

House Heating Fuel, Plumbing, Kitchen and Telephone Service	Number	%
Lacking complete kitchen facilities	0	0
No telephone service	62	4.9

Source: Census SF 3. Percentages Rounded.

AFFORDABLE HOUSING

Affordable housing means decent, safe and sanitary living accommodations that are affordable to extremely low, very low, low and moderate-income people. Maine defines an affordable owner-occupied housing unit as one for which monthly housing costs do not exceed approximately 30 percent of monthly income and an affordable rental unit as one with a rent (including utilities) that does not exceed 30 percent of monthly income. Affordable housing often includes manufactured housing, multi-family housing, government-assisted housing for extremely low, very low, low and moderate-income families, and group and foster care facilities.

In 1990, 12.9 percent of surveyed homeowners in Newport spent more than 30 percent of their income on housing, which is considered unaffordable.

Selected (surveyed) Newport Owner Households: Monthly Owner Costs in 1990

Owner Costs as a percent of income	Number	%
Less than 15 percent	245	43.4
15 to 19 percent	145	25.7
20 to 24 percent	75	13.3
25 to 29 percent	26	4.6
30 to 34 percent	22	3.9
35 percent or more	51	9.0
Not computed	0	0.0

Source: Census SF-3. Percentages Rounded.

In 1999, 41.8 percent of surveyed renters in Newport spent more than 30 percent of their income on housing, which is considered unaffordable.

Selected (surveyed) Newport Renter Households: Monthly Renter Costs in 1999

Gross Rent as a percent of Income	Number	%
Less than 15 percent	44	12.7
15 to 19 percent	20	5.8
20 to 24 percent	52	15.0
25 to 29 percent	45	13.0
30 to 34 percent	34	9.8
35 percent or more	111	32.0
Not computed	41	11.8

Source: Census SF-3. Percentages Rounded.

The Maine State Housing Authority has calculated that on average, as of 2006, housing in Newport, Penobscot County and the state is not affordable to the median income earner. The next table shows the estimated median income, median home price, and median affordable home in 2006. From these figures, MSHA calculates an affordability gap. The index for Newport was 0.90, which means that the median income earner in Newport could afford 90 percent of the actual median home sale price in 2006.

2006 Housing Affordability

Place	Index	Est. Median Income	Home Price the Median Income Can Afford	Actual Median Home Price	Income Needed to Afford Actual Median Home	Housing Price Gap
Newport	0.90	\$35,546	\$103,018	\$114,950	\$39,663	\$11,932
Penobscot County	0.89	\$40,188	\$119,321	\$134,000	\$45,133	\$14,679
Maine	0.73	\$44,488	\$134,329	\$185,000	\$61,270	\$50,671

Source: MSHA

The next table shows the percent and number of very low, low and moderate-income households in Newport and what housing they could afford in 2006. The actual median home price in Newport of \$114,950 was affordable to those in the moderate income group, but not affordable to those in the extremely low, very low and low income groups, an estimated 530 Newport households (or 39.6 percent of all households). In 2006, MSHA estimated that the average rent (including utilities) for a two-bedroom apartment in Newport was \$783. That rent would be affordable to those in the moderate income group, but not affordable to those in the extremely low, very low and low income groups

Estimated Housing Affordability by Income 2006

Income Categories	Newport Households				
	Number	%	Annual Income	House can Afford	Monthly Rent can Afford
Extremely Low (less than 30% of Median Household Income)	184	13.8	\$10,664	\$30,906	\$267
Very Low (30% 50% of Median Household Income)	140	10.4	\$17,773	\$51,509	\$444
Low (50% to 80% of Median Household Income)	206	15.4	\$28,437	\$82,415	\$711
Median Household Income	--	--	\$35,546	\$103,018	\$889
Moderate (80% to 150% of Median Household Income)	377	28.1	\$53,319	\$154,527	\$1,333

Sources: MSHA, and modified from Claritas. Notes: Affordable rent (including utilities) is up to 30 percent of monthly income. In 2006, there were an estimated 1,339 households in Newport. About 432 households earned more than the Moderate income group and are not included in this table.

The Maine State Housing Authority calculated a need for an additional 58 units of subsidized housing for Newport in 2006. According to MSHA, senior subsidized housing needs are currently being met, with 22 units unused. Recent trends suggest a growing demand for additional subsidized senior units.

MSHA 2006 Newport Housing Need Summary

Categories	Family Units	Seniors Units (65 and over)
Number of Renter Households @ 50% AMI	111	28
Number of Subsidized Units Currently Available	53	50
- Project Based	48	50
- Non-Project Based (Section 8 Vouchers)	5	0
Number of Affordable Rental Units Needed	58	-22
Indicated Unmet Need %	52.3%	0.0%

Source: MSHA. Note: AMI is the Household Area Median Income

AFFORDABILITY AND STATE LAW

The State of Maine Comprehensive Planning and Land Use Regulation Act requires that every municipality "...shall seek to achieve a level of least 10 percent of new residential development, based on a five-year historical average of residential development in the municipality, meeting the definition of affordable housing. Of all housing units built in Newport from 2002 to 2006, 44percent were mobile homes, which by state definition are considered affordable housing.

AFFORDABLE HOUSING REMEDIES

1. Relax zoning ordinance and building code requirements that might increase building costs. Any proposed ordinance or code provisions should be sensitive to lessen the potential costs on low-income residents.
2. Take steps to allow mobile homes in more areas. Newport currently allows these units in all zones that allow residential housing.
3. Provide town sewer, water and roads to new parts of town thus thereby making available land for new homes.

MUNICIPAL REGULATIONS AFFECTING HOUSING COSTS

LOT SIZE AND COMMUNITY WASTEWATER FACILITIES

Smaller housing lots are generally more affordable than larger lots. Given rising housing costs, Newport should consider the impact of minimum lot sizes in its land use ordinance. Depending upon soil conditions, small lots may not be able to meet Maine's minimum standards for septic systems and water wells.

The installation of sewers and water systems is a substantial cost to municipalities, therefore significant state and federal funds are often necessary to develop or expand these systems. Maintaining sewer and water systems is a large part of the municipal expenditures of service center communities. Private community wastewater facilities may be a cost-effective alternative. Such systems allow for development on smaller lots than could be accommodated by individual septic systems and are paid for by their developers and users. When major subdivision proposals come before Newport, with adequate ordinance standards, the Planning Board could request proposals from developers for community wastewater facilities. The initial cost of these systems would be offset by an increase in the number of allowable units within the development and result in greater profit for the developer.

ELDERLY HOUSING

The Maine State Housing Authority estimates that in 2006 Newport had 310 elderly households, where the primary householder was 65 years or older, which was more than 23 percent of the estimated number of households. However, there is a need for housing for moderate income elderly and those who may be ineligible for subsidized housing. Newport has no assisted living facilities. Assisted living facilities outside of Newport are located in Pittsfield and presumably do not meet the needs of Newport's elderly residents.

SUBSIDIZED HOUSING PROGRAMS

The U.S. Department of Housing and Urban Development is the primary federal agency dealing with affordable housing. Rural Development, part of the U.S. Department of Agriculture, also works on affordable housing. The Maine State Housing Authority administers the following: Rental Loan Program, Section 8, SHARP, Supportive Housing and vouchers.

Subsidized units are built with state or federal monies to provide housing to lower income individuals and families. A housing project or development may be entirely formed by subsidized units, or the project may be of mixed uses. Subsidized units are typically available to individuals below certain income guidelines and residents pay a fixed percentage of their income as rent.

Housing is also subsidized through certificates and vouchers. When subsidized units are not available, MSHA provides money for residents to pay to rent private units. Newport is reimbursed by the state for general assistance money given to residents with short-term immediate needs for housing.

POLICIES AND IMPLEMENTATION STRATEGIES

To encourage and promote affordable, decent housing opportunities for all its residents, Newport has developed these policies and will pursue the following strategies:

Policies: Newport will continue to recognize the importance of safe, decent and affordable housing for residents and will set a goal that 10 percent of new housing built or placed over the next decade will be affordable.

Newport will encourage and support the efforts of regional housing coalitions in addressing affordable and workforce housing needs.

Newport will develop land use policies which encourage affordable housing within the growth areas of the community.

Newport will develop land use policies which encourage higher density residential development.

Strategies: To be Accomplished in 1-2 Years

To maintain and promote affordable housing opportunities through the land use ordinance, Newport will continue to encourage affordable housing and will also encourage senior citizen housing opportunities. Newport will continue to allow mixed housing types (single-family and multi-family units), mixed uses and mixed income housing within the residential areas of the town and will encourage the use of private community wastewater facilities paid for by the users of these systems. Newport's Economic Development Committee mission will be to evaluate affordable housing financing alternatives, including grants, loans, public/private partnerships, Affordable Housing Tax Increment Financing, elderly housing programs and related options, and to provide information regarding available housing programs to residents.

Newport will enact or amend growth area land use regulations to increase density, decrease lot size, setbacks and road widths, or provide incentives such as density bonuses, to make housing development less expensive. In addition, accessory apartments will be allowed throughout the growth areas where appropriate and able to meet the applicable performance standards. Mobile home parks will be allowed in accordance with 30-A MRSA 4358 (3) (M).

Newport will provide for the development of higher density housing opportunities by encouraging development in appropriate areas within town provided that they are served by appropriate infrastructure. This goal may be accomplished by reducing minimum lot sizes and increasing density allowances.

Strategies: To be Accomplished in 2-5 years.

The Planning Board and Economic Development Committee will initiate discussions with neighboring housing coalitions to ensure regional support and participation in appropriate initiatives supporting the creation of affordable housing.

STATE GOAL

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

INTRODUCTION

Newport and its surrounding area's natural resources provide numerous recreational opportunities for its residents and visitors. Newport has some municipal recreational facilities and many private resources such as open spaces including lake shoreland areas, athletic fields, farms, forests, wetlands and ponds which are detailed in the Natural Resources chapter of this plan. Much open space is not publicly accessible and development pressure on all unprotected open space has increased. Accessible open space is noted in this chapter of this plan and historic sites are described in the History chapter.

Newport appreciates the efforts of the Sebasticook Valley Community Center in addressing the recreational needs of its residents and financially supports its efforts.

PROGRAMS

Newport students participate in recreational programs sponsored by MSAD 48 which use in Hartland, Corinna and Newport. The school district usually provides transportation to these activities and volunteers play a large role in them...

