Norway Comprehensive Plan

Looking to the Future

Inventory Summary
Policies
Strategies

Draft Update of June 14, 2004
Revised May 2011

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THE COMPREHENSIVE PLAN

What is a Comprehensive Plan?

It creates a framework or guidance for the growth and future of the town, and it forms the legal framework for land use ordinances. It is not a land use ordinance. A Comprehensive Plan is required to have three key elements: an Inventory and Analysis, Town Policies, and Strategies or actions that must be taken to achieve the policy. The Policies and Strategies include a Capital Improvement Plan and a Future Land Use Plan. The most recent Comprehensive Plan was adopted by the town in 2004 as a update of the 1992 Plan. This edition updates the demographic data to the extent that it is available and builds on the Policies and Strategies and Future Land Use Plan developed in the 1992 and 2004 Plans.

Format of Plan

The Norway plan combines the Policies and Strategies along with the Future Land Use Plan into one document entitled "Looking to the Future." The Inventory and Analysis is contained in a second document entitled "Background—Inventory and Analysis." "Looking to the Future" provides a summary of important information and issues identified by the Inventory and Analysis. It also contains maps from the inventory and maps developed as part of the policy development. The maps and inventory summary allows readers to obtain background information without referring to two documents. This also keeps the key facts and issues before the reader as they consider the Policies and Strategies presented.

Policies are used as guidance for future decisions. Strategies are actions that, at this time, are needed to help implement the Policies. Each strategy is followed by an italicized abbreviation identifying the group responsible for implementation and the year(s) in which it would be implemented.

- S = Selectmen
- PB = Planning Board
- TM = Town Manager
- Others are spelled out

VISION

Norway will remain a beautiful rural residential Maine town with a unique and thriving historic downtown, beautiful views and clean waters, with ample employment opportunities. Growth will be orderly growth and in areas where services are available to accommodate it; growth will not detract from the existing rural character of the town and will enhance the character of the downtown.

POPULATION

NORWAY: 5,014 **Oxford County: *57,833*** **State of Maine: *1,328,361***

Information and Issues

Population Change: The population change in Norway has varied considerably over the past four decades. In the 70s and 80s, the population increased by 12 and 18 percent, respectively, but in the 90s, the population decreased by 3%. The 2000 census was 4,756. The 2010 census shows a population increase of just over 5% to 5,014.

Household Size: The average household size has decreased in Norway as it has for the region and most of Maine.

Age Distribution: The population of Norway is aging as is the rest of the State's population.

Education Levels: The people of Norway have improved their education levels over the past several decades. A significant decrease in the percentage of people not completing high school occurred; the percentage of high school graduates remained approximately the same, and the percentage of people with college experience and degrees increased dramatically. Educational attainment is higher in Norway than it is for Oxford County as a whole, but it still lags behind the State.

Income: The Median Household Income is significantly lower than for Oxford County and the State. This trend dates back to 1979.

Occupations: The occupations of the residents are integrally related to employment opportunities, educational levels and income. Even with a dramatic loss in manufacturing jobs, Norway still has a higher percentage of the labor force in "production, transportation, and material moving" than does the state, and it has a similar percentage to the county.

- Some residents engaged in manufacturing have undoubtedly changed their place or type of employment.
- The percentage of persons in management and professional occupations is higher than the state and similar to the County, a change over the past decade. The percentage of workers having service occupations is lower than for the state and county.

ECONOMY

Information and Issues

- More than 45% of the manufacturing jobs held by Norway residents have been lost since 1980.
- People involved in Entertainment and Recreation have increased by almost 150%since 1980.
- Residents working in Professional jobs including Health Services and Education have increased by 170% since 1980.
- The Median Household Income has declined from 86% of the State's in 1979 to only 77% of the State's in 2000.
- It will be necessary to cooperate with other area towns and with regional agencies to pursue and create economic opportunities for our citizens and the tax base.
- Small businesses and the entrepreneurial spirit account for significant economic growth.
- Businesses, especially the emerging technology based ones, require a well educated work force.
- The State and generally, the Country, is also losing manufacturing jobs. It will be necessary to adapt the economy to this new economic reality. Potentials include attraction of more technology related jobs and capitalization on the area's significant resources to attract visitors and tourism dollars.
- Improving the downtown, maintaining the rural character of other areas, and protecting the lakes are important assets to further development of the tourism industry which is becoming ever more important in the economic structure of the area. This is also important in attracting new residents and entrepreneurs to the area.

State Goals

Plan for, finance, and develop an efficient system of public facilities and services to accommodate anticipated growth and economic development,
and
Promote an economic climate that increases job opportunities and overall economic well-being

Town Goal

To promote an economic climate which increases job opportunities and overall economic well-being.

Town Policies

- *To take an active stance in promoting economic development in keeping with the Character and Vision of Norway.*
- *To encourage the entrepreneurial spirit.*

- *To allow home based occupations in all areas of the community provided the uses do not adversely affect the neighborhood.*
- *To provide for commercial and industrial land uses in environmentally suitable locations where it will not conflict with adjacent less intense land uses.*
- *To support and encourage tourism activities and cultural programs.*
- *To support economic and community development by*
    - *pursuing appropriate federal, state and private grants and funding*
    - *providing local incentives and funding as needed*
    - *maintaining and improving infrastructure in growth areas.*
- *To cooperate with other towns and regional agencies to promote economic development opportunities and develop regional approaches.*
- *To support education as a means of improving the economic climate and attracting better jobs.*

Implementation Strategies

- Work with adjacent communities and regional entities to develop and support shared economic development opportunities including Androscoggin Valley Council of Governments, Community Concepts, and Western Maine Economic Development, and support them through dues or county assessments as appropriate.
- Work with local groups to develop and support economic and community development including the Community Development Citizens Advisory Committee, Norway Opera House Corp., Norway Downtown, and the Norway Branch Railroad Corp. and support these groups as appropriate.

  S –immediately and ongoing
- Continue to improve infrastructure in growth areas and evaluate financial mechanisms to help finance improvements including a mix of local funding, tax increment financing, Community Development Block Grants, Economic Development Administration Grants and USDA Rural Development Grants and loans.

  S/TM/ongoing
- Ordinances should contain provisions which define home-based occupations and allow such uses in all areas.

  PB/2011-2012
- Ordinances should not create unreasonable barriers to small entrepreneurial ventures, but should protect the environment and neighborhoods.

  PB/on-going
- The Future Land Use Plan should identify environmentally suitable locations for commercial and industrial development. The Site Plan Review ordinance should reflect the desired scale, design, and intensity of future economic development.

  PB/ when adopted
- Support downtown improvements as presented in this plan and as may be feasible as additional plans specific to the downtown area are developed.

  S/PB/Main St program/on-going
- Protect the natural resources and rural character of the town in accordance with the other policies of this plan.

  PB/on-going

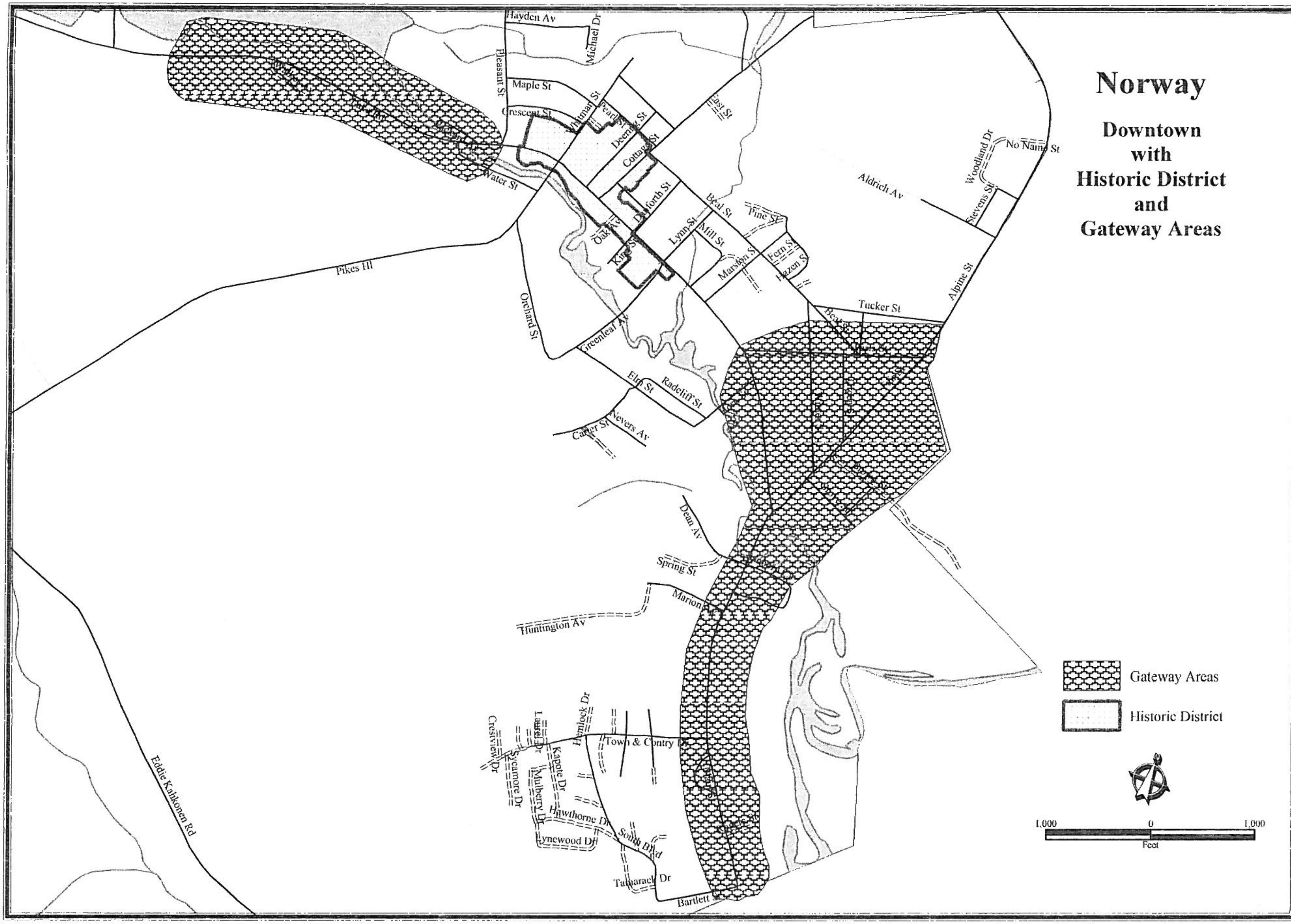
DOWNTOWN

Defining the Downtown: *The Oxford Hills, or southerly, Gateway is defined as the area southerly of the downtown stretching to the borders with the towns of Oxford and Paris and includes, but is not limited to, Route 26, Fair Street, South Main Street and Paris Street. The Lakes, or northerly, Gateway stretches to the north of town along Route 118. The term Village refers to the commercial area of the Downtown, the gateway areas, and the residential areas surrounding these areas. Downtown refers to the commercial area located along Main Street. (see map)*

Information and Issues

Downtown Norway is integral to the economy of the town. Revitalization of the area was identified as an important issue during the development of the plan. There have been other planning efforts to stimulate business and provide detailed approaches. The information provided in this plan sets the framework for the other revitalization efforts and establishes policies and strategies to be enacted through ordinances and other town actions.

- Downtown Norway has suffered numerous setbacks as shopping centers and big box stores have opened in the surrounding area.
- The competition has drawn shoppers away from the Downtown, and longtime stores have been forced to relocate or close.
- The closure of manufacturing establishments near the downtown has displaced potential shoppers.
- As income levels have declined relative to the state, there has been less disposable income to support merchants in the downtown.
- The Town of Norway has been proactive in making improvements such as sidewalks and parking and has supported several grants to assist the private sector.
- Norway has been designated a "Maine Street Community" and has been receiving technical assistance through this program.
- Downtown Norway must develop a service and retail niche for the town and region.
- The gateway areas to the North and South of the downtown are an integral part of the retail and service sectors of Norway's economy.
- The gateways create the first impression to many visitors. Attractive gateways, combined with an attractive downtown will encourage residents and visitors to frequent Norway businesses.


Norway
Downtown
with
Historic District
and
Gateway Areas
Gateway Areas
Historic District
1,000
0
1,000
Feet
Hayden Av
Michael Dr
Pleasant St
Maple St
Crescent St
Whitman St
Pearl St
Deering St
Cottage St
Danforth St
Oak Av
King St
Lynn St
Mill St
Beal St
Pine St
Fern St
Hazen St
Marston St
East St
Aldrich Av
Woodland Dr
No Name St
Stevens St
Alpine St
Tucker St
Water St
Pikes Hl
Orchard St
Greenleaf Av
Elm St
Radcliff St
Carter St
Nevers Av
Dean Av
Spring St
Marion St
Huntington Av
Town & Contry Dr
Hemlock Dr
Laurel Dr
Crestview Dr
Sycamore Dr
Mulberry Dr
Kapote Dr
Hawthorne Dr
Lynewood Dr
South Blvd
Tamarack Dr
Bartlett St
Eddie Kahkonen Rd

Town Goal

It is the Goal of Norway to have integrated commercial areas encompassing the Downtown and the Gateway areas. These areas will have a mix of uses including retail, services, financial, institutional, governmental, light industrial, and a mix of housing and green space. The mix of businesses will serve residents, offer regional employment opportunities, and be attractive to tourists.

Town Policies

- *To preserve the historic integrity of the downtown.*
- *To support Downtown groups in their efforts to increase business activity and attract new businesses.*
- *To encourage clean, neat, well maintained buildings throughout the town with particular emphasis on Norway Village including the Gateway areas and the downtown.*
- *To encourage signage that does not create busy, cluttered views and that does not foster competing signs to become increasingly larger and more obtrusive to public spaces. Alternatively: It is the policy of Norway to encourage signage that is simple, clean, neat, and unobtrusive, but that allows for the freedom of expression and provides an attractive way of encouraging customers to use the business.*
- *To encourage green space and greenery in the forms of trees, shrubs and grass to make the Village area more aesthetically pleasing. Green space and greenery should be used to separate buildings from the street where appropriate, soften building features, offer shade, and hide or soften sides of buildings, storage and parking areas.*
- *To encourage the preservation of large, healthy trees, to provide spaces for large trees where they will not encroach on signage and public improvements such as sidewalks and curb, and to encourage the planting of large (3 to 4 inch diameter) trees that will grow to be shade trees for new construction wherever landscaping allows.*
- *To provide for varied setbacks in the Village areas.*
- *That new or substantially rehabilitated buildings should be in keeping with the character of the downtown or area in which they are located. A variety of building types is encouraged, but buildings should be well designed and the not be flat roofed boxes with no architectural elements. In the historic district building design should complement historic buildings.*
- *That neither landscaping elements nor signs will block the visibility of travel ways including driveway access points and interior parking facilities.*
- *To provide adequate parking in the village area. In the downtown area adequate parking will be provided through a combination of private sector and town government actions. In the gateway areas, parking will be the responsibility of the property owners unless special circumstances make town participation in the best interest of the town.*

- *To continue to assist with the financing of public facilities for the village through grants and other resources.*

Implementation Strategies

- Develop a minimal design and landscaping standard to implement the above policy on green space, greenery and building design that would apply to all new construction and substantial rehabilitation in the Village.
  PB/ 2013
- The sign ordinance should consider size, lighting and number of signs allowed for each business or business cluster. Large signs that wrap around buildings or structures such as gasoline station canopies should be discouraged.
  PB/2013
- The town should evaluate the downtown and gateway areas to determine appropriate areas that may be used for open space, green buffers, and pedestrian amenities. The town should work to develop such areas through *2005*the design standards and grants and other town initiatives.
  S/PB/ongoing
- Develop a property maintenance code in order to insure that properties are properly maintained and do not detract from adjacent properties, create a nuisance, or a health or safety hazard.
  S/2012
- Evaluate existing parking requirements and consider new requirements that would reduce commercial parking requirements and allow spaces to be located at greater distances from the business than is currently allowed. New requirements should continue to make parking the landowner's responsibility outside the Downtown area.
  PB/2012
- The town should update the 1996 parking study and should develop a program to assist with the development of appropriate parking in the Downtown.
  S/2012 and after
- New parking requirements, if developed, should ensure that unsafe conditions are not created along travel ways by inadvertently encouraging unwanted, unsafe or illegal parking.
  PB/2011
- The town should continue to seek grants and other sources of funding to improve the public facilities in the Village, including the Downtown and the Gateways.
  S/2011 and after

HOUSING

Information and Issues

- The number of housing units decreased slightly in the last decade.
- Owner occupied units have increased, and renter occupied units have decreased significantly over the past 10 years.
- Seasonal units have also increased significantly over the past 10 years, a change from the previous decade.
- The improvement of Route 26 has likely contributed to the recent trends.
- While rental units and many homes have continued to be reasonably affordable, housing with views and around lakes has become increasingly expensive.
- The town has taken an active role in providing low and moderate income housing.
- Housing along lakeshores is continuing to be converted from seasonal to year-round.
- It is expected that there will be continued price pressure for lakeshore property and homes with views. Buyers will include workers from Greater Portland, electronic commuters, retirees from other areas of the state and New England, and seasonal residents that want to take advantage of the lakes and mountains of western Maine.

State Goal

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

Town Goals

To encourage the development of safe innovative housing to help residents achieve home ownership.

To assure that ordinances do not have the secondary affect of unnecessarily increasing the cost of housing.

Town Policies

- *To encourage and promote adequate workforce housing to support the community's and region's economic development.*
- *To address the affordable housing needs of the Town residents including residents with special needs and elderly residents and to strive to have 10% of all new housing be affordable.*
- *To ensure that land use controls encourage the development of quality affordable housing, including rental housing.*
- *To allow mobile home park development in environmentally suitable areas where adequate services are available or will be available at the time of development.*
- *To allow manufactured housing on individual lots in all locations within the community where single-family housing is allowed.*

- *To allow "accessory apartments" with single-family homes provided that all regulations are adequately addressed. Owner occupancy should be encouraged for all homes allowed to include "accessory apartments."*
- *To allow a density bonus not to exceed 20% for developments that provide dwelling units which will remain affordable. All additional units permitted shall be for low and moderate income people.*
- *To support federal, state and local efforts including Community Development Block Grant (CDBG) to address Town affordable housing needs, including those related to sweat equity programs, transitional and senior housing.*
- *To encourage and support the efforts of the regional housing coalitions in addressing affordable and workforce housing needs.*
- *To enforce ordinances to ensure the maintenance of properties such that the health, safety, and well-being of the residents*

Implementation Strategies:

- Ordinances will continue to support land use regulations for the growth areas that provide for relatively high densities, small lots and minimal setbacks as is currently the case in the downtown and adjacent area in order to keep housing affordable, minimize the need for infrastructure expansions, and promote development in the context of the designated growth areas.
  PB/ongoing
- Continue to support a Community Concepts effort to provide affordable housing and discuss the adequacy of their efforts and/or the need for additional regional action to provide affordable and workforce housing.
  S/TM/ongoing
- Ordinances should include provisions which limit mobile home park development and/or expansions to growth areas where adequate services, including public sewer and water, are available, and should allow manufactured housing on individual lots in all locations where single family housing is allowed.
  PB/2012 and ongoing
- Ordinances should include provisions to allow single-family dwellings to include "accessory apartments." Standards should address building, sewerage disposal and parking requirements.
  PB/2012 and ongoing
- Ordinances should allow a density bonus not to exceed 20% of the total number of dwelling units when such units are reserved for low and moderate income, and/or elderly residents or residents with special needs. Commitments must be provided to ensure future affordability. For information on the use of density as a land use concept, see the Future Land Use Plan.
  S/PB/2013
- The Building Maintenance Code should be enforced.
  S/CEO/ongoing
- Ordinances should allow innovative types of housing, including open space development and mixed uses.
  PB/2013

- Ordinances should allow elderly and other special needs housing in a variety of districts.

  PB/2013
- Norway should work with other towns in the area to conduct a detailed study of the housing needs and implement recommendations to improve housing stock and affordability.

  S/CD/immediately and ongoing
- Ordinances should allow manufactured housing on individual lots in all locations within the community where single family housing is allowed.

  PB-ongoing

TRANSPORTATION

Roads - Information and Issues

- Continued improvement of transportation corridors linking Norway to other areas of the region and particularly to the growth areas to the south are important to the economic prosperity of Norway and the region.
- Maintenance of corridors and collector roads in Norway to effectively move residents and visitors throughout the community is an important function of our road network. Movement is dependent on road conditions and also traffic conditions. Numerous access points from development along corridors can result in unsafe conditions and an increase in travel times.
- Norway has been systematically upgrading its road network for over 15 years. In 2010, approximately three fifths of the roads were in good condition and less than 20% of the roads were in poor or poor to fair condition.
- The quality of the road system has increased, but it appears that public satisfaction has not yet been achieved. Survey respondents indicated a willingness to provide additional funding to improve town roads. Road inventory work indicates that continued funding at or above what is now being spent will be necessary to continue to improve roads.
- As growth occurs in the rural areas that are further away from the downtown, there is continued pressure to improve roads that formerly served a limited number of residents.
- Poor design and erosion of ditches and around culverts that are not properly maintained can have significant adverse impacts on surface waters including lakes and streams.
- Private roads, especially roads around lakeshores, can have significant adverse impacts on lakes and streams.
- Private roads also present particular problems for the provision of public safety services.
- Congestion in the Southern Gateway area is a concern to residents and officials.

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.

Sensible Transportation Policy Act

(paraphrased) To make the Town Comprehensive Plan consistent with The Sensible Transportation Policy Act (23 MRSA §73)

Town Goal

To provide effective, efficient, and environmentally sound transportation facilities and systems that will support the continued growth and prosperity of the town and region.

Town Policies

- *To prioritize community and regional needs associated with safe, efficient, and optimal use of transportation systems such that the transportation systems support the community vision and town goals.*
- *To promote public health, protect natural and cultural resources, and enhance livability by managing land use in ways that maximize the efficiency of the transportation system and minimize increases in vehicle miles traveled.*
- *To meet the diverse transportation needs of residents (including children, the elderly and disabled) and through travelers by providing a safe, efficient, and adequate transportation network for all types of users including motor vehicles, pedestrians, and bicyclists.*
- *To promote fiscal prudence by maximizing the efficiency of the state or state-aid highway network.*
- *To provide adequate support for a safe, efficient road system in fulfilling the Town Goal and regional needs.*
- *To develop and enforce road construction standards that will ensure environmentally sound, well constructed roads that provide adequate access for emergency vehicles.*
- *To maintain a multi-year road improvement program.*
- *To assure that future development or redevelopment does not cause unsafe conditions or create traffic congestion.*
- *To require developers to make roadway improvements necessary to mitigate development impacts.*
- *To manage access to roads in order to mitigate congestion and ensure safe conditions.*
- *To continue to evaluate regional public transit options and support regional public transit for elderly and disadvantaged citizens.*

Implementation Strategies

- Amend local ordinances and adopt new ordinances as appropriate to be consistent 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.

    PB/TM/Road Commissioner/2012
- Work with the MaineDOT to address deficiencies in the system or conflicts between local, regional, and state priorities for the local transportation system.

    TM/Road Commissioner/ongoing
- Actively participate in regional and state transportation and land use planning efforts.

    S/TM/ongoing
- Town ordinances should insure consistency with local, regional, and state transportation policies identified in this plan.

    PB/TM/2012

- Town ordinances should include standards for public and private roads that provide for efficient growth patterns and future street and transit connections.
  PB/TM/Road Commissioner/2012
- Town ordinances should include or reference road construction standards for public and private roads and roads that will be located in Shoreland Zoned areas. The standards should ensure safe access and adequate emergency access, and should ensure construction and maintenance occurs in an environmentally sound manner.
  PB/Road Commissioner/2012
- Ordinances should contain standards to ensure sound access management principles, especially in the Gateway areas.
  PB/2012
- The Road Committee and Road Commissioner should develop a 10 year road improvement program that includes improvement priorities and estimated costs. The plan should reflect community, regional, and state objectives The information should be included in the Town CIP.
  Road Committee/Commissioner/TM ongoing.
- The Road Commissioner should develop an annual road maintenance program.
  Road Commissioner/2012
- Town Ordinances should require that developers make necessary roadway improvements to mitigate development impacts.
  PB/2012
- Conduct a study to determine why people are less satisfied with the road system even as the system has improved.
  S/TM/Road Commissioner/2012
- Continue to improve scheduling of road work.
  Road Commissioner/2011 and ongoing
- Improve communications with residents.
  Road Commissioner/2011 and ongoing
- Survey residents routinely to determine their satisfaction with road maintenance.
  S/TM/Road Commissioner

Sidewalks – Information and Issues

- Sidewalks are an important part of the transportation network in the downtown and village areas. It is important to provide pedestrian friendly access to shopping, businesses, neighborhoods, and recreational facilities.
- Sidewalks are an important interface with the public, especially visitors to the gateway areas and the downtown.
- Pedestrian and bicycle trails can enhance the attractiveness of the community and provide recreation and additional mobility for residents and visitors. (See also Recreation.)

Town Policies

- *To continue to update, as needed, the Sidewalk Improvement Plan and incorporate funding to implement the plan in the Town's Capital Improvement Program (CIP).*
- *To extend sidewalks when development is proposed adjacent to or near existing sidewalks.*

Implementation Strategies

- Include sidewalk improvements in the CIP.
  S/TM/ ongoing
- Town Ordinances should require the construction of sidewalks for proposed projects when the proposed projects are adjacent to existing sidewalks or when construction of sidewalks would be consistent with the Town's Sidewalk Improvement Plan.
  S/PB/2012

Parking – Information and Issues

- Parking in the downtown area is critical to the success of the businesses located there. Parking requirements in the Site Plan Review Ordinance may be too restrictive to allow vital growth in the area.
- The town and property owners may need to share the cost of maintaining and developing new spaces in the downtown.
- Downtown parking may need further study and either additional regulation or education to encourage use of appropriate spaces by customers, residents, employees and business owners.
- Parking in residential neighborhoods, gateway areas, and rural areas should be off-street parking provided by the owner.

Town Policies

- *To support the improvement of parking areas located within or adjacent to the Downtown. Parking improvements should include both public and private investment.*
- *To require on-site parking for development outside of the downtown areas including requiring off-site parking for the gateway areas.*
- *To provide flexible parking arrangements in the downtown, especially for businesses, and to insure that parking does not create access problems or safety hazards.*

Implementation Strategies

- Work with downtown interest groups to increase parking opportunities in the downtown, including better utilization of existing spaces and development of additional spaces.
  S/TM/2011and after

- Additional areas for parking within and adjacent to the Downtown should be identified.

  S/ ongoing
- Review existing parking requirements to ensure their adequacy and their feasibility, and change the requirements as appropriate.

  Police Chief/TM/ 2012

Transit Information and Issues

- Public transit, except for that targeted to disadvantaged populations, has not been feasible in rural areas such as Norway.
- Public transit to move residents to jobs outside of Norway and to link the area with attractions to the north and south should be supported.

