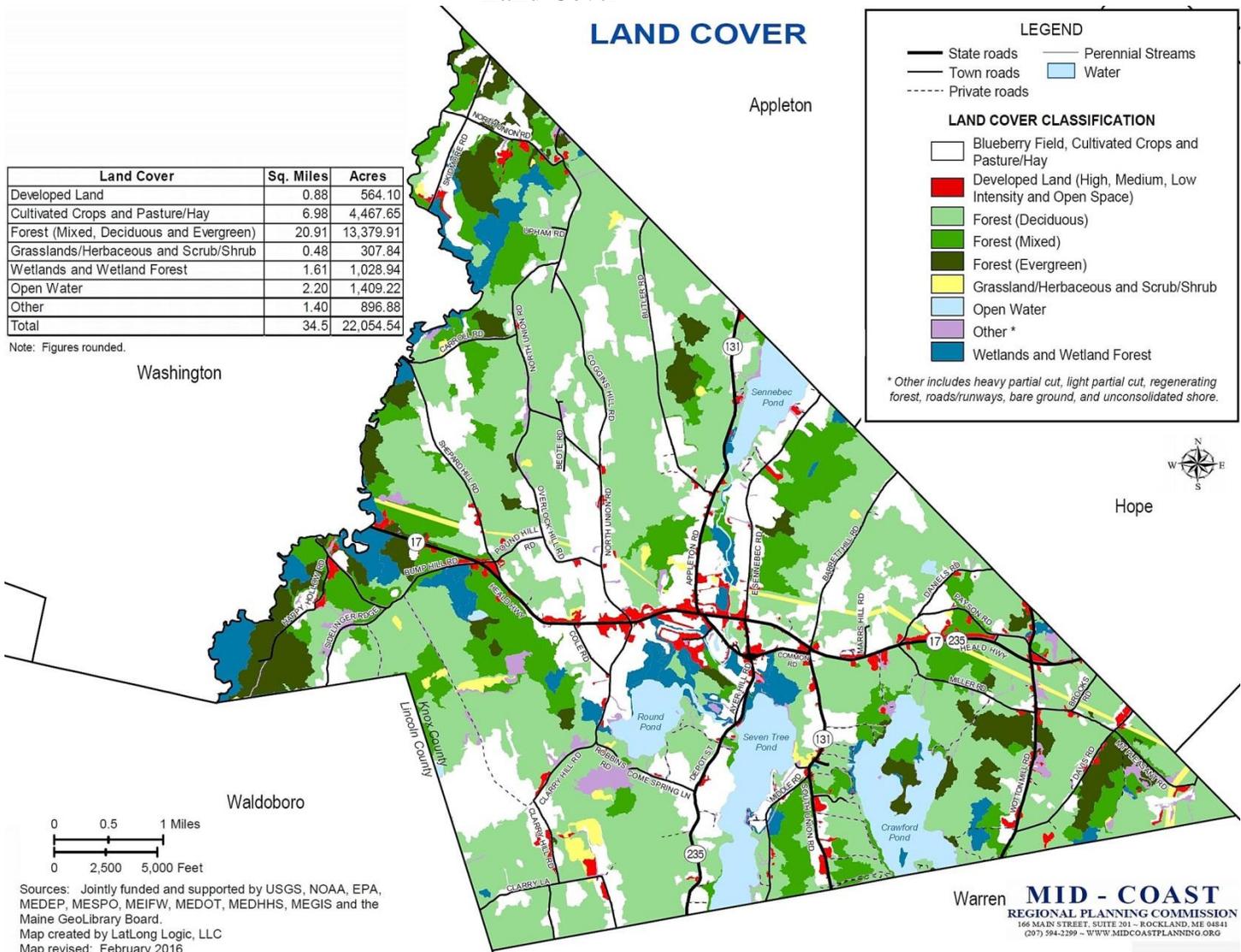
**LEGEND**

State roads  
 Perennial Streams  
 Water  
 Town roads  
 Private roads

**LAND COVER CLASSIFICATION**

Blueberry Field, Cultivated Crops and Pasture/Hay  
 Developed Land (High, Medium, Low Intensity and Open Space)  
 Forest (Deciduous)  
 Forest (Mixed)  
 Forest (Evergreen)  
 Grassland/Herbaceous and Scrub/Shrub  
 Open Water  
 Other \*  
 Wetlands and Wetland Forest

\* Other includes heavy partial cut, light partial cut, regenerating forest, roads/runways, bare ground, and unconsolidated shore.



Sources: Jointly funded and supported by USGS, NOAA, EPA, MEDEP, MESPO, MEIFW, MEDOT, MEDHHS, MEGIS and the Maine GeoLibrary Board.  
 Map created by LatLong Logic, LLC  
 Map revised: February 2016

**Warren MID - COAST**  
**REGIONAL PLANNING COMMISSION**  
166 MAIN STREET, SUITE 201 - ROCKLAND, ME 04841  
 (207) 594-2299 - WWW.MIDCOASTPLANNING.ORG

Sources: USGS, NOAA, EPA, Maine State Agencies

## POPULATION AND DEMOGRAPHICS

### Introduction

An important goal of the municipal comprehensive plan is to relate the demographics of a community with its economy, development, housing and environment. Most of the chapters and the recommendations of this plan are dependent upon or strongly influenced by the size and composition of the current and forecasted population. The planning period for this comprehensive plan is ten years.

### State Goal

*None required.*

### Analyses

*(1) Is the rate of population change expected to continue as in the past, or to slow down or speed up? What are the implications of this change?*

Union's historical population peaked in 1850 at 1,972 persons and declined in 1930 to 1,060. In 1990, the population rose again to 1,989 and has increased since then to total an estimated 2,290 in 2014 and 2,284 in 2015. The State projects that Union's population will decline to 2,221 persons in 2027. For planning purposes, the Town is forecast to have up to 2,300 year round residents by 2027. This will allow the Town the time to better plan for future development, and may serve to limit pressure on local government to expand services.

*(2) What will be the likely demand for housing and municipal and school services to accommodate the change in population and demographics, both as a result of overall change and as a result of change among different age groups?*

The median age of Union and Knox County residents is increasing. In 2000, Union's median age was 40.2, and has since risen to an estimated 49.7 in 2014. The Knox County median age increased from 41.4 in 2000 to an estimated 47.1 in 2014. An age distribution table is shown in the Condition and Trends section below. From 2000 to 2014, Union gained population in these age groups: 55-84. The Town lost population in these age groups: under 5 to 54 and 85+. The data suggest that young people and families with young children have left the community, while older individuals have decided to remain or move into Union. There is variation however within the age groups, so that some young adults may continue to stay in the area if they are able to support themselves, and older persons may choose to move into multiunit housing and assisted living facilities located within larger communities like Rockland and Waldoboro.

It is possible that if the declining average household size trend continues, which in 2014 was estimated at 2.29 persons for the Town down from 2.74 in 1990, there will be more housing being built than would normally be expected based solely upon the total

projected year round population and to meet seasonal (vacation) housing demand. Some existing housing may be modified for elderly residents who wish to stay in their homes, while more accessible new housing is likely to be built for and marketed to persons with age-related physical limitations. See the Housing Chapter for more information including projected housing demand.

The needs for municipal services might change to reflect the aging of the population, for example, home wellness checks, improved street lighting and signage. Other services geared toward the young might see less demand, for example, youth recreation. The school district encompasses several communities. Since Knox County has seen an aging of its population, it is possible that school enrollments will not increase and could decline. See the Public Facilities and Services Chapter for more information.

*(3) Does your community have a significant seasonal population, is the nature of that population changing? What is the community's dependence on seasonal visitors?*

Union has a sizable seasonal population. The Census estimated in 2013 that the Town had 182 units of housing that was for seasonal use, out of 1,139 total housing units. In 2014, the Census estimated that 192 units of housing were for seasonal use, out of 1,170 total units. The average family size for the United States was 3.26 in 2013 and 3.23 in 2014. Accordingly, Union's seasonal housing might accommodate an additional 594 to 620 persons. The Town has two lodging facilities (inns, bed and breakfast establishments) with an estimated six rooms in total. Some persons rent out their homes, for which no official data is available. The Union Fair, which is held annually in Union, attracts approximately 50,000 visitors during one week in August. Several other events have large attendance. A notable portion of the regional economy depends on tourism, and so residents employed in that sector depend on seasonal visitors. See the Economy and Employment Chapter for more information.

*(4) If your community is a service center or has a major employer, are additional efforts required to serve a daytime population that is larger than its resident population?*

Union is not a regional service center community, as defined by the State. The Census estimated the Town's labor force was 1,166 in 2014. Of those, an estimated 212 Union residents worked within the Town. The majority of the Town's labor force commutes to work places in other communities. The Town's daytime population is not larger than the resident population. Many businesses in Union employ just a few people each. See the Economy and Employment Chapter for more information.

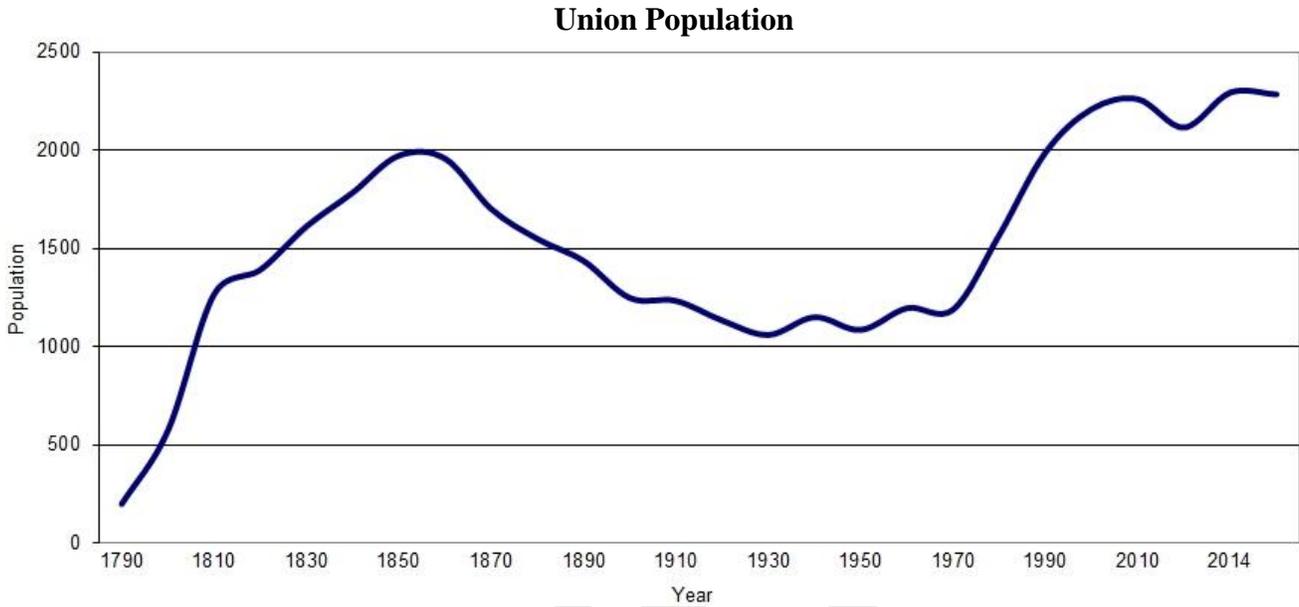
**Conditions and Trends**

*(1) The community’s Comprehensive Planning Population and Demographic Data Set (including relevant local, regional, and statewide data) prepared and provided to the community by the Office or its designee.*

Union was incorporated in 1786. The first decennial census year, 1790, showed the Town’s population as 199. Union’s population rose to 1,972 in 1850 and declined to 1,060 in 1930. Since then the population has risen to 2,259 in 2010 and an estimated 2,290 in 2014 and 2,284 in 2015. Projections by the State indicate a small decline is possible to 2,221 in 2027 and 2,193 in 2032.

<b>Total Population</b>						
<b>Year</b>	<b>Union</b>		<b>Knox County</b>		<b>Maine</b>	
	<b>Number</b>	<b>% Change</b>	<b>Number</b>	<b>% Change</b>	<b>Number</b>	<b>% Change</b>
1790	199				96,540	
1800	573	187.9%			151,719	57.2%
1810	1,266	120.9%			228,705	50.7%
1820	1,391	9.9%			298,335	30.4%
1830	1,612	15.9%			399,455	33.9%
1840	1,784	10.7%			501,793	25.6%
1850	1,972	10.5%			583,169	16.2%
1860	1,957	-0.8%	32,716		628,279	7.7%
1870	1,701	-13.1%	30,823	-5.8%	626,915	-0.2%
1880	1,548	-9.0%	32,863	6.6%	648,936	3.5%
1890	1,436	-7.2%	31,473	-4.2%	661,086	1.9%
1900	1,248	-13.1%	30,406	-3.4%	694,466	5.0%
1910	1,233	-1.2%	28,981	-4.7%	742,371	6.9%
1920	1,133	-8.1%	26,245	-9.4%	768,014	3.5%
1930	1,060	-6.4%	27,693	5.5%	797,423	3.8%
1940	1,150	8.5%	27,191	-1.8%	847,226	6.2%
1950	1,085	-5.7%	28,121	3.4%	913,774	7.9%
1960	1,196	10.2%	28,575	1.6%	969,000	6.0%
1970	1,189	-0.6%	29,013	1.5%	994,000	2.6%
1980	1,569	32.0%	32,941	13.5%	1,124,660	13.1%
1990	1,989	26.8%	36,310	10.2%	1,227,928	9.2%
2000	2,209	11.1%	39,618	9.1%	1,274,923	3.8%
2010	2,259	2.3%	39,736	0.3%	1,328,361	4.2%
2013 Est.	2,115	-6.4%	39,588	-0.4%	1,328,702	0.0%
2014 Est.	2,290	8.3%	39,653	0.2%	1,328,535	0.0%
2015 Est.	2,284	-0.3%	39,455	-0.5%	1,328,028	0.0%
2022 Proj.	2,238	-2.0%	39,323	-0.3%	1,324,705	-0.3%
2027 Proj.	2,221	-0.8%	38,985	-0.9%	1,315,840	-0.7%
2032 Proj.	2,193	-1.3%	38,464	-1.3%	1,300,166	-1.2%

Sources: US Census for 1850-2010, American Community Survey for 2013 and 2014, Claritas for 2015, and Maine Governor's Office of Policy and Management for 2022, 2027 and 2030



Sources: US Census 1850-2010, American Community Survey 2013-2014, Claritas 2015

For planning purposes in this comprehensive plan, the Town is forecast to have up to 2,300 year-round residents by 2027.

Union was part of Lincoln County before Knox County was founded in 1860. Knox County is forecast to decrease modestly in population by 2027 and 2032.

The total number of births to Union residents was greater than the number of deaths from 2000 to 2014. Of the change in population (+81 persons from 2000 to 2014), 13 was due to natural change and 68 was due to in-migration.

<b>Union Vitals – Net Migration</b>		
<b>Year</b>	<b>Births</b>	<b>Deaths</b>
2000	24	23
2001	24	30
2002	25	26
2003	27	16
2004	27	18
2005	20	26
2006	27	27
2007	22	19
2008	19	23
2009	25	24
2010	17	21
2011	18	18
2012	25	24
2013	26	28
2014	22	12
<b>Total</b>	<b>348</b>	<b>335</b>
<b>Natural Change</b>	<b>+13</b>	
<b>Net Migration</b>	<b>+68</b>	

Source: Maine Office of Data, Research, and Vital Statistics, 2015

Overall, the population has increased in Union since 2000. In the Town, those aged 55-84 have increased in number, while those under 5 to 54 and 85+ have decreased in number. For Knox County, growth was seen in groups aged 20 to 59 and 65 to 84. The median age of Union residents has increased by 9.5 years since 2000. Statewide, the median age was 38.6 in 2000 and it increased by 12.7% (4.9 years) to 43.5 in 2014.

Population by Age Estimates	Union				Knox County			
	2000	2010	2014	% Change	2000	2010	2014	% Change
Under 5 years	124	98	85	-31.5%	2,082	1,921	1,744	-16.2%
5 to 9 years	126	118	107	-15.1%	2,383	2,097	1,954	-18.0%
10 to 14 years	188	135	90	-52.1%	2,762	2,297	2,334	-15.5%
15 to 19 years	150	137	76	-49.3%	2,437	2,135	2,110	-13.4%
20 to 24 years	87	92	83	-4.6%	1,691	1,763	1,823	7.8%
25 to 34 years	247	204	208	-15.8%	2,180	4,025	4,066	86.5%
35 to 44 years	375	300	268	-28.5%	2,475	4,949	4,728	91.0%
45 to 54 years	399	408	385	-3.5%	2,894	6,421	5,980	106.6%
55 to 59 years	114	212	213	86.8%	3,316	3,409	3,455	4.2%
60 to 64 years	102	184	181	77.5%	3,348	3,125	3,238	-3.3%
65 to 74 years	166	209	245	47.6%	3,056	3,983	4,532	48.3%
75 to 84 years	95	115	126	32.6%	2,232	2,465	2,439	9.3%
85 years +	36	47	23	-36.1%	1,930	1,146	1,250	-35.2%
Median Age	40.2	45.6	49.7	23.6%	41.4	46.2	47.1	13.8%

Source: US Census American Community Survey 5-year estimates (2010-2014)

Union and Knox County have a similar proportion of residents with high school degrees. The Town has a lower proportion of residents with a bachelor's degree than Knox County. See the Public Facilities and Services Chapter for enrollment figures in area schools.

Educational Attainment of the population aged 25 and older	Union		Knox County		Maine	
	2000	2014	2000	2014	2000	2014
Less than 9th grade	37	34	1,001	607	47,183	30,319
9th to 12th grade, no diploma	135	83	2,544	1,376	80,105	52,066
High school graduate (includes equivalency)	593	677	10,306	10,550	314,600	318,017
Some college, no degree	328	280	5,353	5,670	165,111	190,372
Associate degree	128	157	1,676	2,384	63,934	88,305
Bachelor's degree	226	274	4,833	6,079	129,992	173,294
Graduate or professional degree	93	144	2,590	3,022	68,968	95,586
% High School Graduate or Higher	88.8%	92.9%	87.5%	93.3%	85.4%	91.3%
% Bachelor's Degree or Higher	20.7%	25.3%	26.2%	30.7%	22.9%	28.4%

Source: US Census, American Community Survey 5-year estimates for 2010-2014

The average household size has decreased in Union, Knox County, and statewide. This trend is due to several factors: a lower proportion of married couples, fewer children per

family, and more people living alone longer. Declines in average household size can result in more growth of the housing stock even when population growth is nominal. See the Housing Chapter for more information.

<b>Average Household Size</b>			
<b>Year</b>	<b>Union</b>	<b>Knox County</b>	<b>Maine</b>
1990	2.74	2.45	2.56
2000	2.51	2.31	2.39
2010	2.30	2.22	2.32
2013 Est.	2.31	2.28	2.33
2014 Est.	2.29	2.26	2.34
% Change	-16.4%	-7.8%	-8.6%

Source: US Census, American Community Survey 5-year estimates 2009-2013, 2010-2014

Note: Policies and strategies (recommendations) are found in the other chapters of this comprehensive plan.

## ECONOMY

### Introduction

This chapter describes the local and regional economy, including employment sectors, businesses, employment rates, and retail sales. Recommendations are suggested to improve Union's economy.

### State Goal

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

### Analyses

- (1) *Is the economy experiencing significant change, and how does this, or might this, affect the local population, employment, and municipal tax base?*

Growth in the local economy has been limited by the slow statewide and national economies. The size of the local labor force has increased by 4.5% from 2000 to 2014, while average weekly wages have increased by 19.5% since 2004. The total number of Union businesses is relatively modest. Total unemployment in 2014 was 5.6%, which was lower than recent years, but still higher than the 2000 level of 2.7%. In 2014, the median household income in Union was slightly lower than Knox County but higher than the State as a whole.

Most Union residents who work commute to areas with greater employment opportunities outside of the Town but still within Knox County, especially to Rockland and to a lesser extent, Augusta. As described in the Population and Demographics Chapter, the Town's population is aging, with more retirees who are not dependent upon the local economy for their income.

The municipal tax base is generated largely from residential property taxes. The residential housing market decline has put pressure on municipalities to conduct revaluations of properties to reflect reduced sales prices, which could affect municipal property tax revenue collections. Projected reductions in Maine's state revenue sharing funding will increase the Town's reliance on property tax revenues. See the Fiscal Capacity Chapter for more information.

- (2) *Does the community have defined priorities for economic development? Are these priorities reflected in regional economic development plans?*

Municipally defined priorities are included in the **Strategies** section of this chapter. They are not reflected specifically in the most recent Mid-Coast Economic Development District's Comprehensive Economic Development Strategy (CEDS) report.

- (3) *Is there a traditional downtown or village center(s) in the community? If so, are they deteriorating or thriving?*

Yes, there is a village center. Small businesses are located here and are also spread throughout the Town. Retail activity is focused on Route 17 and within the village area, which has seen little new development since 2000. Existing development has been relatively stable with some expansions.

Most municipal investments have been related to the maintenance of existing roads and buildings. See the Transportation Chapter and Public Facilities Chapter for a description of these efforts.

- (4) *Is tourism an important part of the local economy? If so, what steps has the community taken to support this industry?*

As noted in the Population and Demographics Chapter, Union has a sizable seasonal population. Tourism is a part of the Town's economy.

Small businesses and individuals have established themselves to provide the service needs of retired or seasonal residents; these include sales, services, construction, painting, landscape care, cleaning, plowing services, electrical, plumbing, security and property management.

The Town has been very supportive of tourist based businesses and activities including hosting events like the Union Fair. See the Recreation Chapter for further discussion.

- (5) *Do/should home occupations play a role in the community?*

Some Union residents work several jobs over the course of the year. Much of this is seasonal and some of it operates out of homes. The Census estimates that 59 people worked at home in 2014 in Union. Between 1996 and 2015, the Town's code enforcement office issued 49 permits for home occupations, of which about 25% to 33% were for childcare services. There is generally a lot of support for home occupations to continue to be allowed when compatible with surrounding residential uses.

See the chapters on Housing and Land Use for further discussion of this topic.

- (6) *Are there appropriate areas within the community for industrial or commercial development? If so, are performance standards necessary to assure that industrial and commercial development is compatible with the surrounding land uses and landscape?*

There are only a few areas suitable for heavy industry. Areas most suitable for light industrial or commercial development in Union are limited to portions of the commercial and rural districts. Public sewer is not readily available in Town. Areas with wetlands, critical natural habitats, resource protected shoreland, high value farmland soils, and

established residential neighborhoods are not suitable for industrial or commercial development. See the Future Land Use Plan Chapter for more information on suitable areas and on proposed ordinance performance standards to ensure that new industrial and commercial development does not degrade the quality or value of existing properties.

- (7) *Are public facilities, including sewer, water, broadband access or three-phase power, needed to support the projected location, type, and amount of economic activity, and what are the issues involved in providing them?*

The small-scale and traditional type of development sought in Union does not necessarily require significant public expenditure for new infrastructure. However, if large-scale development were sought or proposed, new infrastructure would be needed.

Most of the Town depends upon well and septic, with the exception of the village area, which is served by a public water district. See the Water Resources Chapter for more information. See the Public Facilities Chapter and Existing Land Use Chapter for the limitations that this places on additional development.

Limited high broadband internet access via DSL (high-speed fiber) and cable is available in portions of the Town, especially along state roads and in the village. Telecommuting opportunities will continue to be constrained until greater bandwidth Internet service becomes available.

Three-phase power is available along Old Route 17 from the Hope town line to Route 131 N, on portions of Route 17 (Heald Highway) to Payson Rd, to Common Rd, and to the power substation on Route 131, and could be extended. The current usage and future demand for three-phase power is not known.

Current municipal revenues are insufficient to upgrade services to subsidize new large-scale development. Large tax increases and/or additional long-term borrowing, a burden that is unlikely to be supported by Town voters, would be needed to make such public improvements. See the Fiscal Capacity Chapter for information on reserve accounts and the Capital Investment Plan.

- (8) *If there are local or regional economic development incentives such as TIF districting, do they encourage development in growth areas?*

The Town has no Tax Increment Financing (TIF) districts in place. Currently, the Town has no economic development incentives.

- (9) *How can/does the community use its unique assets such as recreational opportunities, historic architecture, civic events, etc. for economic growth?*

See the Recreation Chapter for discussion on this topic.

## Conditions and Trends

- (1) *The community's Comprehensive Planning Economic Data Set prepared and provided to the community by the Office or its designee.*

Since 2000, the Town's resident labor force increased by 56 persons. The unemployment rate went from 2.7% in 2000 to 5.6% in 2014. The unemployment rate peaked in 2012. In 2014, 72 persons in Union's labor force were unemployed and looking for work. This was 39 more people than in 2000.

<b>Union Resident Employment</b>				
<b>Year</b>	<b>Civilian Labor Force</b>	<b>Employment</b>	<b>Unemployment</b>	<b>Unemployment Rate</b>
2000	1,238	1,205	33	2.7%
2010	1,299	1,194	105	8.1%
2011	1,290	1,196	94	7.3%
2012	1,307	1,208	99	7.6%
2013	1,308	1,225	83	6.3%
2014	1,294	1,222	72	5.6%
Change #	56	17	39	2.9
Change %	4.5%	1.4%	118.2%	107.4%

Source: Maine Department of Labor, Center for Workforce Research and Information

Note: Annual Not Seasonally Adjusted Labor Force

Since 2000, Knox County's labor force decreased by 289 persons. The unemployment rate went from 2.8% in 2000 to 5.2% in 2014. In 2014, 1,074 persons in the Knox County labor force were unemployed and looking for work. This was 490 more people than in 2000.

<b>Knox County Resident Employment</b>				
<b>Year</b>	<b>Civilian Labor Force</b>	<b>Employment</b>	<b>Unemployment</b>	<b>Unemployment Rate</b>
2000	21,024	20,440	584	2.8%
2010	20,377	18,874	1,503	7.4%
2011	20,439	18,938	1,501	7.3%
2012	20,608	19,180	1,428	6.9%
2013	20,844	19,605	1,239	5.9%
2014	20,735	19,661	1,074	5.2%
Change #	-289	-779	490	2.4
Change %	-1.4%	-3.8%	83.9%	85.7%

Source: Maine Department of Labor, Center for Workforce Research and Information,

10/2015

Note: Annual Not Seasonally Adjusted Labor Force

The State labor force grew by 20,764 persons from 2000 to 2014, while those unemployed and looking for work increased by 17,061 persons. The State unemployment rate rose to 5.7% in 2014, which was similar to the unemployment rate in Union.

<b>Maine Resident Employment</b>				
<b>Year</b>	<b>Civilian Labor Force</b>	<b>Employment</b>	<b>Unemployment</b>	<b>Unemployment Rate</b>
2000	678,164	655,349	22,815	3.4%
2010	695,182	638,630	56,552	8.1%
2011	699,171	644,091	55,080	7.9%
2012	702,455	650,024	52,431	7.5%
2013	707,188	660,259	46,929	6.6%
2014	698,928	659,052	39,876	5.7%
Change #	20,764	3,703	17,061	2.3
Change %	3.1%	0.6%	74.8%	67.6%

Source: Maine Department of Labor, Center for Workforce Research and Information

Note: Annual Not Seasonally Adjusted Labor Force

According to the Maine Department of Labor, a net of nine new businesses were located in Union from 2004 to 2014, for 69 firms in total, employing 441 people on average. Union businesses employed 56 more people at the end of this period. Reported average weekly wages in Union workplaces have increased by \$78 from 2004 to 2014. Almost 200 new businesses located in Knox County from 2004 to 2014. Average wages for those who worked in Knox County were higher than for those who worked in the Town. These figures do not fully account for sole proprietors and other home based businesses.

<b>Annual Employment/Weekly Wages Total All Industries</b>	<b>2004</b>			<b>2014</b>		
	<b>Avg # of Firms</b>	<b>Avg Employ</b>	<b>Avg Weekly Wage</b>	<b>Avg # of Firms</b>	<b>Avg Employ</b>	<b>Avg Weekly Wage</b>
Union	60	385	\$400	69	441	\$478
Knox County	1,728	17,995	\$560	1,927	17,000	\$671

Source: Maine Department of Labor, 10/2015

The median household income had been higher for Town residents than for residents of the County and State median in 2000 and 2010. For 2014, the Town median is slightly lower than the County but still higher than the State. Note: The margin of error for 2014 data is higher than for 2010 data. Generally, Union’s income earners work outside of the Town, have retirement income, or work for themselves.

<b>Median Household Income</b>	<b>Union</b>	<b>Knox County</b>	<b>Maine</b>
<b>2000</b>	\$37,679	\$36,774	\$37,240
<b>2010</b>	\$53,412	\$45,264	\$46,933
<b>2014</b>	\$50,469	\$50,515	\$48,804
<b>Percent Change</b>	33.9%	37.4%	31.1%

Source: US Census, American Community Survey (5-year estimates 2010-2014)

<b>Per Capita Income</b>	<b>Union</b>	<b>Knox County</b>	<b>Maine</b>
<b>2000</b>	\$16,240	\$19,981	\$19,533
<b>2010</b>	\$25,154	\$25,291	\$25,385
<b>2014</b>	\$27,659	\$28,062	\$27,332
<b>Percent Change</b>	70.3%	40.4%	39.9%

Source: US Census, American Community Survey (5-year estimates 2010-2014)

In 2000, 210 people lived below the poverty line in Union (9.6% of all individuals). In 2014, 130 people lived below the poverty line in Union (6.2% of all individuals). At 2.9%, the Town’s family poverty rate in 2014 was substantially lower than Knox County (7.2%) and the State (9.4%). Poverty rates from 2000 to 2014 decreased in Union but increased at the county and state levels.

<b>Individuals Below Poverty Level</b>			
<b>Year</b>	<b>Union</b>	<b>Knox County</b>	<b>Maine</b>
2000	9.6%	10.1%	10.9%
2010	5.7%	12.5%	12.6%
2013	4.5%	10.8%	13.6%
2014	6.2%	11.3%	13.9%

Source: U.S. Census, American Community Survey (5-year estimates 2006-2010, 2009-2013 and 2010-2014)

<b>Families Below Poverty Level</b>			
<b>Year</b>	<b>Union</b>	<b>Knox County</b>	<b>Maine</b>
2000	6.1%	6.4%	7.8%
2010	1.8%	7.9%	8.4%
2013	0.8%	6.5%	9.1%
2014	2.9%	7.2%	9.4%

Source: U.S. Census, American Community Survey (5-year estimates 2006-2010, 2009-2013 and 2010-2014)

The poverty level in 2014 was \$19,790 for a three-person family. The next table shows federally defined poverty levels by family size.

<b>2014 Poverty Guidelines for the 48 Contiguous States and the District of Columbia</b>	
<b>Persons in family/household</b>	<b>Poverty guideline</b>
1	\$11,670
2	\$15,730
3	\$19,790
4	\$23,850
5	\$27,910
6	\$31,970
7	\$36,030
8	\$40,090
For families/households with more than 8 persons, add \$4,060 for each additional person.	

Source: U.S. Department of Health and Human Services

The two largest occupational sectors in Union and in Knox County in 2014 were ‘Management, business, science, arts’ and ‘Sales and office’. The fastest growing occupation for the Town was ‘Management, business, science, arts’. For the County it was ‘Service’ occupations. The sector decreasing the most was ‘Natural resources, construction, and maintenance’. For the County, it was ‘Production, transportation, and material moving’. The Census-defined industry category ‘Agriculture, forestry, fishing and hunting, and mining’ within the ‘Natural resources, construction, and maintenance’ occupational sector employed an estimated 20 persons in Union in 2014. In 2000, 66 persons were employed in that category in Union.

<b>Occupations</b>	<b>Union</b>			<b>Knox County</b>		
	<b>2000</b>	<b>2014</b>	<b>Change</b>	<b>2000</b>	<b>2014</b>	<b>Change</b>
Total civilian employed population 16 years and over	1,117	1,096	-1.9%	19,263	19,483	1.1%
Management, business, science, arts	317	369	16.4%	5,725	6,233	8.9%
Service	165	185	12.1%	2,959	3,470	17.3%
Sales and office	283	249	-12.0%	4,881	4,867	-0.3%
Natural resources, construction, and maintenance	186	141	-24.2%	3,108	3,028	-2.6%
Production, transportation, and material moving	166	152	-8.4%	2,590	1,885	-27.2%

Source: US Census, American Community Survey (5-year estimates 2010-2014)

In Union, most who work do so for private sector employers. Sizable numbers work for themselves in unincorporated businesses, or for the government (city, public schools, county, state or federal).

Class of Worker 2014	Union		Knox County	
	Count	Percent	Count	Percent
Civilian employed population 16 years and older	1,096	100.0%	19,483	100.0%
Private wage and salary workers	812	74.1%	13,992	71.8%
Government workers	129	11.8%	2,452	12.6%
Self-employed in own not incorporated business workers	155	14.1%	2,981	15.3%
Unpaid family workers	0	0.0%	58	0.3%

Source: US Census, American Community Survey (5-year estimates 2010-2014)

Total taxable retail sales increased in Union from 2010 to 2014 by 21.5%. The Town's largest sector, Business Operating increased by 28.5%. This sector comprised 64.3% of total taxable retail sales in 2010 and 68.0% in 2014. The only decline was in 'Other', which combines sales that are not included in the named categories.

Union Total Taxable Retail Sales (Annual) in THOUSANDS OF DOLLARS						
Category	2010	2011	2012	2013	2014	Change
Total	19882.4	21468.7	21524.2	22263.5	24156.6	21.5%
Personal	7097.9	7173.2	7575.8	7404.2	7733.8	9.0%
Business Op	12784.5	14295.5	13948.4	14859.3	16422.8	28.5%
Food Store	4584.6	4602.1	4800.4	4973.4	5081.1	10.8%
Other	597	683.7	506.2	539.3	493.7	-17.3%
Auto Trans	0	0	145.6	248.6	0	0
Restaurant	836.5	879.1	859.9	1110.2	1278.7	52.9%
Lodging	40.3	0	0	70.5	140.1	247.6%

Source: Maine Revenue Services,

Notes: To use these dollar figures, multiply by \$1,000. Some taxable sales are non-disclosable due to the small numbers of businesses in certain sectors.

Of total taxable retail sales in Knox County, about 4.4% were from sales occurring in Union in 2014. In 2010, Union sales comprised about 4.2% of Knox County sales.

Knox County recorded an increase of 15.5% in total taxable retail sales from 2010 to 2014. The largest increases were in ‘Other Retail’ and ‘Restaurant’. No categories recorded a decline.

<b>Knox County Total Taxable Retail Sales (Annual) in THOUSANDS OF DOLLARS</b>						
<b>Category</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>Change</b>
Total	470,126.0	482,574.2	492,211.6	518,998.6	542,912.2	15.5%
Personal	412,866.9	420,906.5	438,175.2	462,748.4	483,564.9	17.1%
Business Op	57,259.1	61,667.7	54,036.4	56,250.2	59,347.3	3.6%
Building	79,446.9	80,857.6	84,770.1	87,474.4	88,498.9	11.4%
Food Store	51,271.1	51,148.9	53,412.8	54,345.0	54,990.4	7.3%
General	74,467.8	74,050.1	75,310.4	77,902.7	86,458.2	16.1%
Other Retail	64,156.1	67,474.4	68,168.2	78,853.6	85,034.2	32.5%
Auto Trans	62,320.3	65,191.8	69,284.6	73,229.1	75,231.4	20.7%
Restaurant	29,265.2	31,207.9	34,936.6	36,714.7	38,758.8	32.4%
Lodging	51,939.5	50,975.8	52,292.5	54,228.9	54,593.0	5.1%

Source: Maine Revenue Services, Note: To use these dollar figures, multiply by \$1,000.