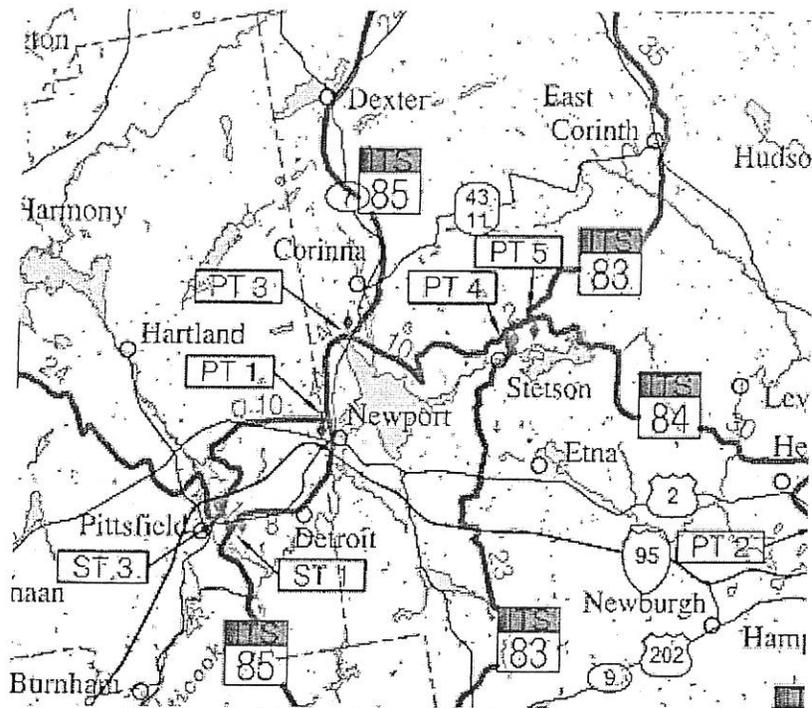
FACILITIES

Newport owns recreation facilities on Elm, North and Grove Streets. The Grove Street area includes two tennis courts and a regulation Little League field.

The Sebasticook Valley Community Center oversees the public swimming area located at the American Legion site on Sebasticook Lake. The lake also provides recreation opportunities to boat owners, fishermen and snowmobilers. Other sites are illustrated on the Recreation Facilities map.

Snowmobile trails cross Newport in several locations as shown on the next map. Public sentiment supports these trails and their possible expansion. Local clubs use their dues and snowmobile registration fees to maintain the trail system...

Snowmobile Trails through Newport



(Source: Maine Snowmobile Association)

One of Newport's larger private recreational facilities is the (Sebasticook Lake Campground with 50 sites on 30 acres located at 52 Tent Village Rd Newport. Vacation housing rentals are available in season.

REGIONAL RECREATION

The following list details some regional recreational resources in the greater Newport area:

- *Newport Cultural Center.* The Newport Cultural Center is the home of the Newport Public Library and Historical Society. This 11,000 square foot facility blends the collections of the library with artifacts and objects of the Newport Historical Society collection. As patrons enter the building, the experience is one of being in both a library and a museum. Historical artifacts, large and small, are displayed in protective glass cases along the interior walls and among the media stacks. It is a comfortable, bright setting where patrons may pause to reflect on the rich heritage of our community. Our young people enjoy learning about the world in a spacious, cheery section designed especially for readers. Children also benefit from the huge arts and crafts room in the buildings upper level. On the same floor there is a public meeting room available for clubs and organizations.
- *American Folk Festival, Bangor.* Presents music, dance and other performing arts representing cultural traditions from across America and the world.

- *Bangor Historical Society, Bangor.* Since 1864 BHS has preserved and promoted the history and culture of the Penobscot River Valley through exhibits, lectures, events and books.
- *Bangor Symphony Orchestra, Bangor.* Founded in 1896, the BSO presents many concerts each season, from six classical concerts and a youth concert series to summer POPS to innovative collaborations and community partnerships. The Symphony also brings live concerts and ensemble performances to towns and schools across the state.
- *Blackbeard's USA Family Fun Park, Bangor.* Miniature Golf, Go Carts, Batting Cages.
- *Dexter Historical Society, Dexter.* Three buildings at the Water St. campus; the 1854 Grist Mill Museum with many exhibits about Dexter, the 1825 Millers House with Victorian parlor, the 1845 one-room Carr Schoolhouse. The Abbott Museum at 12 Church St. was the 1836 town hall and later office for Amos Abbott Woolen Mill. There is a gift shop with Made in Maine products and local crafters, and a genealogy and research center with reading room.
- *Dexter Municipal Golf Course, Dexter.* A 9-hole course that plays to a par 70, with a driving range and a putting green.
- *Hermon Meadow Golf Club, Hermon.* An 18-hole Championship Golf Course and Driving Range.
- *Maine Discovery Museum, Bangor.* The largest children's museum north of Boston. Located in the historic Freese's building in downtown Bangor.
- *Newport Country Club.* Features a 9 hole lighted golf course.
- *Bossov Ballet*

MUNICIPAL FUNDING

Newport helps finance many recreational programs and services within the town. Organized recreation activities were turned over to the Sebecoos Valley Community Center which relies on private funding, user fees, and an annual appropriation from the town of approximately \$70,000. There is also an additional \$33,000 appropriation utilized by the Selectpersons for discretionary recreation activities such as Senior Citizens trips and the purchase of Little League equipment.

Public support for recreation is seen as positive and supportive as indicated by consistent funding.

Town of Newport Actual Expenditures on Recreation and Culture (year ending December 31)

2002	2003	2004	2005	2006	Change*
\$77,064	\$102,825	\$93,803	\$98,828	\$101,168	31.3%

Source: Town Reports

The Maine Department of Conservation once provided municipal guidelines for recreational facilities and spending based upon a community's size, in the DOC's Statewide Comprehensive Outdoor Recreation Plans but those guidelines were not included in the most recent plan (2003-2008), due to perceived limitations with those guidelines.

Newport believes that existing public recreational facilities and programs in the community and region will accommodate projected growth and an increase in senior programs over the 10-year planning period.

STATE FUNDING

The Grants and Community Recreation Division of the Maine Department of Conservation, in addition to its responsibilities regarding federal and state grant programs, serves as a resource for Maine cities and towns in matters related to community recreation. Information is available on the organization and structure of municipal parks and recreation boards, recreation programming, and facility development. Division personnel also serve as liaison with the Maine Recreation & Park Association, the National Recreation & Park Association, and regional parks and recreation organizations.

LAND USE OPTIONS TO PRESERVE OPEN SPACE

Many options are available to protect open space, whether used for recreation or not, including government purchase of private land, donation, non-profit ownership, voluntary deed restrictions including conservation easements, or regulations like zoning and subdivision ordinances that seek to reserve open areas in new developments. In addition, the Tree Growth Tax Law program, and Farm Land and Open Space Tax Law can help protect open space. In Newport, there were 44 parcels totaling 4003 acres in Tree Growth tax status, no parcels in farmland tax status, and 15 parcels totaling 1447 acres in open space tax status. It is noteworthy that the Tree Growth program does not always encourage public access to subsidized private lands and reduces property tax revenues.

Newport's land use ordinances do not contain provisions for significant open space conservation, yet incentives or requirements for preservation are found in the ordinances of other towns. Traditionally, local attitudes have been that unimproved land is often seen as a shared resource, e.g. for hunting, and though privately owned, the land can be used by the residents because people know one another. This notion may be changing due to the influx of new residents. As more residents restrict the use of their land, it is harder to sustain the illusion that large amounts of private land are available for public use. This makes the limited amount of public access provided on town-owned lands increasingly important to residents.

REGIONAL COORDINATION

Newport will continue to support regional recreational opportunities with the recreation departments of adjacent towns. The Town will continue to explore additional recreational opportunities for Newport citizens. This will be accomplished by contacting the recreation departments of the adjacent towns and share in the public promotion of any new recreational programs.

SUMMARY

The majority of Newport's recreational programs and facilities are privately owned and the town supports these recreational providers with annual appropriations. Newport will pursue the restoration of its public landing, the creation of bike paths, and the conversion of abandoned rail lines to four-season recreation trails by applying for state grants supplemented by local appropriations. Newport will continue with its efforts to protect Sebasticook Lake.

Most of Newport's recreational opportunities depend upon the natural resources of the Town and region. These resources attract summer residents and visitors who contribute to the local economy. The Town has limited municipal recreational facilities. Since many important recreational resources rely on public access, Newport should seek to maintain and improve this access, working in cooperation with landowners, volunteer organizations and trusts such as the Mullins Woods Land Trust.

POLICIES AND RECOMMENDATIONS/IMPLEMENTATION STRATEGIES

Policies: Maximize recreational opportunities for Newport citizens.

Preserve open space for recreational opportunity.

Preserve and promote access to Sebasticook Lake.

Secure trail systems

Strategies: Ongoing

In order to expand its recreational opportunities, Newport will maintain and improve relationships between local government, committees and service providers and will encourage increased participation in the education process from local officials and interested citizens.

Since most of Newport's recreational facilities and programs are privately owned, the town may wish to establish a public swimming area and boat launch facility to ensure residents' continued access to Sebasticook Lake. This may be accomplished by obtaining grants through the Parks and Recreation Division of the State of Maine. The Manager/Selectpersons will pursue grants for the establishment of a public swimming/boat launch facility. If necessary, the Manager/Selectpersons may initiate the establishment of a reserve account to be used for the purchase of land

Newport will pursue grants for the establishment of bike paths and private land acquisition to support development of additional snowmobile trails over abandoned rail lines.

Strategies: To be Accomplished in 1-2 Years.

Newport's Recreation Committee will annually review the recreational opportunities in the town to ensure that its residents have adequate recreational programs and services. The Recreation Committee will report on the effectiveness of the Sebasticook Valley Community Center in meeting the recreational needs of the community and will forward an annual report on the status of Newport's recreational needs prior to budget appropriations with its recommendations for expenditures and needed repairs to the public facilities and services.

Strategies: To be Accomplished in 2-5 Years.

To preserve open space, Newport will encourage the voluntary use of conservation easements on individual parcels and draft ordinances requiring proposed major subdivisions to contain dedicated recreational or scenic open space, especially in shoreland areas.