Town Policies

- *To continue to evaluate the need and feasibility of public transit on a regional basis.*

PUBLIC FACILITIES AND SERVICES

Information and Issues

- It is important to note that the vast majority of respondents to the community survey were satisfied with the services provided by the town. In most categories, over 60 percent of the respondents were satisfied. The exception to this was with road maintenance. Fifty-nine percent of the respondents were dissatisfied with road maintenance, but 67% indicated that they were willing to spend more money for it.
- The tax burden on the citizens of the state is an important issue being faced at both the state and local levels. State and municipal leaders have identified the need to become more efficient at all levels of government in order to try to reduce the tax burden or at least, keep increases to the bare minimum. In this effort, towns must carefully coordinate work within the community and must look to sharing services, programs and processes with other towns and regional entities. To this end, Norway has adopted the policies listed.

State Goal

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

Town Goal

To provide an efficient system of infrastructure, other public facilities and public services to accommodate anticipated growth and economic development and provide for a safe, financially sound, and healthful community.

Policies for Efficient, Cost Effective Government.

- *To coordinate work within all town departments, the water district and other entities to ensure that there is no duplication of services and that projects and programs complement each other rather than negatively impact each other In order to efficiently meet identified public facility and service needs. Particular emphasis must be placed on public works projects, to ensure that maintenance, upgrades and expansions are done efficiently and in accordance with the town's goals, policies and plans.*
- *To provide public facilities and services in a manner that promotes and supports growth and development in identified growth areas.*
- *To participate in shared programs and services when such cooperation provides increased efficiencies, improved services, and/or cost effectiveness.*
- *To obtain State, Federal and private grants and funding to implement projects in accordance with the towns goals, policies, and plans.*

Implementation Strategies

- Continue to identify and plan for capital improvements needed to maintain or upgrade public services to accommodate the community's anticipated growth and changing demographics.
- Locate new public facilities comprising at least 75% of new municipal growth-related capital investments in designated growth areas.
- Continue to share services and explore options for regional delivery of local services.

  Norway participates in the following shared or regional services:

  Norway/Paris Solid Waste
  Oxford County Regional Solid Waste—recycling with other towns
  Purchase of fuel and paper—SAD#17
  Road signs—Paris, Oxford, Oxford County and others
  Road Salt Purchase—AVCOG
  Norway/Paris Cable TV
  Work for Welfare participants—for town and for NPSW
  Certification to administer MDOT projects
  Mutual Aid Fire Protection
  Back up water supply—Paris Utility District and Oxford Water District
  Regional Economic Development—AVCOG
  Code Enforcement Officer-Woodstock, Greenwood, Hanover

WATER SUPPLY

Information and Issues

- The public water supply serves the built up areas of the downtown, including both the commercial, industrial and residential areas. It also serves the gateway areas, and extends up Pikes Hill to the standpipe.
- Expansion of the water supply system in the Pike Hill area is possible depending on housing density and frontage requirements. However, it is not economically feasible at this time.
- Norway must protect the public wellhead and should continue to work with Paris and Oxford to insure backup supplies are available should the Norway well be contaminated or otherwise fail.
- Norway needs to insure that groundwater in rural areas is protected since that is the primary source for rural residents.

Town Policies

- *To provide adequate quantity and quality of water to meet the needs of the residents and commercial/industrial customers and provide for community growth.*
- *To upgrade the public water supply system to replace obsolete pipe and provide adequate fire flows.*
- *To protect and preserve ground water resources (refer to the Ground Water section of the Natural Resources Chapter).*

- *To protect the portion of the Norway Wellhead Protection area located in Norway and to encourage Oxford to protect the Norway wellhead area located in northern Oxford.*

Implementation Strategies

- Enforce the Wellhead Protection Ordinance.
  S/CEO/ongoing
- The Water District should continue to assess alternative future water supply sources.
  NWD/ongoing
- The Water District and the Town should continue to coordinate system maintenance, upgrades, improvements, and expansions.
  NWD/S/Road Commissioner/ongoing
- Ordinances should contain standards to insure that groundwater throughout the community is protected from development impacts including residential development and the use, storage, and transportation of chemicals and wastes associated with business development.
  PB/2011 and ongoing

WASTEWATER TREATMENT

Information and Issues

- The Town of Norway operates a public sewerage system which provides service to the Norway Downtown and village area, development along Route 26, including a limited section of Route 26 in northern Oxford.
- The low flows and quality of the Little Androscoggin River preclude any significant sewer system or treatment facility expansions to serve substantial growth in Norway.
- The Town has conducted an extensive sewer system rehabilitation effort. Some older sewers may still have significant infiltration and need improvement to create capacity.
- There are significant physical and geographic constraints to expansion of the Downtown and surrounding village area, but sewer extensions along the perimeter of the area may be feasible.
- Alternative treatment methods such as land treatment or constructed wetlands may have to be used to provide additional capacity or for nutrient removal. The need for major improvements is not expected to occur for at least eight years.

Town Policies

- *To provide adequate sewerage disposal for urban areas of Norway and to protect the Norway wellhead, located in Oxford, by providing sewage disposal for that area, as capacity permits.*
- *To provide capacity for growth by repairing and improving older sewer lines to reduce infiltration and inflow.*

- *To protect the water quality of the Little Androscoggin River by maintaining an efficient sewerage treatment system.*
- *To plan for future capacity by working with the Paris Utility District and/or developing innovative disposal techniques such as land application or constructed wetland treatment.*

Implementation Strategies

- Continue to monitor sewer system capacity.
  Sewer Dept/ongoing
- Continue to repair, improve and maintain the sewage system and treatment facility.
  S/Sewer Dept/ongoing
- Continue to seek grants for major improvements and repairs and include improvement projects in the CIP.
  S/TM/CD/ongoing

STORMWATER MANAGEMENT

Information and Issues

- The collection and discharge of storm-water is coming under increased scrutiny at the State and federal level.
- Storm-water erodes soils and carries nutrients from roof tops, parking areas, lawns and roads to water bodies.
- Nutrients entering a lake in storm-water runoff can cause over-fertilization of the lake causing algae blooms and eventually kills fish. It results in undesirable water quality and a decrease in property values around the lake.
- The storm-water runoff from urban areas is particularly detrimental to streams.
- Both public and private roads and their drainage systems are a major cause of pollution in storm-water runoff.

Town Policies

- *To provide adequate storm-water drainage systems for both the urban and rural areas in order to protect roads, other property, and surface water quality.*

Implementation Strategies

- Storm-water drainage system facility and equipment needs should be included in the Capital Improvements Program (CIP).
  TM/2011 and after
- Maintain the roadside drainage system in order to increase road life and prevent erosion and phosphorus runoff from degrading water bodies. Include maintenance in Annual Road Maintenance program.
  S/Road Commissioner/ongoing
- Consider lake and surface water protection when developing road improvement priorities.
  Road Commissioner/ongoing

SOLID WASTE

Information and Issues

- Norway participates with Paris in the operation of Norway Paris Solid Waste, Inc. This quasi-municipal group operates a transfer station and demolition disposal facility.
- NPSW offers residents expanded services by collecting waste oil and antifreeze and mercury containing devices and fluorescent bulbs.
- Norway also participates in Oxford County Recycling, another quasi-municipal organization, which handles the recycling of traditional commodities such as paper, plastic and tin cans.
- NPSW also participates in an annual regional Household Hazardous Waste collection day.
- Oxford County Recycling collects Universal Waste including cathode ray tubes (TVs), old computer monitors, fluorescent bulbs, and mercury containing devices as well as other electronic devices.
- Although some costs may continue to increase as regulations become more stringent and more potentially hazardous materials have to be separated from the waste stream, Norway Paris Solid Waste, Oxford County Recycling and the State of Maine are conducting a study to determine the most economical choices for the future, including whether or not single stream makes sense for this area. .

Town Policies

- *To continue participation in the Norway-Paris Solid Waste Corporation (NPSW), Oxford County Regional Recycling, and to participate in other regional solid waste management programs to the extent feasible.*
- *To encourage NPSW to plan for the future as disposal and recycling methods continue to evolve.*
- *To participate in special waste disposal and recycling programs such as electronics collection, household hazardous waste collection and mercury containing device collection in order to reduce the toxicity of the waste stream.*

Implementation Strategies

- Support NPSW and Oxford County Regional Recycling and encourage them to be proactive in developing efficient, cost effective and environmentally sound disposal and recycling methods.

  S/TM/ongoing

FIRE AND POLICE

Information and Issues

- The number of fire calls has increased three times from what they were fifteen years ago.
- Continued growth and development could result in the need for increased staff and equipment for both fire and police protection.
- Growth in rural areas may require additional dry hydrants and other equipment.
- While Norway has not had a significant problem to date, it is becoming increasingly difficult to get volunteer firefighters because many Town residents work outside of Town.
- State training requirements make recruitment of volunteer firefighters difficult. Training requirements for both police officers and firefighters also make the training expensive.
- Dispatching for all emergency services is done through the county dispatch operations

Town Policies

- *To provide adequate fire and police protection.*
- *To assure that appropriate training is provided to all fire fighters and police officers.*
- *To assure that new growth and development can be adequately served by the fire and police departments.*

Implementation Strategies

- The Town will include adequate funding for training of fire fighters and police officers and for providing suitable equipment in the annual budget.
  S/TM/Fire Chief/ongoing
- Continue to work with other departments on training and mutual aid.
  Fire Chief/ongoing
- Ordinances should provide for the construction of dry hydrants as a cost to the developer for developments of significant size.
  PB/2012

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AMBULANCE AND RESCUE

Information and Issues

- Ambulance service is provided by PACE, a service owned by Stephen's Memorial Hospital. It provides ambulance service to many towns in the region.
- Funding is provided through the patients.
- This regional approach offers significant efficiencies of scale.
- Search and rescue is provided by the Fire Department in conjunction with the assistance of mutual aid communities and state departments as necessary.

Town Policies

- *To support the Paramedic Alliance for Community Emergencies (PACE), a non-profit organization, to provide ambulance and rescue service for the Town.*

TOWN GOVERNMENT AND FISCAL PLANNING

Information and Issues

- With 76% of the respondents to the community survey expressing satisfaction with town government, every attempt should be made to maintain the current level of service without increasing costs excessively. Sharing with other towns, agencies and the private sector should be constantly considered. Town facilities are reasonably adequate to meet the needs of the town government. Several notes are worthwhile making.
- The town office is used to capacity; however, the need for new staff is not anticipated.
- The town garage is old and not big enough to accommodate storing and servicing all the vehicles for snow removal.
- Several other small buildings in the highway department area will need maintenance and repairs to insure they do not deteriorate.
- Other town needs are noted in other sections.
- Norway is in reasonably good financial condition.

State Goal

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

<u>Town Goal</u>

To maintain a sound financial management system in order to ensure that adequate finances are available for the maintenance and improvement of public facilities and services.

Town Policies

- *To maintain adequate facilities and staff to provide the services needed by the residents.*
- *To continuously explore opportunities to share equipment, facilities, and staff in the efficient provision of excellent local government service.*
- *To finance existing and future facilities and services in a cost effective manner.*
- *To explore and apply for available grants to assist in the funding of capital investments, maintenance and services.*
- *Direct a minimum of 75% of new municipal growth-related capital investments into designated growth areas.*
- *To reduce Maine's tax burden by staying within LD 1 spending limitations.*

Implementation Strategy

- Annually, as part of the Town Budgetary process, review existing town staff positions, their assigned work responsibilities and make a determination if staff position adjustments are necessary.
  S/TM/ongoing
- The Town valuation of property should continue to be maintained at one hundred percent of market value.
  Assessor /ongoing
- Maintain facilities to insure that they do not deteriorate and provide for safe, healthful and environmentally sound conditions for workers and the public.
  S/TM/ongoing
- Continue to update and implement the capital improvement plan.
  S/TM/ongoing
- Explore opportunities to work with neighboring communities to plan for and finance shared or adjacent capital investments to increase cost savings and efficiencies.
  S/TM/Water District/ongoing

			Capital, Project and Equipment Budget									
Note: Norway has an extensive maintenance and capital planning budget. This is an excerpt from that document showing the most significant expenditures through 2016.												
	Impacts (1)	Funding (2)	2,007	2,008	2,009	2,010	2,011	2,012	2,013	2,014	2,015	2,016
FIRE TRUCK RESERVE	A	Local Taxes	156,567	20,000	18,500	20,000	20,000	20,000	22,000	25,000	25,000	25,000
POLICE CRUISER	A	Local Taxes						23,000		23,000		23,000
CEMETERY LAND DEV	A	Local Taxes	912	0			16,000					
DOWNTOWN IMPROVEMENTS	G											
Opera House/buildings		Grants/Donations - CDBG,Community Bond Fund, Private					425,000	100,000				
Trails and Parks		Grants - CDBG, Recreational Trails, LWCF							100,000		100,000	
TRAFFIC SAFETY/SIDEWALKS	G	Local Taxes	52,291	0	20,000	0	0	9,000	10,000	11,000	12,000	13,000
ROAD RECONSTRUCTION (2)	R	Bond	50,000	100,000	100,000	95,000		70,000	70,000	70,000	80,000	80,000
A list of improvements contained in Road Improvement Section												
IN TOWN STREETS.	G	Bond/Grants	71,376	127,441	129,867	47,500	20,000	48,000	50,000	50,000	50,000	50,000
HIGHWAY EQUIP RESERVE	A	Local Taxes	25,000	40,000	30,000	25,000	47,500	48,000	50,000	50,000	50,000	50,000
New Grader (2013-2014)												
HIGHWAY TRUCK	A	Local Taxes	77,000		60,000							
HIGHWAY TRUCK RESERVE	A	Local Taxes		70,000		45,000	48,000	48,000	50,000	50,000	50,000	50,000
CAPITAL BUDGET			572,785	800,883	633,866	232,500	576,500	366,000	352,000	279,000	367,000	291,000
(1) R = Rural Areas	(2) Road improvement plan includes significant expenditures on all town roads to maintain current conditions and prevent deterioration.											
G = Growth Areas												
A = All Areas												

RECREATION

Information and Issues

- Recreation, although largely a town responsibility, is contained in this separate section because of its importance to both the citizens and the future economic development of the community.
- Pennesseewassee Park is one of the prime elements of the Norway Recreation Program. Improvements are needed to the park in the form of better amenities and more trails. The northerly portion of the park has not been developed.
- The community would benefit by having a sidewalk/trail system that connected Gouin athletic fields, the high school, and the town's other athletic fields with Pennesseewassee Park. Other trails would be a good local recreational resource as well as provide amenities for visitors.
- Existing and planned fields for the Little Androscoggin River Recreation Area will meet much of the recreational needs for the planning period.
- There is a need for more organized recreation programs for youth.

State Goal

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

Town Goals

To provide recreation facilities, including trails, and programs that meet the needs of residents,
and
To improve Pennesseewassee Park facilities and trails in order to take full advantage of the opportunities presented.

Town Policies

- *To continue to improve Pennesseewassee Park to support recreation programs and provide recreational opportunities for area residents.*
- *To develop and maintain recreation facilities including completion of the Little Androscoggin River Recreation area.*
- *To develop and maintain recreation programs for youth and adults to meet the needs of Norway residents.*
- *To develop a bicycle/pedestrian trail system linking existing recreation facilities, including Pennesseewassee Park, the high school and the downtown.*
- *To support the development of such other bicycles/pedestrian trails as an important component of the emerging tourism economy and as a tool for retaining and attracting young workers for developing technology sector jobs.*
- *To connect local trails with regional trail networks and insure that the downtown and commercial areas of Norway are served.*

- *To support the maintenance and further development of snowmobile trails through the support of the local snowmobile club.*
- *To encourage the responsible use of ATVs by working with the ATV club as needed.*
- *To continue to maintain public access to Pennesseewassee Lake, Hobbs Pond, North Pond and the Little Androscoggin River for boating, fishing, and swimming.*
- *To preserve open space for recreational use as appropriate.*

Implementation Strategies

- Include needed recreational facility improvements in the Capital Improvement Plan.
  S/TM/Recreation Dept./ongoing
- Plan improvements to Pennesseewassee Park and include improvements in the Capital Improvement Plan.
  TM/Recreation Dept/2012 and after
- Work with public and private partners to provide recreation facilities and connect facilities and trails to any regional networks.
  S/TM/Recreation Dept/ongoing
- Develop a bicycle/pedestrian plan for trails linking the downtown, Roberts Farm Preserve, Lake Pennesseewassee Park, high school, and area recreation facilities. Such a plan will be relatively long term, but implementation should start at the earliest economically feasible date. The plan should include the priorities and proposed schedule for construction, and the appropriate elements should be included in the Capital Improvement Plan.
  Trail Committee/Recreation Dept/ ongoing
- Continue development of the Little Androscoggin River Recreation area through a combination of town funds and donations.
  Recreation Dept/TM/2012
- Assess the need for and financial feasibility of new recreational programs for adults and youth.
  Recreation Dept/TM/2012
- Continue to support the Trackers Snowmobile Club.
  S/ongoing
- Develop an on-going dialogue with the ATV club and the snowmobile club to insure that riders are sensitive to private property and state laws controlling the use of these recreational vehicles.
  Recreation Dept/ongoing
- Continue to coordinate with the Healthy Communities Coalition and the high school trails group.
  Recreation Dept/ongoing
- Work with non-profits, including Western Foothills Land Trust, on the protection of important open space and recreational land.
  S/TM/ongoing
- Provide education regarding the benefits and protections for landowners allowing public recreational access on their property.
  S/TM/Recreation Dept/Land Trust/ongoing

NATURAL RESOURCES

Natural resources include the natural features of the land and the plants and animals that the natural environment sustains. (See maps at end of section.) They include (see maps):

Soils including the topography
Forests and Agricultural land
Surface waters—lakes, rivers, and streams
Wetlands, also considered a water resource
Ground Water
Floodplains
Special Wildlife Habitat including Deer
Wintering Areas, Waterfowl and Wading Bird, and Endangered Species Habitat.
Endangered Plant Habitat
Unique Natural Areas

State Goal

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

Town Goal

To protect and preserve natural resources located in Norway including shared resources.

Town Policies

- *To conserve critical natural resources as identified in the Inventory and Analysis and as may be identified in the future by reliable sources.*
- *To coordinate with neighboring communities and regional and state resource agencies to protect shared critical natural resources.*

Town Strategies

- Amend local shoreland zone standards to meet current state guidelines.
  PB/2011
- Designate critical natural resources as Critical Resource Areas in the Future Land Use Plan.
  Comprehensive Planning Committee/PB/S/2011
- Amend existing ordinances and ensure that new ordinances require subdivision and other development applicants to look for and protect critical natural resources that may be on site, including but not limited to, modifying proposed site design, construction timing, and/or extent of excavation.
  PB/2012
- Through local land use ordinances, require the planning board (or Code Enforcement Officer) to incorporate maps and information provided by the Maine Beginning with Habitat program into their review process.
  PB/2012

- Adopt natural resource protection practices and standards for construction and maintenance of public roads and properties and ensure implementation by town staff and any town contractors.
  S/TM/2012
- Work with adjacent municipalities, AVCOG, the Western Foothills Land Trust and other appropriate agencies on conservation and management of local and shared critical natural resources through purchase of land or easements from willing sellers or through appropriate regulatory efforts.
  S/TM/PB/ongoing
- Distribute or make available information to those living in or near critical natural resources about applicable local, state, or federal regulations.
  TM/PB/Western Foothills Land Trust/ongoing

SOILS AND TOPOGRAPHY

Information and Issues

- **Soils** are an important foundation for all construction. Building on soils not suited to the particular construction activity can lead to costly construction problems and environmental degradation. Erosion of soils can cause damage to water resources and wetlands. Construction on steep slopes can lead to erosion. On-site sewage disposal is also highly dependent on adequate soils.

Town Policies

- *To encourage development on soils and slopes suited for the type of activity.*
- *To discourage development on slopes greater than 20 percent.*
- *To prevent environmental degradation caused by erosion.*

Implementation Strategies

- Land Use Ordinances should carefully consider the treatment of soils, slopes, and bedrock in the calculation of net building density.
  PB/2012 and beyond
- Land Use Ordinances should incorporate erosion and sedimentation standards for development, and the Planning Board should carefully review all activities requiring permits to insure adequate erosion and sedimentation controls. Ordinances and the Planning Board should encourage nonstructural approaches including the maintenance of natural vegetation.
  PB/2012
- The Planning Board should review soils and related information to insure that development will not cause significant environmental degradation.
  PB/ongoing

GROUNDWATER

Information and Issues

- Groundwater is one of the area's and the town's most important natural resources.
- The public water system (operated by the Norway Water District) obtains its water from the Little Androscoggin River Valley Aquifer, a large sand and gravel deposit adjacent to the Little Androscoggin River.
- Other towns in the area use the same aquifer for their public water supplies.
- Downtown Norway, the village area, and the development along Route 26 all are served by public water supply, as is most of the economic development in Paris and Oxford.
- Most homes in the rural sections of Norway depend on ground water, either drilled or dug wells or springs, for their domestic supplies, and many small businesses in the rural areas also depend on ground water.
- Ground water generally flows from high areas (the hills tops) to surface waters where it is an important part of the recharge for wetlands, streams, rivers and lakes.
- The quality and quantity of ground water can impact businesses, homes, and other natural resources.
- Activities that have the potential to adversely impact ground water quality and quantity include: Petroleum product storage, Handling and transportation of hazardous chemicals, Mining and Subsurface sewage disposal.

Town Policies

- *To protect and preserve ground water, with particular attention to sand and gravel aquifers, from activities which could adversely impact their quality or quantity.*
- *To regulate development activities so that the cumulative effect of the activities do not degrade groundwater quality below state drinking water standards, at a minimum.*

Implementation Strategies

- The Water District will continue to update a list of developments which are potential threats to the Town water supply both within the Town and within the portion of the recharge area located outside of Norway.
  NWD/ 2012 and after
- Ordinances shall restrict some types of development activities located over sand and gravel aquifers. Ordinance provisions shall be more restrictive in wellhead areas or areas identified as potential water supply sources.
  PB/ongoing
- Town ordinances should include provisions addressing sludge disposal and land spreading practices for residual wastes.
  PB/2013
- Ordinances should provide for the review of hazardous materials handling, use, storage, and disposal practices to insure that facilities and handling practices will

protect the groundwater and the environment. Facilities should be required to have Spill Prevention and Control Plans that should be filed with the Fire Chief.

PB/2012

- Land Use Ordinances should require a hydro-geologic analysis for development proposals that could adversely impact ground water resources at the discretion of the Planning Board.

  PB/2012
- The Subdivision Ordinance should require that all applicants identify both proposed and back-up septic system sites for each lot with such back up site to remain usable.

  P*B/2012*
- The Town and Norway Water District will work with the Town of Oxford to protect the Norway wellhead.

  NWD/ongoing

SURFACE WATERS

Information and Issues

- Surface waters are another important natural resource. They include lakes and ponds, streams, brooks, and rivers. They also include wetlands and vernal pools; these are discussed under the Wetland heading. Surface waters are important because they provide habitat for numerous plants and animals, including fish. They also provide a water source for wildlife and recreation opportunities for residents and visitors.
- Vegetation along shorelines or streams, rivers and lakes is important. It provides shade for aquatic dependent species, and along streams, the shade keeps waters cool and suitable for cold water fish (trout).
- The four major lakes in Norway, Pennessewassee Lake, and Hobbs, North Sand Ponds, provide the character and scenery for much of the rural area. Development along their shorelines also accounts for approximately 25% of the tax base in Norway.
- Lakes are threatened by development along their shorelines as well as development throughout the watersheds. Additionally, runoff and erosion from camp roads and town roads and associated drainage systems also contribute significant non-point source pollution to the lakes.
- The Little Androscoggin River carries waste from our sewage treatment plants away, accepts stormwater runoff from the downtown and Route 26 area, and provides recreation opportunities.
- The Crooked River is a somewhat unrecognized resource having very little development along its shores and being surrounded by abundant wildlife.
- All surface waters are threatened by the clearing associated with increased land development and the resultant increased runoff that carries sediments and nutrients.

Town Policies

- *To protect, maintain and improve the quality of surface waters, especially the four major lakes and the Crooked River.*

Implementation Strategies

- Town Shoreland Zoning Regulations shall be at least as stringent as State guidelines established by the Mandatory Shoreland Zoning Act.
  PB/ongoing
- Seventy-five (75) foot buffer areas should be maintained between development and perennial streams, except that roads should be permitted to cross streams.
  PB/ongoing
- Ordinances should include phosphorus control methodologies as recommended by the Maine Department of Environmental Protection. (See Inventory and Analysis for listing of lakes and additional information.) Actual phosphorus loads should be revised to reflect best available information. Ordinances and the Planning Board should and encourage nonstructural measures for phosphorus controls.
  PB/ongoing
- The Town will work with the Lake Association of Norway and property owners to encourage buffers and other water quality protection measures.
  S/CEO/ongoing
- The Town Staff and officials should be provided with training in water quality issues, soil erosion and storm-water practices to insure their understanding of the need for water quality protection and reduce the amount of phosphorus export from town roads.
  S/PB/ annually
- The adequacy of storm-water drainage systems associated with roads within watershed and shore-land areas should be assessed. Corrective measures identified in the assessment should be included in a Town Capital Improvement Plan (CIP).
  Road Commissioner/other staff assigned/2013
- Ordinances shall require a 200' minimum shore-land frontage plus additional frontage for each dwelling unit for developments which offer property owners deeded common access to lakes and rivers.
  PB/ ongoing
- The Town will work with the Natural Resources Conservation Service and the Maine Forest Service to insure that agricultural activities located within watershed areas are not contributing excessive amounts of nutrients to surface water resources.
  M/CEO/2011and thereafter
- Ordinances should contain provisions that control the intensity of development on land that has been logged heavily (liquidation harvesting) over the past five years such that it makes preservation of a natural forest canopy outside of building envelopes and in buffer areas unfeasible.
  PB/2012

WETLANDS

Information and Issues

- Wetlands are important resources that are closely tied to both surface waters and ground water.
- During dry periods, wetlands recharge both surface waters and ground water.
- During periods of flooding, wetlands act as a natural reservoir to reduce the intensity of floods.
- Wetlands support a significant number of species including waterfowl, wading birds, fish, and reptiles.
- Wetlands are also important sources of drinking water and provide food for many upland animals.
- Wetlands also provide both breeding and feeding habitat for many types of fish and birds.
- Vernal pools, small natural ponds that often dry up in the summer, are important wildlife habitat. They support species, such as some types of salamanders, that are only found in these pools.