Maine Revenue Services category descriptions:

- Total Retail Sales: Includes Consumer Retail Sales plus special types of sales and rentals to businesses where the tax is paid directly by the buyer (such as commercial or industrial oil purchase).
- Business Operating: Purchases for which businesses pay Use Tax, i.e., for items that are used by the business in its operation (like shelving and machinery) and not re-sold to consumers.
- Building Supply: Durable equipment sales, contractors' sales, hardware stores and lumberyards.
- Food Stores: All food stores from large supermarkets to small corner food stores. The values here are snacks and non-food items only, since most food intended for home consumption is not taxed.
- General Merchandise: In this sales group are stores carrying lines generally carried in large department stores. These include clothing, furniture, shoes, radio-TV, household durable goods, home furnishing, etc.
- Other Retail: This group includes a wide selection of taxable sales not covered elsewhere. Examples are dry good stores, drug stores, jewelry stores, sporting good stores, antique dealers, morticians, bookstores, photo supply stores, gift shops, etc.
- Auto Transportation: This sales group includes all transportation related retail outlets. Included are auto dealers, auto parts, aircraft dealers, motorboat dealers, automobile rental, etc.
- Restaurant/Lodging: All stores selling prepared food for immediate consumption. The Lodging group includes only rental tax.

- (2) *A brief historical perspective on how and why the current economy of the community and region developed.*

Union began as a community of farmers and foresters. A large portion of that farming ceased, although farming does continue on a modest scale. The Town, which had once been extensively cleared for agriculture has since reverted to forest and rural residential uses in many areas.

The growth of manufacturing, which had employed many in the workforce for generations, occurred principally in larger communities like Rockland and Waldoboro. Improvement in the roadway networks, especially during the second half of the twentieth century, allowed more people to live farther from their workplaces in search of less expensive land and housing. Service sector employment (both public and private, and in low, moderate and high wage occupations) has surpassed manufacturing over the past four decades. Commuting has sustained predominantly residential towns like Union. However, there are important businesses located in the Town that provide needed services to residents. There have been and continue to be opportunities for business development that is in keeping with the character of Union like small-scale, traditional trades, medical services, and home-based occupations.

Telecommunications with improved broadband services allow more people to work where they want to, usually out of their homes with occasional trips to business meetings elsewhere. Greater bandwidth internet capabilities are available in cities today and will be needed here if Union residents want to participate in what has been termed the information economy.

- (3) *A list of local and regional economic development plans developed over the past five years, which include the community.*

The Midcoast Economic Development District, which includes Knox County and surrounding areas, prepares annual Comprehensive Economic Development Strategy (CEDS) reports. These reports outline economic trends and inventory planning and projects underway that seek to improve the economy by creating or retaining employment and services, and proposals for which there is community interest and for which funding from the U.S. Economic Development Agency is possible. No Union projects were included in the 2014 CEDS, the latest available.

- (4) *Where does the community's population work and where do employees in your community reside? A description of the major employers in the community and labor market area and their outlook for the future.*

As shown in the next table for 2014, most Union residents who work do so in Knox County 78.2%, with 20.1% working within Union. In 2000, 55.1% of Union residents worked in Knox County; of those, 23.4% worked within Union.

Work Place 2014 Category	Union Residents		Knox County Residents	
	Count	Percent	Count	Percent
Total:	1,055	100.0%	18,942	100.0%
Worked in town of residence	212	20.1%	7,141	37.7%
Worked in county of residence	825	78.2%	16,521	87.2%
Worked outside county of residence	223	21.1%	2,228	11.8%
Worked in state of residence:	1,048	99.3%	18,749	99.0%
Worked outside state of residence	7	0.7%	193	1.0%

Source: U.S. Census Bureau, American Community Survey (5-year estimates 2010-2014)

Most Union commuters (79.4%) drove to work alone. A modest percent (8.8%) carpooled. About 5.6% of Union residents worked at home.

Transportation - Travel To Work, 2010-2014 Categories	Union		Knox County		Maine	
	Count	Percent	Count	Percent	Count	Percent
Total	1,055	100%	18,942	100%	632,757	100%
Car, truck, or van - drove alone	838	79.4%	14,120	74.5%	494,250	78.1%
Car, truck, or van - carpooled	93	8.8%	2,082	11.0%	65,134	10.3%
Public transportation (excluding taxicab)	0	0.0%	47	0.2%	4,061	0.6%
Walked	56	5.3%	1,006	5.3%	24,784	3.9%
Taxicab, motorcycle, bicycle, or other means	9	0.9%	394	2.1%	10,657	1.7%
Worked at home	59	5.6%	1,293	6.8%	33,871	5.4%

Source: U.S. Census Bureau, American Community Survey (5-year estimates 2010-2014)

Average travel times are longer for Union workers than for Knox County and the State average.

Travel Time to Work, 2010-2014	Union	Knox County	Maine
Average in Minutes	25.6	18.5	23.5

Source: American Community Survey (5-year estimates 2010-2014)

The next table shows a partial listing in 2015 for businesses in Union that employ five or more people each. Most of these businesses are located on Route 17 (Heald Highway) or in the village (Burkett Rd, Common Rd, and Depot St).

<b>Union Businesses/Employers with 5+ employees each</b>		
<b>Name</b>	<b>Address</b>	<b>Employee Range</b>
Badger Cafe & Pub	289 Common Rd	10-19
Camden National Bank	52 Burkett Rd	5-9
Cates Real Estate	295 Common Rd	5-9
Coastal Blueberry Service	60 Common Rd	5-9
Come Spring Cafe	1422 Heald Highway	5-9
Common House of Pizza	279 Common Rd	5-9
Common Market	40 Burkett Rd	10-19
Crawford Commons Inc	132 Middle Rd	5-9
Damariscotta Bank & Trust	17 Sennebec Rd	5-9
Four Corner Variety	1718 Heald Highway	10-19
Hammond Tractor Co	1987 Heald Highway	20-49
Maritimes Farms Convenience	1923 Heald Highway	10-19
Mic Mac Market	994 Heald Highway	10-19
RSU 40 School Supt	1070 Heald Highway	10-19
RSU 40 Union Alternative Education	1070 Heald Highway	5-9
RSU 40 Union Elementary School	1070 Heald Highway	20-49
RT Allen & Sons Inc	72 Depot St	10-19
Sterling Ambulance	1924 Heald Highway	5-9
Union Farm Equipment Inc	1893 Heald Highway	20-49
Union Fire Station	5667 Common Rd	NA
Union Town Office	567 Common Rd	5-9
Union True Value Hardware	749 Heald Highway	5-9
US Post Office	309 Common Rd	5-9

Source: Maine Dept of Labor, Info-group 2015

Note: This state data contains errors.

Most businesses in Union employ just a few people each. The next table shows a partial listing in 2015 for businesses that employ up to four people each.

<b>Union Businesses/Employers with 1-4 employees each</b>	
24 Hour Property Svc	Luce Dirt Excavation
A & B Welding Llc	Luce's Garage
Adolphsen Line Painting	Luce's Transportation
Appleton Ridge Pet Care Ctr	Maine Outdoors
Blake Edward Pulp & Logs	Maine Scene
Brae Maple Farm	Mic Mac Cove Family Campground
Butler Maxcy & Heath Inc	Mishka Plumbing & Heating
Cars Certified Auto Repair	MKM Construction
Classical Wood Floors	Motion Industries Inc
Coity Castle Farm	NP Morith Inc
Come Spring Food Pantry	Peoples United Methodist Church
Cross Insurance	Positive Images
Crowning Touch Embroidery	Professional Heating Service
Dolham Donna	Regional Activities Guide –ME
Donald Sabins Sewing Mach.	Riverdale Farms & Garage
Earth Sun Moon Trading Co	Robbin's Heating & Plumbing
Eastern Illustrating	Rowa Tree Farm
Agricola Farms	Savage Oakes Vineyard & Winery
Freyenhagen & Freyenhagen	Shep's Import
Full Circle Farm Inc	South Union Auto Repair
Gallant & Gallant	Studio 4 Salon
GDS Warehouse	Sweetgrass Farm Winery
Gerald Curry Cabinet Maker	Thurston Bros Inc
Gnathos Dental Products	Tidewater Telecom Inc
Golden Raven Storyteller	Tri-County Solid Waste Transf
Graybrook Studio	Union Fair
	Union Historical Society
Erica Harriman, CPA	Union Nazarene Church
Heritage Floor Sanding	Union Pottery
J&L Construction	Union Square Laundry
Joly Signs	Union Town Garage
	Vose Library
Larry Luce Masonry	Walker Flooring
Linita Farms	Washburn Water Plant
Litovald USA	Waterfront Properties of Maine
Regional Activities Guide –ME	Steven Zizza, DDS
Riverdale Farms & Garage	

Source: Maine Dept of Labor, Infogroup 2015

Note: This state data contains errors.

For those living in Union and commuting elsewhere to work, there are varied opportunities within Knox County. The next table lists the 25 largest employers in Knox County ranked by the number of employees. According to the Maine Department of Labor, only the Penobscot Bay Medical Center employs between 501 and 1,000 employees. All other firms in Knox County employ fewer than 500 people each.

<b>Top 25 Private Employers In Knox County by Average Monthly Employment By County (1st Quarter 2015)</b>		
<b>Rank</b>	<b>Name</b>	<b>Sector</b>
1	Penobscot Bay Medical Center	General medical and surgical hospitals
2	Fisher Engineering	Construction machinery manufacturing
3	Wal Mart / Sam's Club	Discount department stores
4	Hannaford Bros Co	Supermarkets and other grocery stores
5	Camden National Bank	Commercial banking
6	North End Composites LLC	Boat building
7	O'Hara Corporation	Finfish fishing
8	Boston Financial Data Services Inc.	Telemarketing and other contact centers
9	Maritime Energy	Fuel dealers
10	Samorock LLC	Hotels and motels, except casino hotels
11	Quarry Hill	Nursing care facilities, skilled nursing
12	Penobscot Bay YMCA	Civic and social organizations
13	FMC Corporation	All other miscellaneous food manufacturing
14	Lowes Home Centers LLC	Home centers
15	Home Depot USA Inc	Home centers
16	Maine Behavioral Healthcare	Outpatient mental health centers
17	Shaws Supermarkets Inc	Supermarkets and other grocery stores
18	Coastal Opportunities Inc	Vocational rehabilitation services
19	Kno-Wal-Lin Home & Hospice Inc	Home health care services
20	Linda Beans Perfect Maine	Full-service restaurants
21	Lie-Nielsen Toolworks Inc	Saw blade and handtool manufacturing
22	Dragon Products Company LLC	Ready-mix concrete manufacturing
23	Windward Gardens	Nursing care facilities, skilled nursing
24	McDonald's	Limited-service restaurants
25	Penobscot Bay Physicians & Association	Offices of physicians, except mental health

Source: Maine Department of Labor

The medical sector provides a significant amount of employment in low, moderate and high wage positions. Given the forecasted aging of the region's population, this sector is likely to continue growing regardless of the overall condition of the State or national economy. Tourism-related activities also support many businesses.

The State's major private sector employers are found in service center communities like Augusta, Bangor and Portland. Many of these employers have multiple locations. Retail tops the list followed by medical services.

<b>Top 25 private employers in Maine by Average Monthly Employment (1st quarter 2015)</b>				
<b>Rank</b>	<b>Name</b>	<b>Location</b>	<b>Employment range</b>	<b>Business description</b>
1	Hannaford Bros Co	Statewide	7,001 to 7,500	Supermarkets grocery stores
2	Wal Mart / Sam's Club	Statewide	6,501 to 7,000	Discount department stores
3	Mainehealth	Portland	6,501 to 7,000	General medical surgical hospitals
4	Bath Iron Works Corporation	Bath	5,001 to 5,500	Ship building and repairing
5	L.L.Bean, Inc.	Statewide	4,501 to 5,000	Mail-order houses
6	Eastern Maine Medical Center	Statewide	3,501 to 4,000	General medical surgical hospitals
7	Maine General Medical Ctr	Statewide	3,001 to 3,500	General medical surgical hospitals
8	Central Maine Healthcare Corp	Lewiston	3,001 to 3,500	General medical surgical hospitals
9	Unum Provident	Portland	3,001 to 3,500	Direct life insurance carriers
10	TD Bank NA	Statewide	3,001 to 3,500	Commercial banking
11	Shaws Supermarkets Inc	Statewide	2,001 to 2,500	Supermarkets grocery stores
12	Webber Hospital Association	Statewide	1,501 to 2,000	General medical surgical hospitals
13	Mercy Hospital	Portland	1,501 to 2,000	General medical surgical hospitals
14	Goodwill Industries Northern NE	Statewide	1,001 to 1,500	Vocational rehabilitation services
15	Home Depot USA Inc	Statewide	1,001 to 1,500	Home centers
16	Circle K	Statewide	1,001 to 1,500	Gas stations convenience stores
17	Pratt & Whitney Aircraft Group	N Berwick	1,001 to 1,500	Aircraft engine and parts mfg.
18	Lowe's Home Centers LLC	Statewide	1,001 to 1,500	Home centers
19	Jackson Laboratory	Bar Harbor	1,001 to 1,500	Research development biotech
20	St Mary's Regional Medical Ctr	Lewiston	1,001 to 1,500	General medical surgical hospitals
21	SD Warren	Statewide	1,001 to 1,500	Paper, except newsprint, mills
22	University of New England	Statewide	1,001 to 1,500	Colleges and universities
23	Rite Aid of Maine Inc	Statewide	1,001 to 1,500	Pharmacies and drug stores
24	Sunday River Skiway	Statewide	1,001 to 1,500	Skiing facilities
25	Bowdoin College	Brunswick	1,001 to 1,500	Colleges and universities

Source: Maine Department of Labor

**Policies**

- (1) To support the type of economic development activity the community desires, reflecting the community’s role in the region.
- (2) To make financial commitments, if necessary, to support desired economic development, including needed public improvements.
- (3) To coordinate with regional development corporations and surrounding towns as necessary to support desired economic development.

**Strategies**

Economy Strategies	Responsible Parties	Timeframe
<p>(1) If appropriate, assign responsibility and provide financial support for economic development activities to the proper entity (e.g., a local economic development committee, a local representative to a regional economic development organization, the community’s economic development director, a regional economic development initiative, or other)</p> <ul style="list-style-type: none"> <li>• Track and evaluate the “State of the Union economy” on an ongoing basis and report to Selectmen annually on actions that could be taken to improve Union’s business climate and investment.</li> </ul>	<p>Selectmen, Town Manager, Economic Development Committee, and Chamber of Commerce</p>	<p>Immediate</p>
<p>(2) Enact or amend local ordinances to reflect the desired scale, design, intensity, and location of future economic development</p> <ul style="list-style-type: none"> <li>• Amend as needed the site plan review ordinance to ensure that performance standards are sufficiently flexible to adapt to changing commercial needs while retaining compatibility with residential neighborhoods and adjacent properties.</li> </ul>	<p>Economic Development Committee, Selectmen, Planning Board, Ordinance Review Committee, and Town Meeting Vote</p>	<p>Immediate and Ongoing</p>
<p>(3) If public investments are foreseen to support economic development, identify the mechanisms to be considered to finance them (local tax dollars, creating a tax increment financing district, a Community Development Block Grant or other grants, bonding, impact fees, etc.)</p>	<p>Selectmen, Town Manager, and Town Meeting Vote</p>	<p>See the Capital Investment Plan for items and timeframes</p>
<p>(4) Participate in any regional economic development planning efforts that are relevant to improving the economic health of Union.</p>	<p>Economic Development Committee, Selectmen, Town Manager, and Chamber of Commerce</p>	<p>Midterm and Ongoing</p>

Note: Strategies proposed in this Comprehensive Plan are assigned responsible parties and a timeframe in which to be addressed. Immediate is assigned for strategies to be

addressed within two years after the adoption of this Comprehensive Plan, Midterm for strategies to be addressed within five years, and Long Term for strategies to be addressed within ten years. In addition, Ongoing is used for regularly recurring activities.

DRAFT

## HOUSING

### Introduction

This chapter identifies and analyzes housing trends, including tenure, type, age and affordability, and forecasts housing needs for the planning period.

### State Goal

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

### Analyses

- (1) *How many additional housing units (if any), including rental units, will be necessary to accommodate projected population and demographic changes during the planning period?*

As noted in the Population and Demographics Chapter, the State projects that Union's population will decline to 2,221 persons in 2027. For planning purposes, the Town is forecast to have up to 2,300 year round residents by 2027, which is 16 more than the current population estimate for 2015 of 2,284 persons. The Town's average household size has decreased over several decades. In 2014, it was estimated at 2.29 persons down from 2.74 in 1990. If the average household size declines to 2.20 persons, with a projected population for planning purposes of up to 2,300 people by the year 2027, 1,045 housing units would be needed for occupancy. In 2014, the Census estimated there were 911 occupied housing units in Union out of 1,170 total housing units (occupied and vacant). Therefore, up to an additional 134 units would be needed for occupancy by 2027.

The Census records that 292 dwellings (net) were built/located in the Town from 1990 to 2014, for an annual average of almost 11.7 units. For planning purposes, up to an estimated 117 units of new housing is forecasted to be constructed, about 9 per year on average from 2015 onward, for a projection of 1,287 total units (occupied and vacant) by the year 2027. Some units currently classified by the Census as vacant could become occupied year-round, offsetting the need for an estimated 17 new units. It is also likely that new seasonal housing will be constructed in addition to the construction of new year-round units.

In the 2014 Census estimates, there were 113 units of renter occupied housing in Union, which was 12.4% of the total estimated occupied housing stock. It is possible that rental housing could increase to 13% of total occupied housing by 2027, and if it does, that would mean about 15 additional renter occupied units would be constructed out of the total 117 additional units of new housing projected.

- (2) *Is housing, including rental housing, affordable to those earning the median income in the region? Is housing affordable to those earning 80% of the median income? If not, review local and regional efforts to address issue.*

Town-level housing affordability data for Union from MaineHousing, also known as the Maine State Housing Authority, indicates that in 2015, the median income household could afford 109% of the median home sale price, but that 459 households or 45.6% were unable to afford the median home price. In comparison, the median income earner in Knox County could afford about 106% of the median home sale price in 2014. Housing information for those earning 80% of the median was not available.

The American Community Survey of the Census 2014 estimates that about 219 households (39% of households with a mortgage) in Union pay 30% or more of their monthly income on housing. Paying 30% or more of one's income is generally considered unaffordable. For Knox County, 37.5% of households with a mortgage pay 30% or more of their income on housing. For those without a mortgage in Union, 67 households (28.3% of households without a mortgage) pay 30% or more of their income on housing. For Knox County, 20.6% of those without a mortgage pay 30% or more of their income on housing.

For those who rent their homes in Union, 26 households (40.7% of occupied rental units) pay 30% or more on housing. For Knox County, that percentage is 46.6% and for the State, it is 51.9%.

For 2014, Union's housing stock included about 4.7% multi-unit housing, while Knox County had 12.3%. Multi-unit housing tends to be lower-priced and therefore more affordable than single-family housing. At 6.9%, the Town has a somewhat lower percentage of mobile homes as a proportion of its total housing than Knox County (7.8%) and the State (8.8%). By definition, the State considers mobile homes as a form of affordable housing.

Since 2000, no subsidized housing units have been built in Union.

The Union Land Use Ordinance allows single-family, two-family, multifamily, accessory apartments and mobile homes on individual lots in many areas of the Town. See the Conditions and Trends section for more information on land use regulations, and the number of subsidized units in the Town.

- (3) *Are seasonal homes being converted to year-round use or vice-versa? What impact does this have on the community?*

Union had an estimated 192 seasonal housing units in 2014. The Planning Board/Code Enforcement Officer reports that since 2010 there have been about five conversions of seasonal units to year-round occupancy and no conversions of year-round housing to seasonal use. While the Town does not actively monitor occupancy, there has been little impact on the community from conversions.

- (4) *Will additional low and moderate income family, senior, or assisted living housing be necessary to meet projected needs for the community? Will these needs be met locally or regionally?*

A large portion of the forecasted population change in Union will be an increase in the older age groups. The demand for housing to accommodate the needs of the elderly will increase. In 2013, the most recent year of data provided by MaineHousing, Union had six subsidized housing units for senior citizens. The Union Corporation for Better Housing has eight units located at 146 Townhouse Rd. The construction of additional facilities including assisted living could meet future local demand. Service center communities like Rockland will continue to host the majority of the region's subsidized units, especially for the elderly population, given the efficiencies of scale required by federal funding agencies for elderly and subsidized housing projects, the location of medical facilities nearby, proximity to social services and shopping amenities, and the existing range of housing stock.

- (5) *Are there other major housing issues in the community, such as substandard housing?*

For Union in 2014, no housing units are estimated to lack complete plumbing or complete kitchens. The Code Enforcement Office records indicate a small amount of substandard housing units in which there are current and ongoing violations of life safety codes that endanger occupants. Most prevalent concerns include older mobile homes, lack of maintenance, and lack of fire and carbon monoxide detectors.

- (6) *How do existing local regulations encourage or discourage the development of affordable/workforce housing?*

Statewide, affordable housing tends to be located on lots of 20,000 square feet or smaller, and/or as part of multi-unit development with public water and connections to sewer or community wastewater systems. A limited amount of housing in Union meets these conditions. However, the allowance of multifamily units, accessory apartments, assisted living facilities and mobile homes in many areas of the community provides for affordable housing opportunities. The Union Land Use Ordinance supports development that encourages affordable/workforce housing. See the Conditions and Trends section for more information on zoning regulations.

**Conditions and Trends**

*Minimum data required to address Analyses:*

- (1) *The community’s Comprehensive Planning Housing Data Set prepared and provided to the community by the Maine State Housing Authority, and the Office, or their designees.*

From 1990 to 2014, the total number of housing units increased by about 33.3% (+292 units) in Union, while the Town’s year-round population increased by 15.1% (301 persons) during the same period. Vacant housing units increased by 46.3% (+82 units). Seasonal/recreational units increased 45.5% (+60 units). A housing unit is classified as “other vacant” when it does not fit into any other year-round vacant category. Common reasons that a housing unit is labeled “other vacant” are that no one lives in the unit and the owner: Is making repairs or renovations, does not want to rent or sell, is using the unit for storage, and/or is elderly and living in a nursing home or with family members. Additional reasons are that the unit is being held for settlement of an estate or that the unit is being foreclosed. While foreclosed properties may be classified as “other vacant,” they may also appear in any of the vacant or occupied categories.

<b>Housing Units in Union</b>					
<b>Units by Tenure</b>	<b>1990</b>	<b>2000</b>	<b>2010</b>	<b>2014</b>	<b>Percent Change</b>
Total Units	878	1,052	1,203	1,170	33.3%
Occupied	701	863	981	911	30.0%
Vacant	177	189	222	259	46.3%
- Vacant, for rent	9	13	21	0	-100.0%
- Vacant, for sale only	8	7	13	46	475.0%
- Vacant, rented or sold, not occupied	4	5	2	15	275.0%
- For seasonal, recreational, occasional use	132	147	159	192	45.5%
- All other vacant	24	17	27	6	-75.0%

Sources: Census 1990, 2000, 2010, American Community Survey 5-year estimate 2010-2014

Note: While the 2010 Census had 1,203 total housing units, the 5-year estimate 2006-2010 showed just 1,181, which better aligns with the trend seen from 2000 to 2014. It is possible that the 2010 Census over-counted units, as the Code Enforcement Office reports few units removed/razed from 2010 to 2014.

The increase in the number of housing units has occurred at a faster rate than the growth of population for Knox County. Total population grew by about 9.2% from 1990 to 2014 countywide, while housing grew by 25.4%. Growth in both year-round and seasonal housing has been notable. Seasonal housing comprised about 21.0% of the County's total housing stock in 2014, with much of that housing in coastal communities.

<b>Housing Units in Knox County</b>					
<b>Units by Tenure</b>	<b>1990</b>	<b>2000</b>	<b>2010</b>	<b>2014</b>	<b>Percent Change</b>
Total Units	19,009	21,612	23,744	23,838	25.4%
Occupied	14,344	16,608	17,258	17,038	18.8%
Vacant	4,665	5,004	6,486	6,800	45.8%
- Vacant, for rent	389	272	502	323	-17.0%
- Vacant, for sale only	239	163	372	137	-42.7%
- Vacant, rented or sold, not occupied	115	168	138	280	143.5%
- For seasonal, recreational, occasional use	3,541	4,054	4,828	4,997	41.1%
- All other vacant	381	347	646	1,063	179.0%

Sources: US Census 1990, 2000, 2010, American Community Survey 5-year estimate 2010-2014

The average household size has decreased at the municipal and county level, as it has statewide and nationally.

<b>Average Household Size</b>			
<b>Year</b>	<b>Union</b>	<b>Knox County</b>	<b>Maine</b>
1990	2.74	2.45	2.56
2000	2.51	2.31	2.39
2010	2.30	2.22	2.32
2013 Est.	2.31	2.28	2.33
2014 Est.	2.29	2.26	2.34
% Change	-16.4%	-7.8%	-8.6%

Source: US Census, American Community Survey 5-year estimates 2009-2013 and 2010-2014

In 2014, about 88.4% of the Town’s housing stock was composed of single-family units (detached and attached). The County’s housing stock was 79.9% single-family units (attached and detached), while the State’s was 71.9% (attached and detached). Union’s housing stock includes 4.7% multi-unit housing, while Knox County has 12.3% and the State has 19.2%. At 6.9%, the Town has a somewhat lower percentage of mobile homes as a proportion of its total housing than Knox County (7.8%) and the State (8.8%).

<b>Estimate of Units by Structure Type 2014</b>						
<b>Category</b>	<b>Union</b>		<b>Knox County</b>		<b>Maine</b>	
	<b>Estimate</b>	<b>Percent</b>	<b>Estimate</b>	<b>Percent</b>	<b>Estimate</b>	<b>Percent</b>
Total Est. Units	1,170	100%	23,838	100%	724,685	100%
1, detached	1,026	87.7%	18,612	78.1%	504,372	69.6%
1, attached	8	0.7%	419	1.8%	16,377	2.3%
2	36	3.1%	1,044	4.4%	37,843	5.2%
3 or 4	0	0.0%	865	3.6%	40,089	5.5%
5 to 9	19	1.6%	539	2.3%	27,509	3.8%
10 to 19	0	0.0%	150	0.6%	11,847	1.6%
20 or more	0	0.0%	344	1.4%	22,318	3.1%
Mobile home	81	6.9%	1,865	7.8%	64,033	8.8%
Boat, RV, van, etc.	0	0.0%	0	0.0%	297	0.0%

Sources: Census American Community Survey 5-year estimate 2010-2014

According to the US Department of Housing and Urban Development, from 2000 to 2014, 180 housing unit permits were issued in Union, of which 175 were for units in single-family structures. Five were multi-family units. Permit activity was greatest between 2000 and 2005.

From 2000 to 2014, 2,938 housing unit permits were issued in Knox County. At the County level, about 5.7% of all permits were for multi-family units. During this period, most building permit activity occurred from 2002-2004; however, most multi-unit permit activity occurred in 2003 and in 2012. See the next table.

<b>Housing Unit Permits Issued</b>						
<b>Year</b>	<b>Union</b>			<b>Knox County</b>		
	<b>Single-Family</b>	<b>Multi-Family</b>	<b>Total Units</b>	<b>Single-Family</b>	<b>Multi-Family</b>	<b>Total Units</b>
2000	17	5	22	219	17	236
2001	24	0	24	257	24	281
2002	20	0	20	292	20	312
2003	21	0	21	337	34	371
2004	19	0	19	345	0	345
2005	19	0	19	262	6	268
2006	16	0	16	207	2	209
2007	12	0	12	143	2	145
2008	8	0	8	128	4	132
2009	6	0	6	103	2	105
2010	4	0	4	73	2	75
2011	4	0	4	113	11	124
2012	4	0	4	108	34	142
2013	8	0	8	82	10	92
2014	5	0	5	101	0	101
<b>Total</b>	<b>187</b>	<b>5</b>	<b>187</b>	<b>2,770</b>	<b>168</b>	<b>2,938</b>
<b>Average</b>	<b>12</b>	<b>0.3</b>	<b>12</b>	<b>184.7</b>	<b>11.2</b>	<b>195.9</b>

Source: US Department of Housing and Urban Development (HUD)

Note: Town records indicate more development than shown in HUD figures.

According to the Planning Board/Code Enforcement Office, between 2000 and 2014, 188 housing units constructed/located in the Town were single-family homes (stick-built and modular), while 15 were mobile homes (manufactured with chassis). Seven multi-family units were constructed during this period. Building activity was stronger prior to the recession. New homes were built Town-wide, and on these roads in particular: Heald Highway (Route 17), North Union Rd, Sennebec Rd, and Depot St (Route 235). Generally, this development was spread out.

Since 2001, there have been three new short subdivision dead-end roads built (Harding Ln, West View Ln, and an unnamed road), nine lots in total, which were designed based upon site conditions and surrounding patterns of development. No cluster developments were constructed during this period.

About 77.9% of Union’s housing stock was occupied in 2014, as compared with 71.5% for the County and 76.3% for the State. As noted, the Census categorizes seasonal homes as vacant. The homeowner vacancy rate was higher for the Town than it was for the County and State. Conversely, Union had a 0% rental vacancy rate as compared with 7.5% for the County and 7.2% for the State.

<b>Estimate of Housing Occupancy 2014</b>						
<b>Category</b>	<b>Union</b>		<b>Knox County</b>		<b>Maine</b>	
	<b>Estimate</b>	<b>Percent</b>	<b>Estimate</b>	<b>Percent</b>	<b>Estimate</b>	<b>Percent</b>
Total housing units	1,170	100%	23,838	100%	724,685	100%
Occupied housing units	911	77.9%	17,038	71.5%	553,086	76.3%
Vacant housing units	259	22.1%	6,800	28.5%	171,599	23.7%
Homeowner vacancy rate	5.5%		1.0%		2.2%	
Rental vacancy rate	0.0%		7.5%		7.2%	

Source: Census, American Community Survey 5-year estimate 2010-2014

Notes: The homeowner vacancy rate is the proportion of the homeowner-housing inventory that is vacant for sale. The rental vacancy rate is the proportion of the rental-housing inventory that is vacant for sale

About 87.6% of occupied housing in Union was owner occupied in 2014, as compared with 78.0% in Knox County and 71.4% for the State. The balance of occupied housing was renter occupied.

<b>Estimate of Housing Tenure 2014</b>						
<b>Category</b>	<b>Union</b>		<b>Knox County</b>		<b>Maine</b>	
	<b>Estimate</b>	<b>Percent</b>	<b>Estimate</b>	<b>Percent</b>	<b>Estimate</b>	<b>Percent</b>
Occupied housing units	911	100%	17,038	100%	553,086	100%
Owner-occupied	798	87.6%	13,293	78.0%	395,074	71.4%
Renter-occupied	113	12.4%	3,745	22.0%	158,012	28.6%

Sources: Census, American Community Survey 5-year estimate 2010-2014

About 28.1% of total housing in Union was built before 1939. For Knox County that figure was 34.7% and for the State that figure was 25.7%. Union has a relatively younger housing stock than does Knox County. Substandard housing is more common with older homes.

<b>Estimate of Year Structure Built 2014</b>						
<b>Category</b>	<b>Union</b>		<b>Knox County</b>		<b>Maine</b>	
	<b>Estimate</b>	<b>Percent</b>	<b>Estimate</b>	<b>Percent</b>	<b>Estimate</b>	<b>Percent</b>
Total housing units	1,170	100%	23,838	100%	724,685	100%
Built 2010 or later	23	2.0%	159	0.7%	4,855	0.7%
Built 2000 to 2009	153	13.1%	3,067	12.9%	89,273	12.3%
Built 1990 to 1999	182	15.6%	2,629	11.0%	89,077	12.3%
Built 1980 to 1989	186	15.9%	3,257	13.7%	108,631	15.0%
Built 1970 to 1979	151	12.9%	2,978	12.5%	102,859	14.2%
Built 1960 to 1969	56	4.8%	1,381	5.8%	53,365	7.4%
Built 1950 to 1959	66	5.6%	1,282	5.4%	54,466	7.5%
Built 1940 to 1949	24	2.1%	815	3.4%	35,826	4.9%
Built 1939 or earlier	329	28.1%	8,270	34.7%	186,333	25.7%

Sources: Census, American Community Survey 5-year estimate 2010-2014

For Union, no housing units are estimated to lack complete plumbing or complete kitchens. For Knox County, 0.7% units lacked complete plumbing and 0.6% lacked complete kitchens. For the State, 0.9% lacked complete plumbing and 1.1% units lacked complete kitchens.

<b>Estimate of Kitchen and Plumbing in Housing Units 2014</b>						
<b>Category</b>	<b>Union</b>		<b>Knox County</b>		<b>Maine</b>	
	<b>Estimate</b>	<b>Percent</b>	<b>Estimate</b>	<b>Percent</b>	<b>Estimate</b>	<b>Percent</b>
Occupied housing units	911	100%	17,038	100%	553,086	100%
Lacking complete plumbing facilities	0	0%	125	0.7%	4,736	0.9%
Lacking complete kitchen facilities	0	0%	105	0.6%	6,034	1.1%

Sources: Census, American Community Survey 5-year estimate 2010-2014

The median income of Union residents has increased since 2000 at a somewhat lower rate than for Knox County residents as a whole. The income gap between the Town and County has narrowed as of 2014.

<b>Median Household Income</b>	<b>Union</b>	<b>Knox County</b>	<b>Maine</b>
<b>2000</b>	\$37,679	\$36,774	\$37,240
<b>2010</b>	\$53,412	\$45,264	\$46,933
<b>2013</b>	\$53,274	\$49,755	\$48,453
<b>2014</b>	\$50,469	\$50,515	\$48,804
<b>Percent Change</b>	33.9%	37.4%	31.1%

Sources: Census, American Community Survey 5-year estimate 2009-2013 and 2010-2014

Union's poverty rate is substantially lower than the rate for Knox County as a whole. See the Economy Chapter for more information.

<b>Income – Below poverty level, 2014 Est</b>		
<b>Category</b>	<b>Union</b>	<b>Knox County</b>
Total individuals below poverty level	130	4,343
Percent of individuals below poverty level	6.2%	11.3%
Percent of families below poverty level	2.9%	7.2%

Sources: Census, American Community Survey 5-year estimate 2010-2014

The numbers of subsidized housing units in Union are shown in the next table. Top categories included housing vouchers and units for senior citizens. Countywide, there were 1,073 subsidized units, of which 472 were designated for senior citizens.