STATE GOAL AND THE SENSIBLE TRANSPORTATION POLICY ACT

- *To plan for, finance and develop an efficient system of public facilities and services to accommodate anticipated growth and economic development.*
- *The Sensible Transportation Policy Act (23 MRSA §73) requires that the State Planning Office and the Maine Department of Transportation establish linkage between that Act and the Growth Management Act. Therefore, the transportation section of a comprehensive plan must be developed in accordance with the Sensible Transportation Policy Act in order to be consistent with the Growth Management Act.*

INTRODUCTION

As a service center community, Newport attracts people from surrounding towns for work, shopping, school and recreation. Newport is a crossroads, with Interstate 95, US Route 2 and State Routes 7, 11, 100 and 222 intersecting in town. A safe and dependable transportation system is the lifeline of every community. This chapter details the current condition and usage of Newport's transportation system. Road names and geographic locations are taken from town maps. These names occasionally vary from local usage but have been referenced to maintain consistency. The main goal of this chapter is to plan the efficient maintenance and improvement of the transportation system in order to accommodate existing and anticipated development.

ROADWAYS

Newport has 71.18 miles of public roads of which 52 miles are town roads and 19.18 miles are state or state-aid roads. Most of the town roads are paved, but about seven miles of remain unpaved. Named private subdivision roads and lanes (often shared driveways listed with E-911) are also shown in the table below.

Newport Roadway Inventory (primary roads shown in bold)

Name	Length	Ownership	Maintained	Surface	Condition
Abnaki Dr					Fair
Adams St	0.06	Local	Town	Paved	Good
Bar L Hill Rd		Local	Town	Unpaved	Fair
Barrows Point Rd	0.7	Local	Town	Paved	Good
Birch St	0.12	Local	Town	Paved	Good
Blaisdell Rd	0.5	Local	Town	Paved	Good
Brandy Way		Private		Unpaved	Fair
Camp Benson Rd	0.43	Local	Town	Paved	Good

Name	Length	Ownership	Maintained	Surface	Condition
Canadian Geese Dr		Private		Unpaved	Fair
Corrie Rd		Private			
Carter Ave		Local	Town	Paved	Good
Cedar Dr		Private			Fair
Cemetery Rd	0.92	Local	Town	Paved	Good
Center St	0.24	Local	Town	Paved	Good
Chamberlain Dr		Local	Town	Unpaved	Fair
Cherry Ln		Private			Poor
Christie Campground Rd		Private		Unpaved	Good
Cortland Rd		Private		Unpaved	Fair
County Woods Rd	2.28	Local	Town	Paved	Good
Crabapple Dr		Private		Unpaved	Fair
Darling Rd		Private		Unpaved	Fair
Douglas Dr		Private		Unpaved	Fair
Down Wind Rd		Private		Unpaved	Good
Drew Ln		Private		Unpaved	Fair
Durham Bridge Rd	3.85	Local	Town	Paved	Good
Eagle Dr		Private		Unpaved	Good
Eastville Village Rd					
Ellingwood Dr		Local	Town	Paved	Good
Elm St (US 1, SR 7, SR 100)	0.38	State	State	Paved	Fair
Garth St.		Private		Paved	Good
Evergreen Ln		Private		Paved	Fair
Fairview St		Local	Town	Paved	Good
Fernald Rd	0.62	Local	Town	Paved	Good
First St		Private		Unpaved	Poor
Folsom Dr		Private		Unpaved	Poor
Gilman Rd		Private		Unpaved	Fair
Golf Course Rd	3.76	Town		Paved	Good
Goodwin St	0.17	Local	Town	Paved	Good
Graffam Rd	0.22	Local	Town	Unpaved	Poor
Grant St		Private		Unpaved	Poor
Gray Rd	0.46	Local	Town	Unpaved	Good
Grogin Ave		Town		Paved	Good
Grove St	1.38	Local	Town	Paved	Fair
Hall Rd		Local		Unpaved	Fair
Hamstead Dr		Private		Unpaved	Poor
Hart St		Private		Unpaved	Poor
Hemlock Rd		Private		Unpaved	Poor
Hidden Dr		Private		Unpaved	Poor
High St	0.48	Local	Town	Paved	Good
Highland Ave	0.19	Local	Town	Paved	Fair
Hill Ave	0.13	Local	Town	Paved	Fair

Name	Length	Ownership	Maintained	Surface	Condition
Holyoke Ln		Private		Unpaved	Fair
Hope Rd	0.36	Local	Town	Unpaved	Fair
Hoyt St	0.0.7	Local	Town	Paved	Fair
Industrial Park S Rd	0.17	Local	Town	Paved	Fair
Interstate-95	2.37	Federal	State	Paved	
Joslyn Rd	0.27	Local	Town	Paved	Fair
King Rd		Local		Paved	Good
Kitchen Hill Rd	1.35	Local	Town	Paved	Good
Knowles Ln		Private		Unpaved	Good
Lake Ave	0.12	Local	Town	Paved	Good
Lee St		Private		Unpaved	Fair
Level Full Ln		Private		Unpaved	Fair
Libby Hill Rd	0.85	Local	Town	Paved	Good
Library St		Local	Town	Paved	Good
Lilly Dr		Private		Unpaved	Poor
Littlefield Rd		Private		Unpaved	Good
Loon Dr		Private		Unpaved	Fair
Loop Rd		Private		Unpaved	Poor
Ludden Rd		Private		Unpaved	Fair
Lunt Rd	0.09	Local	Town	Paved	Fair
Mackenzie St		Local		Paved	Fair
Main St (US 2, SR 100)		State		Paved	Fair
Maple St	0.1	Local	Town	Paved	Good
Maplewood Rd	0.67	Local	Town	Unpaved	Good
Marginal Way	0.31	Local	Town	Paved	Good
McKinley Ln		Private		Unpaved	Good
McNally St		Private		Paved	Good
Mill St	0.07	Local	Town	Paved	Fair
Murray Rd	0.88	Private			Fair
Nason Rd		Local		Unpaved	Good
New Rd		Private		Unpaved	Poor
Noah's Landing Dr		Private		Unpaved	Fair
Nokomis Way		Town		Paved	Good
North St	0.48	Local	Town	Paved	Good
Nuthatch Ln		Private		Unpaved	Fair
Oak St		Local		Paved	Good
Old Bangor Rd	1.75	Local	Town	Paved	Good
Palmer Rd	1.45	Local	Town	Paved	
Park Ave	0.6	Local	Town	Paved	
Peck Dr		Local	Town	Paved	Good
Parkin Dr		Private		Unpaved	Fair
Pearl's Ln		Private		Unpaved	Fair
Penobscot Dr		Private		Unpaved	Fair
Pine St	0.15	Local	Town	Paved	Good

Name	Length	Ownership	Maintained	Surface	Condition
Pine View Apartments					
Sand Rd	0.25	Local	Town	Unpaved	Fair
Pleasant St	0.11	Local	Town	Paved	Fair
Poplar Dr		Private		Unpaved	Fair
Pratt Rd	1.03	Local	Town	Unpaved	Fair
Presley Rd		Private		Unpaved	Poor
Prilay Rd	1.08	Local	Town	Unpaved	Good
Railroad St	0.18	Local	Town	Paved	Good
Ridge Rd	0.91	Local	Town	Paved	Good
Route 2 (Newport – Palmyra)	5.26	State	State	Paved	Good
Route 222 (Mullen Rd)	4.04	State	State	Paved	Good
Route 7 (Newport – Plymouth)	0.35	State	State	Paved	Good
Route 7 (Newport, SR 2, SR 7, SR 11)	4.69	State	State	Paved	Good
Rowe Ave	0.1	Local	Town	Paved	Good
Rutland Rd	2.73	Local	Town	Paved	Fair
Sand Rd		Local		Unpaved	Fair
Sawyer Rd	0.1	Local	Town	Unpaved	Fair
Sebasticook Street	0.23	Local	Town	Paved	Fair
Shady Ln		Private			Fair
Shaw St	0.35	Local	Town	Paved	Good
Sheridan St	0.08	Local	Town	Paved	Fair
Sherman St		Local		Unpaved	Fair
Shore Dr		Private		Unpaved	Fair
Simon Ln		Private		Unpaved	Fair
Smith Rd		Local		Unpaved	Poor
South St	0.3	Local	Town	Paved	Fair
Spring St	0.41	Local	Town	Paved	Fair
Spruce St	0.12	Local	Town	Paved	Good
Square Haven Ln		Private		Unpaved	Fair
Stetson Rd	3.62	State	State	Paved	Fair
Stuart St		Private		Unpaved	Fair
Summer St	0.18	Local	Town	Paved	Fair
Sun Dr		Private		Unpaved	Fair
Tamarack Dr		Private		Unpaved	Fair
Tardy Dr		Private		Unpaved	Fair
Tarramango Ln		Private		Unpaved	Fair
Tent Village Rd		Private		Unpaved	Fair
Tyler St		Private		Paved	Good
Water St	0.32	Local	Town	Paved	Good
Wentworth Ave		Local		Paved	Good
West Spring St	0.14	Local	Town	Paved	Good

Name	Length	Ownership	Maintained	Surface	Condition
West St	0.21	Local	Town	Paved	Good
Williams Rd	2.69	State	State	Paved	
Willow Drive		Private		Unpaved	Fair
Wiseman St	0.09	Local	Town	Paved	Fair

Source: Maine DOT and Town of Newport, Road Commissioner

ROADWAY MAINTENANCE

Newport's Road Maintenance Program includes paving, pot hole patching, brush cutting, culvert replacement, ditch clearing for drainage, placement and removal of snow fences, and snow plowing. The town owns four dump trucks with plows and wings one tractor to clean sidewalks, a front end loader and a backhoe for snow plowing.

Overall, Newport's roadways are in good condition. The town works with limited resources to maintain local roads. The damage that occurs to most roads is in part the result of trucking activity. Harsh weather, which includes rapid changes in weather conditions, is another cause of road deterioration. Roads are most vulnerable to the weight of trucks and other heavy vehicles during the spring thaw, which is also the time when many natural resource based products are transported to market. When road weight limit postings are put in place, the conflict between road maintenance and the economic needs of local businesses becomes clear.

It is important to consider that most roads were not originally engineered for the weight they now carry. If money were no concern, the best course of action would be to rebuild each major road. That, however, is not economically feasible. Nevertheless, selective reconstruction of major roadways can be beneficial. No new road construction is planned.

TRAFFIC COMMUTING PATTERNS

The 2000 census found that most Newport residents who commute to work drive alone and only a minority carpool. Significantly fewer residents walked to work or worked at home in 2000 than in 1990 or 1980. This was due to greater employment opportunities in cities such as Bangor and Waterville. According to the Census, the average commuting time for Newport residents was 20 minutes in 1990 and 28.9 minutes in 2000.

