

Town of Falmouth

2013 Comprehensive Plan

Volume II: Appendices

Adopted by Town Council, October 28, 2013

[Proposed revisions re. State of Maine comments, February 7, 2014](#)



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Appendix 1: Implementation of 2000 Comprehensive Plan

Implementation Status, Comprehensive Plan 2000 <small>Draft: April 17, 2013</small>				
Policy / Action Recommendations		Time Frame	Responsibility	Implementation Status
General				
1	Prioritize among the following recommended policies and actions and establish a specific work program for implementation of this updated Comprehensive Plan.	Immediate	Town Council & Comprehensive Plan Advisory Committee (CPAC)	<i>CPAC typically reviewed annual work plans with the Town Council.</i>
Land Use				
Issues and Implications: The current development pattern of primarily single family housing on larger lots is converting large areas of the Town from rural to suburban. The character of the community is being altered by the current pattern of development. The development of the Exit 10 area created opportunities for the Town to expand its nonresidential tax base, but there is potential for other limited nonresidential projects. Redevelopment and improvement of the Route 100 corridor has begun to create a community center in this area. The Town's historic natural resource based uses are shrinking as the community becomes more subdivided and this pressure is likely to continue or increase.				
1	Continue development of the CommunityViz computer modeling as a tool for analyzing growth options and development patterns, and for engaging the public in an interactive planning process.	Immediate	Planning Department	<i>CommunityViz was used for the 2003 Residential Master Plan 1 Study (Woodville and Falmouth Center area), but not since then.</i>
2	Conduct a master planning process of Falmouth in three sections starting with the central master planned growth zone, to develop master plans for the ten residential districts using an interactive planning process involving residents of the districts and a cross section of citizens. The ten State goals set forth in the State Growth Management Program will be considered in the development of these master plans.	Short-term	Comprehensive Plan Advisory Committee	<i>A master plan was developed for the Woodville and Falmouth Center area (2003 Residential Master Plan 1). The recommendation for Resource Conservation Zoning Overlay District was then applied townwide in 2005. With exception of the 2005 Falmouth Corners Study, no further residential master plans were developed.</i>
3	Adopt a master plan as an addendum to this Comprehensive Plan for each residential district to guide development patterns and the future location of streets and intersections, public utilities, subdivisions, open space, trails, greenbelts, public facilities, and bicycle/pedestrian linkages.	Mid-term	Comprehensive Plan Advisory Committee	<i>Three master plans or studies have been prepared: one for the Woodville and Central Falmouth area in 2003, one for Falmouth Corners in 2005 and one for the Tidewater project in 2001-5.</i>

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Policy / Action Recommendations	Time Frame	Responsibility	Implementation Status	
4	Review the zoning for the Route 1 and Exit 10 commercial areas to assure that these allow the type of planned nonresidential growth desired.	Mid-term	Planning Department	<i>A plan for Route One with zoning recommendations was developed in 2005, but not adopted by the Council. This plan is currently under review by the Community Development Committee. No zoning review has been done for (former) Exit 10 area beyond the adoption of the Planned Development District there in 1998.</i>
5	Review and revise, as necessary, the zoning for the ten residential districts as the individual master plans are completed and adopted.	Mid-term	Planning Department	<i>The recommendation for Resource Conservation Zoning Overlay District was applied town-wide in 2005.</i>
6	Review and revise, as necessary, the subdivision and other land use regulations to implement the residential master plans.	Mid-term	Planning Department	<i>The recommendation for Resource Conservation Zoning Overlay District was applied town-wide in 2005.</i>
Housing				
Virtually all new housing construction is not affordable to low and even moderate income households.				
1	Adopt flexible residential design guidelines to ensure that housing is appropriately designed for the density of development proposed under various master plans in different residential districts.	Short-term	Town Council & Comprehensive Plan Advisory Committee	<i>Developing design guidelines for all compact developments was a recommendation in the 2005 Compact Development Study, but has not yet been implemented.</i>
2	Reactivate the Town's Affordable Housing Alliance and charge them with developing policies and proposals to address the need for affordable housing.	Short-term	Town Council	<i>Two affordable housing reports with recommendations have been prepared in 2003 and 2007. Other than two lot donations to Habitat for Humanity and the Woods Road Workforce Housing Project, which was halted, no actions have been undertaken.</i>
3	Continue the Town's policy of making land available for non-profit affordable housing efforts on an individual lot basis.	Short-term	Affordable Housing Alliance & Town Council	<i>Town has donated two lots to Habitat for Humanity of Greater Portland, one on Hadlock Road in 2000 and another on Hartford Avenue in 2007.</i>
4	Consider making Town land available for affordable housing subdivisions and/or multi-family projects conducted by non-profit organizations.	Mid-term	Affordable Housing Alliance & Town Council	<i>Town considered making Woods Road site behind public safety building available for workforce housing development by Developers Collaborative, but decided to halt that project.</i>
5	Consider exempting affordable housing units constructed under town supported programs from impact fees.	Mid-term	Comprehensive Plan Advisory Committee & Town Council	<i>Since 1990 negotiated exactions can be required by the Town, but have not been applied. No fee exemptions for affordable housing units have been created.</i>

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Policy / Action Recommendations		Time Frame	Responsibility	Implementation Status
6	Identify a number of suitable locations for mobile home projects.	Long-term	Comprehensive Plan Advisory Committee	<i>No locations for mobile home projects have been identified.</i>
7	Revise zoning and subdivision regulations to establish standards for mobile home parks consistent with State law.	Long-term	Comprehensive Plan Advisory Committee & Town Council	<i>No zoning standards have been established for mobile home parks. Manufactured housing units on individual lots are permitted under standard zoning provisions.</i>
Transportation				
Commuter traffic is increasing the need for improvements on the west side of I-295 to accommodate traffic growth. Increasing commercial development in the Route 1 corridor is increasing traffic, resulting in the need to explore alternatives for handling these volumes. The dispersed pattern of development combined with growth in outlying communities is increasing traffic on the Town's rural collectors and is changing their character. The lack of pedestrian and bicycle facilities in much of the community has created a need for improvements to allow the interconnection of residential areas. The limited parking at the Town Landing is not adequate for demand. The PACTS study raises the possibility of fundamental changes in the regional highway network that may address some of Falmouth's needs.				
1	Appoint the Falmouth Trails Advisory Committee as a standing committee and provide it with the resources necessary to implement the Town's Bicycle, Pedestrian, & Trails Master Plan.	Immediate	Town Council	<i>A Falmouth Trails Advisory Committee (FTAC) has been created. Two plans exist: a 2002 Trails Master Plan and 2003 Bicycle and Pedestrian Master Plan. Improvements recommended in these plans are realized through the annual Capital Improvements Plan (CIP), Conservation Corps, and efforts of the Falmouth Public Works Department.</i>
2	Participate in regional transportation planning efforts to increase utilization of the highway system and to provide long-range solutions to traffic congestion in Greater Portland.	Immediate	Planning Department & Public Works Department	<i>Three staff members participate in regular meetings of PACTS. The Town has received funding from PACTS.</i>
3	Conduct a study to lay out future road networks that improve east-west collector road travel and increases accessibility and route options for secondary roads.	Immediate	Public Works Department	<i>A 2003 Wilbur Smith Associates Study identified the potential for new (sub)collector roads. Few areas exist where interconnection was considered important and achievable. No implementation actions have been taken.</i>
4	Commission a feasibility study for diverting commuter traffic onto the highway system as outlined in the Town's Turnpike Spur Report.	Short-term	Public Works Department	<i>No formal feasibility study was undertaken for diverting commuter traffic onto the highway system. Space restrictions to create a new on-ramp and the location of tollbooths were the principal limiting factors.</i>

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Policy / Action Recommendations		Time Frame	Responsibility	Implementation Status
5	Adopt an ordinance establishing limits on the creation of new driveways on arterial and collector roads to preserve roadway capacity.	Short-term	Planning Department & Public Works Department	<i>No ordinance has been adopted to limit driveways on arterial and collector roads.</i>
6	Amend the Zoning and Site Plan Review Ordinance to require driveway connections on adjacent commercial sites and pedestrian connections to adjacent sites, neighborhoods, and the public sidewalk system.	Short-term	Planning Department & Town Council	<i>Amendments have been made to the Village Center Design Guidelines which control access to Route One.</i>
7	Amend the Subdivision Ordinance to require preservation of existing trails, construction of sidewalks, and interconnection with surrounding or proposed bicycle & pedestrian networks.	Short-term	Falmouth Trails Advisory Committee & Planning Department	<i>Trail preservation is encouraged in the Resource Conservation Zoning Overlay District. No sidewalk or bicycle network zoning requirements exist.</i>
8	Lobby the Maine Turnpike Authority and the Maine Department of Transportation to participate in and consider recommendations from a feasibility study that addresses changes in the toll highway system.	Mid-term	Planning Department & Public Works Department	<i>Some discussions were held with Maine Turnpike Authority and MDOT regarding the toll highway system, but any changes are dependent on implementation of a future toll system by MTA.</i>
Public Facilities				
Continued growth will stretch the service capacity of the police department and may require additional patrols. The police facility is adequate for current staff needs but will need to be replaced to accommodate future growth. Continued growth may require a transition to additional paid staffing in the fire department to assure the availability of adequate manpower. The school department currently uses modular and portable classrooms to serve the existing school population. As growth continues, the Town will need to expand its elementary capacity. Growing school age populations will require the development of additional athletic fields and recreational facilities.				
1	Continue developing a proposal for a municipal swimming and a community/senior activity center.	Short-term	Pool Committee	<i>A swimming pool proposal was voted down by the Falmouth voters in 2002. A community center is currently under consideration as part of the Community Facilities Planning Study.</i>
2	Develop a baseline description of an acceptable level of services and facilities. Estimate the current capacity of services and facilities and attempt to identify growth thresholds where expansion will be necessary.	Mid-term	Comprehensive Planning Advisory Committee & Planning Department	<i>The two proposals for impact fees that were developed - for school facilities and for recreational facilities and open space - established a baseline for acceptable service. Neither proposal was adopted.</i>
3	Begin preliminary planning for the construction of a public safety building.	Mid-term	Public Safety Department	<i>A new public safety building was constructed on Marshal Drive off Woods Road.</i>

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4	Develop a proposal for the needed expansion of elementary school capacity that meets the community's educational needs in a manner that is consistent with the planned development of the community.	Mid-term	School Building Committee	<i>A new elementary school was built at the Woodville campus.</i>
5	Study the need for a senior center to meet the social and recreational needs of the community's growing elderly population.	Long-term	Community Programs	<i>A community center, to also serve senior citizens, has been under consideration..</i>
6	Consider joint-use arrangements and multi-purpose designs on all public facilities projects that will maximize limited resources and provide for flexible responses to changing conditions.	Ongoing	All Departments	<i>Joint-use arrangements and multi-purpose designs on public facilities projects are typically considered.</i>
Public Utilities				
<p>The Town has no formal role in most decisions to extend the public water system. There is no funding mechanism currently in place to provide for the extension of public water mains or sewers into areas where growth is desired. The Town faces a significant financial issue with the possible relocation of the treatment plant outfall or treatment of trace chemicals. The Town has no master plan for future sewer service areas and allows developers to determine where sewers will be extended. There are no public groundwater supplies at risk from a lack of public sewer service. Current policy gives developers the option to connect to the public sewers or not, even in areas adjacent to sewer lines. New development and the reconstruction of existing infrastructure will be required to meet the Environmental Protection Agency's Phase II water quality standards.</p>				
1	Conduct a study of establishing designated sewer service areas, encouraging sewer extensions by developers and permitting higher densities when sewers are provided.	Short-term	Sewer Department	<i>No study of designated sewer service areas was conducted. Smaller lots are permitted where sewers are provided, however the overall project must remain "density-neutral."</i>
2	Consider revising development standards to establish a two-step process for determining development density, establishing a base density for development on public sewers or private septic systems, and increasing or decreasing density from that base depending on soil suitability, design, and mitigation factors.	Mid-term	Planning Department & Sewer Department	<i>No process for determining development density was established.</i>
3	Explore options for upgrading the sewage treatment plant to address issues related to trace pollutants.	Mid-term	Sewer Department	<i>Upgrade options for the treatment plant to address pollutant issues have been explored and implemented.</i>
Population				

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Policy / Action Recommendations	Time Frame	Responsibility	Implementation Status	
<p>Continued population growth is changing the character of the community and stressing the capacity of municipal and school services. The population of the community appears to be becoming more homogenous and current patterns may further reduce the diversity of the population. The movement of young families into the community is increasing the demand for school facilities and services. At the same time, the number of senior citizens is growing, creating a different set of demands on the community. Increasingly, Falmouth is a bedroom community where a large portion of the residents commute to other communities. This limits the availability of volunteers for local services and increases peak hour traffic volumes.</p>				
1	Explore establishing impact fees to help pay for the new school and municipal facilities needed to accommodate growth.	Immediate	Comprehensive Plan Advisory Committee & Town Council	<i>Two proposals for impact fees were developed: In 2000 for school facilities and in 2003 for recreational facilities and open space. Neither proposal was adopted.</i>
2	Adopt an interim cap on the number of building permits issued for new residential units while the Town completes its residential growth planning.	Immediate	Comprehensive Plan Advisory Committee & Town Council	<i>A permanent cap for new residential units was established in July 2000.</i>
3	Identify the optimum residential growth rate for the community based upon the residential master plans and adjust the building permit limit accordingly.	Mid-term	Comprehensive Plan Advisory Committee	<i>The residential growth planning effort was not completed and the initial residential growth rate was not adjusted. There was consideration of determining an optimum growth rate by determining the cost of services and relating it to the revenues of new construction. An annual review of growth permits is done by the Codes Enforcement Officer.</i>
4	Continue exploring approaches for expanding the supply of affordable housing in Falmouth (see Housing policies).	Mid-term	Affordable Housing Alliance & Town Council	<i>Two affordable housing reports with recommendations have been prepared in 2003 and 2007. Town considered making Woods Road site behind public safety building available for workforce housing development by Developers Collaborative, but decided to halt that project.</i>
5	Tie the growth rate of residential units to implementation of the established goals and objectives to encourage the development pattern desired such as giving priority to development in compact growth areas or affordable housing.	Long-term	Comprehensive Plan Advisory Committee & Town Council	<i>No compact growth areas have been established. Affordable housing and retirement housing units are exempted from the residential growth permit requirements.</i>
6	Continue monitoring the rate of residential development and reassess the impacts of growth on the community, municipal and school facilities, and municipal and school services on a periodic basis.	Ongoing	Planning Department	<i>Residential development is monitored on an annual basis. Growth impacts were assessed in 2000 for school facilities and in 2003 for recreational facilities and open space.</i>

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Policy / Action Recommendations	Time Frame	Responsibility	Implementation Status
Local Economy			
The revitalization of the Route 1 corridor has increased retail sales in the community. There are limited areas to support new nonresidential use for the community. Increasingly, Falmouth is a bedroom community where a large portion of the residents commute to other communities. This limits the availability of volunteers for local services and increases peak hour traffic volumes.			
1	Continue implementing the Village Center Plan for the Route One Business District and review the Town's zoning and subdivision regulations to assure that they are consistent with the Village Center Plan.	Ongoing Planning Department	<i>A new plan for Route One was developed in 2005, but not adopted by the Council. The plan was updated by the Community Development Committee and consists of zoning amendments as well as an Infrastructure Plan.</i>
Natural Resources			
Highland Lake continues to experience water quality problems due to development in the watershed. Both the Presumpscot and the Piscataqua Rivers fail to meet the water quality standards of their classification. The possible removal of the Smelt Hill Dam will alter the riverine environment and improve the recreational potential of the segment upstream of the dam. Much of the residential development relies on on-site sewage disposal, but soils in much of the Town are marginal for this purpose. Relaxed state standards for septic system bedrock and groundwater separations have allowed development in marginal areas. The Town lacks adequate wetland protection in its land use ordinances.			
1	Study the impact of camp roads on phosphorous loading in Highland Lake and explore ways to reduce nutrient export if these roads are shown to be a significant source of phosphorous.	Short-term Conservation Commission	<i>A 2003 Phosphorus Control Action Plan, including camp roads, was prepared for Highland Lake by Maine DEP and Maine Association of Conservation Districts. The Highland Lake Conservation Project includes specific improvement projects and is currently in Phase III.</i>
2	Adopt a wetland protection policy to establish building setbacks and buffering requirements.	Short-term Conservation Commission	<i>Buffers and setbacks to streams, ponds, and wetlands were adopted in 2001. Additional zoning amendments for wetlands and vernal pools were developed, but not adopted.</i>
3	Undertake a program to educate homeowners on the maintenance of septic systems and to identify and correct malfunctioning systems with a focus on the Presumpscot and Piscataqua River watersheds.	Mid-term Conservation Commission	<i>No formal septic system education program exists. However, an investigation/problem identification program does exist. Septic odor complaints are followed up and individual property owners are counseled by the Code Enforcement Officer and his staff.</i>
4	Continue to monitor the water quality in Highland Lake to assess the impact of the recently adopted Phosphorous Control Ordinance.	Ongoing Conservation Commission	<i>The Volunteer Lakes Monitoring Program (VLMP) has continued to monitor water quality at Highland Lake.</i>

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Marine Resources				
<p>The current public access at the Town Landing is limited and is probably overused. Some of the community's clam flats remain closed to harvesting. The coastal marine habitat may be impacted adversely by surface runoff that carries pollutants from paved surfaces and poorly functioning septic systems into the tidal areas. There are very limited opportunities for public access to the coast except at Mackworth Island. Access to rivers and streams for recreational and commercial fishing is limited.</p>				
1	Revise the Town's subdivision and site plan review regulations to establish standards for the quality of stormwater runoff especially in areas that are directly tributary to marine habitats.	Mid-term	Public Works Department & Planning Department	<p><i>A 2003 Illicit Discharge Ordinance targets failing septic systems and illegal storm drain connections to protect marine habitats. 2009 zoning/site plan review ordinance amendments made the Town to come into compliance with Maine Department of Environmental Stormwater Rules and National Pollutant Discharge Elimination System (NPDES) laws. A stormwater management plan was developed for the Route One Commercial District.</i></p>
Farm and Forest Uses				
1	Encourage owners of farmland and commercial forest land to continue to utilize available current use tax programs.	Ongoing	Assessing Department	<p><i>The Assessor's office does not encourage or discourage utilization of the current use tax programs. Current use tax information is provided on the Assessor's homepage.</i></p>
Recreation and Open Space				
<p>The current rate and pattern of residential development is reducing the amount of informal open space in the community and altering its character. The Town's indoor and outdoor recreational facilities are generally adequate to meet current needs but will need to be expanded as the population grows. The Town's open space acquisition program provides opportunities to preserve significant open areas but will need periodic funding. There is little formal activity to preserve the Town's scenic resources. Changing demographics and changing interests in recreation activities will change the amounts and type of recreation opportunities desired (for example the interest in a roller-blade/skateboard park).</p>				
1	Revise the subdivision regulations and zoning ordinance to encourage the use of conservation subdivisions that permanently preserve large portions of the site as open space.	Short-term	Planning Department & Town Council	<p><i>In 2005 the Resource Conservation Zoning Overlay District was adopted. This district sets aside 30% or more of open space in Conservation Subdivisions.</i></p>
2	Pursue approval of an additional open space bond issue to allow the community to purchase or obtain conservation easements on key open land.	Short-term	Town Council	<p><i>In 2007 a \$5M bond issue was approved by the Falmouth voters. The 2005 Greening of Falmouth Report provides a guide for such acquisitions.</i></p>

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3	Undertake a comprehensive, objective inventory of the Town's scenic resources.	Mid-term	Planning Department	<i>No comprehensive scenic inventory has been made.</i>
4	Proceed with the development of Phase II of Community Park as funding permits.	Long-term	Community Programs Department	<i>Development of phase II of Community Park has not occurred and is regulated through a Referendum vote in ____.</i>
Historic and Archaeologic Resources				
The Town provides some protection for historic and archaeological resources through the Resource Conservation Overlay District but this does not apply Town-wide. These is no formal effort to inventory, evaluate, and protect, if appropriate, the Town's prehistoric archaeological resources.				
1	Revise the Town's subdivision and site plan regulations to require that the historic and archaeological significance of a site be investigated (especially in areas identified by the State Historic Preservation Office as "Resource Potential Areas") as part of the development review process and that appropriate measures be taken in the design of a project to protect as necessary any identified resources.	Mid-term	Planning Department & Town Council	<i>No historic and archaeological zoning amendments have been made.</i>
2	Protect the Town's archaeological and historic resources through regulation and education.	Mid-term	Planning Department	<i>No specific regulatory or education effort has been made to protect archaeological and historic resources. In the Resource Conservation Zoning Overlay District, however, such resources are included as "Secondary Conservation Areas."</i>
3	Inventory the Town's prehistoric and historic archaeological resources in partnership with the State Historic Preservation Office.	Long-term	Planning Department	<i>With exception of River Point, no inventory of prehistoric and historic archaeological resources has been made.</i>
Fiscal Capacity				
Growth and the need to expand municipal and school facilities are putting upward pressure on the budget that is likely to continue. Even though economic growth continues, the Town has limited ability to increase the share of property taxes paid by non-residential uses. The Town's use of debt to pay for needed facilities is increasing but remains at manageable levels.				
1	Monitor the fiscal impacts of growth and development and explore the use of impact fees to help pay for the facilities needed to serve new development.	Ongoing	Planning Department & Town Council	<i>Two proposals for impact fees were developed: In 2000 for school facilities and in 2003 for recreational facilities and open space. Neither proposal was adopted.</i>
Regional Coordination				

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1	Continue to work with the Soil and Water Conservation District and other towns to improve water quality in Highland Lake.	Ongoing Conservation Commission	<i>The Town is an active player with the Soil and Water Conservation District in protecting Highland Lake.</i>
2	Continue to work with PACTS, Metro, and the other municipalities to improve the regional transportation network and expand bus service, regional trails, and bike routes.	Ongoing Planning Department and Town Council	<i>Three staff members are involved in regular meetings of PACTS. The Town joined the Metro Board and expanded the Falmouth Flyer bus service to include Johnson Road and Foreside Road.</i>
3	Encourage and work with the Greater Portland Council of Governments and regional municipalities to develop regional approaches for addressing the pattern of residential development and affordable housing.	Mid-term Planning Department and Town Council	<i>A Regional Housing Plan was developed by GPCOG and Cumberland County. There is no regional approach for addressing the pattern of residential housing. GPCOG is working on a Sustainable Southern Maine plan.</i>
4	Work with Westbrook and Portland relative to the removal of the Smelt Hill Dam on the Presumpscot River.	Long-term Planning Department	<i>The Smelt Hill Dam was removed in 2002.</i>

Appendix 2: Public Participation Summary

The committee has sought the input from the public throughout the development of this plan. Several highlights of that are described below.

In 2010 the committee conducted an on-line, three-question survey to learn more about the perceived qualities of Falmouth and issues that residents felt needed improvement. In addition, the survey made residents aware of the current effort by the committee to draft a new Comprehensive Plan that will guide Falmouth's decision-making over the next ten years. Various methods were used to draw attention to this survey, including a series of ads in *The Forecaster*. A total of 553 responses were received. The survey is described in appendix 3. A 27-page report was prepared outlining verbatim all comments received.

In 2011 the committee designed and conducted an in-depth, statistically-valid survey of Falmouth residents and businesses with help of the survey firm Market Decisions of Portland. The data collection for the survey involved a dual mode internet and paper survey. A letter was sent to each Falmouth household and Falmouth business. The letter provided a description of the survey and how respondents could access the survey through the Town's web site. In addition, it provided contact information for the staff of Market Decisions in cases where a respondent wanted a paper copy or had questions about the survey. A total of 1,077 respondents completed all or part of this survey. Assuming that the 1,077 survey respondents are all unique and residents of Falmouth, the survey effort gathered information from a little more than 9% of the population in Falmouth (according to the 2010 Maine State Planning Office estimates). This is a rather large proportion of the population and Market Decisions has stated that it is "one which should be sufficient to consider the survey a valid measure of the views of Falmouth residents." A 229-page survey report and a 500+page report with verbatim comments were prepared.

In 2012 the committee posted all draft chapters and recommendations on-line along with feedback forms requesting feedback on each of the draft goals, policies, and actions. Again, various methods were used to draw attention to this survey, including another series of ads in *The Forecaster*. A total of 571 responses were received. Reports containing verbatim comments for each of the draft chapters were prepared.

In November 2012 the committee organized a discussion with approximately 20 local real estate developers, realtors, and architect to help it think through what type of development – residential as well as commercial – could be expected to be built in Falmouth in the years to come. The discussion centered around these three questions:

"Setting aside concerns regarding existing zoning:

1. What (residential/commercial) building products would you want to design, build or sell (or expect to see built) that will cater to the Falmouth market over the next 10-20 years?
2. Where in Falmouth do they see potential for that?
3. What opportunities does the draft vision statement provide for that?"

Throughout the plan development process, the Town maintained a detailed website containing all relevant information for the project. The link for this site is:

http://www.town.falmouth.me.us/Pages/FalmouthME_BComm/LPAC/CompPlanUpdate.

From April 2010 to June 2013 the committee met 69 times. In addition, there have been numerous subcommittee meetings. An agenda subscriber list was maintained and used, and the agendas and minutes of committee meetings (all of which were open to the public) have been posted on the Town's website. See: http://www.town.falmouth.me.us/Pages/FalmouthME_BComm/compplan

In addition, all Town committees and known local organizations were contacted requesting input in the development of the plan. Committee members also used their personal resident contact lists and forwarded the link to project web site asking for feedback.

Appendix 3: Survey Results

2010 "Mini" Survey

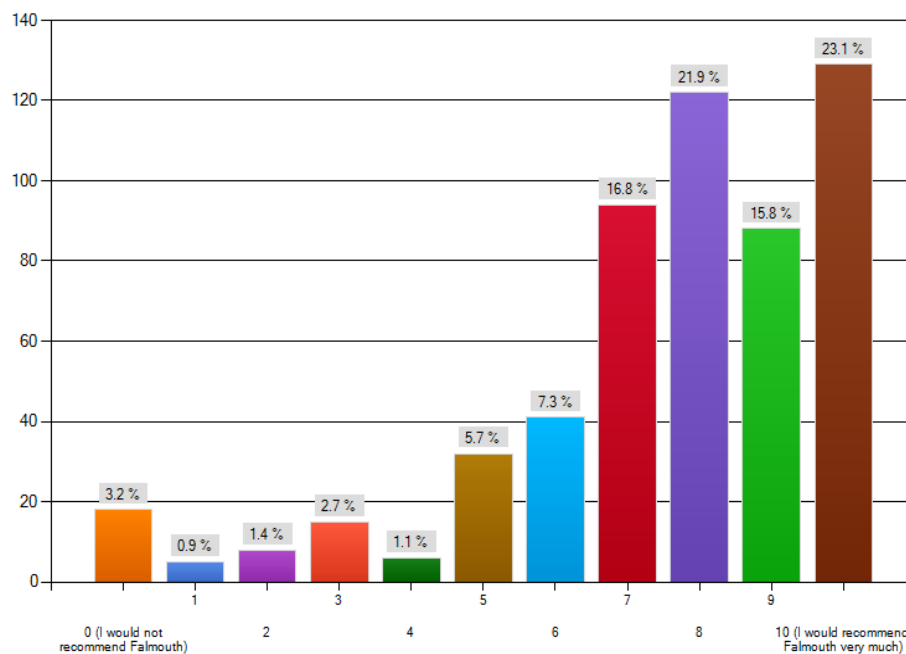
The Long Range Planning Advisory Committee conducted an initial, informal 3-question survey among Falmouth residents from June-October 2010. The purpose of this survey was to learn more about the perceived qualities of Falmouth and issues that residents felt needed improvement. In addition, the survey made residents aware of the current effort by a citizen committee to draft a new Comprehensive Plan that will guide Falmouth's decision-making over the next ten years or so.

The questions were:

1. From 0 (least) - 10 (most), would you recommend Falmouth as a town to call home, or have a business in, to a friend or colleague?
2. Why did you give that score?
3. What needs to change to increase your score?

A total of 553 responses were received. The feedback obtained by this survey was by the committee in the development of a statistically-valid community survey that was conducted in 2011.

From 0 (least) to 10 (most), would you recommend Falmouth as a town to call home, or place to do business, to a friend or colleague?



2011 Survey

In 2011 the committee conducted a statistically-valid survey of Falmouth residents and those with businesses in Falmouth. A total of 1,077 respondents completed all or part of the survey. In total 83 residents completed the survey by paper and 994 took the survey online.

SURVEY METHODOLOGY

Questionnaire Design

The survey questionnaire that was used during the course of the Town of Falmouth Comprehensive Plan Survey was developed by the Long Range Planning Advisory Committee and Market Decisions with input provided by the Director of Long Range Planning, the Town Manager, and the Town Council.

The initial steps in survey design meeting occurred on December 23, 2010 with a discussion of the research topics and themes. Over the course of the next four months, survey themes (buckets) were developed along with questions addressing each of these themes. Additional meetings were held to discuss the survey instrument on March 23 and April 14 with LPAC and the Director of Long Range Planning. An initial draft of the survey was prepared on April 25 for review. A revised draft copy of the survey was prepared for review on May 4, 2011. The final survey revisions were made and the survey was prepared for data collection on May 11, 2011.

The basic components of the Town of Falmouth Comprehensive Plan Survey included questions in the following areas:

- Would You Recommend Falmouth?
- Driving, Bicycling, and Walking
- Town Services
- Town Center
- Public Water and Sewer
- Residential Development
- Commercial Development
- Alternative Energy
- Open Space Preservation
- Conclusion (importance of topics for the future of Falmouth)
- Demographics

Data Collection

The data collection phase of the Town of Falmouth Comprehensive Plan Survey began on May 16 and was completed by June 30, 2011. A total of 1,077 respondents completed all or part of the survey by this date. In total 83 residents completed the survey by paper and 994 took the survey online.

The data collection for the survey involved a dual mode internet and paper survey. The internet survey version was programmed by Market Decisions staff and pre-testing was completed by May 13, 2011. The paper version was prepared on May 13, 2011.

Data collection included initial publicity about the survey, a pre-notification letter, online access to the survey through the Town's web site, and providing paper versions at several locations in Falmouth:

- Prior to data collection, the survey was publicized through articles published in the Falmouth Forecaster.
- A pre-notification letter was sent to each Falmouth household and Falmouth business on May 16, 2011. The letter provided a description of the survey and how respondents could access the survey through the Town's web site. In addition, it provided contact information for the staff of Market Decisions in cases where a respondent wanted a paper copy or had questions about the survey.
- A link to the Internet survey was placed on the initial page of the Town's web site. The survey went live and the link was activated on May 18, 2011.
- Paper copies of the survey were provided to the Town of Falmouth. These were distributed to several locations (Town Hall, Falmouth Memorial Library, Shaw's Supermarket and Hannaford Supermarket). The survey packets included a business reply mail envelope to allow respondents to return the survey directly to Market Decisions free of charge.
- A PDF copy of the survey was also placed on the Town's website.

Data collection was initially scheduled to end on June 13, 2011. The period of data collection was extended to June 30, 2011. Responses from all respondents to the internet survey and those returning paper versions of the survey were included in the data set.

Survey Response

A total of 1,077 respondents answered part or completed all of the survey either online or on paper. A total of 883 respondents completed the entire survey.

Given the high proportion of Falmouth residents surveyed and the effort at making everyone in Falmouth aware of the survey as well as providing a range of opportunities for all Falmouth residents to participate the results can be considered valid. Specifically, assuming that the 1,077 survey respondents are all unique and residents of Falmouth, the survey effort gathered information from a little more than 9% of the population in Falmouth (according to the 2010 Maine State Planning Office estimates); a rather large proportion of the population and one which should be sufficient to consider the survey a valid measure of the views of Falmouth residents.

Data Weighting

The data were examined with respect to demographic characteristics such as gender, age, income and education according to the most recently available information (2011 Maine State Planning Office estimates for age and gender and 2000 Census for education and income). Based on these comparisons, the raw data represented gender fairly accurately while under-representing young residents, those on the lower end of the income scale, and those with less education. Given the dated population

information on income and education (11 years old) it is difficult to assess the degree to which the sample truly underrepresented these groups in 2011.

The results presented in this report have been weighted to reflect the actual distribution of Falmouth residents with respect to their age only. The other more reliable population characteristic, gender, was fairly well represented in the sample and thus weighting on this variable was not necessary. The weights are calculated by dividing the percentage of the Falmouth population in a given age group by the percentage of the sample belonging to the same group. Because percentages have been rounded to the nearest whole number, they may not always sum exactly to 100%. In addition, multiple-response questions take into account all responses mentioned by respondents, therefore, percentages will not always sum exactly to 100%.

Sampling Error

Since the number of respondents answering each of the survey sections varied, the associated sampling error also varies. In general, the sampling error is less for the sections early in the survey where the largest number of respondents answered questions and greater for the later sections. Based on the number of respondents completing the entire survey, the expected sampling error will be no greater than plus or minus 3.3%.