Town Policies

- *Protect wetlands and vernal pools from filling and alteration in order to maintain their overall benefits and values.*
- *Provide a high level of protection for wetlands and areas within 250 feet of the upland edge of such wetlands identified as having significant wildlife habitat value as required by the State Shoreland Zoning Law.*

Implementation Strategies

- Ordinances shall include provisions to encourage the protection of identified or significant wetlands with buffer areas, deed restrictions, conservation easements and other means.
  PB/2011 and beyond
- Land Use Ordinances should carefully consider the treatment of wetlands in the calculation of net building density (See Implementation Strategy listed under the Soils and Steep Slopes Section in this Chapter).
  *PB/*2013
- Town Ordinances, including Shoreland Zoning, shall comply with the minimum standards of the State Shore-land Zoning Law.
  PB/ongoing
- Timber harvesting in excess of the 40% basal area may be allowed in the Shoreland Zone in accordance with the State Shore-land Zoning Guidelines when a forest management and harvest plan has been prepared by a registered forester.
  PB/ongoing
- Ordinances should provide for the protection of small, but important habitats, such as vernal pools. Protection includes preserving the areas, providing an adequate buffer and insuring that hydrologic characteristics are not changed to the extent that areas are not recharged.
  *PB/*2012-2013

FLOODPLAINS

- Floodplains, associated with rivers, streams, and some lakes and wetlands, are important natural areas. They often provide excellent wildlife habitat and are fertile agricultural land.
- From a strictly economic standpoint, floodplains provide storage of flood waters that could otherwise damage both up stream and down stream areas, especially bridges, roads and buildings.
- Norway's floodplains are limited in comparison to many communities. Many are identified wetlands. There is some floodplain located along the brooks running through the downtown area and some important areas along the Little Androscoggin River.

Town Policies

- *To prohibit construction and development in floodplain areas where such development might increase the risk of property loss and/or increase the level of flooding.*

Implementation Strategies:

- The Planning Board and Code Enforcement Officer should strictly administer and enforce the Town's Flood Hazard Ordinance.
  PB/CEO/ ongoing

WILDLIFE HABITAT

- Natural areas that support a variety of species or are critical to the breeding or feeding habitats of a few species are considered Wildlife Habitat. They often have value as other resources such as forests and wetlands.
- The larger the tracts of undeveloped land, the more species that the land can support. For example, bobcats need over 100 times the area that a skunk needs to thrive.
- Certain types of land, such as uplands, wetlands, and field/forest edges support different species. All are essential habitat to support good wildlife diversity.
- As development spreads into rural areas, important habitat is consumed. Fewer numbers of animals can be supported on the land, and as more land is consumed, fewer species can be supported.

Town Policies

- *To protect, maintain and/or improve diverse and significant wildlife habitat.*
- *To mitigate the adverse impacts of development upon diverse and significant habitat.*

Implementation Strategies

- Ordinances should include provisions to conserve diverse and significant wildlife habitat through such actions as deed restrictions, easements, and common areas with management plans, open space development and other development techniques that are sensitive to habitat areas.

  *PB/*2012 and beyond
- Town Shoreland Zoning Regulations should include provisions to zone as Resource Protection a 250-foot area surrounding 10-acre open water wetlands rated as moderate and high value waterfowl habitat by the Maine Department of Inland Fisheries and Wildlife as required by state law.

  PB/ on-going
- Ordinances should encourage development designs that provide for the preservation of large tracts of land, the protection of wildlife habitat and other important natural resources.

  PB/2012-2013

RARE, ENDANGERED AND SIGNIFICANT AREAS

Information and Issues

- There are no state identified areas in Norway.
- Ordway Grove is an area having virgin growth white pine that is the second tallest grove in New England. The trees are 400 years old, and the forest is approximately 6,000 years old.
- Other significant resources may exist but have not been identified.

Town Policies

- *To protect identified rare and endangered plant and animal species and significant natural features.*

Implementation Strategies

- The Land Use Ordinances, including the Subdivision Ordinance, should be amended to include provisions allowing the Planning Board to require information concerning the impacts to rare and endangered species, should they be identified in the future, including measures to protect them.

  *PB/*2012-2013
- Ordway Grove should be managed to insure its preservation for the enjoyment of future generations.

  S/CEO/ PB/ongoing

Norway

Wetlands-
Wetlands are an underestimated, yet a very important natural resource. They
* Reduce flooding by acting like a sponge, providing a buffer for excess water
* Recharge surface and ground water in times of drought
* Naturally filter water through chemical and biological action
* Control the effects of erosion by filtering silt from water
* Offer habitats to certain animals, plants and insects
* Provide breeding, feeding and resting areas for wildlife
* Supply unique recreational opportunities.

Alteration of wetlands can result in serious natural and economic outcomes.

Furlong Pond

Spring Ponds

North Pond

Little Pennesseewassee Pond

Pennesseewassee Lake

Sand Pond

Groundwater
Groundwater is water derived from precipitation that seeps through the soil and fills many small spaces in the soil or cracks (fractures) in bedrock below the water table. Groundwater provides a major source of drinking water. Most rural homes have wells that draw water from the soil or bedrock (bedrock aquifers). The public water supply that serves the downtown obtains water from a large sand and gravel aquifer that runs along the Little Androscoggin River Valley. Water from a large area in southeastern Norway and northern Oxford recharges the public well that is located in Oxford.

Groundwater is easily contaminated as substances seep through the soil and dissolve or mix with the groundwater. Contrary to popular belief, the soil does not filter or treat many substances very well, especially chemicals. Pollution prevention measures need to be undertaken to protect the groundwater in Norway. These include:
- controlling sewage disposal
- storing, using, and disposing of chemicals and hazardous materials
- preventing spills and leaks and cleaning them up quickly if they occur.

Surface Waters and Watersheds
The land area that contributes water to a surface water body is known as a watershed. Development, other construction activity, agriculture and timber harvesting can all disturb a watershed and impact water quality. Soil erosion causes sediment and nutrients, such as phosphorus, that are naturally attached to soil particles to reach the waters. Sediment harms fish and destroys habitat. Phosphorus fertilizes lakes causing excessive algae and plant growth, thereby impacting fish, wildlife, and the enjoyment of our waters. To reduce pollution:
- prevent erosion
- reduce the use of chemical fertilizers and pesticides
- control sewage disposal

National Wetlands Inventory
High Yield Aquifers
Low Yield Aquifers
Watersheds

Water Resources

0 0.5 1 2
Miles

Waterfowl and Wading Bird Habitat -
Waterfowl and Wading Bird Habitat is special wetland areas that support migrating waterfowl and wading birds. It is of particular importance to the continued success of many birds.

Norway

Spruce Ponds

North Pond

Little Pennesseewassee Pond

Pennesseewassee Lake

Sand Pond

Wildlife Habitat-
Wildlife species are depend on the land and land cover for habitat. Many depend on a variety of land cover including forests and fields, for example. If an existing habitat is lost, various types of species will not be present. Among the many important wildlife habitats, there are four that are considered critical: wetlands, shorelines of surface waters, deer wintering areas, and large tracts of uninterrupted forest. The deer wintering habitat depicted was mapped in the early 1990's and has changed some since.

Wildlife Habitat

- National Wetlands Inventory
- Waterfowl Habitat
- Deer Wintering Areas

0 0.5 1 2
Miles

Norway

Steep Slopes
The map depicts slopes that have slopes over 20%. Construction and development on steep slopes can lead to serious erosion with subsequent environmental damage. See the water resources map for additional information on the impacts of erosion. Development on steep slopes is also costly for the developer and for the town should they assume ownership of roads. It also makes provision of emergency services difficult.

Spectacle Ponds

North Pond

Little Pennesseewassee Pond

Pennesseewassee Lake

and Pond

Floodplains
The map depicts the 100 year floodplains. These are the areas that have one percent chance of being inundated in any given year. Floodplains provide important wildlife habitat, but even more importantly, they provide important flood water storage. Development on floodplains can be adversely impacted by floods, but it can also restrict flow and decrease storage capacity. Thus it can cause additional destruction both upstream and downstream from the development site.

- National Wetlands Inventory
- Deer Wintering Areas
- Floodplains
- Steep Slopes

Floodplains and Steep Slopes

0 0.5 1 2
Miles

Norway

Little Pennesseewassee Pond

Pennesseewassee Lake

Sand Pond

North Pond

National Wetlands Inventory
Waterfowl Habitat
Deer Wintering Areas
High Yield Aquifers
Low Yield Aquifers
Floodplains
Steep Slopes
Watersheds

Development Constraints

0 0.5 1 2
Miles

HISTORIC AND ARCHAEOLOGICAL RESOURCES

State Goal
To preserve the State's historic and archaeological resources.

Town Goal
To preserve the Town's historic and archaeological resources and identified significant scenic resources.

HISTORIC RESOURCES

Information and Issues

- The heart of downtown Norway is a Registered National Historic District. It consists of over 40 buildings. Many are brick and were built shortly after the fire that destroyed Norway in 1894.
- Other historic structures are scattered throughout the community. Many are of state wide and local importance.
- There are four small villages outside of downtown Norway that have unique characteristics.
- The Historic District, historic structures in other areas and the old villages, are important parts of Norway's culture and heritage. Development should be carefully designed in so that it does not adversely impact these areas.
- See the Inventory and Analysis for a listing of important historical structures and the map in the Downtown section for the boundaries of the Historic District.

Town Policies

- *Protect, promote and preserve buildings and sites located within the Historic District to the extent feasible given the economic realities of each building and other constraints in the downtown.*
- *Encourage the protection, preservation and maintenance of local historic buildings and sites located outside the Historic District.*
- *Support the efforts and work of the Norway Historical Society and Norway Preservation.*

Implementation Strategies

- Local land use ordinances shall require all developers to look for and identify any historical resources and to take appropriate measures to protect those resources, including but not limited to, modification of the proposed site design, construction timing, and/or extent of excavation.
  PB/done – incorporate into any additional ordinances
- The planning board or CEO shall use maps and information provided by the Maine Historic Preservation Commission in their review process.
  PB/CEO/ongoing
- Work with the local historical society and/or the Maine Historic Preservation Commission to assess the need for, and if necessary plan for, a comprehensive community survey of the community's historic and archaeological resources.
  S/PB/good survey completed, revisit in 2013
- Demolition, relocation or modification of historic buildings located within the Historic District will continue to require site plan review by the Planning Board to insure that the character of the district is maintained.
  *PB/*2012
- The Selectmen shall appoint an Historical Commission to provide advice to the Planning Board, other groups and property owners on the modification or rehabilitation of historic buildings and areas, especially in the Historic District. The make-up of the Historical Commission and number of members will be determined by the Select-board and comprised of effected property owners, members of Norway Downtown, and the Norway Historical Society.
  S/2013
- An Ordinance should be developed and adopted to establish historic preservation standards. The Ordinance should be administered by the Planning Board. The Ordinance shall require property owners to notify the Historic Commission and the Planning Board one-hundred and eighty (180) days, or some other appropriate timeframe, prior to the demolition of a historic building located within the Historic District.
  *PB/*2013
- The Norway Historic Commission should develop education programs for property owners of historic buildings and sites.
  S/Historic Commission/immediately and thereafter
- Develop sign standards for the Historic District.
  *PB/*2012
- Pursue a historic landmark or district designation for significant historic areas and structures, as appropriate.
  *S/Historic Commission/*2014 *and after*

ARCHAEOLOGICAL RESOURCES

Information and Issues

- Archaeological resources have not been identified in Norway, although it is expected some do exist. The most probable areas are along the shorelines of the major lakes and rivers (Little Androscoggin and Crooked).

Town Policies

- *Protect to the greatest extent practicable the significant archaeological resources in the community.*
- *Assure that before archaeological sites/areas are disturbed, their values are adequately addressed.*

Implementation Strategies

(1) Local land use ordinances shall require subdivision or non-residential developers to look for and identify any archaeological resources and to take appropriate measures to protect those resources, including but not limited to, modification of the proposed site design, construction timing, and/or extent of excavation.

PB/done – incorporate into any additional ordinances

(2) The planning board or CEO shall incorporate maps and information provided by the Maine Historic Preservation Commission into their review process.

PB/CEO/ongoing

- Ordinances shall require that development/excavation in areas on or adjacent to historic sites or suspected or mapped potential prehistoric areas be submitted to the Maine Historic Preservation Commission at least 30 days prior to necessary Planning Board actions.

PB/2013

SCENIC RESOURCES

Information and Issues

- The scenery contributes to the character of the community and makes it a desirable place to live.
- The views have attracted development of new year-round and seasonal homes selling for significantly more than the average home in the area.
- The Inventory and Analysis identifies ten views that are accessible from public locations that are of particular significance.
- Land use regulations provide only minimal protection for scenic views and their view-sheds (the land that can be seen from the view point).

Town Policies

- *To maintain the scenic character of Norway.*
- *To recognize the identified scenic views as a significant resource, and minimize development impacts.*

Implementation Strategies

- Town ordinances should include performance standards to protect identified scenic viewing locations and views.
  *PB/*2012-2013
- To the extent feasible, ordinances should include provisions to allow the Planning Board to require an assessment of the view, to mitigate development features that may adversely impact views and view-sheds, to provide for the protection of views with conditions and easements, and to provide for the protection of viewing locations.
  *PB/*2012-2013
- Ordinances should include provisions to protect the scenic character of the Town through the use of buffer areas, open space design, and other design features.
  *PB/*2012-2013
- When road construction or reconstruction is undertaken by the Town or State, road design plans should include turn-outs or suitable areas to allow vehicles to leave the travel way in identified scenic viewing locations.
  *S/Road Commissioner/*2014 *and after*

AGRICULTURE AND FOREST RESOURCES

Information and Issues

- Farming has not been a significant activity in Norway for many years. A 1981 inventory showed 650 acres of crop land and 1,400 acres of pasture.
- There is considerable less crop land now, but many of the pastures and fields still remain being hayed at least once a year.
- Open fields contribute significantly to the character of Norway,
- With the growing interest in locally produced agriculture, there may be opportunities for some farming to re-emerge as a viable livelihood.
- In 2010, there were 13 parcels registered with the assessor as Farm and Open Space Land. These contained 64 acres of farmland and 576 acres for woodland.
- Norway is approximately 80% forested.
- Forest land registered in current use tax programs has decreased by approximately 12% over the past 30 years.

State Goal

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

Town Goal

To conserve important agricultural and forest resources in order to support local agriculture, provide sustainable timber resources to the forest industry, and maintain community character.

Town Policies

- *To safeguard lands identified as prime farmland or capable of supporting commercial forestry in keeping with the rights of property owners to obtain a reasonable return on their land.*
- *To promote the use of best management practices for timber harvesting and agricultural production.*
- *To support farming and forestry and encourage their economic viability.*

Town Strategies

- Consult with the Maine Forest Service district forester if developing any land use regulations pertaining to forest management practices.

  PB/2011 and as land use ordinances are amended
- Consult with Soil and Water Conservation District staff if developing any land use regulations pertaining to agricultural management practices.

  PB/2011 and as land use ordinances are amended

- Amend land use ordinances to require commercial or subdivision developments in *critical rural areas* to maintain areas with prime farm soils as open space through the use of open space concepts to the greatest extent practicable.
  PB/2012
- Limit non-residential development in *critical rural areas* to natural resource-based businesses and services, nature tourism/outdoor recreation businesses, farmers' markets, and home occupations.
  PB/2012
- Encourage owners of productive farm and forest land to enroll in the current use taxation programs.
  Assessor/S/TM/PB/2011 and beyond
- Permit activities that support productive agriculture and forestry operations, such as roadside stands, greenhouses, and pick-your-own operations.
  PB/2012
- Include agriculture and commercial forestry operations in local or regional economic development plans.
  S/TM/ongoing

FUTURE LAND USE

State Goal

To encourage orderly growth and development in appropriate areas of each community, while protecting the state's rural character, making efficient use of public services, and preventing development sprawl.

Town Vision

Norway will remain a beautiful rural residential Maine town with a unique and thriving historic downtown, beautiful views and clean waters, with ample employment opportunities. Growth will be orderly growth and in areas where services are available to accommodate it; growth will not detract from the existing rural character of the town and will enhance the character of the downtown.

Introduction

The Future Land Use Plan serves as a guide to the future land use in Norway and is the building block of land use ordinances both existing and ones to be developed by the planning board, select-board and town staff over the next two years. It builds on the Future Land Use Plan presented in the previous comprehensive plans, policies in this document and AVCOG regional plans for transportation, economic development, and natural resources.

There are many constraints to growth and development in Norway. The Development Constraints map in the Natural Resources section indicates some of natural constraints, and the accompanying map in this section shows constraints surrounding the downtown. As such, Norway will invest 75% of its dollars for municipal growth related expenditures within the Downtown, Gateway, General Residential and Special Commercial areas. All areas not served by sewer are considered rural. Recent trends for development have been slow, but the plan must consider that growth pressures will increase as the economy improves and the town invests in downtown redevelopment.

Future Land Use Policies

In addition to the policies in the previous sections that will guide the future land use plan, the following policies provide further guidance.

- *To support the locations, types, scale and intensities of land uses stated in the vision.*
- *To coordinate Norway's land use strategies with other local and regional land use planning efforts.*
- *To support the financial commitment needed for infrastructure in the growth areas.*

- *To establish efficient permitting, especially in the growth areas.*
- *To protect critical resource areas from the impacts of growth.*

Land Use Plan Concepts

Density Concept: This concept is used to encourage open spaces to be maintained and to allow flexibility in the design of new development. Using this concept, developers can reduce their costs and natural resources can be protected. The Future Land Use Plan designates land use areas in the community. Within each area, it proposes to regulate the density of housing and other land uses. Many towns have a minimum lot size ordinance; using that concept, each house must be built on a lot of the minimum size required. Under the density concept, the number of houses on any given piece of land is determined by dividing the amount of land by the allowable density. For example, if the density is established at 80,000 square feet (roughly 2 acres), then 10 houses could be located on a 20-acre lot (less any roads or other amenities). Municipal capital investments to support this growth pattern will be less as the need for roads and utility lines will be less.

Land Use Ordinances: Existing Land Use Ordinances will require some revision to implement the policies in this plan. As with the density concept, ordinances should provide the significant flexibility for development such that resources are protected and land can be used to the greatest extent possible in keeping with the policies and the concepts of the Future Land Use Plan. Open Space development, use of back-lots, buffers between residential and natural resource based uses, and conservation easements are all tools that should be encouraged.

Land Use Areas

Downtown Village and Gateway Areas

This area includes the downtown commercial area and adjacent residential area, the Southerly Gateway, (the mixed use areas southerly of the village along Lower Main Street, Fair Street and Paris Street) and the Northerly Gateway (the mixed use area stretching along Route 117/118). Important factors in the area include the mixed use of development, aesthetics, access management, parking, pedestrian use, and green spaces.

Purpose of this growth area

- *To provide for continuation of the traditional mixed uses in the downtown and adjacent areas and that have served Norway well for over a century, and*
- *To improve the attractiveness of the area for residents, businesses and visitors.*

Downtown and Gateway Areas in Detail (see map): This is a mixed use area of homes, businesses, services, and industry. Most of this area is the traditional village, and most of it is served by public sewer and water. Mobile home parks are also located within this area. The area stretches from the traditional village southerly to the boundary with the town of Oxford and easterly to Paris and northerly to Pennesseewassee Lake. Route 26 runs through the southerly part of the area from Oxford to Paris, and there is

significant commercial development located adjacent to Norway in both Oxford and Paris. The Route 26 area of Norway is considered its Southern gateway, and many commercial uses have been developing along it over the past decade. Because of natural constraints, the Gateway area has been developed with somewhat smaller businesses than those in adjacent Oxford.

An area just north of Pennesseewassee Lake outlet is tightly constrained by steep slopes and the lake. However, there is some residential and business development along it. As it stretches along Routes 118/117, it is considered the Northerly Gateway. The aesthetics, access management, parking, and pedestrian friendliness are all important aspects of these gateway areas. They are residents and visitors first impressions of Norway. With limited land area in the actual downtown, and with a tendency of businesses to like high traffic areas with "easy" vehicle access, these areas will be extremely important as they continue to evolve and develop.

The Little Androscoggin River Valley Aquifer, a major sand and gravel aquifer, underlies the southeasterly portion of the area. A small portion of Norway's wellhead protection area is located in this area. Development should comply with the existing Wellhead Protection Ordinance

Densities should be consistent with existing regulation which requires 10,000 square feet for lots on public water and sewer and 20,000 square feet for those not on water and sewer. Setbacks should be minimal and in keeping with the existing development in the immediate area. In the business district of the downtown, zero lot line and front setbacks may be permissible when compatible with adjacent development. In the residential portion of the village, setbacks may be minimal but should account for adjacent residential structures. Impervious area for residential lots should be limited in order to provide some green area for aesthetics and stormwater management.

All lots over the Little Androscoggin Valley Aquifer and in the gateway area should have restrictions on the amount of impermeable coverage—no more than 70 percent.

Historic District

The Historic District is located within the downtown area, mostly in the commercial section along Main Street. It will be an overlay district. It is listed on the National Register and is considered a national importance.

Purpose of this growth area:

- *To protect the historic downtown for the enjoyment of future generations, and*
- *To insure that the historic downtown contributes to the purposes of the Downtown Village and Gateway Areas.*

Historic District in Detail (see map): This would be an overlay district intended to preserve the character of the designated National Historic District. There would be special requirements for all construction and demolition, and there would be special requirements for signs. Buildings in the historic district would be "compatible" with the historic nature of the structures in the district. Exterior surfaces would be a natural material such as wood, brick, or stone, or a material that had the appearance of these

materials such as vinyl clapboard siding. Windows, doors and architectural trim would also be compatible with the style of building and the historic nature of the district. This is not meant to unduly restrict architectural styles. Downtowns are often noted for the mix of uses and the mix of architectural types that blend together in the area. While modern designs are not necessarily encouraged, the standards should not prohibit them, although considerable thought must be put into the design to insure that it will contribute to the character of the downtown. For example, large, concrete block or metal sided buildings with flat roofs have little value in the district.

General Residential Area

It is adjacent to the downtown. For years, the steep slopes adjacent to the downtown area prevented migration of the village style development into the area. However, in more recent years, moderate growth has occurred just beyond the steeper part of the area. With steep slopes, water and wetlands constraining the village, the general residential area is designated as a logical area for moderate development to continue to occur. It is possible to provide public sewer and water to some of the area, although there are no plans to undertake extensions and incur the relatively substantial costs of doing that at this time.

Purpose of this growth area

- *To provide for an area of moderate growth and density in Norway in keeping with much of the development that has occurred in the town over the past three decades.*

General Residential Area in Detail (see map): The General Residential area extends from the Downtown/Village areas up Pleasant Street in one direction and onto Pike's Hill to the west of the downtown and south of Pennesseewassee Lake. This is an area where public services such as sewer and water may be extended some day, although there are no plans to do that within the next decade. Substantial "home occupations" (would allow several employees and added floor space in addition to the home) should be allowed in this area along with a mix of housing types. The density should be 40,000 square feet for the first two uses and then an additional 20,000 square feet would be required for every use or unit beyond the first. The lot coverage for businesses and any multi-family housing should be limited to 40 percent. Development of Open Space subdivisions should be encouraged with structures located in such a manner as to facilitate provision of sewer, water, etc., should they be extended to the area. Such subdivisions could be encouraged by providing a density bonus of 10 to 40 percent if the subdivision layout meets criteria that would facilitate services.

Special Commercial Area

This area is located at the northerly junction of Routes 118 and 117. It allows expansion of the business area already located there and is designated as a growth area. It is designed to have particular attraction to businesses that will benefit from proximity to the views afforded by Pennesseewassee Lake and the residents surrounding the nearby lakes.

Purpose of this growth area

- *To provide an area for convenience type services northerly of the downtown area to serve traffic and rural residents.*

Special Commercial Area in Detail: This area is located at the junction of Routes 118 and 117 just northwesterly of the downtown. There are currently several businesses in the area that are popular with travelers on these two state highways and with summer residents living around the lakes. It is anticipated that small, roadside and neighborhood service establishments would locate there.

Rural Village Areas

These areas are located in the rural part of Norway and once served as small village units for rural residents to obtain basic supplies and services and attend worship services.

Purpose of this rural area

- *To encourage the preservation of historic structures and the very small villages located there, and*
- *To provide a place for neighborhood commerce and service businesses such as general stores and small specialty shops.*

Rural Village Areas in Detail: The purpose of these rural areas is to encourage the preservation of historic structures and the very small villages located there. A secondary purpose is to provide a place for neighborhood commerce and service businesses such as general stores and small specialty shops. Density would be 40,000 square feet with a density bonus given for preservation or historic structures and development in keeping with the character of the villages. These areas cover a very small area and are located on major town roads that must be maintained for rural residents, lakeshore residents and connections with adjacent communities.

.

Lake Area

This area provides an opportunity for the town to take advantage of the significant tax base that has already developed around the lakes and in this area where there are wonderful views of lakes and mountains from much of the private property. The area already has significant development, and demands for improved roads have been factored into the capital improvement plan. Views of this area from other areas of town are limited such that development of the area does not interrupt the most important scenery in Norway.

Purpose of this transition area:

- *To allow growth in keeping with the existing pattern of development in the area, and*
- *To take advantage of the significant property value that will be created by such growth, and*
- *To improve the standards so that the lakes and water resources will be protected.*

Lake Areas in Detail: These areas are designed to take advantage of potential lake access and views that are available in much of these areas. Property values in these areas are relatively high, and the town must take advantage of this value for its property tax base. At the same time, the areas will provide for lake protection, over and above current approach. Densities should be in the 80,000 square foot range. There would be no building on down- side of the cleared area where limited cutting would be allowed, and building envelopes (the amount of land that could be cleared) would be limited to no

more than 15,000 square feet. Ordinances should require a high percentage of phosphorus to be treated using on lot and natural methods and should discourage the constructed phosphorus control devices to serve multiple lots and road networks.

Open Space/Wildlife Areas

These areas consist primarily of land that is currently in tree growth, has significant natural resources or constraints such as wetlands or steep slopes, or are in the distant parts of the community. The density in these areas would be 80,000 square feet, but all land that is in steep slopes, wetlands and a 75-foot wetland buffer, streams and a 75-foot stream buffer would be subtracted from the total acreage before determining density. Where there is un-fragmented habitat in Norway, it exists in these areas. No part of such areas could be included in a building lot. The natural resources and constraints could not be built upon. People developing their land would be encouraged to preserve farm fields and forest land for commercial use or as wildlife habitat. Proposed roads would also be subtracted from the land area before determining density. The town would not upgrade roads in the area; roads in the area will be maintained in a safe, passable condition, but will not be upgraded. All landowners and real estate agents will be made aware of this, and there will be information in the town office for residents and prospective residents. When forestry is a viable commercial activity on the original parcel, at least 60 percent of the viable forest must be maintained by using open space development where such a percentage is deemed feasible as a working forest.

This area is contains much, but not all of the areas identified as Critical Natural Resources and Critical Rural areas. It is designed to protect scarce or especially vulnerable natural resources and open land functionally necessary to support a vibrant rural economy.

Purpose of this rural area containing critical natural resources:

- *To provide for some working forest to remain,*
- *To protect natural resources such as the Crooked River,*
- *To maintain the character of rural Norway,*
- *To prevent extensive development on land not well suited to it, and*
- *To provide for the extensive tracts of wildlife habitat that a good diversity of species requires.*

Open Space/Wildlife Areas in Detail: These areas consist primarily of land that is currently in tree growth, has significant natural resources or constraints such as wetlands or steep slopes, or are in the distant parts of the community. Much of it and generally adjoins large, undeveloped areas in adjacent towns. The purpose of these areas are to provide for some working forest to remain, to protect natural resources such as the Crooked River, to maintain the character of rural Norway, to prevent extensive development on land not well suited to it, and to provide for the extensive tracts of wildlife habitat that a good diversity of species requires.