Commuting Methods of Newport Residents

	1980		1990		2000	
	Number	Percent	Number	Percent	Number	Percent
Workers 16 years and over	1,108	100.0%	1263	100.0%	1,285	100.0%
Drove alone	622	56.1%	903	71.5%	1,036	80.6%
In carpools	307	27.7%	160	12.7%	159	12.4%
Using public	11	1.0%	8	0.6%	0	0.0%

transportation						
Using other means	7	0.6%	23	1.8%	14	1.1%
Walked or worked at home	138	12.5%	168	13.3%	76	5.9%

Source: Census

In 2000, more than 27 percent of Newport residents who worked did so in Newport. This was a significant decrease from 1990, largely due to availability of jobs outside the community. Similar trends have been seen in smaller communities throughout the region. Almost 43 percent of Newport residents who worked did so outside Newport, but still in Penobscot County, many in Bangor. As a relatively small service center community, Newport does have important local businesses which provide limited employment opportunities for residents. See the Economy Chapter of this plan for information on local and regional employment.

Where Newport Residents Work

	1990		2000	
	Number	Percent	Number	Percent
Total Commuters	1263	100.0%	1285	100.0%
Work and Reside in Same Town	584	46.2%	350	27.2%
Work in Penobscot County, outside Newport	287	22.7%	550	42.8%
Work in Other Maine County	378	29.9%	385	30.0%
Work in Other State	14	1.1%	0	0.0%

Source: Census

TRAFFIC VOLUME

Vehicle Miles Traveled is a measure of total traffic volume. From 1990 to 2000, VMT increased 12.9 percent in Penobscot County. However, during the same period, the county population decreased by 1.1 percent. This indicates that people are driving more on average than they have in the past. This is true throughout Maine and most of the U.S. as well.

Maine DOT has actual traffic counts, called Annual Average Daily Traffic , from both 2001 and 2006 for select locations on Newport roads. The next table details these traffic counts.

Traffic Volumes

Location Description	Type	AADT in 2001	AADT in 2006	Change
County Woods Rd SW/O SR 222	I	800	950	18.8%
Grove St NE/O Elm St	I	830	970	16.9%
High St SE/O SR 7/11	I	3,230	3,160	-2.2%
Libby Hill Rd NW/O SR 7/11 (High St)	I	680	670	-1.5%

Location Description	Type	AADT in 2001	AADT in 2006	Change
Park Ave E/O Elm St	I	590	540	-8.5%
Ridge Rd NE/O I-95 off ramp	I	2,010	2,210	10.0%
Spring St S/O US 2/SR 7/100 (Main St)	I	670	630	-6.0%
SR 11/100 at Palmyra town line	I	14,800	19,700	33.1%
SR 222 E/O Durham Bridge Rd	I	1,080	1,190	10.2%
SR 222 W/O Durham Bridge Rd	I	1,490	1,580	6.0%
SR 7 SW/O US 2/SR 100	I	1,340	1,120	-16.4%
SR 7/11 N/O Libby Hill Rd at railroad crossing	I	10,840	11,890	9.7%
SR 7/11 NE/O US 2/SR 7/100 (Main St)	I	11,050	12,340	11.7%
US 2 at Palmyra town line	II	10,030	13,130	30.9%
US 2/SR 100 E/O SR 7	II	2,220	1,790	-19.4%
US 2/SR 7/100 (Main St) W/O High St	I	7,980	9,400	17.8%
US 2/SR 7/100 NW/O SR 7	II	3,040	2,940	-3.3%
US 2/SR 7/100 W/O IR 1276 (Old Bangor Rd)	II	4,280	4,270	-0.2%
US 2/SR 7/100 W/O Ridge Rd	II	5,760	6,270	8.9%
Williams Rd NW/O SR 7/11	I	2,280	2,560	12.3%

Notes: Newport sites where both 2001 and 2006 data are available. Locations: E/O East of, N/O North of, S/O South of, W/O West of, etc. Types: I Urban Group, II Arterial Group. Source: Maine DOT

Newport residents have observed increased traffic especially on Moosehead Trail (Route 7) and on the Stetson, Durham Bridge, Palmer and Williams Roads. It is believed that these increases are not accurately shown by the Maine DOT data available for Newport.

The closest recorded traffic volumes for Interstate 95 are from the Town of Plymouth I-95 north of the off ramp to State Route 7. In 2005, they were: northbound 8,750, southbound 9,480.

TRAFFIC CONGESTION

Traffic congestion lowers a roadway's level of service which is a qualitative measure characterizing operational conditions within a traffic stream and including speed, travel times, freedom to maneuver, traffic interruptions and the perceptions of motorists and passengers. There are six levels of service, given letter designations from A to F, with LOS A representing the best operating conditions and LOS F the worst. LOS E is defined as the maximum flow or capacity of a road system. For most purposes, however, a level of C or D is usually used as the maximum acceptable volume. In 2005, Maine DOT noted:

- LOS E for SR 7/11 north of the US 2-SR7/100 intersection and south of the Libby Hill Rd. intersection
- LOS D for I-95, portions of Elm St. and SR 7/11

- LOS C for portions of SR 2/SR7/100 west of Ridge Rd.
- LOS B for most of SR 2/SR7/100.
- LOS A or B for all other roads

Residents have expressed concern with traffic congestion in the Triangle area, especially during weekends and the summer. The selectmen have identified this problem with MDOT for engineering and redesign work. They have also identified the need to rebuild the intersection of Route 7 and the Williams Road.. They also identified the need to rebuild the Stetson and Mullen Roads. The selectmen included these projects in their proposal for MDOT to consider in 2008.

SAFETY

According to reports compiled by the Newport Police Department, there were 537 reported traffic accidents in Newport from 2003 to 2005. Most of these accidents did not involve personal injury, yet there were two fatalities, eight serious personal injuries, 63 minor injuries (in which a person had visible injuries, bruises, abrasions, swelling, etc.), and 166 injuries that were not visible (including momentary unconsciousness or complaint of pain). Most reports listed “no improper action” as an accident’s cause; the most common attributing factors leading to accidents were “driver inattention – distraction”, “failure to yield right of way” and “illegal, unsafe speed.” Most crashes occurred on US Route 2, followed by state Routes 11 and 7, and Stetson Rd. These statistics do not account for unreported crashes, which tend to be less serious.

Between 2003 and 2005, Penobscot County had 12,343 crashes, with 63 fatalities; 372 incapacitating injuries; 1,738 evident injuries; 2,965 possible injuries; and an estimated economic impact of \$390,143,000.

Maine DOT found several road segments in Newport with high crash locations (at least eight accidents occurring in three years). In 2004, these high crash locations included state Route 11/100 between I-95 and downtown, Elm St. near downtown and state Route 222 between Prilay Rd. and Pratt Rd. Residents have not expressed concern with safety in other areas...

Locally-Identified Hazards

Area [Indicate: intersection or stretch of roadway]	Hazard [Indicate: Speeding, Poor Sight Distance, Poor Configuration, Poor Shoulders, Pedestrian Crossing, etc.]	Solution [Indicate: Enforcement, Reduce Speed, Redesign, etc.]
None	None	None
Williams Road	Increased Traffic	Reduce Speed
Stetson Road	Destroyed by Trucks	Stop Truck Traffic
Williams Road/Route 7	Dangerous	Realignment

Source: Town of Newport, Town Residents

ACCESS MANAGEMENT

Access Management is the planned location and design of driveways and entrances to roads in order to improve safety preserve capacity and maintain posted speeds. Maine DOT has established standards, including greater sight distance requirements based in part on posted speeds, for the permitting of driveways and entrances for three categories of roadways: retrograde arterials, mobility arterials and all other state and state-aid roads. In Newport, US Route 2 from the state Route 7 intersection to the Palmyra town line is a mobility arterial corridor. State Route 7 from the US Route 2 intersection to the Corinna town line is classified as a retrograde arterial as is state Route 11 from the Newport/ Palmyra town line to the intersection of state Route 7/US Route 2.

Shared access points for businesses and residences can enhance safety while allowing development to occur along roadways. To maintain and improve traffic flow, future land use ordinances should include access management performance standards that conform to MDOT standards.

BRIDGES

There are six bridges in Newport: The Main Street,, Durham, North Street and Corinna Stream Bridges are owned by the state and range in condition from poor to good. The other bridges are owned by the town and are in good condition. See the section Maine DOT Project Planning for information on proposed bridge replacement.

PUBLIC TRANSPORTATION

Newport has no town-provided public transportation. Concord Trailways offers coach service to and from Portland and Bangor, with its closest stop to Newport in Bangor. PenQuis CAP offers limited services to income-eligible persons. The lack of public transportation is of some concern to residents, especially the.

AIR TRANSPORTATION

Newport has one private airfield known as Newport Sky Park (ME 68) located south of Elm St. Primary regional airports include:

1. Bangor International Airport provides national and international commercial passenger and freight services, as well as civil defense operations. Its longest runway extends 11,441-feet. Car rental services are available.
2. Augusta State Airport serves Augusta and the region with scheduled commercial service, air taxi and general aviation. It is owned by the state. Its longest runway extends 5,000 feet. Fuel is available.

RAIL TRANSPORTATION

The Maine Central rail line crosses the southern portion of town and serves the Prentiss & Carlisle Wood Yard and Soil Prep of Plymouth. The Board of selectmen have prioritized this rail siding for further development and reported their intention to the Maine Department of Transportation.

PARKING

Most businesses in Newport provide parking spaces for their customers and employees. Public parking is available at the Municipal Building parking lot and on Main and Mill Streets.; In general, there is a demand for more public parking during the entire year at the Municipal Building and Public Safety Complex.

PEDESTRIAN WAYS

There are paved pedestrian sidewalks in Newport along: Elm, Water, High, Main Shaw and North Streets. Many pedestrians use road shoulders and unpaved paths as walkways. Maintaining and creating neighborhoods in which children can walk to school and which contain general stores and other gathering places are often seen as an important part of vibrant communities. Preserving existing pedestrian paths and restoring others is often needed. In Newport, replacement and new sidewalks are needed on 50 percent of public streets.

BIKE PATHS, SNOWMOBILE PATHS

There is one bike path in Newport along the Four Seasons Recreation Trail. There are snowmobile trails along Durham Bridge, the Four Seasons Trail and many others trails connecting several of surrounding communities. See the Recreation Chapter for more information.

MARINE PORTS AND TOWN LANDINGS

As an inland community, Newport is not served by ports. The town has one landing on Seabasticook Lake, located on North Street.

MAINE DOT PROJECT PLANNING

The Maine DOT Six-Year Transportation Improvement Plan (2004-2009) lists the major transportation policy initiatives and capital improvement projects it expects to include within the next six year budgeting period. That plan includes two projects in Newport:

1. Highway reconstruction of US Route 2 from Newport to Hermon, beginning at Route 7/11 and ending at the Bangor city line. Corridor length: 23.5 miles.