SURVEY RESULTS SUMMARY

A. Would You Recommend Falmouth?

Among all respondents, 81% would recommend Falmouth as a place to call home, giving a rating of seven through ten on the 11-point scale. Forty-one percent of respondents would strongly recommend Falmouth as a place to call home, giving a rating of nine or ten. Only a small percentage of respondents would not recommend Falmouth as a place to call home with 5% giving a rating of zero through three.

B. Driving, Bicycling, and Walking

Thirty-one percent of respondents are concerned or extremely concerned about traffic congestion. The roads considered particularly congested are Route 1, Falmouth Road, Bucknam Road, Woodville Road, and Middle Road (10%). Twenty-eight percent of respondents are concerned or extremely concerned about speeding on town roads with the main concern focusing on Falmouth Road, Blackstrap Road, Middle Road, Route 1, and Route 88.

A majority of respondents indicate it is important or very important to extend bike path/lane (61%), walkway path/sidewalk (58%) and pedestrian trail networks across town (53%). A majority of respondents also support or strongly support installing paved shoulders, sidewalks or bike lanes on selected roadways, even if trees had to be cut down or mailboxes set back (64%), it widens the road in front of their property (59%), or Town funds were required (59%).

Most respondents (83%) currently live on a street without a sidewalk. Among those without a sidewalk, 66% indicate they would use it if their street did have a sidewalk.

Sixty-three percent of respondents indicate there are specific roads where the Town should consider installing sidewalks including Falmouth Road, Route 1, Woodville Road, and Route 88. Sixty-nine percent indicate there are specific roads where the Town should consider installing paved shoulders or bike lanes including Falmouth Road, Blackstrap Road, Middle Road, and Woodville Road.

Residents are split on the importance of having road or path connections between residential neighborhoods, having property owners and/or developers set aside funds for the construction of future road connections, and the construction of connections on existing right of ways.

Nearly half (46%) of respondents support or strongly support using 100% local funds to maintain state roads if state funding for maintenance is not available while 49% oppose or strongly oppose deferring maintenance of state roads until state funds become available.

Sixty-two percent of respondents indicate the Town should give roadway improvements preference over pedestrian/bicycle improvements while 46% of respondents indicate the Town should give pedestrian improvements preference over bicycle improvements.

Currently, a majority of respondents walk along Town streets, walk or hike on Town trails, or ride a bicycle on Town streets at least once a month and a majority of respondents would like to walk along Town streets, walk or hike on Town trails, walk to get to work, shopping or entertainment, or ride a bicycle on Town streets, trails/bike paths or to get to work, shopping or entertainment at least once a month.

C. Town Services

The most commonly used services by respondents include the Town Clerk's office (75%), the Town website (73%), the Falmouth Memorial Library (71%), and the Transfer Station (66%). Among those using Town services, a majority are satisfied or very satisfied with most services provided.

Enhanced services or programs viewed by the largest percentage of respondents as a priority include community and recreational programming and facilities (45%), cultural or social programs (39%), open space acquisition (38%), elderly services (33%), and a swimming pool (33%). Among those that consider enhanced services or programs as a priority for the town, those considered the highest priority are a swimming pool, open space acquisition, and community/recreational programming and facilities. Among those indicating a specific enhanced services or programs is a priority; a majority would support a potential increase in taxes or user fees to fund a swimming pool, open space acquisition, community/recreational programming and facilities, and teen center space.

Seventy-one percent of respondents support the concept of expansion of shared services with nearby communities and/or Cumberland County though less than half (47%) would support the concept if the services were moved outside Falmouth. If the services were moved somewhere outside of Falmouth, only 32% would support or strongly support sharing a transfer station, 28% town hall business, 33% community programs, and 25% a library with nearby communities and/or Cumberland County.

D. Town Center

Nearly half of residents (49%) indicate it is important or very important that the Town establish a municipal town center. A majority consider the availability of recreational activities, Falmouth Memorial Library, availability of community activities, pedestrian space for walking, community programming, availability of municipal services and youth services/teen center as important or very important features for a town center.

E. Public Water and Sewer

A majority of respondents agree or strongly agree that the Town should proactively plan for sewer, water, and other utility extensions (63%), establish a policy that identifies when Town funds will be used for infrastructure costs (74%) and establish a policy that identifies when a developer can recoup utility infrastructure costs (65%). Only 33% of respondents agree or strongly agree that the Town should wait for private proposals for sewer, water, and other utility extensions for new developments and respond accordingly.

F. Residential Development

Residents are divided on the development of compact housing. Thirty-seven percent of respondents support continued development of residential housing in Falmouth. Thirty-nine percent of respondents support the development of compact housing in existing neighborhoods and 46% support the development of compact housing in new neighborhoods. Nearly half (46%) support the development of single family compact housing though only 29% support the development of multi-family compact housing. Only 26% percent of respondents support optional development of compact housing for developers and 26% support the mandatory development of compact housing in selected and suitable areas for developers. However, only 20% of respondents support the development of large residential lots instead of compact housing. The areas most frequently mentioned by respondents as suitable for compact housing include Falmouth Corners (23%), Falmouth Center (22%), Falmouth Foreside (21%), Pleasant Hill (20%), and Leighton Hill/Brookside (20%).

Nearly one-quarter (24%) of respondents are interested or very interested in living in or moving to a compact housing neighborhood. Among those with interest, 81% are interested in single family or multi-family housing.

Three-quarters of respondents indicate the Town should develop smaller zoning districts that more closely relate to the character of existing development while 72% of respondents indicate the Town should allow small scale corner grocery stores in residential neighborhoods.

Forty-five percent of respondents are supportive of the Town undertaking large scale Master Planning efforts and 53% of respondents are supportive of the Town encouraging smaller site-specific collaborative Master Planning efforts among developers, residents, and the Town. A large majority, however, are not familiar with past Master Planning efforts; 80% of respondents are not very or not at all familiar with the past Master Planning efforts in the Woodville neighborhood and 81% of respondents are not very or not at all familiar with the past Master Planning efforts in the Falmouth Corners neighborhood.

G. Commercial Development

43% of respondents would recommend (rating 7 through 10) and 18% would not recommend (rating 0 through 3) Falmouth as a place to do business to a friend or colleague.

A majority of respondents support future business and commercial development along the Route 1 corridor if such development will generate additional tax revenue (78%), provide more opportunities for local shopping, entertainment and dining (75%), provide more walkability (70%), and provide more employment opportunities (68%). However, support for future business and commercial development along the Route 1 corridor declines if it were to lead to increased traffic (23%), reduce buffers between business and residential areas (21%), have an impact on the rural character of the community (20%), or require Town investments in infrastructure such as roads, water, and sewer (35%).

A majority of respondents also support future business and commercial development along the Route 100 corridor if such development will generate additional tax revenue (76%), provide more opportunities for local shopping, entertainment and dining (70%), provide more employment opportunities (70%), and provide more walkability (63%). As with development along the Route 1 corridor, support for future business and commercial development along the Route 100 corridor declines if it were to lead to increased traffic (24%), reduce buffers between business and residential areas (23%), have an impact on the rural character of the community (23%), or require Town investments in infrastructure such as roads, water, and sewer (34%).

A majority of respondents support retail, entertainment, dining, services and professional offices along Route 1 both between Route 88 and the Turnpike Spur as well as north of the Turnpike Spur. A majority of respondents also support retail, entertainment, dining, services and professional offices along Route 100 between the Portland line and Mountain Road. Half (50%), support these uses between Mountain Road and the Cumberland line.

H. Alternative Energy

A majority of respondents support implementing policies to encourage (74%) or require (60%) green building practices in Town buildings and establishing Town regulations to allow the development of alternative energy sources (70%). Nearly half (49%) support encouraging the development of the infrastructure required for electric cars.

A majority of respondents support establishing regulations to allow the development of wind, solar, natural gas, wood, geothermal, and tidal energy sources for residents and businesses. Fifty-eight percent of respondents are interested or very interested in installing alternative energy systems at their residence and nearly half (49%) are likely or very likely to install alternative energy systems at their residence in the next 10 years.

I. Open Space Preservation

Fifty-eight percent of respondents are satisfied with the Town's efforts to acquire open space and 61% are satisfied with the Town's efforts to preserve and manage the open space it has already acquired.

A majority of residents support or strongly support the Town acquiring more open space (61%), the Town leveraging alternative funds through grants and other resources to continue to buy more open space (64%), and requiring that land be set aside as open space in new residential developments through zoning ordinance requirements (64%). Only 18% support the Town stopping the practice of acquiring open space.

However, only 43% support the Town spending tax funds to acquire more open space and only 25% support the Town spending tax funds beyond the 5 million dollar authorization in 2007 to acquire more open space.

Forty-two percent of respondents support the Town placing a priority on managing and improving the open space and conservation lands it already has rather than acquiring new open space.

Thirty-one percent of respondents indicate that 30% of the land area suitable for development in new residential developments should be set aside as permanent open space, 16% indicates that 50%, and 3% indicate that more than 50% should be set aside. Ten percent of respondents indicate that none of the land area suitable for development in new residential developments should be set aside as permanent open space, 4% of respondents indicates 1 to 10%, of the land area and 11% indicates 10% of the land area should be set aside as permanent open space. One-quarter (25%) is unsure how much of the land area suitable for development in new residential developments should be set aside as permanent open space.

A majority of residents indicate it is important for the Town to manage open space for a range of purposes. Those considered important by the largest percentage of respondents include water quality protection (85%), wildlife habitat preservation (81%), scenic quality (80%), trails for walking (77%), and areas along waterways, river corridors, and streams (75%).

J. Conclusion

Respondents rate education (84%) and public safety (75%) as the most important topics for the future of Falmouth over the next ten years followed by driving/roads (69%), walking (66%), alternative energy (65%), town services (62%), and open space preservation (61%).

Appendix 3: Planning Studies performed since 2000

Below is a list of Falmouth and regional plans that have been developed since 2000 Comprehensive Plan. The committee reviewed all these plans.

- = Town of Falmouth Report (38 plans)
- = Regional Report (24 plans)

Land Use

- [Pleasant Hill Design Charrette](#), Comprehensive Plan Advisory Committee, March 2000
- [Residential Master Plan 1 – Interim Report](#), Comprehensive Plan Advisory Committee, 2003
- [Town of Falmouth Planning Survey](#), Market Decisions, June 2004
- [Compact Development Study](#), Comprehensive Plan Advisory Committee, March 2005
- [Tidewater Village Design Guidelines](#), Orcutt Associates, August 2005
- [Falmouth Corners Study](#), Falmouth Corners Working Group, Greater Portland Council of Governments, Institute for Civic Leadership, November 2005
- [Community Development Operations Evaluation](#), The Consensus Building Institute, July 2007

Housing

- [Town of Falmouth Housing Assessment Report](#), Community Current, Inc. and MRLD, 2003
- [Ad-Hoc Workforce Housing Committee Report](#), Ad-Hoc Workforce Housing Committee November 2005
- [Cumberland County Housing and Homeless Needs Assessment](#), Greater Portland Council of Governments, 2007
- [Workforce Housing Project, Woods Road](#), Workforce Housing Commission and Developers Collaborative, 2009 (not adopted by Town Council)
- [Regional Housing Plan](#), Greater Portland Council of Governments and Cumberland County

Transportation

- [Falmouth Village Center Connectivity Study](#), Gorrill-Palmer Consulting Engineers, Inc/ Terrence DeWan and Associates, May 2001
- [Trails Master Plan](#), Falmouth Trails Advisory Committee, September 2002
- [Street Interconnectivity Analysis](#), Wilbur Smith Associates, December 2002
- [Bicycle and Pedestrian Master Plan](#), Falmouth Trails Advisory Committee, January 2003
- [Coastal Corridor Coalition Phase I Report](#), Greater Portland Council of Governments, 2003
- [Regional Bus Rapid Transit and Light Rail Study](#), Portland Area Comprehensive Transportation Planning Committee, 2004
- [Southern Maine Corridors Committee Regional Transportation Assessment](#), 2005, Greater Portland Council of Governments & Southern Maine Regional Planning Commission
- [I-295 Corridor Study](#), Portland Area Comprehensive Transportation Planning Committee and Maine Department of Transportation, 2006
- [Destination Tomorrow: Linking Our Communities, Advancing Our Region](#), Portland Area Comprehensive Transportation Planning Committee, 2006
- [PACTS Regional Transit Coordination Study](#), Greater Portland Council of Governments & Southern Maine Regional Planning Commission, 2007
- [Mass Transit Committee Report](#), Mass Transit Committee, October 2008

- Regional Bicycle/Pedestrian Master Plan Update, Portland Area Comprehensive Transportation Planning Committee, 2009
- Area Collector Road Assessment, Portland Area Comprehensive Transportation Planning Committee, 2009
- Pavement Management and Transportation Management Plan, Gorrill-Palmer (currently in process)
- Portland North Small Starts, Maine Department of Transportation (currently in process)

Public Facilities

- Community Facilities Planning Study, (Ad Hoc) Community Facilities Planning Committee (currently in process)

Public Utilities

- Wastewater Facilities Study Update, December 2002
- Comprehensive Pump Station Assessment for the Town of Falmouth, Maine, Wright-Pierce, July 2009

Population

- Greater Portland Community Needs Assessment, 2004, United Way

Local Economy

- Falmouth Village Center – Traffic and Land Use Study, Falmouth Route One Corridor Committee, May 2005 (not adopted by Town Council)
- Looking Out for Portland and the Region, Portland Community Chamber, 2007
- Greater Portland Global Communities Report, Greater Portland Global Communities Task Force, 2009
- Falmouth Shopping Center Property, Community Development Committee (currently in process)
- Route One Study, Community Development Committee (currently in process)
- Comprehensive Economic Development Strategy, Southern Maine Economic Development District, up-dated annually

Natural Resources

- An Ecological Assessment of the South Coastal and Southwestern Interior Regions of Maine, Maine Natural Areas Program, 2002
- Remote Sensing Inventory of Potential Vernal Pool Habitat in the Town of Falmouth, Maine, Woodlot Alternatives, November 2002
- Phosphorus Control Action Plan, Highland Lake, Maine Department of Environmental Protection, June 2003
- A Plan for the Future of the Presumpscot River, Presumpscot River Management Plan Steering Committee, 2003
- Mitigation Properties Available in the Town of Falmouth, Maine, July 2007
- 2009 Climate Action Plan, Falmouth Green Ribbon Commission on Climate Change and Energy Efficiency (currently in process)
- Report regarding Natural Resource Protection, Long-Range Planning Advisory Committee (currently in process)
- Slope Stability Assessment (Shoreline Drive/Bayshore Road area), Wright-Pierce (currently in process)

- Highland Lake Conservation Project – Phase II and III, Cumberland County Soil and Water Conservation District (phase III currently in process)

Marine Resources

- Expanding and Sustaining the Shellfisheries of Casco Bay, Casco Bay Estuary Partnership, 2003
- State of the Bay, Casco Bay Estuary Partnership, 2005
- Falmouth Anchorage Evaluation Phase II: Long-Term Management and Operations, Falmouth, Maine, Milone and MacBroom, August 2008
- Review and Recommendations of the Long Term Management and Operations Plan for the Harbor, Harbor & Waterfront Committee, May 2009

Farm and Forest Uses

- Cruise Report and Forest Management Plan, Southern Maine Forestry Services, May 2009
- Hadlock Community Forest Harvesting Operations Plan, Open Space Implementation Subcommittee of the Falmouth Conservation Commission, September 2009

Recreation and Open Space

- Town Lands Report, Falmouth Conservation Commission, June 2004
- The Greening of Falmouth, Falmouth Conservation Commission, January 2006
- River Point Management Plan, Open Space Implementation Subcommittee of the Falmouth Conservation Commission, January 2009
- Brown Property Use Plan, Town Council (currently in process)

Historic and Archaeologic Resources

Fiscal Capacity

- School Impact Fee Analysis and Draft Ordinance, Comprehensive Plan Advisory Committee, September 2000
- Proposed (Recreational Facilities and Open Space) Impact Fee Provisions, Comprehensive Plan Advisory Committee, April 2003
- 2010-2020 Tax Increment Financing Development Programs, Town Manager, 2009

Regional Coordination

- 2006 Aerial Photography, Greater Portland Council of Governments, 2006
- Spring 2010 Aerial Photography, Greater Portland Council of Governments (currently in process)
- Portland Task Force on Regionalism, Greater Portland Council of Governments, 2004

Appendix 4: Inventory Chapters

The chapters that follow contain analyses of the various resources of Falmouth, their condition and trend data, and recommended goals and policies.

Each chapter identifies issues facing the community and used questions suggested by the state in section 3 of the Review Criteria Rule to help it address the state goals. Each chapter also contains data to identify current conditions and future trends for that topic area.

The following topics are addressed in this appendix:

- Population and Demographics
- Local Economy
- Housing
- Transportation
- Public Facilities and Services
- Utilities
- Fiscal Capacity and Capital Investment Plan
- Natural Resources
- Marine Resources
- Recreation and Open Space
- Agriculture and Forestry
- Cultural, Archaeological, and Historic Resources

Population and Demographics

Draft: June 20, 2013

The State of Maine Comprehensive Plan Review Criteria Rule does not state a goal for the Population and Demographics section of a Comprehensive Plan. Rather, this section serves as a source of information to clarify conditions and trends that might affect other sections of the Town of Falmouth Comprehensive Plan.

Population and demographic changes play significant roles in our future. Among other factors, these changes can influence Falmouth's character, available open space, school size, commercial development, and level or type of municipal services.

YEAR ROUND POPULATION CHANGE

Between 1890 and 1990, the population of Falmouth increased five-fold from about 1,500 to 7,610. The period of greatest growth occurred in the years leading up to and immediately following World War II. During the 1990s the Town continued to experience significant growth. By 2000, Falmouth's population reached 10,310 people, an increase of 2,700 people (or 35%) over its 1990 population. Population growth slowed in the first decade of the 21st century. By 2010, Falmouth's population grew to 11,185, an increase of just 8% over the previous decade. This is well over the data for comparable towns such as Cumberland and Yarmouth, which stayed relatively flat (1% and 0% increases respectively between 2000 and 2010).

Population in Falmouth, 1960-2025

	Population	Net Change	% Change from previous decade
1960	5,976		
1970	6,291	315	5%
1980	6,853	562	9%
1990	7,610	757	11%
2000	10,310	2,700	35%
2010	11,185	875	8%
2020	13,013	1,828	16%

Source: Decennial Census with 2020 estimate from Maine State Planning Office

Population change is the result of two factors; natural increase and net migration. Natural increase is the difference between the number of resident births and the number of resident deaths in the community. Net migration is the net change in people moving into the community and those moving out of the community. Historically, the growth in population has been driven by the net migration of new residents moving into Falmouth.

HOUSEHOLD CHANGES

Household size has dropped significantly in the last few decades. While in 1980 it was 2.72 persons per household, in 2000 it was 2.56 persons per household. It may have leveled out as it was 2.54 persons per household in 2010. This decrease is a reflection of an increase in single-person households, a tendency toward small households among the baby boomers, the increased longevity and independence of seniors living alone, and increased divorce rates.

Smaller households means that more (and different) housing units are needed to accommodate the growing population. The group facilities population (primarily residents of nursing home and eldercare facilities) increased from 84 people in 1990 to 217 people in 2000, but dropped to 178 people in 2010.

EDUCATIONAL ATTAINMENT

Falmouth residents continue to be well educated. In 2010, 61.8% of the residents aged 25 or older had, at least, an associate degree. More than 97.2 percent of residents had graduated from high school or passed a General Educational Development (GED) test — a significant increase over 1990, which was an increase over 1980.

AGE DISTRIBUTION

Falmouth’s population appears to be moving in two different directions. On one hand, many young families are moving into the community driving up school enrollments. On the other, Falmouth’s population has been getting older. Falmouth has the highest percentage of residents over the age of 75 in Southern Maine. Its median age increased by more than 5 years over the last 20 years.

Age of Falmouth’s Population

	1970	1980	1990	2000	2010
less than 5 years	7.2%	4.6%	6.2%	6.9%	4.6%
5 - 24 years	34.2%	29.1%	21.5%	22.4%	25.7%
25 - 44 years	24.2%	25.8%	31.5%	28.0%	19.3%
45 - 64 years	23.9%	25.6%	22.1%	25.4%	33.7%
65 plus years	10.4%	14.9%	18.7%	16.2%	16.8%
total population	6,291	6,853	7,610	10,310	11,185
median age	n/a	37.6 years	39.8 years	n/a	45.3 years

The number of school-age children in Falmouth’s public schools has increased from 1,069 pupils in 1988 to 1,751 in 1998-99 and peaked to 2,184 in 2003. It then dropped somewhat, only to rise to 2,157 in 2011. Falmouth has one of the highest student “retention rates” in the Greater Portland area. This rate is calculated by dividing the number of students in Grade 2 in a given year by the number of students in Grade 1 in the previous year. By comparison, Portland has one of the lowest rates and has been losing students.

	Grades	2000 students	2011 students	2019 projected students
Elementary School	K-5	979	893	778
Middle School	6-8	483	525	436
High School	9-12	548	733	594
Total		2010	2151	1808

The recent student increases are partially due to economically driven decisions to attend public school vs. private school, which may swing back when economic conditions improve. They are also partially due to Falmouth’s new elementary school, the Forbes 2011 “America’s Best Place to Live and Learn” award, and the introduction of all-day kindergarten which is in high demand with contemporary dual-income young families. However, by 2019, the New England School Development Council (NESDEC)

projects a decrease of about 15% in student numbers as compared to 2009 to 1,808 students. Initiatives, such as tuition-paying students and a possible Science, Technology, Engineering, and Mathematics (STEM) program, may keep future student numbers higher.

HOUSEHOLD INCOME

From an income perspective, Falmouth is an upper-middle income community. In 1999, its median household income was \$66,855. By 2009, this increased 24% to \$83,139. By comparison, the median household income in 2009 in Cumberland County and Maine was \$54,342 and \$46,541 respectively.

RACE AND ETHNICITY

Falmouth is becoming a less white community. Whereas in 1990, 1.2% of the population were minorities, this increased to 2.6% in 2000, and 5.5% in 2010. The largest minority group is Asian or Pacific Islander (252 residents in 2010).

ISSUES AND IMPLICATIONS

- Changes in the population distribution across age categories (due to the attraction of the community to families with school-age children, as well as the increase in the number of senior citizens residing in Falmouth) are altering Falmouth's needs.
- According to the latest Census data, the population of the community appears to be becoming more socio-economically homogenous, and current patterns may further reduce the socio-economic diversity of Falmouth's inhabitants.
- The movement of young families into the community sustains a focus on the quality of school facilities and services.
- At the same time, the number of senior citizens is growing, creating a different set of demands on the community.

Local Economy

Draft: June 20, 2013

Maine's Growth Management Act recommends the promotion of an economic climate that increases job opportunities and the overall economic well-being of a community.

While Falmouth is often viewed as only a residential community, economic activities play a significant role. The main challenge for our Town is to encourage commercial development in a way that helps balance the tax base. From 2001 to 2010, Falmouth's labor force increased by more than 18% (while the labor force in Cumberland County declined by 1% in that same period) a sign that single events can have a big impact in a town. The work occupations of these people work i continue to change. Commuting patterns increasingly show more residents employed outside Falmouth, while many others are coming to Falmouth to work. Retail sales in Falmouth continue to steadily increase.

ECONOMIC BASE

Falmouth's economic base is heavily retail, service, and office oriented. Between 2000 and 2009, approximately 365,000 square feet of non-residential space was constructed in Falmouth. This included the TD Bank building (140,000 sf) and Hannaford Plaza (63,000 sf) in West Falmouth along Route 100 at Exit 53. TD Bank became the community's top employer with more than 400 employees in this one location. The amount of new construction compares to 274,000 square feet between 1990 and 1999, and 220,000 square feet between 1980 and 1989.

The Route One corridor remains the community's commercial center. In 2008, in the southern end of Route 1 (between the Turnpike connector and Route 88) the primary uses of non-residential space (900,000 square feet +/-) were:

Comparison retail	12%
Automotive retail/service	10%
Health care services	9%
Convenience retail	9%
Finance, real estate, insurance	5%
Restaurants	4%

Upon relocation and expansion of Shaw's supermarket, the former's Shaw's space (50,000 sf) in the Falmouth Shopping Center has remained vacant for a number of years and is still available for redevelopment.

There is also a significant amount of business and professional office space in the Route 1 corridor north of the Turnpike connector.

RETAIL SECTOR

Historically, Falmouth's retail businesses have focused on providing day-to-day convenience and service goods for the residents of Falmouth, the northern suburbs, and eastern Portland. A 1998 study of the Route 1 commercial center's "market area" (i.e., the area from which people will travel to shop in Falmouth) found that residents from eastern Portland, Cumberland Foreside, Cumberland Center, and northwest Falmouth regularly travel to the Foreside to purchase convenience goods (day-to-day items like groceries, etc.). Comparison goods stores (offering larger ticket items like televisions, jewelry, furniture, etc.) along Route 1 attract customers from as far away as Freeport, Pownal Center, West Cumberland, and the peninsula in Portland.

Taxable retail sales from stores throughout Falmouth have increased from \$89,000,000 in 1990, to more than \$140,000,000 in 1999 (+57%), to \$183,000,000 in 2010 (+31%). The retail sales pull factor measures the relative strength of the community's retail sector in serving local and regional markets. The pull factor is calculated by dividing a town's per capita sales by a region's per capita sales. If the pull factor is greater than 1.0, the community is attracting consumers from outside the town. If the pull factor is less than 1.0, the community is "leaking" sales to other areas.

	Falmouth	Cumberland County	Cumberland	South Portland	Windham	Yarmouth
Total Retail Sales	1.11	1.00	0.13	2.18	0.89	0.72
Consumer Retail Sales	1.12	1.00	0.11	2.17	0.92	0.74
Business Spending	0.99	1.00	0.37	2.26	0.64	0.58
Building Supplies	0.04	1.00	0.06	0.57	1.97	0.95
Food Stores	1.43	1.00	0.18	1.53	1.05	1.45
General Merchandise	1.03	1.00	0.00	4.00	1.30	0.13
Other Retail	0.61	1.00	0.25	1.86	0.42	0.71
Auto	2.76	1.00	0.12	1.90	0.52	1.08
Restaurant	0.78	1.00	0.08	1.95	0.71	0.82
Lodging	0.09	1.00	0.08	1.25	0.04	0.14
Restaurant and Lodging	0.64	1.00	0.08	1.82	0.58	0.68

By comparison, auto sales remain particularly strong in Falmouth, followed by food sales. The weakest areas are building supplies and lodging. Overall, the community is attracting consumers from outside the Town.

LOCAL INITIATIVES

Falmouth has several ongoing initiatives intended to increase the amount of commercial activity, while maintaining its small town character:

The Route One corridor remains much studied and subject to physical change. Following plans in 1986 and 1993, a 2005 Route One Study containing a variety of zoning amendments was not accepted by the Council. Zoning for Route One is presently being reviewed by a Council committee. A comprehensive infrastructure plan for this corridor was also under way in 2012.

In 2009, in cooperation with the property owners, the Town conducted a community event and survey to hear from the public what new development might be appropriate at the Falmouth Shopping Center, including the vacant former Shaw's space.

In 2011, a new committee was established, the Falmouth Economic Improvement Committee (FEIC). The committee's charge involves enhancing the economic well-being of the community by conducting outreach to existing businesses. The Town also created a Business Resource Website, which includes an Available Commercial Property database aimed at assisting business-location decisions in Falmouth.

The Town also joined the newly-formed Greater Portland Economic Development Corporation (GPEDC), offering collaboration among the six Greater Portland communities and the private sector.

Specific roles for these new entities have not yet been defined.

LABOR FORCE

Falmouth's labor force (the number of residents who are employed or actively seeking work) has increased significantly. It expanded from 3,313 in 1980 and 4,694 in 1999 to 5,705 in 2010. Falmouth's share of the labor pool in Cumberland County increased from 2.87% in 2001 to 3.41% in 2010.

Unemployment levels in Falmouth, despite having increased in the last decade, remain well below county, state and national levels. Through July 2010, the 2010 unemployment rate averaged 5.7%, compared with 8.5% in Maine and 9.9% in the nation over the same period.

COMMUTING PATTERNS

Falmouth has become a job importer and serves as a regional employment center. In 2010, about 26% (1,097) of Falmouth workers (4,190) remained in Falmouth to work. About 46% of Falmouth workers commuted to Portland. About 28% commuted to other area locations. Alternatively, of the 3,829 jobs in Falmouth, 71% of the workers came (2,732) from out of town. About 24% of the people who come to Falmouth to work live in Portland.

In 1980, 53% of Falmouth's residents worked in Portland. By 1990, 46 % worked in Portland. In 2010, this number remained at 46%.

Two Metro bus lines serve Falmouth and bring workers and shoppers to Falmouth's exit 53 area and Route 1 from Portland and vice versa.

RESIDENT EMPLOYMENT BY OCCUPATION

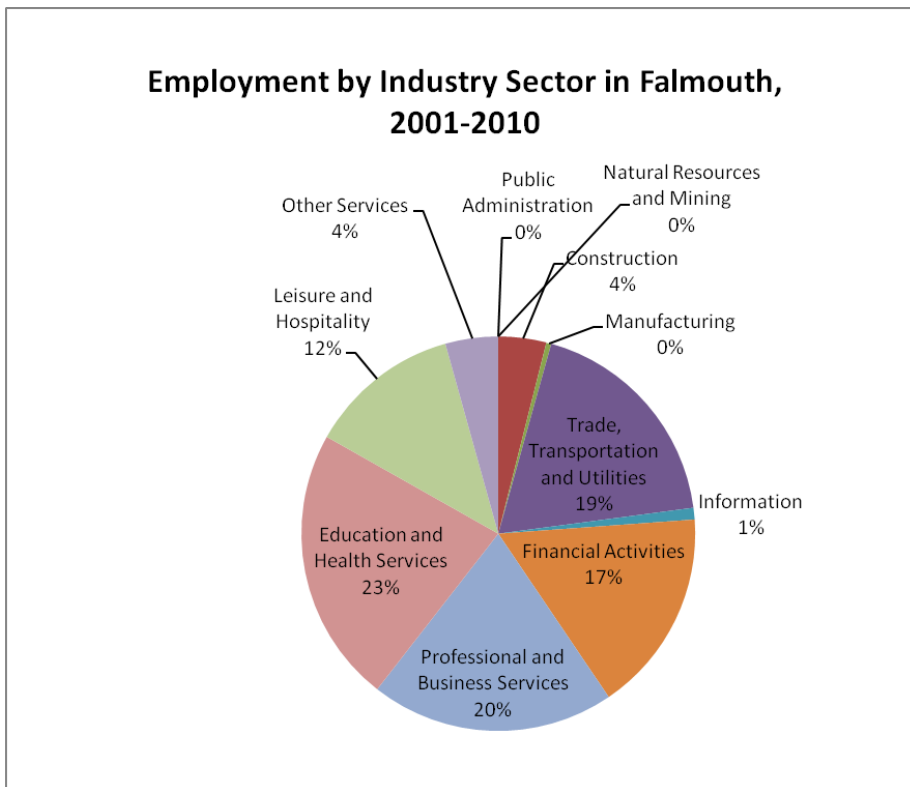
Falmouth's population is increasingly employed in white collar occupations. The percent of Falmouth residents working in executive, managerial, and professional occupations increased from 34% in 1980 to more than 50% in 2000. This increase was offset by relative decreases in technician, sales, and administrative support, and blue collar occupations

Falmouth Resident Employment by Occupation

(Employed persons 16 years and over)

	1980	1990	2000
Management, professional, and related occupations	33.7%	47.0%	51.0%
Service occupations	8.4%	8.2%	7.4%
Sales and office occupations	34.5%	29.9%	29.1%
Farming, fishing, and forestry occupations	1.7%	1.9%	0.4%
Construction, extraction, and maintenance occupations	21.6%	13.1%	5.7%
Production, transportation, and material moving occupations			6.5%

A more detailed picture is the occupation of Falmouth residents by Industry Sector.



In 2010, about 8% of Falmouth workers were self-employed.

The top ten employers in 2010 represented 44% of total workers in Falmouth.

Top 10 Employers 2010	Employees
TD Bank	444
Town of Falmouth	439
Tyler Technologies	375 ¹
Hannaford Brothers	200
Sedgewood Commons	150
Shaw's Supermarket	150
Falmouth-by-the-Sea	118
Skillin's Greenhouses	107
The Woodlands Club	102
OceanView Assisted Living	77
Total	2,162

TAX INCREMENT FINANCING

Tax Increment Financing is a public financing method that is used as a subsidy for redevelopment, infrastructure, and other community-improvement projects. There are three Tax Increment Financing Districts in Falmouth. Two are located along the Route One corridor. The third covers the West Falmouth Crossing development at exit 53. A portion of the tax revenues in these areas is available for reinvestment in Falmouth.