Access management standards should be used, and for development along Route 117 and Route 118 additional access restrictions should apply such as use of common driveways, more restrictive driveway grades near the road, and other measures to ensure traffic safety.

Aquifer and Wellhead Protection Areas

The Wellhead Protection area is located in the extreme southeasterly part of town near the Oxford town line. The Aquifer Protection areas are located along the Little Androscoggin River in this same area and along sections of the Crooked River in the westerly part of Norway.

Purpose of this special protection area

- *To protect the public water supply and the sand and gravel aquifers in the town.*

Aquifer and Wellhead Protection in Detail: These areas are overlays to other land use requirements. They may restrict certain uses, and require the use of Best Management Practices for any business or operation that has the potential to pollute groundwater. The Wellhead Protection Area consists of several zones based on travel time of the groundwater to the well. Each zone has different requirements with the most restrictive pertaining to the area closest to the well.

Shoreland Zones

The Shoreland land use districts, those within 250 feet of lakes, rivers and identified wetlands and within 75 feet of identified streams, would remain as currently exists with one exception for streams as noted below.

Purpose of these critical resource areas

- *To protect the Shoreland Zone as required by State Law, and*
- *To protect the surface waters of Norway and the shorelines from unregulated development in order to preserve the aesthetics of the shorelines and protect water quality.*

.

Shoreland Zones in Detail (see map): The shore-land zone provides basic protection to surface waters and large open water wetlands. The land use districts that make up the shore-land zone are generally compatible with the type of development that existed in the area prior to the zoning. The districts also consider the natural resource base and physiographic features (lay of the land) such as steep slopes, wetlands, and floodplains, in determining the districts.

Stream Protection Areas

Currently, only streams that outlet from lakes or streams that form from the confluence of two perennial streams are protected. Buffers for all perennial streams will filter runoff, provide protection to fish habitat and ensure that stream waters are not excessively warmed by sunlight. Wooded buffers in these riparian areas also provide for wildlife travel corridors.

Purpose of these critical natural resource areas

- *To protect stream water quality and fish habitat and*
- *To provide riparian habitat and wildlife travel corridors.*

Stream Protection Areas in Detail: This area would create a 75 foot buffer area between development activity and all perennial brooks and streams. Forestry operations, which are regulated by the State would not be covered. Buffers provide riparian habitat

and wildlife travel corridors and help filter and treat any pollutants from runoff before they enter streams.

Critical Natural Resources and Critical Rural Areas

Areas identified in Norway as critical natural resources and critical rural areas must be protected. These are, but not limited to, Shoreland Resource Protection areas, areas in the well-head protection area and the sand and gravel aquifer, multi-function wetlands, State or Regional Habitat Focus Areas of Ecological Significance and significant and high value fisheries or wildlife habitat as defined by 13 MRSA sec 480-B(10), essential wildlife habitats and threatened, endangered and special concern species as defined by the Department of Inland Fisheries and Wildlife pursuant to the Maine Endangered Species Act.

Enforcement of Ordinances

The town will provide the planning board with ongoing training to fairly and effectively enforce the towns land use ordinances. The code enforcement officer will be provided with the tools, training and support necessary to enforce land use regulations. The town will ensure that the code enforcement officer is certified in accordance with 30-A MRSA sec 4451.

Norway

Downtown

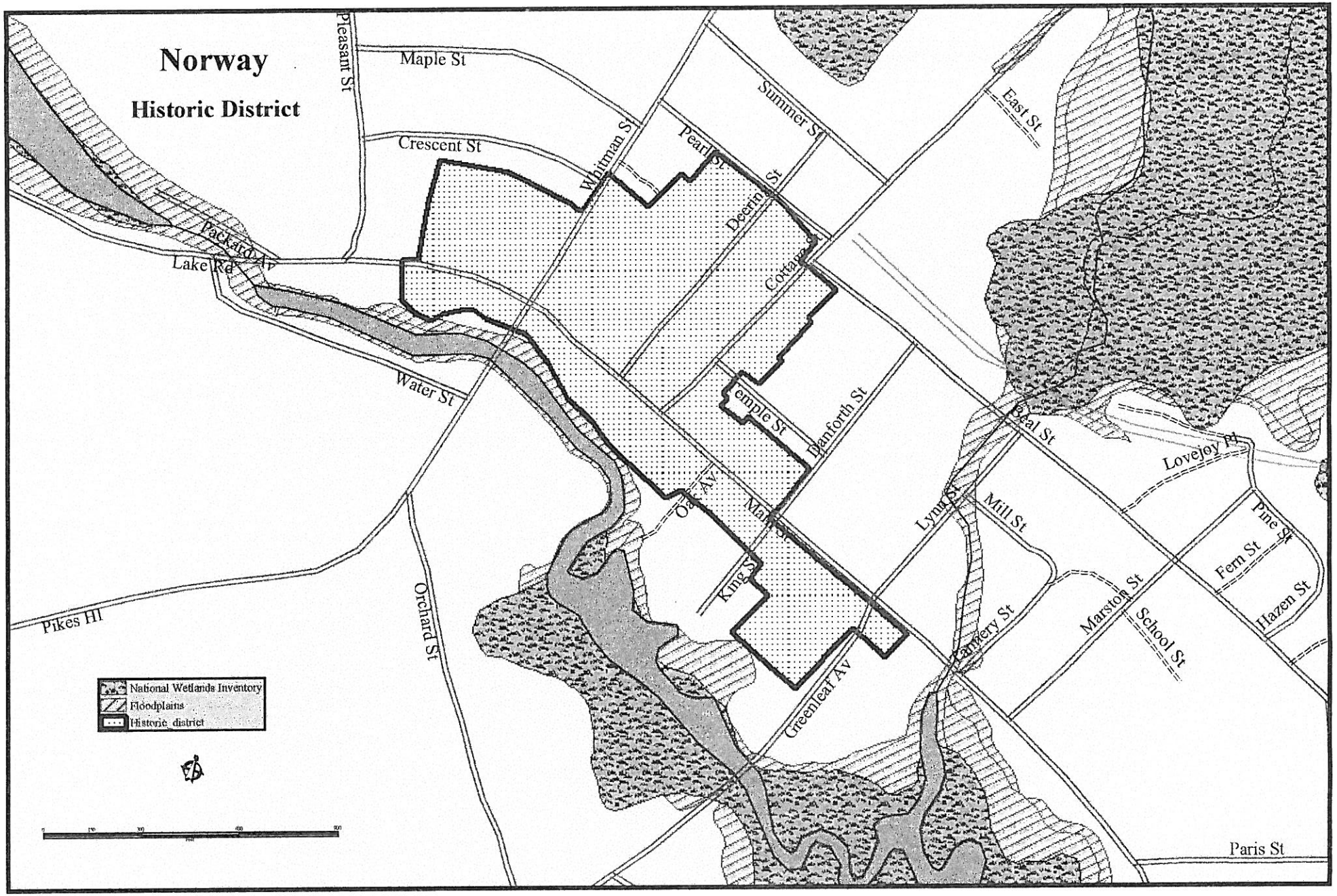
This map shows the Water System and the extent of the Sewer System. It also shows the natural constraints surrounding the downtown.

Pennesseewassee Lake

Pennesseewassee Lake

National Wetlands Inventory
Low Yield Aquifers
Floodplains
Steep Slopes
Water System
Area Served by Sewer

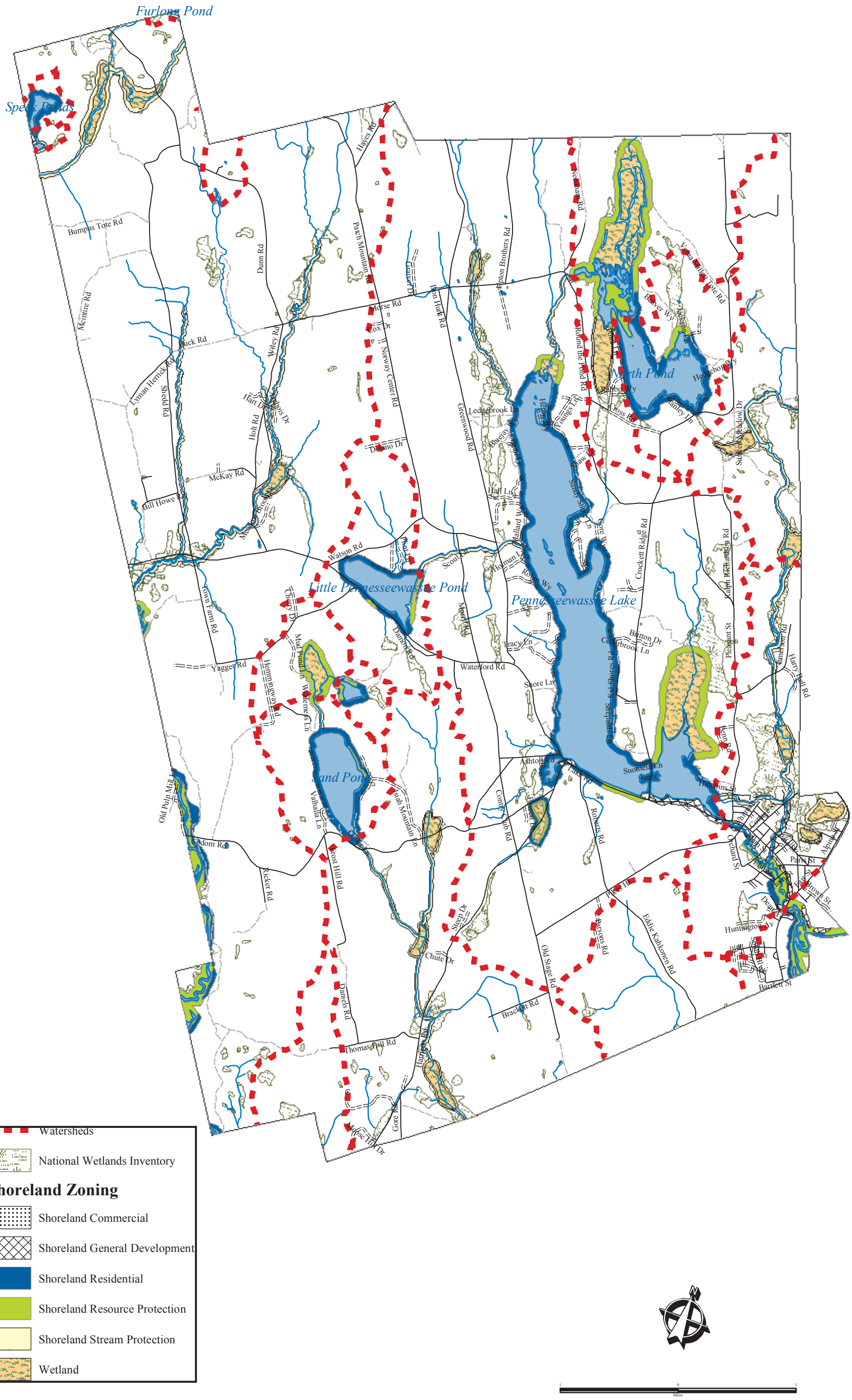
0 400 800 1600
Feet


Norway
Historic District
Pleasant St
Maple St
Crescent St
Whitman St
Pearl St
Summer St
East St
Deering St
Cottage St
Packard Av
Lake Rd
Water St
Temple St
Danforth St
Beal St
Lovejoy Pl
Oak Av
Main St
King St
Lyne St
Mill St
Pine St
Fern St
Hazen St
Marston St
School St
Tannery St
Greenleaf Av
Orchard St
Pikes Hl
Paris St
National Wetlands Inventory
Floodplains
Historic district

Norway, Maine

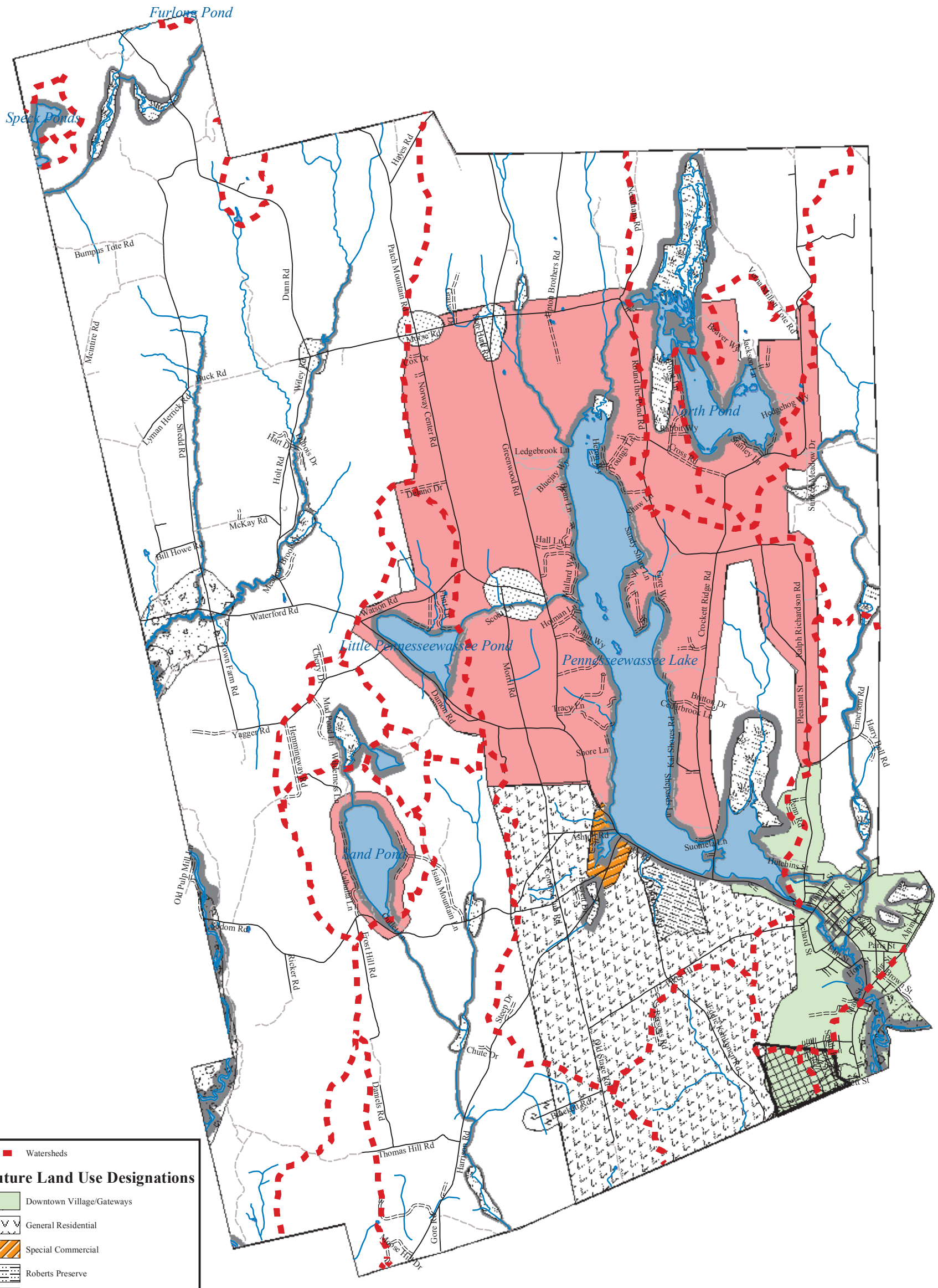
Future Land Use

Shoreland Districts only



Norway, Maine

Future Land Use
2011



Shoreland Zoning District designations
shown on accompanying map

Norway Comprehensive Plan

Background

Inventory and Analysis

Draft Update of June 14, 2004
Revised May, 2011

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INTRODUCTION

The comprehensive plan is a framework for decision-making for the next decade or so. It must be based on a clear understanding of the people, the economy, the public facilities, and the natural and other resources. The historic development patterns and the regional setting are also important elements that the plan must consider.

The Comprehensive Plan consists of two documents or volumes: the Inventory and Analysis, which is this volume, and the Policies and Strategies that are contained in a complementary volume entitled "Looking to the Future." The Inventory and Analysis of the community along with public input, provides a basis for the policy and action steps (strategies) that will lead us into the future.

THE PEOPLE

An analysis of the population and the characteristics of the people enhances the capability of the Town officials to prepare for future growth and the impacts that it will have on land use and community facilities and services. This chapter examines and documents historic, current, and future population trends, income and education characteristics, and other descriptive statistics of the people of Norway.

Population Trends

The population change in Norway has varied considerably over the past four decades. Between 1970 and 1980, the population of Norway increased by 12%. From 1980 to 1990, the population increased 18%, but from 1990 to 2000, the population decreased by 3%; and from 2000 to 2010, the population increased by 8.8%. The table below indicates trends in the region and shows that Norway's growth has been similar to Oxford County and the State in the longer term.

Population

	1970	1980	1990	2000	2010	% Change 1990-2000	% Change 1970-2000	% Change 2000-2010
NORWAY	**3,595**	**4,042**	**4,754**	**4,611**	**5,014**	**-3.0**	**28**	**8.8**
Greenwood	610	653	689	802	830	16.4	31.5	3.4
Harrison	1,045	1,667	1,951	2,315	2,730	18.7	121.5	15
Otisfield	589	897	1,136	1,560	1,770	37.3	165	12
Oxford	1,892	3,143	3,705	3,960	4,110	6.8	109	4
Paris	3,739	4,168	4,492	4,793	5,183	6.7	28	8
Waterford	760	951	1,299	1,455	1,553	12.0	91	6
West Paris	1,171	1,390	1,514	1,722	1,812	13.7	47	5
Oxford County	43,457	48,958	52,602	54,755	56,244	4.1	26	3
State of Maine	993,722	1,125,043	1,227,928	1,274,923	1,318,301	4.1	28	3

U.S. Census

Other Characteristics

Average Household Size: The average household size has decreased in Norway as it has for the region and most of Maine since 1980. Norway had a smaller household size than did the county and the state in 1980, and this trend has continued until a modest increase in the last decade. It is expected that, in the future, the household size will continue to decrease slightly in both Norway and the region.

Average Household Size

	Average Household Size 1980	Average Household Size 2000	Average Household Size 2010
NORWAY	**2.51**	**2.29**	**2.37**
Oxford County	2.77	2.42	2.42
Androscoggin County	2.73	2.38	
Franklin County	2.77	2.40	
Maine	2.75	2.39	2.36

U.S. Census

Age Distribution: Age distribution statistics for both 1980 and 2000 show that the population of Norway is aging as is the rest of the state. The table shows a significant drop (4%) in the 18 to 44 age group and an even greater increase (6%) in the 45 to 64 age group. The under 18 population appears to be relatively stable, although the percentage in this age group is slightly lower than for the county and state. Likewise, the over 64 population showed a slight decrease between 1980 and 2000, but the percentage in this age group is higher than for the county and state.

Age Distribution

	NORWAY 1980	NORWAY 2000		Oxford County 1980		Oxford County 2000		State of Maine 2000
Age	**#**	**%**	**#**	**%**	**#**	**%**	**#**	**%**
Under 18	**1,060**	**26**	**1,144**	25	14,422	26	335,485	26
18 - 44	**1,421**	**35**	**1,426**	31	17,598	32	440,253	35
45 - 64	**790**	**20**	**1,201**	26	13,942	26	315,783	25
65 and over	**771**	**19**	**840**	18	8,793	16	183,402	14
Totals:	**4,042**	**100%**	**4,588**	100%	54,755	100%	1,205,621	100%

U.S Census Note: For 1980 the population is under 18 and for 2000 it is reported as under 19. This causes a small discrepancy in both the under 18 and 18 to 44 age groups for 2000.

Education: The people of Norway have made strides in improving their education levels over the past two decades. A very significant decrease in the percentage of people not completing high school occurred, and while the number and percentage of high school graduates remained approximately the same, the percentage of people with college experience and degrees increased dramatically.

Educational attainment has improved but has fallen behind Oxford County as a whole, but it still lags relatively far behind the state. Norway has a higher percentage of people without high school diplomas and a significantly lower percentage of people with post graduate educational experience.

Educational Levels
1980 to 2009

	NORWAY						Oxford County				Maine			
	1980		2000		2009		2000		2009		2000		2009	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%
No Diploma	**1,008**	**34**	**678**	**21**	**338**	15.6	6,693	32	4,817	7.6	127,288	15	97,750	4.3
High School Graduate	**1,385**	**46**	**1,360**	**42**	**917**	42.5	16,317	46	19,336	46.9	314,600	36	326,009	38.0
Some College	**366**	**12**	**680**	**21**	**361**	26.7	8,960	12	11,926	28.9	229,045	26	254,466	29.7
Bachelor's Degree	**156**	**5**	**333**	**10**	**181**	8.4	3,985	6	4,499	10.9	129,992	15	157,038	18.3
Graduate/Professional Degree	**66**	**2**	**199**	**6**	**148**	6.9	1,974	3	2,349	9.7	68,968	8	83,036	9.7
Totals:	**2,981**		**3,250**		**2,160**		37,929		41,255		661,724		857,209	

U.S. Census

The following table provides the most recent data from the U.S. Census in more detail.

Educational Levels 2009
Detailed Information

Education Attainment	Norway	Oxford County	Maine
Less than 9th grade	**115**	1,672	36,660
Margin of Error	**5%**	0.6	1,235.56
9th to 12th grade, no diploma	**223**	3,145	61,090
Margin of Error	**4.30%**	0.9	1,517.4
High school graduate (includes equivalency)	**917**	19,336	326,009
Margin of Error	**n/a**	6.5	2,633.99
Some college, no degree	**361**	8,422	172,779
Margin of Error	**6.5**	5.8	2,285.28
Associate degree	**215**	3,504	81,687
Margin of Error	**5.60%**	0.9	1,491.27
Bachelor's degree	**181**	4,499	157,038
Margin of Error	**20**	0.7	2,264.99
Graduate or professional degree	**148**	2,349	83,036
Margin of Error	**3.9**	0.7	877.63
% High School Graduate or Higher	**83.7**	87.9	89.4
Margin of Error	**6.6**	1	0.5
% Bachelor's Degree or Higher	**15.2**	17.2	26.1
Margin of Error	**6.4**	1.1	0.3

Income: The Median Household Income in Norway, as presented in the table below, is significantly lower than for Oxford County and the State. This maintains a trend reported in the 1990 Comprehensive Plan that dates back to 1979. Furthermore, over the 20 years, households have lost ground compared to the state. In 1979, the Median Household Income in Norway was 86% of that for the state; in 1989 it was 79%, was only 77% in 1999 and 76% in 2009.

Median Household Income

	Norway	Norway as Percent of State	Oxford County	State
1989	**$22,154**	79	$24,535	$27,854
1999	**$28,497**	77	$33,435	$37,240
2009	**$37,551**	76	$40,055	$46,541

U.S. Census

The following table presents income levels and allows a comparison to the County and State. Again, it indicates that there is a significantly higher percentage of households with low incomes in Norway than there is for the state.

Household Income Levels
2009

	Norway		Oxford County		State of Maine	
Household Income	**#**	**%**	**#**	**%**	**#**	**%**
Below $10,000	**64**	**5.7**	1,823	8	40,154	7.4
Below $24,999	**431**	**38.2**	6,726	29.5	141,623	26.1
$25,000 to$49,999	**478**	**42.4**	7,364	32.3	147,592	27.2
$50,000 to $99,999	**148**	**13.1**	6,726	29.5	176,893	32.6
$100,000 or over	**70**	**6.2**	2,006	8.8	75,423	13.9

U.S. Census

Poverty: Over the past two decades, the poverty status of Norway's residents changed dramatically. In 1979, the percentage of families and individuals in poverty was significantly lower than for the State, but it is now somewhat higher. Alarmingly, the percentage of families with children under 18 in poverty is very high compared to the county and state, and the percentage of families with a female head of household in poverty is also very high.

Poverty Status
2009

	Norway	Oxford County	State of Maine
Percent Families below poverty level	**12.04**	13.96	12.79
Percent Families with Children under 18	**17.5**	13.2	11.9
Percent Families with female householder, no husband present	**36.4**	31.4	28.1
Individuals below poverty status	**12.7**	11.8	10.9
Individuals 65 and over below poverty status	**10.1**	10.1	10.2

U.S. Census

The People and Their Jobs

The occupations of the residents are integrally related to employment opportunities, educational levels and income. A dramatic loss in manufacturing jobs, as noted in the Economy section presented later in the Inventory and Analysis, establishes a basis for review of the following table that presents the Occupations of Norway residents in the labor force. Even with the loss in manufacturing jobs, Norway still has a higher percentage of the labor force in "production, transportation, and material moving" than does the state, and it has a similar percentage to the county. Some residents engaged in manufacturing have undoubtedly changed their place or type of employment to new industries, such as from wood product manufacturing to manufactured home construction, and some have chosen to commute further to work in manufacturing facilities in other regions. However, compared to the State of Maine, there is still some strength in manufacturing employment.

Occupations
(2009)

	Maine		Oxford County		Norway	
	#	%	#	%	#	%
Management, professional, & related occupations	218,740	33	6,342	25	**470**	**23**
Service occupations	115,436	18	5,144	20	**476**	**23**
Sales and office occupations	162,634	25	5,577	22	**559**	**28**
Farming, fishing, and forestry occupations	10,385	2	427	2	**0**	**0**
Construction, extraction, & maintenance occ.	68,696	11	3,964	16	**188**	**9**
Production, transportation, and material moving occ.	80,520	13	4,174	16	**341**	**17**
Employed civilian population 16 years and over	656,411		25,628		**2,034**	

Source: U.S. Census

The table shows that the number of persons in management, professional, and related occupations is below the state percentage and about the same as for Oxford County. Workers in these occupations generally have a higher level of education and higher incomes. The percentage of workers having service occupations is higher than for the state and county. These occupations generally demand lower educational attainment and have lower pay than many occupational areas. Sales and office occupations span a wide variety of fields. In this area, Norway has a higher percentage of workers than does the state, or the county. These occupations require some special knowledge and many require post high school education. Pay is generally better than for Service occupations, but often lower than many of the other types.

None of Norway's workers list their occupation as farming or forestry. This is lower than the state and county average, and points to the fact that Norway has no working farms left. The most notable farms have turned to alternative ventures such as raising deer and elk. This not only points to a small but sometimes vital missing element in the economy, but also has ramifications for land development.

Norway has a slightly higher percentage of workers in construction, extraction and maintenance. Since there are no commercial mines or significant commercial pits in Norway, the workers are in construction and maintenance. This undoubtedly reflects housing growth in southern and western Maine. Often, these workers are the most mobile and travel to jobs outside the area, generally, for relatively short periods of time.