<b>Subsidized Housing Units</b>				
<b>Category</b>	<b>Union</b>		<b>Knox County</b>	
	<b>2011</b>	<b>2013</b>	<b>2011</b>	<b>2013</b>
Disabled Units	0	0	96	96
Family Units	0	0	312	309
Housing Choice Vouchers	15	NA	276	166
Senior Units	8	6	480	472
Special Needs Units	0	0	0	30
<b>Total</b>	<b>23</b>	<b>6</b>	<b>1,164</b>	<b>1,073</b>

Source: MaineHousing, Maine State Housing Authority

In 2014, the median value of occupied homes in Union was \$20,100 lower than Knox County and \$400 lower than the State median.

<b>Estimated Value of Owner Occupied Housing 2014</b>						
<b>Category</b>	<b>Union</b>		<b>Knox County</b>		<b>Maine</b>	
	<b>Estimate</b>	<b>Percent</b>	<b>Estimate</b>	<b>Percent</b>	<b>Estimate</b>	<b>Percent</b>
Owner-occupied units surveyed	798	100%	13,293	100%	395,074	100%
Less than \$50,000	22	2.8%	804	6.0%	32,957	8.3%
\$50,000 to \$99,999	74	9.3%	1,183	8.9%	55,951	14.2%
\$100,000 to \$149,999	190	23.8%	2,143	16.1%	66,302	16.8%
\$150,000 to \$199,999	193	24.2%	2,816	21.2%	77,438	19.6%
\$200,000 to \$299,999	207	25.9%	2,993	22.5%	89,693	22.7%
\$300,000 to \$499,999	84	10.5%	2,135	16.1%	51,345	13.0%
\$500,000 to \$999,999	22	2.8%	962	7.2%	17,049	4.3%
\$1,000,000 or more	6	0.8%	257	1.9%	4,339	1.1%
Median (dollars)	\$173,200	(X)	\$193,300	(X)	\$173,600	(X)

Sources: Census, American Community Survey 5-year estimate 2010-2014

About 219 households (39.0% of households with a mortgage) in Union pay 30% or more of their monthly income on housing. Paying 30% or more of one's income is generally considered unaffordable. For Knox County, 37.5% of households pay 30% or more, and for the State, 33.4% with a mortgage pay 30% or more of their income on housing.

For those without a mortgage in Union, 67 households (28.3% of households without a mortgage) pay 30% or more of their income on housing. For Knox County, 20.6% pay more than 30%, and for the State 17.4% of those without a mortgage pay 30% or more of their income on housing.

<b>Estimated Selected Monthly Owner Costs As A Percentage Of Household Income (SMOCAPI) 2014</b>						
<b>Category</b>	<b>Union</b>		<b>Knox County</b>		<b>Maine</b>	
	<b>Estimate</b>	<b>Percent</b>	<b>Estimate</b>	<b>Percent</b>	<b>Estimate</b>	<b>Percent</b>
Housing units with a mortgage (excluding units where SMOCAPI cannot be computed)	561	100%	7,938	100%	250,899	100%
Less than 20.0 percent	204	36.4%	2,647	33.3%	95,997	38.3%
20.0 to 24.9 percent	80	14.3%	1,167	14.7%	40,794	16.3%
25.0 to 29.9 percent	58	10.3%	1,146	14.4%	30,352	12.1%
30.0 to 34.9 percent	35	6.2%	599	7.5%	20,568	8.2%
35.0 percent or more	184	32.8%	2,379	30.0%	63,188	25.2%
Not computed	0	(X)	88	(X)	858	(X)
<hr/>						
Housing unit without a mortgage (excluding units where SMOCAPI cannot be computed)	237	100%	5,199	100%	142,000	100%
Less than 10.0 percent	74	31.2%	1,605	30.9%	48,291	34.0%
10.0 to 14.9 percent	80	33.8%	1,153	22.2%	28,530	20.1%
15.0 to 19.9 percent	0	0.0%	749	14.4%	19,326	13.6%
20.0 to 24.9 percent	6	2.5%	362	7.0%	13,097	9.2%
25.0 to 29.9 percent	10	4.2%	259	5.0%	8,147	5.7%
30.0 to 34.9 percent	5	2.1%	227	4.4%	6,198	4.4%
35.0 percent or more	62	26.2%	844	16.2%	18,411	13.0%
Not computed	0	(X)	68	(X)	1,317	(X)

Sources: Census, American Community Survey 5-year estimate 2010-2014

The median rent paid in Union is slightly lower than for Knox County and for the State.

<b>Estimated Gross Rent 2014</b>						
<b>Category</b>	<b>Union</b>		<b>Knox County</b>		<b>Maine</b>	
	<b>Estimate</b>	<b>Percent</b>	<b>Estimate</b>	<b>Percent</b>	<b>Estimate</b>	<b>Percent</b>
Occupied units paying rent	64	100%	3,417	100%	146,634	100%
Less than \$200	0	0.0%	42	1.2%	3,685	2.5%
\$200 to \$299	0	0.0%	212	6.2%	9,432	6.4%
\$300 to \$499	4	6.3%	299	8.8%	15,093	10.3%
\$500 to \$749	31	48.4%	1,140	33.4%	40,788	27.8%
\$750 to \$999	20	31.3%	774	22.7%	39,629	27.0%
\$1,000 to \$1,499	9	14.1%	862	25.2%	29,535	20.1%
\$1,500 or more	0	0.0%	88	2.6%	8,472	5.8%
Median (dollars)	\$740	(X)	\$754	(X)	\$772	(X)
No rent paid	49	(X)	328	(X)	11,378	(X)

Sources: Census, American Community Survey 5-year estimate 2010-2014

For those who rent their homes in Union, 26 households (40.7% of occupied rental units) pay 30% or more on housing. For Knox County, that percentage is 46.6% and for the State, it is 51.9%.

<b>Estimated Gross Rent as a Percentage of Household Income (GRAPI) 2014</b>						
<b>Category</b>	<b>Union</b>		<b>Knox County</b>		<b>Maine</b>	
	<b>Estimate</b>	<b>Percent</b>	<b>Estimate</b>	<b>Percent</b>	<b>Estimate</b>	<b>Percent</b>
Occupied units paying rent (excluding units where GRAPI cannot be computed)	64	100%	3,387	100%	144,502	100%
Less than 15.0 percent	16	25.0%	452	13.3%	15,811	10.9%
15.0 to 19.9 percent	15	23.4%	481	14.2%	17,170	11.9%
20.0 to 24.9 percent	7	10.9%	472	13.9%	17,252	11.9%
25.0 to 29.9 percent	0	0.0%	405	12.0%	19,171	13.3%
30.0 to 34.9 percent	4	6.3%	429	12.7%	14,232	9.8%
35.0 percent or more	22	34.4%	1,148	33.9%	60,866	42.1%
Not computed	49	(X)	358	(X)	13,510	(X)

Sources: Census, American Community Survey 5-year estimate 2010-2014

In 2015, the median income earner in Union could afford 109% of the median home sale price. For Knox County, that figure is 106% and for the State, it is 103%. The next table also shows the income needed to afford recent home sale prices, and home prices that are affordable for recent income figures. Home sale prices are for units sold through the multiple-listing service. These sales do not include homes and lands sold directly by the owner without the use of a real estate agent, which tend to fetch lower prices and are often sold or given to relatives.

<b>Homeownership Affordability Index in 2015</b>						
<b>Area</b>	<b>Affordability Index</b>	<b>Median Home Sale Price</b>	<b>Median Income</b>	<b>Income needed to afford median home price</b>	<b>Home price affordable at median income</b>	<b>Households unable to afford median home price</b>
Union	1.09	\$176,500	\$54,472	\$49,997	\$192,298	459 (45.6%)
Knox County	1.06	\$180,000	\$52,165	\$49,339	\$190,310	8,378 (48.3%)
Maine	1.03	\$176,000	\$50,703	\$49,352	\$180,816	281,724 (50.1%)

Source: MaineHousing, Maine State Housing Authority

Notes:

- The Homeownership Affordability Index is the ratio of Home Price Affordable at Median Income to Median Home Price. An index of less than 1 means the area is generally unaffordable - i.e., a household earning area median income could not cover the payment on a median priced home (30 year mortgage, taxes and insurance) using no more than 28% of gross income.

In 2015, the median income earner in Knox County could afford about 84% of rental housing costs. For the State that figure was 89%, an improvement over recent years. The next table also shows rents that are affordable for recent income figures. The data suggests the likelihood of some overcrowding by low income families. MaineHousing, Maine State Housing Authority did not calculate renter affordability for the Town of Union. Although Union has a higher median household income than Knox County, the Town has proportionally fewer units available for rental, with 0% rental vacancies, indicating a need for additional rental units in general.

<b>Renter Affordability Index in 2015</b>						
<b>Area</b>	<b>Affordability Index</b>	<b>Avg. 2 BR rent w/utilities</b>	<b>Renter Household Median Income</b>	<b>Income needed to afford avg. 2 BR rent</b>	<b>2 BR rent affordable to median income</b>	<b>Households unable to avg. 2 BR rent</b>
Knox County	0.84	\$964	\$32,222	\$38,551	\$806	2,603 (58.1%)
Maine	0.89	\$850	\$30,142	\$33,998	\$754	89,127 (55.4%)

Source: MaineHousing Maine State Housing Authority

Notes:

- The Rental Affordability Index is the ratio of 2-Bedroom Rent Affordable at Median Renter Income to Average 2-Bedroom Rent. An index of less than 1 means the area is generally unaffordable – i.e., a renter household earning area median renter income could not cover the cost of an average 2-bedroom apartment (including utilities) using no more than 30% of gross income.

Information on Union homeowner and rental households earning up to 80% of the Household Area Median Income was not available from MaineHousing, Maine State Housing Authority.

(2) *Information on existing local and regional affordable/workforce housing coalitions or similar efforts.*

Local and regional agencies operate programs to assist Union residents. Through State and federal grants, private foundations and donations, Penquis operates the Head Start program, WIC (Women, Infants and Children) nutrition programs, as well as job training and retraining programs, family development and case management programs for low-income residents.

Penquis also provides several energy and housing programs in Knox County. These include the Home Energy Assistance Program (HEAP/Wx), Low Income Home Energy Assistance Program (LiHEAP), Department of Energy (DOE/Wx), Central Heating Improvement Program (CHIP), Home Repair Network, Neighborhood Stabilization Program (NSP), among other programs. The types and amounts of assistance provided to Union residents are shown in the next table for the most recent year available.

<b>Penquis Housing Services provided to Union residents for the fiscal year 2015</b>		
<b>Service</b>	<b>Households/Clients</b>	<b>Value</b>
Central Heating Improvement Program: Repairs or replaces faulty central heating systems.	1 Client	\$799
Emergency Crisis Intervention Program: Provides home heating assistance to income-eligible households that are in an emergency or energy crisis.	5 Households	\$1,467
Good Neighbor Heating Assistance: Provides 100 gallons of heating fuel to households whose income is 250% of the federal poverty level or less.	4 Households	\$1,120
Home Buyer Education	4 Clients	\$880
Low Income Direct Install	2 Households	\$1,200
Low-Income Home Energy: Assistance Program Assists income-eligible households with home heating costs.	57 Households	\$33,452
Weatherization	1 Household	\$8,291

Source: Penquis

MaineHousing, also known as the Maine State Housing Authority, are the housing agents for tenant and/or project based rental assistance, providing Housing Choice Vouchers (Section 8 Housing) which includes subsidized rents for qualifying families. Families contribute between 30% and 39% of their income toward rent. Housing must meet Housing and Urban Development quality standards and Fair Market Rent guidelines.

Pen Bay Healthcare provides comfort, care and support to people in their homes through Kno-Wal-Lin Home Care and Hospice. Their services include nurses, rehabilitation therapists, social workers and home health aides, home hospice, chronic disease management, pediatric, tele-health programs and visiting volunteers, among other services.

(3) *A summary of local regulations that affect the development of affordable/workforce housing.*

The Union Land Use Ordinance allows single-family and two-family dwelling units in all districts. Mobile home units constructed after June 15, 1976, multi-family units, and assisted living facilities are allowed in the Village and Rural Districts. Mobile home parks are allowed in the Rural District. Residential uses are also allowed with limitations based upon environmental constraints in the High Elevation Areas Overlay District, and portions of certain Shoreland Zoning Districts. In the Commercial and Industrial Districts, the range of residential uses is limited. See the map titled Union Land Use Districts.

<b>Allowable Residential Land Uses by District, and Application Dispositioning Authority</b>				
<b>Residential Uses</b>	<b>Village District</b>	<b>Commercial District</b>	<b>Industrial District</b>	<b>Rural District</b>
Accessory apartment	CEO	CEO	NO	CEO
Boarding house, boarding care facility	PB	NO	NO	PB
Building, structure or use accessory to a residential use	CEO	CEO	CEO	CEO
Cluster housing subdivision	PB	NO	NO	PB
Conversion of existing single-family dwelling to multifamily dwelling units, including but not limited to apartments or condominiums	PB	NO	NO	PB
Elderly housing facility, assisted living facility	PB	NO	NO	PB
Home occupation	CEO	CEO	CEO	CEO
Manufactured housing, mobile home	CEO	NO	NO	CEO
Mobile home park	NO	NO	NO	PB
Multi-family dwelling, including but not limited to apartments or condominiums	PB	NO	NO	PB
Nursing or convalescent home	PB	NO	NO	PB
Single-family dwelling	CEO	CEO	CEO	CEO
Two-family dwelling (duplex), including but not limited to apartments or condominiums	CEO	CEO	CEO	CEO

Source: Town of Union Land Use Ordinance, Amended June 15, 2015

Notes: CEO = Code Enforcement Officer, PB = Planning Board, NO = Not allowed.

Dimensional requirements are lower in the Village District reflecting the traditional development seen there and access to a public water system. There is no public sewer

currently. If public sewer were installed, minimum lot sizes could be decreased, e.g., 10,000 square feet.

<b>Standard Dimensional Requirements by District</b>				
<b>Dimension</b>	<b>Village</b>	<b>Commercial</b>	<b>Industrial</b>	<b>Rural</b>
Minimum lot size (sq. ft.)	20,000	60,000	10A*	60,000
Minimum lot size for dwellings (sq. ft.)				
Single-family	20,000	60,000	N/A	60,000
Single-family w. accessory apartment	20,000	60,000	N/A	60,000
Two-family	40,000	90,000	N/A	90,000
Multi-family				
first dwelling unit	20,000	N/A	N/A	60,000
each additional dwelling unit	20,000	N/A	N/A	30,000
Minimum lot size for cluster housing				
Overall lot size (sq. ft.)	20,000	N/A	N/A	60,000
Lot size per dwelling unit (sq. ft.)	20,000			20,000
Minimum street frontage (ft.)	100	150	500*	150
Minimum front yard from edge of right-of-way (ft.)**	25	30	200*	25
Minimum side and rear yard (ft.)**	20	20	200*	20
Maximum building height (ft.)				
Residential	35	35	N/A	35
Nonresidential	50	50	50	50
Maximum lot coverage by buildings	20%	20%	25%	10%***

Source: Town of Union Land Use Ordinance, Amended June 15, 2015

Notes: In the High Elevation Areas Overlay District (areas 400-ft or higher in elevation), the minimum lot size is 3 acres, with maximum residential lot coverage of 5%. See the Ordinance for additional dimensional requirements \*, \*\*, \*\*\*.

As noted, statewide affordable housing tends to be located on lots of 20,000 square feet or smaller, and/or as part of multi-unit residential development with public water and sewer. A limited amount of housing in Union is found on lots 20,000 square feet and smaller, primarily in the Village area. However, with the allowance of multi-family units, accessory apartments and individual mobile homes in many areas of the Town, the Union Land Use Ordinance provides for affordable housing options especially in the Village and Rural Districts. The Rural District is approximately 16,474 acres and it constitutes about 80.1% of the Town's land area.

**Policies**

- (1) To encourage and promote adequate workforce housing to support the community's and region's economic development.
- (2) To ensure that land use controls encourage the development of quality affordable housing, including rental housing.
- (3) To encourage and support the efforts of the regional housing coalitions in addressing affordable and workforce housing needs.

**Strategies**

Housing Strategies	Responsible Parties	Timeframe
(1) Maintain, enact or amend growth area land use regulations to increase density, decrease lot size, setbacks and road widths, or provide incentives such as density bonuses, to encourage the development of affordable/workforce housing.	Selectmen, Town Manager, Ordinance Review Committee, Town Meeting Vote	Immediate
(2) Maintain, enact or amend ordinances to allow the addition of at least one accessory apartment per dwelling unit in growth areas and to promote conservation/cluster affordable housing in such areas, subject to site suitability.	Selectmen, Town Manager, Ordinance Review Committee, Town Meeting Vote	Immediate
(3) Create or continue to support a community affordable/workforce housing committee and/or regional affordable housing coalition. <ul style="list-style-type: none"> <li>• Establish a Town committee to review affordable housing needs and to work with the state and regional housing authorities to seek information to be better able to work with those in need.</li> </ul>	Selectmen and Town Manager	Midterm
(4) Designate a location(s) in growth areas where mobile home parks are allowed pursuant to 30-A M.R.S.A. §4358(3)(M) and where manufactured housing is allowed pursuant to 30-A M.R.S.A. §4358(2). Note: To be limited to the Rural District, which is currently zoned for Mobile Home Parks.	Selectmen, Town Manager, Ordinance Review Committee, Town Meeting Vote	Long Term
(5) Support the efforts of local and regional housing coalitions in addressing affordable and workforce housing needs. <ul style="list-style-type: none"> <li>• The Town will encourage participation in programs, grants and projects within the Town or the region to insure sufficient affordable housing options for its elderly citizens</li> </ul>	Selectmen and Town Manager	Immediate and Ongoing
(6) Seek to achieve a level of at least 10% of new residential development built or placed during the next decade be affordable.	Selectmen, Town Manager, Code Enforcement	Midterm and Long Term

Housing Strategies	Responsible Parties	Timeframe
<ul style="list-style-type: none"> <li>• The Town will continue to encourage affordable housing opportunities by continuing to allow a mixture of appropriate housing types, including cluster/conservation subdivisions, multi-units, and accessory (in-law) apartments.</li> <li>• The Town will welcome and encourage participation in programs, grants (Community Development Block Grant [CDBG], housing assistance and rehabilitation programs) and projects for the construction of subsidized workforce housing within the Town, and grants to homeowners for improvements to energy efficiency and habitability.</li> </ul>	Officer, and Ordinance Review Community	

Note: Strategies proposed in this Comprehensive Plan are assigned responsible parties and a timeframe in which to be addressed. Immediate is assigned for strategies to be addressed within two years after the adoption of this Comprehensive Plan, Midterm for strategies to be addressed within five years, and Long Term for strategies to be addressed within ten years. In addition, Ongoing is used for regularly recurring activities.

## RECREATION

### Introduction

The natural resources of Union and the region provide numerous recreational opportunities like hiking, hunting, horseback riding, snowmobiling, cross-country skiing, fishing and boating. Open space includes shoreland areas, athletic fields, farms, forestlands, wetlands, lakes, ponds, and rivers, as described in these chapters of this plan: Agricultural and Forestry Resources, Natural Resources and Water Resources. The recommendations of this chapter seek to preserve and improve recreational opportunities.

### State Goal

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

### Analyses

- (1) *Will existing recreational facilities and programs in the community and region accommodate projected growth or changes in age groups in your community?*

In general, Union and the region have the capacity to provide recreational facilities and programs for residents over the ten-year planning period. However, the Town should anticipate an increase or change in demand for recreation programs due to the growing elderly population.

- (2) *Is there a need for certain types of services or facilities or to upgrade or enlarge present facilities to either add capacity or make them more usable?*

The Comprehensive Plan Survey conducted in 2016 regarding the question of locally available services, identified satisfaction levels with recreational facilities in Union as follows:

Service	Very Satisfied	Satisfied	No Opinion	Dissatisfied	Very Dissatisfied
Recreation Facilities	2.86% (5)	45.71% (80)	21.71% (38)	26.86% (47)	2.86% (5)

Source: 2016 Union Survey

A majority supported creating a Recreational Trail that links the School, Village Common and Union Fairgrounds (64.46% 107 respondents). Some support for a recreational trail was conditioned on the trail not negatively affecting abutting private property owners, not requiring tax dollars to build or maintain, and not using eminent domain. It was suggested to apply for grants to fund the work and have school children participate. Several also supported sidewalks in the village area, and ATV trails in rural areas. Several suggested support for the Thompson Community Center financially and

for recreational activities. Twelve suggested more recreational activities and improved recreational facilities in general and for youth and the elderly. Related to this, eight wanted more hiking and walking trails, while seven recommended improvements to the Thompson Community Center, which is seen as dilapidated by some.

The Parks and Recreation Committee's programs, with its focus on youth, are appropriate and necessary within our limited resources. Some further development of organized programs for all citizens is advisable. Perhaps this could best be accomplished through a well-coordinated effort to integrate plans and programs with the Thompson Community Center.

The Center, while recently self-supporting in terms of normal operations and some extensive repairs, will probably need additional assistance to install an elevator to enable handicapped access to second floor rooms. The Town may be called on for financial assistance. Full use of this building by various groups, and use of the building and outdoor recreational facilities by the elementary and middle school students would not only allow broadening the programs available to serve more groups simultaneously but may enable the Center to receive more revenue from those activities. The Union Senior Citizens Club is an active group that receives some financial support from Town appropriations.

Existing recreational facilities are well-maintained overall and successful efforts to develop a Little League ball field near the Thompson Community Center have resulted in a popular facility.

The Union Fair grounds also offer certain recreational activities including annual antique festivals, horse and sheep shows, Scout jamborees, and special events.

Additional parks are recommended for the future enjoyment of the public and the preservation of premium open space and river access. One possibility would be Clarry Hill; a few acres at the crest, which would offer a picnic area in a sensational view setting before it is lost to high priced housing development. Public views from high points have been a part of Union's heritage for many generations, but these could be restricted by residential developments that generally discourage public access. If land is not available through donation, either to the Town or a land trust or other environmental organization, the Town should consider putting aside money from the Pullen Funds for purchase and development of such recreational lands and/or beginning a "land acquisition" fund for this or other specific land purchases. Purchase of land to retain the tradition of informal public access to other high points may be worth consideration. The Town may be able to get assistance from one of the land trusts in the Mid-Coast area or from State programs such as the Land for Maine's Future or various programs administered by the Maine Department of Agriculture, Conservation, and Forestry, Bureau of Parks and Recreation. This type of park would be for low intensity, non-sport type activities.

Although addressed to some degree in the Transportation chapter of the Plan topic of sidewalks, there is a need for walking paths off the roads, both in the immediate village

areas and out in the countryside. The cooperation of landowners and some volunteer efforts could result in a highly appreciated trail or two to be enjoyed by all who love nature and the outdoors. However, there appears to be less interest in creating trails open to ATV use.

The Town of Union has already followed policies that have resulted in both indoor and outdoor recreation for its citizens. Conversion of the old yellow school as the Thompson Community Center, while still not fully utilized, has been successful as far as it has gone. Union's outdoor recreational facilities were adequate for many years while the town's population was relatively stable. However, the population growth of the 1970s and 1980s along with a decline in largely outdoor occupations such as farming, have brought with them a need for more outdoor facilities. The water quality and physical characteristics of the St. George River within and near Union, including the ponds through which the river flows, offer recreational opportunities not found on the Kennebec, even though that river's water quality is improving, or on the Sheepscot and Medomak Rivers, much of which are limited to canoeists with some "white water" ability.

(4) *Are important tracts of open space commonly used for recreation publicly-owned or otherwise permanently conserved?*

Yes, important open spaces are publically owned like the Union Common, Founders Park and Ayer Park. Conservation easements protect other areas as well. See the response to 4 below.

(4) *Does the community have a mechanism, such as an open space fund or partnership with a land trust, to acquire important open spaces and access sites, either outright or through conservation easements?*

Though the Town itself does not currently have any agreements, partnerships in place to acquire additional open spaces. Individual landowners have conservation easements in place utilizing two area land trusts: the Georges River Land Trust and the Medomak Valley Land Trust.

Preserves owned and managed by the Georges River Land Trust include Pool Preserve (three acres along the St. George River), Stickney Preserve (no public access), and 100-Acre Island on Crawford Pond (access only available through private lands). The Georges River Land Trust also holds conservation easements for other private lands the do not allow public access, approximately 283 acres.

Medomak Valley Land Trust is active in Union as well. They manage 65 acres on Clarry Hill in Union and more land in Waldoboro. The Carroll Farm Trail is located on a 70-acre parcel known as Sweetgrass Farm Winery and Distillery. The farm is under private ownership, and is open to the public year-round for low-impact recreation, while the Medomak Valley Land Trust maintains the trail.

(5) *Does the public have access to each of the community’s significant water bodies?*

Public access to significant water bodies is indicated in the next table.

<b>Public Access to significant water bodies in Union</b>		
<b>Name (shared with)</b>	<b>Public Access</b>	<b>Location(s)</b>
Crawford Pond (Warren)		
Crawford Stream	Yes	Founders Park
Lermond Pond (Hope)		
Medomak River (multiple)	Yes	Carroll Farm Trail
Mud Pond		
Round Pond		
Sennebec Pond (Appleton)		
Seven Tree Pond	Yes	Ayer Park
St. George River (multiple)	Yes	Union Fairgrounds

(6) *Are recreational trails in the community adequately maintained? Are there use conflicts on these trails?*

Recreational trails are primarily on private property including snowmobile trails. In general they are privately maintained.

(7) *Is traditional access to private lands being restricted?*

Traditionally, year-round residents have viewed unimproved land as a shared resource, e.g. for walking, hunting, etc. and though privately owned, the land is used by residents because everyone knows each other. This has changed, especially along coastal properties, due in part to the influx of new residents, both year-round and seasonal. As more people restrict the use of their land, informal public access to private land becomes increasingly problematic.

**Condition and Trends**

*Minimum data required to address Analyses:*

(1) *The community’s Comprehensive Planning Recreation Data Set prepared and provided to the community by the Department of Conservation, and the Office, or their designees.*

See the map titled Public Facilities.

(2) *A description of important public and private active recreation programs, land and water recreation areas (including hunting and fishing areas), and facilities in the*

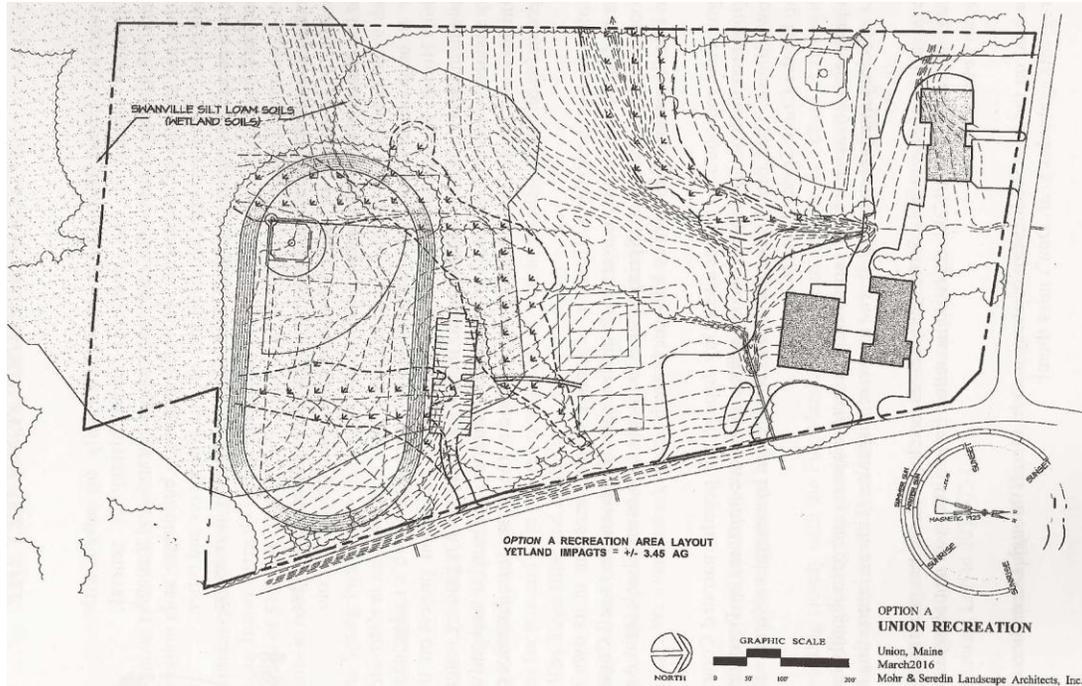
*community and region, including regional recreational opportunities as appropriate, and identification of unmet needs.*

### Recreation Facilities and Programs

Union has two small parks and one recreation area, aside from the Common, school grounds (SAD 40), and the Union Fairgrounds (Knox Agricultural Society). A Little League baseball field is located on land behind the municipal building.

The Union Common is a scenic park and recreational asset of the town, though not under the purview of the Parks and Recreation Committee. Consisting of three Town owned parcels with a combined area of about 0.83 acre at the very center of the village commercial and social activity, it offers a few park benches, lots of trees, two war memorials and a gazebo/bandstand. The Common accommodates summer festival activities, craft and bake sales, and band concerts on special occasions. In December, it is traditionally decorated with about thirty-four Christmas trees, which are illuminated nightly.

The Thompson Community Center, a non-profit corporation, offers facilities made up of the “old yellow school” and the Thompson Memorial Building. The Center has significant space and specialized facilities (gymnasium, stage and cafeteria with kitchen) which have considerable potential for contributing to town and community recreation programs as well as accommodations suitable to revenue producing ventures. However, the facilities are in need of considerable investment for maintenance and restoration. The land on which the Thompson Community Center is located totals approximately 20 acres, owned by the Town. The recreation area directly south of the Center contains a small park for young children, Prior Park. This playground offers a few swings, a “go-round” and two picnic tables. Immediately adjacent are an outdoor basketball court and two tennis courts, paved, well fenced, illuminated and well maintained. An initial planning concept for a track, Little League/soccer field, and connecting trails was prepared in March 2016. A Recreation Complex Committee has formed to gain support for these suggested improvements, which are illustrated in the next figure.



Union’s Elementary School and RSU 40/SAD 40 (Maine School Administrative District) Office occupies a site of just under 49 acres, owned by SAD 40, off Route 17 just east of the Common village. Its athletic facilities are in excellent condition and include a combined soccer and baseball field, a playground and a softball field, the latter two close to Route 17. At present, no use is made by the school of the Thompson Community Center’s facilities, either indoor or outdoor. Non-school use of the SAD 40 facilities is extensive, and includes Babe Ruth, farm team and Little League activities in summer and during parts of the school year. Union residents also use the equipment at the playground and skateboard on the parking lot and driveways.

Ayer Park, located at the St. George River inlet to Seven Tree Pond, occupies a site of 0.8 acre owned by the Town since 1973. It was developed using State and local funds in 1973-74. It offers a public boat-launching ramp, limited parking area, swimming beach, a picnic area (ten tables, ten fireplaces), and two Porta-Potties, one of which is handicapped-accessible. Generally well maintained, the facilities were refurbished in 1990 as a public service project organized by Aaron Lincoln, an Eagle Scout. Another major renovation was carried out in 2003, including replacement of the tables and fireplaces. The park is open from April 1<sup>st</sup> to November 1<sup>st</sup> each year, with the boat ramp open year-round.

The park is heavily used and overcrowded in hot weather, unsupervised, and subject to a degree of vandalism - to the extent that many town families do not choose to use this park. A significant flaw in planning this park was the co-location of the boat ramp and bathing beach. The boat access at times draws excessive traffic and poses hazards to the unsupervised swimmers. A few vehicles with boat trailers can overwhelm the limited parking space, discouraging prospective bathers and picnickers.

The Parks and Recreation Committee's programs are focused primarily on youth activities. Programs offered in 1990 were: 1) a coed, three week team sports program for children in grades 3 through 6, 2) canoeing instruction and hiking experiences, 3) coed youth tennis instruction, 4) adult tennis lessons, 5) youth baseball, 6) Pee Wee basketball, and 7) swimming instruction at PenBay YMCA in Rockport. The programs are supported in part by the Joseph Pullen Fund, an endowment invested specifically to fund recreation activities and facilities for town citizens, and the William Pullen Fund, available for general governmental purposes, and by appropriation of taxes at Town Meeting.

Open space in our rural environment contributes heavily to the town's recreational opportunities. The river and ponds offer swimming, skating, winter and summer fishing, boating and other water sports. The surrounding hills, lanes and back roads provide access to hiking, biking and nature appreciation walks. Winter landscapes provide sledding and tobogganing opportunities as well as cross country skiing, snow shoeing and snowmobiling. Snowmobile registration receipts have been refunded by vote at Town Meeting to snowmobile clubs in adjacent towns. These clubs mark and maintain trails in the Interconnected Trail System (ITC) with the cooperation and permission of landowners. Hunting is, of course, a popular fall and winter activity; although fewer lands remain open to hunters as more properties are posted every year. Future hunting pressure may ultimately exceed the capacity of the remaining unposted lands for reasonable activity levels, but this is not expected to happen during the ten-year planning period.

A small private golf course is located on Barrett Hill Road. Owned and managed as the Union Country Club, it is a nine-hole "Par 3" course open to members and their guests from approximately April to mid-October. Presently limited to 135 members, some of whom are residents of towns other than Union, there is a waiting list for new memberships.

#### Recreation Areas within the Region:

- Beech Hill Preserve (Rockport)
- Camden Hills State Park (Camden/Lincolnville)
- Jack Baker Woods (Thomaston)
- Penobscot Bay YMCA (Rockport and Rockland)
- Pleasant Point Nature Preserve (Cushing)
- Rockland Harbor, including Rockland Breakwater (Rockland)
- Thomaston Village Trail - Georges Highland Path

Recreation needs of Union residents include adequate ongoing maintenance of the Town's limited recreational facilities, including tennis courts, basket ball courts, little league field, Air Park and Founders Park, and trails through open spaces, as well as the consideration of the hosting of recreational programs within Union.

*(3) An inventory of any fresh or salt water bodies in the community determined locally to have inadequate public access.*

The public has boating access, for a fee, to Crawford Pond via a ramp at the Mic Mac Cove Campground and Cabins. Canoes can be launched from a site on the Union Fairgrounds on the St. George River above Round Pond. Seven Tree Pond should be studied, perhaps in cooperation with the Town of Warren, to determine if any other sites are suitable and potentially available for launching sites, either “full service” or limited to car-topped craft. The east shore of the pond, reachable from Route 131 south, may present opportunities, especially near South Union. A privately owned site on the St. George River, immediately downstream of the Middle Road Bridge in Warren, has been used for occasional canoe launching and retrieval with the owner’s permission. Other sites on the pond or the adjacent river may be found.

Water bodies within inadequate public access in Union, as noted above include Sennebec Pond and Crawford Pond.

*(4) A description of local and regional trail systems, trail management organizations, and conservation organizations that provide trails for all-terrain vehicles, snowmobiling, skiing, mountain biking, or hiking*

Snowmobile Trails town wide traverse over privately owned land located mostly between Hope, Appleton and Union and are maintained by Hatchet Mountain Snowmobile Club and Appleton Trail Makers Inc.. Any cross-country ski trails are on property privately owned.