2011 SURVEY

In the Commercial Development section of the survey respondents suggested that:

1. Overall, they would not strongly recommend Falmouth as a place to do business.
2. They support an increased business presence to:
 - a. increase town revenues,
 - b. provide more opportunities for local shopping, entertainment, and dining, and
 - c. increase employment opportunities.
3. A majority of them would support future businesses being located:
 - a. along Route 1 from Route 88 to the Turnpike spur,
 - b. along Route 1 from the Turnpike spur to Cumberland Town line, and
 - c. along Route 100 from Portland City line to Mountain Road.

Back-up data in the survey was as follows:

- Only 43% would recommend Falmouth as a place to do business, 39% would neither recommend nor not recommend, and 18% would not recommend Falmouth as a place to do business.
- Respondents would recommend Falmouth as a place to do business because of the demographics of the community, the range of businesses already doing business in town, and the space available.
- Respondents would not recommend Falmouth as a place to do business because the Town makes it difficult to start or keep a business in town, it is too costly to start and operate a business in Falmouth, and residents prefer to keep Falmouth as a residential community.

¹ In 2011, Tyler Technologies moved about half of its operations to Yarmouth.

Through input from local business organizations (FEIC), it is clear the Town has several areas of opportunity to improve its business attractiveness. Overall, the topic relates to existing or absent regulations that need to be updated to ensure businesses can operate more efficiently and have a better sense of outcome in their applications. Some specific areas mentioned include:

- Clarity around the norms and rules (or absence thereof) guiding the establishment of home-based businesses
- Rules and regulations for the renovation of existing business spaces in contrast to the ones guiding all new spaces
- Rules and regulations on the use of signage and promotion of businesses in the Town.

ISSUES AND IMPLICATIONS

- The Route 1 corridor remains the economic engine of Falmouth.
- While there are limited areas to support new non-residential use for the community, there is potential for growth along Route 100.
- Except for large scale events such as the addition of TD bank offices and Tyler Technologies to the town, underlying employment trends mimic other Greater Portland communities.
- Falmouth's above-average income, commuting patterns, and educated residents offer an attractive base to further enable the growth of a quality and diverse business base.

PROPOSED COMPREHENSIVE PLAN GOALS

- Support the type of economic development activity that reflects the community's role in the region.
- Make a financial commitment to support desired economic development, including needed public improvements.
- Coordinate with regional development corporations and surrounding towns to support desired economic development.

PROPOSED COMPREHENSIVE PLAN POLICIES

- Attract and retain desirable businesses to increase the town tax base and available employment.
- Ensure business applications find clear and predictable outcomes early in the application process.
- Seek business community input on a regular basis to help shape the strategies and tactics of Falmouth economic development.
- Pursue specific projects, while being frugal on maintaining low administrative operations.

PROPOSED COMPREHENSIVE PLAN ACTIONS

Suggested Action	Suggested Responsible Party	Suggested Priority	Plan Reference
1. Clarify roles and define responsibilities of parties responsible for Town economic development efforts.	Falmouth Economic Improvement Committee, Town Council	H	1-3
2. Prepare, adopt, and implement a Falmouth Economic Development Plan.	Falmouth Economic Improvement Committee, Town Council	H	1-4
3. Create a multidisciplinary task force that will review existing ordinances for clarity from a business perspective. Prioritize, review and implement its recommendations.	Falmouth Economic Improvement Committee, Town Council	H	1-5, 5-12
4. Establish measurable goals for attracting quality business and employment opportunities.	Falmouth Economic Improvement Committee, Town Council	H	1-6
5. Assure that Falmouth remains an active participant in Greater Portland economic development efforts.	Falmouth Economic Improvement Committee, Town Council	H	1-7

Housing

Draft: June 20, 2013

INTRODUCTION AND SUMMARY

Maine's Growth Management Act recommends encouraging and promoting diverse housing opportunities for all Maine citizens.

A housing stock with diverse price points plays a significant role in our community to achieve that goal. It enables a wider range of individuals and families of varying economic means an opportunity for a "home," providing security, privacy, health, community. It also provides value in non-tangible ways: culturally, demographically, economically, and educationally. For the local businesses, it may affect their ability to attract and sustain customers.

Below is a review and general inventory of the housing stock in Falmouth. It includes historical growth, the varying types of housing, and actions that the Town should consider with regard to housing. In offering its assessment of housing in Falmouth, the Long Range Planning Advisory Committee (LPAC) considered various resources, including 2011 survey results, input by Town citizens, a presentation by the Executive Director of the Southern Maine Agency on Aging, and data contained in the 2000 Population/Demographic Chapter of the Comprehensive Plan.

After conducting its review, LPAC believes that diverse housing is important to the life blood of our community as we move into the next decade and future. However, as is evident from the body of this report, LPAC does not recommend that further Town resources should be directed towards the concept of workforce housing. Finally, given the fact that we are an aging population, LPAC urges the Town to consider the question of whether the housing stock in Falmouth is sufficient to serve the future needs and interests of its senior citizens.

GROWTH IN HOUSING UNITS

Falmouth continues to grow, albeit at a slower pace than in prior years. According to the Assessing Department, in 1969, Falmouth had 2,066 housing units. By 2010, this number reached 4,751 housing units, an increase of almost 130%. Growth in housing units has been relatively steady: 22% in the 1970s, 33% in the 1980s, 25% in the 1990s, but slowing to 13% between 2000 and 2010. This growth suggests that Falmouth's housing market has remained relatively independent of real estate booms and busts, but is not immune from it. By 2025, Falmouth will grow to about 13,000 people from the 11,185 in 2010. The population growth rate is projected to be approximately 1% per year.

TYPE OF GROWTH

Residential growth has not occurred evenly among housing types. Tremendous growth in condominium developments in the 1970s and 1980s produced dramatic increases in the number of multi-family units. However, this form of housing in Falmouth virtually disappeared in the 1990s and 2000s as single-family units dominated new construction. According to Assessing data in 2009, there were 967 multi-family units and 3771 single family units.

	1969	1979	1989	1999	2009
Single family units	1883	2115	2498	3293	3771
% increase over previous decade	15%	12%	18%	32%	15%
Attached units	183	399	852	903	967
% increase over previous decade	3%	118%	114%	6%	7%
Total units	2066	2514	3350	4196	4738
% increase over previous decade	14%	22%	33%	25%	13%

TYPE OF OWNERSHIP

Falmouth's residents are changing. The percent of owner-occupied units decreased from 88% in 1980 to 80% in 1990, then climbed again to 85% in 2000, and was 81% in 2009. The decrease by 1990 was due in large part to the enormous condominium expansion and increases in assisted living and eldercare facilities in Falmouth in the 1980s. The increase in single family units in the 1990s raised the percent of owner-occupied housing units in Falmouth. The most recent decrease in home ownership may be tied to the state of the economy in recent years. Average household size of owner-occupied unit is 2.79 persons, compared to 1.43 persons for a renter-occupied unit.

AGE OF HOUSING STOCK

Falmouth's housing units are relatively new and in good condition. An estimated 27% of the housing units have been constructed since 1990, and 62% have been built since 1960. About 20% of housing units predates World War II.

SENIOR HOUSING

For purposes of this chapter, LPAC considered a "senior citizen" to be a person 65 years-of-age or older. With regard to housing, Falmouth has a number of condominium developments which tend to appeal primarily to seniors, with only one, (Applegate) requiring residents to be 55 or older. Additionally, there are several compact housing developments that, while not limited to seniors, generally have greater appeal to an older, retired population. Also, there are three eldercare developments: OceanView at Falmouth, Falmouth by the Sea, and Sedgewood Commons (an Alzheimer's care facility). The existence of other housing arrangements for seniors, such as alternative home-sharing programs, is less well documented.

Consideration of senior housing should be afforded some measure of urgency by the Town. As reported to LPAC by the Executive Director of the Southern Maine Agency on Aging, the population of people aged 65 and older is expected to grow by 58% in Cumberland County between 2008 and 2020, which will mean that a significant portion of Falmouth residents will be over age 65 by the end of this decade. While OceanView at Falmouth is scheduled to expand its facility over the next few years, that alone does not ensure that the housing needs of Falmouth's senior citizens, of varying economic status, will be met in the future.

SUBSIDIZED HOUSING

Falmouth has three Section 8 subsidized rental developments for those 62 and older or disabled. They are Foreside Village on Fundy Road, Blackstone on Squidere Lane, and Foreside Estates. They are privately owned by corporations that provide subsidized housing throughout southern Maine. Each has eligibility requirements, waiting lists, and are not limited to Falmouth residents. There is also a "Section 8 Housing Choice Voucher" program that provides rental assistance to income-eligible tenants by subsidizing a portion of the monthly rent and utilities, paying directly to landlords. In 2012, this program helped 10 low-income families in Falmouth.

INCOME AND HOUSING ASSESSMENT

The State of Maine considers households with annual incomes lower than 50 percent of the Portland Metropolitan Statistical Area's (MSA) median income to be very low income households, with incomes between 50% and 80% of the MSA's median. Moderate income households have between 80% and 150% of the MSA's median income designation. In 2012, these annual income levels for a family of four were:

- very low income: less than \$36,650
- low income: between \$36,650 and \$58,640
- moderate income: between \$58,640 and \$109,950.

Many residents in Falmouth reside in housing they can afford. However, for lower income level individuals there is not enough housing stock to meet demand. In 2012, housing for a four-person household in Falmouth with a median income of \$73,300 could not cost more than \$245,000 if it was "affordable" — and no more than 30% of the household income was spent on housing costs (mortgage principal, interest, condominium fees, taxes, insurance). In 2010, the median home price in Falmouth was \$399,500.

WORKFORCE HOUSING

The Town has studied this issue twice during the last decade. A 2007 study recommended that the Town facilitate an affordable housing development on a Town-owned parcel of land. In a follow-up effort, property in the rear of the new police station facility was selected by the Town for such purposes. A developer was selected who proposed to construct 48 single-family and multi family units, of which a number of units would be "affordable." However, the Town Council could not reach agreement as to how best to proceed and halted this project in 2009.

While developers are certainly encouraged to consider affordable housing concepts as a part of their overall building plans, the use of Town resources to further fund or facilitate such endeavors cannot be recommended at this time.

On a smaller scale, the Town made land available for non-profit affordable housing efforts on an individual-lot basis. It donated two lots to Habitat for Humanity of Greater Portland: one on Hadlock Road in 2000 and another on Hartford Avenue in 2007.

MANUFACTURED HOUSING

A "manufactured housing unit", as defined in Falmouth's Zoning Ordinance, is a mobile home constructed after June 15, 1976, or a modular home. In order to fall within this ordinance definition, such housing types must satisfy applicable federal and/or state standards. Manufactured housing is allowed in the following areas (if minimum dimensions are met):

- Pleasant Hill Road area (20,000 square foot lot with 125 feet of frontage);
- near Highland Lake and along Middle Road north of Woods Road (40,000 square foot lot with 150 feet of frontage); and
- along Route 9 north of Woods Road and between Winn Road and the Maine Turnpike (80,000 square foot lot with 250 feet of frontage).

COMPACT HOUSING

In 2005, the Town produced a "Compact Development Study." The concept of "compact" housing

consists of single and/or multi family developments on smaller lots. Developing design guidelines for such developments was a recommendation of the study, but was not implemented.

2011 SURVEY

Because compact housing means many different things to different people, the 2011 survey data on this topic was inconclusive. For purposes of this report, the term “compact housing” means clustering living units in such a way as to create or provide open space for the benefit and enjoyment of all. Compact housing may pertain to single and/or multi-family dwellings. The survey did indicate support for the compact housing concept among those with a preference for new single-family neighborhoods and that it be an option, not a requirement. Overall, the survey indicated that Falmouth residents have diverging preferences for housing types and densities as already found in any of our neighborhoods.

Respondents also suggested that the Town:

- Conduct more research to formulate residential housing policy recommendations pertaining to various housing types, including compact housing.
- Develop smaller zoning districts that more closely relate to the character of existing neighborhoods. Falmouth residents have varying preferences for housing types and also seem to have a preference for consistency within a neighborhood of housing type, density, and size.
- Adopt policies that permit appropriate small-scale commercial development, such as “corner” stores, in residential zoning districts.
- Evaluate whether to engage in a master planning process in order to develop the policies and zoning that support the desired variations in housing and uses.

MASTER PLANNING PROCESS See the land use chapter.

PROPOSED COMPREHENSIVE PLAN GOAL

- To encourage and promote housing stock with diverse price points for all Falmouth citizens.

PROPOSED COMPREHENSIVE PLAN POLICIES

- Encourage a variety of housing types and densities throughout the community.
- Promote consistency of housing types and densities within each neighborhood.

PROPOSED COMPREHENSIVE PLAN ACTIONS

Suggested Action	Suggested Responsible Party	Suggested Priority	Plan Reference
1. The Town should seek public input from seniors and explore the development of housing that is attractive to an age 65-and-older population, including alternative senior housing programs, such as home sharing programs, accessory apartments, adult family care homes and congregate housing, and sliding scale development.	Town Council	M	3-5

Transportation

Draft: June 20, 2013

Revised: January 2014

Maine's Growth Management Act recommends planning for the financing and development of an efficient system of public facilities and services to accommodate anticipated growth and economic development.

Falmouth experiences significant transportation demands on a daily basis. It has more than 10,000 residents, is located adjacent to Portland, and is traversed by major routes such as I-95 (Maine Turnpike), I-295, the Turnpike Spur, Route 1, Route 26/100, Route 9 (Middle Road), and Route 88 (Foreside Road). While Falmouth has more major infrastructure access than many Maine towns its size, it faces a particular challenge in terms of east to west connections. Other than a controlled-access highway (Turnpike Spur) and a single primary east-west local route (Falmouth Road), most travel inland from the coast and vice-versa is circuitous. This being said, the placement of residential subdivisions at key areas has made the creation of new travel corridors impractical and costly. Approximately 3.2 miles of roads are state owned, operated, and maintained roads for which capital improvement responsibilities belong to the state. In addition, approximately 29.6 miles of roads are state-owned roads that the Town of Falmouth handles maintenance and snow plowing responsibilities, and in return, receives state funds (Urban Renewal Incentive Program or URIP). In 2009 the Town estimated that its per mile cost to maintain new streets with sidewalks, catch basins, trash pick-up, lighting, and fire hydrants was \$12,408.

ROADWAYS AND INTERSECTIONS

Based on a recent field survey performed as part of a 2010 consultant study, the current condition of 91.9 miles of streets is as follows:

Condition	Mileage	% of Total	Treatment	Recommended Completion Date
Very Poor	6.63	7.2%	Reconstruct	When Funding is Available
Poor	5.56	6.1%	Reconstruct	When Funding is Available
Poor– Fair	8.09	8.8%	Reclaim	When Funding is Available
Fair	7.75	8.4%	Heavy Overlay/ Shim(2.0")	2011-2016
Fair – Good	12.00	13.1%	Light Overlay (1.0")	2012-2014
Good	7.41	8.1%	Future Overlay	2015-2018
Very Good	44.41	48.4%	Future Overlay	2015-2018

Consultants working for the Town have stated that the Town generally meets the maintenance needs of its roadways. They recommended that reclaim and heavy overlay projects be completed first to keep certain roadways from deteriorating to a point where full reconstruction would be needed. It was also

recommended that the Town complete a pavement condition survey every two to three years. The most recent one was 2010.

Crash data, compiled by MaineDOT for 2006-2008, was also reviewed and indicated seven locations as “High Crash Locations.” The consultant concluded that many of these locations do not appear to have a specific series of corrective actions, or have declining crash rates due to specific actions. Two locations stand out: (1) The frequency of driveways between Depot Road and Clearwater Drive along Route 1 appears to be a safety issue. (Access management of properties is reviewed through the Town’s development review process.) (2) The current configuration of the I-295 northbound ramps at Bucknam Road has resulted in a significant safety problem, according to the consultant. Maine DOT has prepared an I-295 Corridor Study to address this problem. The implementation schedule for that correction is undetermined. According to the Police Chief, speeding remains a major complaint from residents. There is also a perceived impatience with traffic congestion leading to driver actions that add to safety concerns.

Turning movement forecasts at the key intersections for the year 2035, utilizing the PACTS model and land use forecasts, indicate that:

- Along most of the Route 1 corridor growth will continue, but at a relatively slow rate of about half a percent per year.
- Growth is expected to be somewhat greater along Falmouth Road, at about 0.7 percent per year.
- Route 100 appears to show the greatest traffic growth of the major local roadways, at close to one percent per year.
- The greatest long-term growth appears to be west of the Maine Turnpike, at about 1.4 percent per year.

A forecast horizon out 26 years shows rather significant overall volume changes at most locations, particularly those with the higher growth rates.

The Town faces constraints with its transportation network. One, the Town is primarily residential and rural, with exceptions along Route 100 near MTA Exit 53, Route 1 south of Bucknam Road, and the higher-density residential area along Route 88. As such, most property has homes on large lots, resulting in relatively low population densities when compared to municipalities to the south. This also limits construction of new roadway or other transportation infrastructure connections. Congestion and traffic delays are evident on Bucknam Road during commuter hours when vehicles commuting from Cumberland, Yarmouth, and North Yarmouth use this route to reach I-295, either via-route 9 or route 1. Maine DOT’s I-295 corridor study does not propose any new access points to I-295 in Cumberland, which would alleviate some of Falmouth’s traffic issues on Bucknam Road. In 2012, the Town Council directed staff to pursue funding for a roundabout at the Bucknam and Middle Road intersection. Staff pursued funding through Portland Area Comprehensive Transportation System (PACTS) in 2012 as part of the 2014/2015 biennium; however, this project was not selected by PACTS for funding.

Another reality is that while north-south connectivity is excellent for a town the size of Falmouth, east-west connections are comparatively limited, consisting mostly of the I-95/I-295 Spur and Falmouth Road. There are several streets that provide partial connections, including Lunt, Leighton, and Mountain

Roads. However, because so many parcels of land have been developed for residential subdivisions as well as institutional, business, and recreational facilities, providing new connections appears unlikely.

The Town can allow for some growth in certain areas without significant strain on the road network. There remains development potential east of I-295, where most concentrated development and infrastructure is located. By continuing to focus growth in this area, advantage can be taken of the existing network with fewer needs for new road connections. Coordination with Cumberland is desired to address impacts from development in that community along Route 1 and Route 1 North in Falmouth.

Because Falmouth has chosen to maintain a more rural, rather than urban feel, street widths play a major role. The Town followed recommendations and development strategies in its village area to keep Route 1 at a single travel lane in each direction. A Route One South Infrastructure Plan aims to coordinate all required improvements between Route 88 and the Turnpike Spur. The Town also has a Bicycle and Pedestrian Plan that is referenced whenever road projects are undertaken.

The consultant prepared a listing of improvements on an intersection-by-intersection basis that may be necessary to accommodate traffic volumes anticipated for 2035 and maintain reasonable traffic flow. These require prioritization and further investigation. For example, certain intersections have “roundabouts” recommended. The Town has implemented “VUEworks,” an asset management software program to allow for better road data tracking and evaluation.

BRIDGES

Falmouth’s transportation system includes 45 road and rail bridges. Nineteen of these are owned by the Maine Turnpike Authority, 22 by the state, and two by the Town of Falmouth. Of the 45 bridges, 39 have sufficiency ratings low enough to qualify for rehabilitation or reconstruction funds. Most of these are bridges that were constructed for the Interstate 95 expansion (1960 +/-) and the Maine Turnpike construction (1955).

Two bridges are owned and maintained by the Town:

- Field Road bridge over East Piscataqua
- Mill Road bridge over Piscataqua

The Mill Road Bridge has sufficiency ratings low enough to qualify for rehabilitation or reconstruction funds. However, the Mill Road Bridge is slated to be discontinued by the MaineDOT once its structural condition deteriorates past the point of allowing vehicular traffic. According to a consultant, this bridge does not serve any significant purpose, except the potential for redundancy, should the Falmouth Road Bridge require closure. In the future, the Town must decide whether to replace, abandon, or convert this bridge to a pedestrian crossing. The Field Road Bridge may not have a sufficiency rating low enough to qualify for rehabilitation or reconstruction funds.

The Martin’s Point Bridge is scheduled for replacement by Maine DOT in 2014.

DEAD END ROADS

Proliferation of new development roads can exacerbate traffic and maintenance problems. Dead ends, as well as new intersections, add significantly to the cost of snowplowing. While one plow could cover 12 to 15 miles of rural roadway, development with many dead ends and intersections requires one plow

for each six to eight miles of roadway. Dead-end streets can also affect other municipal services such as trash collection, fire/rescue/police response times, and school bus services. Since 1980, the number of dead ends and intersections west of Route 1 has increased from 85 to more than 180 in 2000 and 211 intersections and 175 dead-end public and private streets in 2010. Also, driveway access points along arterial and collector roadways leads to congestion, more accidents, and a loss of rural character.

PARKING

Falmouth owns a lot at Town Landing and a satellite parking lot at the corner of Johnson and Foreside roads.

PUBLIC TRANSIT

METRO Routes 6 and 7 currently serve the community. Longer-term changes in transit may impact the way bus service is utilized. Maine DOT is examining options for commuter rail and/or express bus service to communities north of Portland. These may impact travel, particularly during peak periods for the community. In addition, if intercity travel options occur, a different type of bus routing than the current Route 7 may be needed. If a “Zoom” stop and/or a rail station were built, it could be served by Route 7 or, alternatively, a new local shuttle. This shuttle could loop more tightly in Falmouth, providing connections in population centers and commercial centers, carrying travelers to the intercity stops.

The community is also served by Regional Transportation Program (RTP), a nonprofit organization that provides on-demand and para-transit service to residents throughout Cumberland County. RTP services are open to the general public on a space-available basis and require reservations to be made in advance.

RAIL TRANSPORTATION

Falmouth has two rail lines that run north-south through the community. One is owned by the St. Lawrence & Atlantic Railroad and the other by Guilford Transportation (Pan Am Lines). Track and crossing improvements have been made to allow the Downeaster train to offer passenger rail between Portland and Brunswick. This service does not include a passenger station in Falmouth. Due to an increased number of trains and increased speeds (up to 60 mph), and the requirement for trains to sound their horns at each crossing, there is an increased concern with neighborhood livability. The Town is exploring options for achieving railroad safety while maintaining residents’ livability expectations.

BICYCLE AND PEDESTRIAN FACILITIES

Falmouth has a network of designated bicycle and pedestrian byways located along the Route 1 and Route 88 corridors. Most of the network consists of paved shoulders, but there are sidewalks along the center of Route 1. The Town updated its Bicycle and Pedestrian Plan and created a stand-alone Trails Master Plan. The plan’s goal is to provide a trail network accessible to all residents. Thanks to many volunteers, Falmouth’s trail network is becoming more extensive. It also relies to a large extent on the generosity of private landowners. Falmouth currently has ± 32 miles of pedestrian trails +16 miles of which have been built by Falmouth Conservation Corps members over the past four years on Town and local land trust-owned property. This does not include 3.5 miles of canoe trail on the East Branch of the Presumpscot River. Trail maps have been developed, trail information is available on the Town’s website, and a Falmouth Trails Advisory Committee has been created. Some of Falmouth’s trail network has been designated by the trail advocacy group, Portland Trails.

The 2009 PACTS Bicycle and Pedestrian Plan contains an inventory of existing and proposed on-road bikeways in Falmouth. Different on-road bikeways provide distinct levels of accommodation and perceived safety for cyclists. Their application is dependent upon a roadway’s characteristics and its context. Three types of on-road bikeways are included on the inventory below: bicycle lanes, paved shoulders, and shared lanes.

	Existing	Proposed
Bicycle Lane	4.0 miles	0 miles
Paved Shoulder	10.9 miles	33.5 miles
Shared Lane	5.1 miles	0 miles

Bicycle lanes are designated bikeways that have stenciled bicycle symbol pavement markings and are designated for use by bicycles. An example of bicycle lanes on a suburban, uncurbed roadway is Route 88 in Falmouth. The vast majority of bicycle lanes in the region are being created by reallocating existing pavement width to define the bicycle lanes.

Paved shoulders are located to the right of the outside travel lane and delineated by a white pavement stripe. They are not designated specifically for use by bicycles, but are available for bicycle use and provide room for separation from motor vehicle traffic. Local examples of paved shoulders are along much of Route 1 in Falmouth, Cumberland, and Yarmouth.

Shared Lanes are roadway travel lanes used by both by motorists and bicyclists. Shared Lanes are often used where the roadway is not wide enough to provide another accommodation such as a bike lane. Shared Lane pavement markings, also called “sharrows,” may be appropriate if the Shared Lane is part of a designated bicycle route. ‘Share the Road’ signs are often placed along roads where an on-road bikeway may transition, due to reduced pavement width, from a bicycle lane or paved shoulder to shared lane. Local examples of existing shared lanes are Main Street/Route 1 in Freeport Village.

The minimum recommended width for paved shoulders to provide quality accommodation for cyclists used to be 4 feet (American Association of State Highway and Transportation Officials (AASHTO), 1999). In 2011, MDOT has revised this policy to reflect various ranges of lane and shoulder widths. These ranges are dependent on road classifications and traffic volumes. Usually, the range for travel lanes is 10-12 feet; for paved shoulders the range is 2-6 feet. Additional width is recommended when the paved shoulder is next to curbing or on streets with higher traffic speeds and volumes. In addition to safety benefits for cyclists, paved shoulders also have motorist safety and pavement-reservation benefits. Specific bicycle signage is only installed for bicycle lanes and shared lanes.

Portions of Routes 1 and 88 are part of the Eastern Trail.

TRANSPORTATION DEMAND MANAGEMENT

Transportation Demand Management (TDM) measures include many techniques, including staggered work hours, carpooling/vanpooling, secure bikeways, and subsidized bus passes, among others. While such measures were once relegated to large metropolitan areas, mandatory TDM requirements are already practiced in the City of Portland. The Maine Department of Transportation has begun assessing fees for creation of various TDM programs in several regions of the state. It is

recommended that the Town work with PACTS, Maine DOT, and GoMaine on coordinating TDM planning and administration.

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FUNDING

Funding of transportation comes from federal, state, and local sources. Coordination with the Maine DOT and PACTS, the area's transportation agencies, on projects will continue to be an important part of the planning and funding process. Falmouth is an active member of PACTS and should continue to be very active on this body.

The Town has explored the need to set up an impact fee-based structure for road funding when development occurs, to supplement federal, state, and local funds, but no complaints by developers with the current system was reported.

Tax Incremental Financing (TIF) funding has also been used to pay for transportation improvements along Route One and near Turnpike exit 53. The most likely candidate for a future new TIF district may be in the Village Mixed Use District along Route 100 from Leighton Road northerly to the CMP easement. Given the large potential and need for infrastructure improvements along this portion of Route 100, this potential TIF district warrants investigation.

WAYFINDING SIGNAGE

Falmouth has a directional sign system throughout the community, primarily near the Town offices, the Village area, and by the Exit 53 commercial area. These signs, also called "wayfinding signs," provide useful information about the location of key destinations. This signage needs to be improved and expanded.

REGIONAL TRANSPORTATION ISSUES

Falmouth's road network carries commuting traffic from towns to the north (especially Cumberland). Since the mid-1990s, the Town has attempted to attain local road access to the Turnpike Spur in order to divert commuter traffic off local roads and onto the highway system. This would create a toll-free "ring road" to include the Falmouth Turnpike Spur and the interconnection of the Spur and Interstate 295. This effort has not been successful. The Town is investigating if some of the Turnpike Connector ramps that connect to Route One can be replaced with an at-grade intersection for economic development purposes. In addition, the MaineDOT has developed the I-295 Corridor Study which outlines the need for improvements to I-295 from Scarborough to Brunswick. Additional changes are anticipated for the Turnpike ramps as well as the Bucknam Road exit. Timing for those improvements has not yet been determined.

WILDLIFE HABITAT IMPACTS

A road can be a hazard and barrier for terrestrial wildlife species moving across the land and to aquatic species traveling up and down streams. Wildlife needs to be able to freely move across the landscape and through the waterways to find food, find a mate, access different habitats, and adapt to range shifts as a result of a changing climate. Town road maintenance and construction projects (such as culvert installation) can inadvertently impede fish (beyond just the diadromous species noted in the Marine Resources section) and wildlife passage. The State of Maine provides recommendations how to minimize such impacts. For more information on the effects of roads on wildlife, go to: http://www.maine.gov/doc/mfs/fpm/water/docs/stream_crossing_2008/MaineStreamCrossingsPoster.pdf and http://www.beginningwithhabitat.org/pdf/Conserving_Wildlife_in_MDL.pdf.

STREET TREES

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Street and shade trees can add to the character of the community. They typically are part of public infrastructure and in Falmouth are managed by the Public Works Department. According to the Maine Forest Service, studies have shown the value of street trees beyond shade and beauty. They play an important role in air filtration, stormwater interception, and increasing property values and business. These values support multiple state goals. The Maine Forest Service administers Project Canopy, a community forestry assistance program aimed at financially assisting with tree planting and maintenance and continued forest management planning. In recent years Falmouth has been the recipient of various Project Canopy grant for Town-owned parcels as well as for the enhancement of Route One South.

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2011 SURVEY

In the Driving, Bicycling, and Walking section of the survey, respondents urged the Town to do the following:

1. Coordinating with appropriate state agencies and using the 2010 consultant study, plan for a 10-year road construction and maintenance schedule. The plan should include a projection of costs and methods of funding, e.g. funds from the state and from the Town.
2. Develop a plan to provide more sidewalks and shoulders for biking and walking. The Plan should include a requirement that bike lanes be created as each road received repairs.
3. Facilitate coordination of the current system of trails with the PACTS Bicycle and Pedestrian Plan.

Back-up data for the survey includes:

Driving

- Speeding and traffic congestion are not major issues among the respondents.
- A majority of respondents want their roads maintained and are willing to have the Town assume responsibility for maintaining good roads even where it should be the state's responsibility.
- Respondents were split on the importance of connectivity between residential neighborhoods and were also split about the use of Town funds, or impact fees on property developers, to fund connectivity.

Bicycling

- The majority of respondents believe that it is important to have bike paths across Town and support installing paved shoulders, sidewalks, and improving trails to do so even if it means spending Town money.

Walking

- The majority of respondents want to be able to walk more on Town streets and trails for recreation and shopping, even if it means widening roads and spending Town money to do so, though the greater percentage of respondents were interested in using Town trails.
- The majority of respondents do not have access to sidewalks in their neighborhood but would use them if they existed.

The survey results also indicated that residents want transportation infrastructure improvements. Funding these improvements must be included in the town's overall financial plan.

ISSUES AND IMPLICATIONS

- Commuter traffic is increasing the need for improvements, particularly on the west side of I-295, to accommodate traffic growth.
- The dispersed pattern of development, combined with growth in outlying communities, is increasing traffic on the Town's rural collectors and is changing character.
- Despite an expansion of the pedestrian and bicycle network, there remains a need for additional improvements to allow the interconnection of neighborhoods.

PROPOSED COMPREHENSIVE PLAN GOALS

- Develop a functional bicycle network on Falmouth's roads.
- Construct new sidewalks on an ongoing basis to provide for safe places to walk.
- Assure that traffic congestion and speeding are not major issues.
- Develop a network of interconnected trails, to allow residents and visitors to move easily through town.

PROPOSED COMPREHENSIVE PLAN POLICIES

- Maintain the transportation network in Falmouth in the most cost-effective way possible.
- Improve the shoulders to add bicycle lanes and/or sidewalks, each time a road is being repaved or reconstructed, and where appropriate. Expand and interconnect the pedestrian trail network

in Falmouth. Interconnect and link pedestrian trails with sidewalks where possible. Connect Falmouth trails to those of adjacent towns.

- Work with the Maine DOT and PACTS to address deficiencies in the system, such as traffic congestion and pavement condition, and resolve any conflicts between local, regional, and state priorities for the local transportation system.
- Update yearly a prioritized 10-year improvement, maintenance, and repair plan for local/regional transportation system facilities that reflects community, regional, and state objectives every year during budget cycles, and every two-years at the regional (PACTS) level.
- Participate in regional and state transportation and land use planning efforts.
- Develop a safe pedestrian and bicycle network that connects neighborhoods together and serves as an alternative means of transportation throughout town.
- Require development to include pedestrian facilities for residents and link those facilities with existing or proposed public sidewalks, bikeways, or trails where feasible and appropriate.
- Explore potential outside funding sources to maximize opportunities for pedestrians, bicyclists, and outdoor recreation.

PROPOSED COMPREHENSIVE PLAN ACTIONS

Suggested Action	Suggested Responsible Party	Suggested Priority	Plan reference
1. Map current and proposed bicycle, pedestrian, and trail improvements and post on Town’s website	Town Staff	H	2-7
2. Design and implement an expanded wayfinding system to help people orient themselves and navigate through the community.	Town Staff	H	2-8, 4-12
3. Amend the land use regulations to require interconnection by new developments with surrounding bicycle and pedestrian networks.	Town Council	H	2-9, 5-13
4. Work with PACTS, MaineDOT, and GoMaine to implement a Transportation Demand Management program for Falmouth.	PACTS, Town Staff	H	4-13
5. Complete a pavement condition survey every three to five years, evaluate its findings, incorporate them into the Town’s asset management software program, and update the Capital Improvement Plan (CIP) accordingly.	Town Staff	M	2-10, 4-14

Suggested Action	Suggested Responsible Party	Suggested Priority	Plan reference
6. Explore the creation of a Route 100 North TIF District to help fund required transportation improvements.	Falmouth Economic Improvement Committee	M	1-8
7. Evaluate the routing for current public transit service and update this evaluation if and when commuter rail or express bus service to communities north of Portland is implemented.	METRO, Town Staff	L	2-11

Public Facilities and Services

Draft: June 20, 2013

Maine's Growth Management Act recommends planning for, financing, and developing an efficient system of public facilities and services to accommodate anticipated growth and economic development.