Employment by Industry, 2009

	NORWAY		**Oxford County**		**Maine**	
	#	%	#	%	#	%
Agriculture, Forestry, Fishing, Mining	**0**	**0**	818	3	16,312	3
Construction	**129**	**6**	2,712	11	52,201	8
Manufacturing	**316**	**16**	3,853	15	67,501	10
Information Services	**28**	**1**	365	1	13,488	2
Transportation	**65**	**8**	912	4	26,636	4
Wholesale Trade	**42**	**1**	487	2	18,312	3
Retail Trade	**366**	**18**	3,255	13	89,747	14
Finance, Insurance, Real Estate	**58**	**3**	930	4	40,372	6
Personal Entertainment, Recreation	**119**	**6**	2,175	8	53,962	8
Professional: Management, scientific	**171**	**8**	1,610	6	52,906	7
Educational and Health Services	**591**	**29**	6,142	24	167,516	23
Other Services	**103**	**5**	1,289	5	30,174	5
Public Administration	**46**	**2**	810	3	27,284	4
TOTALS	**2,034**		25,628		656,411	

U.S. Census

Other Factors: Unemployment rates change based on general swings in the economy and the opening and closing of large local businesses. However, over the past two decades, the Town of Norway and the immediate region have had an unemployment rate that has exceeded the state's and, until the national economic downturn of 2008, the nation's.

As manufacturing has decreased in importance, the importance of people working at home or being self-employed has become more important. Forty-four (44), or four (4) percent, of Norway's workers worked at home and 206, or approximately 10 percent, reported being self-employed (in an unincorporated business). Some of these workers are providing services locally, some are providing professional services to a wide ranging area including New England or possibly the entire country, and others are manufacturing crafts or specialty items.

The average commuting time to work was 23.7 minutes, which was similar to that for the state. It can be assumed that the people of Norway have adapted to the changes in the economy by finding jobs relatively close to home, rather than traveling long distances to work in areas with more need for workers.

Conclusions

There has been a startling loss of manufacturing jobs in the area, and there has been a significant increase in the number of Service sector jobs including health and education. At the same time, the Median Household Income has fallen from 86% of the State's to 76% of the State's. The loss of manufacturing jobs and the change to an economy based on services may be the basis for the declining incomes.

The State, and generally the Country, is also losing manufacturing jobs. It will be necessary to adapt the economy to this new economic reality. Potentials include attraction of more technology related jobs and capitalization on the area's significant resources to attract visitors and tourism dollars.

The self-employed are an important segment of the economy. With more than 10% of the labor force being self-employed, the town needs to encourage continued entrepreneurship. These workers provide potential for economic growth: successful entrepreneurs may grow into businesses that have employees and may also provide products or services that will attract other businesses or tourism dollars to the area.

Norway must adapt to a changing world, federal, state, and regional economy. There is no clear blueprint on how to accomplish this, but it will take courage, flexibility, innovation and, most probably, some trials and errors.

Norway and the area also suffer from low educational attainment. Industries, both manufacturing and service sectors that depend on technology, require a well educated work force. As with the State, many of Norway's best and brightest students leave the area after completing their education. A vicious circle results. There are no jobs for well educated people, and the area cannot attract jobs because the work force is undereducated

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HOUSING

Housing Trends

Year-Round Housing Trends: While the population of Norway has increased by almost nine percent over the past decade, there has been a 2% decrease in the number of year-round housing units. From 1980 until 2000, the population grew by only 14%, but the number of total housing units grew by 26%. The growth in year-round units is indicative of both the population growth and the decrease in the number of persons per household since 1980. Thus, more housing units are needed for the same number of people. Since the decade of 2000 to 2010 was characterized by a severe downswing in the economy, the number of housing units needed may change again in better times when better housing can be better afforded.

Norway Housing and Housing Growth
1980 to 2010

	1980	1990	2000	2010	Percent Change 1980-2000	Percent Change 1990-2000	Percent Change 2000-2010
Total Units	2,011	2440	2,551	2,564	27	4.5	.5
Year-Round	1,704	1,927	2,155	2111	26	12	-2%
Seasonal	307	413	396	453	29	-4	14

U.S. Census

Seasonal Housing Changes: The growth in seasonal units between 1980 and 2010 can be attributed to the attractiveness of Norway's four major lakes, while the slight decrease over the 1990's was probably attributable to more people deciding to winterize seasonal properties and live near our lakes year-round. Now, most new units being constructed along the lake shores are also winterized units, many of which are being lived in year-round. Occupants of the converted and new lakeshore properties are often retirees or people willing to commute significant distances to work.

The demand for lakeshore property over the past several decades has contributed to some changes that would not have otherwise occurred. On one hand, the seasonal lakefront property adds to the tax base of the community without significantly increasing the demand for traditional municipal services, especially education, and it also brings revenue to the area as seasonal residents purchase goods and services. On the other hand, it has the potential to negatively impact the resources that form the attraction in the first place - more growth along the lakes leads to a change in the character of the shoreline and to the potential for more water quality degradation.

Regional Housing
Year-Round Units
1980-2010

Town	Units 1980	Units 2000	Units 2010	Growth Rate (%) 2000-2010
NORWAY	**1,704**	**2,155**	**2,564**	**19**
Oxford	1,078	1,561		
Paris	1,584	2,082		
Otisfield	354	619		
West Paris	476	678		
Greenwood	247	346		
Waterford	409	615		

U.S. Census

Year-Round Housing and Rental Units: Norway has a slower year-round housing growth rate than other towns in the area; however, it is still very significant. The Housing Occupancy table shows that the growth in renter-occupied units had been significantly greater than the growth in owner-occupied units from 1980 to 1990, but that this trend reversed itself in the past decade. The 1980 to 1990 growth in renter-occupied units reflected the construction of significant numbers of subsidized units. During this same period, many older, single- and two-family homes in the downtown were divided into multiple unit structures. During the 1990s, there was little activity in the area of low income housing. A few older multi-family units were destroyed by fire or razed for other reasons including expansion of the Stephens Memorial Hospital. More recently, the Town took an active role in assisting Community Concepts, the regional community action agency, to construct 24 low and moderate income units on Cottage Street, near the downtown and across the street from the New Balance shoe factory. The town approached Community Concepts with the idea for the project and helped them locate a suitable site. The town also constructed a sidewalk to the project.

A look at rents later in this section will show that many of Norway's homes and rental units are reasonably priced. While there has been a slight decrease in the number of rental units over the past decade, Norway is still coping with issues created by the rental housing growth in the previous decade. The town has identified that many of the rental units have been poorly maintained leading to a slow downward spiral in the condition of the downtown housing stock. Other impacts include a relative decrease in housing value in the downtown, a higher percentage of low income households, and a more transient population.

Housing Occupancy
(Occupied Units)

Occupancy Type	Number Units 1980	Housing Units 1990	Housing Units 2000	Housing Units 2010	Percent Change 1980-2000	Percent Change 1990-2000
Owner Occupied	1,125	1,268	1,367	1,501	13	8
Renter Occupied	459	620	605	442	35	-2
TOTAL	1,584	1,888	1,972	1,943	19	4

U.S. Census

The 1992 Comprehensive Plan reported that in both 1980 and 1990, the percentage of single-family housing units was significantly less than for Oxford County or the State. This trend has become more pronounced in this decade as shown in the following tables. The percentage of multi-family units has increased in compared to the state in the past decade.

The 1992 plan also reported an increase in the percentage of mobile homes from 1970 to 1989. The percentage of mobile homes in Norway still exceeds the percentage for the state in 2010 and is similar to the percentage in Oxford County, with both experiencing a decrease in the percentage of mobile home housing by 2010.

Comparison of Year-Round Housing Unit Types
1980

	Single-Family		Multi-Family		Mobile Home	
	#	%	#	%	#	%
NORWAY	**984**	**58**	**457**	**27**	**263**	15
Oxford County	13,190	70	3,786	20	1,857	10
State of Maine	282,560	66	110,580	26	35,105	8

U.S. Census

2000

	Single-Family		Multi-Family		Mobile Home	
	#	%	#	%	#	%
NORWAY	**1,235**	**58**	**492**	**23**	**418**	**19**
Oxford County	15,318	75	1,006	5	4,009	20
State of Maine	352,376	64	131,342	24	63,902	12

U.S. Census (single-family determined by subtracting vacant seasonal, etc., units from total single-family)

2010

	Single-Family		Multi-Family		Mobile Home	
	#	%	#	%	#	%
NORWAY	**541**	**48**	**408**	**36.2**	**179**	**15.9**
Oxford County	16,949	74.3	3,032	13.3	2,827	12.4
State of Maine	373,863	68.9	115,577	21.3	53,719	9.9

U.S. Census

Occupancy/Vacancy Rates: Thirty-six percent of the occupied units in Norway are occupied by renters in multi-family housing. The vacancy rate for homeowner units in 2000 was a relatively low 1.5 percent and was about average for the area and similar to that of the state. However, the vacancy rate for rental units was 12.9%; this was much greater than the state's rate of seven percent, significantly higher than most surrounding towns and slightly higher than the county rate of 10.7%.

Another important feature about occupancy is the length of time people have lived in a unit, referred to as housing tenure.

Housing Tenure Comparison
Norway and Selected Areas
2000

	Maine	Oxford County	Norway	Oxford	Paris
Occupied housing units	518,200	22,314	**1,972**	1,486	1,975
1990 to March 2000	302,324	11,765	**1,231**	829	1,206
Percent 1990 to 2000	*58*	*53*	***62***	*56*	*61*
1980 to 1989	99,479	4,739	**388**	315	344
Percent 1980 to 1989	*19*	*21*	***20***	*21*	*17*
1970 to 1979	58,595	2,723	**147**	214	160
Percent 1970 to 1979	*11*	*12*	***7***	*14*	*8*
1969 or earlier	57,802	3,087	**206**	128	265
Percent before 1969	*11*	*14*	***10***	*9*	*13*

2010

	Maine	Oxford County	Norway	Oxford	Paris
Occupied housing units	542,617	22,799	**1,943**	1,657	2,187
2000-2009	261,552	9,409	**1,014**	737	815
Percent 2000-2009	48	41	**52**	44	37
1990 to March 2000	302,324	11,765	**454**	829	1,206

	Maine	Oxford County	Norway	Oxford	Paris
Percent 1990 to 2000	*58*	*53*	***23.4***	*56*	*61*
1980 to 1989	99,479	4,739	**281**	315	344
Percent 1980 to 1989	*19*	*21*	***14.5***	*21*	*17*
1970 to 1979	58,595	2,723	**129**	214	160
Percent 1970 to 1979	*11*	*12*	***6.6***	*14*	*8*
1969 or earlier	57,802	3,087	**65**	128	265
Percent before 1969	*11*	*14*	***4.3***	*9*	*13*

U.S. Census

The housing tenure of Norway residents appears to be of a shorter duration than for the state, county and surrounding towns. This is a trend that has continued over the years. In Norway in 2009, 52% of householders had moved into their current unit since 2000; for the state the rate was 48%. Paris, another community with a considerable number of rental units, had a rate of 37%, and the county had a rate of 41%. Only 4.3% of the householders had lived in their units prior to 1969. This was lower than the state at 11% and the county at 14%. The percent of families having moved into their unit within the past 10 years did decrease in the 2009 data from that of 2000; however, this trend was also true for the state, county, and several adjacent towns.

These numbers only provide a glimpse of the housing tenure. With housing growth, there are occupancy changes, but with Norway's moderate housing growth, it is not expected that this accounts for the higher turnover rates in occupancy. The Census data also does not reflect the many households living in rental units that may have much more frequent turnover than once in the past decades.

Condition: The following table gives some indication of the condition of the housing stock. While not a perfect indicator, the age of the housing stock gives some indication as to condition. Additionally, the number of units without bathroom and/or kitchen facilities also is an indicator of housing conditions with those not having such facilities expected to be in relatively poor condition and not well suited to current living standards. (They would be considered substandard by the housing authorities.)

Age of Housing Stock
Norway and Selected Areas
2010

Units / Years	Maine	Oxford County	Norway	Greenwood	Otisfield	Oxford	Paris	Waterford
	696,948	34,553	**2,564**	746	1,160	1,998	2,066	1,114
2000-2009	53,139	1,706	**129**	78	134	146	99	49
Percent 00 to 10	7.6%	4.9%	5.0%	10.5%	11.6%	7.3%	4.8%	4.4%
1990 to 2000	94,909	5,183	**288**	90	341	396	395	160
Percent 90 to 00	*15*	*16*	***11***	*13*	*34*	*21*	*18*	*18*

Units Years	Maine	Oxford County	Norway	Greenwood	Otisfield	Oxford	Paris	Waterford
	696,948	34,553	**2,564**	746	1,160	1,998	2,066	1,114
1970 to 1989	207,845	10,184	**867**	290	337	756	660	266
Percent 70 to 89	*32*	*32*	***34***	*42*	*33*	*39*	*31*	*30*
1940 to1969	159,288	7,089	**583**	143	166	489	445	188
Percent 40 to 69	*24*	*22*	***23***	*21*	*16*	*25*	*21*	*21*
1939 or earlier	189,859	9,839	**813**	164	173	279	642	281
Percent 39 or earlier	*29*	*30*	***32***	*24*	*17*	*15*	*30*	*31*

U.S. Census

Sixteen percent of Norway's housing stock was constructed from 1990 to 2010. This is considerably lower than the state which had almost 23 percent of the housing stock constructed during those years. The percentage constructed from 1940 to 1989 does not vary significantly from the State's percentage, but the amount constructed prior to 1940 is slightly higher than the State's and the County's percentages and higher than most of the surrounding towns. Thus, Norway's housing stock is generally older than that of the State, County and surrounding towns.

In 2010, Norway had 28 units, or just less than 1.5 percent, of its occupied housing that lacked plumbing and/or kitchen facilities. This is a decrease from the percentage lacking facilities in 2000 and compares favorably with the state and Oxford County.

A 1990 survey conducted for Community Development purposes found about 20 percent of the housing stock to be in "poor" condition, indicating that units needed substantial repairs. It is expected that this survey is still a generally accurate picture of the condition of the housing in Norway.

Housing Costs and Affordability

Owner-Occupied Units/Single-Family Homes: In 2009 a very high percentage of the housing units in Norway cost between $100,000 and $149,999. This was a much higher percentage in that category than for the county and for the rest of Maine. For units falling below $50,000 in value, Norway's percentage was lower than that for the state and the county. The percentage of owner occupied units having a value over $200,000 was lower than the state and county,

The median value of an owner-occupied unit was slightly higher than for the county, but was only 69 percent of the state's median value.

Percent Owner Occupied Units
by Price Range (2009)

Price Range	Maine	Oxford County	Norway
Total Units	395,233	17,966	**1,501**
Percent< $50,000	*8.2*	*9.6*	***18.7***
Percent $50 to $99,999	*15.7*	*21.3*	18.2
Percent $100 to $149,999	*17.2*	*23.3*	***27.8***
Percent $150 to $199,999	*18.0*	*18.9*	***13.9***
Percent > $200,000	*41*	*26.9*	***21.4***
Median value (dollars)	$ 172,100	$ 140,800	**$ 119,400**

U.S. Census

To consider the full range of housing prices with current data, information was collected on sales prices for single-family homes from 2000 through 2002. The information was obtained from the Assessor's sales analysis program and is reported in $10,000 increments up to $200,000 and in larger ranges for prices over that.

Rental Housing Units: A detailed study of rental rates was not conducted as an element of this Comprehensive Plan. However, a review of local real estate data was done in the fall of 2003; rental rates range from $375 and up for a one bedroom unit to $425 and up for a two bedroom apartment and $500 and up for a three bedroom apartment. Most renters pay their own utilities which would add $25 to $50 per month onto these rates. Rental rates for a single-family home would generally be a minimum of $550 plus utilities. Additionally, several boarding homes (single room rentals) are located in the Downtown area. Since these types of units share kitchen and/or bathroom facilities, their rental rates are much lower than the above costs, with rooms available for approximately $325 per month including utilities.

There are 93 subsidized units in Norway including 18 units in the Norway Family Apartments which was recently constructed. The 93 units are distributed in six housing complexes located in or near downtown Norway.

Housing Costs versus Income: The recent Census provides the monthly housing costs as a percent of income for both renters and home owners. The following table is presented for Homeowners.

Homeowner Costs
as Percentage of Household Income

	Maine	Oxford County	Norway
Percent of Homeowners paying <29.9%	*65.4*	*65.4*	***64.8***
Percent of Homeowners paying 30 to 34.9%	*8.9*	*8.6*	***18.1***
Percent of Homeowners paying >35%	*25.6*	*26.9*	***17.2***

The percent of homeowners in Norway that are paying less than 29.9% of their income for their household costs is 0.6%, less than the percentage of state or county residents paying less than this amount. A smaller percentage of Norway's residents are paying in the 30 to 34.9 percent range of their income in household costs, and a much smaller percentage as for the state and county is paying more than 35 percent for household costs.

The following two tables present information on renter housing costs. In the recent Census, no renters in Norway were paying less than $299 per month while the state and the county did have more than 10% of renters paying below this figure. Twelve and three tenths percent (12.3%) are paying less than $499 whereas 35.7% of county renters and only 26.2% of state renters are paying less than that. Thus, Norway's residents appear to be paying higher rents than residents of the overall state and county.

Monthly Rental Costs
(2009)

	Maine		Oxford County		Norway	
Rental Costs	**#**	**%**	**#**	**%**	**#**	**%**
Less than $200	7,006	5.2	227	5.4	**0**	**0**
$200 to $299	9,120	6.7	372	8.8	**0**	**0**
$300 to $499	19,406	14.3	911	21.5	**43**	**12.3**
$500 to $749	43,730	32.3	1,632	38.5	**200**	**57.0**
$750 or more	56,225	13	1093	25.9	**108**	**30.8**
No cash rent	11,897	7	598		**23**	
Median (dollars)	$ 688		$ 601		**$ 691**	

U.S. Census

The following table indicates monthly rental costs as a percentage of household income. Norway has a greater percentage of its renters paying more than 19.9 percent and 29.9 of their incomes in rent than does the county or state. Forty-nine and six tenths percent (49.6) percent of renters are paying over 35% of their income in rent, compared to 36.3 and 38.7 for the county and state, respectively. This, again, is an indication that rents in Norway are high.

Renters Costs
as a Percentage of Household Income

	Maine	Oxford County	Norway
Percent households <19.9% of income	24.6	23.3	**7.1**
Percent households 20 to 29.9 of income	26.7	29.4	**24.5**
Percent households 30 to 34.9 of income	10.0	11.0	**18.8**
Percent households >35 of income	38.7	36.3	**49.6**

Affordability: The U.S. Department of Housing and Urban Development (HUD) has established guidelines for determining general income housing affordability ranges. The income levels which are of primary concern with respect to housing affordability are moderate, low-income, and very-low-income which are defined as being 150%, 80%, and 50% of median household income, respectively.

Estimated Affordable Housing Prices

Income Level	Household Income	Monthly Gross Rent	Sales Price
Moderate	$37,551	$1,068	$129,000
Low	$22,797	$569	$48,100
Very Low	$14,248	$356	$29,700

Source: Table prepared by AVCOG based on median household income levels from 2000 U.S. Census and formulas provided in guidance prepared by SPO.

Affordability was based on the capacity to spend 30% of the household income on rental costs or on the mortgage cost plus an allowance for utilities. The table shows the affordable costs for rent and an affordable selling price for each of the household income categories of interest.

Norway appears to have an affordable housing problem at this time with rents and home sales not affordable by some income levels. The very low income households have considerably less choice and appear to be priced out of the rental housing market unless they receive rental assistance of some type. The 93 subsidized units provide some relief to this situation; however, most of these units have very low vacancy rates so needs may not always be met. However, Norway has continued to provide opportunities for low income housing and recently enacted a property maintenance code to insure units meet health and safety standards. Norway must be careful that ordinances and land use controls do not inadvertently cause the cost of housing, especially in the downtown, to escalate beyond affordability levels.

The low income level undoubtedly impacts the percentage of their income that households must spend on housing. In addition to the income issues cited in the population and economy sections of the plan, median income levels are also lowered by the number of households living in assisted housing and those living in "boarding" homes where "rents" cannot be characterized by unit.

ECONOMY

Overview

The town of Norway and surrounding area had its original economy based on agriculture and subsequently manufacturing industries, in particular, shoes and wood products. Much of the agriculture in Norway was supplanted by manufacturing from the Civil War period through the mid 20th Century. Over the past 40 or more years, the traditional manufacturing base has eroded as jobs in several industries, including shoes, moved off-shore or overseas. Additionally, many forest product and wood based manufacturers have faced serious competition from overseas manufacturers. This has led to the demise of most wood product companies, including most recently, C.B. Cummings that had been a mainstay of the manufacturing base.

As traditional industries in the area have closed, a few new ones have located in the area. A bright spot for Norway is the establishment of a New Balance athletic shoe manufacturing facility located near the downtown. There are manufactured housing facilities located in adjacent towns. While not providing a tax base, they do help with school taxes and also provide jobs for area workers including Norway residents.

Norway, and the area, is faced with a continuing struggle to create jobs, improve tax base, and revitalize its economy.

Employment of Labor Force

Following is a table reporting Employment by Industry for 2010. It provides a count of the residents of Norway working in the various industries listed. Over the past several decades, the Census has changed the industry sectors so comparison of employment trends over time is made more difficult. The most significant trend has been the decrease in jobs in Manufacturing. In 1980, 44 percent were employed in some type of manufacturing; in 2000, only 20% were. No one sector has had a similar increase, but Construction, Transportation, Recreation and Entertainment all had significant increases in the percentage of people employed by those industries. The percentage working in Retail and Wholesale Trade, Financial Services and Public Administration was relatively constant. The percentage working in the fields of Health Services and Educational Services had the most pronounced increase, from 10% to **29**%.

Even with the significant decrease in manufacturing employment through 2010, the percentage of workers in Manufacturing still exceeded the percentage for the State. However, in both cases the percentage of workers in Manufacturing has dropped dramatically over the past two decades. Employment in other industries is similar at the town and state levels.

Employment by Industry, 2009

	NORWAY		Oxford County		State of Maine	
	#	%	#	%	#	%
Agriculture, Forestry, Fishing, Mining	**0**	**0**	818	3	16,312	3
Construction	**129**	**6**	2,712	11	52,201	8
Manufacturing	**316**	**16**	3,853	15	67,501	10
Information Services	**28**	**1**	365	1	13,488	2
Transportation	**65**	**8**	912	4	26,636	4
Wholesale Trade	**42**	**1**	487	2	18,312	3
Retail Trade	**366**	**18**	3,255	13	89,747	14
Finance, Insurance, Real Estate	**58**	**3**	930	4	40,372	6
Personal Entertainment, Recreation	**119**	**6**	2,175	8	53,962	8
Professional: Management, Scientific	**171**	**8**	1,610	6	52,906	7
Educational and Health Services	**591**	**29**	6,142	24	167,516	23
Other Services	**103**	**5**	1,289	5	30,174	5
Public Administration	**46**	**2**	810	3	27,284	4
TOTALS	**2,034**		25,628		656,411	

U.S. Census

Regional Employment Trends

Norway is located in the Norway/Paris Labor Market Area (LMA). An LMA is an economically integrated geographical unit within which workers may readily change jobs without change of residence. The Norway/Paris LMA includes Norway, Paris and Oxford and 6 surrounding towns, a decrease in size from the 1989 information provided in the 1992 Comprehensive Plan. However, the towns that are not now included had relatively few employment opportunities compared to the overall area. Therefore, the trends noted by comparing the 1990 data to the 2000 data are a reflection of the job market rather than a reflection of the loss by creating a smaller Labor Market Area.

The following table summarizes non-farm wage and salary employment in the Norway/Paris LMA in 1989 and 2000. In 1989, approximately 30 percent of the jobs in the area were manufacturing, and in 2000 only 17% of the jobs were in manufacturing. There was a decrease of approximately 1,000 manufacturing jobs in the area with only the manufacturing of machinery having a gain in jobs. Still, the area had a higher percentage of manufacturing jobs as a percentage of the total than did the state.

Non-manufacturing jobs grew by approximately 1,500, or a 26% increase. In the non-manufacturing sector, Construction, Transportation and Utilities, and Services, including business services and health, were strong growth sectors. Several service categories not listed in the 1989 data are also expected to have been strong growth sectors.

Non-Farm Wage and Salary Employment
Norway-Paris LMA

	1989	2000	2010	Percent Change
TOTAL	7,850	8,017		2.1
Total Manufacturing	2,380	1,342		-43.6
Durable	1,680	940		-44.0
Lumber	1,090	600		-45.0
Logging	40	10		-75.0
Sawmills	240			-100.0
Misc. Wood Products	510	310		-39.2
Stone, Clay, Glass	20			-100.0
Fabricated Metal	50			-100.0
Machinery except elect.	150	230		53.3
Other Durable	370			-100.0
Nondurable	700	400		-42.9
Printing and Publishing	140	40		-71.4
Other Nondurables	530	360		-32.1
Total Non-manufacturing	5,480	6,910		26.1
Construction	460	600		30.4
Residential Building	150	220		46.7
Special Trades	280	250		-10.7
Transportation & Utilities	140	380		171.4
Wholesale Trade	70	70		0.0
Retail Trade	1,910	1,880		-1.6
Finance, Ins. & Banking	270	280		3.7
Services & Mining	1,670	2,330		39.5
		50		
Hotel & Lodging	170	40		-76.5
Personal Services		70		
Auto Repair		70		
Amusement and		90		
Business Services	40	270		575.0

	1989	2000	2010	Percent Change
Health	620	900		45.2
Social Services		410		
Government	950	1,370		44.2

Source: Maine Department of Labor

Labor Force and Employment

Labor Force Size: The Maine Department of Labor estimated that Norway's 1989 labor force was 2,030 persons. This compares to an estimated 2000 labor force of 2,580, or a 27% increase. Although the town's total population decreased by 3% between 1990 and 2000, the labor force increased by 27%. This was the result of a larger percentage of the total population in the labor force in 2000.

Unemployment: Norway and the Norway/Paris Labor Market Area have typically had unemployment rates higher than the State's. The following table shows this long-term trend, and also shows that Norway's unemployment rate is historically higher than even that of the Labor Market Area, and this is one of Norway's most significant challenges.

Unemployment Statistics
Norway and Selected Areas, 1990-2010

	1990	1998	1999	2000	2001	2002	2005	2006	2007	2008	2009	2010
Norway	**9.0**	**6.6**	**5.9**	**4.7**	**5.5**	**6.9**	**6.4**	**6**	**6**	**8**	**11.2**	**10.4**
Norway-Paris Labor Market Area	7.6	6.3	6.1	4.9	5.4	6.5	5.8	4.67	5.8	7.1	10.8	10.2
State of Maine	5.2	4.4	4.1	3.5	4.0	4.5	4.88	4.67	4.68	5.34	8.03	7.88

Maine Department of Labor, Bureau of Employment Security

Commuting Patterns

For Norway Residents: Over the past 30 years, there has been a shift in the location of employment of Norway workers. Less than a third of Norway workers live and work in Norway. In 1980, 44% of Norway residents worked in Norway. Between 1980 and 2000, the number of Norway workers working in Paris remained the same but those traveling to Oxford, Androscoggin County and Cumberland County increased significantly. This trend is the result of loss of traditional industry and better paying jobs elsewhere.