*(5) A map or list of important publicly-used open spaces and their associated facilities, such as parking and toilet facilities.*

See the map titled Public Facilities.

<b>Public Open Spaces in Union: Associated Facilities</b>	
<b>Name</b>	<b>Associated Facilities</b>
Ayer Park	Parking, Toilets, Landing, Picnic tables
Founders Park	Picnic table, sitting bench and limited access to stream
Thompson Community Center / Prior Park (small play area next to tennis court)/Town Office Land	Parking, Toilets, Ballfield, Playground, Tennis Courts
Union Common	Benches

**Policies**

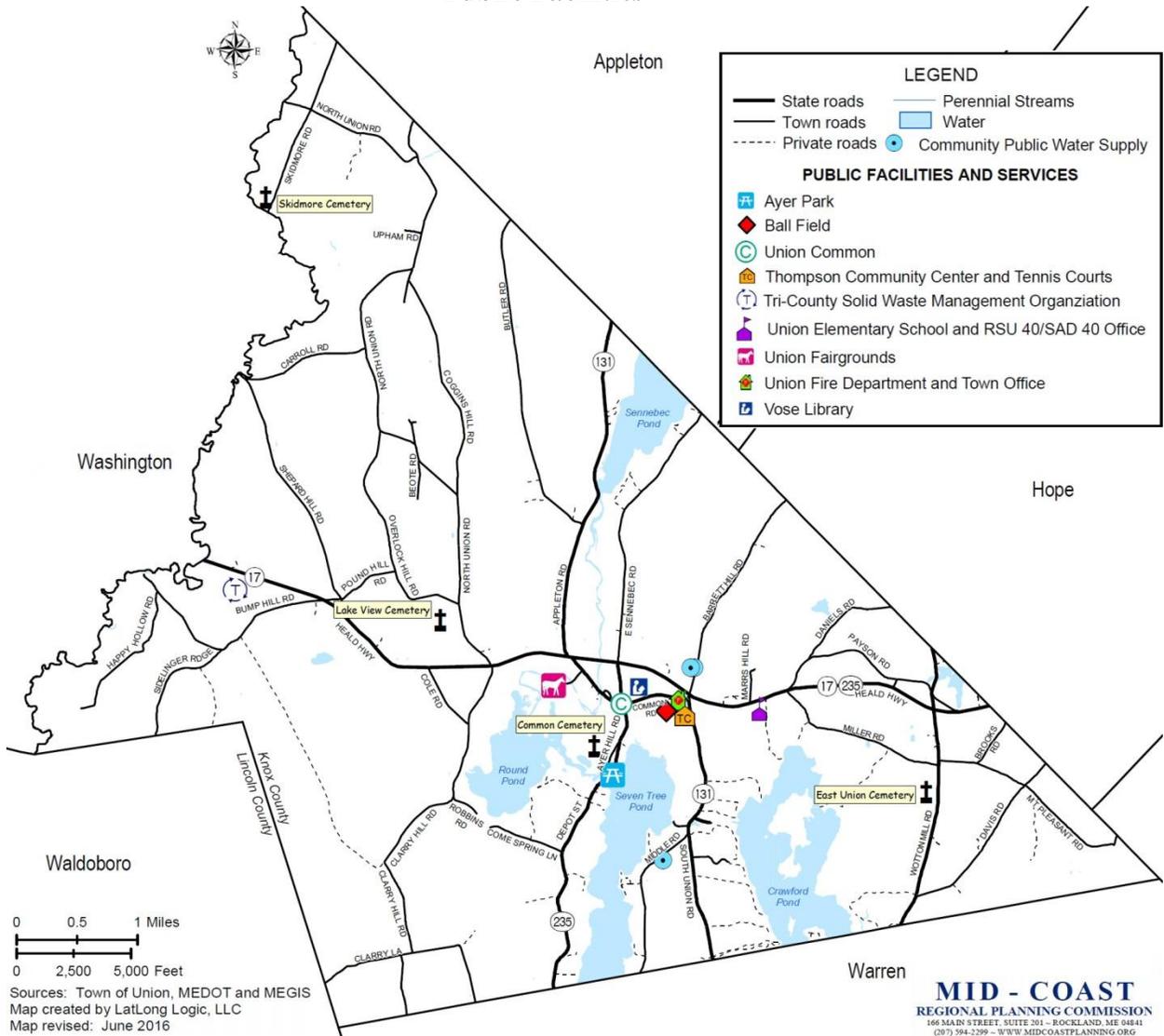
- (1) To maintain/upgrade existing recreational facilities as necessary to meet current and future needs.
- (2) To preserve open space for recreational use as appropriate.
- (3) To seek to achieve or continue to maintain at least one major point of public access to major water bodies for boating, fishing, and swimming, and work with nearby property owners to address concerns.

**Strategies**

Recreation Strategies	Responsible Parties	Timeframe
<p>(1) Create a list of recreation needs or develop a recreation plan to meet current and future needs. Assign a committee or community official to explore ways of addressing the identified needs and/or implementing the policies and strategies outlined in the plan.</p> <ul style="list-style-type: none"> <li>• Develop a plan for a multi-use complex of recreational and other municipal and quasi-municipal facilities along the South Union Road below the Thompson Community Center.</li> </ul>	Selectmen and Recreation Committee	Immediate and Ongoing
<p>(2) Work with public and private partners to extend and maintain a network of trails for motorized and non-motorized uses (walking and hiking). Connect with regional trail systems where possible.</p> <ul style="list-style-type: none"> <li>• Create a pedestrian/bicycle pathway along portions of the St. George River between the village and Union Fairgrounds, and from the village toward the D.R. Gaul School.</li> <li>• Work with local snowmobile clubs, landowners, and the Union Recreation Committee to create additional trails, which might be used for walking in warm weather, snowmobiling and cross-country skiing in the winter. There would be little public cost involved if volunteer labor was used.</li> </ul>	Selectmen and Recreation Committee, Snowmobile Clubs, Landowners	Midterm
<p>(3) Work with an existing local land trust or other conservation organizations to pursue opportunities to protect important open space or recreational land.</p> <ul style="list-style-type: none"> <li>• Acquire through donation to the Town or purchase, land at the summit of Clarry Hill for a small park and picnic area.</li> </ul>	Selectmen and Recreation Committee	Long Term
<p>(4) Provide educational materials regarding the benefits and protections for landowners allowing public recreational access on their property. At a minimum this will include information on Maine’s landowner liability law regarding recreational or harvesting use, Title 14, M.R.S.A. §159-A.</p>	Selectmen and Recreation Committee	Immediate and Ongoing

Note: Strategies proposed in this Comprehensive Plan are assigned responsible parties and a timeframe in which to be addressed. Immediate is assigned for strategies to be addressed within two years after the adoption of this Comprehensive Plan, Midterm for strategies to be addressed within five years, and Long Term for strategies to be addressed within ten years. In addition, Ongoing is used for regularly recurring activities.

# Public Facilities



Sources: Town of Union, MEDOT and MEGIS  
 Map created by LatLong Logic, LLC  
 Map revised: June 2016

Sources: MEGIS, Town of Union

**MID - COAST**  
 REGIONAL PLANNING COMMISSION  
 166 MADEY STREET, SUITE 201 - ROCKLAND, ME 04841  
 (207) 594-2299 - WWW.MIDCOASTPLANNING.ORG

# TRANSPORTATION

## Introduction

This chapter describes the current condition of Union's transportation system and makes recommendations for its maintenance and improvement. The format and outline of this chapter follows the State Comprehensive Plan Review Criteria Rule, as amended on 8/6/2011.

## State Goal

*To plan for, finance and develop an efficient system of [transportation-related] public facilities and services to accommodate anticipated growth and economic development.*

## Analyses

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

### Safety:

Maine DOT recorded Route 235 from the Warren town line to the intersection with Come Spring Lane as a high crash location where eight or more crashes have been reported within a three-year period ending in 2010. In the more recent period of available data from 2011 to 2015, Union has no high crash locations documented by Maine DOT. Nevertheless, local concern has been expressed for these road segments/intersections: Route 17 intersections with these roadways: Wottons Mill Rd, Route 131 S (South Union Rd), Route 131 N (Appleton Rd), North Union Rd, and Bump Hill Rd.

Overall, Route 131 is in fair condition, making driving the posted speed difficult and dangerous.

The following improvements would increase safety for motorists and pedestrians:

- Enhance navigation signs, guide signs, and warning signs.
- Adjust street name signs and/or replace with larger signs for better visibility for drivers and for emergency response.
- Access management strategies: Limit curb cuts by consolidating separate entrances that are close together, and regulate requests for new entrances to ensure adequate site distances.

#### Traffic speed:

Except when conditions or other regulations require a lower speed, the following are maximum rates of speed, unless posted otherwise: 15 m.p.h. in a school zone at specific times of the day, 25 m.p.h. in a business or residential area or built up portion, 35-45 m.p.h. on all other public ways. Speeding is of concern on all roads. Ongoing police enforcement is very costly. The use of traffic calming strategies in road design might decrease the amount of enforcement needed to reduce speeding.

#### Congestion and travel delay:

The level of service (LOS) is a measure of congestion and delay. The lowest LOS found in Union were C and D for Route 17. Other State roads were B. All town roads were A. Maine DOT no longer provides this data. Generally, roadways in Union have not reached their maximum capacities. Delays where the travel speed is lower than the posted speed are limited. Delays on roads do occur during the morning and evening commute and mostly during the summer tourist season.

#### Travel volume and type:

See the Transportation Map for annual average daily traffic volumes at key points on roadways in Union in 2015. The major roads accessing Union, Route 17, Route 131, and Route 235 have the highest volumes, as listed below:

- Route 17: 6,626 vehicles at the Hope town line, 7,543 vehicles west of Miller Rd, 7,392 vehicles west of Appleton Rd, and 4,869 vehicles at the Washington town line
- Route 131 N (Appleton Rd): 3,170 vehicles north of Route 17, and 1,811 vehicles at the Appleton town line
- Route 131 S (South Union Rd): 2,204 vehicles south of Route 17, and 1,503 vehicles at the Warren town line
- Route 235: 2,192 vehicles south of Common Rd, and 1,670 vehicles at the Warren town line

Seasonal volumes (highest in July and August) are approximately 1.5 times greater than the annual averages for state roadways in the region. Private passenger vehicles comprise most of the volumes on Union roadways. Importantly, nearly all consumer goods for sale in Union are trucked into the Town, and Union businesses depend upon the road network to truck most of their goods out of the Town.

#### Road and bridge design and maintenance:

The Town is concerned that all roadways and bridges be well engineered and built to last. Substandard design or construction will result in higher costs to taxpayers and/or

subdivision associations for repair. Road damage from flooding, adverse weather conditions, which have increased in recent years, 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 cost more upfront, in the long term it will reduce costs for the taxpayers, residents, and business owners, all of whom depend on the road network.

Road maintenance is an ongoing effort and municipal budgets are often stretched as the cost of such maintenance often increases faster than the costs of other goods and services, due principally to the costs of petroleum and petroleum-based products like asphalt. The state and federal match for such work has always been important and has become even more crucial to maintain safe roadways. The Town has worked with property owners to improve the safety and mobility (traffic flow at the posted speed) of roadways.

#### Accessibility:

Outside of the village, Union is accessible primarily by motor vehicles. Parking adequate for current and projected future use is found at schools, recreation, shopping and public gathering areas, with the exception of Ayers Park. Municipal parking lot locations and capacity are noted below *Conditions and Trends* response to (6). The lots augment the onsite parking provided at shopping and other locations. Current and recommended pedestrian and bicycle routes are noted below in *Conditions and Trends* response to (3). Concern for improving the safety of these routes has helped shape the recommendations in this chapter. Residents in general, especially children and the elderly should be able to get around portions of the Town without depending on motor vehicles exclusively.

Union and the region lack alternative transportation options in comparison with more densely developed areas, and so residents are largely dependent on their privately-owned vehicles for daily trips to work, stores and elsewhere. Buses bring children to and from public schools. See *Conditions and Trends* response to (8). for a description of current public transportation services.

#### Closed or posted bridges or roads:

There are no closed roads or bridges. The following state road has been posted with weight restrictions (23,000-pound limit) seasonally in recent years: Wottons Mill Rd. Locally posted roads include Cole Rd and Davis Rd. Seasonally (spring thaw) all town roads have a 5-ton (10,000-pound) limit.

2. *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?*

Union has considerable through traffic on Route 17, which connects Augusta with Rockland. Route 131 connects neighboring communities in Knox and Waldo Counties.

Route 235 connects neighboring communities in Lincoln, Knox and Waldo Counties. Common Rd links these major routes and has both local and through traffic. These roads serve local commerce and neighborhoods as well. See the Transportation Map for traffic volumes. Different uses can create conflicts, especially in regards to speed. The enforcement of posted speeds and adequate road design are crucial to counteract these conflicts and the hazards they can create.

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

Union has a sidewalk in the village area (one narrow 20 to 24 inch wide paved path leading for almost one-half mile along the curb of Common Road from the triangular segment of the Common between the historical society and the bank to a point opposite the western front entrance of the Thompson Community Center) in poor to fair condition. The remainder of the Town does not have sidewalks.

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

Pedestrians and bicyclists use roadway shoulders, which are narrow in many places, or use the travel lanes where there are no shoulders. Heavier vehicular volumes in summer and speeding (year-round) threaten the safety of pedestrians and bicyclists, as well as those riding on horseback to and from area farms and stables. The addition of sidewalks or multi-use paths in certain areas as noted in the strategies section of this chapter could improve this situation, but would require spending public funds and the cooperation of private landowners. Off-road trails including hiking paths and snowmobile trails are noted in the Recreation Chapter.

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

The 2010-2011 'Connecting Maine' Statewide Long-Range Transportation Plan to 2035 provides overall goals for the maintenance and improvement of the state transportation system to meet the needs of residents and businesses. These goals agree generally with this comprehensive plan. There are no Union specific projects or impacts included in the Long Range Maine DOT plan. The lack of adequate funding to preserve and enhance the state transportation network will continue to affect Union along with many other Maine communities.

Maine DOT has prioritized highway corridor for improvements and maintenance based upon usage and importance in the state roadway network. Union's highest priority roads as ranked by Maine DOT include Route 17, which is ranked as a Priority 2 Road. Regionally, Route 1 is ranked as a Priority 1 Road. In Union, Route 131 N and S is a Priority 4 Road. Route 235, Common Rd, and Wottons Mill Rd are Priority 5 Roads. All other roads in the Union are Priority 6 Roads (town roads). See the Transportation Map for highway corridor priority levels. Statewide, Maine DOT has focused funding on Priority 1 and 2 Roads for improvements.

The Maine DOT Work Plan for Calendar Years 2016-2017-2018 includes projects for Union, as listed in the next table.

<b>Maine DOT Work Plan for Calendar Years 2016-2017-2018</b>						
<b>WP Year</b>	<b>Asset(s)</b>	<b>Description</b>	<b>WIN/ID</b>	<b>Scope of Work</b>	<b>Hwy Corridor Priority</b>	<b>Est Funding</b>
2017/18 Completed in 2016	Route 17	Large culvert (#46460) located 0.21 of a mile west of Wotton Mill Road.	018565.00	Highway Safety and Spot Improvements	2	\$250,000
2017/18	Common Road	Beginning 0.13 of a mile north of Ayer Hill Road and extending northerly 0.16 of a mile on Route 235; and beginning 0.16 of a mile east of Town House Road and extending easterly 0.22 of a mile on Common Road.	021834.00	Highway Safety and Spot Improvements	5	\$218,500
2017/18	Route 17	Install flashing beacon at Wotton Mill Road.	022703.00	Highway Safety and Spot Improvements	5	\$27,500
2016 Completed in 2016	Route 17	Repairing curbs and joints on the St. George River Bridge (# 5893) on Route 17 in Union, located 0.23 of a mile easterly from the Common Road.	WR 31824	Maintenance	2	\$35,000
2016 Completed in 2016	Route 235	Ditching on Route 235 in Union starting at the Warren-Union town line and traveling northerly and then proceeding easterly along Route 17 and stopping just past Short Street in Union.	WR 31944	Maintenance	5	\$10,000
2016 Completed in 2016	Route 17	Paving the surfaces on Sidemill and St. George River Bridges ( # 2768 and # 5893) in Washington and Union.	WR 31962	Maintenance	2	\$80,000

The 2009 Midcoast Route 17 Corridor Management Plan includes these communities Hope, Rockland, Rockport, Union and Washington. Recommendations for Union are shown in the next table.

<b>Midcoast Route 17 Corridor Management Plan: Union Recommendations</b>		
<b>Investment Description Recommendations</b>	<b>Location(s)</b>	<b>Rationale</b>
Access management controls for business entrances strengthened.	Throughout	Safety: maintain posted speed though controlled development/ redevelopment of entrances, encourage shared entrances.
Entrances shared for new and expanded businesses accessing SR 17, with adequate signage alerting drivers to businesses.	Throughout	Safety: fewer new entrances where crashes could occur. Mobility, maintain posted speed. See also, <i>Safety Audit of Existing Traffic Conditions</i> investment description in this table.
Frontage road/internal road/access road, i.e., a new road located parallel to SR 17 for limited stretches, to serve new business entrances.	SR 17 and Sennebec Road and other areas where conditions permit	Safety: reduce multiple access points on SR 17, by providing an access road to abutting business. Development: allow some visibility on SR 17 to remain and open up an area for new development parallel to SR 17 behind existing businesses.
Grade changes, vertical realignment, reduce steepness of SR 17.	SR 17 near Sennebec Road	Safety: poor sight distance.
Intersections: Lane pavement markings and signage.	Throughout	Safety and Mobility: reduce sudden lane changes by clearly marking turn only lanes and through lanes with pavement markings and signs sufficiently ahead of the intersection.
Intersections: Realignment, vertical, with adequate turning radii for trucks.	SR 17 WB at Clarry Hill Road/ North Union Road, Sennebec Road, and at Pound Hill Road, too steep near SR 17	Safety: improve sight distance based on vertical alignments. Limited sight distance on Route 17 causes increased crash activity on approaches to intersections in the locations noted.
Intersections: Warning signal 'intersection ahead' signs, but not additional full traffic signals.	SR 17 WB at Clarry Hill Road/North Union Road, Sennebec Road, at Pound Hill Road)	Safety: limited sight distance.

**Midcoast Route 17 Corridor Management Plan: Union Recommendations**

<b>Investment Description Recommendations</b>	<b>Location(s)</b>	<b>Rationale</b>
Lighting for streets that is context sensitive.	Common Road in the Union Village area	Amenity and Safety: street lights in keeping with the architectural heritage .. would alert drivers to the village areas and the lower speed zones, In Union, the use of solar to reduce costs of lighting. Street lights on SR 17 at intersections with other state routes could improve safety. For both SR 17 and the Common Road, consider the use of LEDs to reduce electricity needed, and motion sensors ahead of lights to activate.
Name for SR 17 should be standardized.	Throughout	Various names for the same roadway is confusing (Augusta Road, Rockland Road, Heald Highway, Rockland St, New Rockland St, Lakeview Dr, Maverick St).
Park and ride parking lots.	Union	Encourage carpooling for commuting to Augusta and Rockland.
Pedestrian trail, bike lanes, sidewalks, walkways, esplanades, and/or shoulder improvements for pedestrian and bike use.	Union village area, SR 17, along Common Road, Depot St, that connects along the river from lower Sennebec Pond, a high crash location, through the proposed commercial SR 17 zones, under the roadway to the Village and near the River and Round Pond to public boat landing and park on SR 235.	Amenity and safety, especially children: encourage growth and livability in Union's village area and to enhance the St. George River and its ponds, currently there is only a very narrow ancient sidewalk for a very short distance from Common Road a few hundred feet down Depot Street (SR 235).
Public participation in Maine DOT decision making process continued and enhanced	Throughout	Ensure that municipal officials and citizens are aware of transportation options and possible improvements and the project planning and funding process. Seek advice and support of municipal officials, residents and local businesses for suggested improvements.

<b>Midcoast Route 17 Corridor Management Plan: Union Recommendations</b>		
<b>Investment Description Recommendations</b>	<b>Location(s)</b>	<b>Rationale</b>
Public Service Announcements on Television and Radio.	Throughout	Safety: reduce speeding, and tailgating, especially where roadways traverse rolling hills, which obscure intersections, traffic and animals ahead.
Safety Audit of Existing Traffic Conditions.	Throughout	Conduct a safety audit with municipal officials, residents and business owners, along with transportation planners and engineers to better quantify the specific safety improvements that would be most beneficial to implement.
Speed Limit Enforcement.	Throughout, especially in village areas and approaches to those village areas	Safety: vehicular and pedestrian, with attention to commercial vehicles.
Vegetation trimming at high volume entrances and at intersections, no use of pesticides/herbicides that would generate non-point source pollution.	SR 17 near SR 235/Wottons Mill Road	Safety: as vegetation near intersection reduces sight distances for drivers turning onto and off of SR 17 and other roads.
Warning signs for high crash stretches of roadway ahead, hills, hidden driveways.	SR 17, SR 131, Town Roads)	Safety: as rolling hills (changes in vertical alignment of roadways limit sight distances and reaction times).

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

The Urban-Rural Initiative Program/Local Road Assistance Program payments for fiscal years 2010 through 2013 was \$57,960. For fiscal year 2014, it was \$56,424. For fiscal year 2015, the amount will be \$51,748.

Future municipal funding for road improvement and maintenance for Union are estimated at \$400,000 per year for 2015 through 2020. Of this amount, about \$300,000 adjusted for inflation is available for local roadwork each year and \$100,000 is to pay down the \$1 million bond approved in 2015.

Road maintenance is an ongoing effort and municipal budgets are often stretched as the cost of such maintenance increases much faster than the costs of other goods and services, due principally to the expense of petroleum and petroleum-based products like asphalt. The state and federal match for roadwork has always been important and has

become even more crucial to maintain safe roadways. The Town is currently using preservation methods to extend pavement life.

7. *Are there parking issues in the community? If so what are they?*

Parking is generally sufficient in most parts of the Town, with the exception of the Village Common area. During seasonal events like the Union Fair, parking is limited, requiring the transport of people from satellite parking lots. Limited parking at Ayers Park leads to overcrowding during events there. A parking committee had been formed to improve parking availability.

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

Parking standards in the Land Use Ordinance do not generally push development out of the village area. In fact, the Land Use Ordinance allows the Planning Board to exempt the strict application of the off-street parking requirements for properties within the village area.

9. *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?*

Union and the region lack alternative transportation options in comparison with more densely developed areas, and so residents are largely dependent on their privately owned vehicles for daily trips to work, stores and elsewhere. Busses bring children to and from public schools. See **Condition and Trends** response to (8) for a description of current public transportation services.

10. *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)?*

Union does not host a transportation terminal.

11. *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?*

There are no airports within Union. The Knox County Airport is about 20 miles from Union, so development within Union would not interfere with that airport's operations or airspace.

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

Union is not a coastal community. However, the following improvements are needed to public landings on these waterbodies: Sennebec Pond. Seven-Tree Pond had a ramp upgrade/replacement recently. No public access is available on Crawford Pond. See the Water Resources Chapter and Recreation Chapter for more information.

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

Union has Access Management Standards in the Land Use Ordinance (Section 1.10.9) including a permit requirement for driveways and entrances on municipal roadways that takes into account minimum sight distances based upon posted speeds, and among other standards, driveway/entrance spacing requirements.

The Union Subdivision Ordinance states, “When lots do have frontages on two or more roads, the Plan and deed restrictions shall indicate vehicular access shall be located only on the less traveled way.” Additionally, “Where a major subdivision abuts or contains an existing or proposed arterial street, no residential lot may have vehicular access directly on to the arterial street.”

State access management rules apply to state and state aid roads. Those wanting a new curb cut (driveway or entrance access) on a state road have to obtain a permit from Maine DOT. The Town believes that these have been helpful in certain areas like Route 17: Union Farm Equipment/Hammond Tractor Co. area and ineffective in certain areas like Route 17: Come Spring Cafe, due principally to the configuration of the parking area.

14. *Do the local road design standards support the community’s desired land use pattern?*

The Union Subdivision Ordinance has street design standards, with differentiation based upon street classification (Arterial, Collector, Minor, and Private). This allows subdivision design to fit more appropriately into the surrounding land use patterns and scale of development. Additionally, cluster subdivision standards allow for the use of shorter road lengths.

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

Opportunities for safe biking and walking along roads are limited. The Site Plan Review provisions in the Land Use Ordinance require that submitted development plans include the, “Location and dimensions of on-site pedestrian and vehicular access ways, parking areas, loading and unloading facilities, design of ingress and egress of vehicles to and from the site onto public streets, and curb and sidewalk lines...”

The Subdivision Ordinance has sidewalk design standards and states, “The Board may require the creation of a twenty (20) foot easement in line with the street to provide continuation of pedestrian traffic or utilities to the next street.”

The Access Management Standards of the Land Use Ordinance state, “Adjacent commercial or office properties classified as major traffic generators (e.g., school, shopping center, or office park), shall provide a cross access for vehicles and pedestrians to allow circulation between sites unless environmental constraints are present.”

16. *Do planned or recently built subdivision roads (residential or commercial) simply dead-end or do they allow for expansion to adjacent land and encourage the creation of a network of local streets? Where dead-ends are unavoidable, are mechanisms in place to encourage shorter dead-ends resulting in compact and efficient subdivision designs?*

Since 2001, there have been three new short subdivision dead-end roads built (Harding Ln, West View Ln, and an unnamed road), nine lots in total, which were designed based upon site conditions and surrounding patterns of development. No cluster developments were constructed during this period.

The Subdivision Ordinance allows the Planning Board to require easements in line with the terminus of a dead-end street to provide for a continuation of the road where future subdivision is possible. The Subdivision Ordinance also allows for cluster developments with shorter subdivision roads and compact design possible.

### ***Conditions and Trends***

*Minimum data required to address state goals:*

1. *The community’s Comprehensive Planning Transportation Data Set prepared and provided to the community by the Department of Transportation, and the Office, or their designees.*

Note: This data set has been incorporated and updated in the map titled Transportation.

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

The Transportation Network Map shows the locations of roads and bridges. Town road deficiencies include Barrett Hill Rd, Carroll Rd, Collinstown Rd, Miller Rd. Bridge deficiencies include the North Union Bridge #5589. Limited sidewalks are located along these streets within the village: Common Rd. Pedestrian improvements to address safety concerns are in the implementation strategies sections. According to Maine DOT, Union has 62.29 miles of public roads, of which 43.71 miles are town roads, 11.63 miles are State Aid Highways, and are 6.95 miles State Highways. About 85% of the town roads are paved. Named private subdivision roads and lanes (often shared driveways listed with E-911) are also shown in the table below. The State and town roads are vitally important as they allow residents to commute to work, school, stores, and around the town. The overall condition (poor, fair, good, or excellent) of each road way is noted.

Union Roadway Inventory						
Roadway Name	Classification	Length (Miles)	Owned	Maintained	Surface	Overall Condition
<b>Route 17:</b> Heald Highway	Arterial	6.95	State	State	Paved	Good
<b>Route 131:</b> (Appleton Rd) (South Union Rd)	Collector	2.88 2.29	State	State	Paved	Fair/ (Portions Good)
<b>Route 235:</b> (Buzzell Hill Rd) (Depot St) (Town House Rd)	Collector	0.55 2.55 0.36	State	State	Paved	Good
Abijah Ln	Private	0.14	Private	Private	Gravel	*
Al-Berta Ln	Private	0.56	Private	Private	Gravel	*
Autumn Ln	Private	0.14	Private	Private	Gravel	*
Ayer Hill	Local	0.34	Town	Town	Paved	Fair
Barker Ln	Private	0.08	Private	Private	Gravel	*
Barrett Hill Rd	Local	2.40	Town	Town	Pave/Grav.	Poor
Beech Ln	Private	0.12	Private	Private	Gravel	*
Beote Rd	Local	0.35	Town	Town	Gravel	Fair
Bird Farm Ln	Private	0.77	Private	Private	Gravel	*
Bonnie Ln	Private	0.09	Private	Private	Gravel	*
Bowen Ln	Private	0.19	Private	Private	Gravel	*
Brooks Rd	Local	0.18	Town	Town	Paved	Good
Browns Ln	Local	0.10	Town	Town	Paved	Good
Buckeye Ln	Private	0.56	Private	Private	Gravel	*
Bump Hill Rd	Local	1.83	Town	Town	Pave/Grav.	Excellent
Burkett Rd	Local	0.02	Town	Town	Paved	Good
Butler Rd	Local	2.78	Town	Town	Pave/Grav.	Good
Carroll Rd	Local	1.06	Town	Town	Paved	Fair
Chadam Ln	Private	0.18	Private	Private	Gravel	*
Chestnut Ln	Private	0.06	Private	Private	Gravel	*
Clark Ln	Private	0.08	Private	Private	Gravel	*
Clarry Hill Ln	Local	1.67	Town	Town	Pave/Grav.	Good
Clarry Hill Rd	Local	2.82	Town	Town	Paved	Excellent
Coggins Hill Rd	Local	1.10	Town	Town	Gravel	Fair
Colby Lane	Private	0.09	Private	Private	Gravel	*
Cole Rd	Local	0.59	Town	Town	Gravel	Good
Collinstown Rd	Local	0.90	Town	Town	Paved	Fair
Come Spring Ln	Local	0.60	Town	Town	Gravel	Fair
Common Rd	Collector	1.16	State	State	Paved	Fair
Cove Ln	Private	0.08	Private	Private	Gravel	*
Crawfordsburn Ln	Private	0.60	Private	Private	Gravel	*
Cross Ln	Private	0.06	Private	Private	Gravel	*

Union Roadway Inventory						
Roadway Name	Classification	Length (Miles)	Owned	Maintained	Surface	Overall Condition
Cummings Ln	Private	0.28	Private	Private	Gravel	*
Daniels Rd	Local	0.91	Town	Town	Paved	Good
Davis Rd	Local	1.36	Town	Town	Paved	Excellent
Dewmar Ln	Private	0.23	Private	Private	Gravel	*
Elston Ln	Private	0.05	Private	Private	Gravel	*
Fairgrounds Ln	Local	0.14	Town	Town	Paved	Fair
Feyler Rd	Public Ease.	0.44	Private	Private	Gravel	*
Graybrook Ln	Private	0.11	Private	Private	Gravel	*
Greene Ln	Private	0.13	Private	Private	Gravel	*
Guinea Ridge Rd	Local	0.33	Town	Town	Paved	Good
Hannan Rd	Private	0.54	Private	Private	Gravel	*
Happy Hollow Rd	Local	0.75	Town	Town	Gravel	Good
Harding Ln	Private		Private	Private		*
Hawes Ln	Private	0.35	Private	Private	Gravel	*
Hemlock Ln	Private	0.13	Private	Private	Gravel	*
Hidden Acres	Private	0.74	Private	Private	Gravel	*
Hills Point	Private	0.31	Private	Private	Gravel	*
Hilt Ln	Private	0.62	Private	Private	Gravel	*
Indian Knoll Ln	Private	0.13	Private	Private	Gravel	*
Jasmine Ln	Private	0.07	Private	Private	Gravel	*
Lermond Ln	Private	0.02	Private	Private	Gravel	*
Limestone Pl	Private	0.04	Private	Private	Paved	*
Lynwood Ln	Private	0.23	Private	Private	Gravel	*
Maple Ln	Private	0.06	Private	Private	Gravel	*
Marrs Hill Rd	Local	0.27	Town	Town	Paved	Good
McDonald Ln	Private	0.06	Private	Private	Gravel	*
Meadowood Ln	Private	0.62	Private	Private	Gravel	*
Medomak Ln	Private	0.07	Private	Private	Gravel	*
Mic Mac Ln	Private	0.58	Private	Private	Gravel	*
Middle Rd	Local	1.35	Town	Town	Paved	Good
Mid-State Ln	Private	0.06	Private	Private	Gravel	*
Military Ln	Private	0.62	Private	Private	Gravel	*
Millay Ln	Public Ease.	0.66	Private	Private	Gravel	*
Miller Rd	Local	1.49	Town	Town	Pave/Grav.	Fair
Mt Pleasant Rd	Local	1.72	Town	Town	Paved	Good
North Union Rd	Local	6.26	Town	Town	Paved	Good
Noyes Ln	Local	0.02	Town	Town	Paved	Fair
Oak Point Ln	Private	0.23	Private	Private	Gravel	*
Olson Farm Ln	Private	0.27	Private	Private	Gravel	*
Orchard Ln	Private	0.07	Private	Private	Gravel	*

Union Roadway Inventory						
Roadway Name	Classification	Length (Miles)	Owned	Maintained	Surface	Overall Condition
Overlock Hill Rd	Local	1.94	Town	Town	Pave/Grav.	Good
Payson Rd	Local	1.77	Town	Town	Paved	Good
Pound Hill Rd	Local	0.68	Town	Town	Paved	Good
Quiggle Rd	Local	0.24	Town	Town	Paved	Good
Rabbit Farm Rd	Local	0.51	Town	Town	Gravel	Fair
Rhodes Ln	Private	0.42	Private	Private	Gravel	*
Robbins Rd	Local	0.24	Town	Town	Gravel	Good
Saima Ln	Private	0.15	Private	Private	Gravel	*
Seiders Hill Ln	Public Ease.	0.27	Private	Private	Gravel	*
Sennebec Rd	Collector	2.33	Town	Town	Paved	Good
Seven Tree Ln	Private	0.03	Private	Private	Gravel	*
Shepard Hill Rd	Local	2.31	Town	Town	Paved	Good
Short St	Local	0.10	Town	Town	Paved	Good
Sidelinger Rd	Local	0.97	Town	Town	Gravel	Fair
Skidmore Rd	Local	1.54	Town	Town	Paved	Fair
Springer Ln	Private	0.55	Private	Private	Gravel	*
Spruce Ln	Private	0.12	Private	Private	Gravel	*
Sterlingtown Ln	Local	0.18	Town	Town	Paved	Good
Stickney Ln	Private	0.34	Private	Private	Gravel	*
Stone Rd	Public Ease.	1.44	Private	Private	Gravel	*
Summer Ln	Private	0.20	Private	Private	Gravel	*
Sunk Haze	Local	0.13	Town	Town	Paved	Good
Taylor Ln	Private	0.25	Private	Private	Gravel	*
The Woods Rd	Private	0.25	Private	Private	Paved	*
Thurston Ln	Local	0.11	Town	Town	Paved	Good
Townsend Ln	Local	0.18	Town	Town	Gravel	Fair
Tri-State Blvd	Private	0.11	Private	Private	Gravel	*
Upham Rd	Local	0.26	Town	Town	Gravel	Fair
Winterberry Ln	Private	0.04	Private	Private	Gravel	*
Witch Mountain Ln	Private	0.11	Private	Private	Gravel	*
West View Ln	Private		Private	Private		*
Wood Lily Ln	Private	0.20	Private	Private	Gravel	*
Wottons Mill Rd	Collector	1.86	State	State	Paved	Good

Source: Town of Union, Note: \*The condition of private roads is undetermined.

Union's public bridges are shown in the next table and on the Transportation Map.