Growth, development, and changing demographics significantly affect the demands placed on public services, infrastructure, and facilities. This chapter examines the capacity of the Town's public services, infrastructure, and facilities in Falmouth to meet the existing and future needs for general government facilities, public safety (police, fire, and emergency medical services), public works, and school facilities.

TOWN HALL (www.town.falmouth.me.us)

The Falmouth Town Hall, located on Falmouth Road, is a two-story building built around 1899. It has undergone multiple renovations and additions. Town Hall houses several of the Town's municipal services. An annex is attached that houses the Falmouth Food Pantry. The Town Council recently decided to maintain the Town offices at this location and not relocate them to the Plummer-Motz and Lunt school complex, which had become available when the new elementary school was built. Because of its age, the Town Hall needs continued investment to address the building's maintenance needs. Particularly relevant is the lack of energy efficiency in this building.

FALMOUTH MEMORIAL LIBRARY (www.falmouthmemoriallibrary.org)

The Falmouth Memorial Library facility on Depot and Lunt roads is jointly owned by the Town of Falmouth and the Falmouth Memorial Library Association. While the Town provides approximately 75% of the annual operational funding for the library, the Association is responsible for the maintenance of the facility. Due to growing needs for its services, the library has expressed a need to expand its facility. On-site expansion possibilities have proven limited. Relocation of the library to the Lunt School property was rejected by Falmouth voters in 2011. The Board of Trustees is currently exploring its options.

A survey conducted in 2012 has provided the library with direction regarding content and services to Falmouth citizens. (*See the chapter on Historical, Archeological, and Cultural Resources*)

PARKS AND COMMUNITY PROGRAMS

Charged with providing supplementary educational, active and passive recreational, social, and cultural opportunities for members of the Falmouth community, this Town department provides programming and opportunities as fits community needs. A volunteer board works closely with the department's staff to address youth and adult demands. This department is also responsible for the scheduling of all public facilities supported by local tax dollars, including school buildings and municipal park facilities. The department maintains an online scheduling calendar; a cooperative venture between many Town and school departments. This department also assists numerous nonprofit organizations by providing meeting and/or event space.

Past facility discussions include a swimming pool, which was proposed but rejected by the Falmouth voters in 2002. A community recreation/meeting/gathering center is another potential facility which has been discussed for several years including what such a center entails, what services it could include, and where it could be located. A proposal for such a facility at the Motz School and Mason Gymnasium was rejected by Falmouth voters in 2011. The community has debated the need for a "civic" or "Town" center.

Given the changing demographics for Falmouth over the next ten years, this department may be challenged with taking the lead on providing a wider variety of services and learning, cultural, and recreational opportunities for Falmouth residents. The Parks Division, which had been placed with Public Works, was put back in this department in 2013.

PUBLIC SAFETY

A. POLICE

Providing a 24-hour, seven-day-a-week protection, the Falmouth Police Department occupies a new LEED-certified facility on Marshall Drive, off Woods Road. As residential and commercial development continues, pressure on the department's resources increase. Residential growth in rural areas has stretched the department's ability to offer adequate coverage and will continue to do so. Business development, too, continues to change the amount and type of coverage offered.

Falmouth's police, fire, and EMS services work cooperatively with adjoining communities to better provide public safety. As the challenge to match financial capacity with public safety demands, collaboration among municipalities will become a necessity. For example, the Town participated in the creation of a Regional Crime Lab. Similarly, since 2010, the Town has provided dispatch emergency services for the towns of Yarmouth and North Yarmouth.

B. FIRE AND EMERGENCY MEDICAL SERVICES (EMS)

Falmouth provides 24-hour, seven-day-a-week protection fire and emergency medical services (EMS). The predominantly volunteer department responded to 1,637 requests for service in 2011. There are three fire stations in Falmouth: Station 1 on Foreside Road, Central Station at the intersection of Bucknam Road and Route 1, and Station 4 at the intersection of Winn and Falmouth Roads. Pleasant Hill Fire Station, on Allen Avenue Extension, closed in 2010 and was sold for private re-use. The Central Station was renovated in 2007.

The three stations serve as home to three full-time staff, 100 volunteer/call firefighters and emergency medical technicians (EMT), and one part-time firefighter/paramedic who staffs an ambulance around the clock. The volunteer firefighters and EMT's are paid on a per-call basis for services. The Department has two volunteers on 24-hour, seven-day-a-week duty. As the call volume continues to increase, it is likely to stress the ability of volunteers to be able to leave their jobs, family, etc., and respond. Employers have become less willing to give the volunteers time from work to respond to calls. The department does not envision a great need for increased staff, but a second person on duty may be needed in the future. Currently, there is one part-time person around the clock.

The Fire Department has three pumper vehicles, one 95-foot aerial platform truck, one tanker truck, two utility vehicles, one command car, and three ambulances. In areas of Falmouth served by the public water system, fire hydrant flow volumes and flow pressures are adequate. Non-hydrant areas such as those located in West Falmouth rely on tanker trucks to carry the water needed to fight a fire. These areas are supplemented with 12 dry hydrants and six cisterns spread throughout town to provide remote water access. Several subdivisions have been built with self-contained home sprinkler systems.

The time commitment for volunteers continues to increase for both fire and rescue. Initial firefighter training and EMT training both consist of more than 120 hours for basic certification. Commercial

development demands different techniques and equipment, both of which require more training time. Public safety expectations have also changed, resulting in a paramedic responding with many EMS calls. The challenge is to match financial capacity with public safety demands.

The department has effective mutual assistance agreements with neighboring towns. Falmouth Fire-EMS is one of eleven area departments that comprise the Coastal Mutual Aid Association. Member organizations of this cooperative group have pledged to provide each other with their available resources for any emergency. Up-to-date lists of equipment and apparatus are maintained and utilized to establish pre-incident plans and facilitate rapid mobilization of needed resources in an emergency. This group meets bi-monthly and is lead by officers of the participating departments. Falmouth Fire-EMS is also an active participant in the Portland Metro Fire Chiefs collaboration and Cumberland County Fire Chiefs Association and is constantly working with its neighbors to address future needs, including staffing, response, and safety.

PUBLIC WORKS

The Public Works Department is responsible for street and road maintenance, and manages the solid waste disposal and recycling programs. The department has one facility located on Woods Road. Two expansions have assured the garage has enough space for the next 10 to 20 years. Various energy upgrades have also been made. The department has a detailed vehicle replacement schedule that plans to replace between one and three vehicles per year. The Street and Roads Maintenance Division performs snow plowing and ice control, mailbox repair for damages from plow trucks, road drainage, ditching and paving, street signs, street sweeping, catch basin and storm drain maintenance, roadside mowing, and maintenance of Town-owned trees.

The Solid Waste Disposal and Recycling Division manages the Town's curbside trash collection program and the recycling program, and operates the Town's transfer station for non-curbside trash. The Town's pay-per-bag program is designed to charge households for only the amount of trash they throw away, thereby encouraging households to throw away less and recycle more. Trash and recyclables not picked up at the curb can be brought to the transfer station on Woods Road. "Silver bullets" were abandoned in favor of curbside pickup in 2011 with minor effect on recycling rates. "Silver Bullets" still remain at the Transfer Station.

Responsibility for managing the Town's parks was transferred in 2013 back to the department from the Community Programs Department to allow for greater efficiency and coordination.

(See the chapter on Recreation and Open Space. The Town Landing facility is discussed in the chapter on Marine Resources).

WASTEWATER

A review of wastewater facilities is included in the Utilities Chapter.

SCHOOLS

The Town of Falmouth has several school facilities that provide public education for grades K through 12. Falmouth's growth has dramatically increased the number of students in the school system. The newest school, Falmouth Elementary, opened in 2011. The new elementary school closed two elementary schools: Plummer-Motz and Lunt. Following rejection of a civic re-use of this complex in 2011, a Request for Proposals (RFP) for private re-use and redevelopment was solicited by the Town

and most of the property was sold to OceanView at Falmouth for expansion of its retirement community.

	Grades	2000 students	2013 students
High School	9-12	548	735
Middle School	6-8	483	499
Elementary School	K-5	979	898
Total		2,010	2,132

In 2011, Falmouth was named a “Top City to Live and Learn” by *Forbes Magazine* and “Great Schools” in its study ranking cities across the United States. Falmouth schools earned an education quality score of 100.00. Based on the reputation of the Falmouth schools, in-migration of households with school aged children will continue to exert pressure on the school system. However, projections for 2012-2013 hold elementary, middle, and high school enrollments below 2011-2012 numbers. There is a perception that the amount of recreation space available for sports programs by the school and others is in high demand. Increasing expectations by parents and teachers will challenge financial capacity and demand creative exploration of funding.

2011 SURVEY (www.town.falmouth.me.us/Pages/FalmouthME_BComm/CompPlan)

The conclusions of the Town Services section state suggested that:

1. Overall, respondents were quite satisfied with Town services. Most commonly used services by respondents are the Town Clerk’s office, Town website, Falmouth Memorial Library, and the Transfer Station. As noted in the Verbatim Comments report, there is room for specific improvements.
2. There was dissatisfaction expressed with road conditions (at the time of the survey) and economic development.
3. Support for expansion of services appears to be for community/recreational programming and facilities and open space acquisition.

Expanded services

- The raw survey data will need to indicate how many people wanted some type of added service.
- In terms of number of people supporting added services, their level of support, and willingness to pay for the services through taxes and/or user fees was strongest for:
 - o Community/Recreational Programming and Facilities
 - o Open Space Acquisition
 - o Swimming pool.
- The pool had strongest opposition as well.
- There are some strong pockets of support for Library and community/town center expansion.
- Relatively new younger residents with children were the most supportive of expanded services.
- The survey did not test the level of support for taxes vs. user fees.

Shared services

- Respondents had strong support for shared services with other communities and/or Cumberland County if there were cost savings, and still supported this concept even if services moved out of Falmouth (but much less so).

- However, when presented with specific examples, that support eroded and turned into opposition. The greatest opposition was to sharing library and Town Hall services outside Falmouth. This was somewhat less so for transfer station and community programs.

Respondents of the Town Center section of the survey suggested that the Town:

1. Consider a “Town Center” definition beyond a building or a location. Its goal should primarily create a stronger sense of community and neighborhood, and secondarily offer more facilities and resources, as these are less popular, according to respondents.
2. Consider conservative budgets and leverage existing priorities to try to meet the goals above and incorporate. Examples are the needs around good roads and driving conditions, walkability of the Town, and other existing infrastructure projects that add minor costs to the concept.
3. Consider all neighborhoods as good locations for parks or other recreational facilities. The area around Route 1 and particularly the zone including the current library, Family Ice, baseball fields and surroundings offer “town center” attractiveness to (a) enable walking, sitting and recreational facilities, (b) access to businesses, and (c) potential further infrastructure at low cost.
4. Leverage opportunities also geared to families and adults under 50 — this may also help define ways of raising funds or even getting the projects completed (e.g. special individual contributions for more playgrounds, sitting benches, and other minor recreational facilities).

The back-up data for the Town Center section is as follows:

- The concept of the Town Center as a major initiative ranked at the bottom three of overall Town priorities with 47% support — but with more than one in three respondents claiming “not important.”
- When asked about the Town Center attributes, the top three rankings were for Memorial Library, recreational activities, and community activities with about 60% support.
- More structured activities — programs, culture, enrichment, and services — received support by about half the population.
- Residents likely without children in the household, recent arrivals (<5 years), and from Falmouth Corners were most interested in community activities.

The Conclusions section of the survey is a good tool to prioritize initiatives across Town resources. It reflects what matters in the respondent’s mind given the current circumstances. It should be used in conjunction with how circumstances change over the next ten years. Respondents suggested that the Town develop a plan that puts primary priorities and resources on (1) the quality of education, (2) public safety, and (3) the roads and driving conditions.

ISSUES AND IMPLICATIONS

- Continued growth will stretch the service capacity of the police department and may require additional patrols.
- Continued growth may require additional paid staffing in the fire department, especially on the EMS side, to assure the availability of adequate staffing.
- Growing school age populations may require the development of additional athletic fields and recreational facilities.

- Joint-use arrangements and multi-purpose designs on all public facilities projects will maximize limited resources and provide for flexible responses to changing conditions.
- As energy costs rise, improved efficiency and sustainability of Town facilities will become increasingly important.

PROPOSED COMPREHENSIVE PLAN POLICIES

- Anticipate changing demographics that will present challenges for both flexibility and more efficient use of facilities (including buildings, athletic fields, open space), as well as the financial capacity to fund stress on public safety and roads in particular.
- Improve the ongoing capital planning program by considering growth impacts on the needs of Town facilities (including schools) on a long-term basis and balance needs against willingness and ability to pay for them including the exploration of impact fees.
- Recognize the age diversity and economic concerns of its population over the next 10 years and provide services on a fair and equitable basis.
- Coordinate planning efforts of the town and the school system to share information, improve communication, and encourage coordination of activities.

PROPOSED COMPREHENSIVE PLAN ACTIONS

Suggested Actions	Suggested Responsible Party	Suggested Priority	Plan Reference
1. Request feedback from the community regarding the demand for existing Town and School facilities. Share the inventory of those facilities in a more obvious place on the Town’s website. Review, and improve where possible, the informational system to educate the public about the existence of Town and School facilities and their availability for use.	Town Council, Town Staff	H	4-15
2. Create a management system for more efficient, flexible, and open use of Town and School facilities.	Town Council, Town Staff	H	4-16
3. Review Fire and Rescue operations to determine whether there are staffing challenges as time commitments for volunteers increase, and if there is a problem, develop a plan address it.	Town Council, Town Staff	M	4-17

Utilities

Draft: June 20, 2013

Maine's Growth Management Act directs that communities plan for, finance, and develop, an efficient system of public facilities and services to accommodate anticipated growth and economic development.

Through this approach, municipalities can preserve natural resources of value to the community and encourage prudent development. This chapter focuses on the management of utility services including public water and sewer, stormwater management, and energy.

Public water and sewer are widely available in the denser areas of Falmouth. In the outlying, more rural areas of Town, water supply and sewage disposal are generally an individual property owner responsibility utilizing private wells and septic systems. As is typical in Maine, most houses are heated with oil, propane or gas, though wood stoves and boilers are also common. Most vehicles are powered by gas or diesel fuel. Current trends are leading to other energy and heat sources including solar, geothermal and wood pellet systems. This chapter provides an overview of the current status of the public water and sewer systems in Falmouth, as well as the availability of natural gas and anticipation of alternative energy use by individuals and the region as a whole.

PUBLIC WATER SERVICE

Public water in Falmouth is provided by the Portland Water District (PWD). The District is a quasi-municipal organization that provides water service to 200,000 people in the Greater Portland Region and is completely independent of the Town. The District delivers water service to Falmouth, Raymond, Scarborough, South Portland, Standish, and Windham, and provides both water and wastewater service to Cape Elizabeth, Cumberland, Gorham, Portland, and Westbrook.

The District's water supply is Sebago Lake. Sebago Lake water is clear, soft, and colorless; clean enough to be exempt from filtration required with most surface water sources. The size of this watershed allows the District to withdraw up to 300,000,000 gallons per day. Current use is around 22,000,000 gallons per day. The District has an extensive source-water protection program. The District owns about 2,500 acres of land around the intake at the southern end of the lake and leads a number of environmental protection efforts, including community outreach, security, and lake monitoring programs.

In 2000, the water distribution system served about 60% of the community (1800+ households) in Brookside, Falmouth Center, Woodville, Falmouth Corners, Pleasant Hill, and Falmouth Foreside. A booster station is located along Winn Road, but this benefits primarily Cumberland users as natural barriers make extending the water system into Falmouth problematic. There is considerable bedrock on the western side of Town along Leighton Hill, between Gray Road and Winn Road, on Pleasant Hill, and in areas to the west of Middle Road. Cost is a concern when space for water mains has to be blasted through shallow bedrock. In addition, elevation is a limitation and, for this reason, it is unlikely that water service would extend up Leighton Hill without an expensive pump station.

When new subdivisions are proposed, extensions of the water system are built by developers. The water district is not allowed to extend mains with ratepayer funds to serve new customers, and so does not proactively expand its system. When developers request service, they pay for the expansion. When water service is expanded, existing houses that the new water main passes by are not required to connect to the system. This creates fewer incentives to expand the system. However, the water district can upsize piping to enhance the service where extensions are specified by development or

municipalities. They may also expand in partnership with a town if a plan is established for a targeted expansion district or area. The Portland Water District is now one of seven founding members of a group called the Southern Maine Water Coalition. This entity was established by the Maine Legislature as a regional body and is allowed to enter into contracts that are beneficial to the member Districts. The Town may benefit from resources available. (*See Regional Coordination chapter.*)

PUBLIC SEWER SERVICE

The Town of Falmouth operates its own wastewater collection, conveyance, and treatment system. The Wastewater Department is responsible for the system's maintenance and operation. The system can be roughly separated into collection and treatment.

Falmouth's wastewater treatment system serves areas in Falmouth as well as Cumberland. Cumberland contracts its service from Falmouth. Falmouth's collection system encompasses the Route One corridor, Mackworth Point, and the Foreside. Middle and Pleasant Hill Roads are other heavily served areas. The system also serves the Woodlands development, the Woodville Road school campus, Leighton Road to Exit 53, and along Winn Road including the Falmouth Country Club. The Town of Falmouth's wastewater conveyance system includes approximately 39 miles of gravity sewers, 14 miles of pressure mains, and 28 pump stations that convey sewage to the Richard B. Goodenow Wastewater Treatment Facility (WWTF) located at 96 Clearwater Drive, near the head of the Presumpscot River Estuary (see Map). The WWTF, and seven of the pump stations, were constructed between 1969 and 1971 as part of a three-phase project. The remaining 21 stations were constructed between 1978 and 2007 (mostly by developers) and later turned over to the Town for long-term operations and maintenance. Some of the Town's existing gravity sewers pre-date the construction of the WWTF and were constructed as early as the 1940s. The WWTF is subject to a discharge license from the Maine Department of Environmental Protection. In 2008, the treatment facility received a significant upgrade. Pump stations and sewer lines are upgraded on an ongoing basis and older stations are near the point where they will need significant upgrades or replacement.

Most of Falmouth has generally poor soils for on-site wastewater disposal. Concern about old and malfunctioning septic systems sometimes prompts interest in possible sewer extensions by residential customers. The municipal system has some excess sewer capacity. Similar to water main extensions, sewer extensions are often realized when developers propose new subdivisions and the developer pays for the extension. Extensions may be considered too expensive depending on site conditions, such as depth to bedrock, whether pump stations are needed, and potential number of new connections. Local codes require existing residences to hook into an expanded collection system within ten years of the sewer becoming available. The Town Council must approve any extension whether serving new or existing lots. There is no mechanism or policy that encourages more residences and developers to hook into the system, or identifies areas of the town targeted for future expansion.

Peak flows during storm events have reached 4,000,000 gallons per day. There are no combined (stormwater and waste water) sewer overflows in Falmouth's system. Occasional overflows during extreme events back out of the system (through manhole covers) when too much flow exceeds system capacity. The Town has taken steps to reduce overflows from large storm events and increase capacity to better handle storm flows at pump stations and the treatment plant. Illicit sump pumps and floor drains, as well as leaking pipes and manholes, contribute to these peak flows. Continued efforts to remove sources of extraneous water are necessary to preserve licensed capacity needed to support future growth.

Demand on the system has grown. Average daily flows have increased from 450,000 gallons in 1971 to an average one million gallons per day today. The system is rated to handle 1,560,000 gallons per day. Organic loadings have increased from 800 pounds per day to 1,600 pounds. The system is designed to handle 2,600 pounds. Prior to a significant upgrade completed in 2008, area towns studied, and subsequently rejected, a regional option that would have eliminated the Falmouth facility and redirected Falmouth and Cumberland sewer flows to the Portland Water District treatment facility in Portland. The upgraded Falmouth facility provides secondary treatment of conventional pollutants, enhanced removal of nutrients, primarily nitrogen and phosphorus, and the ability to handle peak flows without operational problems.

Use of Falmouth's system is predominantly residential with commercial businesses contributing similarly to the waste stream. There are no heavy manufacturing or industrial wastes in the system. Nevertheless, household hazardous wastes make their way into the waste stream. Falmouth's wastewater treatment system is not designed to handle certain trace amounts of hazardous materials. Regulatory policy is focusing more on trace pollutants like mercury, pharmaceuticals, and nutrients. Concerns about the residual levels of these compounds are lessened if there is good mixing with the waters that receive the treated wastewater. The Maine Department of Environmental Protection reviews Falmouth's discharge permit in a five-year renewal cycle. The current permit must be renewed in early 2013. This periodic re-permitting may result in new limits that require investment in additional treatment technology or improved mixing of the plant effluent with the receiving waters.

Generally Falmouth's sewer rates are median for the area and lower than several neighboring communities. Residential hookups are charged a flat fee per month for their sewer service. Commercial fees are levied on the number of fixture units installed. New residential customers pay a \$100 application fee to the Town and a \$2,000 connection fee before connecting to the system. The current residential service cost is \$37.27 per month. The Wastewater Department is supported solely by these user fees.

A master plan for upgrades to the system's pump stations was completed in 2009. That study found that "the Town's operation and maintenance staff has been very proactive in maintaining the infrastructure and equipment in the system, but that several of the stations are reaching the end of, or have exceeded, their design life (capacity still remains, but components need replacement) and that several stations are approaching their maximum capacity and have little or no additional capacity to handle additional flows."

The 2009 study also stated that: "Because of the lack of adequate long-term sewer planning for West Falmouth, the Town is now faced with capacity limitations in several sections of the West Falmouth sewer system that may either preclude future development or make it cost-prohibitive. Prior to adding any new sewer users to the collection system, we strongly recommend that the Town develop a sewer master plan that will allow the Town to dictate how future developments in West Falmouth will be sewerred."

Consultant Wright-Pierce completed a 2013 report regarding Falmouth's wastewater treatment plant capacity. Wastewater management contains two major categories of function – collection and treatment. The treatment portion of the plant was upgraded in 2007 with planning for interim growth to 2015 and a plan for additional growth beyond 2015. The report identifies capacity for growth, but

advises the Town that there should be an effort to reduce flow during extreme peak wet weather events.

Infiltration and inflow (“I/I”) occurs during these extreme wet weather events from, for example, residential roof and floor drains that are inappropriately connected to the sewer system and high ground water that finds its way through joints in the gravity line system. Although the Town is doing an excellent job managing the peak events, it needs to consider (a) a plan for I/I reduction and (b) addressing pump station capacity (this has been an ongoing effort). A reduction in I/I will give the Town the capacity it needs to grow. Retrofit or replacement options for the Mill Creek pump station, the Town’s largest station, will also need to be considered.

The Town of Cumberland, which is also served by the Falmouth plant, will work with the Town to make sure the sewer system continues to meet the demands of current users and added capacity to serve future users. This is a key issue with financial and policy implications that include land use growth patterns.

STORMWATER MANAGEMENT

Since 2003, Falmouth has been regulated under the Environmental Protection Agency’s Phase II rules of the National Pollutant Discharge Elimination System. These rules, which fall under the federal “Clean Water Act,” are required for municipalities that discharge stormwater runoff to state and federal receiving waters and are intended to improve the quality of polluted stormwater that has the greatest likelihood of environmental degradation. The Town participates in a regional effort, called the Interlocal Stormwater Working Group (ISWG), to work collaboratively with other municipalities in the greater Portland area. This work results in shared resources and efforts which minimize costs and attain compliance with these rules.

Every five years a new “General Permit” is written, outlined, and followed in order to maintain regulatory compliance. Municipalities are required to report to the Maine Department of Environmental Protection on an annual basis. The six major categories of these permits are as follows: Education and Outreach, Public Involvement and Participation, Illicit Discharge Detection and Elimination, Construction Site Runoff Control, Post-Construction Stormwater Management, and Pollution Prevention/Good Housekeeping.

In 2012, the Town was awarded a Competitive Coastal Grant from the Maine Coastal Program. This grant was aimed at developing a proactive stormwater management plan for the commercial area of Route 1 that is part of the Webe’s and Mill Creek watersheds. Recommended retrofits will help to alleviate any potential stormwater quality concerns in this area.

(See Marine Resources and Regional Coordination chapters for related information.)

ENERGY MANAGEMENT

Since the 2000 Comprehensive Plan, the conversation about how we heat our homes and municipal buildings, power our lights, and power our cars has been changing. Due to environmental concerns, cost, and availability connected with the traditional fuel source (such as oil and gas), many Falmouth residents, and our Town, have been working to reduce use of oil and gas and consider alternative sources of energy. Driving through Falmouth today, one may see rooftop solar panels on a municipal building or a residence. Suggestive of the changes underway, a major, local solar equipment vendor reported in 2013 having installed 60 solar-powered devices (solar space heat, or solar photovoltaic

panels, or solar hot water systems) during the past several years. The hiring of energy auditors to determine how one may best conserve their energy use and make use of alternative forms of energy like the sun, geothermal heating and cooling, natural gas, wood chips, wind, and/or propane is becoming more common.

The Town has led the way in energy conservation and alternative energy use. The Town Council expressed their support of this direction through unanimously passing the U.S. Mayors Climate Protection Agreement in 2008 and authorizing a volunteer committee, the Falmouth Green Ribbon Commission, to complete a carbon footprint of the town and develop a plan to conserve energy, save money, reduce emissions, and investigate alternative energy solutions. The Recycling and Energy Advisory Committee (REAC) continues to serve as the citizen group associated with this effort.

From changing the lighting in Town Hall to less energy-consuming bulbs, to reducing vehicle miles travelled by staff through the purchase of efficient vehicles and changing vehicle usage policies, to installing propane heaters, wood chip heating and solar panels on the schools, the Town has chosen to make investments in energy conservation and innovations which have a sound financial basis and reduce environmental impacts. The Town, with the support of the public, chose to make both of its newest buildings, the Falmouth Elementary School and the Falmouth Police Department, energy efficient — earning the LEED Silver Award (Leadership in Energy and Environmental Design, U.S. Green Building Council) for the Police Department. The elementary school is working to achieve Gold Certification. The public has expressed its continuing support for green municipal building practices.

Recently, the U.S. has found a way to access large reserves of domestic natural gas. While most energy is supplied through an electric wire, gas pump, or heating fuel truck, natural gas, a cheaper and cleaner form of domestic energy, requires a pipeline distribution system. Most of Maine, Falmouth included, does not have the infrastructure for natural gas. Recently, Falmouth, Cumberland, and Yarmouth have been exploring the feasibility of bringing natural gas service into their towns. Service to a large part of the community appears financially feasible. The likely route would be from Tuttle Road in Cumberland along Route One south. (Gas service across Martin's Point Bridge has been deemed unfeasible and a connection from Brookside Road to Leighton Road is unlikely.) Development of this service could encourage development in the commercial areas of Route One, while reducing the environmental cost of supplying energy to this area. The feasibility of this initiative, timing, and cost, if any, to the Town are unknown at this time.

In other areas of the state, communities and groups are working together on installations that serve more than one home, a trend which may be encouraged here. Commercial installations may also be a possibility. There may be other opportunities to work with neighboring towns on energy projects, the gas pipeline being one example. Furthermore, the Town may have energy purchasing options. New information, changing costs and incentives, and greater technological developments in alternative energies are emerging every day. The Town has the opportunity to develop a position regarding the use, implications, and preferences for various energy sources and projects, whether pursued independently or collaboratively.

PROPOSED COMPREHENSIVE PLAN GOALS

- Take a more proactive role in planning and coordinating for the maintenance, expansion, and sustainability of our utilities.

- Continue the Town’s proactive position on energy and develop an energy plan to reduce overall energy consumption within the Town, increase public awareness of energy issues, and build public support for energy-efficient and sustainable energy policies.

PROPOSED COMPREHENSIVE PLAN POLICIES

- Develop a Master Sewer Plan as a priority to guide future West Falmouth development (the area between I-295 and the Maine Turnpike).
- Create a comprehensive energy plan for the Town and School Department to save money and reduce environmental impacts. Stay current with the changing energy-related developments by annually updating the Town’s Energy Plan.
- Revise existing, or establish new ordinances/regulations, if required, to address new impact issues or to achieve proposed comp plan actions. As alternative energy use becomes more prevalent with homeowners and commercial entities, impact issues may arise.

PROPOSED COMPREHENSIVE PLAN ACTIONS

Suggested Action	Suggested Responsible Party	Suggested Priority	Plan reference
1. Pro-actively plan for sewer, water, and other utility extensions. Assess the options and means of participating in collaborative efforts with agencies and regional groups to better serve residents and businesses. <ul style="list-style-type: none"> a. Assess the implications of increased emphasis on smaller, clustered lots as they pertain to reliability of wells and septic in closer proximity to each other, and if/how this should affect proactive extensions of public water and/or sewer service. b. Establish a plan for additional public water service in cooperation with Portland Water District (PWD). c. Establish a plan for targeted sewer service expansion in the designated growth area. 	Town Council, Town Staff	H	3-6
2. Establish a policy along with ordinance/regulation changes that identifies if, when, where, and how Town funds will be used for, and developments can recoup, utility infrastructure cost, and conditions/preferences for cost-sharing.	Town Council, Town Staff	H	3-7

Suggested Action	Suggested Responsible Party	Suggested Priority	Plan reference
3. Develop an energy plan for the municipality and school department. Update annually. <ul style="list-style-type: none"> a. Reduce overall energy consumption through conservation, energy efficiency and alternative energies. b. Determine and describe town interest in participating in group or regional energy initiatives. c. Assess need for guidelines on new installations of alternative energies such as wind, solar, tidal, etc. d. Continue pursuit of town-wide natural gas options. 	Town Council, Recycling and Energy Advisory Committee, Town Staff	M	1-9, 2-12

Fiscal Capacity and Capital Investment Plan

Draft: June 20, 2013

Maine's Growth Management Act recommends that communities plan for, finance, and develop an efficient system of public facilities and services to accommodate anticipated growth and economic development.

The fiscal capacity of a community is a key factor in its ability to meet this recommendation. The current financial condition of Falmouth is consistently stable, fiscally responsible, allows delivery of necessary services, includes a focus on sustainable solutions, and allows the servicing of basic continued growth.

ASSESSED VALUATION

An important component of the Town's fiscal health is its taxable real and personal property, also known as total assessed valuation. The total taxable assessed value more than doubled between 2002 and 2011 to \$ 2,240,376,000.

As a result of new construction over the past 20 years, Falmouth's valuation has increased between 1% to 4% per year. The Town Assessor has projected that new construction will add \$16 million, or 0.75% to the Town's assessed valuation for FY 2013, for a total valuation of \$2,152,685,000 (exclusive of Tax Increment Financing [TIF] valuation). This total valuation equates to more than \$192,462 per capita, which is generally considered a very good valuation ratio for a community with limited commercial tax base. The proportion of commercial value (compared to residential value) has increased from 13.0% in 2002 to 14.7% in 2011. ²

TAX RATE

Falmouth's tax rate, in its simplest terms, is a balance between Town expenditures and the Town's assessed value which has consistently demonstrated the fiscal responsibility exercised by the Town. In 1990, the tax rate was \$15.10 of tax for \$1,000 in assessed valuation. In 2000, the tax rate was \$18.60. In 2003, it climbed to \$20.45, only to drop to \$15.80 in 2004 due to a revaluation – the lower tax rate resulted from a higher valuation. The tax rate dropped to \$14.60 in 2008. Another revaluation in 2009 dropped it to \$12.35, where it stayed in 2010 and 2011. It increased to \$12.92 for FY 2011-12.

The municipal contribution to the tax rate (per \$1,000 valuation) has remained stable over the last decade, while the school's contribution has fluctuated over the last decade as the table below indicates.

	Town	School	Total
FY 2006	\$3.53	\$10.61	\$14.14
FY 2007	\$3.18	\$8.79	\$11.97
FY 2008	\$3.20	\$8.85	\$12.05
FY 2009	\$2.95	\$8.81	\$11.76
FY 2010	\$3.00	\$8.81	\$11.81
FY 2011	\$3.04	\$9.365	\$12.405
FY 2012	\$3.01	\$9.86	\$12.87

² Source: CAFR, page 80

Falmouth's tax rate continues to compare very favorably to surrounding communities. The State Bureau of Taxation publishes full value tax rates for all Maine communities each year. Full value tax rates are used so that fair comparisons can be made between communities. The rate is calculated by using the state-determined valuations and the adjusted locally-determined property tax commitments. (2009 is the most current data available from the state at the time of this writing.)