Norway Resident Work Locations
1980-2000

Where Norway Residents Worked	# of Norway Residents Working at the Location-1980	Percentage of Total Resident Workers-1980	# of Norway Residents Working at the Location-2000	Percentage of Total Resident Workers-2000
Norway	**907**	**44**	**606**	**29.3**
Paris	306	18.8	307	14.8
Oxford (Town)	183	11.2	376	18.2
Other Towns in Oxford County	59	3.6	203	9.8
Androscoggin County	114	7	309	14.9
Cumberland County	30	1.8	198	10
York County	29	1.8	6	0.3
Total	1,628		2,005	

Source: 1980 & 2000 U.S. Census

Those working in Norway: According to the 2000 Census, 1,843 persons worked in the town of Norway (a combination of residents and nonresidents). This was a decrease of approximately 250 from 1980. Some two-thirds of the people working in Norway came from out-of-town. Of those who commuted to Norway, most came from other Oxford County towns, while the remainder came from Androscoggin and Cumberland Counties.

Where Norway Workers Come From
1980-2000

Location Where Norway Work force Lived	# of Norway Workers Residing at the Location 1980	Percentage of Total # Working in Norway 1980	# of Norway Workers Residing at the Location 2000	Percentage of Total # Working in Norway 2000
Norway	**907**	**43.3%**	**606**	**32.8%**
Paris	386	18.4%	273	14.8%
Oxford (Town)	213	10.1%	173	9.4%
Other Towns in Oxford County	364	17.4%	538	29.1%
Androscoggin County	87	4.3%	122	6.6%
Cumberland County	129	6.1%	102	5.5%
Other	4	0.1%	29	1.6%
Total	2,090	100.0%	1,843	100.0%

Source: 1980 & 2000 Census

Employment Base

The employment base of Norway has changed considerably over the past two decades, and even over the past few years. The following table lists the major employers in Norway.

Major Employers
Norway, 2010

Employer	Industry Category
New Balance	Athletic Footwear
Stephens Memorial Hospital	Hospital
Norway Nursing	Nursing Home
Norway Savings	Bank
Grover Gundrilling, Inc.	Machine Shop

TRANSPORTATION

Introduction

Transportation facilities, including roads, are important to a community's economy, residential growth, and its overall development pattern. Additionally, expenditures for roads are generally the second highest expenditure in Town budgets. These two issues demonstrate the importance of inventorying and analyzing transportation facilities for a community.

Norway has been aggressively addressing road and other transportation issues over the past decade. Shortly after adoption of the 1992 comprehensive plan, a road committee was formed to provide input on the development of a Road Improvement Plan. Such a plan, including a complete inventory, was developed in the mid 1990s and has been used as a basis for road improvements since. More recently, the town has discussed trail development and pedestrian movement. While a proposal to develop a walking trail along the path of the old Norway Railroad was dropped in the late 1990s due to public sentiment, more recently other trail development efforts have started. Additionally, in 1991 the town conducted a sidewalk inventory and improvement plan for the downtown, including the residential areas.

Community Opinion

The Comprehensive Planning Committee conducted a "Survey of the Future" which asked some similar questions to a survey done for the previous comprehensive plan. Transportation related facilities were included and are reported in the table that follows. Residents were asked if they were satisfied, dissatisfied, or had no opinion regarding the quality of Town services and whether or not they would be willing to spend additional money to improve the service. The survey rated the four services listed in the table. A significant majority of respondents were satisfied with sidewalks, parking and street lights, but only 38% were satisfied with road maintenance. However, 67%, a very significant number, appeared to be willing to spend more to improve road maintenance.

Although the town has done considerable work on their roads over the decade, the percentage of respondents reporting to be satisfied with roads has dropped from 43 to 38. While the poll does not give statistically accurate answers, it does give some indication of public sentiment. And while the percentage satisfied with sidewalks and parking were high, they were both lower than in the last survey.

Public Opinion on Transportation Related Facilities

Town Service	Satisfied %	Dissatisfied %	Spending %		
	Yes	No	More	Same	Less
Road Maintenance	38	59	67	29	4
Sidewalks	66	36	37	53	9
Parking	67	25	24	66	10
Street Lights	71	9	15	77	8

The Road Network

Roads are the most important element of Norway's transportation facilities. There are several ways to classify roads. Generally, they can be classified as state, local and private, but the State Department of Transportation has classified them into a system of use which includes Arterial Highways, Collector Highways, Local Highways, and Private Roads. These designations are important because they relate to the State Access Management Law that regulates access to state highways. They also have classified them into the State Highway System, which includes State Highways, State Aid Highways and Townways. This classification system is important because it determines whether the state or town is responsible for maintenance (and its associated costs), or whether the maintenance is shared (winter vs. summer). The state designation of rural or urban highway is also important because towns are responsible for winter maintenance of urban highways, such as the stretch of Route 118 through downtown Norway.

There is a total of 84.4 miles of public roadways in Norway according to the Maine Department of Transportation (MDOT).

Roads by MDOT Jurisdiction Classification

Highway Type	Miles
State Highway	12.23
State Aid Road	3.29
Town Road	68.92
Total Public Roads	84.44

State Roads: State roadways in Norway include Routes 26, 117 and 118. Route 26 is the most well traveled route in Norway; only a short stretch (1.11 miles) runs through Norway as it goes from Portland to the western Maine mountains and beyond to northern New Hampshire and eventually Quebec. Route 26 is located just southeasterly of downtown Norway and connects the town to commercial areas in Paris and Oxford. It is classified by MDOT as an arterial highway.

Routes 117 and 118 are the other two state highways in Norway. They serve areas to the northwest and west of Norway. Route 117 is classified by MDOT as an arterial highway and Route 118 is classified as a collector.

State roadways located in nonurban areas are maintained by the State. Road maintenance includes plowing, sanding and salting in the winter and roadway repair and resurfacing in the summer. The Town assumes the winter maintenance responsibility for State roads located in the urban (Downtown) area including Route 117 running through downtown Norway.

The Greenwood Road which runs northerly to the west of Pennesseewassee Lake is a State Aid road from its intersection with Route 118 to its intersection with Morse Road and Round the Pond Road in North Norway. It is designated as a minor collector. The town is responsible for winter maintenance of State Aid roads but MDOT provides the general upkeep including paving and ditching.

Local Public Roadways: The Town is responsible for both summer and winter roadway maintenance for local roads which consist of approximately 69 miles. MDOT classifies all highways that are not in the arterial or collector classification as local roads. They are designed primarily to serve adjacent land areas and to carry traffic from neighborhoods and low density rural areas to collector roads. The volume of traffic on local roads varies considerably. There are approximately 49.5 miles of paved local roads and 19.5 miles of gravel roads.

Private Roadways: Additionally, there are over 60 miles of private roads located in Norway. Many serve residences located on or near the shores of the four major lakes in town. Some serve remote rural areas and are abandoned or discontinued town or county roads. A few are private roads which serve mobile home parks or newer subdivisions; these are the only private roads that meet town road standards. The residents that own property that use the private road assume the winter and summer maintenance responsibilities for the road.

Private roads, especially the older ones serving lake development or remote rural areas, are a concern from several standpoints. They present significant problems for emergency vehicle access, and they also are prone to erosion, which can adversely impact surface waters. Of significant concern to the lakes in town is the maintenance of the camp roads that serve the lake development. Many are now plowed in the winter to serve year-round residents and seasonal owners that want to participate in winter sports in the area. Emergency vehicle access is even more problematic when there is snow cover, and winter plowing creates additional erosion potential on most roads.

In the early 2000's The Lakes Association of Norway (LAON) and the Town of Norway have been working with Androscoggin Valley Council of Governments (AVCOG) to provide minimal financial assistance obtained from grants from the Maine Department of Environmental Protection and technical assistance with the maintenance of camp roads. LAON also provides educational information through its newsletters and annual meetings.

Town Road Conditions

As part of the previous Comprehensive Plan inventory, the Town of Norway undertook a road surface inventory of all town-owned roads. The information was put into a Road Surface Management computer model, and a Road Improvement Plan was generated in an Excel spreadsheet form. Since then, the town has maintained the information and has used it to plan and budget road work each year. Emphasis has been placed on paved roads and several gravel roads that have been identified for paving due to increasing traffic volumes. Recently, the inventory has been placed in a GIS system.

Road Conditions

Repair Category	Length of Road	Percent of Paved Roads
Poor	8.8	12.7
Fair to Poor	4.3	6
Fair	13.3	19.3
Fair to Good	0.3	0.4

None Required -Good	22.9	32.6
Total Paved	49.6	
Gravel	19.5	
TOTALS	69.1	

AVCOG and Highway Department

Norway's roads are in reasonably good condition. There has been significant improvement since the first inventory done in 1990. To a large extent, this defies the community survey responses. Some additional effort by the town is needed to determine why roads have continued to improve but the satisfaction, at least of respondents to the survey, has decreased.

In 1990, only 0.5 miles of paved road was in Good condition, and almost 21 miles of paved road was in Poor condition. The table shows that the amount of road in Good condition has increased dramatically, and that the amount of road in Poor condition has been decreased by almost 50 percent. Since 1995, the town has reconstructed or rehabilitated more than 37 miles of road. To accomplish this, the town increased the amount of funding put into the capital improvements for roads and has utilized several bond issues. However, even as the road conditions have improved over the past decade, some of the first roads rehabilitated under the Road Improvement Program have started to deteriorate to the point of needing some significant preventive work. In order to improve all of the paved roads that are in Poor or Fair to Poor condition and maintain the others so that they do not fall into that category, it will be necessary to continue to put significant expenditures toward the road program. If adequate funding is put towards the roads in Fair or better condition as the Poorer roads are being reconstructed, then within the next decade, the town should be able to move toward more of a preventative approach, which should ultimately save tax dollars.

Highway Department

The Highway Department includes the Road Commissioner and eight full-time employees. The Highway Department is responsible for maintaining local roads, sidewalks, cemeteries, public parking areas and public grounds. Roadway and sidewalk maintenance responsibility includes snow plowing, sanding and road salting during the winter months and roadway improvements, repair and maintenance. They also do some improvement and maintenance work on the town's recreational facilities.

The Town Highway Garage is located on Grove Street, off of Route 26. It is in the same area as the regional transfer station and recycling facility and the Norway Sewage Treatment Facility. The garage contains the Road Commissioner's office, a lunch area, a relatively large maintenance bay, and bays for equipment storage. The building is over 50 years old. Over the past several years, the Road Crew made several improvements to provide containment for petroleum products and other hazardous materials. The building is too small to adequately house and maintain the town's public works equipment.

The town owns a significant area around the public works garage. Some is dedicated to sand and salt storage, which is outside and not under cover. Additionally, they have storage areas for culverts, some equipment, and many items salvaged from past public works jobs.

Each year the town's capital budget provides a list of the Highway Department's equipment with the condition, future life expectancy, and the year for which replacement is scheduled.

Highway Capital Equipment Plan
(from Town CIP)

Description	Cost	Mileage/Hours	Condition	Replacement	To Replace
1992 Int dump	$64,000	142,949 / 13,235	3.5	keep for spare	SPARE
1981 mack pump	$19,000	29,722	3	refurb.	refurbish
1999 f-450 dump	$65,000	77,552 / 9093		2011	$120,000
1997 Galion grader	$180,000	6,094			$220,000
1989 JD loader	$70,000	14,693		2012	$150,000
2001 Trackless	$65,000	? / 3,488			$100,000
1980 Seagrave aerial	$45,000	24,101 / 1,950		2013	$150,000
1997 Johnson sweeper	$60,000	10,926 / 2,168		2014	$120,000
1988 J. D. tractor		3,283		2015	$100,000
2000 Sterling dump				2016	
2001 JD loader	$79,000	6,538		2017	$160,000
				2018	
				2019	
2003 Frtlinr dump	$82,000	79,158 / 6,684		2020	$142,000
				2021	
				2022	
2002 GMC squad	$40,000	11,138		2023	$60,000
				2024	
2004. Mack wheeler	$120,000	67,233 / 4,732		2025	$200,000
				2026	
2006 Mach Wheeler	$147,000	32,910 / 2,614		2027	$200,000
2008 Int Plow Truck	$130,000	5816		2O28	$130,000
2008 Komatsu Exc.	$140,000	692			$140,000
				2029	
				2030	
					$1,992,000

Highway Capacities

The Maine Department of Transportation collects traffic data on all state highways and some local roads on a regular basis. They use the actual traffic counts to estimate Average Annual Daily Traffic counts for many roads in a community. This information can assist the town with land use planning, access management, and capital improvement planning. Traffic counts can also be an important factor in economic development and can assist retailers to determine good business locations.

Based on accepted highway standards, most of the local roads have adequate capacity for their current or foreseeable uses. However, in some cases traffic counts may be high enough to be incompatible with the residential conditions along the streets and roads. Furthermore, the speed of traffic may also affect the safety of some local roads, both for residents living on the road and for the traffic using the road.

Therefore, the Planning Board will have to carefully consider the impacts of both residential and commercial development on neighborhoods and residences even though actual capacities of roads may be adequate.

Residents have identified the traffic in and around Route 26 and the downtown as a problem. To local residents, the area seems congested especially at unsignaled intersections with Main Street and Route 26 and the downtown intersections with Main Street (Routes 117 and 118). The following table provides some traffic counts from 2009 and 1999. While traffic had increased considerably along Route 26 from the mid 80' to 1999, traffic changes since then have not changed significantly. There is a growing need to study the traffic and signalization needs in this area. Since the roads involved are state routes, the Maine DOT will have to undertake the work. The town will need to carefully consider development patterns, especially along Route 26, and will need to develop a good access management program to avoid additional congestion.

Traffic in the downtown area has not increased nearly as much as the Route 26 traffic has, yet there is a perception that traffic in the downtown is congested with turning movements on and off of Main Street a problem, especially during the summer months when there are more summer residents around the lakes that are all concentrated to the north and west of town.

The lack of significant traffic increases in the downtown may mean that further business development in the downtown will have to rely on pulling customers to the area.

Annual Average Daily Traffic Volumes
Selected Locations

Location	AADT mid 80s	AADT 1999	AADT 2009
Route 26, **Norway/Oxford Town Line**	13,300	18,463	19,510
Route 26, south of **Route 26 & Main Street intersection**	14,770	19,379	19,920
Route 26, north of **Route 26 & Main Street intersection**	9,540	12,587	
Main Street, west of **Route 26 & Main Street intersection**	5,850	6,792	
Route 26, south of **Route 26 & 117 intersection**	9,130	14,861	12,380
Route 26, south of **High School** (Green St.)			14,290
Route 26, north of **Route 26 & 117 intersection**	17,370	22,941	
Route 117, west of **Route 26 & 117 intersection**	9,560	10,745	8,090
Alpine Street, north of **Route 26 & 117 intersection**	2,270	2,748	3,560
Route 117, west of **Route 117 & Main Street intersection**	13,300	14,758	11,900
Route 118, west of **Route 117 & 118 intersection**	5,750	5,835	5,730
Route 117, south of **Route 117 & 118 intersection**	3,280	4,168	4,150

Maine Department of Transportation

Public Transit

The main transit services available to Norway residents are provided by Western Maine Transportation, a private nonprofit organization, serving Oxford, Androscoggin, and Franklin Counties. Western Maine Transportation serves primarily disadvantaged populations with demand response services. They are partially subsidized by towns including Norway. Various groups have discussed needs for additional transit services in the Oxford Hills area, especially services linking the area to other areas such as Lewiston-Auburn and Greater Portland. However, such services do not seem feasible at this time.

Public Parking

The vast majority of merchants in Norway depend on public parking for their employees and customers. There are a total of 132 public parking spaces available along the streets in the Downtown between Pike Hill Road and Paris Street. There are two Town-owned public parking lots; one, a small lot located at the corner of Cottage and Main Street, and a larger lot containing 50 spaces located behind the Fair Share Coop building. Both are centrally located to the greatest concentration of merchants. A few stores have private parking either for employees or customers, and a number of properties have private spaces for their owner's or tenant's use; however, many are not conveniently located for business use. The private spaces total close to 190.

Past parking studies have generally found an adequate number of public spaces for the downtown area. One problem continually identified is employees taking up prime parking spaces in front of store fronts on a daily basis. This presents a combined education and enforcement problem. There is a third parking lot on Water Street which can accommodate employees of downtown businesses.

There are several concerns about parking that need to be addressed. If unused storefronts and underutilized buildings should become more intensely used, parking may present more of an issue. The Site Plan Review Ordinance requires that all development being reviewed provide off-street parking for employees and customers. Many buildings will have to undergo review if their uses change, and thus, they would be required to provide off-street parking, a task that may be difficult given the intensity of development in the downtown. Thus, the ordinance requirements could eventually have a chilling impact on downtown development. Norway needs to reevaluate the parking requirements for commercial businesses and for housing that may make use of upper floor space in underutilized buildings.

Parking along residential side streets has been identified as a safety and a plowing issue for many years. The Site Plan Review Ordinance also requires off-street parking when residences are converted to multi-family dwellings. This seems appropriate given past problems with on-street parking in residential areas.

Sidewalks and Pedestrian Ways

Sidewalks in Norway are provided in the Downtown and along some of the streets in the adjacent village area. Maintenance of the sidewalks is the responsibility of the Town Highway Department. The town recently undertook a sidewalk study that made recommendations on the maintenance and improvement of sidewalks and the installation of several new sidewalks including a new sidewalk on Cottage Street north of Beal Street that would lead to the new low income housing project and the New Balance factory. The sidewalk study also recommended establishment of a maintenance account of approximately $10,000 per year.

Rail Lines

An existing private railroad spur (Norway Branch Railroad) is located within Norway. The Town owns approximately 80 percent of the stock. The railroad spur, which includes a 60-foot right-of-way, begins at Cottage Street and travels along the northern perimeter of the Downtown Area east to Paris where the spur connects to a railroad line owned by the St. Lawrence and Atlantic Railroad Company (SLARR).

The spur is no longer used, and some of the track has been removed. In the early 1990s, a proposal to place a walking path along the right-of-way met with significant opposition from abutters. With the development of many similar walking trails in other communities over the years, this idea is undergoing a revival. Such a walk would connect commercial development in Paris to downtown Norway. It would also serve to provide a route from the high school and the school athletic fields to the downtown.

Pedestrian Walkways and Trails

In addition to the potential pedestrian trail along the Norway Railroad right-of-way, there has been discussion of providing a walking/bicycling path from the downtown to Pennesseewassee Park, located northwesterly of town along Route 118. Route 118 has adequate shoulders to accommodate walking and biking along most of the distance. The Oxford Hills Healthy Community Coalition is interested in trails and has been working with two groups to plan and develop trails. One group is staffed by the Coalition and is interested in mapping existing trails and planning trail development and improvement. The other group consists of interested citizens, town officials, and several teachers from the high school. This latter group's first order of interest has been a trail network along the Little Androscoggin River connecting the middle school in Paris with the high school area and creating trails for recreational use in this area. With the exception of this last recreational system, the walkways and trails noted herein would have the potential to move a significant number of people to destinations in Norway and neighboring Paris. The Recreation Committee and the Healthy Communities Coalition are also considering other trails that would probably be used mostly for recreational purposes. Those efforts are reviewed in the Recreation section.

PUBLIC FACILITIES AND SERVICES

Introduction

This section presents an analysis of the current demands placed upon existing Town facilities and services and also determines if public facility or service system additions and improvements will be needed to adequately accommodate the demands of the projected Town population. A definitive study of each facility is beyond the scope of a comprehensive plan. Besides the general adequacy of facilities and services as perceived by town officials, an important way to determine adequacy is public opinion. To gauge this, the Comprehensive Planning Committee developed a community survey. While not statistically valid, the opinions of those who took the time to complete and return it provide insight into the public's thoughts on some facilities and services. The survey results combined with the opinion of municipal staff and elected officials can serve as a guide to further studies and capital programming.

Community Survey

A survey, similar to the one administered in 1990, asked residents about Town and community services. One question listed those services provided by the town, school and water districts and asked whether people were satisfied, had no opinion or did not use, or were dissatisfied. It also asked if the town should spend more, the same or less on the service. A second question asked about services that are not directly provided by the town or associated district. For this question, the various services were listed and people asked whether more service, the same amount, or less service was needed. It did not rate satisfaction levels. The survey contained additional questions that are discussed elsewhere in this report. The results on the town and community service questions follow. Approximately 220 individuals responded to the survey.

> ***Survey of Town-Related Services:*** The Survey results indicate high levels of satisfaction for all town services. Most services were rated similarly to the ratings they received in the previous comprehensive plan. There was a significant and dramatic turnaround for the percentage of residents satisfied with the Police Department from only 20% satisfied in 1990 to over 70 percent now satisfied. Several other services including sewer, water, and schools experienced drops in the percentage of residents satisfied since the last survey; however, this appears to be attributed to the number of people that responded by saying that they did not use the service. The percentage of residents dissatisfied with these services actually dropped. The respondents also seemed reasonably satisfied with expenditures on the town services. A very low percentage of the respondents wanted to spend either more or less money on the services.

Norway Town Services Survey Results

Town Service	Level of Satisfaction		Spending Money	
	Satisfied - %	Dissatisfied - %	Less -%	More - %
Fire	80.1	0	4.1	9.3
Police	70.4	12.9	7.7	13.3
Recycling	92.9	3.8	9.3	5.2
Transfer Station	87.5	2.1	6.3	3.7
Sewer[1]	59	1.7	6	3.6
Water[2]	55.2	2.9	3.7	7.4
Schools[3]	54.7	15.4	33	15.9

1. 39.3 % do not use
2. 41.8% do not use
3. 29.9 % had no opinion or did not use

Another question asked residents their opinion on several other municipal programs or services. These are included in the table below. Fifty percent of respondents indicated that there was a need to share more municipal services with other municipalities, but 46% felt the existing sharing arrangements were adequate, and less than four percent felt that there should be less sharing of services. Fifty-two percent felt that there needed to be more enforcement of rental housing codes, but 43% felt that the existing program was adequate. There was somewhat stronger support to have cleaner public areas with almost 58 percent of respondents indicating that they would like areas to be cleaner and 41% feeling that public areas were adequate.

Other Town Provided Services

	Need More %	Adequate %	Need Less %
Sharing of Municipal Services	50.5	45.9	3.6
Enforcement of Rent Housing Codes	52	43.1	5
Clean Public Area	57.7	41.4	0.9

Survey of Community Services: The services listed in the table are ones that the town or related districts do not directly provide but which the town may be able to influence and assist the providers to improve the service through various efforts including financial assistance, cooperation on grants, improving communication with providing agencies, and assisting the public to learn more about those that are available.

Community Services Survey Results

	Need More %	Adequate %	Need Less %
Child Care	38.2	58.3	3.5
Health Care	36	63.5	0.5
Elderly Housing	51.4	47.2	1.4
Affordable Housing	51.4	42.2	6.4
Youth Recreation	57.9	38	4.2
Public Transportation	58.3	40.3	1.4
Elder Care	52.2	47.3	0.5
Other Elder Services	48.5	51	0.5
Land Conservation Program	41.7	52.3	6
Historic Preservation Program	40.5	53.6	5.9
Paths and Trails	46.8	47.7	5.5
Cultural Activities and Arts	40.5	55	4.5

A very low percentage of respondents thought that less service was needed in any of the areas listed. For most services, there were only small differences between the percentages of respondents indicating that the services were adequate and those that felt more were needed. Two of the largest discrepancies occurred in the areas of Child Care and Health Care where less than 40 percent of the respondents felt more of these services were needed. Other notable areas included Youth Recreation and Public Transportation where 58% of respondents felt that more service was needed.

Water Supply

Public Water Supply: The Norway Water District operates a public water supply system which provides water service to the Norway Downtown and surrounding village area and development located along Route 26. A line also runs northerly along Route 118 to Crockett Ridge Road where an emergency intake for Pennesseewassee Lake is located. Several short extensions also serve areas adjacent to the Downtown area.

The service area includes the Town and Country Mobile Home Park. Public water service is provided along the streets in the mobile home park; however, individual service to the manufactured homes is the responsibility of the mobile home park.

Norway's primary public supply is from the Little Androscoggin River Valley Aquifer, but the well is located in the Town of Oxford. The Little Androscoggin River Valley Aquifer is discussed in more detail in the Natural Resources section of the Plan. In general, the aquifer is very productive but has extensive development, and hence, a number of threats to its quality, located over it.

The well, located near Route 26 south of the Norway/Oxford Town Line, is capable of pumping over 650 gallons per minute. A total of 94,442,000 gallons were pumped last year for an average of 258,000 gallons per day. During summer months, up to 500,000 gallons a day are pumped. The well is 80 feet deep and is in excellent condition; however, in 1991contamination from MBTE, a gasoline additive, occurred nearby, and the well was shut down in the spring of that year to avoid further contamination of the aquifer. After a lengthy clean-up process, the Maine DEP certified that the contamination had been cleaned up, and the well was put back in service. During the period that the well was off-line, water was obtained from the Paris Utility District through a permanent connection with that system that allows each district to provide emergency back-up to the other. The Oxford Water District installed new lines to serve northern Oxford, and there is also a permanent connection to their system for back-up purposes.

In addition to several gasoline stations, there are numerous other adverse land uses over the aquifer, both in Norway and in the wellhead recharge area in Oxford. While some of the uses are served by the Norway sewer system, many utilize subsurface (septic) disposal systems. The gasoline stations have underground tanks and piping, and some uses have floor drains or are involved with manufacturing and maintenance activities from which materials could be accidentally released.

The Norway Water District prepared an extensive wellhead protection study of the well including delineation of recharge zones and a detailed inventory of land uses in the area of the well. While the map has not been updated, they have also conducted an education program at several of the businesses most likely to handle and store potential pollutants. The District needs to update the land use map of the wellhead area and obtain more documentation on activities, the disposition of floor drains and information on spill prevention and control.

Water storage occurs on Pike's Hill where water is pumped, chlorinated and stored to a one million gallon capacity reservoir. The reservoir was constructed in 1962 and is in good condition. The reservoir has two separate compartments to provide storage during cleaning and maintenance operations.

The Norway Water District has 800 customers, both businesses and residential. The water supply system of Norway consists of 81,458 feet or 15.4 miles of pipe. The water pipe in the system varies from 12 inches ductile iron to 1 inch copper lines. Small size lines generally serve no more than 4 homes. Approximately 84 percent of the pipe is 6 inches or larger. Most of these lines provide adequate service; however, the line running along Route 26 south of Downtown is 6 inches and needs to be increased in size. The line under Main Street and running to Route 118 and Crockett Ridge Road was recently upgraded in conjunction with Main Street improvements made by the Maine Department of Transportation. There are 74 publicly owned hydrants and 12 private hydrants connected to the system. The condition of the pipe in the water system varies.

Town Future Water Needs: As noted, in case of emergencies, Norway can be supplied by water from either the Paris Utility District system or the Oxford Water District. Likewise, Norway provides back-up for these systems.

Aside from obtaining water from Oxford or Paris, Norway has a limited number of options for future Town water supply. Use of the Little Androscoggin River Valley Aquifer is not practical due to the limited area in Norway and the location of the old dump and sewage lagoons on it. Another sand and gravel aquifer runs along the Crooked River valley near the Norway/Waterford Town Line; however, the distant location makes use of it impractical. There may be some potential to use a bedrock aquifer located just northerly of the downtown area. No hydrology work has been done on the area, and exactly how it

was first identified is not well documented. Other options for the Town include permanently connecting to the Paris water supply system or connecting to the Oxford water system. Currently, the Paris Utility District has adequate capacity to supply Norway with water. Oxford would need a new well in order to have the long-term capacity needed. They have considered developing another well, but have no formal plans in place. Other system needs include systematic hydrant replacement and systematic upgrading of undersized pipes.