Union Bridge Inventory						
Name	DOT Inv #	Road	Owned	Built	Length (feet)	Federal Sufficiency Rating
Bessey	2069	Common Rd	State	1936	129	94
Fairgrounds	6134	Fairgrounds Rd	State	Replaced 2003/4	64	68.8
Graveyard	0586	Miller Rd	Municipal	1945	18	66
Miller	0587	Miller Rd	State	1999	21	100
North Union	5589	North Union Rd	Municipal	1960	18	97.9
Luce *	6047	North Union Rd	Municipal	1966	17	87.9
Youngs	2971	Old Route 17	State	1917	16	67.8
East Union	2259	Payson Rd	Municipal	1929	25	66
Messer	0572	Route 131	State	1935	13	58.2
Stuart Brook	5665	Route 131	State	2004	16	99.7
South Union	5763	Route 131	State	1959	53	76.7
Medomak*	2541	Route 17	State	1931	53	97.6
St. George river	5893	Route 17	State	1960	180	79.9
Trues	3841	Route 235	State	1947	70	65.4
Lermond Mills	5942	Route 235	State	1963	17	88.4
Upper Medomak*	6046	Shepard Hill Rd	State	1966	26	98.8
Skidmore*	0578	Skidmore Rd	State	2001	66	94

Source: Maine DOT 2013, bridge inspections in 2012

Note: \*Shared with the Town of Washington

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

A potential off-road hiking trail has been considered from the Elementary School to the Thompson Community Center, and continuing to the Union Fairgrounds. See also, the Recreation Chapter for trails including snowmobile trails.

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

Major Traffic Generators	Hours of Operation
Union Elementary School (Route 17) RSU Administrative Offices Rivers Alternative Middle School	School year (8-4)
Union Fairgrounds	Seasonally
Thompson Community Center	Weekends
Ayers Park	Seasonally

<b>Major Events/Activities</b>	<b>Dates</b>
Farmers Market	Weekly
Founders Day	July
Union Fair (Union Fairgrounds)	Late August

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

The Union Subdivision Ordinance has road design and construction standards in Section 11 (Subsections: B and C). As noted above, design standards are differentiated by road classification, which allows for development suited to its surrounding conditions. The Subdivision Ordinance states, “All proposed subdivisions shall be in conformity with the Comprehensive Plan or policy statement of the municipality and with the provisions of all pertinent State and local codes and ordinances.” Additionally, this ordinance states “Where the subdivision streets are to remain private roads, the following words shall appear on the recorded plan: All roads in this subdivision shall remain private roads to be maintained by the developer or the lot owners and shall not be accepted or maintained by the town.” Since 2001, there have been no private subdivision roads accepted as public roads through town meeting vote.

6. *List and locate municipal parking areas including capacity, and usage.*

<b>Municipal Parking Lots Name/Location</b>	<b>Spaces</b>	<b>Condition</b>	<b>Usage</b>
Town Office/Fire Station	36	Good	Regularly
Union Common	64	Fair	Frequently

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

There are no airports within Union. The Knox County Airport is about 20 miles from Union, so development within Union would not interfere with that airport’s operations or airspace. The Wireless Telecommunication Facility Provisions in the Land Use Ordinance regulate the height of cell towers (190-foot maximum).

8. *Identify bus or van services.*

Waldo Community Action Partners (WCAP) is a State of Maine designated Regional Transportation Provider. In mid-2016, the took over Coastal Trans, Inc. (CTI), a non-profit subsidiary of Methodist Conference Home, Inc. WCAP operates transportation services for residents of Waldo, Knox, Lincoln, and Sagadahoc Counties and the Towns of Brunswick and Harpswell. They provide Non-Emergency Medical Transportation for MaineCare eligible riders, as well as services for riders who are elderly, have disabilities, and people with low income and transportation for the public. They currently work with a number of agencies to provide connections to services for mental health, medical care,

and adult rehabilitation services. They operate a fleet of agency vehicles that include ADA accessible buses, as well as sedans and vans to provide transportation services. They operate Demand-Response services for riders, and a Midcoast Shuttle that provides round-trip morning and afternoon service from Brunswick to Edgecomb.

Concord Coach (Trailways) offers daily service on their Maine Coastal Route between Orono and Boston's Logan Airport. Stops include the University of Maine in Orono, Bangor, Searsport, Belfast, Lincolnville, Camden/Rockport, Rockland, Waldoboro, Damariscotta, Wiscasset, Bath, Bowdoin College, Brunswick, and Portland. Waldoboro is the closest stop to Union.

The frequency of scheduled bus service is insufficient for most individuals to be able to use on a regular basis, as would be necessary for commuting to work daily. The dispersed location of residents and of workplaces inhibits public transportation to some extent. There are, however, key locations within Union, and in other communities, that could benefit from more frequent bus services. These areas include the village. Strategies to address this need are presented at the end of this chapter.

9. *Identify existing and proposed marine and rail terminals within your community including potential expansions.*

The Town has no marine or rail terminals. None are proposed.

10. *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.*

Union is not a coastal community.

**Policies**

1. *To prioritize community and regional needs associated with safe, efficient, and optimal use of transportation systems.*
2. *To safely and efficiently preserve or improve the transportation system.*
3. *To promote public health, protect natural and cultural resources, and enhance livability by managing land use in ways that maximize the efficiency of the transportation system and minimize increases in vehicle miles traveled.*
4. *To meet the diverse transportation needs of residents (including children, the elderly and disabled) and through travelers by providing a safe, efficient, and adequate transportation network for all types of users (motor vehicles, pedestrians, bicyclists).*
5. *To promote fiscal prudence by maximizing the efficiency of the state or state-aid highway network.*

**Strategies**

<b>Transportation Strategies</b>	<b>Responsible Parties</b>	<b>Timeframe</b>
1. <i>Develop or continue to update a prioritized improvement, maintenance, and repair plan for the community's transportation network.</i>	Selectmen, and Town Manager	Immediate and Ongoing
2. <i>Initiate or actively participate in regional and state transportation and land use planning efforts.</i>	Selectmen, and Town Manager	Long Term
3. <i>Enact or amend local ordinances as appropriate to address or avoid conflicts with:</i> a) <i>Policy objectives of the Sensible Transportation Policy Act (23 M.R.S.A.73)</i> b) <i>State access management regulations pursuant to 23 M.R.S.A. 704: To maintain and improve traffic flows, and improve safety, future land use ordinance provisions should be in harmony with access management performance standards set in current state regulations for state and state aid roadways.</i> c) <i>State traffic permitting regulations for large developments pursuant to 23 M.R.S.A. 704-A.</i>	Selectmen, Planning Board, Ordinance Review Committee, and Town Meeting Vote	Midterm
4. <i>Enact or amend ordinance standards for subdivisions and for public and private roads as appropriate to foster transportation-efficient growth patterns and provide for future street and transit connections.</i>	Selectmen, Planning Board, Ordinance Review Committee, and Town Meeting Vote	Midterm

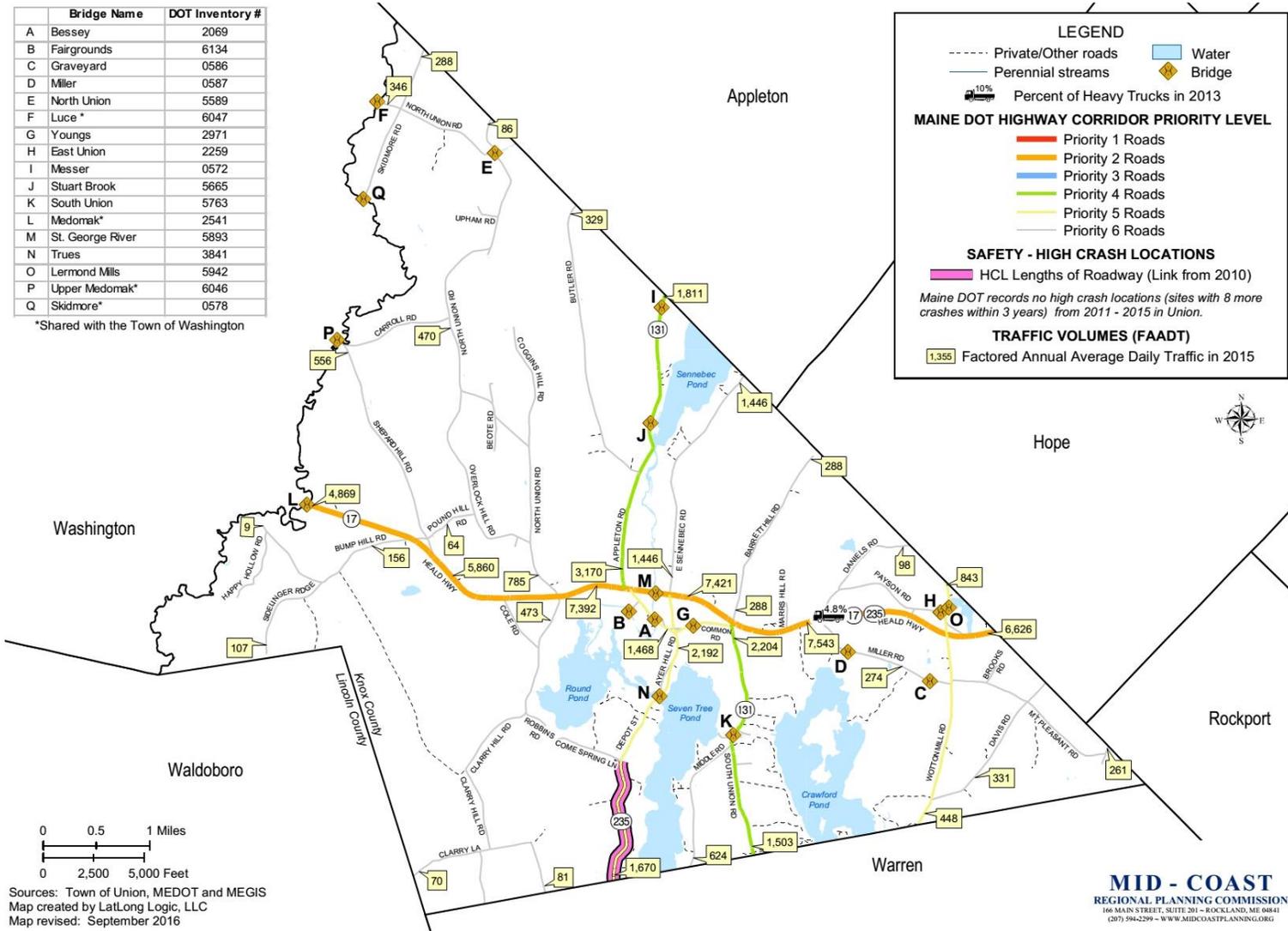
Transportation Strategies	Responsible Parties	Timeframe
5. Consider the effects of increased intensity and frequency of storms and flooding, and propose amendments to roadway design standards including adequate sizing for culverts and drainage to reduce the potential for future damage to roadways. Seek state and federal grants to replace substandard culverts and to improve roadway drainage.	Selectmen, Planning Board, Ordinance Review Committee, and Town Meeting Vote	Midterm
6. Work with the Maine DOT as appropriate to address deficiencies in the system or conflicts between local, regional, and state priorities for the local transportation system.	Selectmen, and Town Manager	Immediate and Ongoing
7. Transit Options: Work with Penquis and other providers to meet the needs of youth, elderly and disabled residents, who lack their own transportation, by providing carpools, van/jitney, to stores, employers, and services.	Selectmen, and Town Manager	Long Term
8. Pedestrians and Bicycles: To promote pedestrian and bicycle safe options, the Town will welcome opportunities to create multi-use, walking and bicycle paths throughout the Town and especial into interior areas, and sidewalks in the village and other areas. Through public participation the Town will prioritize potential projects, and then seek CDBG infrastructure funds, Maine DOT Enhancement funds, and other sources, to create new paths where best suited, and in agreement with landowners. Public support for these project proposals will be obtained before the Town commits resources.	Selectmen, Town Manager, Planning Board, Ordinance Review Committee, and Town Meeting Vote	Midterm and Ongoing
9. Parking: Provide additional funding to improve parking facilities and seek additional parking in the Union Common, and a Park-and-Ride Lot abutting or near Route 17.	Selectmen and Town Meeting Vote	Long Term
10. Impact Fee: Investigate, and implement if warranted, an impact fee system that applies to all new development that affects traffic use of the Town’s major road corridors to assist in providing funds to upgrade these roads.	Selectmen and Town Meeting Vote	Long Term
11. Site Specific Improvements: <ul style="list-style-type: none"> <li>• Study the effectiveness/safety of the Yield sign at Route 131 (South Union Rd) and Route 17 intersection.</li> <li>• Evaluate the effectiveness of the school zone speed limit on Route 17 and investigate if it can be raised to 25 m.p.h. given the lack of pedestrian activity in this area.</li> </ul>	Selectmen, Town Manager, Maine DOT	Midterm

Note: Strategies proposed in this Comprehensive Plan are assigned responsible parties and a timeframe in which to be addressed. Immediate is assigned for strategies to be addressed within two years after the adoption of this Comprehensive Plan, Midterm for strategies to be addressed within five years, and Long Term for strategies to be addressed within ten years. In addition, Ongoing is used for regularly recurring activities.

# TRANSPORTATION

	Bridge Name	DOT Inventory #
A	Bessey	2069
B	Fairgrounds	6134
C	Graveyard	0586
D	Miller	0587
E	North Union	5589
F	Luce*	6047
G	Youngs	2971
H	East Union	2259
I	Messer	0572
J	Stuart Brook	5665
K	South Union	5763
L	Medomak*	2541
M	St. George River	5893
N	Trues	3841
O	Lermond Mills	5942
P	Upper Medomak*	6046
Q	Skidmore*	0578

\*Shared with the Town of Washington



0 0.5 1 Miles  
0 2,500 5,000 Feet

Sources: Town of Union, MEDOT and MEGIS  
Map created by LaLong Logic, LLC  
Map revised: September 2016

**MID - COAST**  
REGIONAL PLANNING COMMISSION  
166 MAIN STREET, SUITE 201 - ROCKLAND, ME 0841  
(207) 584-2299 - WWW.MIDCOASTPLANNING.ORG

## PUBLIC FACILITIES AND SERVICES

### Introduction

This chapter identifies and analyzes the public facilities and public services of Union. Recommendations are made to improve town facilities and services. A list of future needs and estimated expenditures is contained in the Capital Investment Plan.

### State Goal

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

### Analyses

(1) *Are municipal services adequate to meeting changes in population and demographics?*

In general, Union has the capacity to provide basic and necessary municipal services to its citizens over the ten-year planning period. However, the Town should anticipate an increased demand for services for its growing elderly population, which could include a need for assisted living facilities. At this time, except for the Union Corporation for Better Housing (eight units at 146 Townhouse Rd), most of this type of housing is located nearby in Rockland, Thomaston, and Waldoboro. Due to development constraints in Union such as a lack of sewers to handle larger-scale multi-unit housing, this limitation on housing will most likely continue in the foreseeable future. See the Housing Chapter for more information.

(2) *Has the community partnered with neighboring communities to share services, reduce costs and/or improve services? In what ways?*

The following is a list of inter-municipal and regional efforts in which Union participates:

- Ambulance service mutual aid agreements with Northeast, Warren and Waldoboro Ambulance services to provide back up, and depending on who is closest to the scene.
- Animal Control through a contract with the Knox County Sheriff's Office.
- Emergency dispatch through the Knox County Regional Communications Center.
- Fire and rescue participation in a mutual aid program with Appleton, Hope, Warren and Washington.
- Municipal solid waste disposal and recycling through an inter-local agreement with the Tri-County Solid Waste Management Organization (through Knox County, in cooperation with Lincoln and Waldo Counties). In turn, through a contract, solid waste from Tri-County is transported to Ecomaine's facilities in Portland for recycling (single-sort), waste-to-energy generation and/or to their landfill in Westbrook, Scarborough, and South Portland. Ecomaine is a non-profit waste management organization.
- Police protection through a contract with the Knox County Sheriff's Department.

- Midcoast Maine Community Action for social services for low income and at risk individuals and families.
- Mid-Coast Regional Planning Commission for land use and transportation planning assistance.
- Penquis for social services for low income persons.
- Public education as a member of RSU 40, which serves Friendship, Union, Waldoboro, Warren, and Washington.
- Public transportation services through Waldo Community Action Partners (WCAP), a State of Maine designated Regional Transportation Provider. WCAP took over these services from Coastal Trans (CTI)/Methodist Conference Home, Inc. in mid-2016. They offer disabled and low-income residents transportation for medical appointments, and limited demand response service for the general public in the region.
- Public Works interlocal agreements for the sharing of equipment and personnel.
- Regional emergency training and disaster planning through the Knox County Emergency Management Agency.
- Sand and salt countywide bidding process for winter road usage.

(3) *If the community has a public sewer system, what issues or concerns are there currently and/or anticipated in the future? Is the sanitary district extension policy consistent with the Future Land Use Plan as required by (38 M.R.S.A. §1163), or will it be?*

The Town does not have a public sewer system.

There has been some consideration of developing a public sewer system, at least in the vicinity of the Union Common where a number of inadequate disposal systems have been replaced or upgraded under the Maine DEP's Small Communities Program. However, due to the excellent water quality in the St. George River, (Class A below the outlet of Sennebec Pond) and in the great ponds in the St. George River basin (all of which are Class GPA), there is no realistic possibility of any discharge of treated effluent into the St. George River system near Union.

(4) *If the community has a public water system are any public water supply expansions anticipated? If so, have suitable sources been identified and protected? Is the water district extension policy consistent with the Future Land Use Plan?*

The existing water systems serve village residents and businesses. No public water expansions are anticipated for the ten-year planning period. However, the water district, the Maine Water Company, improvement plan includes a new pump and new building on Barrett Hill Road in the next ten years. The water district's extension policy is consistent with 65-407 Maine Public Utilities Commission Chapter 65: Water Main Extension and Service Line Rule. Likewise, it is consistent with the Future Land Use Plan.

(5) *If the town does not have a public sewer or water system, is this preventing the community from accommodating current and projected growth?*

The lack of public sewer system has and will continue to inhibit large-scale or higher density growth. However, demand for this type of development has not been expressed. Projected growth is modest based upon observed trends and assumes that sewer will remain unavailable for the Town during the ten-year planning period of this plan. The Town can accommodate the growth anticipated, predominantly residential in the form of mostly single-family detached housing units. If multi-unit development were sought, sewer or a community wastewater system would likely be needed, especially if such growth were to occur within or near shoreland areas.

- (6) *Are existing stormwater management facilities adequately maintained? What improvements are needed? How might future development affect the existing system?*

The drainage system in Union is a mix of public infrastructure installed over the years, and private stormwater management systems installed as part of subdivision and site plan regulated development. Ongoing maintenance of ditches, culverts and catch basins are crucial for these systems to continue to function properly. The areas where needed improvements might be required generally fall along the state maintained roads. Any future private land development should include an analysis of potential drainage changes and the impact on neighboring properties.

Without adequate stormwater management, the cumulative effect of small, piecemeal development (new buildings and impervious surfaces like parking lots), in addition to mid- and large-scale development, would threaten adjacent properties and roadways with increased flooding. Accordingly, the review of projects through the Union Land Use Ordinance, Subdivision Ordinance, and the Shoreland Zoning Ordinance includes drainage standards. Improvements to public stormwater facilities that are needed because of development projects should have a share of the cost for those improvements borne by the applicant. As well, State regulations for applicable projects address stormwater management.

- (7) *How do residents dispose of septic tank waste? Are there issues or concerns regarding septic tank waste?*

Property owners are responsible for the maintenance and disposal of their septic waste. The Town contracts with Interstate Septic, a private firm for municipal facilities using septic systems. The Town is not aware of failing septic systems within Union. When individual systems fail, the Town has worked with property owners to address these issues while meeting all codes and ordinances. Septage is not disposed of within Union.

- (8) *Is school construction or expansion anticipated during the planning period? Are there opportunities to promote new residential development around existing and proposed schools?*

There is one school currently operating in Union. Union students also attend schools in surrounding communities. Given the decline in enrollments seen over the past decade, the decline in young families and with increases in the elderly population predominately, new school construction or expansion during the planning period is unlikely to be warranted for Union's share of the RSU 40s total enrollment or for the school district as a whole.

Funding cuts, which have occurred chiefly at the State level, will limit the amount of school improvements to be made over the planning period and might result in the closing of underutilized facilities. Regionalization of education has been promoted by the State in an attempt to reduce education costs, especially administrative costs. The decisions on education spending will increasingly be made on a regional basis, not by any one municipality alone.

(9) *Is the community's emergency response system adequate? Are improvements needed?*

Union Ambulance Service meets current needs. It provides emergency response services to the Town and is staffed with trained professionals. Northeast, Warren and Waldoboro Ambulance services to provide back up, and depending on who is closest to the scene. Improvements needed include a replacement ambulance.

Union's Fire Department meets the needs of the community currently and is anticipated to do so for the ten-year planning period. Knox County town fire departments support each other when needed through mutual aid agreements.

No major improvements to existing facilities and buildings during the ten-year planning period are anticipated to be necessary. New or replacement vehicles (fire trucks and ambulances) are both planned for during this same period. Fire Trucks are the most significant expenditure. They should be replaced or rehabbed on a regular basis; ideally with funding from a reserve account. See the Capital Investment Plan for cost estimates.

The Town contracts with the Knox County Sheriff's office for police protection. This service is deemed to be adequate currently and for the planning period.

(10) *Is the solid waste management system meeting current needs? Is the community reducing the reliance on waste disposal and increasing recycling opportunities? Are improvements needed to meet future demand?*

It is anticipated that the current needs will be met through the new contract with Ecomaine and that it will be able to handle projected growth during the ten-year planning period.

(11) *Are improvements needed in the telecommunications and energy infrastructure?*

All businesses require basic public services. In the current economy, access to markets far beyond Union is essential for many as well. Internet and telecommunications infrastructure in Union is sufficient in many parts of the community but could be improved (as technology advances) and expanded to fill the current gaps in coverage. See the Economy Chapter for more information.

(12) *Are local and regional health care facilities and public health and social service programs adequate to meet the needs of the community?*

Health care is provided at a regional level through Miles Memorial Hospital (Damariscotta) and Pen Bay Medical Center (Rockport), and Maine General Health (Augusta). Physician offices are located in Damariscotta, Rockland and Rockport. See the conditions and trends section below for more information. Locally, Union Ambulance provides emergency response. Public opinion strongly supports having a pharmacy locate within the Town.

(13) *Will other public facilities, such as town offices, libraries, and cemeteries accommodate projected growth?*

The Town's public facilities generally have adequate capacity for the next ten-year period.

(14) *To what extent are investments in facility improvements directed to growth areas?*

Most public facilities are located within and near the village, which is a designated growth area, and so funding for public facility improvements will benefit this growth area.

(15) *Does the community have a street tree program?*

The Town does not have a formal street tree program.

### ***Conditions and Trends***

*Minimum data required to address Analyses includes the identification of the following as applicable for the public facilities and services in 3.11 C (5) (a through i):*

(1) *location of facilities and service areas (mapped as appropriate);*

See the map titled Public Facilities

(2) *general physical condition of facilities and equipment;*

(3) *capacity and anticipated demand during the planning period;*

(4) *identification of who owns/manages the systems;*

For (2) through (4) see the responses below.

(5) *estimated costs of needed capital improvements to public facilities; and*

See the Capital Investment Plan.

(6) *the following information related to each of these public facilities and services:*

a. *Sewerage and/or Water Supply – Identify number and types of users, and percent of households served*

Union has no public sewer. Residents and businesses depend upon subsurface waste systems. As of 2016, the Maine Department of Health and Human Services indicated that there are five public water systems (PWS) in Union as shown in the next table. The Maine Water Company, Union Division, serves much of the village area, about 113 houses. Nearly all other residents and businesses in the Town outside of the village area depend upon private wells for drinking water.

Most properties in Union are served by private water sources, either drilled wells, dug wells, or lake/pond-drawn systems. The Common area of Union is served by Maine Water Company, formerly Aqua-Maine. This system services about 100 properties extending along parts of the Common Road, Depot Street, Burkett Road, Townhouse Road, and Sunk Haze.

The water source for the Common area consists of three drilled wells feeding into a 128,000-gallon concrete storage tank. This tank is located underground, and was built in the mid-1970s. Water treatment includes chlorine for disinfectant and phosphate for corrosion control.

The Maine Water Company has two other wells in Union. One is located on the property of Allen’s Blueberry Freezer at 72 Depot Street, and is currently used seasonally as needed. The second well is located on property owned by the Maine Water Company on the corner of Common Road and Fairgrounds Road. This well is not currently in use.

The Maine Water Company currently has no plans for expansion of the water system.

<b>Union Public Water Systems</b>				
<b>Name/Owner</b>	<b>ID-Type</b>	<b>Source</b>	<b>Depth</b>	<b>Type</b>
Crawford Commons/ Seven Tree Manor	ME0095190	drilled well	NA	C
Maine Water Company - Union Division	ME0091537- 101	bedrock well (farthest from road)	306 feet	C
	ME0091537- 102	bedrock well (nearest to road)	307 feet	C
	ME0091537- 103	bedrock well (middle)	400 feet	C
	ME0091537- 504	cannery well (emergency use)	NA	C
Mic Mac Cove Campground	ME0003551	drilled well	125 feet	NC
RSU 40 Union Elementary and-Middle Schools	ME0000640	drilled well	220 ft	NTNC
Thompson Community Center and Town Office	ME0092377	well	NA	NC

Source: Maine Department of Health and Human Services, Drinking Water Program  
Notes: C=Community, NC=Non-Community, NTNC=non-transient non-community

See the Water Resources Chapter for state assessments of public water systems in Union, for the most recent year(s) that the state provided.

- b. Septage – Identify any community policies or regulations regarding septage collection and disposal.*

Union has no public sewer system and relies entirely on private on-site disposal systems, most commonly septic tanks and leach fields. The Town contracts with Interstate Septic Facility of Rockland to accept septic tank pumpage.

The Town follows State regulations regarding septage collection and disposal from municipal facilities. The Town enforces the State Plumbing Code regarding subsurface waste systems.

- c. Solid Waste – Describe the community’s solid waste management system. Identify types and amounts of municipal solid waste and recycled materials for the past five (5) years.*

Union has a charter waste disposal agreement with Tri-County Solid Waste in Union (which serves Appleton, Liberty, Somerville, Union, and Washington). This facility had an adjusted recycling rate of 51% in 2001, with waste disposed at PERC in Orrington (will change to Eco Maine in 2018). Municipal Solid Waste expenses in Union have been increasing as they have statewide. The State did not provide five years of data as part of the community dataset prepared in 2015. Tri-County Solid Waste figures are not disaggregated by town and overall figures show that the amount of Municipal solid waste and recycled materials has remained consistent over the past 5 years.

The Land Use Ordinance including Site Plan Review, has provisions for waste disposal in new commercial, industrial, office, institutional, municipal and multifamily residential developments. The Subdivision Ordinance has solid waste provisions for new developments in subdivisions.

- d. Stormwater Management – Identify combined sewer overflows. For Municipal Separate Stormwater System (MS4) communities, describe plan and status of the major goals of the MS4 requirements.*

Union has no combined sewer overflows. The Town is not an MS4 community.

- e. Power and Communications – Availability of 3-phase power, Internet (including broadband), and cable within the community.*

Limited high broadband internet access via DSL (high-speed fiber) and cable is available in portions of the Town, especially along state roads and in the village. Telecommuting opportunities will continue to be constrained until greater bandwidth Internet service becomes available.

Three-phase power is available along Old Route 17 from the Hope town line to Route 131 N, on portions of Route 17 (Heald Highway) to Payson Rd, to Common Rd, and to the power substation on Route 131, and could be extended. The current usage and future demand for three-phase power is not known.

- f. *Emergency Response System –Average call response times for fire, police, and emergency/rescue.*

## **Fire Department**

The Union Fire Department in 2015 responded to 100 calls. The Fire Department staffing includes a chief, assistant chief, 2 captains, 3 lieutenants, 2 fire police, and 14 firefighters, who are volunteers and hold jobs in other occupations. Maintaining adequate staffing levels is an ongoing concern. There are efforts to attract additional volunteers.

The Union Fire Department has been a municipal department since the 1920s. In October 1987, the Union Fire Department moved into the new fire station located on Common Road. This building includes four doors (bays) for fire department vehicles, with space for three additional vehicles. One additional bay houses the Union Ambulance Service. Recently the second floor of the station that was an attic area has been completed for meeting areas and office areas. Currently the department is a paid, on-call service, with members alerted through the Knox County Regional Communications Center. Mutual aid agreements are in place with the surrounding communities.

The department continues to develop dry-hydrant agreements with landowners, should the use of water supplies be necessary for fire suppression. The department applies for grants, and has received such grants for various needs. Recent grants awarded to Union Fire Department include radios and equipment. Training for members is extensive, and requires many hours of commitment. Members are offered continuing education, and participate in many pre-planning incident scenarios and fire scene practices. Meetings are held monthly for training and organizational needs. Training includes hazardous materials recognition and handling. Motor vehicle accident extraction service is also a specialized function of the service.

The 2016 public opinion survey found about 33% very satisfied and 53% satisfied with the Union Fire Department.

## **Police**

Union has had no police department since 1977. The Town contracts with the Knox County Sheriff's Office for police protection. In 2015, the Knox County Sheriff's Office responded to 537 incidents in Union, of which 126 were property watch related, 142 traffic related (erratic vehicle, traffic hazard, traffic offence, radar detail, and traffic accidents), 76 not classified, 16 alarm response, 15 agency assistance and 14 well-being

checks. The remainder was for other categories. The County did not calculate an overall average response time.

The town is served by the State Police, and by the Knox County Sheriff's Department. Several troopers and deputies live in or near Union, which provides an additional measure of security

There have been informal studies sponsored by the Selectmen, in response to citizen concerns about speeding and other disturbances, to determine whether the Town should consider creating a local police unit of some type, but citizen opinion appears to be strongly against this action.

The 2016 public opinion survey found about 14% very satisfied and 54% satisfied with the County Police. By comparison, in the 2002 citizen survey, only 54 percent of respondents rated police services as adequate, showing that there are some concerns among Union residents. A supplemental survey conducted in 2003 and focused specifically on law enforcement issues indicated that speeding in the area of the Union Common and in residential areas is the predominant concern, with additional concerns expressed regarding theft and burglary, drug abuse, driving under the influence, and vandalism. However, a clear majority of respondents to both surveys indicated a perception that crime is lower in Union than in the State overall.

### **Ambulance Service**

In 2016, Union Ambulance Service had 7 paramedics, 5 EMTs Advanced, 9 EMT Basics, and 7 Drivers.

The Union Ambulance Service is a municipal department, converted from a volunteer service, and is housed in the Fire Station in the William Pullen Municipal Building. It serves Union as well as the Towns of Washington, and Appleton on a contract basis. The Ambulance Service and the Fire Department are members of the Knox County Mutual Aid Association and the Knox County Firemen's Association.

The Ambulance Service is served by six paramedics, nine emergency medical technicians (EMTs), eleven intermediate EMTs and seven drivers. It is dispatched from the Knox County Regional Communications Center. The Service responds to over 500 emergency calls per year. Core staffing is per diem Monday through Friday, 5:00 A.M. – 5:00 P.M.

The Service is well equipped, and has earned a reputation for being one of the best for its size in the State. The service operates a 2009 Ford van-type modular ambulance, with drop-down automatic snow chains. The ambulance is fully equipped for advanced life support and advanced cardiac life support, with a monitor/defibrillator/pacer unit, an automatic transport ventilator, and an automatic external defibrillator. Five additional defibrillators are carried in the personal vehicles of members of the Service.

The 2016 public opinion survey found about 30% very satisfied and 39% satisfied with the Union Ambulance Service.

- g. *Education – Identify school administrative unit. Include primary/secondary school system enrollment for the most recent year information is available and for the ten (10) years after the anticipated adoption of plan.*

The Town is a member community of Regional School Unit (RSU) 40. Other member communities are Friendship, Waldoboro, Warren, and Washington. The voters of Union elect school board members to represent them on the School Board.

The next table shows school enrollments in RSU 40 in area schools 2016.

**RSU 40 Total School Enrollment by Grade in FY 2016**

Schools	PreK	K	1	2	3	4	5	6	7	8	9	10	11	12	Total
Friendship		12	9	12	15	11	15	11							85
Miller	30	53	41	54	41	41	44	43							347
Prescott		12	20	17	14	15	15	16							109
Union	21	15	21	11	19	18	16	16							137
Warren	32	41	47	45	46	48	50	42							351
MMS									140	147					287
MVHS											172	117	151	125	565
<b>Total</b>	83	133	138	139	135	133	140	128	140	147	172	117	151	125	<b>1,881</b>
Total Grades Pre-K -6															1,029
Total Grades 7 - 8															287
Total Grades 9 - 12															565

Source: RSU 40

Enrollment projections for the next ten years for the RSU total and for the portion of Union resident students are not available from RSU 40. Trends from the past decade suggest slight declines are possible. However, fluctuations of total enrollment based upon the economy and housing market are probable, which inhibits definitive forecasting. Regionally, current facilities have capacity for growth but shifts in school use by grade may be required. The municipal membership of RSU 40 may change over the next decade as communities decide whether to remain or form new districts to meet the needs of their residents.

- h. *Health Care - Describe major health care facilities (hospitals, clinics) and other providers serving the community. Identify public health and social services supported by the community through municipal subsidy.*

There are no hospitals or clinics located in Union. Miles Memorial Hospital (Damariscotta), a subsidiary of Lincoln County Healthcare and Pen Bay Medical Center

(Rockport), a member of MaineHealth, provide a full range of medical services and offer affiliated home health and hospice services, public health nursing, physician offices and educational programs. The Town financially supports the Union Ambulance Service. The Town supports a Health Officer who is a volunteer, and also provides subsidies for the following health-related organizations: Union Senior Citizens, Vose Library, New Hope for Women, Mid-Coast Community Action, Broadreach, Coastal Transportation Inc., Spectrum Generations and Come Spring Food Pantry..

*i. Municipal Government Facilities and Services – Describe facilities and staffing for municipal administrative, enforcement, and public works operations.*

Union is governed by the Town Meeting/Selectmen form of government. The Town employs a Town Manager, Town Clerk, two Deputy Town Clerks, Tax Collector, two Deputy Tax Collectors, Treasurer, Deputy Treasurer, Fire Chief/EMA Director, Health Officer, Welfare Director, Code Enforcement Officer/Plumbing Inspector, and Animal Control Officer. Some positions are part-time. Some staff persons hold multiple positions. The Town contracts for some services including Certified Assessor Agent. See the lists below for elected and appointed officials.

The Town Office is open Monday through Thursday 8:00 AM to 4:00 PM and Friday 8:00 AM to 12:00 PM. The Town Office is open the 1st and 3rd Tuesday until 6:00 pm.