The table below compares Falmouth's full value rate with other area communities. Since 2000, Falmouth has had a rate below the average in each year with the exception of 2003. This table relies on state-derived data.-The most recent data demonstrates that Falmouth's full value rate is \$1.94 below the regional average.

Greater Portland Communities	2009	2008	2007	2006	2005	2004
Cape Elizabeth	13.20	13.05	11.92	10.89	11.71	12.48
Cumberland	14.67	13.51	13.26	14.85	12.54	13.70
Falmouth	12.16	11.81	11.36	10.74	12.44	14.38
Gorham	13.50	13.38	12.84	11.98	12.69	14.37
Portland	16.54	15.88	15.09	14.27	14.91	15.96
Scarborough	11.97	11.58	11.17	10.71	11.23	12.52
South Portland	14.66	13.77	13.41	12.75	13.23	14.09
Westbrook	16.14	15.32	15.20	14.90	15.27	17.97
Windham	12.00	10.91	10.74	10.88	11.72	14.11
Yarmouth	16.11	15.21	14.43	14.43	15.22	16.63
Average Full Value Rate	14.10	13.44	12.94	12.64	13.09	14.62
Falmouth	12.16	11.81	11.36	10.74	12.44	14.38
Variance from Average	1.94	1.63	1.58	1.90	0.66	0.24

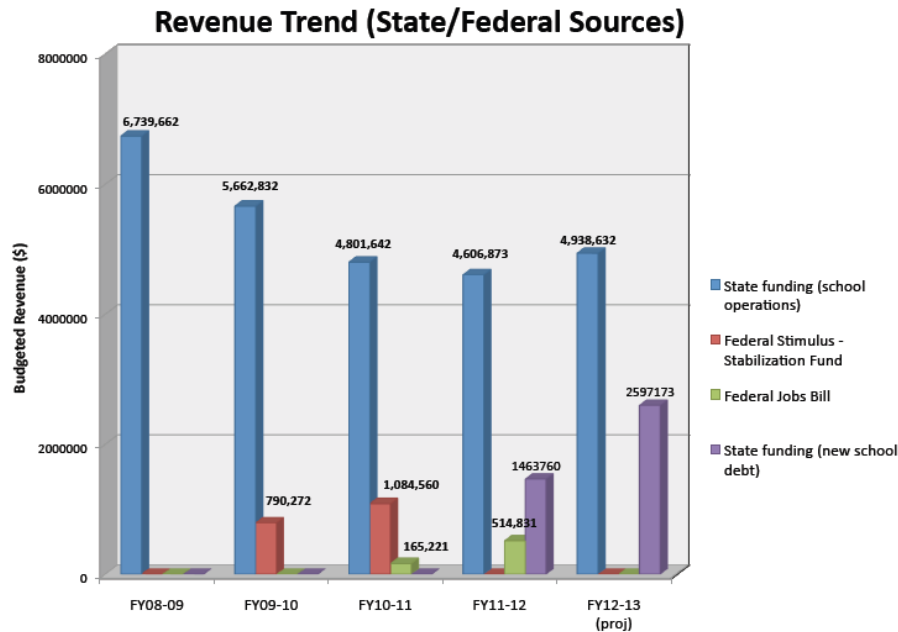
The following regional mill rate comparison was made in 2012.

TOWN	MIL RATE (current)	% OF VALUATION
Yarmouth	\$20.28	100
Portland	\$18.28	100
Westbrook	\$17.40	100
Gorham	\$16.30	100
South Portland	\$16.10	100
Cape Elizabeth	\$15.18	100
Freeport	\$15.15	100
Windham	\$13.90	100
Scarborough	\$13.03	100
Falmouth	\$12.92	100

OPERATING REVENUES AND EXPENDITURES

The budget for fiscal year 2012-13 shows that property taxes support municipal services for 59%, the Cumberland County assessment for 100% and education for 76%. Property Taxes for fiscal year 2012-2013 provide 59% of the municipal services budget, 100% of Cumberland County’s assessment, and 76% going to education.

For the fiscal year that ended on June 30, 2011, Falmouth’s revenues totaled more than \$46 million. Money raised from property taxes accounted for \$26 million and excise taxes raised more than \$2.3 million. Intergovernmental revenues ,mostly in the form of state school aid ,accounted for \$10.5 million of revenues. School revenues from state and federal sources have fluctuated over the past five years, as the chart below from the Falmouth School Department indicates.



In 2011, 63% of all expenses were spent on education. Public safety and public works combined to account for 18% of expenditures.

CAPITAL IMPROVEMENT PLAN

The capital improvement plan (CIP) is a tool used to manage the continuing need to replace or add equipment, buildings, land, and other capital assets. It not only addresses the maintenance and replacement of existing assets, but also looks ahead for future needs, projects, and mandates. Capital expenditures include funds for buildings, lands, major equipment, and other commodities that are of significant value and have a useful life of many years. In Falmouth, a capital improvement is a capital expenditure that is more than \$5,000 and has a useful life of more than one year.

Falmouth’s CIP is based on the inventory of assets required by the Government Accounting Standards Board 34 (GASB 34). GASB 34 requires the Town to have a detailed inventory of its entire infrastructure of roads, bridges, sidewalks, drains, and sewer lines.

There are a variety of internal and external factors that influence CIP decisions. These factors include:

1. Maintenance of Existing Facilities: Falmouth already has a considerable investment in its streets, wastewater system, town buildings, parks, etc. With limited financial resources to expand the existing capital stock, priority may be given to keep existing facilities in good working condition.
2. Availability of State and Federal Funding: The decreasing availability of revenue is cause for concern that may require new priorities with CIP decisions.
3. State and Federal Mandates: State and federal mandates may require the renovation of existing facilities or the construction of new facilities.

4. Imponderables: Even the best planning cannot anticipate future unforeseen circumstances. These imponderables may have negative or positive consequences.

The Town's CIP is structured to accommodate the goal of steady funding without significant changes in the property tax rate. The Town's strategy of making prudent investments in its capital equipment/facilities and infrastructure should be continued, because it will sustain the condition of the Town's infrastructure and minimize long-term maintenance costs.

Capital Expenditure Schedules are developed showing the detail of all capital outlays proposed for the next ten years. The entries include the fund balance at the beginning of the year, funding transfers, capital purchases, and the reserve balance at the end of the year. The purpose of the Capital Expenditure Schedule is to show that funding and revenue adjustments are enough to cover the capital outlays each year and to make sure that the fund is adequately funded at the end of ten years. Assumptions in FY 2013 include a \$16 million increase in valuation for each CIP year, but no interest earnings for capital funds.

Major capital annual expenditures through FY 2017-18 fluctuate per year and include a range of annual appropriations, such as:

- Major Collector & Sub Collector Road Improvements: \$565-855K
- Public Safety Building Bond Addition \$3.9 million bond: \$273-313K
- Open Space Reserve (November 2007 referendum): \$75-100K
- Fire apparatus reserve: \$412-337K
- Public Works equipment reserve: \$146-198K
- Computer equipment reserve: \$60-78K
- School improvements: \$185-267K

CAPITAL ASSETS

Falmouth's investment in capital assets for its governmental and business-type activities as of June 30, 2011, amounted to \$94 million (net of accumulated depreciation). This investment in capital assets includes land, buildings and system, land improvements, machinery and equipment, and infrastructure. Recent major capital asset events included the following:

- Construction of the new elementary school on the school campus on Woodville Road.
- Relocation of the existing athletic fields from the new school site was completed, along with the installation of a new wood chip boiler.
- Addition of the formerly private Falmouth-on-the-Green and Winn Road sewer lines and pumping stations to the Falmouth wastewater system.
- Several open space acquisitions and a variety of street construction projects throughout town.

DEBT SERVICE

As of June 30, 2012, Falmouth's gross debt/valuation ratio is an estimated 0.83%. The Maine Municipal Bond Bank has found the average debt/valuation ratio for Maine municipalities to be 2.1%. Municipalities have a legal debt limit of 15%; however, bond analysts consider anything under a 3% debt/valuation ratio to be acceptable. It should be noted that the bonded indebtedness of the Town's sewer utility is paid through sewer user charges, and not through property tax dollars, and is not reflected in this table.

Fiscal Year End June 30	Pop.**	Assessed Valuation* (x 1,000)	Total Direct Debt (x 1,000)	Debt as % of Assessed Value	Direct Debt per Capita
2012	11,185	\$2,277,294	\$18,910	0.83%	\$1,690.65
2011	10,823	2,240,376	19,304	0.86%	1,783.61
2010	10,823	2,219,406	15,542	0.77%	1,436.02
2009	10,823	2,195,699	16,831	0.77%	1,555.11

*Includes TIF valuation

**Source: U.S. Census Bureau

Total Direct Debt includes High School construction, Public Safety building improvements, and the local-only share of 2011 Elementary School bond

TAX COLLECTION RATES

The municipality's tax collection rate is another indicator of financial stability. Falmouth typically has an excellent collection rate averaging more than 97% from 2007 to 2012. Although the Town has been experiencing an economic downturn, tax collection rates remain strong.

UNASSIGNED FUND BALANCE

Falmouth's unreserved, unassigned fund balance as of June 30, 2011, was \$11,320,373. The Town recently amended its fund-balance policy to require a minimum 16.7% of expenses plus an additional \$1 M of reserve for unidentified capital needs. The fund balance should not be viewed as "cash on hand" or surplus funds. There are many encumbrances against the fund balance, such as reserves for receivables (unpaid taxes). For example, if the tax collection rate declined to 91%, as it did during the recession in the early 1990s, the amount that would need to be reserved for tax receivables would substantially increase. The fund balance provides the Town with adequate coverage for various liabilities, accounts receivable, unforeseen expenses or shortfalls in revenues. It has also enabled the Town to meet most of its cash flow needs despite the timing of property tax collections, which occur well into the fiscal year.

Analysis of Fund Balance	
Unreserved, unassigned Fund Balance (6/30/11)	\$11,320,373
Net Receivables	(454,324)
Tax-acquired property	(6,950)
Other non-cash assets	(108,766)
Unencumbered Fund Balance	10,750,333
Minimum Reserve required by Fund Balance Policy (16.7% of total 2011-12 expenditure budget)	(6,376,815)
Projected "Available" Fund Balance	\$4,373,518

The "available" fund balance should not be relied upon for regular tax relief. In accordance with Council fund-balance policy, this available balance should be used for what is commonly called "one-time" expenses. Regular reliance on fund balance could artificially reduce the tax rate but when fund balance

is no longer available, the tax rate will dramatically increase. "Available" fund balance is essential for the Town's ability to respond to unforeseen circumstances. These unforeseen circumstances can include natural disasters, premature infrastructure failure, and economic influences uncontrollable at the local level.

RATING AGENCY OPINIONS

The Town's 2011 estimated assessed valuation ("AV") totals a sizable \$2.24 billion. Corresponding state-equalized valuation is estimated at \$2.07 billion, or \$185,239 per capita. Rating agencies such as Standard & Poor's consider this "extremely strong." The agencies also consider Falmouth's tax base "very diverse," as the 10 leading taxpayers account for 6.9% of total AV with the largest taxpayer, OceanView, accounting for just 1.5%. The rating agencies also consider Town income levels "very strong," with median household and per capita effective buying income levels at 169% and 189% of national levels respectively.

The rating agencies found that Falmouth's financial performance remains consistently strong. The Town saw modest fund balance drawdowns in fiscal years 2008 and 2009 because of recessionary pressure on local receipts in addition to the continued funding of capital requirements. However, in 2010, the Town realized an \$846,000 increase in the fund balance, closing the year with an unreserved general fund balance of \$18.4 million, or 48% of general fund expenditures. Of this amount, \$10.2 million, or 26% of general fund expenditures, was undesignated, a level the rating agencies consider "very strong." The remaining \$8.3 million in unreserved fund balance was designated for various capital improvements and other future expenses.

For fiscal 2011, budgeted expenditures totaled \$36.2 million, a 1.2% decrease from the 2010 budget. Property taxes continue to be the Town's largest revenues source, accounting for 72% of budgeted general fund revenues.³ Current-year collections remain consistent and have averaged 97.7% over the past three fiscal years. Intergovernmental aid, primarily school state aid, accounts for 19% of budgeted town revenue while excise taxes generate an additional 6%. Both state revenue sharing and state school aid have come under pressure in recent years, somewhat mitigated by the receipt of federal stimulus funds (\$544,000 in fiscal 2010). The \$6.75 million in intergovernmental aid budgeted for fiscal 2011 represents a 7.4% decrease over fiscal 2010 budgeted aid.

In January 2011, Standard & Poor's stated:

"... (T)he Town's overall net debt burden is low. It equals just \$950 per capita, or 0.5% of market value. The Town's debt service carrying charges have been low, averaging 5% over the past three fiscal years. However, with the permanent financing of the elementary school project (...), the Town's debt ratio and carrying charge measures may increase should the Town need to issue additional new money debt. Debt amortization is currently very favorable, with the Town planning to retire 81% of General Obligation debt through 2020 and all debt through 2027 (...). Though the Town's capital plans calls for more than \$20 million in capital expenses through fiscal 2019, the Town does not expect to issue additional debt in the near to intermediate term. Such projects will instead be funded on a pay-as-you-go basis, including appropriation of the designated fund balance reserves."

³ Source: Standard & Poor, page 3

In January 2011, Moody's stated that it expected the Town's \$2.2 billion tax base to remain relatively stable given its favorable location and strong demographic characteristics. Its report stated:

"(...) (T)he Town's assessed value growth has averaged 6.2% annually since 2005, reflecting modest market appreciation and construction of new properties. However, growth in fiscal 2011 was just 0.9%, reflecting regional weakness in real estate markets as well as moderate additions of new single-family homes. Falmouth completed a town wide property revaluation resulting in a 26.4% increase in assessed values in fiscal 2009 largely reflecting value appreciation since the Town's last full revaluation in 2003. Although predominantly a residential community (78% of assessed value), access to major transportation arteries U.S. Route 1, Interstate 295, and Interstate 95 supports a healthy commercial sector (11% of assessed value). Residents benefit from employment opportunities in these districts as well as convenient access to Portland. Positively, the tax base exhibits a minimal level of concentration with the top ten taxpayers representing just 6.5% of the equalized value. The property tax collection rate remains strong, approximating 98% annually on a current year basis. Income levels are well in excess of national medians with per capita and median family income of 170% and 174% of the nation, respectively. Additionally, reflecting the Town's property wealth, the equalized value per capita totals \$196,932 or a strong 221% of the national median."

ISSUES AND IMPLICATIONS

- The pressure on the budget, due to reduced reliance on state and federal revenue sources, is likely to continue.
- The Town has a stable mill rate which is below average when compared to other communities in the region. As projects demand use of property taxes, it will also be important to maintain a stable and competitive mill rate.
- The Town has a need, but limited controls, to increase the share of property taxes paid by non-residential uses.
- The Town's use of debt to pay for needed facilities remains at manageable levels.

PROPOSED COMPREHENSIVE PLAN GOALS

- Maintain the fiscal health of the Town, while meeting the expectations of residents in keeping Falmouth a highly-desired community.
- Leverage the available fiscal flexibility to support or fund the top goals of the Comprehensive Plan in a manner that meets the overall Town 10-year vision.
- Manage finances for self-reliance, assuming federal and state resources will be less available or unreliable.

PROPOSED COMPREHENSIVE PLAN POLICIES

- Ensure budgets provide safety nets to manage reductions in federal and state resources.
- Leverage the Town's solid financial position to fund project opportunities that will increase the non-residential tax base and overall Town valuation.
- Ensure budgets prioritize and provide the infrastructure and capital requirements of the 10 year plan.

PROPOSED COMPREHENSIVE PLAN ACTIONS

Suggested Action	Suggested Responsible Party	Suggested Priority	Plan Reference
1. Prioritize long-term projects in the Town plan to ensure the top ones delivering on the plan’s vision are funded and executed within a 10-year timeframe.	Town Staff	H	4-10
2. Manage the balance of the tax base to increase the share coming from businesses. (This increased share will result from the success of the economic development plan.)	Falmouth Economic Improvement Committee	H	1-10
3. Leverage regionalization opportunities to help broaden fiscal flexibility by: <ul style="list-style-type: none"> • Seeking to regionalize non-priority cost-centers for the Town, • Freeing up Town resources to control mil rate increases or enable other Plan projects, and • Endorsing the goals of the Economic Development Plan to broaden the Town’s tax base. 	Town Council	H	4-19
4. Monitor the capacity to sustain or increase the current mil rate including the capacity of what taxpayers can manage.	Town Council, Town Staff	M	4-20
5. Continue to explore alternative resources, including but not limited to non-property tax, direct-funding programs (i.e. “pay to play”) as a way to help Town projects move forward if enough residents are willing to support them.	Town Council	M	4-21
6. Review, and amend as necessary, all financial management procedures and comply with established best management practices.	Town Staff	L	4-22

Natural Resources

Draft: June 20, 2013

Revised: January 2014

Maine's Growth Management Act recommends protecting the quality and managing the quantity of the State's water resources, including lakes, aquifers, great ponds, estuaries, rivers, and coastal areas and protecting the State's other critical natural resources, including without limitation, wetlands, wildlife and fisheries habitat, sand dunes, shorelands, scenic vistas, and unique natural areas.

As a coastal community, Falmouth has a rich diversity of these natural resources, including marine habitats, a major river system, a freshwater great pond, and numerous streams and wetlands. Much of Falmouth is forested and wildlife abounds. Maintaining balance between accommodating growth and preserving Falmouth's natural resources continues to be a major goal of the Comprehensive Plan. Understanding these natural resources is critical to achieving that goal.

TOPOGRAPHY

A. GEOLOGY

Falmouth is a transition zone between two of Maine's physiographic regions – the Central Uplands and the Midcoast. Inland, Falmouth is more akin to the Central Uplands with its long and gently-rolling ridges like Poplar Ridge and Blackstrap Hill. Along the coast are drowned river valleys, long winding bays, and rocky headlands; more typical of the Midcoast region.

B. LANDFORMS AND WATERSHEDS

Falmouth's elevation rises to 503 feet above sea level at Blackstrap Hill. Leighton Hill and Blackstrap Ridge form Falmouth's western wall. From these heights, the land falls away into hills and valleys that diminish to the coast. Seven watersheds divide the landscape: Casco Bay, Mill Creek, the East and West Branches of the Piscataqua, Highland Lake, Presumpscot River, and the Presumpscot Estuary. These combine into larger watersheds.

Steep terrain and soil type present restrictions for development. Generally, slopes between 3% and 8% are predominant throughout town. Slopes greater than 25% are mostly confined to locations immediately adjacent to the coastline and along stretches of the Presumpscot River, where geologic and soil formations are less stable and more susceptible to erosion.

C. SOILS

Shallow to bedrock soils and hydric (wet) soils can be a limiting factor in the location of septic systems. Approximately 50% of the Falmouth population uses on-site septic systems. The Maine State Plumbing Code requires a minimum of 12 inches (or more with some soil types) between the bottom of the leach field and the seasonal high water table, bedrock, or other restrictive layer.

Prime farmland soils are defined by the US Department of Agriculture as having the soil quality, growing season, and moisture supply needed to produce a sustained high yield of crops. Although farming has dramatically declined due to regional economic changes, preserving agricultural soils as a future resource should be considered. These agricultural soils are located throughout Falmouth, but most heavily in the Woodville Road and Winn Road area. (*See chapter on Agriculture and Forestry*)

D. SURFACE WATERS

Healthy surface waters (lakes, rivers, estuaries, and ocean) are a crucial resource because of their ecological, social, scenic, and recreational uses. The State has developed classification systems for lakes, rivers, and salt waters. These systems are based on standards for uses such as drinking water supply, fishery habitat, and recreational uses. The [Maine](#) Department of Environmental Protection ([DEPEPA](#)) [periodically](#) monitors surface water quality [on some waters](#) in Falmouth. [In addition to DEP monitoring, water quality monitoring is also conducted by the Highland Lake Association \(HLA\) and Presumpscot River Watch \(PRW\). HLA conducts bi-weekly water quality monitoring on Highland Lake from May through September. PRW is a volunteer organization that was formed in 1989 to conduct monitoring along the Presumpscot River and its tributaries. PRW currently monitors three stations in Falmouth including one on the Presumpscot River, one on the East Branch Piscataqua River and one on the Piscataqua River. More information can be found at: \[www.maine.gov/dep/water/monitoring/rivers_and_streams/vrmp/reports/2012/PRW_2012_Report.pdf\]\(http://www.maine.gov/dep/water/monitoring/rivers_and_streams/vrmp/reports/2012/PRW_2012_Report.pdf\).](#)

Maine DEP's 2010 *Integrated Water Quality Monitoring and Assessment Report* summarizes water quality data collected by the DEP and others. The Clean Water Act requires states to submit an Integrated Report to the EPA every even-numbered year. Monitoring information is analyzed by the DEP to assess the ability of Maine's water resources to meet uses such as drinking water, aquatic life support, fishing, or recreation as established by Maine's Water Classification laws.

The report bases assessments of streams, rivers, lakes, ponds, marine, and estuarine waters on these five main listing categories:

- Category 1: Attaining all designated uses and water quality standards, and no use is threatened.
- Category 2: Attains some of the designated uses; no use is threatened; and insufficient data or no data and information is available to determine if the remaining uses are attained or threatened (with presumption that all uses are attained).
- Category 3: Insufficient data and information to determine if designated uses are attained (with presumption that one or more uses may be impaired).
- Category 4: Impaired or threatened for one or more designated uses, but does not require development of a TMDL (Total Maximum Daily Load) report.
- Category 5: Waters impaired or threatened for one or more designated uses by a pollutant(s), and a TMDL report is required.

FALMOUTH SURFACE WATER QUALITY, 2010		
Water Body	Category	DEP Comments
Piscataqua River	2	Monitoring data showing attainment of bacteria standards
East Branch Piscataqua River (Main stem entering Piscataqua River, just upstream of confluence with Presumpscot River)	3	
Norton Brook	3	Nonattainment of bio criteria in 2002 may have been due to natural habitat effects. More data is required to support impaired assessment. Needs resampling

Highland Lake	2	Was category 5a in 2002. Improved to category 2 in 2010. Appears stable.
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Since the Sappi pulp mill in Westbrook closed and Smelt Hill Dam has been removed, the water quality of the Presumpscot River has been steadily improving and dissolved oxygen conditions are generally good.



In the 1980's and 1990's, Highland Lake's water quality has been steadily decreasing due to nonpoint source pollution from roads, driveways, and lawns. In 1990, the DEP listed Highland Lake as impaired (category 5) due to These increased phosphorous and sediment levels, reduced water clarity and dissolved oxygen levels are threatening the water quality. As the watershed of Highland Lake includes portions of Falmouth, Windham, and Westbrook, improvement of the lake's water quality required a coordinated effort by the three communities and area volunteers working with the Highland Land Association (HLA) and the Cumberland County Soil & Water Conservation District (CCSWCD). A 1999 watershed management plan, resulting from a watershed survey, was followed by extensive efforts in education and demonstration projects over a period of 13 years by the HLA and CCSWCD. This effort has, over the past ten years, resulted in improved water quality and habitat. In 2010, Highland Lake was removed from the Department of Environment Protection's list of "impaired at risk" lakes in Maine. The HLA continues its outreach efforts in education through its publications, website, and water quality monitoring, and Highland Lake Conservation Corps.

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WETLANDS

Wetlands are identified by the presence of hydric soils, hydrophilic (i.e. water loving) plants, and high water table for part of the year. Some wetlands have more value than others for cleansing water, providing flood control, maintaining stream flows, or supporting wildlife habitat. Wetlands are located throughout Falmouth. Coastal wetlands concentrate around the Presumpscot River estuary. Floodplain wetlands extend through the watershed of the Piscataqua's East Branch. Large freshwater wetlands are present near Highland Lake. Freshwater wetlands adjacent to water bodies provide highly beneficial functions including sediment and phosphorus removal, runoff attenuation, temperature stabilization, and habitat for aquatic species.

Vernal pools are a specific type of wetland, usually at their peak depth in the spring. They are particularly important because they provide critical breeding habitat for several native amphibian species that, in turn, sustain many other forms of woodland wildlife. Studies suggest that these amphibian species are rapidly vanishing as the pools and habitat they rely upon are developed, or otherwise compromised. Many of the amphibians that breed only in vernal pools spend most of their lives in the uplands within hundreds of feet of the vernal pool. The areas surrounding vernal pools are also critical for the survival of these species.

In order to provide the appropriate level of protection for wetlands and vernal pools and to build in flexibility to minimize undue impacts on land owners, draft policies were prepared in 2007. These draft policies focused on protecting the functions and values provided by Falmouth’s wetlands, vernal pools, and the adjacent associated upland habitats. The proposed policies were intended to protect wetlands and associated surface waters, support breeding populations of amphibian species that utilize vernal pool habitats in town, and provide for landowner flexibility in development. The draft zoning amendments were not voted upon by the Town Council at the time.

STREAMS

Forested riparian areas provide many benefits including providing shade to keep streams cool, bank stability, food sources and filtering stormwater runoff. Shoreland zoning typically provides protection for second-order and higher streams. A stream of the first order is a stream which does not have any other recurring or perennial stream feeding into it. When two first-order streams come together, they form a second-order stream. State officials have suggested that the Town consider extending Shoreland Zoning to provide at least minimal protection of first order streams.

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E. FLOODPLAINS

Floodplains are low, mostly flat areas adjacent to rivers, streams, ponds, and the ocean and are periodically covered by rising water during major periods of rain or snowmelt. The mapped 100-year floodplain has a one percent chance of being flooded during any year. In recent years, Falmouth has experienced several storms exceeding the 100-year event, including a 500-year flood in 1996. These floodplains are located along the river corridors and the shores of Falmouth’s lakes and ponds. Fortunately, very little development is located in the floodplains. These areas are typically zoned “Resource Protection.”

In 2004, the Federal Emergency Management Agency (FEMA) began a project to update floodplain maps in Cumberland County. This project has not been completed as several coastal communities challenged the methodologies and resulting base flood elevations in the study. In early 2010, FEMA staff encouraged communities to draft Memorandums of Understanding (MOU) to serve as a basis for improving the relationship between FEMA and the communities and promoting a more cooperative approach to floodplain mapping in their communities. The Town prepared an MOU, hired a consultant to do local mapping, and FEMA has accepted the Town’s mapping work. The Town’s data will be incorporated into the new FEMA maps. This is expected to result in much more accurate maps for the Town and better resources for individual property owners and banks when determining if flood insurance is necessary. The new FEMA maps are expected to be finalized by 2014.

GROUNDWATER

Groundwater meets the drinking water needs of residents not served by the public water system. Falmouth has a few larger sand and gravel aquifers, located in the Maine Turnpike corridor as well as along and south of the East Branch of the Piscataqua River. There are no public water wells in Town, but about one-third of the population gets its potable water from individual wells. The majority of wells are drilled into bedrock, which tends to be less susceptible to contamination problems than sand and gravel aquifers.

FISHERIES AND WILDLIFE HABITAT

The availability of high quality habitat for fish and wildlife is essential to maintaining an abundant and diverse population for both ecological and sport purposes. Development often fragments wildlife habitat and diminishes its quality for certain native species.

Although not all the streams in Falmouth have been inventoried by Maine Department of Inland Fisheries and Wildlife (IFW), several still support wild brook trout populations. They include the Piscataqua River, Hobbs Brook, Meader brook, Minnow Brook, and Norton Brook.

The State considers these streams high value or critical fish/wildlife habitat and recommends additional protection to protect these significant natural resources when reviewing proposed "development" projects. Brook trout habitat is vulnerable to a host of land-based activities, which often leads to a loss of riparian habitat. The State typically recommends a 100 foot undisturbed buffers along both sides of any stream or stream-associated wetlands. Protection of riparian areas diminishes erosion and sedimentation problems; reduces thermal impacts; maintains water quality; and supplies leaf litter and woody debris (providing energy and habitat) for the system. Protection of these important riparian functions insures that the overall health of the stream habitat is maintained. In addition, smaller headwater and lower order streams are often effected the greatest by development and these systems benefit the most from adequately sized, vegetated buffers.

Town road maintenance and construction projects can inadvertently impede fish passage at stream crossings. This issue is further discussed in the Transportation chapter.

The Falmouth Land Trust has been successful creating easements for wildlife habitat contiguous corridors. Deer wintering areas are a significant wildlife feature in Falmouth. Most of these are located just west of the I-95 corridor. However, actual deer wintering habitat locations may vary over time. Another species capable of living in suburban fringe areas is the wild turkey.

The removal of the Presumpscot River's Smelt Hill Dam has improved the freshwater fishery habitat along the river. A fish ladder at Highland Lake provides alewife migration access from the salt water to the fresh, and back again after spawning. (See the chapter on Recreation and Open Space)

Warmwater fishery resources within 634-acre Highland Lake include white perch, chain pickerel, largemouth bass, and smallmouth bass. Coldwater fishery resources within Highland Lake include landlocked salmon, brown trout, and/or brook trout. The coldwater fishery resources have been popular and longstanding, but are expected to be reduced (and may not exist in the future) due to a recent cancellation of the State's stocking program for those species. This cancellation followed a finding by IFW, per its policy, that public access to Highland Lake via Falmouth was deemed "inequitable." The Town Council was of the opinion that boat access ramp improvements proposed by the State would increase the number and size of boats using Highland Lake beyond the carrying capacity of the lake. The State has stated that that opinion contradicts State and Maine IFW public access goals and that the management of Highland Lake, as a public resource, falls under Maine IFW jurisdiction.

The Presumpscot River Watershed Coalition (PRWC) is a partnership of concerned citizens, municipalities, non-governmental organizations, and state and federal agencies working together to promote the recovery and long-term health of the Presumpscot River and its tributaries. PRWC developed a vision for the river and is implementing the Presumpscot River Management Plan,

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developed over a four-year period under the aegis of the Casco Bay Estuary Partnership.

Implementation partnerships with the Town may exist.

The Plan's focus areas are:

- Restoring fisheries
- Mitigating and reducing cumulative environmental impacts
- Improving and preserving open space

For more information, see: <http://presumpscotcoalition.org/plan.html>.

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UNIQUE AND CRITICAL NATURAL AREAS

Falmouth contains many distinctive natural resources that are officially listed as unique and critical natural areas by the state, including old growth white pine stands, seabird nesting areas, seal haul outs, rare reptile habitat, *Carex polymorpha* (an endangered sedge), *Potamogeton pulcher* (a threatened aquatic plant), *Lonicera dioica* (an endangered plant on Mackworth Island), and a rare vascular plant's habitat. More information on these resources follows below.

Endangered, Threatened, and Special Concern Species documented in Falmouth include: Eastern box turtle (Endangered), New England cottontail (Endangered), wood turtle (Special Concern), least bittern (Endangered), bald eagle (Special Concern), spotted turtle (Threatened), and roseate tern (Endangered). Endangered and Threatened species are protected from "take and harassment" under the Maine Endangered Species Act (MESA). Additionally, Clapboard Island Ledge is designated as Essential Habitat because it supports nesting roseate terns. For more information about these species or about MESA and Essential Habitat, visit: http://www.maine.gov/ifw/wildlife/endangered/listed_species_me.htm.

The Town supports Deer Wintering Areas, Inland and Tidal Wading Bird and Waterfowl Habitat, Shorebird Areas, Seabird Nesting Islands, and Significant Vernal Pools, all habitats designated as Significant Wildlife Habitat under the Natural Resources Protection Act (NRPA). For more information about these habitats and NRPA, visit: <http://www.maine.gov/dep/land/nrpa/index.html>.

Eight rare plant species have been documented by the Maine Natural Areas Program in Falmouth as well as two rare/exemplary natural community types. The below table provides an up-to-date list of significant plant features. For rank and state status explanations, go to

<http://www.maine.gov/dacf/mnap/features/rank.htm>. State Rarity Ranks are determined by the Maine Natural Areas Program;

- S1 Critically imperiled in Maine because of extreme rarity (five or fewer occurrences or very few remaining individuals or acres) or because some aspect of its biology makes it especially vulnerable to extirpation from the State of Maine.
- S2 Imperiled in Maine because of rarity (6-20 occurrences or few remaining individuals or acres) or because of other factors making it vulnerable to further decline.
- S3 Rare in Maine (20-100 occurrences).
- S4 Apparently secure in Maine.
- S5 Demonstrably secure in Maine.

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The features below marked with "*" are located wholly or mostly on conserved lands.