Private Water Supplies: Private wells meet the needs of development located outside the Norway Water District service area. Private wells consist of dug wells, springs, well points and drilled wells. Exact numbers of each type of well is not documented. In general, springs are the least common of the private water supply types. Dug wells may be used by older homes and a few new homes. Well points are not common in Norway because the geologic conditions are not conducive to them. Drilled wells are now the most common type of individual supply and are used for most new construction. All of these private water supplies depend on ground water. For springs and dug wells, the recharge area, or area that contributes water to the well, is relatively small, and the water is close to the surface of the ground. Thus, these wells are subject to drought and also to contamination sources that may exist nearby. Drilled wells obtain water from fractures in bedrock underlying the topsoil. The recharge area can be quite extensive. The water flows through the soil before entering the fractures in the bedrock and may move some distance in the bedrock fractures. Drilled wells are less susceptible to drought, and they are generally recognized to be less subject to pollution than other sources. However, there are instances where a small amount of contamination has caused pollution of drilled wells at considerable distances. They do have several natural sources of contamination including radon and arsenic, and once contaminated, they are very difficult to clean up.

During several years of drought that western Maine experienced prior to the summer of 2003, there were a number of residences in the rural areas of Norway that had water supply problems. There are no official records on the number of people impacted, but calls to the town office for assistance probably numbered between 20 and 40, and it is suspected that most were dug wells or springs. Most wells did not run out of water for the entire several years of the drought. People were probably without water for anywhere from several weeks to 3 or 4 months, with most of the problems occurring during the summer. However, during the very cold winter of 2002-2003, there were a number of dry wells in western Maine since the ground was frozen so solid that recharge did not occur. The number in Norway is unknown. Residents usually weather these periods by hauling water from places that the town makes available to access the public water supply.

There is some potential to obtain private water supplies or small public water supplies from the sand and gravel aquifers in town, one located along the Little Androscoggin River and another located along a portion of the Crooked River in the western part of Norway. However, little development is expected near the Crooked River in the near future, and it is unlikely that any wells will be located in the Little Androscoggin River Aquifer in Norway. Much of the area is owned by the town and has been used for various waste disposal practices in the 20th century.

Waste Water Treatment

The Town of Norway operates a public sewerage system which provides service to the Norway Downtown and surrounding village area and development along Route 26. It also serves a limited section of Route 26 in the northern portion of Oxford.

The majority of flow to the system is from the Downtown including the large residential area located around the commercial area. The system running southerly of Downtown along Route 26 collects waste from the Town and Country Mobile Home Park; however, sewerage lines within the Park are the

responsibility of the Park. A limited amount of development, mostly businesses, located along Route 26 in northern Oxford is connected to the Norway Sewer System. The sewerage system lines extend approximately to Pottle Road in northern Oxford. The lines are maintained by Norway through a contractual agreement with Oxford and various businesses connected them.

The first sewage treatment system in Norway was installed in 1965. The Town rebuilt the lagoon system in 1990. The new lagoons have a rated capacity of 400,000 gallons per day (gpd). Together, the two lagoons that make up the system have a total volume of 52 million gallons. While the design capacity is similar to that of the original design of more than 20 years ago, the total volume of possible storage greatly exceeds the old volume of approximately 15 million gallons. During periods of low flows in the Little Androscoggin River, Norway must limit the discharge or hold the complete flow until river flows increase to the point where the discharge can be assimilated without causing degradation of water quality below the State classification.

The collection system consists of fifteen miles of pipe, the sewer department has undertaken an aggressive rehabilitation utilizing grant and loan funds from USDA. The new pipe eliminates storm-water infiltration and thus increases the storage capacity of the lagoons. As the new pipe has been laid, the town has also rebuilt water lines, streets and sidewalks.

There are eight online pumping stations. One additional pump station is located in an uncompleted subdivision but is not operated by the town. The conditions of the pumping stations vary depending on their age. In 1990, one pumping station was replaced and one installed. The station located within northern Oxford was installed around 1972 and the remaining stations are over twenty-five years old (three were installed in 1964, one in 1952 and one at the time the Miller Shoe Factory, now New Balance, was built). Many of the pump stations have been rebuilt, however, because of their age they should be rehabilitated or replaced.

The Norway sewer plant was the first in the state to utilize SolarBees, a solar powered pumping system used to better mix the lagoons. Installation of the SolarBees has more than cut the electric bill at the lagoons in half, saving the town many thousand dollars each year.

Town Future Sewerage Treatment Needs: With the reconstruction of the sewage treatment facility in the early 1990s, there should not be a need for significant expenditures for treatment over the next 5 to 10 years. However, there is increasing concern that nutrient levels in the Little Androscoggin River are preventing it from achieving a higher classification and also creating nuisance conditions by creating algae blooms during the warm summer months when river flows are low. Therefore, there is some potential that the town may have to eventually add treatment capabilities to remove nutrients. However, it is not expected that significant expenditures would be necessary for at least another eight years. The significant storage capacity of the lagoon system will work in the town's favor, since sewage is held during the worst river conditions.

The low flows and quality of the Little Androscoggin River preclude any significant treatment facility expansions to serve substantial growth in Norway. Growth creating flows that would exceed the capacity of the sewage treatment facility and the Little Androscoggin River is not expected during the life of this plan, but when it does occur, alternative treatment methods such as land treatment or constructed wetlands may have to be used.

There are significant physical and geographic constraints to expansion of the Downtown and surrounding village area, but sewer extensions along the perimeter of the area may be feasible. The areas most likely to see sewer service extensions are listed below. The relatively small expansions in these areas can be

handled by the current system. However, it is not anticipated that any significant extensions into these areas will be financed with town funds in the upcoming decade.

- Alpine and Cottage Streets northeasterly of town.
- Along Route 118/117 northwesterly of town (ledge has prevented large scale expansion in this area)
- Pleasant Street
- Area westerly of Route 26 south of town, near the Town and Country mobile home park.
- Service in the Route 26 area of northern Oxford. Sewer extension to this area could help protect the aquifer while providing infrastructure necessary to serve the growing commercial area in northern Oxford
- A portion of Pikes Hill

Storm-water Management

When the Norway sewer system was installed over 60 years ago, many of the sewers handled both sanitary sewage and storm-water. Upon construction of the sewage treatment lagoons in the 1960s, the town started separating storm sewage from the sanitary sewer lines. While it has taken many years, the separation was recently completed with Main Street reconstruction project improvements through the downtown and the Beal Street area made with a CDBG and USDA Rural Development grants.

Storm-water in the Downtown and surrounding area (the sewered area) is handled either by an underground pipe system or by surface ditches. The underground system, which consists of a series of catch basins and pipes, collects water from much of the area. The storm drain system is not interconnected over any significant distance; localized pipe networks discharge to the nearest natural surface drainage way. In a few sewered sections, storm-water flows in open ditches just as it does along roads in the rural section of town.

Storm-water in the rural area of Norway is handled in open ditches along the edge of roads. Generally, these ditches discharge into natural drainage channels which flow to streams or lakes.

The collection and discharge of storm-water is coming under increased scrutiny at the State and federal level. Storm-water carries nutrients from roof tops, parking areas, lawns and roads to water bodies. It can also carry sediment and other pollutants including some metals to the streams, rivers, wetlands and lakes to which the storm-water systems flow. Nutrients entering lakes in storm-water runoff has been a primary concern in Maine for almost two decades. However, as noted under the Waste Water Treatment section, nutrient pollution as well as sediment and other pollutants are also becoming a concern for other water bodies, including the brooks flowing through the downtown area and the Little Androscoggin River. The storm-water runoff from urban areas is particularly detrimental to streams. Studies have shown that both the quantity and quality of runoff from urban and suburban areas has major impacts on streams. Lakes are even more vulnerable and show signs of degradation from low density rural development and road construction.

The federal government is already requiring municipalities with certain characteristics (size and type of water body that may be impacted) to develop storm-water management plans to reduce the quantity and improve the quality of runoff. Norway did not fall into the category. The State has instituted a law to review new development, depending on the size of the development and the receiving water body type for both quantity and quality. Treatment of storm-water from new sites is often required. It is possible that,

eventually, the State will place additional controls on storm-water management from urban areas and roadside ditches.

Where storm-water is handled in open ditches, there are two areas of concern: first, keeping the roadside ditches maintained so that they adequately drain the roadbed; and second, keeping ditches stabilized such that they do not erode and carry sediment and nutrients to nearby water-bodies, especially lakes. Over the past decade, the town has made a concerted effort to improve their road side drainage in the rural area to both protect their roads and to minimize pollution to the lakes. The Road Department has improved their management practices significantly. To protect the lakes and water-bodies, they must continue to plan improvements considering both the road characteristics and the environment. Additionally, it is necessary to maintain the ditch system and other improvements that have been installed. This important aspect is sometimes forgotten, or receives a lower priority than reconstruction efforts, but it is equally important to the cost effectiveness of the road program and to the environment.

Solid Waste

The Town of Norway joined with the Town of Paris to create Norway-Paris Solid Waste, Inc. (NPSW) in the early 1980s. NPSW is responsible for the disposal of the solid waste generated in the two communities. The quasi public corporation owns and operates a transfer station located at the end of Brown Street near the Norway-Paris town line and the waste water treatment lagoons. The majority of the facilities are located in Norway. In addition to the transfer station, there are tire and white goods storage areas, a metal and bulky waste transfer area, and a small building where bulky items, such as furniture, are dismantled into component pieces to make transportation and disposal less expensive. NPSW owns and operates a truck scale on site.

Recycling facilities operated by Oxford County Regional Solid Waste Corporation (OCRSWC) are also located on the site. The recycling facility was originally constructed by NPSW, and it was enlarged by OCRSWC with the aid of a state recycling grant. OCRSWC handles recyclables for NPSW. Should OCRSWC dissolve, the facility would revert to NPSW.

NPSW also collects fluorescent bulbs, mercury containing devises, and PCB ballasts. OCRSWC is in the process of starting a program to handle electronic waste especially computer monitors and televisions (Cathode Ray Tubes - CRTs) because they contain lead. NPSW collects waste oil, and some volunteers are raising funds to develop a “swap shop” where people could drop off unwanted items and others could pick them up. NPSW participates in an annual, regional Household Hazardous Waste collection program run by Androscoggin Valley Council of Governments.

In 1994, NPSW opened a new demolition debris site located in westerly Norway off Route 117, near the Otisfield Town Line. The site, known as Frost Hill, includes a landfill for demolition debris, a composting area for leaf and yard waste, a demolition wood waste storage and grinding area, an inert fill area for rock, concrete and masonry material and a brush burning area. The landfill portion of the site is expected to have over 15 years of additional life expectancy. The original design life has been extended by the grinding of clean wood waste, which is disposed of in a wood-to-energy facility. A small amount of land suitable for landfill is also available on the parcel. This land could be permitted for waste disposal purposes at a later date.

The Board of Directors of NPSW, Inc. is comprised of residents of both Towns, and each Town approves the annual budget. Therefore, the Towns have direct control over the facilities and methods used. The Towns have addressed the State’s waste reduction and recycling mandate with membership in Oxford County Regional Solid Waste Corporation (OCRSWC).

Solid waste from the transfer station is hauled to Mid Maine Waste Action Corp. (MMWAC) where it is incinerated in a waste to energy facility. NPSW occasionally evaluates disposal options and changes the ultimate disposal site for their wastes depending on costs.

More than 50 percent of the solid waste is brought to the transfer station by individual residents. The rest is picked up by several private haulers offering that service to area businesses and residents. Some contractors haul waste directly to MMWAC. This consists of both residential waste and waste collected from various businesses. There is no town-run collection system.

To date, the towns of Norway and Paris share equally in all costs associated with NPSW. There is no distinction made between waste coming from the two towns. Since both are approximately the same size, the towns have agreed to share the costs equally. At times since construction of the transfer station, NPSW has accepted waste on a contractual basis from other towns in Oxford County most of which are members of the regional recycling corporation. They also contracted for the disposal of demolition debris from Oxford for some time while they were making improvements to their site. Currently, no other towns use any of the facilities.

The following table provides information on the quantities of waste handled by NPSW and the Oxford County recycling program. For planning purposes, it can be assumed that Norway generates approximately one half of the quantities reported.

Norway-Paris Solid Waste Generation

WASTE TYPE		QUANTITY (tons unless noted)
Brown Street Transfer Station		
	Municipal Solid Waste (handled at transfer station)	2920
	Metals Removed at MMWAC	75
	Recycling (paper, glass, tin cans, plastics)	905
	Textiles	27
	Tires	50
	Scrap Metal - White Goods	452
	Waste Oil	940 gallons
	Fluorescent Bulbs	11,922 linear ft.
	Mercury containing devices	7 pounds
	Ballasts	816 pounds

Direct Haul to MMWAC		
	Solid Waste	2,388
	Bulky Waste	477
Frost Hill Bulky Waste Handling Site and Landfill		
	Demolition Waste - landfill	1,434
	Demolition Wood Waste - chipped for energy recovery	376
	Wood Ash - from brush to landfill	7
	Compost	100

Data from NPSW

A comparison of the solid waste and recyclable quantities to those reported in the previous plan indicates that municipal solid waste generation has decreased slightly from over 7,000 tons with 934 tons of it recycled in 1990 to 6,213 tons with 932 tons recycled in 2003. Therefore, the recycling rate has increased slightly from 13% to 15% when bulky wastes are not included in the calculations. For the municipal solid waste that is handled at the transfer station, the recycling rate is 32%. NPSW uses a clear bag system whereby trash is delivered to the transfer station in clear plastic bags or other containers that may be inspected for recyclables by attendants. By ordinance, if recyclables are found in the trash, the resident is charged a fee for disposal. The procedure is not enforced; rather the ordinance is used as a public education tool, and attendants remind residents of the potential penalty for not recycling.

In order to extend the life of the landfill at the Frost Hill facility, NPSW began a shingle recycling program in the mid 00's and worked with a mobile home manufacturer to divert sheet rock ends and waste vinyl siding to reuse sites. NPSW continues to evaluate programs to extend the life of the landfill including reuse programs for other wastes. They also participate in the Oxford County Regional Recycling Universal Waste programs to handle, mercury containing products, electronic devices, especially CRTs, and potentially other special wastes. There may be some opportunities to collect other Universal Wastes and the State could pass legislation to include other difficult wastes in the State's Product Stewardship program. They participate in the AVCOG program to do a one day collection for Household Hazardous Waste.

At this writing, the State of Maine, Oxford County Solid Waste and Norway Paris Solid Waste have partnered to study future strategies for solid waste and recycling, including single stream, privatization and additional regionalization.

Public Safety

Fire Protection: The Norway Fire Station, built in 1989, is located adjacent to the Town Offices at the corner of Lynn and Beal Streets. The department is made up of one Fire Chief, two engineers and about 40 volunteer firefighters, all trained by the Chief. The Fire Chief is paid a salary and is elected to his position. The two engineers are paid a stipend and are also elected.

The public water system that primarily serves the downtown area provides water for firefighting purposes. There are a total of 85 hydrants (73 district-owned and 13 privately owned). In areas not served by the public water system, the fire department must carry all water to fires. They can fill tank trucks from the nearest hydrant on the public system or they can use a number of dry hydrants located around

the rural areas of the town. Eight dry hydrants are located around town; locations are Norway Lake, Nobles Corner, Norway Center/Greenwood, Harrison Road, Chapel Brook, Hobbs Pond, Round the Pond/Crockett Ridge Roads and Town Farm/Waterford Road.

Norway is a Mutual Aid Fire Department and can call upon the equipment and firefighters of other departments in the Oxford Hills area, when necessary. From May 2001 to April 2002, the department answered 228 calls, up from approximately 70 calls at the time the previous plan was developed. Dispatching for fire calls is handled by the Oxford County Sheriff's Office.

To date, Norway has been fortunate to have a number of volunteer firefighters working in town or nearby. Several members of the road crew serve as firefighters. Thus, they have not faced as significant a shortage of daytime firefighters that many surrounding towns have.

The public water system is capable of supplying adequate quantities of water for firefighting purposes in most areas of the service area. There are a few older, small diameter lines on which there are no hydrants. These usually run short distances so that hose can be laid from the nearest hydrant with minor problems. Firefighting in the rural area is more problematic with water having to be trucked from the nearest dry hydrant to the scene. As subdivisions are developed, the town should consider requiring the installation of a dry hydrant as part of any one of significant size. They also should consider developing a capital plan for new dry hydrants, and levy a charge to new houses and/or smaller subdivisions to support the program (an impact fee).

The following table lists the Department's major equipment including its age and general condition.

Fire Department Equipment
December 2003

Equipment	Year	General Condition
Forestry Truck	1962	3.5
Maxim Pumper	1967	3
GMC Pumper	1972	3
Mack Pumper	1980	2.5
Seagrave 100' Ladder	1980	3
Freightliner pumper	1989	3.5
Pemfab	1993	2
GMC - 1 ton	2002	1
Pumper Replacement	2013	

Town Future Fire Protection Needs: The existing staff and equipment are adequate to provide fire protection to the Town, especially given the mutual aid agreements with surrounding towns, two of which have similar size fire departments. However, continued growth and development could result in the need for increased staff (possibly a paid staff and also additional volunteers) and equipment. The town currently employs a part-time worker who does the fire reporting and updates 911 maps for fire department use. It should be noted that it is difficult to get volunteer firefighters because many Town residents work outside of Town and because of State firefighter training requirements. As noted from the equipment table, the town will need to purchase a new pumper at the end of the 10-year horizon for this plan.

Police Protection: The Town of Norway employs one full-time Chief, seven full-time and four part-time officers. The term of office is one year for the officers and they are sworn in annually. The Chief of Police is paid a salary and the officers are paid hourly. The State Police and Sheriff's Office provide back-up police protection for the Town or respond when specifically requested. The State Police handle all homicides and fatal accidents. Dispatching of police calls is handled by the Oxford County Sheriff's Office. The Police station is located in the town office complex. It is adequate for the current needs.

The accompanying table lists the Police Department vehicles:

Police Department Vehicles

Year	Make	Condition	Mileage
2011	Dodge		
2011	Dodge		
2007	Ford Explorer		
2009	Crown Victoria		
	Chief and detective vehicles		

After working through some controversy in the early 1990s, the Police Department appears to be well respected with 70.4% of respondents to the community survey rating it as satisfactory and only 12.9% being dissatisfied. This is a dramatic turnaround from the previous survey that found over 75 percent of the respondents dissatisfied.

Town Future Police Protection Needs: Future growth and development might require additional staff and equipment. Each new business or home will directly impact the demand for service. These demands could require an additional investment for staff and/or equipment. Security of seasonal property has become more of an issue in a number of towns in the region, and this may be particularly important in Norway with its four lakes and many seasonal homes. Training of new officers and continuing training for existing officers is also a challenge for the Department.

Ambulance and Rescue: Ambulance and rescue service for Norway and Paris is provided by service owned by Stephen's Memorial Hospital. The service is called the Paramedic Alliance for Community Emergencies (PACE). It provides ambulance service to many towns in the region. Staff includes full-time and per diem positions including highly trained paramedics. PACE is currently licensed for the highest level of emergency medical care possible. Funding is provided through the patients (or their

insurance carriers) and through subsidies from the Towns that use the service, including Norway. Dispatching is provided through the Oxford County Sheriff's Office.

Town Future Ambulance and Rescue Needs: Norway plans to continue to use and fund PACE to provide ambulance and rescue service for the Town's residents. The service is adequate to meet the current needs, and PACE will continue to expand and improve service as they have done since the previous plan was developed. Costs to Norway will undoubtedly increase over time so that the service can grow and continue to provide excellent service. However, this regional approach offers significant efficiencies of scale.

Education Facilities

Norway is part of the Maine School Administrative District #17 (SAD 17), which includes eight towns: Harrison, Hebron, Otisfield, Oxford, Paris, Waterford, West Paris and Norway. The District facilities include one high school, one middle school and 12 elementary schools. One elementary school, Guy E. Rowe, is located within Norway and the Oxford Hills High School is located on the Norway/Paris Town Line. The middle school is a short distance away in Paris.

All schools are in good condition. The Guy E. Rowe School underwent a major rehabilitation and expansion project in the late 1990s as did the Oxford Hills Comprehensive High School. The Middle School is undergoing a similar project as the plan is being developed.

Health and Human Services

Health Services: Norway residents have a variety of health care services available to them locally and within a relatively easy driving distance in Lewiston and Greater Portland. The Community Survey found that 63 percent of respondents found health care services to be adequate. This is down somewhat from the percentage that expressed satisfaction on the survey for the previous plan, but the question was asked in a slightly different manner that could have accounted for the difference. The following summarizes the services available.

The area hospital, **Stephen's Memorial,** is located at 181 Main Street in Norway and serves much of the population of Oxford County. It is privately owned and provides over 50 beds, and it is considered an acute care facility. An expansion is being completed as this plan is being developed. In addition to the hospital, Stephen's Memorial owns two professional office buildings located on its campus. With the addition and some renovations, the overall condition of the buildings is excellent. The hospital is also a major area employer and is certainly the largest employer located near downtown Norway.

Stephen's Memorial has purchased considerable real estate in the area and has expanded significantly since the last comprehensive plan was developed. With the expanding hospital services and the location between the traditional downtown and the southern (Route 26) gateway, particular attention should be given to this area in developing the land use plan.

Emergency medical service is provided by PACE ambulance as discussed under the municipal services section of the inventory. The PACE main office and ambulance facility are located on the Stephen's Memorial campus.

Androscoggin Home Health Services provides home visits including nursing, physical therapy, occupational and speech therapy, medical social work and long-term care. Fees are paid via clients, insurance and Town subsidies.

Mental health services for qualifying individuals are provided by **Tri-County Mental Health Services**. It is a relatively large, private, non-profit regional mental health service, which offers treatment of mental and emotional illness. They maintain an office in nearby Paris. Revenues are through clients, insurance and Town subsidies.

Human Services: Human services in the Oxford Hills area is provided by a number of non-profit agencies including large, multi-function regional agencies and small volunteer groups. The following list provides information on some of the programs and indicates the wide variety available.

Community Concepts is a large, regional community action agency that provides a range of programs to help low and moderate income residents and the elderly. It receives various federal and state grants, contributions from towns and service users, and fees for some services. It has offices in Auburn, Rumford, and Paris. The following is a list of programs, which is not intended to be all inclusive:

1. Alcohol and Drug Treatment Services
2. Child Abuse and Neglect Prevention
3. Emergency and Transitional Shelter
4. Energy Assistance
5. Homeownership - to help families purchase a home
6. Subsidized Rental Housing - connects qualifying persons with subsidized units
7. Property Management and Maintenance - provides affordable, transitional and special needs housing for qualifying persons
8. Day Care - runs the Norway Children's Center in Norway
9. Head Start - schooling for pre-school children
10. Healthy Beginnings - assistance to new parents with parenting skills

The **Child Health Center** provides non-profit social service for handicap children. This organization is governed by a volunteer Board of Directors, and revenues are received via patients, insurance and Town subsidies.

The **Progress Center** offers training in daily living skills and vocational and personal development to physically and mentally challenged adults. The center is a private, non-profit agency and receives modest subsidies from towns in the area.

The **Food Pantry** provides food to people in need on a referral basis. This organization is a volunteer group that operates from the basement of the Episcopal Church.

The **Adventist Church Service Center** provides donated clothing to people in need. It is operated by volunteers.

Cultural Facilities and Events

The number of cultural services and opportunities in Norway and the surrounding area has increased significantly over the past decade. One proud example of the expanding cultural services is the **Norway Memorial Library**. A major library expansion was completed a few years ago. The library is located in the heart of the downtown on Main Street and has a full-time staff and extensive hours of operation.

At the northerly end of Main Street, the **Norway Historical Society** provides an opportunity for residents to be involved in preserving the history of the town and the area and for people to learn more about Norway's history. Near the Historical Society building on the opposite side of Main Street is the

Matoksy Art Center. Exhibits and art classes are held at this facility. It is a sponsor of the annual art show.

The **Western Maine Art Group** is a group of artists who, through voluntary efforts, run the annual sidewalk art show that fills downtown Main Street with artists from all over Maine and New England.

The Fair Share Commons sponsors the Music Collective and the Art Collective. These groups provide exhibits and shows featuring musicians and artists from the area and occasionally from other areas of Maine, New England and beyond. Performances are offered on a regular, but unscheduled, basis. The facility is small, but is located in the heart of the downtown commercial area. The Unitarian-Universalist Church also frequently sponsors small concerts of area musicians. It also is located in the downtown, along the northerly part of Main Street.

A business owner in the downtown has been trying to offer regular performances of musicians and performance artists on the second floor of his downtown property. Time will tell if this commercial venture will be economically feasible. Art Moves is a private dance studio located in the downtown. It offers lessons and holds performances.

Groups such as the Androscoggin Chorale also perform in the area on occasion. Various groups from the area sponsor these performances most commonly at the high school auditorium.

There are also a number of cultural events held in towns surrounding Norway. The Deertrees Theater is located in Harrison. They sponsor a variety of performance art with many of the presentations during the summer months when seasonal residents are in the area. There is also a theater company located in Buckfield. This group offers regular performance art presentations during much of the year.

Additional cultural activities are located less than an hour away in Lewiston, The Public Theatre, and many activities at Bates College. Likewise, the Greater Portland area offers a number of theater companies, Portland Symphony performances, and many traveling Broadway shows.

Town Facilities

The **Norway Town Office**, completed in 1989, is located at 19 Danforth Street. The building houses the town administrative staff, the Police Department, an office for the Fire Chief, the Community Development Office, the Recreation Director Office and Norway Water District. There are two community rooms available for meetings and community gatherings - one or both is in use several times each week.

The old **Methodist Church** is owned by the Town. Community Concepts leases the space for a nominal fee and provides day care services for children who are Norway residents.

The **Highway Garage**, housing the Highway Department, is located on Grove Street. The garage has bays for the loader, grader, and several trucks. There is also a relatively large maintenance bay. The Road Commissioner's office is located in the building. There is an extensive yard around the building including an area housing gasoline/diesel fuel pumps, a storage yard, a salt shed, and a salt-sand pile for winter road salting. The town has upgraded the Highway Garage some over the past few years to improve health and environmental protection features such as oil and chemical storage areas. The garage is undergoing additional upgrades including lighting, office space, break area, and restroom facilities. The town also owns the old Norway Water District building located near the Highway Garage. It is used for storage but may be improved to serve other functions for the Highway Department.

The **Sewer Department** is located in a small, relatively new building located near the Highway Garage.

This building has a vehicle bay, storage room, and maintenance room. The Sewer Department also owns a small building at the site of the treatment facility. This serves as an office and laboratory. The maintenance building and the treatment facility are approximately 500 feet apart.

The Norway-Paris Solid Waste facility and the Oxford County Recycling Facility are also located in this general area, although the town does not have direct ownership in either one.