Union voters elect these officials:

1. Selectmen, Assessors, Overseers of the Poor (5 members)
2. Trustees of William Pullen Fund
3. Trustees of Cemetery Trust Funds
4. Budget Committee
5. Directors of MSAD/RSU 40 (3 members)
6. Moderator for Town Meetings

The Selectmen or Town Manager appoint these officials:

1. Town Manager/Road Commissioner/GA Administrator/Public Access Officer
2. Town Clerk/Tax Collector/Deputy Register and Treasurer
3. Registrar of Voters/Deputy Clerk and Tax Collector/Deputy GA Administrator and Treasurer
4. Deputy Town Clerk/Tax Collector
5. Assessor's Agent, contracted
6. Town Legal Counsel, contracted
7. Animal Control Officer, with Knox County(subject to change)
8. Appeals Board Members
9. Civil Defense Director
10. Code Enforcement Officer/Licensed Plumbing and Building Inspector, Alternate Code Enforcement Officer/LPI
11. Comprehensive Plan Committee

12. Constable/Union Fair
13. Director of Cemeteries
14. Election Clerks, Election Warden, Deputy Warden
15. EMS Chief, Paramedics, EMTs Basic/Advanced, Drivers
16. Fire Department: Chief/EMA Director, Assistant Chief, Captains, Lieutenants, Fire Police, Firefighters
17. Founder's Day Committee
18. Health Officer, Alternate Health Office
19. Planning Board Members
20. Public Works Forman and Team Members
21. Recreation Committee
22. Recreation Complex Committee
23. Scholarship Committee
24. Sealer of Weights and Measures
25. Tri-County Solid Waste Representatives
26. Treasurer
27. Veteran's Monument Committee

Town volunteer committees advise and assist the Town boards and municipal staff to provide Town services. These committees allow residents a meaningful opportunity to have a say in what types of services the Town offers now and should offer in the future.

### **Public Works**

Public Works is under the direction of the Road Commissioner, who is appointed by the Selectmen and who at this time is also the Town Manager. There are four full-time employees, including a Highway Supervisor and three Driver / Operators. Part-time operators and laborers are hired on an as-needed basis, depending on the time of year and the nature of the work to be completed. In addition, contracted services are used, depending on the nature of the work including major excavations and road building.

The municipal sand and salt building, constructed in 1994-1995, and the equipment garage, constructed in 2000, are located on Town-owned land at 1142 Heald Highway, just east of the Union School. The municipal garage has radiant floor heat, office space, and a kitchen area. In addition, a full bath and storage area complete the amenities of the building. A small storage building is also located on the property.

As of June 2015, the inventory of equipment includes a 2002 7-yard-capacity plow truck, a 2008 7-yard-capacity plow truck, a 2013 wheeler plow truck, a 2015 7-yard-capacity plow truck, a 2005 3-yard-capacity plow truck, a 2004 loader/backhoe, 2013 loader/backhoe, and a 1978 grader. In addition, a full complement of various hand tools and small equipment complete the department.

The 2016 public opinion survey found about 35% very satisfied and 55% satisfied with the road plowing. Almost 18% were very satisfied and 53% satisfied with road repair.

## Cemeteries

The Town of Union owns five cemeteries: Common Cemetery located on Ayer Hill Road, Lakeview Cemetery located on Overlock Hill Road, Sidelinger Cemetery located on Sidelinger Road, Skidmore Cemetery located on Skidmore Road, and East Union Cemetery located on Miller Road. Lakeview Cemetery, Skidmore Cemetery, and East Union Cemetery currently have burial plots available.

Ongoing maintenance includes fencing, road construction, and clearing of plant growth as needed. Stone cleaning and repair of all town cemeteries are scheduled in the town budget on an annual basis. Maintenance of the cemeteries has been supported at least partly by interest earned from the perpetual care account. As interest rates have fallen dramatically over the last few years, maintenance funds have increasingly been drawn from general taxation.

## Summary of Municipal Buildings and Land

Town-owned facilities are listed with their size, location, condition, and capacity/anticipated needs shown in the next table.

<b>Municipal Buildings and Land</b>	<b>Location</b>	<b>Size (Acres)</b>	<b>General Condition</b>	<b>Anticipated Uses</b>
Municipal Public Works Garage, Sand and Salt Building	114 Heald Highway	2.58	Good	Successful as is.
Town Office	Common Rd	20.0	Good	
Fire Dept. Public Safety	Common Rd		Good	
Thompson Community Ctr	S Union Rd		Fair/Poor	
Founders Park	S Union Rd	0.28	Good	
Ayer Park	Depot St	1.0	Good	Remain as is.
Union Common	Common Rd	3.0	Good	Remain as is.
East Union Cemetery	Miller Rd	1.0	Good	Remain as is.
Sidelinger Cemetery	Sidelinger Rd	0.5	Good	Remain as is.
Lakeview Cemetery	Overlock Hill Rd	1.0	Good	Remain as is.
Skidmore Cemetery	Skidmore Rd	0.77	Good	Remain as is.
Common Cemetery	Ayer Hill	1.0	Good	Remain as is.
Undeveloped	Stone Rd	25.0	Good	Former waste site. May be tested and converted into gravel pit or sold if no gravel found.
Old landfill	Bump Hill Rd	16.0	Good	Must remain as is, undisturbed in accord with Maine DEP Closure Standards.

<b>Municipal Buildings and Land</b>	<b>Location</b>	<b>Size (Acres)</b>	<b>General Condition</b>	<b>Anticipated Uses</b>
Undeveloped	Bump Hill Rd	85.0	--	May be used as part of a trail System. Land Trust might accept a Conservation Easement proposal. Former gravel pit, will likely be reused, and dilapidated house razed.
Undeveloped	North Union Rd	2.6	--	Could sell to neighboring property owners. Land Trust informally rejected Conservation Easement proposal.
Undeveloped	Ayer Hill	2.24	--	Restrictive covenant limits uses.
Town Forest	Between Bump Hill Rd and Happy Hollow Rd		--	
Former B.M. Clark parcel	Appleton Rd and St. George River	2-3 acres	Good	

See the map titled Public Facilities for the locations of town-owned and non-municipal community facilities that are open to the public.

**Policies**

- (1) *To efficiently meet identified public facility and service needs.*
- (2) *To provide public facilities and services in a manner that promotes and supports growth and development in identified growth areas.*

**Strategies**

<b>Public Facilities and Services Strategies</b>	<b>Responsible Parties</b>	<b>Timeframe</b>
(1) <i>Identify any capital improvements needed to maintain or upgrade public services to accommodate the community’s anticipated growth and changing demographics.</i>	See the Capital Investment Plan for specific strategies, responsibilities, and timeframes.	
(2) <i>Locate new public facilities comprising at least 75% of new municipal growth-related capital investments in designated growth areas.</i>		
(3) <i>Encourage local sewer and water districts to coordinate planned service extensions with the Future Land Use Plan.</i>		
(4) <i>If public water supply expansion is anticipated, identify and protect suitable sources.</i>	None anticipated.	
(5) <i>Explore options for regional delivery of local services.</i> Including these services: telecommunications and broadband	Selectmen, Town Voters, Long term	See also the Regional Coordination Plan.

**Ambulance Strategies**

It is recommended that the Selectmen and Budget Committee continue to work with the Ambulance Service Director to be sure the ambulance, support equipment, and staffing remain at their present high standard. (Selectmen, Ambulance Service Director, Budget Committee, Town Meeting) Ongoing

**Fire Department Strategies**

Continue to support the development of dry-hydrant locations strategically located throughout Union, in surrounding towns near to the Union town line, and in mutual aid towns.

Budget appropriately for apparatus and equipment reserves, and for replacement as new technologies and operating procedures become available.

Continue to provide ongoing training for members, as classes become available.

(Fire Department, Town Meeting) Ongoing

### Water Supply Strategies

It is recommended that the Town of Union continue to maintain good communication with Aqua Maine concerning construction and replacement of water lines during any road construction. In addition, should grants become available, the Town of Union and Aqua Maine should work together to the benefit of all parties. (Town Manager) Ongoing

### Wastewater Strategies

It is recommended that the Town encourage proper maintenance by homeowners and businesses, and closely monitor the water quality of its ponds and water courses to detect malfunctioning systems. Subdivisions and individual home sites should be inspected prior to issuing plumbing permits and close attention paid to installations. (Local Plumbing Inspector, Health Officer, Selectmen) Ongoing

### Stormwater Management Strategies

Institute and maintain “Best Management Practices” for storm water management along Town roads, which will reduce the amount of pollutants reaching watercourses. This may include constructing storm water detention basins, reseeding after ditches are cleaned, and other methods. (Selectmen, Road Commissioner, Public Works Director) Ongoing

Reexamine the Subdivision Ordinance against current State recommendations (model ordinances) to require that the rate of storm water runoff after development not increase phosphorous and other pollutant concentrations. This can be achieved through a variety of standard practices, and is in addition to storm water erosion control measures normally used during construction of roads, houses and other improvements. (Planning Board, Town Meeting) Immediate

### Public Works Strategies

It is recommended that the current paving and road maintenance schedule be continued. In addition, the upgrading of Town roads and equipment should be completed as needed. It is further recommended that all public works personnel receive continuing education as new technologies and techniques become better known, as better-trained employees will reduce work-time injuries, increase effectiveness, and contribute to overall cost containment. (Road Commissioner, Highway Supervisor) Ongoing

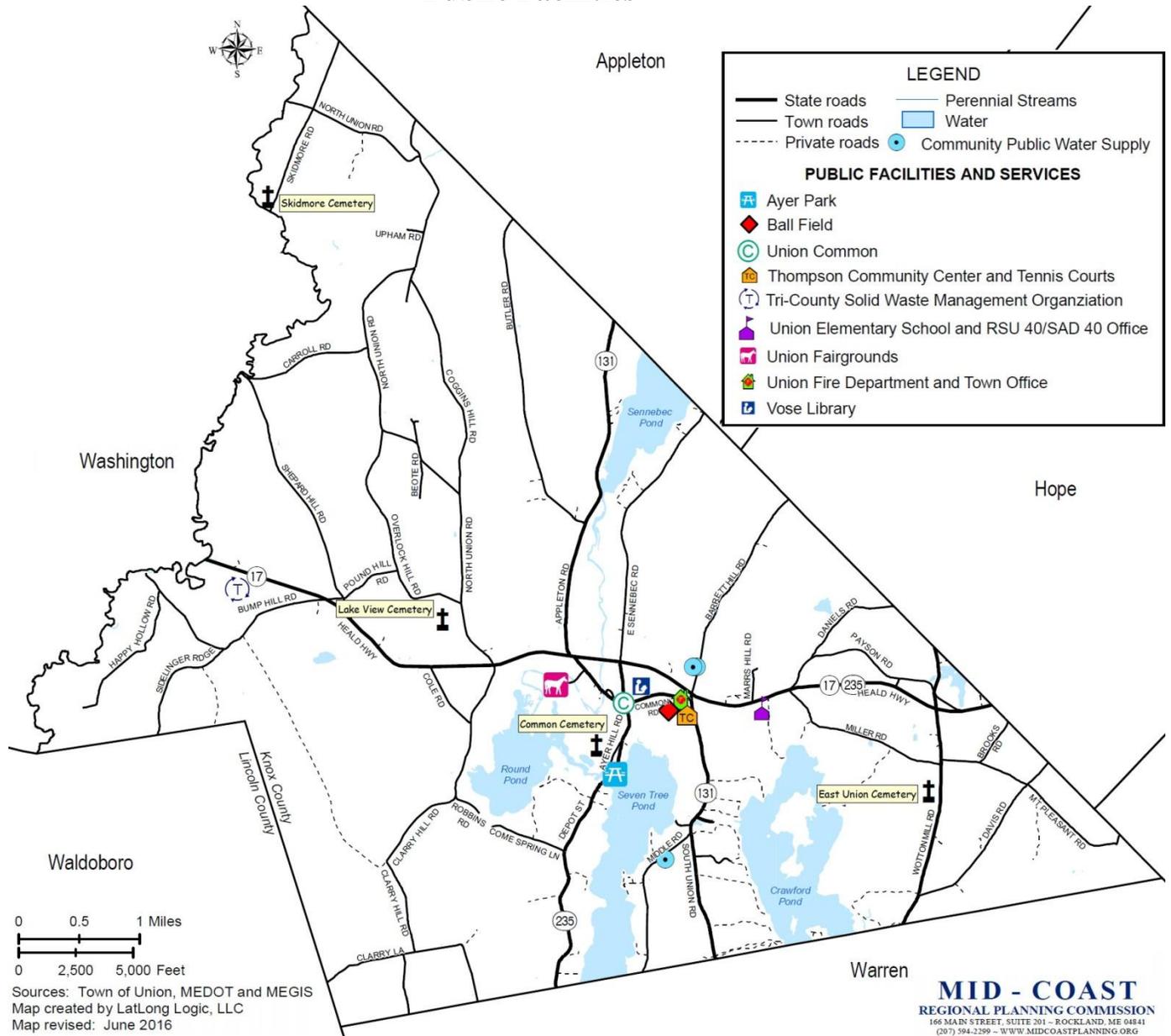
### Other Strategies

It is recommended that the Town continue to support those organizations that render significant services to Union residents, since the services are of high value to the citizens and the Town could not provide comparable services at lower cost. (Selectmen, Budget Committee, Town Meeting) Ongoing

### Cemeteries Strategies

It is recommended that the records of the cemeteries be updated and cataloged for future generations. It is suggested that, in addition to the fees for burials, owners of the burial plots be encouraged to donate to the perpetual care account. (Cemetery Committee) Ongoing

# Public Facilities



Sources: Maine GIS and Town of Union

**MID - COAST**  
 REGIONAL PLANNING COMMISSION  
 166 MAIN STREET, SUITE 201 - ROCKLAND, ME 04841  
 (207) 594-2299 - WWW.MIDCOASTPLANNING.ORG

## REGIONAL COORDINATION PROGRAM

### Introduction

Comprehensive planning recognizes the importance of regional cooperation and coordination. The land uses in one community can impact another community, particularly when that land use is located near the boundaries of the town. The Medomak River and Town of Washington border Union to the west. The Town of Waldoboro borders Union to the southwest. The Town of Warren borders Union to the south (including Seven Tree Pond, St. George River and Crawford Pond). The Town of Rockport borders Union to the east. The Town of Appleton borders Union to the northeast (including Sennebec Pond and the St. George River), as does the Town of Hope (including Lermond Pond). Union and its residents are dependent upon the region, especially the service center communities of Rockland and Waldoboro, for commercial goods and services, medical services and employment opportunities. Although more distant, Augusta also provides employment and shopping for some Union residents.

It is imperative for safety, security, environmental and economic reasons including cost savings for Union to coordinate and cooperate with federal, state, county, regional and local municipal governments and organizations as much as possible.

### State Requirement

*Pursuant to 30-A M.R.S.A. §4326(4), a regional coordination program must be pursued with other communities to manage shared resources and facilities, including but not limited to lakes, rivers, aquifers, and transportation facilities. The plan must identify any shared resources and facilities, describe any conflicts with neighboring communities' policies and strategies pertaining to shared resources and facilities and describe what approaches the community will take to coordinate management of shared resource and facilities. In addition, the plan must include a summary of regional coordination efforts from all applicable topic areas.*

### Municipal Comprehensive Plans and Ordinances

Neighboring Rockport and Waldoboro have adopted comprehensive plans that are consistent with state law, while Appleton, Hope, Warren and Washington have not, as shown in the following table.

Community	Comprehensive Plan Adoption/Amendment Date	Consistent with State laws
Appleton	Yes 2007	No
Hope	Yes 1991	No
Rockport	Yes 2004	Yes (State findings 9/13/2004)
Waldoboro	Yes 1998, Amended 2005	Yes (State findings 10/8/1997)
Warren	Yes 1991	No
Washington	Yes 2005	No

All surrounding towns have shoreland zoning ordinances. Hope, Rockport, Waldoboro and Washington have adopted zoning beyond shoreland zones as well. Surrounding towns have site plan review provisions, subdivision ordinances and floodplain management, among other ordinances. The bordering zoning districts are generally complementary with one another.

### **Summary of Current Regional Coordination**

The following is a list of inter-municipal and regional efforts in which Union participates:

- Ambulance service mutual aid agreements with Northeast, Warren and Waldoboro Ambulance services to provide back up, and depending on who is closest to the scene.
- Animal Control Currently Knox County (for now)
- Emergency dispatch through the Knox County Regional Communications Center.
- Fire and rescue participation in a mutual aid program with Appleton, Hope, Warren and Washington.
- Municipal solid waste disposal and recycling through an inter-local agreement with the Tri-County Solid Waste Management Organization (through Knox County, in cooperation with Lincoln and Waldo Counties). Through membership in the Municipal Review Committee, which serves 187 Maine municipalities, municipal solid waste has been transported to the Penobscot Energy Recovery Company, L.P. (PERC) waste-to-energy facility in Orrington. In 2018 it will change to Eco Maine.
- Police protection through a contract with the Knox County Sheriff's Department.
- Public education as a member of RSU 40, which serves Friendship, Union, Waldoboro, Warren, and Washington.
- Public transportation services through Coastal Trans, Inc. (CTI) is a non-profit subsidiary of the Methodist Conference Home, Inc. CTI is a State of Maine designated Regional Transportation Provider. Waldo Community Action Partners (WCAP) will take over these services in mid-2016. They offer disabled and low-income residents transportation for medical appointments, and limited demand response service for the general public in the region.
- Regional emergency training and disaster planning through the Knox County Emergency Management Agency.
- Sand and salt countywide bidding process for winter road usage.

For more information, please see the Public Facilities and Services Chapter.

### **Regionally Provided Public Services**

As noted above, key public services are provided on a regional basis. Police service is furnished by Knox County. The Fire Department and Ambulance/EMS participate in regional mutual aid programs. Medical service is primarily provided by the Penobscot Bay Medical Center in Rockport and Miles Memorial Hospital in Damariscotta. Maine General Health in Augusta also provides medical care. Public education is provided through RSU 40, which serves five municipalities. See the Public Facilities and Services Chapter. For the limited regional transportation services available, see the Transportation Chapter.

## **Shared Natural Resources**

Union shares these waterbodies with principally residential and recreational uses: Medomak River with the Town of Washington, Seven Tree Pond, St. George River and Crawford Pond with the Town of Warren, Sennebec Pond and the St. George River with Appleton, and Lermond Pond with Hope. All surrounding communities have shoreland zoning ordinances in effect. An effort to coordinate shoreland zoning further, beyond state requirements might be warranted to enhance shared natural resources that support the local economy and protect the health of residents and of wildlife. See the Water Resources Chapter and Land Use Chapter.

Most residents depend upon wells for drinking water and some groundwater resources. Accordingly, cooperation on the review of any large-scale development proposals that could affect this resource should be shared between Union and neighboring communities. See the Water Resources Chapter and Land Use Chapter.

## **Regional Economy**

Many Union residents depend upon the regional economy for their livelihoods. The service centers of Rockland and Waldoboro meet some of the needs of residents that are not provided within the Town itself. Union shares with other towns within commuting distance the effects of regional economic activities. See the Economy Chapter for more information.

## **Regional Policies from the other chapters of this comprehensive plan**

- *To cooperate with neighboring communities and regional/local advocacy groups to protect water resources.* See the Water Resources Chapter.
- *To coordinate the community's land use strategies with other local and regional land use planning efforts.* See the Land Use Chapter, Future Land Use Plan.
- *To coordinate with neighboring communities and regional and state resource agencies to protect shared critical natural resources.* See the Natural Resources Chapter.
- *To coordinate with regional development corporations and surrounding towns as necessary to support desired economic development.* See the Economy Chapter.
- *To encourage and support the efforts of the regional housing coalitions in addressing affordable and workforce housing needs.* See the Housing Chapter.
- *To prioritize community and regional needs associated with safe, efficient, and optimal use of transportation systems.* See the Transportation Chapter.
- *To coordinate the community's land use strategies with other local and regional land use planning efforts.* See the Land Use Chapter, Future Land Use Plan.

**Regional Strategies from the other chapters of this comprehensive plan**

<b>Regional Strategies</b>	<b>Responsible Parties</b>	<b>Timeframe</b>
(1) <i>Participate in local and regional efforts to monitor, protect and, where warranted, improve water quality.</i>	See the Water Resources Chapter for specific strategies, responsibilities, and timeframes.	
(2) <i>Initiate and/or participate in inter-local and/or regional planning, management, and/or regulatory efforts around shared critical and important natural resources.</i>	See the Natural Resources Chapter for specific strategies, responsibilities, and timeframes.	
(3) <i>Include agriculture, commercial forestry operations, and land conservation that supports them in local or regional economic development plans.</i>	See the Agriculture and Forest Resources Chapter for specific strategies, responsibilities, and timeframes.	
(4) <i>Support implementation of local and regional harbor and bay management plans.</i>	Not applicable.	
(5) <i>If appropriate, assign responsibility and provide financial support for economic development activities to the proper entity (e.g., a local economic development committee, a local representative to a regional economic development organization, the community’s economic development director, a regional economic development initiative, or other) and Participate in any regional economic development planning efforts.</i>	See the Economy Chapter for specific strategies, responsibilities, and timeframes.	
(6) <i>Create or continue to support a community affordable/workforce housing committee and/or regional affordable housing coalition and Support the efforts of local and regional housing coalitions in addressing affordable and workforce housing needs.</i>	See the Housing Chapter for specific strategies, responsibilities, and timeframes.	
(7) <i>Initiate or actively participate in regional and state transportation efforts</i>	See the Transportation Chapter for specific strategies, responsibilities, and timeframes.	
(8) <i>Explore options for regional delivery of local services.</i>	See the Public Facilities and Services Chapter for specific strategies, responsibilities, and timeframes.	

## FISCAL CAPACITY

### Introduction

Municipalities must be able to determine the expenditures necessary to provide basic services and the impact that this spending will have on townspeople. The primary funding source for municipal government is property tax revenue. Although the priorities of the Town may change from one election year to another, stable municipal finances are always a fundamental responsibility of Town government. It is important for Union to handle diligently all yearly expenditures while at the same time plan for the Town's long-term objectives. As is the case with any business, the physical assets of Union must be properly maintained through capital reserve accounts to protect the Town's continued economic health.

### State Goal

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

### Analyses

(1) *How will future capital investments identified in the plan be funded?*

Capital investments will continue to be funded through capital reserve funds supported by property tax revenues town-wide, intergovernmental revenues (State aid), grants and loans from federal, State and private sources, and from municipal bonds.

(2) *If the community plans to borrow to pay for capital investments, does the community have sufficient borrowing capacity to obtain the necessary funds?*

The Town will bond during the ten-year planning period of this plan. The community has sufficient borrowing capacity. Currently, Union is below the statutory debt limits as set forth in Title 30-A M.R.S.A. Section 5702.

(3) *Have efforts been made by the community to participate in or explore sharing capital investments with neighboring communities? If so, what efforts have been made?*

As noted in the Public Facilities and Services Chapter and the Regional Coordination Program Chapter, the Town does cooperate with Knox County, neighboring communities, and multi-community quasi-municipal organizations in the provision of services (e.g., police protection, fire, emergency medical services, public education, municipal solid waste management, and Public Works).

**Conditions and Trends**

*Minimum data required to address Analyses:*

- (1) *Identify community revenues and expenditures by category for the last five (5) years and explain trends.*

Total municipal revenues rose 10.5% over the last five years. Property taxes increased 13.9%, comprising 74.1% of total revenues in 2011 and 76.4% in 2015. Excise taxes increased 19.3%, comprising 8.8% of total revenues in 2011 and 9.5% in 2015.

Intergovernmental revenue (state aid) decreased 19.4% overall, comprising 6.7% of total revenues in 2011 and 4.9% in 2015. Subcategories of intergovernmental revenue included state revenue sharing (decreased 24.3% to \$93,228), homestead exemption (increased 78.0% to \$54,502), local road assistance (decreased 10.3% to \$51,748), general assistance and other.

Revenues from charges for services, licenses and permits, and other revenues increased 1.9%, comprising 5.2% of total revenue in 2011 and 4.8% in 2015.

Miscellaneous revenues decreased 10.4%, comprising 4.8% of total revenues in 2011 and 3.9% in 2015.

<b>Revenues - Total Government Funds for the years ending June 30th</b>						
<b>Categories</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Change</b>
Property Taxes	2,913,726	3,003,461	3,129,831	3,174,355	3,319,486	13.9%
Excise Taxes	346,185	353,706	362,284	390,392	413,143	19.3%
Intergovernmental	264,241	273,234	307,730	214,670	212,947	-19.4%
Charges for services	204,391	186,518	198,911	152,303	208,291	1.9%
Investment income, net	13,681	84,614	30,692	135,541	22,758	66.3%
Misc. revenue	190,240	323,624	125,165	44,295	170,423	-10.4%
<b>Total</b>	<b>3,932,464</b>	<b>4,225,157</b>	<b>4,154,613</b>	<b>4,111,556</b>	<b>4,347,048</b>	<b>10.5%</b>

Source: Town Annual Reports, Statement E

Note: Percentages are rounded.

Total expenditures increased 26.3% from 2011 to 2015. The largest expense, education (over which municipal government has no control) increased 8.9% over the last five years, comprising 49.9% of total expenditures in 2011 and 43.1% of total expenditures in 2015.

General government (administration, building maintenance, office personnel, cable tv, stipends, assessor and insurance) increased 9.6% over the same period, comprising 10.4% of total expenditures in 2011 and 9.0% in 2015.

Public safety (fire department, ambulance, plan/code enforcement, animal control and hydrant rental) increased 3.8% over the period, comprising 8.3% of total expenditures in 2011 and 6.8% in 2015.

Highways and bridges (public works, paving/road construction, streetlights, mowing/non roads, and birdhouses) increased 74% over the same period, comprising 15.3% of total expenditures in 2011 and 21.1% in 2015.

County tax increased 2.6%, comprising 5.6% of total expenditures in 2011 and 4.6% in 2015.

Unclassified increased 30.1%, comprising 5.0% of total expenditures in 2011 and 5.2% in 2015. The three largest subcategories in Unclassified in 2015 were Dispatch/RCC (\$58,501), Cemeteries (\$33,769), and Social Security (\$33,198).

<b>Expenditures - Total Government Funds for the years ending June 30th</b>						
<b>Categories</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Change</b>
General Government	374,993	364,785	390,853	385,150	411,090	9.6%
Public Safety	297,876	291,344	286,768	282,312	309,342	3.8%
Health and sanitation	45,433	45,731	46,256	45,108	43,307	-4.7%
Highway and bridges	551,896	649,628	739,326	850,385	960,373	74.0%
Recreation and library	8,121	9,061	9,575	5,319	8,938	10.1%
Education	1,802,009	1,892,986	1,949,329	1,959,822	1,961,872	8.9%
County tax	202,601	206,077	203,027	212,719	207,827	2.6%
Debt service principal	11,500	-	-	-	0	-
Debt service interest	376	-	-	-	564	-
Unclassified	181,538	249,131	245,764	223,075	236,135	30.1%
Capital outlay	0	544,034	68,915	40,593	416,008	-
Program expenditures	131,301	-	-	-	-	-
<b>Total</b>	<b>3,607,644</b>	<b>4,252,777</b>	<b>3,939,813</b>	<b>4,004,483</b>	<b>4,554,892</b>	<b>26.3%</b>
Excess (deficiency) of revenue	324,820	(27,620)	214,800	107,073	(207,844)	-164.0%

Source: Town Annual Reports, Statement E

Note: Percentages are rounded.

- (2) Describe means of funding capital items (reserve funds, bonding, etc.) and identify any outside funding sources.

Capital investments are funded through capital reserve project funds supported by property tax revenues town-wide, intergovernmental revenues (State aid), grants and loans from federal and State sources, and from municipal bonds. The Town does not have tax increment financing districts. Non-governmental (outside) funding sources have recently included gifts, donations from ---.

<b>Nonmajor Permanent Funds as of June 30, 2015</b>	
<b>Name</b>	<b>Fund Balances</b>
Cemetery	232,109
Kinniston Memorial	75,252
Doughty Fund	13,188
Thurston Memorial	35,622
Alumni Scholarship	15,061
Thurston Worthy Poor	95,402
J Pullen Investment	45,557
J Pullen Recreation	12,684
Frank & Gertrude Rowe	15,614
Heald Scholarship	37,867
W Pullen Scholarship	373,128
<b>Total</b>	<b>951,484</b>

Source: Town Annual Report 2015-2016

- (3) Identify local and state valuations and local mil rates for the last five (5) years.

The local valuation of Union decreased 1.6% in the most recent five-year period for which this information is available. Over the same period, the homestead exemption valuation decreased 4.6% to total \$6,840,000 in 2015.

<b>Union Local Valuations</b>						
<b>Category</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Change</b>
Total Taxable	217,194,800	217,654,100	209,745,200	211,427,600	213,709,500	-1.6%

Source: Town Annual Reports Note: Percentages are rounded.

The State valuation of the Town decreased 4.3% in the last five years.

<b>Union State Valuations</b>					
<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Change</b>
235,950,000	235,350,000	231,250,000	225,550,000	225,700,000	-4.3%

Source: Maine Revenue Services Note: Percentages are rounded.

The Town's mil rate increased 15.7% in the last five years.

<b>Union Mil Rates</b>					
<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>Change</b>
14.00	14.40	15.10	15.90	16.20	15.7%

Source: Town Annual Reports Note: Percentages are rounded.

- (4) *How does total municipal debt (including shares of county, school and utility) compare with the statutory and Maine Bond Bank recommended limits on such debt?*

Title 30-A M.R.S.A. Section 5702 contains a limitation on the amount of debt that municipalities may incur. A municipality cannot issue debt (for purposes other than school, storm or sanitary sewer, energy facility or for municipal airports) that would exceed 7.5% of the municipality's last full State valuation. The statute contains additional limits for school, storm or sanitary sewer, energy facility and for municipal airports. There is an overall debt limit for all types of debt of 15% of the municipality's last full State valuation. At the end of fiscal year 2015, the total debt (general obligation and proprietary bonds and notes) was \$86,484 (Public Works truck). In 2016, the Town bonded for roadwork and it has incurred a debt of 905,358.13 as of 6/30/16. The Town has never exceeded the statutory limit.

The Maine Bond Bank has no set policy on the amount of total debt a municipality can or should have outstanding other than to be sure that the municipality is in compliance with the provisions of Maine law regarding limitations on local debt. The Maine Bond Bank looks at outstanding debt, both direct and contingent, from such perspectives as debt per capita, percentage of operating budget to debt service, and total debt among other factors.

General obligation bonds can be issued for the construction or acquisition of major capital assets. The security pledged for the bonds is the general taxing power of the government. General obligation bonds are usually either term bonds, which are due in total on a single date, or serial bonds, which are repaid in periodic installments over the life of the issue.

A proprietary fund is a business-like fund that can be issued by a state or local government. Examples of proprietary funds include enterprise funds and internal service funds. Enterprise funds provide goods or services to the general public for a fee. Internal service funds account for goods and services provided by one department or agency to another department or agency of the governmental unit (or to other governmental units) on a cost-reimbursement basis.

## CAPITAL INVESTMENT PLAN

*The comprehensive plan must include a capital investment plan that:*

- (1) Identifies and summarizes anticipated capital investment needs within the planning period in order to implement the comprehensive plan, including estimated costs and timing, and identifies which are municipal growth-related capital investments;*
- (2) Establishes general funding priorities among the community capital investments; and*
- (3) Identifies potential funding sources and funding mechanisms.*

For (1) through (3), see the table below titled Union Capital Investment Plan Summary 2017-2027.

### **Purpose and Definition**

The purpose of a capital investment plan (CIP) is to establish a framework for financing needed capital investments. A CIP guides budgeting and expenditures of tax revenues and identifies needs for which alternative sources of funding such as loans, grants or gifts will be sought.

Capital investments include the repair, renewal, replacement or purchase of capital items. Capital investments differ from operating expenses or consumables. The expense of consumables is ordinarily budgeted as operations. Capital investments generally have the following characteristics: they are relatively expensive (typically having an acquisition cost of \$5,000 or more); they usually do not recur annually; they last for several years (often having a useful life of three or more years); and they result in fixed assets. Capital items can include equipment and machinery, buildings, real property, utilities and long-term contracts and are funded through the establishment of financial reserves.

Capital investments are prioritized each year in the budget process based on the availability of funds and the political will of the community. A complete CIP describes expected yearly investment and allows for both changes in priorities and reduction of available funds. The CIP is intended to prevent a large capital investment from occurring in a single fiscal year. The unexpected purchase of a sizeable investment can overburden the tax rate and cause large fluctuations in tax bills from year to year. The annual provision for eventual replacement of capital investments depends on the useful life of the capital investments. It is important that capital investments be financially accounted for each fiscal year, minimizing later expenses.

For the purposes of this plan, the total costs have been recognized with an indication of the expected period for each item that is desired based upon priority ratings. The Town currently has a complete capital investment plan that will provide for a yearly allocation of available and applicable funds. Each year any necessary changes will be made to the CIP and it will be included in the annual budget. Each year the Budget Committee will review the funding requests and make a recommendation for Select Board review.

## Priority Rankings

The capital investments identified below were assigned a priority based on the listed ratings. Logically, “A” investments would be implemented prior to “B” and so on. Lower priority items may be funded ahead of schedule if higher priority items have already been funded or are prohibitively expensive, or if other sources of revenue (such as donated funds) become available. In order to fund capital investment projects it is necessary to begin to identify funding sources and set aside funds in advance of the projected time of funding.

- A. Immediate need. A capital investment rated in this category would typically remedy a danger to public health, safety and welfare.*
- B. Necessary, to be accomplished within two to five years. A capital investment rated in this category would typically correct deficiencies in an existing facility or service.*
- C. Future investment or replacement, to be accomplished within five to ten years. A capital investment rated in this category would be desirable but is of no urgency. Funding would be flexible and there would be no immediate problem.*
- D. Desirable, but not necessarily feasible within the ten year period of this Comprehensive Plan.*

Projects referenced in this Comprehensive Plan and existing reserve accounts are the basis for this capital investment plan and have been incorporated into the table below. As well, State and federal mandates necessitating some of these projects have been noted in the table. The need for each project is shown in parentheses.

<b>Union Capital Investment Plan Summary 2017-2027</b>					
<b>Comprehensive Plan Chapter/Town Dept.</b>	<b>Anticipated Item and (Need)</b>	<b>Estimated Cost</b>	<b>Priority</b>	<b>Responsible Party (ies)</b>	<b>Possible Funding Sources</b>
Recreation	Multi-purpose field	\$750,000	C	Recreation Committee	Grants
Public Facilities and Services/Public Works	Wheeler (Two Rear Axles) Public Works Truck	\$190,000	A	Town Manager, Selectmen	Taxes
Public Facilities and Services/Public Works	Single Rear Axle Public Works Truck	\$160,000	A	Town Manager, Selectmen	Taxes
Public Facilities and Services/Public Works	Backhoe	\$85,000	A	Town Manager, Selectmen	Taxes
Public Facilities and Services/Public Works	Grader	\$250,000	B	Town Manager, Selectmen	Taxes

**Union Capital Investment Plan Summary 2017-2027**

<b>Comprehensive Plan Chapter/Town Dept.</b>	<b>Anticipated Item and (Need)</b>	<b>Estimated Cost</b>	<b>Priority</b>	<b>Responsible Party (ies)</b>	<b>Possible Funding Sources</b>
Public Facilities and Services/Public Safety	Fire Truck	\$250,000	A	Town Manager, Selectmen	Taxes
Public Facilities and Services/Public Safety	Fire Truck	\$225,000	A	Town Manager, Selectmen	Taxes
Public Facilities and Services/Public Safety	Ambulance	\$150,000	A	Town Manager, Selectmen	Taxes

Source: Town

## EXISTING LAND USE

### Introduction

This chapter summarizes existing development in Union, trends observed, current regulations and an estimate of the amount of land needed to accommodate growth for the ten-year planning period. Information from the other chapters of this comprehensive plan has been incorporated in the analyses of this chapter. For land use recommendations, see the Future Land Use Plan.