<u>COMMON NAME</u>	<u>SCIENTIFIC NAME</u>	<u>STATE RARITY RANK</u>	<u>STATE STATUS</u>
<u>Upright bindweed</u>	<u>Calystegiaspithamaea</u>	<u>S2</u>	<u>Threatened</u>
<u>Variable sedge</u>	<u>Carex polymorpha</u>	<u>S1</u>	<u>Endangered</u>
<u>Hollow Joe-pye weed *</u>	<u>Eupatorium fistulosum</u>	<u>S2</u>	<u>Species of Concern</u>
<u>Maple - basswood - ash forest natural community *</u>	<u>Enriched northern hardwood forest</u>	<u>S3</u>	<u>N/A</u>
<u>Smooth winterberry</u>	<u>Ilex laevigata</u>	<u>S3</u>	<u>Species of Concern</u>
<u>Mountain Honeysuckle *</u>	<u>Lonicera dioica</u>	<u>S2</u>	<u>Endangered</u>
<u>Foxtail bog-clubmoss</u>	<u>Lycopodiella alopecuroides</u>	<u>S1</u>	<u>Endangered</u>
<u>Broad beech-fern *</u>	<u>Phegopteris hexagonoptera</u>	<u>S2</u>	<u>Species of Concern</u>
<u>Spotted pondweed</u>	<u>Potamogeton pulcher</u>	<u>S1</u>	<u>Threatened</u>
<u>Hardwood river terrace forest natural community *</u>	<u>Upper floodplain hardwood forest</u>	<u>S3</u>	<u>N/A</u>

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Habitat for some of these significant species consists of former agricultural land, undeveloped fields and upland forests surrounded by wetlands. Loss of these habitats to house lots, conversion from field to mid-successional forest, and landscape fragmentation threaten their existence not only in Falmouth, but also in Maine. In the case of some species, the issue of road mortality has a significant impact, especially as it involves breeding adult species. Signage and road watch projects and proactive land management are some of the conservation measures that can be taken.

High Value Plant and Animal Habitats are shown on the Natural Resources Map in Volume III. The various Beginning With Habitat maps provide more detailed location data of each of the mapped these resources. Volume III provides only a summary depiction. For more information, see <http://www.beginningwithhabitat.org/index.html>. The Beginning With Habitat maps from November 2013 have also been posted on the Town’s website.

SCENIC RESOURCES

Scenic resources help define a community. They are the attributes that give it identity and make it an appealing place to live. These resources include the natural (views and vistas) as well as the cultural (buildings and monuments). Key scenic resources in Falmouth include the Falmouth Foreside Preserve, Gilsland Farm, the Presumpscot River to Highland Lake, Mill Creek, and several rural road corridors and view sheds.

OPEN SPACE PROTECTION

See Recreation and Open Space Chapter.

ISSUES AND IMPLICATIONS

- Highland Lake’s water quality problems have improved significantly, but require continued monitoring.
- Both the Presumpscot and the Piscataqua Rivers fail to meet the water quality standards of their classification.
- Much of the residential development relies on on-site sewage disposal, and soils in much of the Town are marginal for this purpose.
- Relaxed State standards for septic system bedrock and groundwater separations have allowed development in some marginal locations.

PROPOSED COMPREHENSIVE PLAN GOALS

- Protect environmentally sensitive lands including shorelines, wetlands, and critical wildlife habitats.
- Protect soils and groundwater from older and poorly working septic systems and ensure wastewater meets all applicable environmental standards for the Presumpscot River Estuary.
- Decrease the levels of nonpoint source pollution that reaches groundwater, natural water courses, streams, and significant water resources including the Presumpscot River and Estuary, Highland Lake, and Casco Bay.

PROPOSED COMPREHENSIVE PLAN POLICIES

- Review the Town’s Zoning Ordinance to protect wetlands and streams and make changes as necessary.
- Protect soils, groundwater, and estuary from older and poorly working septic systems by exploring ways to increase the efficiency and effectiveness of Falmouth’s sewer system ensuring wastewater meets all applicable environmental standards for the Presumpscot River Estuary. *(See the Utilities chapter.)*
- Encourage and support citizen and regional efforts to decrease nonpoint source pollution flowing into Falmouth’s bodies of water, including inland water resources and marine habitats.
- Guide growth and development towards land that has the capacity to absorb development without detrimental impacts to natural resources.

PROPOSED COMPREHENSIVE PLAN ACTIONS

Suggested Actions	Suggested Responsible Party	Suggested Priority	Plan Reference
<p>1. Review the Town’s Zoning Ordinance to protect wetlands <u>and streams</u> and make changes as necessary</p>	Town Council	H	2-13, 5-15
<p>2. Implement a program to educate property owners regarding non-point pollution sources, septic systems, and watersheds. (To date only a problem identification program has been developed.)</p>	Town Council	M	4-23
<p>3. Proactively, make available technical assistance/educational information to stem stormwater runoff in and around Falmouth roads, <u>inland water resources</u>, and critical shoreline areas.</p>	Public Works, CCSWCD	M	4-24

Marine Resources

Draft: June 20, 2013

Maine's Growth Management Act recommends protection of Maine's marine resources, industry, ports, and harbors from incompatible development, and promotion of access to the shore for commercial fishing and the public.

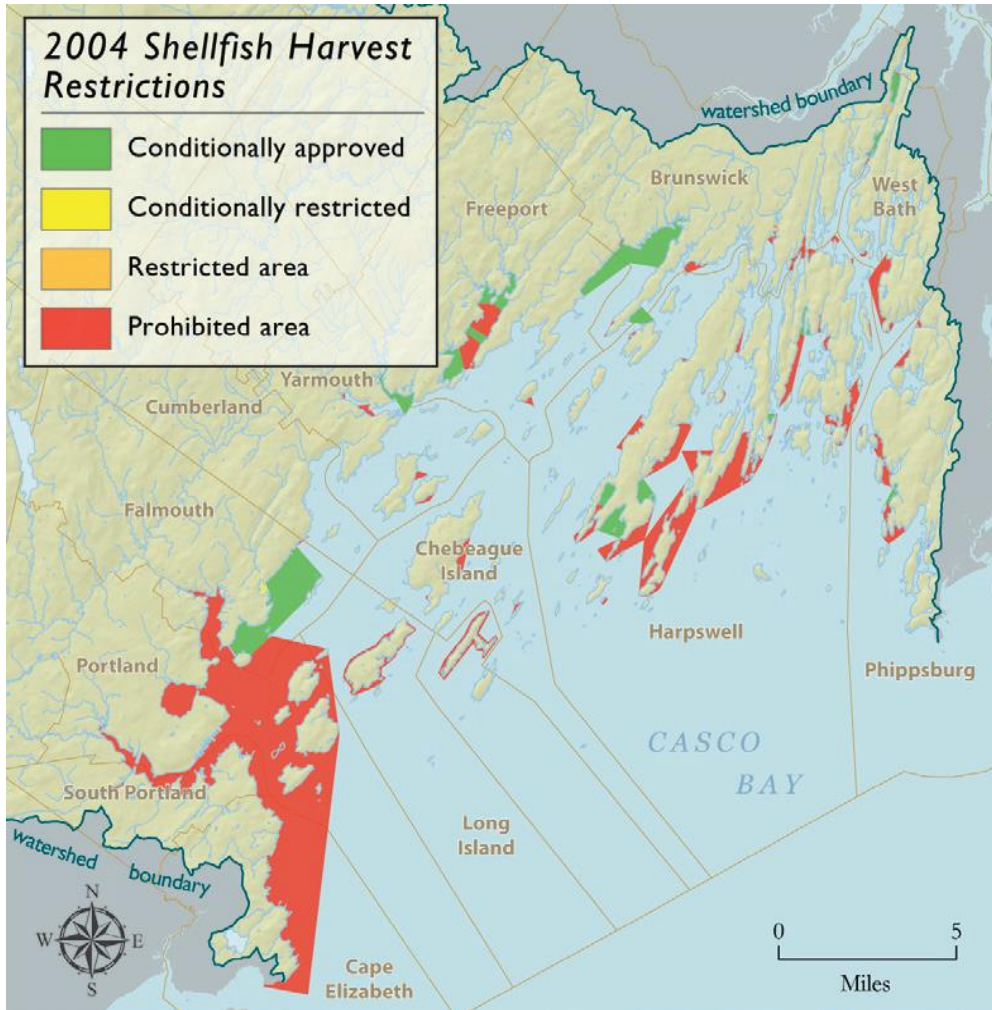
Rocky headlands, extensive tidal flats, estuaries, and a few islands characterize Falmouth's diverse coastline. Equally diverse has been the Town's history with the marine environment. Initially, Falmouth's waterways were highways for the Native Americans and early settlers. In the 1800s, they became the engine of the economy with boat building, milling, transportation, and fishing. Recently, the marine environment has become an attraction for passive and active recreation. According to "Mapping Maine's Working Waterfront, A Statewide Inventory by the Island Institute," of the 20.7 miles of coastline in Falmouth, 1.38 miles (6.7%) are available for public access and use. This chapter assesses the state of Falmouth's marine environment.

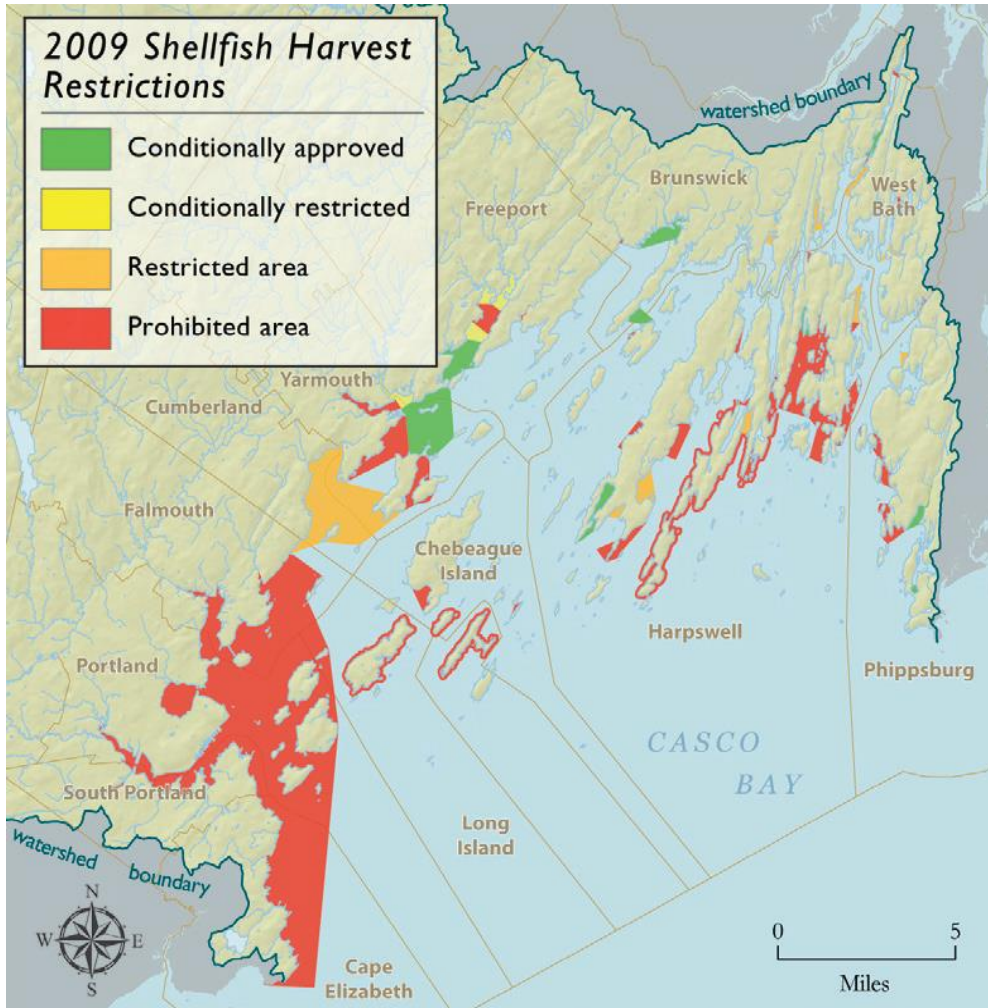
In the past decade, marine water quality monitoring efforts have been maintained by several stakeholder groups such as the Friends of Casco Bay. Shellfish harvesting has remained spotty but is consistent with the experiences of other, similarly situated coastal communities. Commercial fishing has declined markedly in the past decade primarily due to market forces. Public access to Casco Bay from Falmouth has remained static since 2000. Use of the Bay, based on mooring count, reached a peak of 1,114 moorings in 2006 and has declined since that time. There is no immediate pressure of increased mooring use and there is room in the mooring field for expansion if required and desired. Overall, use of Casco Bay by way of Falmouth remains hospitable to commercial and recreational use.

COMMERCIAL FISHING

The Maine Department of Marine Resources reports that there were 20 commercial boats registered in Falmouth in 2011. This is down from 86 as reported in the 2000 Comprehensive Plan. All of these boats fish for lobster. The total value of lobster landings in Maine reached an all-time high in 2005, and declined after that through 2009. In 2010, the value of lobster landings rebounded to nearly the 2005 level. In Cumberland County the total value of lobster landings reached a peak in 2006, but also declined in subsequent years only to rebound in 2010. Because there are no shore-based facilities for these fishermen, they sell their catch on Long Island or in Portland.

Falmouth's extensive tidal flats are prime habitat for soft shell clams. Shellfish harvesting was either prohibited or restricted along most of Falmouth's shoreline in 2011. That represents a significant change from 2004 when a much larger area (approximately 75% versus 10%) was conditionally approved for harvesting.





A shoreline survey was completed in 2010 and indicated the potential to open a few small areas (a couple of acres each) for harvesting. However, according to the Maine Department of Marine Resources, the mudflats in the vicinity of Underwood Road near Cumberland remained closed in 2011 because of stormwater discharges. The flats from Town Landing to Waites Landing are open, except for Mussel Cove, from November 15 to April 30. This closure is automatic during all seasons when boats are moored because of the potential for overboard dumping of wastes. The Mussel Cove area (from Mussel Cove to Bartlett Point and Prince Point) has been historically closed due to chronic background levels of bacteria, probably due to runoff and, perhaps, failed septic systems. The flats from Waites Landing to Mackworth Island and in the Presumpscot Estuary were closed in 2011 because of raw sewage overflow. The overflow was caused by vandalism at a pump station near the Falmouth wastewater treatment plant which disabled the pumps and alarm systems. This area has been conditionally reopened.

The Presumpscot Estuary is “permanently” closed due to Federal Food and Drug Administration guidelines related to viral contamination. This area has been flagged as an “area of concern for toxic contamination” by Maine Department of Environmental Protection (MDEP) due to results of sediment and mussel tissue analysis. These are in large part legacy toxics from past industrial uses. In addition, any (de)chlorinating of effluent discharges by the Falmouth or Westbrook treatment plants affects closure status in this area. Failure of the chlorination systems at either the Falmouth or Westbrook plants could result in (brief) closures.

Communities along the west shore of Casco Bay are gradually losing the tradition of clamming. Because it is happening so gradually, many people do not recognize this loss. There are about three resident and non-resident recreational clammers licensed in Falmouth. This is down from 150+ clammers in 2000. Closed clam flats can be seen, in part, as a reflection of contamination of coastal waters by pathogens. Pathogens are disease-causing agents. This risk may be significant in the future, especially if pathogen sources (such as stormwater runoff, pet waste contamination, septic system failures, etc.) are not addressed. As Falmouth fulfills its municipal, stormwater permit obligations, as mandated by the Environmental Protection Agency (EPA) and carries out shoreline surveys to address clam flat closures, potential pollution sources may be more clearly identified.

There is a commercial depuration clamming firm, Spinney Creek, that has operated in the Presumpscot River Estuary and other closed shellfish areas. Depuration is a process whereby clams are harvested from closed beds and then taken to a facility that flushes pollutants from the clams before going to market. Depuration harvesting in this area was halted many years ago due to Food and Drug Administration (FDA) requirements that harvesting could not be within the area of a treated sewage discharge (i.e. where there is less than a 1000 to 1 dilution, harvesting is prohibited). The prohibition results from the belief that disease-causing viruses are not effectively disabled by disinfection processes.

Spinney Creek has expressed interest in harvesting an area near the Falmouth wastewater treatment plant, which, if permitted, would require costly upgrades to that facility. According to the Wastewater Superintendent, Spinney Creek has recently been working with FDA and Maine Department of Marine Resources (MDMR) to modify harvesting requirements to allow a window for depuration harvesting each year in the late summer and fall. Should Spinney Creek successfully convince the Federal FDA to modify its requirements, the Town does not expect that this determination, by itself, would result in the need for upgrades at the wastewater treatment plant. Plant upgrades would, according to the Wastewater Superintendent, be needed to improve dilution, thus reducing the area that would be closed under current requirements. The wide extent of the existing closure results because the Presumpscot River Estuary is relatively shallow. For this same reason, substantially increasing dilution is not feasible. The cost for the Town to improve dilution (roughly by a factor of 2-3 times the current ratios) was estimated several years ago at \$1.5 to \$2 million.

A mussel, kelp, and sea lettuce aquaculture operation seaward of Clapboard Island was granted a 1.66 acre, 10-year lease by the Maine Department of Marine Resources in 2004. Four floating frames supporting ropes are seeded with mussels and other species.

PUBLIC RECREATIONAL BOATING

In 2011, there were approximately 1,075 recreational boats and 20 commercial boats in Falmouth. Falmouth presently has 1,103 moorings, a reduction from previous years likely due to the economy. It is the largest mooring north of Marblehead, MA. Approximately 60% of these moorings are owned by

residents of Falmouth. The mooring field has sufficient room for additional moorings if demand were to increase again. The town landing's floats are home to around 40-50 dinghies. Also at the town landing are a parking lot, beach, and a paved all-tide boat launch. An Anchorage Evaluation Report was prepared by a consultant in 2008 when demand for moorings was at its historical peak. It recommended additional parking, repositioning of moorings to a more efficient, larger capacity grid system, and a possible launch service. According to the Harbormaster, the need for additional parking still exists at certain times. Repositioning of moorings and a launch service were not pursued by the Town. The Town did purchase five dinghies which are used on a shared basis. This has helped reduce the number of dinghies at the floats. The Town also purchased property on Foreside Road and considered it for parking among other uses. The property remains vacant. There is occasional congestion at the town landing, particularly with boat-trailer traffic.

PRIVATE RECREATIONAL BOATING

Falmouth has two, marine-dependent users, which are both located off of the Foreside Road. Handy Boat is a marine service company that specializes in recreational boat service and includes a restaurant. The restaurant went through extensive renovations in 2011. The Portland Yacht Club is located between Handy Boat and the Town Landing. Both of these have a marine launch service.

PUBLIC ACCESS TO MARINE RESOURCES

As described above, Falmouth's town landing is a key access point to marine resources. In addition, state-owned Mackworth Island has several miles of coastline and small beaches that allow access to the ocean. Visual access is available in numerous locations, but water access is restricted to these two locations.

Currently, there are no swimming beaches in Falmouth monitored for bacteria (which are a surrogate for more dangerous pathogens) under the Maine Healthy Beaches program, therefore, there is no direct data on health risks associated with swimming in Falmouth's coastal waters.

[Public access to inland water resources is discussed in the Recreation and Open Space chapter.](#)

MARINE HABITATS

Extensive mud flats cover Falmouth's intertidal and near-shore waters and are prime habitat for soft shell clams. Also called steamers, soft shell clams are harvested by digging into the mud or sand at low tide. Threats to clams include overharvesting and "red tide," caused by excessive nutrients in the water which result in a dramatic increase in marine micro-organisms. The clam's digestive system concentrates the microorganisms in such large quantities that the clam itself can be unsafe for human consumption.

In waters between 20 and 40 feet deep, just north of the town pier, is a pocket of blue mussel habitat. Mussels are a popular seafood and are exported from Maine to places around the world. Like clams, mussels are filter feeders; they draw seawater through their systems and strain oxygen and nutrients. Mussel feeding systems subject them to red tides in much the same way as clams are subjected.

The deeper waters beyond Clapboard Island and Mackworth Island are abundant sea scallop habitat. While scallops resemble clams and mussels (two shells surrounding the organism itself), scallops are more mobile and actually swim through the water. Scallops are caught by divers, as well as boats dragging nets along the seafloor. They are highly prized seafood around the world. The largest threat to scallops is overfishing.

Sea run fish are a pointed reminder that the marine environment is dependent on Falmouth's freshwater lakes, rivers, and streams. Several of Falmouth's rivers and streams host sea run fish, or fish that split their lives between salt water and fresh water. Salmon, smelt, alewife, and bass are born in freshwater, live their lives in saltwater, and return to freshwater to breed. Eels are the opposite; they live in freshwater but return to the ocean to breed. The Smelt Hill Dam on the Presumpscot River presented a barrier to sea run fish, but was removed in 2002 as it was damaged beyond repair in a 1996 flood. The removal of the Smelt Hill Dam has resulted in restored migratory fish runs in the lower Presumpscot River, as far as the Cumberland Mills Dam, and allows alewives to migrate up the river and Mill Brook to Highland Lake, a historical spawning habitat for these fish.

Road-stream crossings often create artificial barriers to movement of anadromous fish and other aquatic organisms. Anadromous fish are born in fresh water, spend most of their life in the sea, and return to fresh water to spawn. Common examples are salmon, smelt, shad, striped bass, and sturgeon. Fragmentation of stream habitat limits the ability of anadromous fish to move, contributes to degraded health of streams, and reduces ability of streams to provide valued ecosystem services. Enhanced anadromous fish runs in the region would provide increased forage for marine and terrestrial predators and scavengers, such as groundfish (e.g., cod), game fish (striped bass), and raptors (bald eagles, osprey). Most streams in Falmouth are small, steep, or well upstream of major dams without fish passage, and few streams are likely to provide significant anadromous fish habitat. However, improved connectivity of hospitable waterways also would affect population viability for local resident fish and invertebrate species.

MARINE INFLUENCE ON LOCAL ECONOMY

The marine environment has a small influence on Falmouth's economy. The 20 commercial fishing boats are moored in Falmouth, but essentially none of their purchases or sales are done in Falmouth. Recreational boaters play a larger role in Falmouth's economy than the commercial fishers. Handy Boat, the only water-dependent business in town, relies heavily on recreational boaters.

THREATS TO MARINE ENVIRONMENT

Water quality monitoring programs have been conducted in Casco Bay by the State of Maine, Friends of Casco Bay, and other Casco Bay Estuary Partnership (CBEP) partners and collaborators since 1993. Friends of Casco Bay (FOCB) is a non-profit marine advocacy organization dedicated to the health of the bay. Key indicators that are being tracked include dissolved oxygen, water temperature, Secchi depth (water clarity), turbidity, and pH Levels.

The 2010 "State of the Bay" report published by the Casco Bay Estuary Partnership states that "(t)he overall water quality of Casco Bay is good, although there are a few sites where indicators have been measured at levels of concern. Low DO [dissolved oxygen] near urban areas suggests that the Bay is experiencing localized pollution problems, most likely due to over-enrichment with nitrogen." FOCB and CBEP have advocated for nutrient limitations which are being promulgated at the MDEP. These rules, when adopted, will result, according to the Wastewater Superintendent, in the need for additional upgrades at the sewer treatment plant. (*See Utilities Chapter.*)

Pollution remains the largest marine-related threat to the environment. Anti-fouling paint, although its quality has improved, is toxic and accumulates on the seabed as it 'flakes-off' boat bottoms. The large number of boats in Falmouth could pollute the seabed over time. According to the 2010 "State of the

Bay” report, “tributyl tin (TBT) is an ingredient in marine anti-fouling paints. Federal and state laws now ban the use of paints with TBT for all uses except for vessels longer than 25 meters, or those having aluminum hulls (Maine DEP 1999). The overall decline of TBT concentrations in the Bay’s sediments reflects the effectiveness of those laws at reducing toxic chemicals in the marine environment.” Outboard engines discharge oils and unburned hydrocarbons into the sea. Bilge water, water that drains into a boat’s bilge, can mix with oils and hydraulic fluids before being pumped back into the marine environment. These steady low levels of pollution can affect habitat over time.

According to the 2010 “State of the Bay” report, elevated levels of copper were found in mussels in the Falmouth Anchorage in 2007. No elevated toxic levels were found in mussels from Mill Creek in 2009.

According to the 2010 “State of the Bay” report, many common synthetic chemicals, which were not recognized as pollutants in the past, are now being detected in aquatic ecosystems throughout the world, where they are accumulating in the tissues of wildlife and humans. Among this new class of contaminants are polybrominated diphenyl ethers (PBDEs), used as flame retardants in commercial and residential textiles, furniture foam, and electronics since the 1970s. (...) Another important class of emerging contaminants is perfluorinated chemicals (PFCs), industrial chemicals whose common uses include stain repellents, Teflon coatings, cleaning agents, and firefighting foam. They are highly resistant to degradation, and persist in the environment.” Recent studies “raise concerns about the long-term health of marine mammals and birds in the region and, more critically, the overall health of the food web and the ecosystem.” Recent law changes in Maine have banned certain products and the Maine DEP is working with communities on one-day collection events for pharmaceuticals and personal care products (PPCPs), which the 2010 “State of the Bay” report considers “also important contaminants of emerging concern.”

Land-based threats exist as well. Some Foreside residences have septic systems which, when not working properly, can emit too many nutrients into the oceans. Although many of these systems have been fixed, there may be sources of pollution in the Foreside and interior watersheds that have not yet been identified. Only one licensed overboard discharge system exists in Falmouth. In 2003, an Illicit Discharge Ordinance was adopted targeting failing septic systems and illegal storm drain connections. Runoff throughout the watershed (including the Presumpscot and Piscataqua Rivers) from lawns, agriculture, and golf courses can introduce pesticides, herbicides, and fertilizers to the oceans. Roadways and parking lots can be the source of salts, sediments, and oils. Poor land use in the coastal zone as well as in the watersheds flowing into the marine environment can affect the water quality in Falmouth’s waters. In 2009, zoning and site plan review ordinance amendments brought the Town into compliance with the most recent Maine DEP stormwater rules.

According to the Casco Bay Estuary Partnership, projections for the region indicate median sea level rise by 2050 on the order of 20 inches (half a meter). Sea level rise may cause erosion, affect access to the coastal environment, and put public, community, and private recreational amenities — such as beaches, piers, Town Landing, and other community assets — low-lying roads, several sewage pump stations, and extensive sections of the sewer collection system at long-term risk. Falmouth has steep topography, so relatively few community assets are probably at risk in the near term, but those that are at risk may disproportionately affect community access to marine resources and Casco Bay.

[Invasive plants is an issue discussed the Forestry chapter, but, according to the State, invasive aquatic organisms, such as fish and mollusks, are worthy of consideration, as they have proven to be quite](#)

[devastating and costly. For more information, see: http://www.maine.gov/dep/water/invasives/invplan.html](http://www.maine.gov/dep/water/invasives/invplan.html)

ISSUES AND IMPLICATIONS

- Most of the community’s clam flats remain closed to harvesting. Reopening one or more high value clam flats will likely involve looking for, and remediating, sources of bacterial contamination, especially those associated with urbanization and suburbanization adjacent to the coast, such as surface runoff that carries pollutants from paved surfaces and poorly-functioning septic systems into the tidal areas.
- The safety of Falmouth's coastal waters for swimming is not monitored.
- Sea level rise may affect coastal access and put private and public facilities at risk.
- There are very limited opportunities for public access to the coast, except at Mackworth Island.
- The current public access at the Town Landing is limited.
- Access to rivers and streams for recreational and commercial fishing is limited.

PROPOSED COMPREHENSIVE PLAN GOALS

- Ensure safe, protected, access to its waterfront, rivers, streams, and lakes for commercial fishing and the public.
- Protect and improve the marine ecosystem and environmental integrity of Casco Bay.

PROPOSED COMPREHENSIVE PLAN POLICIES

- Maintain the current access to Casco Bay ~~for Falmouth residents.~~
- Assist in maintaining the environmental integrity of Casco Bay.
- Ensure that Falmouth’s coastal waters remain safe for swimming.
- Review the impact of road-crossing structures (culverts / bridges) on aquatic ecosystem connectivity.
- Expand public access to marine resources.

PROPOSED COMPREHENSIVE PLAN ACTIONS

Suggested Action	Suggested Responsible Party	Suggested Priority	Plan Reference
1. Investigate remediation of the last remaining overboard discharge system in Falmouth.	Town Staff	H	2-16
2. Identify one or more high value clam flats, assess its sources of contamination, and investigate remedial action to reopen them for harvest.	Marine Resources Committee	H	2-17, 1-11
3. Monitor water quality at Town Landing to ensure it remains safe for swimming.	Harbor/Waterfront Committee	H	2-18
4. Establish best practices for road-crossing structure replacement to promote aquatic ecosystem connectivity.	Town Staff	L	2-19

Recreation and Open Space

Draft: June 20, 2013

Revised: January 2014

Maine's Growth Management Act recommends promotion and protection of the availability of outdoor recreation opportunities for all Maine citizens, including access to surface waters.

This chapter quantifies and qualifies the outdoor recreation and open space resources of Falmouth, and explores how they are positioned for the demands of the future.

The amount and type of recreation and open space available to residents reinforces the value Falmouth residents place on providing opportunities for citizens to meet, play, exercise, relax, and reflect. The Town of Falmouth owns and/or offers public access to a multitude of natural outdoor open spaces. Falmouth residents and visitors routinely utilize these spaces for active/passive recreation activities such as walking, spending time with pets, mountain biking, trail running, hiking, bird watching, fishing, and hunting. In addition to natural outdoor spaces, the Town provides additional spaces such as tennis and basketball courts, athletic fields, golf courses (privately-owned) ice skating ponds, and parks.

Interior recreational spaces, such as gymnasiums, libraries, theaters, and community meeting spaces, provide opportunities for human development through social interaction, active recreation, exercise, and/or organized sports events. This chapter deals primarily with outdoor open spaces, both natural and manmade, and defers the interior spaces to the facilities chapter.

SUMMARY OF RECREATION AND OPEN SPACES

In 2011, Falmouth open spaces included:

- Undeveloped lands - 1,161 acres
- Park land – 140 acres
- Developed lands, other than park land – 223 acres
- Trails – 32 miles
- Playgrounds - 6
- Cemeteries – 35

STATE RECREATION and OPEN SPACE RESOURCES

Mackworth Island is owned by the Maine Department of Agriculture, Conservation, and Forestry. Its one hundred acres are open to the public for a fee. The facility is shared by the Baxter School for the Deaf and the Friends School. The 1.5 miles of trails on the island offer wonderful views of Casco Bay and access to several small pocket beaches. The Maine Department of Agriculture, Conservation, and Forestry also own a hand-carry boat launch off Mast and Lowell Farm roads, providing access to Highland Lake.

MUNICIPAL RECREATION AND OPEN SPACE RESOURCES

Falmouth's Town-owned recreation and open space resources vary in type, size, use, and ownership:

- Undeveloped Land — In 2011, Falmouth owned approximately 1,524 acres on 80 parcels ranging in size from 0.02 acres to 292 acres, up from 1,043 acres in 2000. Of the 2011 acreage, 1,161 acres (62 parcels) are undeveloped, up from 560 acres in 2000. The undeveloped acreage

includes the Blackstrap Hill Community Forest and Preserve, Hadlock Community Forest, Falmouth Nature Preserve, North Falmouth Community Forest, and many other smaller parcels.

- Landscaped Parks — Falmouth has several landscaped parks: Underwood Park (7 acres), Graves Park (1.7 acres), Depot Park (0.5 acres), and Village Park (12 acres).
- Trails — Falmouth has over 40 miles of designated trails.
- Athletic Fields — Some of Falmouth's fields are multiple use (for example a baseball diamond's outfield might also be part of a soccer field). Counting these multiple-use fields individually, the above example would tally as one soccer field and one baseball diamond. There are 26 athletic fields in Falmouth. Ten of these are at the school campus, ten are at Community Park, four are at the Legion Fields, and one is at Village Park and Huston Park. This includes one synthetic turf field, nine running fields (soccer, field hockey, etc.), two softball fields, seven baseball diamonds, and a track field.
- Outdoor Athletic Courts — Falmouth has seven lighted tennis courts and two unlighted tennis courts. There is a playground basketball facility with four baskets at Huston Park and Falmouth Elementary School has three outdoor basketball hoops for grades K-5.
- Playgrounds — Falmouth has six community playgrounds. These are located at Plummer-Motz/Lunt School complex, Legion Field complex, Huston Park, Underwood Park, Graves Park, and the Falmouth Elementary School.
- Water Access — Falmouth has a paved all-tide boat ramp and a beach at the Town Landing, and canoe/kayak launches off Blackstrap Road, Walton Park, and Woodville Road. *(See also Marine Resources chapter)*
- Skating Facilities — Falmouth has two public skating facilities. An outdoor hockey rink at Village Park and an outdoor family skating rink at Huston Park.
- Cemeteries — The Town of Falmouth maintains seven of the thirty-five cemeteries that exist in the community.

Currently, the Town owns about 140 acres of active parkland throughout a dozen locations.

RECENTLY COMPLETED FACILITIES

A new state-of-the-art stadium synthetic turf field complex with surrounding track was completed at the school campus in 2011.



A new elementary school opened in 2011 and provided playgrounds, outdoor basketball hoops, a full-size gymnasium, and a multi-purpose gymnasium as mentioned above.

PRIVATELY-OWNED RECREATION AND OPEN SPACE RESOURCES

Maine Audubon's preserve on Mackworth Point has dedicated public access in Falmouth. This land includes an environmental education center and a 2.5 mile trail network. The property is mostly fields with 3,300 feet of frontage at the mouth of the Presumpscot River with wonderful views.