2. Highway reconstruction of state Route 7 from Dixmont to Newport, beginning at Route 9/202 and ending at Route 2. Corridor length: 10.7 miles.

The Biennial Transportation Improvement Program is Maine DOT's programming document that defines potential projects for the next two years. Municipalities can suggest projects to be included in the BTIP for potential funding. That plan includes four projects in Newport:

1. Preliminary engineering for future bridge replacement of the Main Street Bridge (#2501) in Newport over the Sebasticook River on Route 2. Budgeted: \$425,000.
2. Highway rehabilitation of Route 222 in Newport beginning at the intersection of Route 143 (Mullen Road) and extending east 1.93 miles to the intersection of the Elementary School Road. Budgeted: \$62,500.
3. Preliminary engineering for future reconstruction of Bangor Rd./Elm St. through Newport, Plymouth, Etna, Carmel and Hermon. Segment 1 begins at the Ridge Road and extends east 10.81 miles to the Hinkley Road; segment 2 begins at the Billings Road and extends east 1.53 miles to the Bog Road; segment 3 begins 0.16 mile east of the Coldbrook Road and extends east 2.28 miles. Budgeted: \$387,822.
4. Highway resurfacing of US Route 2 through Pittsfield, Palmyra and Newport beginning 0.01 of a mile east of the Pooler Road and extending east nine miles to Route 7. Budgeted: \$2,164,436.

MAINE DOT PUBLIC PARTICIPATION IN TRANSPORTATION PLANNING

In 2004, Maine DOT transferred the advisory role of the (RTACs)(what's this?) to the Comprehensive Economic Development Strategy Committees in each of Maine's Economic Development Districts. It is anticipated that this will facilitate public participation and reduce costs. These committees promote sensible development in accordance with the guidelines and support of the U.S. Economic Development Administration. The CEDS will establish subcommittees devoted to transportation issues and will recommend funding priorities. Newport is part of the Eastern Maine EDD, which covers Hancock, Knox, Penobscot, Piscataquis, Waldo and Washington Counties. The 2007 CEDS report contained the following transportation recommendation relevant to Newport:

Penobscot and Piscataquis Counties infrastructure projects: Improve mobility and safety on state Routes 7/11/15/23 from Newport to Dover-Foxcroft including conducting a safety audit and implementing access management techniques as appropriate.

SUMMARY

Major transportation linkages within Newport include Interstate 95 and Routes 2, 7, 11, 100 and 222. Residents rely on the road network as their primary means of transportation in town. Roads should provide safe, reliable access to work, school, stores and residences. Overall, Newport's roadways are in fair or good condition. Continued proper and affordable maintenance of the road network will be in the best interest of all residents. Since Maine DOT has jurisdiction over state and state aid roads in Newport, the town will continue to communicate and cooperate with the department to ensure necessary road improvements are made as expeditiously as possible.

POLICIES AND IMPLEMENTATION STRATEGIES

Policies: Keep the local road maintenance/reconstruction schedule current.

Maintain and improve traffic flows while improving safety.

Prioritize community and regional needs associated with safe, efficient and optimal use of transportation systems.

Safely and efficiently preserve or improve the transportation system.

Promote public health, protect natural and cultural resources, and enhance livability by managing land use in ways that maximize the efficiency of the transportation system and minimize increases in vehicle miles traveled.

Meet the diverse transportation needs of residents (including children, the elderly and disabled persons) and through travelers by providing a safe, efficient and adequate transportation network for all types of users.

Promote fiscal prudence by maximizing the efficiency of the state or state-aid highway network.

Strategies: Ongoing

The Selectmen will regularly update the road maintenance schedule to provide the Road Commissioner with a priority list for maintenance, upgrading and replacement of local roads.

The selectmen will work with PenQuis CAP and other providers to better meet the needs of elderly and disabled residents who lack their own transportation, by providing carpools, Meals for ME and Lynx transportation to stores and services in Newport.

The Planning Board and selectmen will welcome opportunities to create walking and bicycling paths. Through public participation the town will prioritize potential projects and seek CDBG infrastructure funds, Maine DOT Enhancement funds, and other

sources to connect and extend existing paths and create new paths. Public support for these project proposals will be obtained before Newport commits any public resources.

The selectmen will continue to update or develop a prioritized 10-year improvement, maintenance and repair plan for local and regional transportation system facilities that reflects community, regional and state objectives.

The Planning Board will initiate or actively participate in regional and state transportation and land use planning efforts.

The Planning Board and selectmen will work with the Maine DOT to address conflicts between local, regional and state priorities or other deficiencies in the local transportation system.

Strategies: To be Accomplished in 1-2 Years

The Planning Board will develop policies and standards for the residents' approval pertaining to the safety, efficiency, upkeep and resurfacing of local roads.

The Planning Board will maintain a positive working relationship with selectmen and Newport citizens in order to provide guidance and sound decision-making regarding local roadways.

The Planning Board will ensure future land use ordinances will be in harmony with access management performance standards set in current state regulations for state and state-aid roadways

The Planning Board will enact or amend local ordinances to be consistent with local, regional and state transportation policies identified in this plan.

The Planning Board will enact or amend local ordinances to address or avoid conflicts with:

- a. Policy objectives of the Sensible Transportation Policy Act (23 MRSA §73);
- b. State access management regulations pursuant to 23 MRSA §704; and
- c. State traffic permitting regulations for large developments pursuant to 23 MRSA §704-A.

Strategies: To be Accomplished in 2-5 Years.

The selectmen will appoint local citizens to a Local Roads Committee and ensure they follow established duties and procedures.

The Planning Board will enact or amend ordinance standards for subdivisions and for public and private roads to foster transportation-efficient growth patterns and provide for future street and transit connections.

STATE GOALS

- *To protect the quality and manage the quantity of the State's water resources, including lakes, aquifers, great ponds, estuaries, rivers and coastal areas.*
- *To protect the State's other critical natural resources, including without limitation, wetlands, wildlife and fisheries habitat, sand dunes, shorelands, scenic vistas and unique natural areas.*
- *To protect the State's marine resources industry, ports and harbors from incompatible development to promote access to the shore for commercial fisherman and the public.*
- *To safeguard the State's agricultural and forest resources from development; which threatens those resources.*

INTRODUCTION

Newport's natural resources greatly contribute to its quality of life, property values and economy. Natural resources provide desired open spaces and are valued for habitat preservation, recreational opportunities such as fishing, boating, snowmobiling, hunting and hiking, as well as other activities for residents and visitors. The goals of this chapter are to help Newport identify, manage and adequately protect its natural resources (including critical habitats), protect the health of residents and safeguard the sectors of local economy which depend on its natural resources.

LOCATION AND LAND COVER

Newport is located in southwestern Penobscot County, Maine. See the map titled High Value Habitats for the location of Newport's forested areas, grasslands, wetlands/open waters and developed lands.

TOPOGRAPHY

Newport topography ranges from approximately 200 feet above sea level on Sebacook Lake, to 300 feet around its northeast and southwest borders, and 400 to 500 feet along portions of its northern border with Corinna. See the USGS map for contour elevations.

SOILS

Soils are a critical natural resource in all communities. Knowledge of soil types will assist the community in planning for development. Various soil characteristics present limitations to development which can often be overcome through special design, construction and planning.

Several soil characteristics including shallow depth to bedrock, shallow depth to water table, flooding potential, and soils with high erosion potential may present severe limitations to development. Potential consequences from improper development within areas where such soils are present include damage to personal property resulting from erosion and flooding, contamination of groundwater from septic systems, and adverse impacts to surface water quality from sedimentation. For example, soils with a fluctuating water table and subsequent frost heaving may damage roads and buildings constructed over them.

Poorly drained soils (nine to 19 inches to water table) usually place severe limitations on land development. Moderately drained soils (18 to 30 inches to water table) have moderate limitations to development. Well drained soils (30 inches or more to water table) have few, if any, limitations.

Newport's soils have two origins. Most of the town is covered by soils derived from glacial till. This is unconsolidated, unsorted material laid down by a retreating glacier. The remainder is either floodplain or wetland soil and is of recent formation.

Thorndike Series soils are somewhat excessively drained soils associated with glacial till. These soils are prevalent in Newport and are located on the south shore of Nokomis Pond; in the northeast, sparsely developed, farming area of Newport, and in the southeast corner of town. Bangor Series soils which exhibit good drainage and Dixmont Series soils which exhibit moderately good drainage cover a major portion of the town.

Development in Newport usually depends on the private construction and maintenance of safe septic systems and wells. Septic systems should always be designed and constructed carefully, but this is especially crucial when such systems are placed in areas with poorly drained soils, shallow bedrock soils and soils with high water tables. Development on poorly suited soils is the underlying cause of many environmental and, ultimately, economic problems.

The Soils Map shows areas best suited for development that requires septic systems. Low Density Development is defined as three-bedroom single-family unit residences with basement and comparable buildings covering 2,000 square feet with a subsurface wastewater disposal system, and with or without an on-site source of water. Residences may be a single-unit or a cluster of units in a

development. The subsurface wastewater disposal system would have the capacity of processing 270 gallons per day of effluent and would be installed according to the Subsurface Wastewater Disposal Rules of the Maine Department of Human Resources, Division of Health Engineering.

Steep slopes are a significant factor affecting soil properties and can influence land use. Most development occurs on reasonably level areas on slopes of less than 15 percent (representing an average drop of 15 feet or less in 100 feet horizontal distance). On steep slopes of 25 percent or more, soils often present problems for buildings and roads. Septic systems are not allowed on slopes exceeding 25 percent. In these areas, the cost of engineering foundations and connecting utility systems increase. The map titled Topography shows these environmentally sensitive areas.

Removing surface vegetation from large areas of land causes erosion which is a major contributor of pollution to water bodies. Rainfall and runoff, susceptibility to erosion and the combined effects of slope length and steepness must be taken into consideration when identifying highly erodible soils.

The Soils Map shows areas of high agricultural productivity. The U.S. Department of Agriculture defines prime farmland as land that is best suited to produce food, feed, forage, fiber and oilseed crops. It has the soil quality, growing season and moisture supply needed to produce a sustained high yield of crops while using acceptable farming methods. Prime farmland produces the highest yields and requires minimal amounts of energy and economic resources, while farming it results in the least damage to the environment. Prime farmland soils are a limited strategic resource.

FARMS AND OPEN SPACE

Newport has nine farms on approximately 600 acres, producing milk, livestock, corn, hay, potatoes, oats and other vegetables.