### State Goal

*None required.*

### Analyses

- (1) *Is most of the recent development occurring: lot by lot; in subdivisions; or in planned developments? Is recent development consistent with the community's vision?*

As noted in the Housing Chapter, according to the Planning Board/Code Enforcement Office, between 2000 and 2014, 187 housing units constructed/located in the Town were single-family homes (stick-built and modular), while 15 were mobile homes (manufactured with chassis). Seven multi-family units were constructed during this period. Building activity was stronger prior to the recession. New homes were built Town-wide, and on these roads in particular: Heald Highway (Route 17), North Union Rd, Sennebec Rd, and Depot St (Route 235). Generally, this development was spread-out.

Since 2001, there have been three new short subdivision dead-end roads built (Harding Ln, West View Ln, and an unnamed road), nine lots in total, which were designed based upon site conditions and surrounding patterns of development. No cluster developments were constructed during this period.

Modest growth is likely to continue in waterfront areas (for residential uses in appropriately designated shoreland zones) and throughout the community following recent and longer-term trends. There is ample commercial and residential space for the projected development over the next ten years. Care should be taken to steer growth away from the more rural and forested areas and instead into areas with access to existing infrastructure, roads and services, in line with the community vision for development, which has somewhat been the case with much of the recent development seen.

- (2) *What regulatory and non-regulatory measures would help promote development of a character, and in locations that are consistent with the community's vision?*

The current Land Use Ordinance, which also includes Shoreland Zoning provisions, amended in 2015, is generally consistent with the community vision. This ordinance allows single-family dwelling units town-wide. Mobile homes and multi-units are allowed on individual lots in most places (Village and Rural Districts), excluding the Commercial and Industrial Districts and these

shoreland districts: Stream Protection and Resource Protection. The minimum lot area per dwelling unit is 20,000 square feet in the Village District and 60,000 square feet in the Rural District. The High Elevation Areas Overlay District has a three-acre minimum lot size, with five percent maximum lot coverage for areas at or above 400 feet in elevation. Within the shoreland zoning districts, the minimum lot size is 60,000 square feet per residential dwelling unit.

Shoreland Zoning has somewhat reduced the pressure on environmentally sensitive areas, and along with limitations in uses and other restrictions in Resource Protection areas to protect the natural resources that define the rural qualities of Union in accordance with the community's vision. Similarly, the High Elevation Areas Overlay District has as its purpose to protect sensitive high-elevation areas from high-density or other high-impact development, and to protect the rural character of the Town as reflected in the views of the hills from lower lying regions.

See the Natural Resources Chapter and the Water Resources Chapter. Union's current land use ordinances reflect the recommendations of the prior comprehensive plan, which was adopted by voters in 2005.

Non-regulatory measures for protection of rural areas include the voluntary use of conservation easements by landowners, and participation in state current use tax program for farming, open space and forestry activities. See the Agricultural and Forestry Resources Chapter.

Non-regulatory measures to encourage development in more suitable areas, around the traditional areas of settlement, including municipal investment in infrastructure improvements might be worth pursuing where economically feasible and in line with town voter approval. See the Housing Chapter, Economy Chapter and Public Facilities and Services Chapter.

(3) *Is the community's administrative capacity adequate to manage its land use regulation program, including planning board and code enforcement officer?*

With the limited projected growth, the present administrative capacity seems adequate. The Planning Board has not been very busy and Town voters have land use ordinances that have worked well. The Code Enforcement Officer has handled the limited pace of growth and the Town Office staff has been able to assist residents on issues in a timely manner.

The Town should support its Code Enforcement Officer and provide him or her with the tools, training, and support necessary to enforce land use regulations, and ensure that the Code Enforcement Officer continues to be certified in accordance with Title 30-A M.R.S.A. Section 4451.

(4) *Are floodplains adequately identified and protected? Does the community participate in the National Flood Insurance Program? If not, should it? If so, is the floodplain*

*management ordinance up to date and consistently enforced? Is the floodplain management ordinance consistent with state and federal standards?*

The Town enacted an amended Floodplain Management Ordinance in 2016. It meets Federal and State standards and is enforced locally. Recent changes to the National Floodplain Management Program and floodplain maps have been incorporated into the local ordinance under the timeframe set by FEMA. The Town participates in the National Flood Insurance Program.

### ***Conditions and Trends***

*Minimum data required to address Analyses:*

- (1) *An existing land use map, by land use classification (such as mixed-use, residential, commercial, institutional, industrial, agricultural, commercial forests, marine, park/recreational, conserved, and undeveloped land).*

See the maps titled Land Cover, Current Land Use Districts, and Current Land Use Shoreland Zoning Districts.

- (2) *A summary of current lot dimensional standards.*

See the response to (4) below.

- (3) *A description or map identifying the location of lots and primary structures created within the last ten years. Include residential, institutional, commercial, and industrial development.*

As noted in the Housing Chapter, according to the Planning Board/Code Enforcement Office, between 2000 and 2014, 188 housing units constructed/located in the Town were single-family homes (stick-built and modular), while 15 were mobile homes (manufactured with chassis). Seven multi-family units were constructed during this period. Building activity was stronger prior to the recession. New homes were built Town-wide, and on these roads in particular: Heald Highway (Route 17), North Union Rd, Sennebec Rd, and Depot St (Route 235). Generally, this development was spread-out.

Since 2001, there have been three new short subdivision dead-end roads built (Harding Ln, West View Ln, and an unnamed road), nine lots in total, which were designed based upon site conditions and surrounding patterns of development. No cluster developments were constructed during this period.

Commercial development has occurred mostly along Route 17. Home occupations are found town wide. Industrial development has a small amount of activity on designated portions along or near Route 17 and includes a cell tower, transportation facility and tractor supply expansion.

- (4) *Provide a brief description of existing land use regulations and other tools utilized to manage land use, including shoreland zoning, floodplain management, subdivision, site plan review, and zoning ordinances.*

Union’s current Land Use Ordinance reflects the recommendations of the prior comprehensive plan, which was adopted by voters in 2005. As noted above, the Land Use Ordinance, which also includes Shoreland Zoning provisions, amended in 2015, allows single-family dwelling units town-wide. Mobile homes and multi-units units are allowed on individual lots in most places (Village and Rural Districts), excluding the Commercial and Industrial Districts and these shoreland districts: Stream Protection and Resource Protection. The minimum lot area per dwelling unit is 20,000 square feet in the Village District and 60,000 square feet in the Rural District. Within the shoreland zoning districts, the minimum lot size is 60,000 square feet per residential dwelling unit. The High Elevation Areas Overlay District has a three-acre minimum lot size, with five percent maximum lot coverage, for areas at or above 400 feet in elevation.

Residential multi-units are also regulated under the Site Plan Review provisions in the Land Use Ordinance, amended in 2015. Mobile home parks are allowed in the Rural District. Mixed uses are allowed in most districts, and are subject to dimensional standards, and for some uses, site plan review standards as well.

**(Table 1.10-2.) Standard Dimensional Requirements by District**

Dimension	Village	Commercial	Industrial	Rural
Minimum lot size (sq. ft.)	20,000	60,000	10A*	60,000
Minimum lot size for dwellings (sq. ft.)				
Single-family	20,000	60,000	N/A	60,000
Single-family w. accessory apartment	20,000	60,000	N/A	60,000
Two-family	40,000	90,000	N/A	90,000
Multi-family				
first dwelling unit	20,000	N/A	N/A	60,000
each additional dwelling unit	20,000	N/A	N/A	30,000
Minimum lot size for cluster housing				
Overall lot size (sq. ft.)	20,000	N/A	N/A	60,000
Lot size per dwelling unit (sq. ft.)	20,000			20,000
Minimum street frontage (ft.)	100	150	500*	150
Minimum front yard from edge of right-of-way (ft.)**	25	30	200*	25
Minimum side and rear yard (ft.)**	20	20	200*	20
Maximum building height (ft.)				
Residential	35	35	N/A	35
Nonresidential	50	50	50	50
Maximum lot coverage by buildings	20%	20%	25%	10%***

\* Dimensional requirements for a lot in the Industrial District are defined for a single-lot district, such as an industrial park in single ownership. For more-complex lot configurations,

further refinements may be made by amendment in the process of establishing the district through the procedure specified in 1.5.8 and 1.8.1.3.

\*\* The minimum front yard setback shall be required for each yard abutting a public right-of-way.

\*\*\* Maximum lot coverage in the Rural District shall be 15 percent for Town-owned properties used for municipal purposes. Maximum lot coverage in the High Elevation Overlay District (see 1.11) shall be 5 percent.

<b>Union Shoreland Dimensional Standards</b>		
4.15.1.1. Table of Minimum Lot Area and Minimum Shore Frontage	Minimum Lot Area (sq. ft.)	Minimum Shore Frontage (ft.)
Residential per dwelling unit	60,000	200
Governmental, Institutional, Commercial or Industrial per principal structure	60,000	200
Public and Private Recreational Facilities	40,000	200

Sources: Town of Union Land Use Ordinance, Shoreland Zoning provisions

Town wide, Shoreland Zoning provides protection around waterbodies and wetlands limiting impervious surfaces and certain uses within setbacks and districts. Impervious surface percentage maximums, as set in shoreland zoning provisions, can be effective in reducing the amount of runoff into waterbodies. In especially sensitive areas, resource protection designations limit or prohibit development. Stormwater management/drainage for erosion and sediment control are noted in the Land Use Ordinance, including Site Plan Review provisions and Shoreland provisions, as well as in the Subdivision Ordinance. These standards can promote retention of stormwater on the property to minimize runoff off-site. It is believed that these provisions are reasonably effective overall. Similarly, as noted, the High Elevation Areas Overlay District has as its purpose to protect sensitive high-elevation areas from high-density or other high-impact development, with a larger minimum lot size and a smaller lot coverage maximum than found in the Rural District. Taken together, these standards also help to reduce stormwater runoff.

The Subdivision Ordinance, most recently amended in 2015, regulates subdivision development following state review criteria requirements. It has been used in the review of subdivision proposals and has been found to be adequate. It includes provisions for the reservation of open space as follows: “In any subdivision larger than 35 acres, or more than 20 lots or dwelling units, the developer shall provide up to 10% of his total area as open space. In any subdivision of 35 acres or less, the Board shall request the developer to provide up to 10% of his total area as open space. The developer may instead make a payment-in-lieu-of dedication into a municipal land acquisition fund (Section 10, B.1).”

The Site Plan Review provisions regulate new and altered commercial, retail, industrial, institutional and multiple family dwellings consisting of three or more attached units, and related accessory structures. It does not regulate single-family or two-family dwellings and/or accessory buildings, home occupations or agricultural and forest management practices.

Agricultural and forestry uses are allowed town-wide with limitations in the resource protection districts of the shoreland zone, which typically includes wetland areas.

As noted above, the Town amended its Floodplain Management Ordinance in 2016. It meets Federal and State standards and is enforced locally. Recent changes to the National Floodplain Management Program and floodplain maps have been incorporated into the local ordinance under the timeframe set by FEMA. The Town participates in the National Flood Insurance Program.

- (5) *Estimate the minimum amount of land needed to accommodate projected residential, institutional, commercial, or industrial development at least ten (10) years into the future.*

As described in the Housing Chapter, the Census records that 292 dwellings (net) were built/located in the Town from 1990 to 2014, for an annual average of almost 11.7 units. For planning purposes, up to an estimated 117 units of new housing is forecasted to be constructed, about 9 per year on average for 13 years from 2015 onward, for a projection of 1,287 total units (occupied and vacant) by the year 2027. Some units currently classified by the Census as vacant could become occupied year-round, offsetting the need for an estimated 17 new units. It is also likely that new seasonal housing will be constructed in addition to the construction of new year-round units. The 117 new units would require between 54 acres and 162 acres, based upon the amount of new units built within the Village District (20,000 square foot minimum lot size) and the Rural District/Shoreland Districts (60,000 square foot minimum lot size). Given current trends, it is likely that more than half of new development would occur in the Rural District. However, the Village District might be expanded, or a new district with similar standards created to allow for more development on 20,000 square foot lots. If this development occurred within conventional subdivisions, approximately an additional 8 to 25 acres would be needed for new roads and related infrastructure. If development were permitted for cluster/conservation subdivisions it could occur on smaller lots, reducing the developed area for an increase in conserved land. See the Future Land Use Plan Chapter for ordinance amendment recommendations.

Institutional, commercial, or industrial development has been very limited in Union since 2000. Small-scale non-residential uses have occurred, often on lots previously used for other commercial or residential purposes, especially along Routes 17 and 131. It is anticipated that similar conversions will continue, and that there is enough land with road frontage on state roads, which can handle increased development, and traffic within the designated growth areas for the planning period. See the Future Land Use Plan and map titled Future Land Use for the identified growth areas.

### ***Policies***

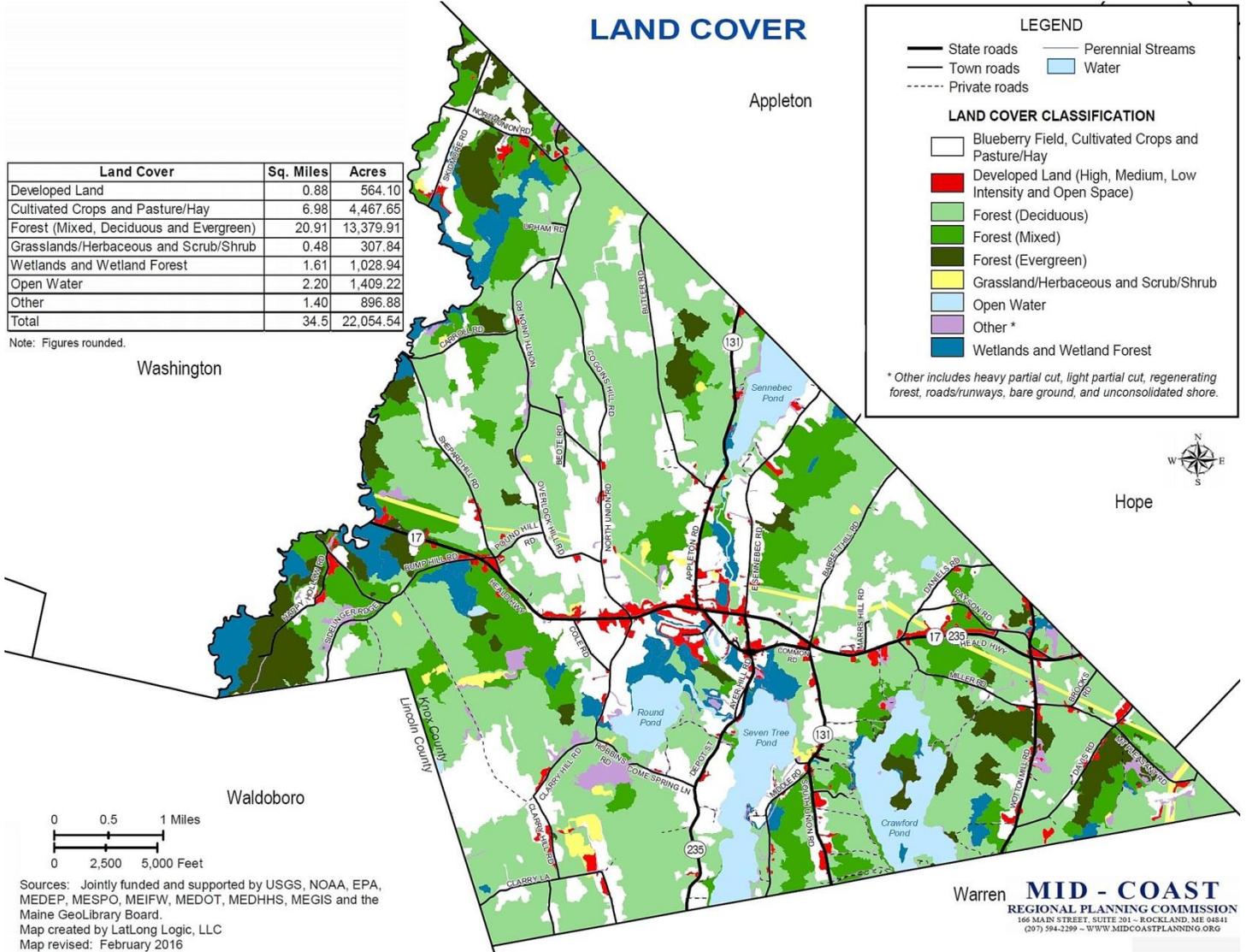
*None Required.* See the Future Land Use Plan.

### ***Strategies***

*None required.* See the Future Land Use Plan.

# Land Cover

## LAND COVER



Land Cover	Sq. Miles	Acres
Developed Land	0.88	564.10
Cultivated Crops and Pasture/Hay	6.98	4,467.65
Forest (Mixed, Deciduous and Evergreen)	20.91	13,379.91
Grasslands/Herbaceous and Scrub/Shrub	0.48	307.84
Wetlands and Wetland Forest	1.61	1,028.94
Open Water	2.20	1,409.22
Other	1.40	896.88
<b>Total</b>	<b>34.5</b>	<b>22,054.54</b>

Note: Figures rounded.

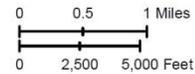
**LEGEND**

- State roads
- Town roads
- Private roads
- Perennial Streams
- Water

**LAND COVER CLASSIFICATION**

- Blueberry Field, Cultivated Crops and Pasture/Hay
- Developed Land (High, Medium, Low Intensity and Open Space)
- Forest (Deciduous)
- Forest (Mixed)
- Forest (Evergreen)
- Grassland/Herbaceous and Scrub/Shrub
- Open Water
- Other \*
- Wetlands and Wetland Forest

*\* Other includes heavy partial cut, light partial cut, regenerating forest, roads/runways, bare ground, and unconsolidated shore.*

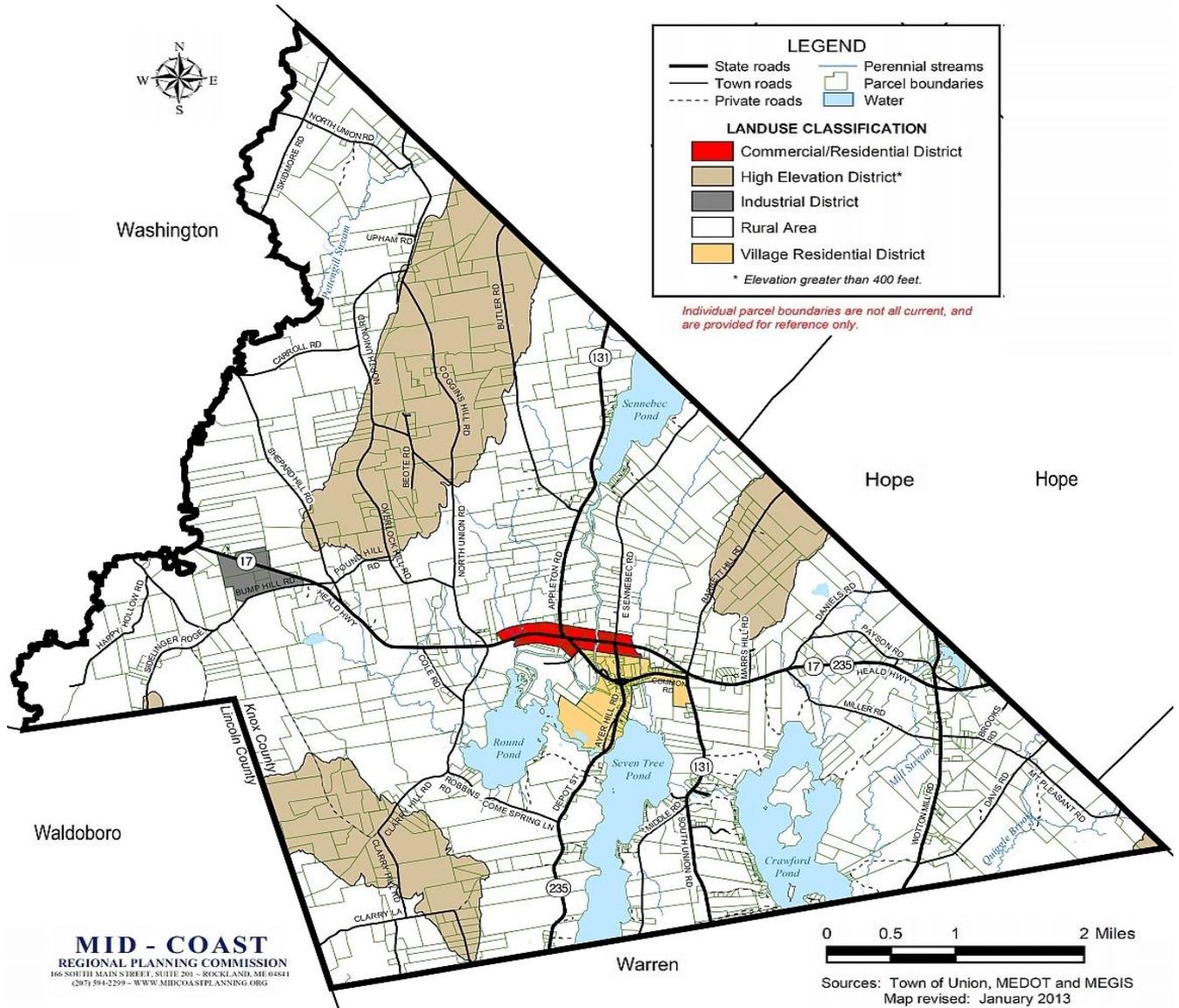


Sources: Jointly funded and supported by USGS, NOAA, EPA, MEDEP, MESPO, MEIFW, MEDOT, MEDHHS, MEGIS and the Maine GeoLibrary Board.  
 Map created by LatLong Logic, LLC  
 Map revised: February 2016

Warren **MID - COAST**  
 REGIONAL PLANNING COMMISSION  
 166 MAIN STREET, SUITE 201 - ROCKLAND, ME 04841  
 (207) 594-2389 - WWW.MIDCOASTPLANNING.ORG

Sources: USGS, NOAA, EPA, Maine State Agencies

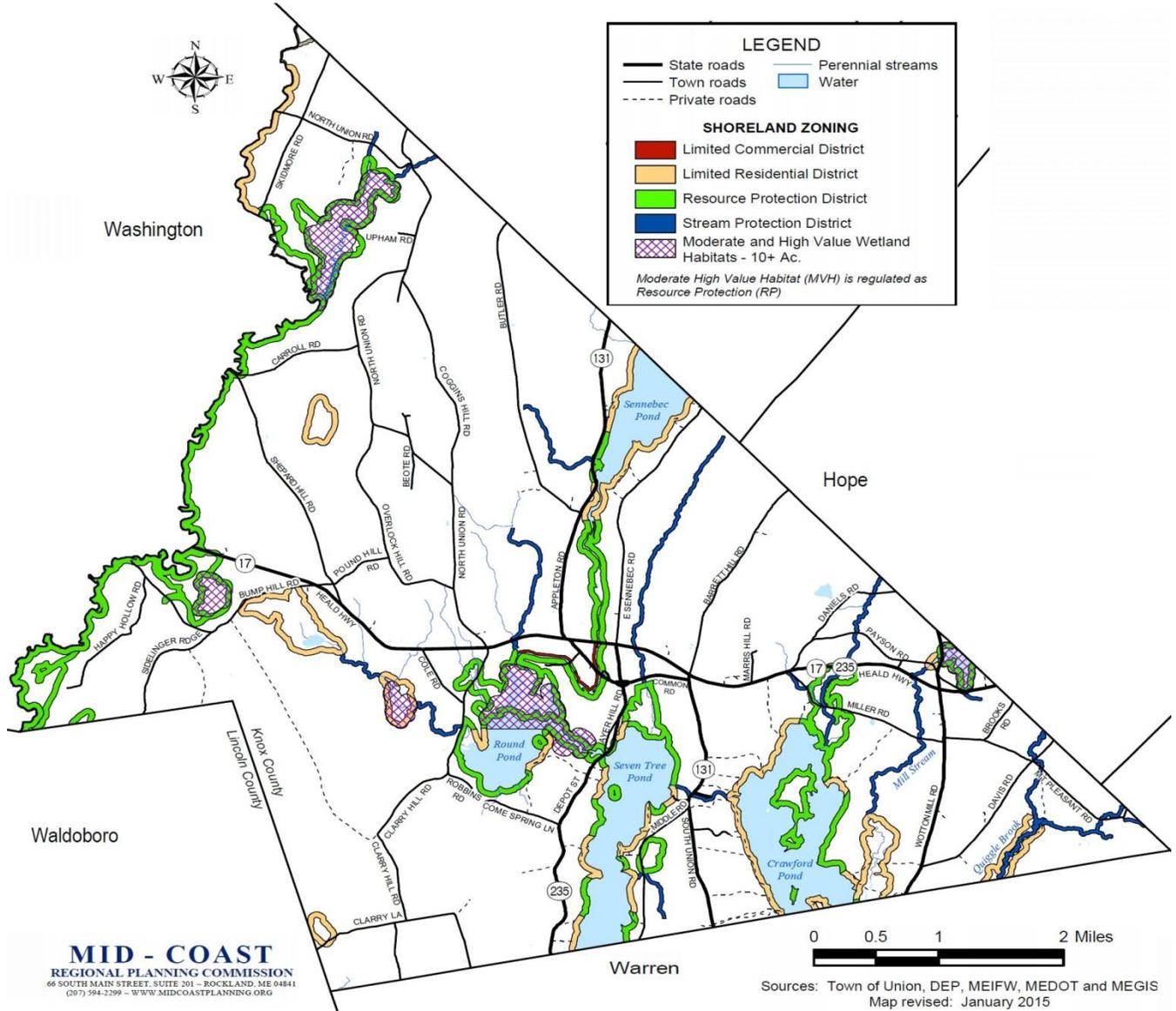
# Current Land Use Districts *Union Land Use Districts*



Source: Town of Union Land Use Ordinance

# Current Land Use Shoreland Zoning Districts

## Union Shoreland Zoning with State-Identified Moderate and High Value Habitats



Source: Town of Union Shoreland Zoning Ordinance

# FUTURE LAND USE PLAN

## Introduction

This proposed land use plan has been formed by considering the historical development of the community and the current natural resource constraints in order to best accommodate future growth. The goal of this chapter is to encourage the types of development and conservation that residents support. The recommendations and implementation strategies described here have been shaped by the inventory, analyses and policies developed in each chapter of this Comprehensive Plan and by public comments and the public opinion survey results. Consideration has been given both to existing land use patterns and to the expected future land use needs. This Comprehensive Plan is not a land use ordinance, but it can serve as the legal foundation of current and future land use ordinances, as the previous Comprehensive Plan has done.

### *State Goal*

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

## Land Use Table

The State definitions of land based upon predominant uses are shown in the next table along with the current corresponding Union Land Use Ordinance Districts and Shoreland Zoning Districts. Recommendations for the Future Land Use Plan are included in the next table.

<b>Land Use Table: Current Area Designations and Future Land Use Plan Recommendations</b>	
<b>State Area Definitions</b>	<b>Union Current Districts, Current Shoreland Zoning (SZ) Districts, and Future Land Use Plan Recommendations</b>
<p><b>Growth Area:</b> an area that is designated in a community's comprehensive plan as suitable for orderly residential, commercial, or industrial development, or any combinations of those types of development and related infrastructure, and into which most development projected over 10 years is directed.</p>	<ul style="list-style-type: none"> <li>• <b>Village District</b> This is a mixed-use area. It comprises much of the principal growth area as recommended in the 2005 Comprehensive Plan, excluding wetlands, and as adopted in the Land Use Ordinance. The current minimum lot size of 20,000 square feet (approximately half an acre) is recommended to remain. A new Village District is also proposed on and north of Route 17 near the Hope town line. Taken together, these areas total about 470 acres and allow for the forecasted development over the planning period.</li> <li>• <b>Commercial/Residential District</b> This is a predominately commercial district along Route 17. It is recommended to continue as a growth area. It totals about 127 acres and allows for forecasted development over the planning period. The current lot minimum size of 60,000 square feet is recommended to</li> </ul>

**Land Use Table: Current Area Designations and Future Land Use Plan Recommendations**

State Area Definitions	Union Current Districts, Current Shoreland Zoning (SZ) Districts, and Future Land Use Plan Recommendations
	remain. <ul style="list-style-type: none"> <li>• SZ Limited Commercial District This district is proposed to continue to support existing commercial activity.</li> <li>• Industrial District This district (about 114 acres) is proposed to support potential activity anticipated during the next ten years and beyond.</li> </ul>
<p><b>Critical rural area:</b> means a rural area that is specifically identified and designated by a community’s comprehensive plan as deserving maximum protection from development to preserve natural resources and related economic activities that may include, but are not limited to, significant farmland, forest land or mineral resources; high-value wildlife or fisheries habitat; scenic areas; public water supplies; scarce or especially vulnerable natural resources; and open lands functionally necessary to support a vibrant rural economy.</p>	<ul style="list-style-type: none"> <li>• Currently Conserved Areas (Parks, Reserves, Conservation Easements)</li> <li>• SZ Resource Protection District</li> <li>• SZ Resource Protection for Moderate and High Value Freshwater Wetlands</li> <li>• SZ Steam Protection District</li> <li>• High Elevation Area Overlay District (with a three-acre minimum lot size)</li> </ul> <p>These areas include the more sensitive rural lands that have received additional regulation in municipal land use ordinances adopted to protect environmental quality, especially water quality. Those standards are recommended to continue in this plan at the same density levels, with consideration of additional standards as included in the Strategies section.</p>
<p><b>Rural area:</b> a geographic area that is identified and designated in a community's comprehensive plan as an area that is deserving of some level of regulatory protection from unrestricted development for purposes that may include, but are not limited to, supporting agriculture, forestry, mining, open space, wildlife habitat, fisheries habitat, and scenic lands, and away from which most development projected over 10 years is diverted.</p>	<ul style="list-style-type: none"> <li>• Rural District</li> <li>• SZ Limited Residential District</li> </ul> <p>These include rural lands that allow less dense mixed uses than the village district, as adopted in municipal land use ordinances. Those standards are recommended to continue in this plan at the same density levels (minimum lot size of 60,000 square feet), with consideration of additional standards as included in the Strategies section.</p>
<p><b>Transitional area:</b> an area that is designated in a community’s comprehensive plan as suitable for a share of projected residential, commercial, or industrial development but that is neither intended to accept the amount or density of development appropriate for a growth area nor intended to provide the level of protection for rural resources afforded in a rural area or critical rural area.</p>	None

## Required Elements for the Future Land Use Plan

See the map titled Future Land Use at the end of this chapter for the location of growth, rural critical areas, and rural areas. The Summary Natural Constraints map shows natural constraints to development identified in this plan including wetlands and habitats. Growth and rural areas are defined in the Area Designations Table above. See the Strategies section below for the recommendations of this Future Land Use Plan.

## Analyses of Future Land Uses

*(1) Does the future land use plan align and/or conflict with the community's vision statement?*

The future land use plan aligns with the community vision statement, which is embraced in the recommendations and implementation strategies of this plan. Most residents seek smart growth. Accordingly, this plan makes recommendations that respect the land and direct growth toward those areas around the Village Common and East Union that can accommodate such development.

*(2) Is the configuration of the growth areas shaped by natural opportunities and/or constraints (i.e. the physical suitability or unsuitability of land for development)? The location of public facilities? The transportation network?*

The growth areas take into account existing infrastructure, historic patterns of development, and sensitive natural resources. The growth anticipated over the next ten-year planning period can be accommodated in the designated growth areas, which are located near existing public facilities, and the principle transportation routes.

*(3) How does the future land use plan relate to recent development trends?*

This future land use plan takes into account both historic and recent development trends and suggests review and amendments to municipal ordinances to provide for the orderly continuation of development while protecting natural resources.

*(4) Given current regulations, development trends and population projections, estimate how many new residential units and how much commercial, institutional and/or industrial development will likely occur in the planning period? Where is this development likely to go?*

As noted in the Population and Demographics Chapter, the State projects that Union's population will decline to 2,221 persons in 2027. For planning purposes, the Town is forecast to have up to 2,300 year round residents by 2027. The slowing of growth and potential for decline, in contrast with previous decades, will allow the Town the time to better plan for future development, and will limit pressure on local government to expand services.

As described in the Housing Chapter, the Census records that 292 dwellings (net) were built/located in the Town from 1990 to 2014, for an annual average of almost 11.7 units. For

planning purposes, up to an estimated 117 units of new housing is forecasted to be constructed, about 9 per year on average for 13 years from 2015 onward, for a projection of 1,287 total units (occupied and vacant) by the year 2027. Some units currently classified by the Census as vacant could become occupied year-round, offsetting the need for an estimated 17 new units. It is also likely that new seasonal housing will be constructed in addition to the construction of new year-round units. The 117 new units would require between 54 acres and 162 acres, based upon the amount of new units built within the Village District (20,000 square foot minimum lot size) and the Rural District/Shoreland Districts (60,000 square foot minimum lot size). Given current trends, a sizable amount of new development might occur in the Rural District. However, a newly proposed growth area in the eastern portion of the Town could offset that trend, and development in cluster/conservation subdivisions could also occur on smaller lots, reducing the developed area for an increase in conserved land.

Institutional, commercial, or industrial development has been limited in Union since 2000. Small-scale non-residential uses have occurred, often on lots previously used for other commercial or residential purposes, especially along Route 17. It is anticipated that similar conversions could continue, and that there is enough land for the planning period with road frontage on state roads that can handle increased development within the designated growth areas.

It is projected that commercial growth will be small. As noted in the Economy Chapter, according to the Maine Department of Labor, a net of nine new businesses were located in Union from 2004 to 2014, for 69 firms in total, employing 441 people on average. Union businesses employed 56 more people at the end of this period. With the exception of Union Farm Equipment, these businesses created little commercial construction. Most were home businesses with minimum or no commercial impact. It is projected that future growth will be similar in scale and not require major changes to the land use ordinance. However, adopting improved design standards could improve the acceptability of new businesses especially when located near existing residences and in areas with high visibility including along Route 17.

Land use ordinances should be amended as needed to better protect environmentally sensitive areas and provide for additional affordable housing opportunities as described in the Housing Chapter. Some additional residential rental housing could occur with the introduction of more flexible standards for accessory/in-law apartments (see the Housing Chapter). Such options would assist lower income and elderly residents stay in Town. Currently, affordable rental housing is largely found in larger communities like Rockland.

*(5) How can critical natural resources and important natural resources be effectively protected from future development impact?*

Shoreland Zoning, the Resource Protection and Stream Protection Districts, and the High Elevation Area Overlay District protect critical natural resources. Much of the Town's critical natural resources are located in the shoreland areas. The Strategies section of this plan recommends continuation and enhancement of these zones and districts. As well, this plan suggests the use of conservation easements, cluster subdivisions and low impact development

standards among other recommendations that would protect critical natural resources. See the Strategies section below.