Falmouth has several types of privately-owned open spaces that do not have dedicated public access. These vary in ownership and level of legal restriction:

- Undeveloped parcels are located throughout Town, but especially prominent in Hurricane Valley, on Poplar Ridge, Leighton Hill, and Falmouth Corners. Legally, there is no open space protection for most of these parcels. Several have been developed recently in western and northern Falmouth.
- Some of the undeveloped parts of the three country clubs — Portland Country Club, Falmouth Country Club, and The Woodlands — can be considered open space.
- "Tree Growth" tax parcels are located throughout Town. In 2010, 1,450 acres (55 parcels) were enrolled in the Tree Growth program, a current use taxation program. This is down about 100 acres from 2000. Lots can be removed from this program at the request of the owner, so these lots are not considered permanent open space.
- "Open Space" tax parcels are also located throughout Town. The owners of lands enrolled in the open space component of the Farm and Open Space tax program pay reduced property taxes as long as development does not occur. In 2010, there were 65 acres (3 parcels) enrolled in this portion of the program, down from 100 acres in 2000. Like the lands in the Tree Growth program, these lands can be removed from the program and are not considered permanent open space.
- In addition, there is a Farmland Tax Program that is discussed in the Agriculture and Forestry chapter.
- Conservation Easements are located throughout Falmouth. While the terms of each easement vary, typically the right for the owner to develop the land is removed or restricted and the land is dedicated open space. Several new developments in northern and western Falmouth have easements for open space, as does the Woodlands Country Club. By acre count, these parcels make up the majority of Falmouth's open space resources. Approximately half of Town-owned open space properties have conservation easements on them. The remainder have been designated "conservation land." Town-owned conservation lands can be used to match grant requests by the Town when they are turned from unprotected land into land protected through conservation easements. The open space use of such lands is unaffected.

The Falmouth Land Trust owns 13 properties totaling approximately 540 acres. Its largest properties are: Blackstrap Hill Preserve (280 acres), McCrann (79 acres), and Falmouth Corners Preserve at Ridgewood Estates (65.6 acres). The Trust holds easements on 14 properties totaling approximately 335 acres.

CONNECTIVITY TO ADJACENT COMMUNITY OPEN SPACES

Falmouth has established ongoing relationships with its neighboring communities and will benefit from future collaborative planning among communities. The surrounding towns and cities, along with the critical open space connections are:

- Portland: Portland Trails, power, water, and gas lines
- Windham: Highland Lake, Lowell Preserve
- Cumberland: Hadlock Community Forest and Rine Forest, power and gas lines

Falmouth should continue to reach out and seek cooperation and collaborative planning with its neighboring communities.

THE GREENING OF FALMOUTH PLAN

As residential development continued to occur, the Open Space Plan of 1990 became outdated and was replaced in 2006 by a new open space plan, titled *The Greening of Falmouth*. This effort was preceded in 2000 by a study of a one-square mile area, Pleasant Hill, which was the fastest growing residential section in Falmouth at that time. The results of that study established goals for future development, many of which directly or indirectly related to open space issues such as preservation, acquisition, use, and management.

The 2006 plan articulated the following goals:

1. To retain and protect Falmouth's rural character and natural resources,
2. To ensure the availability of outdoor recreation,
3. To preserve large tracts of undeveloped land that provide wildlife habitat,
4. To provide connectivity between open space areas, and
5. To actively manage open space to benefit all citizens of Falmouth.

The plan included several strategies and an action plan with six specific actions:

1. The Conservation Commission will lead implementation of the plan through an Open Space Implementation sub-committee formed for that purpose,
2. Refine the skills needed to improve conservation planning, acquisition, and management,
3. Acquire additional areas of high conservation value,
4. Use creative approaches and diverse funding sources when protecting conservation land,
5. Help private landowners keep their land undeveloped, and
6. Reduce the negative impacts of increasing traffic speed, volume, and noise on Falmouth's roads.

The Greening of Falmouth defines "open space" as "any non-developed land and water areas in the community. Open space may include woodland, wetlands, riparian corridors, farmland, orchards, and fields that serve a variety of functions: wildlife habitat, buffer zones, ecological protection, agriculture, passive public recreation, and scenic enjoyment." Active recreation areas, such as parks, golf courses, and playing fields, were not included in this definition.

FALMOUTH LAND ACQUISITION PROGRAM

The Greening of Falmouth Plan was followed by voter approval in 2007 of spending up to \$5 million for open space acquisition over ten years. As of 2013, about 40% of this amount has been expended. Due to budget constraints, annual funding allocations for this purpose have been reduced since 2008-09. Based

on recommendations in the 2006 Open Space Plan, the Town appointed an Open Space Ombudsman who facilitates land acquisitions, management of open space properties, public information, and fundraising.

The chart below details the recent growth in open space land acquisition and protection in acres.

Year	Town-owned, Undeveloped land	Town-owned, Permanently Protected for Conservation	Town-owned, Designated for Conservation	Town-owned, Undesignated (remaining undeveloped land)
2005	765	68	15	682
2011	1,167	594	573	0

Notable open spaces that were recently acquired or expanded include East Branch Conservation Area (55 acres), Hadlock Community Forest (292 acres), North Falmouth Community Forest (109 acres), and the Suckfish Bog Conservation Area (94 acres). In addition, several parcels adjacent to Community Park were acquired.

TRAIL DEVELOPMENT

The Falmouth Conservation Corps of volunteers is responsible for significant trail-development efforts on existing and newly-acquired open space lands. Falmouth currently has more than 40 miles of pedestrian trails in town, of which ± 16 miles has been built by Corps members on Town and local land trust-owned property during the last four years. This does not include 3.5 miles of canoe trail on the East Branch of the Presumpscot River.

MAPPING

The Town developed an interactive map and website for Parks and Public Lands at www.town.falmouth.me.us/parks&lands. This website is a useful tool for citizens looking for access to parks, open spaces, boat launches, and trails in Falmouth. It also published a print map showing the location of all the publically accessible open space properties in Falmouth. The Town periodically updates its GIS mapping system to keep accurate mapping records.

SURVEY OPINIONS

Past surveys identified significant support for open space and natural areas in Falmouth. This was tested again in the 2011 survey for this Comprehensive Plan.

Respondents suggested that the Town:

1. Acquire more open space with funds that have been previously authorized for this purpose,
2. Continue to preserve the open space it has already acquired,
3. Leverage alternative funds to buy more open space, and
4. Continue to set aside open space in new residential developments.

Respondents continued to support past decisions to acquire open space and wanted current space to continue to be preserved for a variety of uses. Respondents wanted the Town to maximize the use of alternative funds to acquire open space and use those funds in conjunction with the remainder of the \$5

million that had been authorized for open space acquisition. Residents also wanted to ensure that open space is distributed within current and future development.

COORDINATION

With increased land acquisition and improvement efforts, the need to coordinate these efforts has also increased. Representatives from Falmouth Land Trust, Falmouth’s Conservation Commission, and Trails Advisory Committee, and Town staff have begun meeting regularly to share the responsibilities regarding open space issues, such as land acquisition, land management, trail building and maintenance. This group is referred to as the Land Management Team (LMT).

Discussion regarding development and maintenance of trails has been ongoing among trail users, Town officials (LMT), and the current Ombudsman. It will be vitally important to have stakeholders interests accurately and fairly represented within the decision making and management process for all of these spaces. Specifically, the stakeholder groups should include underlying landowners and neighboring residents, along with recognized or interested users groups such as, hunters, hikers, runners, bird watchers, skiers, snowmobilers, mountain bikers, property owners, businesses, and other stakeholders.

ADEQUACY FOR CURRENT RECREATION NEEDS

Increased demand for formalized field sport recreation space has been alleviated by improvements made at Community Park and the school campus. Future demand predictions suggest that Falmouth may need to build additional recreation facilities, including a swimming pool facility, which is addressed in the Public Facilities and Services chapter. The natural open spaces are becoming more utilized proportional to community awareness, interconnectivity, and trail development. It is anticipated that natural open space use visits will continue to increase proportional to trail development and community awareness.

FUTURE CONSIDERATIONS

The Town has made notable progress in its efforts to obtain and manage open space properties since the 2000 Comprehensive Plan was formulated. Funding for land acquisition has become a routine line item in the Town’s annual budget (augmented by a concerted effort to obtain grants and donations). A committee structure (the Land Management Team or LMT) exists to oversee the overall open space acquisition and management process. Furthermore, a contracted staff person (the Ombudsman) has been employed to work with landowners, develop management plans and activities, assist with fund raising, inform the public, and take on the other tasks essential to this ongoing and evolving process.

An issue to consider in the future is: how much Town-owned open space do Falmouth residents want? The Town has made significant progress toward the primary goal of *The Greening of Falmouth Plan*. This goal is to “retain and protect Falmouth’s rural character and natural resources, and ensure the availability of outdoor recreation by preserving large tracts of undeveloped land that provide wildlife habitat with connectivity between open space areas, as well as actively manage open space to benefit all citizens of Falmouth.” Many of the major blocks of property have already, or will be, acquired in the next ten years, provided the goals of this Comprehensive Plan are followed. As future acquisition targets, a likely continuing need will remain for critical fragmented “fill-in” parcels that will allow for connectivity between larger parcels, as well as parcels that have a variety of esthetic, environmental, and/or financial benefits.

An ongoing issue will involve the management of these properties in ways that provide aesthetic, environmental and financial benefits to the Town. Much has been done in that area, but the need for management attention will remain, even if acquisition activity diminishes. The presence of a paid staff person to take responsibility for that work is essential.

Most of the acquisition activity to date has focused on acquiring large blocks of undeveloped land. Less attention has been paid to conserving smaller plots with scenic qualities that help maintain the Town's rural character. Efforts have been made to identify such properties, but more needs to be done in the coming years in this area.

Acquisition of properties providing connectivity with existing blocks of conservation land is also an issue of significant importance. In particular, attention needs to be paid to providing such connectivity between large blocks as North Falmouth Community Forest, Blackstrap Hill Preserve, and Hadlock Community Forest.

During the last ten years, the Town has been very successful raising outside funds to support management of existing open space properties, particularly for trail development and maintenance. The Town currently budgets only \$5,000 per year for trail construction and management. Traditionally, most of the trail development and maintenance labor has been from volunteers who typically use the outdoor spaces. Currently, Falmouth has benefited from a significant increase in the number of volunteer hours donated by trail and land users, a trend that is likely to continue as open space use increases.

State and federal monies for this kind of work may become increasingly harder to obtain, thereby necessitating an increase in the level of local funding for management activities. One, albeit small, source of local funding could come from timber sales revenue generated through the management of the various community forests.

Open space is also discussed in the Land Use chapter in the context of Conservation Subdivisions.

PUBLIC ACCESS TO INLAND WATER RESOURCES

The Town of Falmouth contains a portion of one Great Pond: Highland Lake. In addition, the Town contains two large streams (Presumpscot River, Piscataqua River) and various smaller streams. The public need to provide safe access to these waters is met through a variety of existing public access facilities, which are described below.

- The Highland Lake boat ramp is a carry-in boat launch established by the Maine Department of Conservation (DOC). A recent proposal by DOC to expand public access to include other, larger watercraft was rejected by the Falmouth Town Council. In response, MDIFW deemed public access to Highland Lake via Falmouth "inequitable" and, by policy, canceled its longstanding and popular coldwater stocking programs for the lake.
- Two carry-in access points to the Presumpscot River: the Blackstrap Canoe Launch and Walton Park. Both launches are similar to the ones located at the Portland/Westbrook and Portland/Falmouth lines.
- Access to the Piscataqua River is mostly via Town and State road crossings and through private properties.
- Hand-carry kayak and canoe put in to the East Branch of the Presumpscot River is on Woodville Road via the East Branch Conservation Area. Another put in is planned for Field Road.

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- Walk in access to the West Branch of the Presumpscot River is via a pedestrian trail at the northern end of Blackstrap Hill Community Forest, which is used by fishermen.
- Walk in access to the Suckfish Brook Conservation Area beaver pond for fishing and to River Point Conservation Area for fishing on the East & West Branch and the Presumpscot River.

Open space is often used to provide recreational opportunities and access to water resources. Particularly when public resources (such as lakes, rivers, and streams) are located within or adjacent to these designated open space areas, the State recommends that the Town should assure that such areas are open to all Maine citizens and not just residents of a private development.

The State also recommends adoption of an “exemption” in the Town’s zoning ordinance for public access projects that are consistent with Town and State public access goals. This measure will ensure consistency while foregoing the need to undertake a very detailed and comprehensive review of all plan provisions, including their implications. For example, land use zoning ordinances and practices designed to protect water quality are recommended to not be so strict so as to impede the development of public access opportunities. According to the State, these measures could severely limit or eliminate good access prospects on a heavily developed lake, such as Highland Lake.

While a disagreement exist with the Maine Department of Inland Fisheries and Wildlife regarding boat acces to Highland Lake, no specific or significant access deficiencies or improvement needs have been identified by the Town for its surface waters. Minor, low-impact improvements are expected to be made by the Town as opportunities to do so arise.

Public access to marine resources, including Town Landing, is discussed in the Marine Resources chapter.

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PROPOSED COMPREHENSIVE PLAN GOALS

- Actively manage open space to maximize its benefit ~~all Falmouth citizens.~~
- Promote and protect the availability of outdoor recreation opportunities ~~for all Falmouth citizens~~, including access to surface waters.

PROPOSED COMPREHENSIVE PLAN POLICIES

- Maintain existing active recreational facilities as necessary to meet current and future needs.
- When economically feasible and user demand justifies, upgrade existing active recreational facilities or acquire and/or construct new facilities as necessary to meet current and future needs.
- Continue to retain and protect Falmouth’s rural character and natural resources, and ensure the availability of outdoor recreation by preserving large tracts of undeveloped land that provide wildlife habitat connectivity.
- Preserve natural open space and allow for passive recreational uses, while not excluding traditional outdoor activities such as hunting and fishing.

- Actively acquire additional open space, to focus primarily on acquiring land that provides connectivity to the large parcels for the purpose of benefiting humans and wildlife with a secondary focus on acquisition of more large continuous tracks.
- Review and update the 2005 *Greening of Falmouth* report and conduct an assessment outlining accomplishments in open space protection and remaining tasks.
- Balance the needs of all outdoor recreational facilities with those of indoor recreational facilities. This applies to resources required for acquisition, development, maintenance, and management of those facilities. (See *Public Facilities and Services Chapter*.)
- Maintain existing access points to water bodies for boating, fishing, and swimming, balancing access with the concerns of neighbors.
- Promote public awareness of existing open space properties and recreational opportunities.
- Explore creating a linked community-wide pedestrian and bicycle network that connects all parts of town to its commercial centers.

PROPOSED COMPREHENSIVE PLAN ACTIONS

Suggested Actions	Suggested Responsible Party	Suggested Priority	Plan Reference
1. Focus on the acquisition of property or easements that will provide connectivity between existing blocks of park and conservation land.	Ombudsman, Land Management Team	H	2-20
2. Establish permanent access to the River Point Conservation Area once the existing railroad bridge becomes no longer serviceable.	Land Management and Acquisition Committee (LMAC), Town Staff	M	2-21
3. Establish a safe trail connection between the school campus and Falmouth Community Park.	Land Management and Acquisition Committee (LMAC), Town Staff	M	2-22
4. Continue to promote awareness of existing open space properties and the recreational opportunities they offer to Falmouth residents the public.	Town Staff, FEIC, Land Management Team and Ombudsman	M	2-23, 3-8, 4-25

Agriculture and Forestry

Draft: June 20, 2013

Maine's Growth Management recommends safeguarding the State's agricultural and forest resources from the type of development which threatens those resources.

AGRICULTURE

Falmouth's land use history is agriculturally rich. Throughout the last century, Falmouth has had many dairies and farmers planted corn, beans, blueberries and other crops for their own use and for sale. Woodlots were generally managed for personal use. At one time, so much land was cleared for various agricultural pursuits that it allowed a person to stand at the corner of Field and Woodville Roads and see clear to Cumberland.

Prime farmland soils are defined by the U.S. Department of Agriculture as having the soil quality, growing season, and moisture supply needed to produce a sustained high yield of crops. These agricultural soils are located throughout Falmouth, but most heavily in the Woodville and Winn roads area. (See map)

In the mid-1950s, the primary land use in Falmouth was agriculture, with the vast majority of the town's population living in the eastern portion of the community. The transformation of Falmouth started with the construction of the interstate highway system, Interstate 295 and the Maine Turnpike, which divided the community with major physical barriers and provided ready access for commuters to the Portland job market.

Over the last thirty years, Falmouth, along with much of southern Maine, has seen the loss of farm and forest land. As southern Maine has become developed, buildings and roadways have come to occupy former fields and forests. As noted in the Recreation and Open Space chapter, Falmouth's citizens have responded to this trend by supporting the Conservation Commission and the Falmouth Land Trust's efforts to conserve land by purchase and easement. This "open space" is thought of as places for passive and active recreation and provides habitat for wildlife. Conservation easements can permit agricultural and forestry-management pursuits where appropriate. In several surveys over the past ten years, Falmouth citizens have encouraged preservation and protection of open space (including farms and forests) and the community's rural character.

Since 2000, people in Maine and in Falmouth have begun to think differently about agriculture. For many reasons, people are showing a preference for locally-produced agricultural products, whether it is a vegetable or animal product. People have become more aware of how fertilizers and pesticides can affect human and animal health, land and water quality. Maine has seen a growth in farmers' markets, local agriculturally-based businesses, farm conservation efforts, and the promotion of farming. The 2007 Census of Agriculture showed an increase of 1,200 new principal farm operators in Maine from the 2002 census. Although many farmers are aging, there are young farmers entering the field. In 2002, Maine had the fifth youngest farmer population in the country. Farms are becoming smaller. Many of the new Maine farms are less than 100 acres and reflect new tastes and preferences and use varied, creative ways of making their operations pay. (Source: *Cultivating Maine's Agricultural Future, A Guide for Towns, Land Trust, and Farm Supporters*. American Farmland Trust, Maine Farmland Trust, Mainewatch Institute)

FALMOUTH FARMS

What is the present state of agriculture in Falmouth? How does Falmouth support agriculture?

Although Falmouth recently lost its last two dairy herds, other agricultural pursuits are carried on in different ways; the loss of agricultural land notwithstanding. A few of the more well-known operations follow.

Wilshore Farm on Hurricane Road, once a dairy farm, is farming hay and is composting. Much of that farm has been preserved by the Town of Falmouth and the Falmouth Land Trust. The farm is part of the largest block of contiguous protected open space: 600 acres in Falmouth, the Blackstrap Hill Community Forest and Preserve.

Idleknot Farm on Woodville Road, owned by the Hansen family for decades, produces rutabagas, hay, and vegetables which are sold from their farm stand.



Ned Therrien at Wilshore Farm

Another sizable farm, the Zacharias Farm, known for years for its prize-winning Holsteins, is one of the farms which recently sold its dairy herd after its owner died. Much of the Zacharias Farm (125 acres) was purchased in 1999 by the Town. Known as Falmouth Community Park, it is used for school-related athletics and general community use, including hiking, and non-motorized winter activities on marked trails.

Winslow Farm, located on Gray Road in Falmouth, is a family-owned nursery and produce business offering a diverse selection of annual flowers, perennials, vegetables, and fruit. Throughout the growing season, the farm stand provides seasonal organically-grown produce as well as pick-your-own blueberry opportunities.

Capall Creek Farm is a 79-acre horse farm on Route 100 with an indoor and outdoor area which offers riding lessons, horse boarding, quarter-horse training, clinics, and shows.

The Ciancette Farm on Woodville Road, an area recognized for its scenic views and rural character, is a hay farm with other varied, smaller operations.

Maine Coast Vineyards (MCV) began growing wine grapes in 1997 in Hurricane Valley, on the site of an old 14-acre chicken farm. Its wine is produced under federal regulations that ensure that the certified growing area is "Maine," meaning that the wine was made from at least 85% Maine-grown grapes. In 2008, MCV obtained a farming license to maintain a commercial vineyard on the premises and in 2009 its first wine was sold (500 bottles of rose, 1,400 bottles of red and 300 bottles of white). MCV

wholesales to local retail stores and restaurants that are involved in the “locally grown” movement. MCV does not sell wine on the site.



Steve Melchiskey, owner of Maine Coast Vineyards
(Source: www.mainecoastvineyards.com)

In addition to the appeal of the “buy local” theme, small farms have beneficial tax ramifications for municipalities. It’s been shown that farmland keeps municipal spending lower because farms and farmland require few services. Farms provide environmental benefits as they filter drinking water, minimize flooding, and provide wildlife habitat. Farms can strengthen communities by providing jobs as well as providing more accessible space for education and recreation.



Produce at Winslow Farm (photo: C. King)

TIDEWATER FARM AND THE UNIVERSITY OF MAINE REGIONAL LEARNING CENTER

Falmouth gained a wonderful community and regional asset when the University of Maine Regional Learning Center moved to the Tidewater Farm in 2011 (formerly the Fink Family Farm and Homestead). The Center is home to the Cumberland County office of the University of Maine Cooperative Extension, which offers public educational programs focused on practical skills in sustainable living for southern Maine individuals, families, children and home-based businesses using Maine’s natural resources. The Learning Center, located at nearby Tidewater Village, includes a teaching kitchen for programs in human nutrition, food preservation, and food safety, as well as meeting rooms for community events. Educational programming at the Farm represents a public-private partnership of the University of Maine Cooperative Extension, the Cumberland County Extension Association, and the Tidewater Conservation Foundation — a local, not-for-profit group that oversees the conservation easement at the Farm.

Several farming/educational initiatives have taken place at Tidewater Farm:

- Maine Harvest for Hunger is a Cooperative Extension program in which volunteers (including Master Gardener Volunteers) grow fresh, local produce for area shelters, food pantries, and neighbors in need. The University of Maine Cooperative Extension leases a 3-acre parcel of land from the Tidewater Conservation Foundation at the Farm for that purpose;
- The Center for African Heritage Studies uses 1.2 acres of farmland to teach new immigrants farming skills;
- Cultivating Community uses a 1-acre parcel on a community garden model where eligible individuals and families obtain a garden plot and grow food for their own use or for sale.

The University of Maine Cooperative Extension Office offers public programs in backyard gardening, horticulture, and sustainable agriculture. At the Farm, there is access to tillable land, where a series of demonstration gardens are planned for providing agricultural and horticultural educational opportunities to the community using research-based, environmentally-friendly and sustainable gardening practices. The main objectives are to teach youth and adults how to garden and grow their own food; promote sustainable gardening practices for food production and ecologically compatible landscapes; and to increase educational outreach capabilities by providing opportunities for partnerships with area schools and non-profit organizations. Adjacent to the farmland is a nineteenth century house, barn and apple orchard, which are available for future educational programs on a privately-owned portion of the Tidewater property.

FALMOUTH FARMERS MARKET

Evidence of the interest in local food is the success of the Falmouth Farmers Market. This market is one of the markets hosted by the Cumberland Farmers Market Association. It consists of area vendors who offer locally grown organic and all-natural produce, grass-fed meats, fish, dairy products, plants, and specialty foods.



FALMOUTH SCHOOL EFFORTS

The Food Service Department at Falmouth Schools is committed to the integration of locally grown food into the school menu. The high school has a fruit and vegetable garden where students work and a Falmouth food pantry garden was recently started by a middle school student to help provide fresh produce for the food pantry.

AGRICULTURE-RELATED BUSINESSES

Besides the enterprises already mentioned, there are various businesses in Falmouth that deal with plants and trees. Some of these are among the oldest businesses in town: Allen Sterling and Lothrop, Skillins Greenhouses, The Flower Shop and vegetable stand at Winslow Farm on Gray Road, Gnome Landscaping, and others.

TOWN SUPPORT OF AGRICULTURE: ZONING AND COMMUNITY AGRICULTURE

The Town's zoning ordinance promotes agricultural pursuits in several ways:

- Farming, meaning the cultivation of the soil for food products or other useful or valuable growth of the field or garden, nursery stock and non-commercial greenhouses, but excluding animal husbandry, is a permitted activity in the farm and forest and residential areas of the community
- Animal husbandry, meaning the boarding, raising, breeding or keeping of animals, fowl, or birds, for commercial purposes including, without limitations, swine, poultry, cattle, and horses, is permitted in the rural and Tidewater areas only.
- Seasonal farm stand signs erected by growers of fresh fruit and vegetable crops are permitted if the crops offered for sale are those grown on the premises.
- In response to resident interest in small livestock operations, the Town amended its zoning ordinance in 2008 and again in 2011 to allow the keeping of poultry in various parts of town.
- The Town also has rules for the keeping of horses, cattle, sheep, goats, and swine for personal use or enjoyment in these districts. No animals of any kind shall be boarded, raised, kept or bred for commercial purposes in residential areas.
- In 2012 the Town permitted roadside stands that sell local farm and food products, local home-prepared foods, and "Maine Made" products in certain parts of the town.

[Cumberland County Soil and Water Conservation District staff is available for consultation when the Town is interested to develop specific land use regulations pertaining to agricultural management practices. No need for such an action was identified in this plan.](#)

The 2000 Comprehensive Plan noted that "farming had dramatically declined due to regional economic changes" and that "preserving agricultural soils as a future resource should be considered." At that time, the appropriate, recommended action was "encouraging farmers and foresters to take advantage of the Current Use Tax Programs." In FY 2010-2011, 13 parcels comprising 497 acres were in the Farmland Current Use Tax Program. (In 2000, 5 such parcels were listed comprising 217 acres.) Established in 1971, the farmland program requires property owners to have at least five contiguous acres in their tract of land. The land must be used for farming, agriculture, horticulture, and can include woodland and wasteland. Additionally, the tract must contribute at least \$2,000 gross income from farming activities each year. Soils maps can give an indication which land is suitable as farmland. They can be accessed at: www.soils.usda.gov/survey/online_surveys/maine/cumberlandME.

TOWN-OWNED AND FALMOUTH LAND TRUST-OWNED FORESTS

The Town and the Falmouth Land Trust (FLT) own a combined 1,305 acres of forest land in more than a dozen properties. The goals of owning and managing this forest land are to maintain open space, healthy forest ecosystems, preserve and improve wildlife habitat, and provide opportunities for recreation. Two forest inventories and management plans have been completed for most of this land - one in 2009, the other in 2012. The purpose of this work is to guide proper management of these properties in order to improve the volume, quality, and value of timber. Other benefits are to generate income, keep the forest more diverse, vigorous, and continually renewing itself, as well as provide wildlife habitat for desired species.

Of the 1,172 acres examined (see charts below), 1,059 acres are woodland. The reports state that these wooded acres have a combined total stocking of over 6,700,000 board feet of logs suitable for sawing into lumber or better products, and 25,000 cords of lower-value pulpwood and firewood-quality material. Using cords as a standard measure, all the wood on the property would total 38,000 cords, which is an average stocking of about 35 cords per acre. This is considered well stocked to somewhat overstocked. The value of this timber totals approximately \$1.5 million. This value assumes typical sustainable forestry practices are required. Most of the forest stands are highly stocked and recommendations for thinning, improvement cuts, and harvesting are made in the plan. The treatments recommended are to maintain a healthy vigorous forest, improve wildlife habitat, and harvest a sustainable crop.

Treatment was recommended to start with the more traditional woodlots of Blackstrap Hill, Community Forest, Woods Road Community Forest, or the Hadlock Community Forest. Treating 50 to 100 acres annually would result in about a 10-year treatment cycle. The Nature Preserve and Pine Grove Park were considered the neediest from a forestry point of view, but harvesting timber was likely to be controversial on those lots, and in the case of Falmouth Nature Preserve, prohibited by deed restrictions. In 2011, an area of about 150 acres at Hadlock Community Forest was cut and a large volume of low grade, low value, overstocked trees were removed.

Invasive plants are a common problem throughout Falmouth's forests. Invasive plants were observed in all forests except North Falmouth Community Forest and Hadlock Community Forest. There are major infestations in some areas of the town properties with other areas have small populations. Recommendations regarding control of these plants were made in the management plans.

Summary of Town-Owned and Falmouth Land Trust-Owned Woodlots					
Inventory date	Name	Total Acres (Town records)	Acres Woodland (GPS)	Cords per Acre Avg.	Total Value of Timber
2009	Blackstrap Hill Community Forest (FLT property)	195	179	42	\$238,038
2009	Hadlock Community Forest	227	241	38	\$303,864
2009	Woods Road Community Forest	135	111	45	\$222,348
2009	Nature Preserve	83	78	36	\$92,669
2009	North Falmouth Community Forest	49	49	26	\$44,329
2009	Community Park	119	45	26	\$21,916
2009	Pine Grove Park	29	29	81	\$132,940
2009	Town Forest	23	26	41	\$50,600
2009 Totals		860	758		\$1,106,705
2011	Hadlock Community Forest	67	66	35	\$89,978
2011	North Falmouth Community Forest	61	59	18	\$44,874
2011	Community Park	40	40	29	\$42,311
2011	Stillings Lot	24	18	26	\$21,292
2011	Longwoods - East	27	27	31	\$35,833
2011	Longwoods - West	20	20	48	\$48,186
2011	Falmouth Corners (FLT property)	73	71	41	\$126,473
2011 Totals		312	301		\$408,894

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Management plans have also been prepared for other wooded areas owned by the Town: the wooded land in the East Branch Conservation Area (55 acres) and the forest in the Suckfish Brook Conservation Area (65 acres). The most recently acquired forest property (Hundred Acre Woods) does not yet have a management plan.

Decisions on how to best manage the Town-owned properties are made by a "Land Management Team," which includes the Town Manager, Public Works Director, Parks and Community Programs Director, Falmouth Land Trust President, Falmouth Land Trust Executive Director, Conservation Commission chair, a Falmouth Conservation Corps member, and the Open Space Ombudsman.

PRIVATELY-OWNED FORESTS

According to the Small Woodland Owners Association of Maine (SWOAM), there are more than 120,000 small woodland owners in Maine. This term applies to people who own between 10 and 1,000 acres of forestland. These landowners own more than 5.5 million acres, or 33% of Maine's woodlands. Each year, Maine's small woodland owners generate more than 40% of the wood that is used in Maine's forest products industries. In addition, Maine's small woodland ownerships play a critical role in the protection of important wildlife habitats, provide the public with numerous recreational opportunities, and help to maintain much needed open space. SWOAM has been helping these small woodland owners address issues such as taxes, public use of private lands, land use regulations, protecting wildlife habitats and water quality, and marketing and utilization of forest products.

In 2012, SWOAM had about 17 members who live or own land in Falmouth. SWOAM believes that the biggest concerns of woodland owners in this part of Maine are:

- Being able to afford to own and keep woodland as woodland. Tree Growth and Open Space designations assist in property tax assigned, but are not without critics.
- Concerns over zoning, specifically those restrictions on use that have potential to significantly lower property values. Even though many woodland owners may not have any intention of developing their property, they often view their property value as an “emergency” fund. If value is lost, that emergency fund is diminished.
- Misuse of woodland property by others, whether it is dumping, unauthorized motorized vehicle use, or general mischief. Town help when landowners have a problem was recommended. For example, some communities have waived fees for disposal of items dumped on woodland-owner property.

Summary of Timber Harvest Information for Falmouth

<u>YEAR</u>	<u>Selection harvest, acres</u>	<u>Shelterwood harvest, acres</u>	<u>Clearcut harvest, acres</u>	<u>Total Harvest, acres</u>	<u>Change of land use, acres</u>	<u>Number of timber harvests</u>
<u>1991</u>	<u>219</u>	<u>37</u>	<u>0</u>	<u>256</u>	<u>0</u>	<u>6</u>
<u>1992</u>	<u>140</u>	<u>40</u>	<u>0</u>	<u>180</u>	<u>0</u>	<u>4</u>
<u>1993</u>	<u>204</u>	<u>1</u>	<u>0</u>	<u>205</u>	<u>0</u>	<u>5</u>
<u>1994</u>	<u>75</u>	<u>0</u>	<u>4</u>	<u>79</u>	<u>10</u>	<u>4</u>
<u>1995</u>	<u>99</u>	<u>0</u>	<u>0</u>	<u>99</u>	<u>0</u>	<u>6</u>
<u>1996</u>	<u>155</u>	<u>15</u>	<u>10</u>	<u>180</u>	<u>0</u>	<u>9</u>
<u>1997</u>	<u>215</u>	<u>0</u>	<u>0</u>	<u>215</u>	<u>11</u>	<u>10</u>
<u>1998</u>	<u>148</u>	<u>0</u>	<u>0</u>	<u>148</u>	<u>34</u>	<u>7</u>
<u>1999</u>	<u>101</u>	<u>0</u>	<u>0</u>	<u>101</u>	<u>0</u>	<u>8</u>
<u>2000</u>	<u>130</u>	<u>25</u>	<u>0</u>	<u>155</u>	<u>623</u>	<u>8</u>
<u>2001</u>	<u>340</u>	<u>0</u>	<u>0</u>	<u>340</u>	<u>1</u>	<u>7</u>
<u>2002</u>	<u>40</u>	<u>0</u>	<u>0</u>	<u>40</u>	<u>0</u>	<u>4</u>
<u>2003</u>	<u>39</u>	<u>0</u>	<u>0</u>	<u>39</u>	<u>0</u>	<u>4</u>
<u>2004</u>	<u>46</u>	<u>0</u>	<u>0</u>	<u>46</u>	<u>101</u>	<u>6</u>
<u>2005</u>	<u>45</u>	<u>0</u>	<u>0</u>	<u>45</u>	<u>82</u>	<u>6</u>
<u>2006</u>	<u>82</u>	<u>0</u>	<u>0</u>	<u>82</u>	<u>50</u>	<u>4</u>
<u>Total</u>	<u>2,078</u>	<u>118</u>	<u>14</u>	<u>2,210</u>	<u>912</u>	<u>98</u>

Source: Confidential Year End Landowner Reports to Maine Forest Service

* To protect confidential landowner information, data is reported only where three or more landowner reports reported harvesting in the town.