Farm land is eligible for the Farm and Open Space Tax Law Program (Title 36, M.R.S.A., Section 1101, et seq.) if it consists of at least five contiguous acres, is utilized for farming, agriculture or horticulture and has shown gross earnings from agricultural production of at least \$2,000 (which may include the value of commodities produced for consumption by the farm household) during one of the past two years or three of the past five years. In 2006, Newport had 15 parcels and 1844 acres of farmland enrolled in this program.

The Open Space portion of this program has no minimum lot size requirement and the parcel must be preserved or restricted in use to provide a public benefit by conserving scenic resources, enhancing public recreational opportunities, promoting game management, or preserving wildlife habitat. In 2006, Newport had 15 parcels and 185.50 acres of open space enrolled in this program.

Both the Farm and Open Space Tax Laws encourage landowners to conserve farmland and open space by taxing the land at a rate based on its current use, rather than its potential fair market value. These programs benefit farmers by allowing them to continue their way of life without being forced out of business by excessive property taxes caused by rising land valuations. If a property is removed from the program, the owner pays a penalty which is calculated based on the number of years the property was enrolled in the program and/or a percentage of fair market value upon the date of withdrawal.

FORESTLAND

About 45 percent of Newport is covered by forest. See the map titled High Value Habitat for the location of Newport's forested areas... Maine's forests and forest industry still play a vital role in the state's economy. Forested areas provide an abundant and diverse wildlife population for the use and enjoyment of everyone. Loss of forestland can be attributed to development and to irresponsible harvesting techniques. When forestland is fragmented, public access becomes more restricted due to increased land posting.

To optimize forestland use, woodlands must be effectively managed and harvested. The "selection method" of forestry is a silvicultural system in which individual trees or small groups of trees are harvested with minimal damage to the residual forest. Trees with poor form or those that are likely to die before the next harvest is cut while the most valuable and vigorous trees are left to develop. When properly practiced, the selection method can yield regular income from a woodlot, while perpetuating forest cover and providing a healthy forest for one's heirs.

Timber Harvest in Newport (1991-2005)

Year	Selection harvest, acres	Shelterwood harvest, acres	Clearcut harvest, acres	Total Harvest, acres	Change of land use, acres	Number of timber harvests
1991	312	0	0	312	0	6
1992	412	0	5	417	0	6
1993	363	0	0	363	0	9
1994	205	0	30	235	0	4
1995	173	51	0	224	0	6
1996	328	50	0	378	0	8
1997	158	53	25	236	29	10
1998	178	3	0	181	0	13
1999	232	0	5	237	5	17
2000	269	22	0	291	13	12
2001	324	142	0	466	0	15
2002	303	0	0	303	4	11

Year	Selection harvest, acres	Shelterwood harvest, acres	Clearcut harvest, acres	Total Harvest, acres	Change of land use, acres	Number of timber harvests
2003	266	60	0	326	0	8
2004	254	24	0	278	8	12
2005	205	0	0	205	8	7
Total	3,982	405	65	4,452	67	144

Source: Maine Forest Service. To protect confidential landowner information, data is reported only where three or more landowner reports reported harvesting in the Town.

TREE GROWTH TAX LAW

Maine has a program for forestland which is similar to the Farm and Open Space Tax Program. The Tree Growth Tax Law (Title 36, M.R.S.A. Section 571, et seq.) provides for the valuation of land that has been classified as forestland on the basis of its productivity, rather than its fair market value. The tree growth program requires that the parcels be at least 10 acres and that the land is held for commercial use. If the property is removed from the program, the owner pays a penalty which is calculated based on the number of years the property was enrolled in the program and/or a percentage of fair market value upon the date of withdrawal. According to municipal records for 2007, Newport had 44 parcels totaling 3308.13 acres in tree growth tax status.

FOREST PRACTICES ACT

This act regulates the practice of clear cutting by setting regeneration and clear cut size requirements.

SHORELAND ZONING, SUBDIVISION LAW AND CLEAR CUTTING

State legislation provides environmental guidelines and mandates restrictions regarding shoreland and subdivision activities that involve forestry issues and also regulates clear cutting.

WATER RESOURCES

Water resources are vital to Newport's residents and to natural habitats, the environment and to sectors of the economy based on natural resources. The sensible use of water resources will help ensure the physical health of Newport's residents and enhance the usefulness and value of their properties. Likewise, the prudent use of marine resources will help sustain the local economy.

GROUNDWATER

Groundwater is defined as subsurface water located in the zone of saturation, an area of soil and/or rock below the level of the water table where voids (pores) are filled with water. Aquifers are geologic formations containing sufficient saturated porous and permeable material to transmit water at a rate sufficient to feed a spring or for extraction by a well. There are two types of aquifers: bedrock and sand/gravel aquifers. A bedrock aquifer is adequate for small yields. A sand/gravel aquifer is a deposit of coarse-grained surface materials that, in all probability, can supply large volumes of groundwater. The boundaries of mapped aquifers are based on the best-known information and encompass areas which tend to be the principal groundwater recharge sites. Recharge to these specific aquifers, however, is likely to occur over a more extensive area than the aquifer itself. Newport has only one known aquifer of significant yield (10 gallons per minute or greater).

Groundwater and surface water contamination can result from agricultural activities, hazardous waste spill sites, landfills, petroleum products, leaking underground storage tanks, road-salt storage and application, septic systems, saltwater intrusion, shallow well injection and waste lagoons. In addition to these major sources, golf courses, cemeteries, burned buildings and automobile service stations are potential threats to groundwater. If groundwater is contaminated, it is difficult or impossible to clean. Contamination can spread from groundwater to surface water and vice versa. It is therefore important to take measures to prevent contamination before it occurs. Protecting groundwater resources and preventing contamination are the most effective and least expensive techniques for preserving a clean water supply for current and future users.

High levels of naturally occurring arsenic have been found in the groundwater of some Maine communities, but Newport has no documented arsenic contamination.

WATERSHEDS

A watershed is the land area in which runoff from precipitation drains into a body of water. See the map titled Water Resources for the boundaries of watersheds which are also known as drainage divides. The portion of a watershed having the greatest potential to affect a body of water is its direct watershed, or that part which does not first drain through upstream areas. Anything that can be transported by water will eventually reach and impact the quality of a water body. Development activities such as house and road construction and timber harvesting may disturb the land that drains to a lake by streams or groundwater. Disturbed and developed land can degrade water quality by contributing pollutants and other substances to water bodies. Activity anywhere in the

watershed, even several miles away, has the potential to impact the water quality of streams, rivers and ponds.

FLOODPLAINS

Floodplains are defined as areas adjacent to a water body which can reasonably be expected to be covered at some time by floodwater. The primary function of floodplains is to absorb large volumes of water from nearby overflowing channels and to dissipate the force of that flow by reducing the rate of flow by widening the channel. A floodplain may also absorb and store a large amount of water and later become a source of groundwater recharge. Floodplains can also serve as wildlife habitat and open space, or be used for outdoor recreation and agriculture, without interfering with their emergency overflow capacity.

Intensive development on floodplains and flood prone areas can increase the severity of floods and cause flooding of previously unaffected areas. Intensive development in floodplains and flood prone areas can cause widespread property damage resulting from severe flooding, not to mention potential injuries and deaths. Other significant consequences include the public costs associated with cleanup and rebuilding, increased insurance costs and water contamination from toxic and hazardous materials.

Newport's floodplains are associated with tributaries to Sebasticook Lake, its outflow and associated wetlands. Due to the significant storage capacity of Sebasticook Lake and its wetlands, Newport has a minimal floodplain. Nonetheless, development within floodplains should be avoided. The floodplain maps of Newport are located in the Town Office.

Structures located in a floodplain or on floodplain soils may be subject to severe damage during floods. Flood damage to buildings and washout of roads are common problems in these areas. Newport's Floodplain Management Ordinance regulates activities in the town's floodplain...

Newport participates in the National Flood Insurance Program... Flood zones and flood hazard areas inundated by 100-year flood (less than a one percent chance of being equaled or exceeded in a given year) are shown on Flood Insurance Program Rate maps produced by the Federal Emergency Management Agency. Municipal participation in the National Flood Insurance Program facilitates the availability of flood insurance and mortgage loans for homeowners. Newport's maps are outdated and have never been updated despite repeated requests to FEMA to do so.

Newport has adopted the minimum shoreland standards required by the state's Mandatory Shoreland Zoning Act. This ordinance protects the shore areas by restricting development and is described in greater detail in the next section.

Development in floodplains, flood prone areas and special flood hazard areas should be avoided. In addition, existing development and incompatible land use activities should not be permitted to expand and should be identified for their eventual elimination to the maximum extent possible.

SHORELAND AREAS

Shorelands are environmentally important because of their relationship to water quality, their value as wildlife habitat, and their function as floodplains. Development and the removal of vegetation in shoreland areas can increase runoff and sedimentation leading to an increase in the amount of nutrients and other pollutants that reach surface water. Steep slopes with highly erodible soils are particularly susceptible to erosion.

The Newport Shoreland Zoning Ordinance, last amended in 2007, is designed to provide protection to shorelands, specifically within a 250-foot area from the normal high water line of ponds and lakes and identified freshwater wetlands of 10 acres or more, the upland edge of freshwater wetlands, salt marshes, salt meadows, wetlands associated with great ponds, rivers and specified flood hazard areas. An area of 75 feet from the normal high water line is set for other water bodies including tributary streams. There are six shoreland zones: Resource Protection, Limited Residential, Limited Commercial, General Development, Stream Protection, and the Nokomis Pond Water District. Land use standards are defined for each zone. See the ordinance for more information on these standards and permitted uses.

WETLANDS

The map titled Wetlands Characterization shows the location of Newport's wetlands. Wetlands are defined under state and federal laws as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support prevalence of vegetation typically adapted for life in saturated soils." Wetlands include freshwater swamps, bogs, marshes, heaths, swales and meadows. Wetland alterations can contribute to their loss. The most common sources of alterations include commercial, residential and industrial development, roads, floodplain development, pollution, peat mining, timber harvesting and agriculture.

Wetlands are important to public health, safety and welfare because they act as a filter, absorb excess water, serve as aquifer discharge areas, and provide critical habitats for a wide range of fish and wildlife. Some wetlands have important recreational and educational value in that they provide opportunities for fishing, boating, hunting and environmental education. They are fragile natural resources. Any development, even on the edge of a wetland, can have significant environmental consequences and planning efforts should take into account the significance of these areas.