**Policies**

1. *To coordinate the community's land use strategies with other local and regional land use planning efforts.*
2. *To support the locations, types, scales, and intensities of land uses the community desires as stated in its vision.*
3. *To support the level of financial commitment necessary to provide needed infrastructure in growth areas.*
4. *To establish efficient permitting procedures, especially in growth areas.*
5. *To protect critical rural and critical waterfront areas from the impacts of development.*

**Strategies**

The Comprehensive Plan and its Future Land Use Plan are not a land use ordinance, but they can serve as a legal foundation of current and future land use ordinance and strategies for issues that will influence growth within the Town in a manner consistent with public opinion as expressed in public meetings and the results of the 2016 Union Comprehensive Plan survey. Note: The italicized strategies are the state minimum required.

<b>Future Land Use Plan Strategies</b>	<b>Responsible Parties</b>	<b>Timeframe</b>
<i>(1) Assign responsibility for implementing the Future Land Use Plan to the appropriate committee, board or municipal official.</i>	See the strategies below	See timeframes below
<i>(2) Using the descriptions provided in the Future Land Use Plan narrative, maintain, enact or amend local ordinances as appropriate to:</i> <ol style="list-style-type: none"> <li><i>a. Clearly define the desired scale, intensity, and location of future development;</i></li> <li><i>b. Establish or maintain fair and efficient permitting procedures, and explore streamlining permitting procedures in growth areas; and</i></li> <li><i>c. Clearly define protective measures for critical natural resources and, where applicable, important natural resources.</i></li> <li><i>d. Clearly define protective measures for any proposed critical rural areas and/or critical waterfront areas, if proposed.</i></li> </ol>	See the Future Land Use Plan table and narrative above and the strategies below	See timeframes below
<i>(3) Include in the Capital Investment Plan anticipated municipal capital investments needed to support proposed land uses.</i>	Selectmen and Town Meeting Vote See the Capital Investment Plan	Long Term

<b>Future Land Use Plan Strategies</b>	<b>Responsible Parties</b>	<b>Timeframe</b>
(4) <i>Meet with neighboring communities to coordinate land use designations and regulatory and non-regulatory strategies.</i>	Planning Board, Ordinance Review Committee, Selectmen	Midterm
(5) <i>Provide the code enforcement officer with the tools, training, and support necessary to enforce land use regulations, and ensure that the Code Enforcement Officer is certified in accordance with 30-A M.R.S.A. §4451.</i>	Selectmen	Immediate
(6) <i>Track new development in the community by type and location.</i>	Planning Board, Code Enforcement Officer	Immediate and Ongoing
(7) <i>Direct a minimum of 75% of new municipal growth-related capital investments into designated growth areas identified in the Future Land Use Plan.</i>	Selectmen, and Town Meeting Vote	Long Term
(8) <i>Periodically (at least every five years) evaluate implementation of the plan</i>	Planning Board, Code Enforcement Officer	Midterm
(9) Conservation Easements: Encourage the voluntary use of conservation easements for environmentally sensitive properties with critical habitats or scenic and recreational value to the community.	Selectmen, Planning Board,	Immediate and Ongoing
(10) Floodplain Management: Amend the Floodplain Management Ordinance, as needed to meet new federal requirements. Consider potential impact of climate change on land use options and ordinances.	Planning Board, Ordinance Review Committee, Selectmen, and Town Meeting Vote	Immediate
(11) Land Use Ordinance, Site Plan Review: Amend as needed site plan review provisions to protect residential uses from new and expanded commercial uses with harmonious design and year-round buffering, given the mixed-use development pattern that exists and is likely to continue in much of the Town, especially in the Village District and the Commercial/Residential District along Route 17.	Planning Board, Ordinance Review Committee, Selectmen, and Town Meeting Vote	Long Term
(12) Land Use Ordinance: Consider rezoning as a Village District the area shown on the Future Land Use map that is on and north of Route 17 to the Hope town line for mixed-use commercial and residential development on small lots (e.g., 20,000 square feet).	Planning Board, Ordinance Review Committee, Selectmen, and Town Meeting Vote	Midterm

Future Land Use Plan Strategies	Responsible Parties	Timeframe
<p>(13) Land Use Ordinance: From Agricultural and Forestry Resources Chapter: <i>Amend land use ordinances to require commercial or subdivision developments in critical rural areas, if applicable, maintain areas with prime farmland soils as open space to the greatest extent practicable.</i></p> <ul style="list-style-type: none"> <li>The Town should review the potential of conservation subdivision regulations in sensitive areas. To preserve open spaces, forestland, and farm fields and should consult with Maine Forest Service District Forester and Soil and Water Conservation District staff when developing these regulations.</li> </ul>	<p>Selectmen, Planning Board, Ordinance Review Committee, Code Enforcement Officer, and Town Meeting Vote</p>	<p>Immediate</p>
<p>(14) Land Use Ordinance: From Agricultural and Forestry Resources Chapter: <i>Limit non-residential development in critical rural areas (if the town designates critical rural areas) to natural resource-based businesses and services, nature tourism/outdoor recreation businesses, farmers' markets, and home occupations.</i></p> <ul style="list-style-type: none"> <li>The Town should review the Resource Protection Zones to enlarge these zones in order to preserve wildlife habitat, recreational needs, groundwater activity recharge areas, and should consult with Maine Forest Service District Forester and Soil and Water conservation District staff and the State Beginning with Habitat Online Toolbox when developing the regulations.</li> </ul>	<p>Selectmen, Planning Board, Ordinance Review Committee, Code Enforcement Officer, and Town Meeting Vote</p>	<p>Midterm</p>
<p>(15) Land Use Ordinance: From Economy Chapter: <i>Enact or amend local ordinances to reflect the desired scale, design, intensity, and location of future economic development</i></p> <p>To attract, enhance and support existing and future economic development, while minimizing negative impacts of non-compatible uses, the Town should:</p> <ul style="list-style-type: none"> <li>Review the site plan review provisions to ensure that performance standards are sufficiently flexible to adapt to changing commercial needs while retaining compatibility with residential neighborhoods and adjacent properties.</li> <li>Establish an area zoned as commercial- light industrial use, preferably near the existing commercial zone reflecting the Town's concerns with watershed protection.</li> </ul>	<p>Economic Development Committee, Selectmen, Planning Board, Ordinance Review Committee, and Town Meeting Vote</p>	<p>Immediate and Ongoing</p>

<b>Future Land Use Plan Strategies</b>	<b>Responsible Parties</b>	<b>Timeframe</b>
(16) Land Use Ordinance: From Housing Chapter: <i>Maintain, enact or amend ordinances to allow the addition of at least one accessory apartment per dwelling unit in growth areas and to promote conservation/cluster affordable housing in such areas, subject to site suitability.</i>	Planning Board, Selectmen, Ordinance Review Committee, and Town Meeting Vote	Immediate
(17) Land Use Ordinance: From Natural Resources Chapter: <i>Through local land use ordinances, require the planning board (or other designated review authority) to include as part of the review process, consideration of pertinent BwH maps and information regarding critical natural resources.</i>	Selectmen, Planning Board, Ordinance Review Committee, and Town Meeting Vote	Immediate and Ongoing
(18) Land Use Ordinance: From Transportation Chapter: <i>Enact or amend local ordinances as appropriate to address or avoid conflicts with:</i> <ul style="list-style-type: none"> <li><i>a) Policy objectives of the Sensible Transportation Policy Act (23 M.R.S.A.73)</i></li> <li><i>b) State access management regulations pursuant to 23 M.R.S.A. 704: To maintain and improve traffic flows, and improve safety, future land use ordinance provisions should be in harmony with access management performance standards set in current state regulations for state and state aid roadways.</i></li> <li><i>c) State traffic permitting regulations for large developments pursuant to 23 M.R.S.A. 704-A.</i></li> </ul>	Selectmen, Planning Board, Ordinance Review Committee, and Town Meeting Vote	Midterm

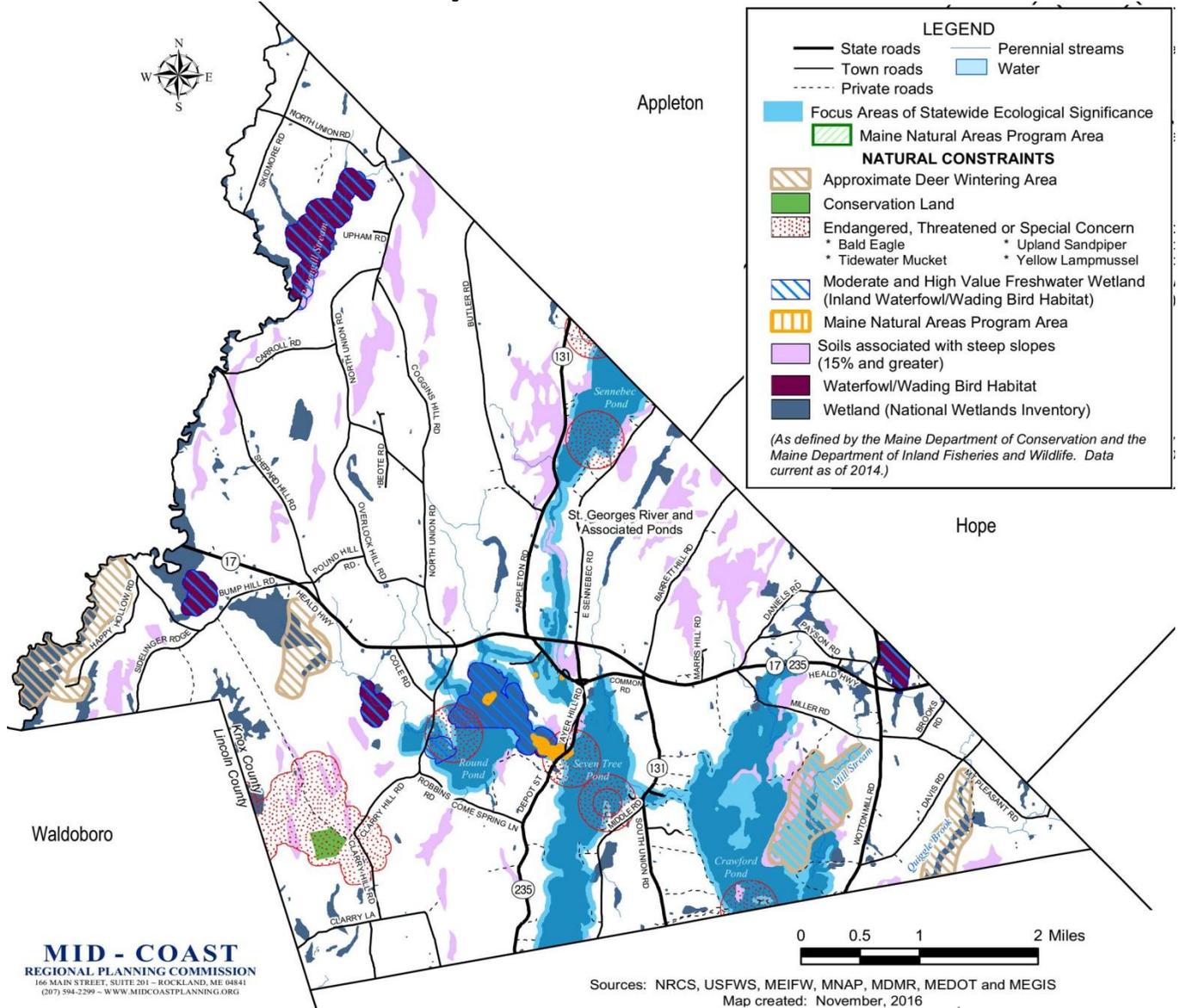
Future Land Use Plan Strategies	Responsible Parties	Timeframe
<p>(19) Land Use Ordinance: From Water Resources Chapter: <i>Adopt or amend local land use ordinances as applicable to incorporate storm water runoff performance standards consistent with:</i></p> <ul style="list-style-type: none"> <li>a) <i>Maine Stormwater Management Law and Maine Stormwater regulations (Title 38 M.R.S.A. §420-D and 06-096 CMR 500 and 502).</i></li> <li>b) <i>Maine Department of Environmental Protection's allocations for allowable levels of phosphorus in lake/pond watersheds.</i></li> <li>c) <i>Maine Pollution Discharge Elimination System Stormwater Program</i></li> <li>d) <i>Amend regulations for construction and development, which better protect against runoff on adjoining lands and roads.</i></li> </ul>	<p>Selectmen, Planning Board, Code Enforcement Officer, and Town Meeting Vote</p>	<p>Midterm</p>
<p>(20) Land Use Ordinance: From Water Resources Chapter: <i>Consider amending local land use ordinances, as applicable, to incorporate low impact development standards.</i></p>	<p>Selectmen, Planning Board, Code Enforcement Officer, and Town Meeting Vote</p>	<p>Midterm</p>
<p>(21) Land Use Ordinance: From Housing Chapter: <i>Maintain, enact or amend growth area land use regulations to increase density, decrease lot size, setbacks and road widths, or provide incentives such as density bonuses, to encourage the development of affordable/workforce housing.</i></p>	<p>Planning Board, Ordinance Review Committee, Selectmen, and Town Meeting Vote</p>	<p>Immediate</p>
<p>(22) Shoreland Zoning Ordinance: Amend the Shoreland Zoning Ordinance, as needed, to meet State requirements. NOTE: No amendments are needed at present.</p>	<p>Planning Board, Ordinance Review Committee, Selectmen, and Town Meeting Vote</p>	<p>Long Term</p>
<p>(23) Subdivision Ordinance: Amend conservation/cluster subdivision housing provisions to promote affordable housing and environmental conservation. Review subdivision criteria to amend to meet current State requirements in Title 30-A, M.R.S.A. Section 4404.</p>	<p>Planning Board, Ordinance Review Committee, Selectmen, and Town Meeting Vote</p>	<p>Midterm</p>

Future Land Use Plan Strategies	Responsible Parties	Timeframe
(24) Subdivision Ordinance: From Natural Resources Chapter: <i>Through local land use ordinances, require subdivision or non-residential property developers to look for and identify critical natural resources that may be on site and to take appropriate measures to protect those resources, including but not limited to, modification of the proposed site design, construction timing, and/or extent of excavation.</i>	Planning Board, Ordinance Review Committee, Code Enforcement Officer, and Town Meeting Vote	Midterm
(25) Subdivision Ordinance: From Transportation Chapter: <i>Enact or amend ordinance standards for subdivisions and for public and private roads as appropriate to foster transportation-efficient growth patterns and provide for future street and transit connections.</i>	Selectmen, Planning Board, Ordinance Review Committee, and Town Meeting Vote	Midterm

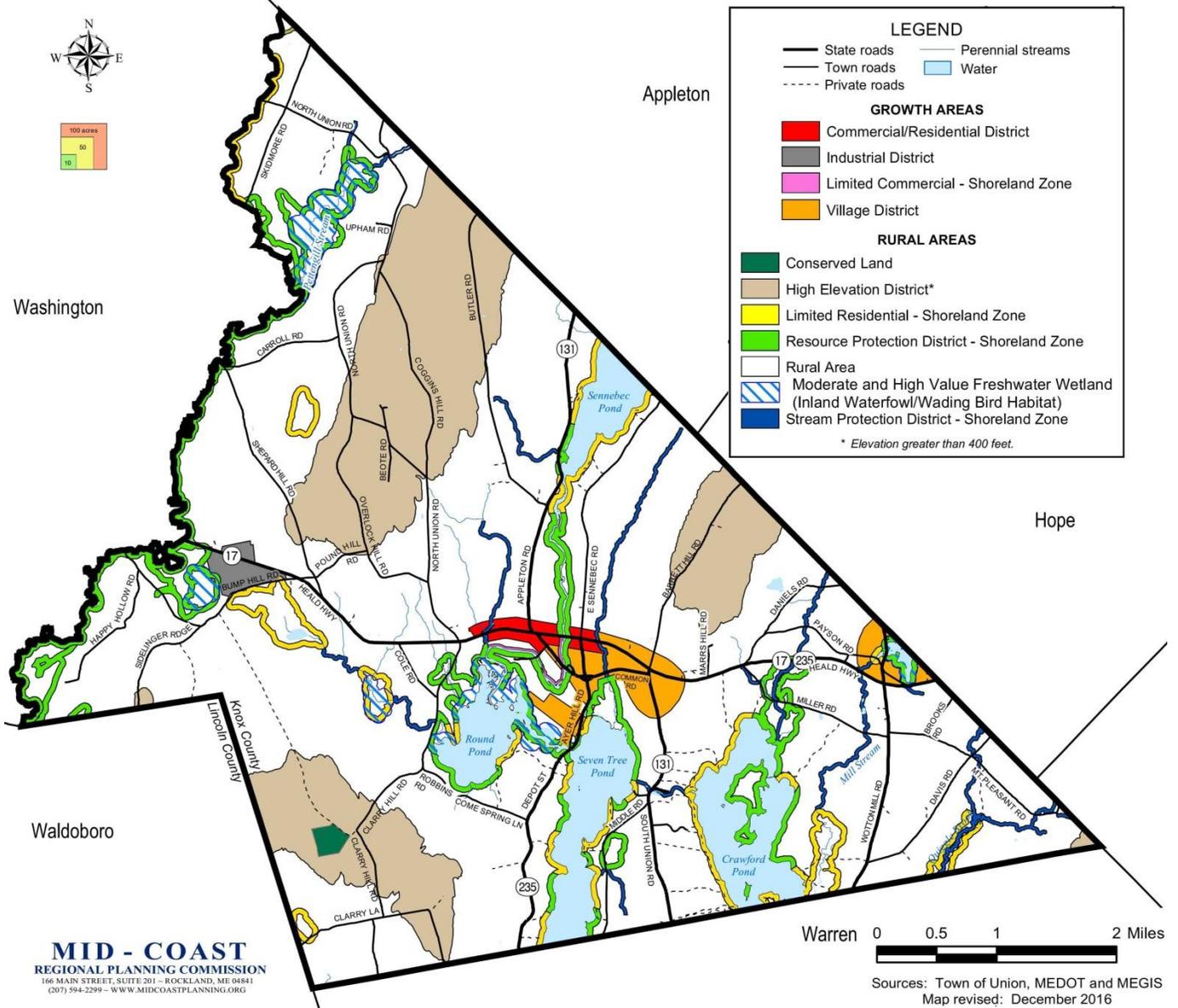
Note: Strategies proposed in this Comprehensive Plan are assigned responsible parties and a timeframe in which to be addressed. Immediate is assigned for strategies to be addressed within two years after the adoption of this Comprehensive Plan, Midterm for strategies to be addressed within five years, and Long Term for strategies to be addressed within ten years. In addition, Ongoing is used for regularly recurring activities.

As the Planning Board is responsible for permit reviews, it might be wise for the Selectmen to appoint members to an Ordinance Review Committee to review and draft recommended ordinance amendments, consulting with Town officials, the Planning Board, and the public. The Selectmen can revise ordinance amendments and place them on the Town warrant for Town meeting vote by resident voters. The recommendations in this Future Land Use Plan should be drafted and presented to voters as shown in the timeframe column of the preceding table of strategies.

# Summary Natural Constraints



# Future Land Use



## SURVEY RESULTS

Total respondents: 186 (Note: Some respondents skipped some questions.)  
 Surveys were collected in February, March and April 2016.  
 Percent (and number) who responded to each question are shown in the tables below.  
 Shaded boxes indicate the majority or plurality of responses to each question.

### A. General

1	I live in Union:	Year-Round 95.00% (171)	Seasonally 1.67% (3)	Non-Resident Taxpayer 3.33% (6)	
2	How many years has Union been your home:	Average 25 years	Median 22 years	Minimum 0.5 year	Maximum 79 years
3	Home Type:	Single-Family House 94.44% (170)	Multi-Family Unit/Condo/Apt 1.67% (3)	Mobile 3.33% (6)	Other 0.56% (1)
4	If you are not a resident, do you plan to become a full-time resident in the future:	Yes 50.00% (3)	No 16.67% (1)	Maybe 33.33% (2)	
5	Employer:	Self-Employed 24.31% (44)	Retired 43.65% (79)	Private employer 21.55% (39)	Public Sector 10.50% (19)
6	Home Ownership or Rental:	Own 98.32% (176)		Rent 1.68% (3)	
7	Work:	Part time 9.44% (17)	Full time 48.89% (88)	Seasonally 2.78% (5)	Retired 37.78% (68)
		Seeking work 0% (0)		Not Applicable 1.11% (2)	

Most of the survey respondents live in Union year-round (95%) in single-family houses (94.44%). A plurality of respondents is retired (43.65%). Of those who work, a plurality works full time (48.89%).

### B. Housing, Development, Planning and Preservation

<b>Housing:</b> Do you favor, oppose or are unsure of the development of the following in the Town:		<b>Favor</b>	<b>Oppose</b>	<b>Unsure</b>
8	Single-Family Homes:	91.76% (167)	1.65% (3)	6.59% (12)
9	Multi-Family Homes:	64.37% (112)	20.11% (35)	15.52% (27)
10	Rental Housing:	59.55% (106)	20.79% (37)	19.66% (35)
11	Subsidized Housing Projects:	28.81% (51)	47.46% (84)	23.73% (42)
12	Housing Projects for Elderly:	85.96% (153)	5.06% (9)	8.99% (16)
13	Mobile Home Parks:	12.43% (22)	67.80% (120)	19.77% (35)

Most respondents favored the development of single-family homes (91.76%) and housing projects for the elderly (85.96%). Smaller majorities favored multi-family (64.37%) and rental housing (59.55%). A majority (67.8%) oppose the development of mobile home parks. A plurality (47.46%) opposes subsidized housing projects.

Written comments were received from 39 respondents. Support was expressed from some for senior/elderly housing developments and for clustered housing, but it was generally suggested that the scale of such projects should be small, in keeping with the rural character of the Town, and that attractive design was important. Opinion on subsidized housing was divided, with some supporting only privately funded projects. Several supported efforts by Habitat for Humanity and others suggested co-housing projects, as well as housing for veterans. Some thought that all housing should be left entirely to the free market and that new development would increase the tax base. Others said that more development would increase the demand for more public services from local government. Opinion on mobile home parks was split. Several noted a need, but most said they would have to be limited in size and location, designed attractively and regulated to avoid problems.

<b>Development:</b> Should the Town encourage the following?		<b>Yes</b>	<b>No</b>	<b>Unsure</b>
14	Light Industry (Non-polluting):	90.91% (160)	4.55% (8)	4.55% (8)
15	Retail Stores (small scale up to 5,000 square feet):	89.89% (160)	3.93% (7)	6.18% (11)
16	Retail Stores (mid-scale up to 20,000 square feet):	50.00% (82)	36.59% (60)	13.41% (22)
17	Retail Stores (large scale over 20,000 square feet):	16.46% (27)	70.12% (115)	13.41% (22)
18	Pharmacies:	76.40% (123)	14.91% (24)	8.70% (14)
19	Medical Health Care Center:	73.01% (119)	13.50% (22)	13.50% (22)
20	Business/Professional Buildings:	78.41% (138)	10.23% (18)	11.36% (20)
21	Home-Based Businesses:	92.22% (166)	1.67% (3)	6.11% (11)
22	Nursing / Assisted Living Homes:	80.79% (143)	2.82% (5)	16.38% (29)
23	Group Homes for Special Needs:	51.41% (91)	17.51% (31)	31.07% (55)
24	Seasonal Campgrounds/RV Parks:	55.43% (97)	26.86% (47)	17.71% (31)

Most respondents agreed that Union should encourage Home-Based Businesses (92.22%), Light Industry (90.91%), and Retail Stores that are small scale up to 5,000 square feet (89.89%). There was a majority of support for all of the other development options listed, with the exception of Retail Stores that are large scale over 20,000 square feet, which was opposed by a majority (70.12%).

Written comments were received from 38 respondents. For retail development, support was expressed for small-scale, mid-scale, and locally owned stores instead of large-scale and national chain stores. Several said they travel to Augusta, Camden and Rockland to shop at larger stores. Some supported any type of development that would bring jobs. Others supported development if it was in keeping with the Town, through good design and site suitability. Several wanted more retail in the village. The need for a pharmacy was repeatedly noted. Only limited support was expressed for campgrounds. Others suggested supporting farming and agriculture, a visitor center, B&B's, and limited industry. Several stated that the government should not be involved in development, which should be left to the private sector and individual property-owners to decide upon.

<b>Planning: Should the Town?</b>		<b>Yes</b>	<b>No</b>	<b>Unsure</b>
25	Enhance site plan review of development proposals:	57.06% (97)	11.18% (19)	31.76% (54)
26	Adopt Building /Energy/Construction Codes:	55.49% (96)	25.43% (44)	19.08% (33)
27	Amend zoning beyond shoreland zones:	26.01% (45)	37.57% (65)	36.42% (63)
28	Charge developers impact fees to cover related public costs:	79.89% (143)	10.61% (19)	9.50% (17)
29	Cover development related public costs through property taxes:	7.39% (13)	77.84% (137)	14.77% (26)
30	Provide tax incentives to attract businesses that bring jobs:	45.76% (81)	35.59% (63)	18.64% (33)
31	Create a Recreational Trail linking the School, Village Common and Union Fairgrounds:	64.46% (107)	21.69% (36)	13.86% (23)

Most respondents supported charging developers impact fees to cover related public costs (79.89%). Likewise, a majority did not support covering development related public costs through property taxes (77.84%). A majority supported creating a Recreational Trail that links the School, Village Common and Union Fairgrounds (64.46%). Smaller majorities supported enhance site plan review of development proposals (57.06%) and adopting Building/Energy/Construction Codes (55.49%). A plurality does not support amending zoning beyond shoreland zones (37.57%).

Written comments were received from 52 respondents. Some support for a recreational trail was conditioned on the trail not negatively affecting abutting private property owners, not requiring tax dollars to build or maintain, and not using eminent domain. It was suggested to apply for grants to fund the work and have school children participate. Several also supported sidewalks in the village area, and ATV trails in rural areas. Some supported tax incentives for new development, but only if the incentives are short-term, and are provided to locally owned businesses, not national or franchise businesses. Others thought that no incentives should be provided because they are a form of corporate welfare, akin to bribes, and that Union could attract development without tax incentives. Some said that new development should pay for its own infrastructure needs. A sizable portion of respondents felt that more information was needed to answer these questions, including a description of current ordinances and codes. Several supported codes in line with state requirements but not stricter. Support was recommended for low impact development and for businesses that depend upon the creativity of residents. A few wanted no new development.

<b>Land Use:</b> Should the Town do more, less or the same, to encourage:		<b>More</b>	<b>Less</b>	<b>Same</b>	<b>Unsure</b>
32	Rural Character:	39.20% (69)	6.82% (12)	46.02% (81)	7.95% (14)
33	Scenic Resources:	46.89% (83)	4.52% (8)	41.81% (74)	6.78% (12)
34	Wetlands:	32.18% (56)	8.62% (15)	44.83% (78)	14.37% (25)
35	Forests:	32.76% (57)	7.47% (13)	49.43% (86)	10.34% (18)
36	Hillsides/Ridgelines:	36.93% (65)	8.52% (15)	43.75% (77)	10.80% (19)
37	Open Space:	39.43% (69)	6.29% (11)	43.43% (76)	10.86% (19)
38	Public Access to the Shore:	44.63% (79)	5.65% (10)	41.81% (74)	7.91% (14)
39	Historic Resources:	35.80% (63)	5.68% (10)	48.86% (86)	9.66% (17)

A plurality of residents stated that the Town should do more to preserve Scenic Resources (46.89%) and Public Access to the Shore (44.63%). For all of the other categories, pluralities of respondents indicated that the Town should do the same, rather than more or less, to encourage the preservation of these natural resources: Rural Character, Wetlands, Forests, Hillsides/Ridgelines, Open Space, and Historic Resources.

Written comments were received from 29 respondents. Some stated that rural character, natural beauty and small town charm are Union’s identity, and that those qualities should be preserved, including for example, through voluntary efforts with land trusts. Others noted that rural character attracts new residents and development, which should be done carefully to preserve rural assets. It was suggested that if natural resources are in jeopardy, they should be protected. Several noted that access to natural resources like ponds and lakes was limited and additional access should be sought. Some stated that such access should be with the permission of private property owners, not taken from them. Several thought the Union Fairgrounds should be better used. A good number needed more information and context to answer these questions, wanting clarification and more information on current standards and ordinances. Some said that nothing needed to be done, and that people should not be told what to do with their property. It was suggested to hire local youth to take care of parkland.

### C. Public Facilities and Services

	<b>Service</b>	<b>Very Satisfied</b>	<b>Satisfied</b>	<b>No Opinion</b>	<b>Dissatisfied</b>	<b>Very Dissatisfied</b>
40	Adult Education	0% (0)	23.08% (3)	69.23% (9)	7.69% (1)	0% (0)
41	Ambulance	30.68% (54)	39.77% (70)	22.73% (40)	4.55% (8)	2.27% (4)
42	Cemeteries	21.02% (37)	47.16% (83)	26.70% (47)	3.98% (7)	1.14% (2)
43	County Police	14.77% (26)	53.98% (95)	22.73% (40)	7.95% (14)	0.57% (1)
44	Fire Protection	33.52% (60)	53.63% (96)	10.61% (19)	1.68% (3)	0.56% (1)
45	Property Tax level	6.18% (11)	44.38% (79)	12.92% (23)	27.53% (49)	8.99% (16)
46	Public School	9.04% (16)	41.24% (73)	33.33% (59)	14.69% (26)	1.69% (3)
47	Recreation Facilities	2.86% (5)	45.71% (80)	21.71% (38)	26.86% (47)	2.86% (5)
48	Road Plowing	35.36% (64)	49.72% (90)	4.97% (9)	7.73% (14)	2.21% (4)
49	Road Repair	17.88% (32)	53.63% (96)	6.15% (11)	16.20% (29)	6.15% (11)
50	Town Office Services	30.73% (55)	51.40% (92)	7.82% (14)	8.94% (16)	1.12% (2)
51	Town Office Hours	23.60% (42)	60.11% (107)	8.99% (16)	7.30% (13)	0% (0)
52	Transportation Services	0% (0)	7.69% (1)	53.85% (7)	38.46% (5)	0% (0)
53	Vocational Education	0% (0)	15.38% (2)	84.62% (11)	0% (0)	0% (0)

These services received the highest amount of the Very Satisfied ratings: Road Plowing (35.36%), Fire Protection (33.52%), and Town Office Services (30.73%). A majority of respondents stated that they were Satisfied with these services: Town Office Hours (60.11%), County Police (53.98%), Fire Protection (53.63%), Road Repair (53.63%), and Town Office Services (51.40%). A plurality of respondents stated that they were Satisfied with these services: Road Plowing (49.72%), Cemeteries (47.16%), Recreation Facilities (45.71%), Property Tax level (44.38%), Public School (41.24%), and Ambulance (39.77%). These services received the largest number of Dissatisfied ratings: Transportation Services (38.46%), Property Tax level (27.53%) and Recreation Facilities (26.86%). These services received the largest number of Very Dissatisfied ratings: Property Tax level (8.99%) and Road Repair (6.15%).

Written comments were received from 24 respondents. Some recommended that the Town office should offer vehicle license plates, complete vehicle registration services for residents. Road repair, paving dirt roads, plowing, and roadside trimming of vegetation near intersections were suggested, as well as enforcement of speed limits on state roads and in the village area. Criticism was made of Knox County Emergency Dispatch as being too slow to respond, and that direct local response from Union should occur. Several suggested support for the Thompson Community Center financially and for recreational activities. One recommended using that facility for elderly or veteran housing. It was noted that the East Union Cemetery needed to be maintained better. One suggested that public transportation should be offered to service centers and shopping areas. Several said no additional town services were needed, and that government should be kept small. One suggested that town employees should be friendlier and that private investors could provide some services.

#### **D. Likes, Dislikes and Your Vision**

##### **54. What do you like most about the Town:**

Written comments were received from 150 respondents. Many had more than one aspect of the community that they liked. Forty-five liked the rural character of the community, its open spaces, hillsides and natural resources. Similarly, 25 liked Union's scenic beauty. The small town, quiet character was liked by 36 respondents, and the friendliness of townspeople was liked by 30 respondents. The Village Common and local businesses were liked by 29 respondents. Farming and related activities were liked by 14 respondents. Eleven liked the Vose Library. Nine liked the history of the area, their connection to that history and the historical society. Six liked town governance and town office staff. Five liked the safety of the area. Several respondents noted individual businesses, town cleanliness, road plowing, conservative laissez-faire values, and clean water.

##### **55. What do you dislike most about the Town:**

Written comments were received from 134 respondents. Some had more than one aspect of the community that they disliked. Twenty disliked the level of property taxes, with some stating that they were not getting adequate services for the amount that they were paying in taxes. Others said they could not afford to remain, and that the area was unaffordable to young families and the elderly. Eleven wrote that they had no dislikes for Union. Town governance was disliked by 11 respondents, with some criticizing how they have been treated at the town office. The lack of businesses and jobs, which requires residents to drive elsewhere to shop and work was disliked by 10 respondents. Nine respondents disliked those seeking to change the town, including those wanting more development, more services or more regulations. Nine disliked road conditions, including plowing and maintenance, while eight disliked speeding, traffic and unsafe roadways. Eight respondents disliked small-town politics and political ideological extremism. A similar number disliked the lack of recreational activities and programs for youth and elderly. Five specifically disliked the lack of a pharmacy. Four disliked the lack of growth. Several disliked the condition of the Thompson Community Center. A few disliked the following: the schools, dilapidated businesses, litter/junk, lack of code enforcement, inadequate ordinances, negative attitudes toward small businesses, and the E911/ambulance service.

##### **56. What would you like to see in the future for the Town, what is your vision for the Town over the next 10 years:**

Written comments were received from 139 respondents. Some had several suggestions for Union's future. Twenty-six respondents recommended improving and increasing small-scale, locally owned businesses and stores, especially within the village area around the Common. Similarly, seven recommended a revitalization of the village including improvements to storefronts and beautification. Twenty-four recommended maintaining the rural character, small town qualities, with controlled growth and natural resource preservation. Fifteen wanted farming to be sustained and enhanced. Thirteen wanted lower property taxes, reduce town government spending, and/or implement fairer property tax assessments, with assistance to those in need. Twelve suggested more recreational activities and improved recreational facilities in general and

for youth and the elderly. Related to this, eight wanted more hiking and walking trails, while seven recommended improvements to the Thompson Community Center, which is seen as dilapidated by some. Ten would like more development, including on Route 17, with suggestions for retail and manufacturing and industry. Six wanted a pharmacy, and four recommended a medical/urgent care facility. Seven wanted improvements to town governance including cost savings, and better outreach to involve residents with decision making, like ordinances. Six recommended to not allow large-scale development. Six would like no changes in general to the Town. In smaller numbers, respondents suggested the following: better road repair and maintenance, paving, elderly housing, multifamily housing, energy efficient housing, more housing, fast-food restaurants, small malls, car wash, public transportation, sidewalks, bike lanes, more parking around the Common, improved use of Fairgrounds/community events, fill the quarries, reduced regulations, historic preservation, scenic preservation, East Union Village district, more access to lakes and ponds.