As the chart above indicates, there has been relatively little private timber harvesting in Falmouth between 2002 and 2006, compared to 1996 and 2001.

District foresters from the Maine Forest Service are available for consultation when the Town wishes to develop any land use regulations pertaining to forest management practices. No need for such an

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action has been identified in the plan. In 2013, the District Forester for Falmouth is Ken Canfield. He can be contacted at 441-3712 or ken.canfield@maine.gov.

In Falmouth, privately-owned forests account for a very small portion of Maine's forest products industry, but their value for wildlife habitat and recreation is well recognized. Well-planned and managed timber harvesting can also be economically rewarding to landowner and logger alike. The Town can provide a policy and regulatory environment that rewards the beneficial outcomes of forest management. In doing so, it supports goals concerning open space and rural character. The Town has sought to protect forests from residential development through its Resource Conservation Overlay District, where open space is set aside when land is being subdivided into house lots.

Forestry, the management of forest land primarily for the growth and harvesting of trees, is permitted in the farm and forest, residential and Tidewater areas.

The Maine Forest Service also administers the WoodsWISE program, directed to family forest landowners with ownership of less than 1,000 acres. District Foresters assist these owners with advice on stewardship and responsible forest management, and help to secure consulting services from a licensed forester. Cost-share assistance is available to help with obtaining a Forest Management Plan. Referral to trained and certified logging companies is also provided. For more information, see: http://www.maine.gov/dacf/mfs/policy_management/woodswise/index.html

The Forest Service publication "Best Management Practices for Forestry: Protecting Maine's Water Quality" is an appropriate reference manual for forestry and road, trail, and driveway construction in and around Falmouth's waters. For more information, see: http://www.maine.gov/dacf/mfs/policy_management/water_resources/bmps.html.

TREE GROWTH TAX PROGRAM

One measure of the extent of privately-owned forest in Falmouth is the acreage enrolled in Maine's Tree Growth tax program. In 2011, 55 parcels comprising 1,450 acres were enrolled in this program (compared to 52 parcels in 2000 with 1,556 acres). Established in 1971, the purpose of the Tree Growth program is to tax all forest lands greater than 10 acres according to their productivity, encourage forest landowners to retain and improve their holdings of forest lands, and promote better forest management. The program reduces property taxes on eligible woodland, but also established penalties when properties are withdrawn from the program. The program is appropriate for woodlands where the primary goal is to grow and harvest commercial forest products.

PROPOSED COMPREHENSIVE PLAN GOALS

- Complete an inventory of agricultural land, its suitability, availability, and state of protection.

PROPOSED COMPREHENSIVE PLAN POLICIES

- Know the extent and value of agricultural land assets in Falmouth.
- Understand the value of the varied agricultural pursuits in Falmouth and the extent to which the community supports these pursuits.
- Ensure healthy, well-managed Town-owned forests.
- Support privately-owned forest lots, through measures such as: Town support for, and defense of, current use taxation program; assistance with removal of dumped items; and involvement with land owners in discussions of zoning regulations.

PROPOSED COMPREHENSIVE PLAN ACTIONS

Suggested Actions	Suggested Responsible Party	Suggested Priority	Plan Reference
1. Assess community interest in agricultural pursuits, desire for preservation of prime farm soils, promotion of farming, and need for access to agricultural opportunities. Decide whether the Town should take additional steps to protect agricultural land besides easement protection.	Town Council, Conservation Commission	H	2-24
2. Inventory lands with potential high value soils by including an inventory of land that has been farmed in the past.	Conservation Commission	H	2-25
3. Continue to educate citizens on the dangers of invasive plants and need for their removal.	Conservation Commission	M	2-26
4. Consider preservation of agricultural land in addition to land already protected by easement.	Conservation Commission, Town Council	M	2-27
5. Explore what measures the Town should undertake to support privately-owned forest lots	Conservation Commission	M	2-28
6. In cooperation with the Falmouth Land Trust, initiate a dialogue with private forest lot owners how the Town can best support them and their forest properties.	Conservation Commission	M	2-29

Historic, Archaeological, and Cultural Resources

Draft: June 20, 2013

Maine's Growth Management Act recommends identifying and preserving historic and archeological resources.

This chapter provides an overview of Falmouth's historic, archaeological, and cultural resources. Its key policy is to honor the history of Falmouth through recognition of its archeological and historic resources and encourage and promote access to cultural opportunities throughout Greater Portland.

Remembering our past and being aware of our culture provides context for today and a perspective on the future. It creates a sense of place and self, and adds richness and texture to our community. Historical structures and artifacts bring the past to life and promote understanding of where we have come from and how our community has changed and continues to change. Libraries offer opportunities to explore worlds, cultures, experiences, and knowledge beyond ourselves and take us into the minds of others and ourselves. Visual and performing arts are expressions of life.

(See chapters on Recreation & Open Space, Marine Resources, Natural Resources and Facilities.)

OVERVIEW OF TOWN HISTORY

The land that comprises what is Falmouth today was used by Native Americans for millennia before European settlement. These first residents left artifacts along waterways and the coastline, place names, and generations of lore. European settlement began in the 1620s. Arthur Mackworth (Mackworth Point and Mackworth Island) and Richard Martin (Martin's Point) were early settlers. By 1640, there were nine families living in what is now Falmouth.

Incorporated in 1718, "Falmouth" encompassed 80 square miles. For almost 50 years "Falmouth" included much of what is now Scarborough, and all of Cape Elizabeth, South Portland, Portland, and Westbrook. Starting in 1765, these communities were slowly carved away, until Falmouth's current borders were finalized in 1871.

Throughout the 1800s, much activity centered around the Presumpscot River. Along its shores were shipyards, lumber and grist mills, a brickyard, comb mill, and a hydroelectric plant (built in 1889 and the first in Maine). Mussel Cove had its own grist mill, and lumber mills on the Piscataqua River operated into the 1900s. Blacksmiths flourished in several parts of Town. By 1900, Falmouth became a suburban community as summer cottages were converted to year-round homes, trolley service from Portland to the Foreside and West Falmouth became reliable, and automobile ownership took off.

ARCHEOLOGICAL RESOURCES

A. PREHISTORIC ARCHEOLOGICAL RESOURCES

Maine's Native Americans moved into the region 11,000 years ago. Until European settlement, there were no formal or written records of the Native American culture and environment; artifacts from this period are called "prehistoric" archeological resources. Maine Native Americans were mobile; summers were spent fishing and digging for shellfish along the coast and winters were spent hunting game in Maine's interior. They carried their homes and belongings on their backs. Thus, there were no permanent villages or other "monumental" architecture. Their artifacts are typically

habitation/workshop sites, lithic (stone raw material) quarries, cemeteries, or rock art and pictographs. For these Native Americans, waterways were the simplest means of transportation.

More than 95% of prehistoric archeological sites are located along waterways. These sites are assumed to extend 50 yards inland from the waterline. In Falmouth, these areas of archeological resource potential are located on the east shores of Highland Lake (known originally as Duck Pond), along stretches of the Presumpscot and the Piscataqua Rivers, along the estuarine and coastal waters of the Foreside, and around the offshore islands in Casco Bay. The Maine Historic Preservation Commission (MHPC) knows twenty-three (23) prehistoric archaeological sites in Falmouth. According to the MHPC at least ten of the sites are likely eligible for listing in the National Register of Historic Places. MHPC has found that the archaeological site at River Point is highly significant and should be nominated to the National Register of Historic Places. MHPC completed a reconnaissance archaeological survey of the islands.

B. HISTORIC ARCHEOLOGICAL RESOURCES

European settlement begins what is now referred to as “historic” archeology. The New Casco Fort on Menickoe Point (near Waites Landing) signified the end of the Indian Wars and the beginning of resettlement. The Indian Wars cost many lives and severe destruction; for a time Falmouth was deserted by European settlers. In 1700, survivors joined forces and built the [a] fort. The site has never been located, but records suggest it is directly across from two islands known as “The Brothers.” (near Waites Landing) About ten historic archaeological sites in Falmouth have been inventoried by the Maine Historic Preservation Commission. Besides the fort, they range from a settlement, burial ground, brickyard, road, to various vessels.

HISTORIC RESOURCES

The following resources are both physical and/or information resources.

A. FALMOUTH HISTORICAL SOCIETY (www.falmouthmehistory.org)

Founded in 1966, the Falmouth Historical Society maintains an office and Genealogy Room in the Whipple Farm House at Ocean View at Falmouth, as well as the Falmouth Heritage Museum at 60 Woods Road, which was established in 2005. The Museum consists of a residence that was relocated to a five-acre property, which was donated by the Town to the Falmouth Historical Society. In 2009, the Society published an illustrated volume on Falmouth in the *Images of America* series. The Society also maintains a gift shop with items of local interest. The organization is self-funded. The organization publishes a quarterly newsletter and sponsors lectures, workshops, special events, and genealogical resources for residents.

B. HISTORIC BUILDINGS

A 1994 survey identifies 985 Falmouth buildings built prior to 1945. The buildings in the survey reflect the mixed character of the Town: farms, summer homes, schools, and small businesses. More than a dozen architectural styles were identified, including Colonial, Federal, Greek Revival, Romanesque, Italianate, and several others.

The following historic buildings are currently listed in the National Register of Historic Places:

- Thomas Skelton House, 124 U.S. Route 1
- The Falmouth House, 340 Gray Road
- Hall’ s Tavern, 377 Gray Road

- Elisha Purington House, 71 Mast Road
- Baxter Summer Home, Mackworth Island
- Norton House Historic District, 241 and 243 Foreside Road
- Payson House at Thornhurst, 48 Thornhurst Road

C. CEMETERIES (www.falmouthmemoriallibrary.org/resources/facts/cemeteries and http://www.town.falmouth.me.us/Pages/FalmouthME_Parks/trailmaps/Cemeteries)

The Town and the Falmouth Memorial Library maintain websites which list information about thirty cemeteries in Falmouth. These include all the small family burial grounds and larger cemeteries, but do not include Native American burial grounds. The largest cemeteries in Falmouth are Pine Grove, Pleasant Hill, Foreside Community Church, Blanchard, McGregor, Leighton, and Packard. The smaller family grounds are scattered throughout various parts of Town. Some are difficult to locate, as they may be located on long-forgotten roads or paths. Some cemeteries yield only vital statistics, while others have stories to tell. A visit to one of Falmouth's old burial grounds can be a rewarding look into the Town's history, for it can tell a surprising amount about how Falmouth's ancestors lived and died. Some burial grounds are located on private property. Some of the web listings contain additional information that has been collected by volunteers who have copied names and dates from gravestones. There is a map at the Falmouth Library with the location of these cemeteries. The Town of Falmouth maintains seven of these cemeteries.

D. VETERANS MEMORIAL

As of this writing, a Falmouth Veteran's Memorial is being developed. This memorial may include a record of the names of men and women from Falmouth who participated in military service of the United States of America. This will be a tribute to their contribution to the community and the nation.

CULTURAL RESOURCES

A. MUNICIPAL RESOURCES

Although Falmouth relies on the broader cultural opportunities of the Greater Portland area, it does support community cultural activity with the following:

- Public lands offer places to explore — whether as conservation of nature and habitat, for recreation, or for aesthetic values, and are often visual reminders of a community's history. Land open to the public varies widely in size, use, and location. The larger parcels include the Wilshore Farms, Community Forest, Foreside Nature Preserve, Town Forest, Blackstrap Hill Preserve, and the Falmouth Community Park. There are also multiple trails, athletic fields, and smaller parks.
(See the chapter on Recreation & Open Space for additional lists and maps).
- For residents with schoolaged children, much of Falmouth's community life takes place on and around school facilities and the Falmouth Memorial Library. This may be on athletic fields, in the high school theater, or at music concerts as the school system offers multiple fields, several gymnasiums and lecture halls for civic events. For other residents, there are various events and lectures at the Falmouth Memorial Library; there are also community programs designed for athletics, education, and entertainment.
- The Community Programs Department organizes a large variety of classes and presentations.
- The School curriculum includes a Falmouth History class for second grade students.

The community has been discussing the need or desire for a “Town Center,” which could comprise areas for recreation, classes, events, etc. for all ages. Such a center was proposed for the former Plummer-Motz-Lunt school complex as a referendum question in November 2011. It was rejected. Public-private redevelopment proposals may still include such a facility.

B. TOWN AND REGIONAL ORGANIZATIONS

Falmouth has numerous local and regional volunteer groups, organizations, and Town committees that add character and diversity to civic life. A sampling of these groups includes, but is not limited to:

- American Legion
- Falmouth Lion’s Club
- Falmouth Land Trust
- Falmouth Rod & Gun Club
- Friends of Casco Bay
- Portland Trails
- St. Mary’s Garden Club, and many more.

Increased regional cooperation between these organizations and their counterparts in neighboring communities is anticipated for a more efficient and cost-effective delivery of services. This is already quite prevalent in the municipal sector.

(See the chapter on Regionalization.)

C. FAITH-BASED INSTITUTIONS

Organized religion in Falmouth began in 1674 on the Neck (now Portland peninsula). The first parish (organized church) was designated in 1735. Several churches have since been built and a number of faith-based institutions are an active component of Falmouth’s cultural fabric. These denominations hold services, and also sponsor lectures, theatrical events, community meetings, bake sales, and numerous other community-wide events.

D. FALMOUTH MEMORIAL LIBRARY (www.falmouthmemoriallibrary.org)

Operational since 1952, the Falmouth Memorial Library is an independent non-profit organization offering free library services to all residents. It has close links to the Town of Falmouth as the Town provides between 70 and 80 percent of the library’s operating budget. The Town Council appoints three of the Library’s Board of Trustees. The library property is jointly owned by the Town of Falmouth and the Falmouth Memorial Library Association (governed by the Board of Trustees). The library’s services extend beyond books to community programs, music, technical assistance, meeting space, and outreach programs. Its 1995 expansion resulted in a building of about 10,000 square feet. In 2010, the library was visited more than 140,000 times a year and circulated 200,000 books. The 2009 Maine State Library Annual Report lists the library as having the highest circulation per capita in its population category (10,000-24,999 population).

Continued growth of the library’s activities has led the Board to explore further expansion or relocation. Two space studies were conducted by library experts, most recently in 2010. Options for on-site expansion of the library are limited. A proposal to relocate the library to the former Lunt School was rejected by voters in 2011.

E. TIDEWATER FARM – UNIVERSITY OF MAINE REGIONAL LEARNING CENTER

www.umaine.edu/regional-learning-center)

In 2011, the University of Maine Regional Learning Center opened a 5,000-square foot space in the Tidewater Village office condominium complex next to Tidewater Farm. The center offers sustainable-living education programs for children, families, and home-based business owners in the region. Its space includes various UMaine offices, including UMaine Extension and public meeting space. Land at Tidewater Farms is also used for public teaching and demonstration gardens with a focus on teaching youth and adults how to grow healthy foods for good nutrition; teaching life skills through 4-H programs for urban, suburban, and rural youth; and teaching adults how to start and sustain natural resource, home-based businesses.

F. GILSLAND FARM SANCTUARY– MAINE AUDUBON SOCIETY (www.maineaudubon.org)

The Gilsland Farm Sanctuary is a 60-acre parcel of land along the Presumpscot River Estuary owned by the Maine Audubon Society. The property serves as the headquarters for the Maine Audubon Society and is open to the public for free and includes large open meadows, woods, salt marshes, orchards, a pond, and an Environmental Center. Events, lectures, and workshops are hosted by Maine Audubon at this site for all ages and many varied interests.

CURRENT TOWN PROTECTIONS

Any subdivision proposal within Falmouth’s Resource Conservation Overlay District is required to catalogue its historic and archeological resources. Under certain circumstances, the subdivision approval could be withheld if the proposed development damages these resources. A similar protection does not exist in the Zoning and Site Plan Review Ordinance.

ISSUES

- Pressures on financial resources.
- Collaboration, and coordination with various organizations.
- Impact of transportation policies.

PROPOSED COMPREHENSIVE PLAN POLICIES

- Honor the history of Falmouth through recognition of its archeological and historic resources.
- Encourage and promote access to cultural opportunities throughout Greater Portland.
- Protect and preserve, to the greatest extent practicable, significant archaeological resources.
- Increase awareness of and access to archeological, cultural, and historic resources through a comprehensive signage program.
- Update Zoning and Site Plan Review to provide appropriate resources for identification, protection, and preservation of artifacts.
- Continue to support economic development efforts to support continuing education and the arts.

PROPOSED COMPREHENSIVE PLAN ACTIONS

Suggested Action	Suggested Responsible Party	Suggested Priority	Plan Reference
<p>1. Provide a signage system and town website to guide people to, and provide information about, sites (buildings and open spaces) of significant historic and cultural value.</p>	<p>Land Management and Acquisition Committee (LMAC)</p>	<p>H</p>	<p>4-27</p>
<p>2. In cooperation with the Falmouth Memorial Library, Falmouth Historical Society, Falmouth Schools, Greater Portland Landmarks, and the Maine Historic Preservation Commission and other applicable organizations, conduct educational event(s) to celebrate Falmouth’s Tercentennial in 2018 and promote Falmouth’s historic resources, such as participation in Historic Preservation Week.</p>	<p>Town Council</p>	<p>H</p>	<p>2-30, 4-28</p>
<p>3. Revise Falmouth’s subdivision and site plan regulations to require that the historic and archaeological significance of areas identified by the State Historic Preservation Office as "Resource Potential Areas" be investigated as part of the development review process; and that resources be provided in the design of a project to help identify, protect, and preserve , as appropriate, any discovered artifacts.</p>	<p>Planning Board, Town Council</p>	<p>H</p>	<p>5-16</p>

Suggested Action	Suggested Responsible Party	Suggested Priority	Plan Reference
<p>4. In cooperation with the Falmouth Historical Society, Greater Portland Landmarks, and the Maine Historic Preservation Commission and other applicable organizations, undertake one or more of the following actions:</p> <ul style="list-style-type: none"> • An intensive level archaeological survey of sites identified by the Maine Historic Preservation Commission. • A reconnaissance survey of Highland Lake shoreline and the banks of the Presumpscot and Piscataqua Rivers, and a portion of the shoreline of Falmouth Foreside focusing on Native American settlements. • A professional survey of historic archaeological sites focusing on agricultural, residential, and industrial sites relating to the earliest Euro-American settlement of Falmouth in the mid - 17th century. • An evaluation of the 1992-93 reconnaissance-level survey of Falmouth’s historic above-ground resources by the Maine Historic Preservation Commission, as well as the 1994 Greater Portland Landmarks survey of buildings built prior to 1945, to determine which buildings merit further study for possible nomination to the National Register of Historic Places and consider possible Local Historic District designation. 	Maine Historic Preservation Commission, Falmouth Historical Society (d)	M	2-31
<p>5. In cooperation with the Maine Historic Preservation Commission, prepare a nomination to the National Register of Historic Places of the archaeological site at River Point.</p>	Maine Historic Preservation Commission	L	2-32

Appendix 5: Timeline of Falmouth Planning Reports

Draft: January 11, 2010

1940

Adoption of Falmouth's first Zoning Ordinance, 1942

Falmouth Planning Board first organized, 1948

1960

Adoption of Council-Manager Form of Government, 1961

- Town of Falmouth 1963 Study Report, Atwood & Blackwell, Planning Consultants, November 1963
- *New Comprehensive Zoning Ordinance adopted, 1965*

1970

- Falmouth Shoreline Erosion Study, Barry S. Timson, June 1979

1980

- Falmouth Parcel Study, Final Report, Thomas Churchill Company, October 1980
- Comprehensive Plan, Parts 1 & 2, Town of Falmouth, Maine, 1981

1985

- Solid Waste Study, Falmouth Maine, Kimball Chase Co., Inc., February 1985
- Zoning and Site Plan Review Ordinance, 1986
- Land Subdivision Ordinance, 1986
- Falmouth Route 1 Corridor Study, Greater Portland Council of Governments, March 1985
- Falmouth Route 1 Corridor Study, Technical Memorandum 1-5, T.Y. Lin International/Hunter-Ballew Associates, September 1985
- The Fall 1985 Survey of the Citizens of Falmouth, Maine, Northeast Research, December 1985.

- Report to the Falmouth Town Council Re: Farm and Forest Zone, Farm and Forest Zone Study Committee, January 1986
- Water Supply Study, West Falmouth/Winn Rd. Area, Portland Water District, May 1986
- Falmouth Intersection Study, T.Y. Lin International/ Hunter-Ballew Associates, May 1986
- Route One Study, Falmouth, Maine, Mitchell-DeWan Assoc., Terrien Architects, Governmental Services, Inc., September 1986
- Town of Falmouth Bedrock Aquifer Study, Robert G. Gerber Inc. Freeport Maine, June 1987
- Falmouth Comprehensive Plan Data Base 1987, Greater Portland Council of Governments, August 1987
- Falmouth Public Access Study Final Report, Greater Portland Council of Governments, August 1987.
- The Route 100 Study; Falmouth, Maine, Route 100 Study Committee, October 1987
- Update of the Falmouth Corridor Study, Dufresne-Henry, January 1988.
- Town of Falmouth Comprehensive Plan, Town of Falmouth, Maine, November 1988 (adopted in 1989)

Formation of Comprehensive Plan Advisory Committee, 1989

- Traffic Engineering Review, Draft Report, Falmouth, ME, DeLuca-Hoffman Assoc., Inc., August 1989.
- Open Space Plan, Comprehensive Plan Advisory Committee, December 1989

1990

- Middle and Woodville Connector Road Feasibility Study, DeLuca-Hoffman Associates, Inc., May 1990
- Mackworth Island Management Plan, Mackworth Island, Falmouth Maine, Sasaki Associates, Inc., March 1991
- Presumpscot Falls Bridge Report, Falmouth Comprehensive Plan Advisory Committee, June 1991
- Illustrated Guide to Stream Protection Districts, Falmouth Conservation Commission, September, 1991
- Falmouth Turnpike Spur Report, Comprehensive Plan Advisory Committee, August 1992
- Town of Falmouth Comprehensive Plan Update, Phase 1, Comprehensive Plan Advisory Committee, April 1993

- [Route One Landscape Improvements](#), Gary W. Fogg, June 1993.
- [Watershed Management Plan, Falmouth Maine](#), Falmouth Conservation Commission, October, 1993
- [Community Forest Program Brochure](#), Falmouth Conservation Commission, February 1994
- [Comprehensive Plan Update](#), Town of Falmouth, May 1994
- [Falmouth Pedestrian & Bicycle Handbook; A Planning Resource Guide](#), Falmouth Planning Department, August 1994
- [Economic Development, Fiscal Impact Analysis](#), Comprehensive Plan Advisory Committee, October 1994

1995

- [Kmart Redevelopment Charette](#), Comprehensive Plan Advisory Committee, February 1995
- [Falmouth Maine Bicycle, Pedestrian & Trails Master Plan](#), June 1996.
- [Stormwater Management Plan](#), Falmouth Conservation Commission, March 1995
- [Wilshore Farms Site Analysis Report](#), Falmouth Conservation Commission, May 1996.
- [Highland Lake Watershed Study](#), Highland Lake Study Committee, July 1996
- [Transit-Oriented Development at Maine Turnpike Exit 10, Final Report](#), Falmouth Comprehensive Plan Advisory Committee, February, 1997
- [Route 1 Market Analysis](#), Planning Decisions, March 1997
- [Assessment of the Community Impacts of the West Falmouth Crossing Development](#), Planning Decisions Inc. South Portland, Maine, May 1997
- [Falmouth Recreation Land Study](#), Gary W. Fogg/Falmouth Dept. of Parks and Community Programs, August 1997.
- [Route One Design Guidelines](#), Terrence DeWan & Associates, October 1997
- [Exit 10 Design Guidelines](#), Terrence DeWan & Associates, January 1998
- [Vacating Public Streets](#), Comprehensive Plan Advisory Committee, February 1998

- Route 1 Market Study – Implementation Strategies, Comprehensive Plan Advisory Committee, March 1998
- Land Acquisition Advisory Committee Report to the Council, June 1998.
- Village Center Design Guidelines, Terrence DeWan & Associates, July 1998

2000

- Comprehensive Plan 2000, Comprehensive Plan Advisory Committee, December 2000 (adoption May 2001)
- Falmouth Village Center Connectivity Study, Gorrill-Palmer Consulting Engineers, Inc/ Terrence DeWan and Associates, May 2001
- Wastewater Facilities Study Update, December 2002
- Trails Master Plan, Falmouth Trails Advisory Committee, September 2002
- Remote Sensing Inventory of Potential Vernal Pool Habitat in the Town of Falmouth, Maine, Woodlot Alternatives, November 2002
- Street Interconnectivity Analysis, Wilbur Smith Associates, December 2002
- Bicycle and Pedestrian Master Plan, Falmouth Trails Advisory Committee, January 2003
- Residential Master Plan 1 – Interim Report, Comprehensive Plan Advisory Committee and Study
- Town of Falmouth Housing Assessment Report, Community Current, Inc. and MRLD, 2003
- Town of Falmouth Planning Survey, Market Decisions, June 2004
- Town Lands Report, Falmouth Conservation Commission, June 2004

2005

- Compact Development Study, Comprehensive Plan Advisory Committee, March 2005
- Falmouth Village Center – Traffic and Land Use Study, Falmouth Route One Corridor Committee, May 2005 (not adopted by Town Council)
- Tidewater Village Design Guidelines, Orcutt Associates, August 2005
- Ad-Hoc Workforce Housing Committee Report, Ad-Hoc Workforce Housing Committee November 2005

- Falmouth Corners Study, Falmouth Corners Working Group, Greater Portland Council of Governments, Institute for Civic Leadership, November 2005
- 2006 Aerial Photography, Greater Portland Council of Governments
- The Greening of Falmouth, Falmouth Conservation Commission, January 2006
- Community Development Operations Evaluation, The Consensus Building Institute, July 2007
- Falmouth Anchorage Evaluation Phase II: Long-Term Management and Operations, Falmouth, Maine, Milone and MacBroom, August 2008
- Workforce Housing Project, Woods Road, Workforce Housing Commission and Developers Collaborative, 2009 (not adopted by Town Council)
- Review and Recommendations of the Long Term Management and Operations Plan for the Harbor, Harbor & Waterfront Committee, May 2009
- Cruise Report and Forest Management Plan, Southern Maine Forestry Services, May 2009
- Comprehensive Pump Station Assessment for the Town of Falmouth, Maine, Wright-Pierce, July 2009
- Report regarding Natural Resource Protection, Long-Range Planning Advisory Committee, 2009
- Climate Action Plan, Falmouth Green Ribbon Commission on Climate Change and Energy Efficiency, 2009
- 2010-2020 Tax Increment Financing Development Program Amendments, Town Manager, 2009

2010

- Falmouth Shopping Center Property, Community Development Committee, 2010
- Community Facilities Planning Study, (Ad Hoc) Community Facilities Planning Committee, 2011
- Brown Property (Foreside Road) Use Plan, Town Council, 2011
- Request for Proposals for Redevelopment of Plummer-Motz and Lunt School Property, Town Council, 2011
- Pavement Management and Transportation Management Plan, Gorrill-Palmer, 2012
- Request for Proposals for Natural Gas Distribution, Town Manager (with Cumberland and Yarmouth), 2013

- Route One South Infrastructure Plan, Community Development Committee/ TY Lin International, 2013
- Route One Zoning Recommendations, Community Development Committee, 2013
- Route One South Tax Increment Financing District Amendment 3, Town Manager, 2013
- Route One Commercial District Stormwater Management Plan, Woodard & Curran, 2013
- Request for Proposals for Renovations to Town Hall and Food Pantry, Town Manager, 2013 (report forthcoming)

Appendix 6: Image Sources

Volume I

PDF Page	Report Page	Title	Image source
1	Cover	Aerial view of Falmouth, looking North	Town of Falmouth
6	4	Concert at Underwood Theater	http://www.mainememory.net
7	5	Falmouth Elementary School	http://www.oakpoint.com/portfolio21-A.html
8	6	Elmwood Farm Depot	http://www.mainememory.net
11	9	Aerial View of Route One	Town of Falmouth
13	11	Master Planning Areas	Town of Falmouth, 2000 Comprehensive Plan
14	12	Residential Master Planning	Town of Falmouth, 2003 Woodville/Falmouth Center Study
15	13	Potential Policy to Promote Compact Development	Town of Falmouth, 2005 Compact Development Study
15	13	Potential Policy to Limit Compact Development	Town of Falmouth, 2005 Compact Development Study
16	14	Workforce Housing Floorplans and Elevations	http://www.kaplanthompson.com/project.php?id=24&pp=2
17	15	Conservation Subdivision Development	Town of Falmouth
25	23	Future Land Use Plan	Town of Falmouth
26	24	Residential and Commercial Growth, 1990-2011	Town of Falmouth
28	26	Natural Resource Limitations	Town of Falmouth
30	28	Potentially Developable Land	Town of Falmouth
31	29	Preferred Sewer Expansion Possibility in Growth Area	Town of Falmouth
35	33	Areas for Potential Zoning Review	Town of Falmouth
36	34	Tidewater Village, Clearwater Drive	http://www.thedavidbanksteam.com/tidewater-village
42	40	Areas for Potential Zoning Review	Town of Falmouth
52	50	Shop Falmouth	Town of Falmouth
53	51	Entrance Sign for Stone Ridge Farm Subdivision	http://www.estescustombuilders.com/communities
53	51	Former Presumpscot River Bridge	http://www.mainememory.net
55	53	Police Station, Marshal Drive	Town of Falmouth
56	54	Richard B. Goodenow Wastewater Treatment Facility	Town of Falmouth
58	56	Environmental Education Center, Maine Audubon	http://www.atlasconnection.com/photo
59	57	Waites Landing, Falmouth Foreside	http://www.mainememory.net
59	57	Aerial view of Falmouth's mooring field in Casco Bay	http://www.jamesconnolly.org/falmouth-maine-real-estate.php
60	58	Portion of USGS map of Falmouth Foreside and Casco Bay	http://me.us harbors.com/harbor-guide/falmouth-foreside
60	58	Georgina Shaylor rides a sled, ca. 1910	http://www.mainememory.net

61	59	Falmouth Land Trust	http://falmouthlandtrust.org/
62	60	Falmouth Corners, early 1900's	http://www.mainememory.net
62	60	Falmouth Historical Society	http://www.falmouthmehistory.org/
63	61	James Merrill House, Falmouth Road, reportedly built about 1738	http://www.mainememory.net

Volume II

PDF Page	Report Page	Title	Image source
1	Cover	Image of Route One Improvements	Town of Falmouth
15	15	"Would you recommend Falmouth?" survey results	Town of Falmouth
33	33	Employment by Industry Sector in Falmouth	U.S. Census Bureau, 2005-2009 American Community Survey
66	66	State and Federal Revenue Trends for Falmouth	Falmouth School Department
79	79	2004 Shellfish Harvest Restrictions	http://www.cascobay.usm.maine.edu/pdfs/sotb2010indicator6.pdf
80	80	2009 Shellfish Harvest Restrictions	http://www.cascobay.usm.maine.edu/pdfs/sotb2010indicator6.pdf
87	87	Synthetic Turf Fiels at falmouth School Campus	Falmouth School Department
95	95	Ned Therrien at Wilshore Farm	http://www.mltn.org/trust_detail.php?t=1248
96	96	Maine Coast Vineyards	www.maineoastvineyards.com
96	96	Steve Melchiskey, owner of Maine Coast Vineyards	www.maineoastvineyards.com
96	96	Produce at Winslow Farm	Claudia King
97	97	Cumberland Farmers Market in Falmouth	Claudia King

Volume III

See Volume III, PDF page 3-7.

Appendix 7: Implementation Action Spreadsheets

The Long-Range Planning Advisory Committee prepared suggested implementation priorities and suggested responsible parties for each of the actions. The Town Council will determine these priorities and provide authorization to the appropriate parties.

Excel spreadsheets have been prepared that can be organized in any fashion. The examples that follow and have organized the implementation actions (a) alphabetically by action, (b) by priority and theme, and (c) by priority and chapter. [They have been revised in January 2014.](#)

Note: This information is included as a guide only and shall not bind the current or future Town Council.