Newport has major wetlands adjacent to the Palmer Road along the eastern bays of Sebasticook Lake and along Stetson Stream. There also are wetlands associated with the east branch of Sebasticook River and Mulligan Stream. The most significant wetlands are located south and east of Newport Village and along portions of the west shore of Sebasticook Lake. Due to their easy accessibility, these wetlands may be the most endangered in Newport. The Wetlands map classifies Newport's wetlands into the following:

- Aquatic Bed (floating or submerged aquatic vegetation), Open Water
- Emergent (herbaceous vegetation), Emergent/Forested (woody vegetation >20 ft tall) Mix, Emergent/Shrub-Scrub (woody vegetation <20 ft tall) Mix
- Forested, Forested/Shrub-scrub
- Shrub-scrub
- Other (rocky shore, streambed, unconsolidated shore, reef, rocky bottom)

STREAMS, LAKES AND PONDS

Some of Newport's the most important resources are its water resources including surface water bodies and groundwater. Rivers, brooks, streams and known sand and gravel aquifers are shown on the Natural Resources Map.

Sebasticook Lake is Newport's most significant resource. Despite being hailed as an attraction at the turn of the 20th Century, years of industrial and agricultural activity in its watershed greatly degraded the lake's water quality. Over the past 25 years, the cooperative efforts of Newport, its residents, state agencies and others have significantly restored the lake... Controlling pollution coming into the lake from its tributaries to the north and east and annually releasing volumes of water has alleviated most of the algae problems so prevalent not long ago. The Town's efforts to enforce sewerage disposal controls and the establishment of a sewage treatment facility have also greatly contributed to ridding the lake of man-made adversity.

Additional surface water bodies in the Newport include Nokomis Pond, Sebasticook River, Mulligan Stream, Mud Pond, Alder Stream Impoundment, and an unnamed pond, small portions of Brooks and Etna Ponds and associated watersheds.

Newport's Shoreland Zoning Ordinance offers some protection to these bodies of water by restricting development around them. In addition, the Floodplain Management Ordinance limits development around some water bodies.

Maine's Natural Resource Protection Act defines a river, stream or brook as a channel that has defined banks (including a floodway and associated floodplain wetlands) created by the action of surface water. Newport's streams and brooks are shown on the map titled Water Resources and Riparian Habitats. Local

streams include the Corinna, Mulligan and Martin Streams. All of these watercourses are Class B a classification that includes waters that may be used for drinking water supply, recreation in and on the water, fishing, industrial process and cooling water supply; hydroelectric power generation, navigation, and unimpaired habitat for fish and other aquatic life.

Class C water are suitable for recreation and fishing but have higher levels of bacteria and lower levels of oxygen than the other classes due to pollution.

Relevant statutory definitions include:

Class B waters. Class B shall be the 3rd highest classification.

- A. Class B waters shall be of such quality that they are suitable for the designated uses of drinking water supply after treatment; fishing; recreation in and on the water; industrial process and cooling water supply; hydroelectric power generation, except as prohibited under Title 12, section 403; and navigation; and as habitat for fish and other aquatic life. The habitat shall be characterized as unimpaired. [1985, c. 698, § 15 (new).]
- B. The dissolved oxygen content of Class B waters shall be not less than 7 parts per million or 75% of saturation, whichever is higher, except that for the period from October 1st to May 14th, in order to ensure spawning and egg incubation of indigenous fish species, the 7-day mean dissolved oxygen concentration shall not be less than 9.5 parts per million and the 1-day minimum dissolved oxygen concentration shall not be less than 8.0 parts per million in identified fish spawning areas. Between May 15th and September 30th, the number of *Escherichia coli* bacteria of human origin in these waters may not exceed a geometric mean of 64 per 100 milliliters or an instantaneous level of 427 per 100 milliliters. [1985, c. 698, § 15 (new).]
- C. Discharges to Class B waters shall not cause adverse impact to aquatic life in that the receiving waters shall be of sufficient quality to support all aquatic species indigenous to the receiving water without detrimental changes in the resident biological community. [1985, c. 698, § 15 (new).] [1985, c. 698, § 15 (new).]

DRINKING WATER SUPPLY

Newport has five public wells as reported by the Maine Drinking Water Program. The State of Maine Drinking Water Program is responsible for enforcing the Federal Safe Drinking Water Act in Maine and has primary responsibility for administering the State's Rules Relating to Drinking Water. The DWP receives funding from both the United States Environmental Protection Agency and the regulated community. Public water suppliers pay an annual fee, which was developed by the DWP, Maine Rural Water Association and the Maine Water

Utilities Association. The DWP regulates more than 2,200 public water systems in Maine.

Public Water Sources in Newport

PWSID#	PUBLIC WATER SYSTEM(PWS) NAME	PWS TYPE	SOURCE NAME	SOURCE TYPE
ME0005065	Christies Campground	NC	DR WELL 133'	WL
ME0005080	Anglers Restaurant	NC	DR WELL 80+'	WL
ME0005085	Sebasticook Lake campground	NC	DR WELL 152'	WL
ME0091100	Newport water district	C	NOKOMIS POND	IN
ME0094563	DC's Bar & Grill	NC	WELL	WL
Unknown	Pine Hill Motel	NC	WELL	WL
Unknown	Newport Country Club	NC	WELL	WL

Source: Maine Department of Environmental Health

WATER POLLUTION

Water quality can be degraded by many factors including natural occurrences and human activity. Pollution can be classified by its origin. Point source pollution originates from a single point such as an outflow pipe, overboard discharge including untreated waste, or from a residence, business or factory. Non-point source pollution originates from a broad area such as agricultural runoff, animal waste and fertilizers, landfills, sand and salt storage, failing septic systems, waste lagoons, leaking underground storage tanks, hazardous substances, acid rain, or through erosion and sedimentation. It is well known that pesticides, sewage, refuse and chemical wastes of industry threaten the quality of ground and surface waters. It is less well known that phosphorus poses a significant threat because of its natural abundance and potential to contaminate. Phosphorous is found in soil and is held in place by vegetation. When vegetation is removed, surface runoff increases and transports phosphorus along with eroded soils into ponds, streams and coastal inlets. All water bodies can but when the phosphorus load to a lake becomes too great, it acts as a fertilizer and causes algae to flourish. With increased levels of algae, the oxygen in a water body is exhausted by bacterial decomposition. The decay of algae also

generates noxious odors and tastes. Most fish, plants and wildlife of water ecosystems are endangered by this process.

A water body with high concentrations of dissolved nutrients such as phosphorus which is also deficient in oxygen is termed eutrophic. Once a water body becomes eutrophic, it is extremely slow to recover and requires intense action to immobilize phosphorus in the sediments. Thus it is well advised to manage the amount and sources of phosphorus entering a body of water to prevent eutrophication.

SEBASTICOOK LAKE

Sebasticook Lake is the largest lake (4,288 acres) within the confines of an individual municipality east of the Mississippi River. The drainage area of the lake is 81,056 acres including three major tributaries: East Branch of Sebasticook River, Mulligan Stream and Stetson Stream. The total drainage area encompasses portions of Penobscot County and, to a much lesser extent, Somerset County. Nine subordinate lakesheds are found within the Sebasticook drainage basin including the drainage areas of Pleasant Lake, Nokomis Pond, Corundel Pond, Puffers Pond, Lake Wassookeag, Gould Pond, Mower Pond, Halfmoon Pond and Brooks Pond. The lake provides many recreational activities such as swimming, boating, fishing and snowmobiling and opportunities for tourism and residential development.

Two public drinking supplies exist within the watershed.

The Penobscot County Soil & Water Conservation District has been working to correct non-point source pollution in the Sebasticook Lake watershed since the early 1980s. The district began with the Public Law 566 program that partnered with the Natural Resources Conservation Service and provided more than a million dollars in cost-share assistance to agricultural landowners to address nutrient management and other agricultural related erosion problems. More recently, the district and NRCS provided landowners assistance through the Environmental Quality Incentives Program, installing another \$100,000 worth of conservation practices. Furthermore, the district has begun their 319 granted project (Phase 1) on the Sebasticook Lake watershed this year. This project has a goal of implementing six best management practices on the 317 sites listed on the Sebasticook Lake Shoreline Survey/Watershed Inventory and BMP Recommendations Report (2001-2002) and the Sebasticook Lake Watershed Survey (1998). This implementation will include outreach to towns and watershed residents to promote the continuation of watershed restoration actions.

In addition to Phase 1, a Phase 2 project has been submitted to the Maine Department of Environmental Protection to implement best management practices on another 46 identified sites. The district's approach is to continue in as many phases as it takes to address all 317 sites that have been identified and address any new sites that are found. The long-term goal of the project is to

improve Sebasticook Lake's water quality by reducing external phosphorous loading.

The overall water quality of Sebasticook Lake has been consistently, but slowly improving, with the exception of years with high summer precipitation, suggesting non-point sources still deliver significant phosphorous loading to the lake. The 1996 closure of the Eastland Woolen Mill in Corinna, which was located upstream on the East Branch of the Sebasticook River, has positively affected Sebasticook Lake's water quality. The district hopes its watershed project will have lasting impacts on the improvement of water quality in Sebasticook Lake and its surrounding watershed.

The Maine Department of Environmental Protection, the Volunteer Lake Monitoring Program and the Sebasticook Lake Association have collaborated in the collection of lake data to evaluate present water quality, track algal blooms and determine historical water quality trends. This data does not include bacteria, mercury, or nutrients other than total phosphorus.

Maine Department of Inland Fisheries and Wildlife (Region B) manages Sebasticook Lake as a warm water fishery. Alewives migrate into Sebasticook Lake annually.

Nutrient Management: Sebasticook Lake, once recognized as one of the most polluted lakes in Maine, remains on the Maine DEP/EPA 2004 303(d) list of waters non-attaining Maine state water quality standards. Water quality conditions in Sebasticook Lake have improved from a historical state of hyper-eutrophy (dystrophic) to a eutrophic state through a concerted effort by Maine DEP, Newport and Sebasticook Lake Association stakeholders to reduce phosphorus loads. These efforts include upgraded wastewater treatment in Corinna and Dexter, implementation of residential and agricultural runoff controls and adoption of best management practices, and reconstruction of the lake outlet dam to allow a 50 percent annual drawdown of the lake volume in the fall. A Sebasticook Lake TMDL study/report was prepared and was approved by US EPA in 2000-2001. This final report, with the EPA-New England review summary/approval letter, can be found on the following Maine DEP webpage: <http://www.maine.gov/dep/blwq/docmonitoring/tmdl2.htm>.

Sample Station #1

Water quality monitoring data for Sebasticook Lake (Sta. #1) have been collected since 1974. During this period, 25 years of basic chemical information were collected, along with a record 30 years of Secchi Disk Transparency (SDT) measures (continuous from 1978-ongoing, in addition to 1974-75). In summary, the water quality of Sebasticook Lake is considered to be below average to poor, however greatly improved, based on historical vs. current measures of SDT, total phosphorus (TP), and chlorophyll-a (Chla). The potential for nuisance summertime algal blooms on Sebasticook Lake is moderate to high. Last year (2005) set a record for minimum summer water clarity exceeding 2.0 m!

Water Quality Measures: Sebasticook Lake is a lightly-colored lake (average color 29 SPU) with an average SDT of 1.9 meters (6.2 feet). The range of upper water column TP for Sebasticook Lake, since 1999, is 12 to 28 parts per billion (ppb) with an average of 20 ppb, while average Chla ranges from 2.5 to 93.3 ppb with an average of 30.4 ppb. Recent dissolved oxygen (DO) profiles show moderate DO depletion in deep areas of the lake. The potential for TP to leave the bottom sediments and become available to algae in the water column (internal recycling) is moderate.

Sample Station #2

Water quality monitoring data for Sebasticook Lake (Sta. #2) have been collected since 1972. During this period, 24 years of basic chemical information was collected, along with 24 years of Secchi Disk Transparency (SDT) measures (continuous from 1978-98, in addition to 1972 and 2000-03). In summary, the water quality of Sebasticook Lake is considered to be below average to poor, however greatly improved, based on historical vs. current measures of SDT, total phosphorus (TP), and chlorophyll-a (Chla). The potential for nuisance summertime algal blooms on Sebasticook Lake is moderate to high. Last year (2005) set a record for minimum summer water clarity exceeding 2.0 m!

Water Quality Measures: Sebasticook Lake is a lightly-colored lake (average color 29 SPU) with an average SDT of 1.9 meters (6.2 feet). The range of upper water column TP for Sebasticook Lake, since 2000, is 21 to 25 parts per billion (ppb) with an average of 23 ppb, while Chla ranges from 7.3 to 54.6 ppb with an average of 25.9 ppb. Recent dissolved oxygen (DO) profiles show moderate DO depletion in deep areas of the lake. The potential for TP to leave the bottom sediments and become available to algae in the water column (internal recycling) is moderate.

TIMBER HARVESTING POLLUTION RISKS

Forests with a healthy canopy and ground layer of humus release the least amount of phosphorus possible. When the canopy is disturbed or removed, more precipitation reaches the forest floor, runs off and carries phosphorus to nearby surface waters. Timber harvesting operations typically disturb the soil and subject it to erosion. Erosion is also exacerbated by the loss of root systems that once

held soil in place. This is particularly true in clear-cut areas. These eroded soils carry phosphorus to surface waters.

To determine the need for controls, observation of local conditions and discussions with local foresters and loggers should occur. Buffer strips of forest between developed areas and water bodies reduce phosphorus runoff. The buffer's effectiveness depends on its width, the integrity of the canopy and undergrowth, the slope of the land and its soil type. When the canopy or other vegetation is removed in buffer areas, the buffering effect is lowered. Generally, the steeper the slopes and poorer the soils in an area, the broader the buffer strip should be. Slopes of 20 percent grade or more are considered steep and generally should be left in their natural vegetated state.

Shoreland zoning ordinances require 75-foot buffers adjacent to tributaries downstream of the intersection of two perennial streams as determined on a U.S.G.S. map and 250-foot buffers along coastal water bodies, ponds and lakeshores. There may be a number of smaller tributaries in lake watersheds that are not subject to Shoreland Zoning. These tributaries may transport phosphorus from upland development to lakes or ponds and so these tributaries should have some type of buffer as well.

Buffer Strips for Streams in Timber-Harvesting Operations

Average Slope of Land (%)	Width of Buffer Strip (ft)
<10	50
10-20	75
20-30	100
>30	Requires special consideration

Source: Maine DEP

AGRICULTURAL POLLUTION RISKS

Activities on a farm that increase phosphorus export include tree clearing, soil exposure through cultivating row crops, fertilization of both pasture and cropland erosion from farming operations, and improper storage or use of manure.

Best management practices can be implemented to avoid erosion, phosphorus transport and other water quality problems. Some practices designed to mitigate phosphorus export from farms are:

- sound manure storage practices consisting of a manure pit which is properly drained and designed to keep runoff from the pit area out of nearby watercourses

- sound manure spreading practices such as proper timing of application (not in winter or early spring since frozen ground and heavy rains prevent absorption of nutrients)
- best fertilizer/pesticide application practices to ensure minimal usage
- forested buffer zones between fields or pastures and streams or lake shores, the width of the zone depending on the slope and type of soil in the zone (as described in forestry regulation above)
- prevention of animals grazing in drainage swales and water courses.

If some open space or farmland is to become a residential subdivision, a new or expanded buffer area may need to be established, especially where remaining farm fields are in close proximity to the development and to water bodies.

CLEARED OPEN SPACE POLLUTION RISKS

Open space can be defined as area left to its natural state, whether forest or field. Cleared land, even if undeveloped, is not as effective a phosphorus control as forested land.

Whether forested or cleared, open space is still a better phosphorus control than roads, roofs or lawns. In watersheds of lakes or ponds that are highly vulnerable, some reversion of cleared open space to forested land may be desirable. An Open Space Preservation Ordinance or similar standard within other land use ordinances can address the need for open space to serve as an effective phosphorus buffer in the watershed.

PUBLIC FACILITIES POLLUTION RISKS

The provision or improvement of public facilities such as roads, water, sewer, schools and recreation in a watershed generally will attract new housing and businesses. Such expansion of facilities can be planned in more environmentally suitable areas of town in order to draw pressure away from phosphorus stressed watersheds.

ROAD CONSTRUCTION AND MAINTENANCE POLLUTION RISKS

Phosphorus control measures should be considered throughout road construction. Appropriate seasonal timing of construction is important to avoid excessive amounts of movement of disturbed soil during the high water flows of spring. Other techniques may entail temporary mulching of exposed soil surfaces, temporary seeding, and installation of silt fences, riprap, gravel-filled trenching or the use of silt basins. Buffer areas and drainage outlets should be provided. The downslope side of a road can be designed to drain in overland flow into a buffer area rather than being concentrated in a ditch. Standards can be applied as part of a road standards ordinance or as part of an erosion and sediment control ordinance.

A major contributor of sediment and phosphorus pollution is the existing road and drainage system in the watershed. Roads and associated drainage networks can act as direct conduits channeling phosphorus from more distant watershed areas to water bodies. Roadside ditches contribute large quantities of phosphorus to the watershed. Controlling phosphorus transport to lakes from roadways and ditches relies on three major management practices: buffer areas downslope of roads including ditch turnouts into these buffers; erosion control in ditches; and proper road ditch maintenance. The simplest method of managing phosphorus export from roadways entails planting or preserving a forested buffer area downslope of the road. Likewise, allowing roads in a stressed watershed to remain unpaved can be a deterrent to further development.

REGIONAL CONSERVATION AND PROTECTION EFFORTS

Land Trusts work with communities and private landowners on land conservation opportunities, including the management of conservation easements which often include or border on water bodies. The following is a list of organizations that offer such services in Penobscot County:

- Bangor Land Trust
- Forest Society of Maine
- Holden Land Trust
- Landmark Heritage Trust
- Maine Audubon
- Maine Coast Heritage Trust
- Maine Farmland Trust
- New England Forestry Foundation, Inc.
- Northeast Wilderness Trust
- Orono Land Trust
- Small Woodland Owners Association of Maine
- The Nature Conservancy in Maine

Newport has one parcel of 117 acres held in a conservation easement; that easement is shown on the map. Legal protections of easements are described later in this chapter.

HABITATS

Sebasticook Lake, its shores and other smaller watercourses in town provide habitats for several wildlife species, such as sea-run alewives, smelts, smallmouth bass, white perch, black crappie and many bird species.

The Resources map shows the location of wildlife animal and plant habitats in Newport. The Maine Department of Conservation notes two high value animal

habitats in Newport: the Least Bittern and Bald Eagle. Critical habitats are described below.

Essential Wildlife Habitats are defined as areas currently or historically providing physical or biological features essential to the conservation of an endangered or threatened species in Maine and which may require special management considerations. Examples of areas that could qualify for this designation are nest sites or important feeding areas. For some species, protection of these kinds of habitats is vital to prevent further decline or to achieve recovery goals. Activities of private landowners are not affected by Essential Habitat designation, unless they require a state or municipal permit, or are funded or carried out by a state agency or municipality. A bald eagle nesting site is designated an essential wildlife habitat in Newport on the western shore of Sebasticook Lake.

Significant Wildlife Habitats (deer wintering areas and waterfowl/wading habitats) are defined as areas with species appearing on the official state or federal lists of endangered or threatened animal species; high and moderate value deer wintering areas and travel corridors; and, high and moderate value waterfowl and wading bird habitats. These include nesting and feeding areas, critical spawning and nursery areas for Atlantic salmon, shorebird nesting, feeding and staging areas, seabird nesting islands, and significant vernal pools.

Focus Areas of Statewide Ecological Significance is defined by the Maine Department of Conservation as areas with habitats worth protecting but not necessarily containing endangered species.

Conserving an array of habitats and their associated wildlife species maintains biological diversity and ensures that wildlife and human populations remain healthy. To feed and reproduce, wildlife relies on the availability of food, cover, water and space. Development often has negative impact on these and results in the loss of habitats and diversity, habitat fragmentation, loss of open space, and the loss of travel corridors.

RARE, THREATENED, AND ENDANGERED PLANTS

The Habitat map identifies rare plant locations. The Maine Department of Conservation notes one known rare, threatened, endangered plant community that possibly may still be present in Newport: *Potamogeton vaseyi* (Vasey's Pondweed). Pondweeds are aquatic, perennial herbs with reduced, inconspicuous flowers which, in many species, are elevated above the surface of the water. *Potamogeton vaseyi* has dimorphic leaves: very narrow (0.2-1 mm wide), flaccid, submersed leaves and wider, thicker floating leaves (see illustration). This species, like the common *P. spirillus*, has small floating leaves, only 0.6-1.5 cm long for *P. vaseyi*. Small spikes (3-8 cm tall) and stipules that are distinct from the leaf blade will serve to separate *P. vaseyi* from other species of pondweeds in Maine. In Newport, it was first observed 1942 near Sebasticook