The **Norway Water District** recently purchased an existing garage on Cottage Street relatively near the town office. This building houses their vehicles, maintenance equipment, and repair shop.

The town owns approximately 80 percent of the stock in the Norway Branch Railroad which in turn owns an old railroad right-of-way. The right-of-way for this once bustling railroad line is located along the northern perimeter of the village, in the Beal Street area. It connects with the St. Lawrence and Atlantic Railroad in Paris. Much of the track has been removed. The strip of land may become an integral part of the downtown redevelopment and associated amenities. It is most likely that the right-of-way will eventually develop into a pedestrian path linking parts of downtown Norway and Main Street in Paris. A proposal some years ago met with considerable opposition from abutters, but this was before walking paths gained popularity.

Another piece of property, which may play a key role in downtown redevelopment, is the former CB Cummings mill (an old wood turning plant) property. The mill has been razed, and it is now owned by Stephens Memorial Hospital. It is located across Pennesseewassee Lake Outlet from Main Street but is within easy walking distance of the downtown.

The town owns four dams as listed below. The first three control the level of three of the town's four major lakes.

North Pond Outlet - boards to control lake level but not used
Hobbs Pond Outlet - boards to control lake level
Pennesseewassee Lake Outlet - boards to control lake level
Pennesseewassee Outlet Stream - run of river/no controls

The operation of the Pennesseewassee Lake Outlet dam must be coordinated with a privately owned dam located where the outlet stream flows under Route 26, near its confluence with the Little Androscoggin River. The town also owns several pieces of land used for recreational purposes as noted in a following section and further described in the Recreation Section.

Town Government

Administration: The legislative body for Norway is the Town Meeting. Day-to-day operations are handled by a five-member Board of Selectmen, with each selectman elected for a three-year term. The Selectmen employ a Town Manager to carry out administrative management. In addition to the Town Manager, who is also appointed as agent for Overseers of Poor, town staff include the following: Tax Collector, Town Clerk and Deputy Town Clerk, Assessor, Health Officer (part-time), Community Development Director (part-time), Road Commissioner, Superintendent of Sewers, Code Enforcement Officer and several administrative support staff. There are also the Police Chief and police officers and a part-time Fire Chief, as noted under the Public Safety section. Actual General Assistance work is contracted to Community Concepts, which assigns a worker with regular office hours in the Norway Town Office.

The delivery of services to the Town residents appears to be adequate with the existing staff, but as individuals retire or leave their positions, changes, such as reassigning duties or consolidating positions, may be possible. As the town grows and government becomes more complex, there is always the potential to need additional staff. With 76% of the respondents to the community survey expressing satisfaction with town government, every attempt should be made to maintain the current level of service without increasing costs excessively.

Boards and Committees: The Town has several boards and committees including the following: Planning Board, Board of Appeals, Budget Committee, Community Development Citizens Advisory Committee, Road Committee and a Recreation Committee. The town also establishes special committees to take on projects such as the Comprehensive Plan.

Public Cemeteries

There are two major public cemeteries that serve Norway. One is located adjacent to the Oxford Hills Comprehensive High School, the majority of it being located in Paris, and the other is a new cemetery on the Watson Road and overlooking Hobbs Pond. A list of all cemeteries is provided in the Historic and Archaeological Resources section of this Comprehensive Plan.

Parks and Recreation Resources

Norway has a variety of recreation facilities and programs available through the town and various volunteer groups. This section will concentrate on those sponsored by the town. Norway employs a full-time Recreation Director. A Recreation Committee provides input on programs and also provides some volunteer support for some programs. In addition to town-owned and private recreation facilities and programs, residents can avail themselves of a wide range of outdoor activities on the lakes and on private land that has traditionally been open for low impact uses such as hiking, fishing, cross country skiing, and snowmobiling.

Facilities: Norway has three excellent recreation facilities to serve its residents. All are within walking distance of the downtown, although two are located a fair distance away. The town is working on improving pedestrian and bicycle access to the facilities.

Pennesseewassee Lake Park - The park contains over 48 acres and includes two swimming beaches, one for the general public and one specifically for swimming lessons, a playground, a basketball and volley ball court, a number of picnic tables, and a paved boat ramp. Adequate parking is available for both the beaches and the boat ramp. The area is heavily wooded and the most heavily used portion of the park, located southerly of the boat ramp, has walking trails cutting through it. The Little Red School House is located at the southerly most end of the park and is used by various organizations in town. The Recreation Committee is in the process of planning improvements to the park including improved access for people with disabilities and improved playground and other amenities. The committee is also evaluating the feasibility of creating additional trails in the portion of the park northerly of the boat ramp. This area has very little use. The town occasionally cuts timber off the park to keep the forest stand in good health; money from the timber sale is used to support recreation programs. The land was given to the town by the State of Maine. As such, its use is not restricted to Norway residents, although the town bears the brunt of the costs associated with improvements and maintenance. Paris provides funding to the town of Norway in support of the swimming lesson program that is run each summer.

The Little Red School House, which is located at Pennesseewassee Park, is also owned by the Town and is operated by the Recreation Department. It is used by four organizations: the Trackers Snowmobile

Club, the Lakes Association of Norway, the Norway Fish and Game Club, and the ATV club. These groups share in some of the utility costs for the building. The school house also serves as a site for recreation department programs, mostly serving youth during the summer months.

Little Androscoggin River Recreation Area - This area is located on a large piece of town-owned land adjacent to the Highway Garage and lagoons. It is accessed by a gravel road extending from Grove Street and running through a portion of the Highway Department's yard. The area is separated from the garage and NPSW transfer station by a steep, wooded slope, and it is separated from the lagoons by a closed landfill. The southeasterly edge of the property abuts the Little Androscoggin River. The recreation area is in the initial stages of development. Currently, there is one little league size ballfield on the property with plans for at least one more ballfield and a soccer field. The town would also like to provide access to the river for canoe and kayak launching. Currently, vehicles can drive across fields to a point near the river where boats can be carried to the river.

Norway Shoe Shop Recreation Area: There are two tennis courts, a basketball court, ice rink and a softball field located on so-called Shoe Shop land on Cottage Street. The land is adjacent to the New Balance factory, and a portion of it is leased on an annual basis from New Balance.

Other facilities are listed below with brief notes.

- Hobbs Pond (Little Pennesseewassee) picnic area and boat ramp - There is an extensive strip of Route 118 right-of-way along the southerly shoreline of Hobbs Pond. Along this stretch, there is a small picnic area and a gravel boat ramp. The picnic area was formerly a State Department of Transportation operated rest area that was taken over by the town when MDOT planned to close it. It has only one picnic table and an area where a few cars can park. It is often used for fishing from the shore. A gravel boat ramp directly on Route 118 is located near the picnic area. Use is somewhat dangerous and is not encouraged. No signs mark the area. Canoes and kayaks can be hand carried to the water from the picnic area site.

- North Pond boat launch and town land - The town owns an approximately 16-acre parcel which has an access point to North Pond on it. The access point is most suitable for hand carrying canoes and kayaks to the lake, and there is no organized parking facility on the land. The remainder of the land is undeveloped, a significant portion of it being wetland.

- Mill Dam parcel. This is a small triangle of land located on the northerly end of Main Street at the intersection with Water Street. The Christmas tree is placed on this property each year during the holiday season.

In addition to the listed facilities, there is also an extensive recreation area associated with the Oxford Hills Comprehensive High School. With the expansion of the school a few years ago, SAD 17 developed a large recreational field complex on the former Wilner Wood Products industrial site straddling the Norway and Paris town line. The complex is a short walk from the high school and is located on the easterly side of the Norway village area. Students from the high school have also developed a skate board park. It is located in Paris but is also a short walk from the high school.

There is an extensive playground and basketball court located at the Guy E. Rowe School that are open to the public when not being used by the school. The school is located at the southerly end of Main Street. The **Town Office** complex has a large front lawn with a historic water fountain that was moved from the Hathaway House on Main Street many years ago and put in storage until it was reassembled and placed on the town office lawn after the previous comprehensive plan was completed. The town also owns a small park at the corner of Lynn and Main Streets. This park, though small, provides a pleasant green space near the center of the downtown. It is near the town office and across Main Street from the library.

There are also several private recreation facilities in Norway, the most notable of which is the Norway Country Club. It is a nine hole course open to the public.

Norway residents have reasonable access to the surface waters in the community. Pennesseewassee Lake Park provides good access to Norway's largest lake for swimming and boating. Public access to North Pond and Hobbs Pond is more limited, but suitable for canoe and kayak access. Swimming access is not suitable to either. There is no public access to Sand Pond. Access to the Little Androscoggin River is available from several relatively new access points in Paris and Oxford. The points were established by the local rod and gun clubs. Norway has plans to develop access at their Little Androscoggin River Recreation facility in the future. Currently, access for canoes and kayaks can be gained with a short portage. There are also two privately owned marinas on Pennesseewassee Lake. One sells and services boats and has limited access to the lake. The other provides a docking and mooring service for people wanting to keep their boats in the water during the summer months.

Ordway Grove is a grove of old growth white pine located off Pleasant Street and near the shores of Pennesseewassee Lake. It is owned by the Twin Town Nature Club but is open to the public for passive recreation. A series of trails wind through the site.

The Frost Homestead Reserve is owned by the Western Foothills Land Trust. Proposed as a technology business park in the late 1990's, it was recently purchased by the land trust. The trust has constructed a network of trails on the parcel of approximately 100 acres. This area overlooks Pennesseewassee Lake and its conservation preserves some views from that body of water and shoreline.

Trails: In addition to trails at Pennesseewassee Park, Frost Homestead Reserve, and Ordway Grove, there are a few other trails in town and concepts for other trails linking the recreation areas and the downtown. Over the past decade interest in recreational, human powered use trails has increased. Some of this is the result of the Healthy Communities Coalition that was sponsored by the hospital and funded by the state tobacco settlement. The Coalition has developed a trail committee that is continues to map existing trails and plan new trails in the Oxford Hills area. There is also a committee affiliated with the high school, that is working with the Coalition, and that has begun development of a passive recreation area and teaching forest between the high school and the Little Androscoggin River. The area is near the Little Androscoggin River Recreation Area and adjacent to the sewage lagoons. The group has also developed a trail that links the passive recreation area at the middle school in Paris with the recreation/teaching forest. The committees have discussed linking the area with the Little Androscoggin River Recreation Area and the downtowns of Paris and Norway.

Other trails that have been considered is a bicycle/pedestrian link from downtown to Pennesseewassee Park and improving the Norway Railroad right-of-way to link downtown with the high school recreation fields and the high school area. The planning efforts are in their initial stages, and it is premature to develop a trail layout in the Comprehensive Plan.

Programs: The town's recreation program has grown considerably since the previous comprehensive plan was developed. The town runs several summer youth programs in addition to giving swimming lessons at Pennesseewassee Park. The town maintains the fields for use by the Little League and other baseball and softball programs. Additionally, the town either operates or provides assistance to the following recreation programs:

Norway Youth Baseball - provide fields
Youth softball
Youth Tee Ball
Swim Program (American Red Cross certified)
Lifeguard Instruction
National Youth Sports Coaches Association training
After School Junior Bowling League
After School Roller Skating and Blading

In addition to these town supported programs, the **Twin Town Nature Club** organizes nature walks through the Ordway Grove and the Western Foothills Land Trust sponsors a variety of outdoor recreation events.

Indoor and outdoor facility needs: The 1991 plan compared the existing recreation facilities with a set of recommended standards provided by the State. The plan provided an extensive list of types of recreation facilities and listed whether the town was deficient or had a surplus. In many categories, the town was found to have close to the recommended number and type of facilities. It was deficient in ballfields and ice skating. The only category in which there was a notable surplus was in picnic tables. The construction of the new ballfield at the Little Androscoggin River Recreation Area and the fields associated with the high school have alleviated most of the deficiencies in comparison to the recommended standards. However, discussions with the Recreation Committee indicate that there is still a demand for ballfields and soccer fields. There is also a locally identified need for trails, and the town would like to develop additional trails at Pennesseewassee Park and connecting trails in and around the downtown area. Completion of the Little Androscoggin River Recreation Area as planned should alleviate the need for ballfields and soccer fields for the next decade or so.

Recommended standards note that the facilities should be available near concentrations of housing. Perhaps the most significant drawback to Norway's facilities is that they are spread out, but fortunately all are within walking distance, or at least an easy bicycle ride, of the downtown including Pennesseewassee Park. The town and the Recreation Committee have identified improved pedestrian and bicycle access to the facilities as important.

Residents of Norway also have the fortune to avail themselves of many outdoor recreation activities on private land. Snowmobile trails crisscross the landscape on public and private land and cross the lakes. These trails are also used by cross country skiers and mountain bikers. Mapped snowmobile trails are maintained by the Trackers Snowmobile Club, and the club obtains permission from private landowners for operation and passage on the trails. However, summer access by mountain bikes and ATVs is not formalized. Many towns have experienced problems with ATV use on town roads and on private land. Norway is no exception. However, there are efforts in the state legislature to more closely regulate ATVs, and local clubs are forming to educate riders and to formalize trail use arrangements with landowners. The local ATV Club has organized to address these issues locally. Unlike snowmobiles that travel on frozen and snow-covered ground, ATVs can lead to significant environmental problems on dirt roads and trails. Speeding and indiscriminate use can result in erosion problems equal to those caused by construction activity. Therefore, it is important that the club be successful in their efforts to educate ATV owners and that they take on some basic responsibilities for trail maintenance.

Access to the lakes provides for fishing and boating opportunities and much of the private land is open to hunting and brook fishing.

The previous comprehensive plan indicated that indoor recreation areas were adequate to meet the needs. With the expansion of the school, this continues to be true. Residents in the area have discussed the

desire for an indoor swimming pool for many years. However, development of a pool has proved difficult due to the finances involved. There may also be a need for a senior citizen center and an indoor teen center. Neither these facilities nor an indoor pool appeared to be a priority for the public that have participated in the plan development through the forums, questionnaire or meetings with the committee. As the Recreation Committee completes some of its currently planned projects, they may want to assess the need for these facilities.

NATURAL RESOURCES

Setting

Norway is located in the southeast portion of Oxford County and is bordered by eight other towns: Albany Township, Greenwood, Otisfield, Oxford, Paris, West Paris and Waterford (all in Oxford County), and Harrison (in Cumberland County). The area is in the foothills of western Maine and is often referred to as the Oxford Hills, a name taken by the regional high school.

The land area of Norway is 44.56 square miles or 28,520 acres as reported by the State of Maine Planning Office. The Little Androscoggin River flows along the southeasterly boundary of the Town and the Crooked River is located to the west, but does not make up the boundary line. A small portion of the Crooked River flows through Norway. Four notable lakes, of which Pennesseewassee is the largest, are contained entirely within the Town.

The Land

Topography: The topography has played a major role in the development of Norway. As the town developed topographic constraints including extensive wetlands, Pennesseewassee Lake, the Little Androscoggin River, and Pikes Hill limited development of the downtown area. These constraints continue to present formidable barriers to expansion of the downtown and the development of an industrial base in the community. The topography also was and continues to be an important factor in establishing the natural resource base, character and aesthetics of the town.

Relief, the general height of land, varies considerably throughout Norway. Elevations range from 1,241 feet above sea level at the top of Brown Hill to approximately 325 feet above sea level along the Little Androscoggin River.

Generally speaking, there are three physiographic areas of Norway:

- a flat glacial outwash plain located in the south east corner of Town (Downtown Norway),
- an area of hills, lakes, ponds and wetlands covering most of Norway, and
- rugged terrain in the northwest corner of Town where the highest elevation occurs at Brown Hill.

The slope of the land also varies considerably throughout the Town. Slope, the amount of rise or fall in a given horizontal distance, presents various limitations to development and other land use activities. As slopes become steeper, construction is more expensive, roads and services are more difficult and expensive to construct and maintain, and the potential for environmental degradation increases.

A review of the U.S.G.S. topographic maps and an analysis of the slopes determined by the U.S. Natural Resources Conservation Service Soil Survey shows the areas of steep slopes. Steep slopes are scattered throughout the community; many run in sinuous strips in a northwesterly direction along the sides of hills. This pattern was created by the intense scouring action of the glacier, which melted away approximately 12,000 years ago. Extensive areas of steep slope can be considered in developing any land use controls, but, since small areas of steep slopes are common throughout much of the Town, slope should be specifically considered in reviewing development.

Soils and Geology: Soils are a basic resource of great importance to the use and development of the land. They are the underlying materials upon which roads, buildings, waste disposal, agriculture and forestry occur. Development which occurs on or in soils which are unsuitable for the proposed use will almost certainly face increased development, construction, and annual maintenance costs and may cause environmental degradation.

Soils in Norway generally follow the physiographic areas of Town. Soils in the "flat area" in the southeastern portion of Town are sandy or gravelly soils typical of aquifer and aquifer recharge areas. Bordering the aquifer are significant wetlands where silts and clay soils are more prevalent. Soils in the remainder of Town are generally glacial tills which range from very well drained to wetlands (very poorly drained or hydric soil types). Some tills are easily worked and provide a good soil type for subsurface disposal. In other areas, soils are shallow to bedrock, have a high water table, or are extremely stony; soils having any of these characteristics are more difficult and expensive to develop. Development on them has increased potential to cause environmental degradation. The characteristics of the glacial till soils vary considerably throughout the town with no significant characteristics such as drainage class or suitability for on-site sewage disposal being prevalent in any particular area. Therefore, soils should be considered as land is developed rather than using the information to provide significant guidance on land use.

Underlying the soils that constitute the surface of the ground is the geologic formation of the land. The geology took its current form over 10,000 years ago when the area was under a massive glacier. It scoured much of the soil from the land, deposited eroded soils in distinct areas, and gave the soils their current characteristics. Most of Norway is characterized by bedrock that underlies the soil layer at fairly shallow depths. In the southeasterly section of the community, a large sand and gravel deposit formed as the glacier retreated from the area over 12,000 years ago. This area is characterized by relatively deep (often 50 or more feet in depth) sand and gravel deposits. These will be further discussed in the section on groundwater.

Water Resources

Wetlands: Wetlands are extremely important natural resources. They provide temporary storage of large amounts of storm water runoff, thus helping to reduce flooding; they filter the water which flows through them, by chemical and biological action, thereby increasing its natural purification; they control the effects of erosion by filtering silt and organic matter; they provide breeding, feeding, and resting habitats for many species of game and non-game wildlife--mammals, fish, birds, reptiles, and amphibians; they offer important habitat for certain plants and insects; and for more than a few people, wetlands offer unique recreational opportunities. Even the slight alteration of a wetland can seriously impact its natural function, and the benefits are difficult and expensive to regain.

The Maine Department of Environmental Protection (DEP) has identified wetlands the area within 250 feet of which must be protected by shoreland zoning regulations. The town has zoned these areas in accordance with the mandatory shoreland zoning law and recommended standards of the model shoreland zoning ordinance. These areas should continue to be zoned accordingly.

In addition to these wetlands, the federal government has published a National Wetlands Inventory which is available in digital form and has been placed on the resource maps used for the development of the plan. The Department of Inland Fish and Wildlife has also designated Waterfowl and Wading Bird habitat, which is mapped for Norway. There are many such habitat locations scattered throughout the town. Three deserve mention due to their size or location: one located in the large wetland area that extends from the southeasterly finger of Pennesseewassee Lake in a northerly direction; another is located northwesterly of North Pond, and a third is located in the northwesterly corner of Norway.

All wetland mapping has limitations because the wetland boundaries are often difficult to define precisely without thorough field-checking. However, these maps do indicate areas which deserve particular attention in planning and development decisions. Some wetlands, especially the larger wetlands and those having important wildlife habitat functions, may best be protected through processes similar to shoreland zoning. Other wetlands can be adequately protected by conducting site-specific review of developments. In addition to State mandated shoreland zoning, wetlands are regulated by State and Federal laws, but these laws often allow some filling and provide little, if any, protection to the important riparian area surrounding them. The riparian area is considered the transition area between the upland soils and the wetland or water body. These areas are important habitat areas. A number of species make these areas their home, and most species use them as travel corridors and access points to water for drinking, food supply, and nesting.

One type of wetland, often so small it defies mapping at anything but the largest scale, are vernal pools. These pools, as the name suggests, are usually present only in the spring and early summer. They provide habitat for several species only found in them including certain types of salamanders. Ordinances should require careful mapping of wetlands and insure that important, although small wetland resources such as vernal pools are protected.

Watersheds: The land area that contributes water to a particular stream, river, pond, or lake is known as its watershed. Watershed boundaries are identified by connecting points of highest elevation around a body of water--that is, all the land within the watershed drains to that body of water, and all the land outside the watershed drains somewhere else (to another body of water). Rain and snow falling within this area eventually flow by gravity in surface runoff, streams, and ground water to the lake, pond, stream, or river which is the lowest point in the watershed.

There are the four significant lakes/ponds in Norway and seven major watersheds of importance.

- Pennesseewassee Lake
- Little Pennesseewassee Pond
- Sand Pond
- North Pond
- Thompson Lake (located in Oxford and several other towns)
- Crooked River (which drains into Sebago Lake)
- Little Androscoggin River

Watersheds are important features that are often little noted. However, all activity in a watershed has the potential to impact the receiving water body. Erosion or the flushing of nutrients in the far reaches of a lake watershed can ultimately adversely impact lake water quality. Therefore, all development must be carefully reviewed for potential impacts on streams, lakes and rivers even when the activity is not adjacent to the water.

Surface waters

Rivers: The Little Androscoggin River, originating from Bryant Pond, flows towards the southeast for approximately 46 miles through hilly terrain, to join the Androscoggin River in the City of Auburn. The "Little Andy" drains an area of approximately 354 square miles. Along its course, the river has areas that are flat and slow-moving, and areas where it resembles a mountain stream, with many riffles. In Norway, after flowing over a dam in South Paris, the river follows a generally flat meandering channel and has an extensive floodplain. When the Norway sewage treatment lagoons were reconstructed in the 1990s, one area of the river bank was stabilized with large stone riprap. The extensive floodplain and meanders

makes significant bank erosion possible. The possibility exists for the river to cut through some of the low lying land that juts out into the river causing the meanders. Development in the area must be carefully considered, even when involving low intensity uses such as recreation. However, the soils and topography make this an ideal area for recreation but care should be taken not to construct facilities that would be easily damaged by flooding or a change in the course of the river.

Just north of Norway, the Little Androscoggin receives the waste from the Paris Utility District's sewage treatment plant. Being a relatively small and slow moving river in this area, the addition of the treated waste causes the classification to drop from B to C. In Norway, the river receives waste from the Norway sewage treatment facility. As it flows through Norway, Paris and northern Oxford, it also receives both directly and indirectly stormwater runoff from the urban areas of these three communities.

There is a limited land area in Norway which drains directly to the Little Androscoggin River; however, Lake Pennesseewassee outlets to the river through a stream named for the main lake. Thus, a significant part of Norway's land area ultimately indirectly drains to the Little Andy.

The Crooked River crosses the southwestern corner of the Norway\Waterford Town boundary. The DEP water quality classification for this resource is Class B. While the Little Androscoggin River has extensive development impacting its water quality, the Crooked River has very little development along its shores or in that part of the watershed which lies in Norway. The Crooked River flows southerly through several other towns and eventually into Sebago Lake, an important lake for many reasons including the fact that it is Greater Portland's drinking water source. The watershed would make an ideal area for preservation through conservation easements and similar programs in which the Portland Water District may be interested.

Streams and Brooks: There are a number of streams and brooks that drain portions of Norway. Most flow to the lakes. Most brooks and streams have good water quality. The State DEP has classified them as B, the second highest water quality classification. Many have been given this classification because the water quality has not been monitored by the state. Bird Brook and Lake Pennesseewassee Outlet have a classification of C. Bird Brook flows from north to south near the easterly boundary of Norway. It flows through a large wetland just north of the downtown area and then flows through the downtown crossing under Main Street and emptying into Pennesseewassee Lake Outlet. Bird Brook collects storm drainage from a portion of the downtown which is the reason the brook has been classified as C. Pennesseewassee Outlet also flows through the downtown area. Storm drainage from a significant section of the downtown flows into this stream and is the reason that the stream was classified as C. Sampling of the stream over ten years ago indicated some contamination from fecal coliform bacteria, an indication that sewage may be entering the brook. Samples were not differentiated between human bacteria and warm blooded animal bacteria, but levels appeared inconsistent with animal contamination. However, a sanitary survey of the brook did not indicate any potential sources of sewage. The issue was not pursued further since the stream was not and still is not used for water contact recreation.

Much of Pennesseewassee Outlet is surrounded by floodplains and wetlands especially in its southerly reaches prior to entering the Little Androscoggin River. This constrains building near the stream but provides a small wildlife refuge in the center of Norway. The outlet has played a significant roll in plans for redevelopment of the downtown. Plans have envisioned a footbridge over the stream and walkways along its banks. The bridge would more closely connect the C.B. Cummings mill area with the downtown. Walkways along the stream would create a pleasant opportunity for green space in the tightly built up downtown.

Lakes and Ponds: Norway has four major lakes located within its boundaries. Parts of the Sebago Lake watershed (Crooked River) and the Thompson Lake watershed also extend into Norway.

Pennesseewassee Lake, also known as Norway Lake, is the largest lake in Town and has a surface area of 948 acres. It supports heavy year round and seasonal residential development along its shore. Three large ponds, North, Sand, and Little Pennesseewassee (Hobbs Pond) are somewhat less developed although considerable growth has occurred around them since the last plan was developed.

Development activities within watershed areas, such as house and road construction and road maintenance, timber harvesting, and agricultural practices, disturb the land that is drained to a lake by streams and ground water. The disturbed and developed land contributes pollutants and other substances to the lake; in turn, lake water quality is degraded. Activity anywhere in the watershed, even miles away, has the potential to impact lake water quality.

Of the myriad of substances that can be carried to the lake from its watershed, phosphorus is of primary concern. Phosphorus is a natural element that clings to soil particles and organic matter. It is necessary for plant growth and is transported by surface water. When water carrying phosphorus is allowed to seep into the ground, as in an undisturbed watershed, soils and organic matter bind with the phosphorus and hold it for use by plants. However, when surface runoff increases, as in a watershed where the vegetation holding the soil in place has been removed for houses, other buildings and roads, the phosphorus can be transported, along with eroded soils, and deposited in lakes and streams. Studies have also shown runoff from built areas, even where erosion is not a problem, to be higher in phosphorous concentration than that from forested areas. Phosphorus quantities increase in a direct relationship with the imperviousness of the land surface.

All lakes have the ability to absorb some phosphorus before there is an adverse impact on the quality of the lake. However, when the phosphorous load to the lake becomes too great, the phosphorus acts as a fertilizer and causes algae to flourish. An abundance of algae turns the lake green, and blocks sunlight to deeper levels. As the algae crowding the upper part of the lake die and drop to the bottom, they are decomposed by bacteria. The oxygen supply in the bottom waters is exhausted by the bacterial decomposition. Under the depressed oxygen conditions, phosphorus, which usually is bound in the bottom sediments, may be released into the water, thereby, exacerbating the problem. Trout and salmon, which live in the colder bottom waters of many lakes, can suffocate. The decay of algae generates obnoxious odor and taste. Fish, plants and wildlife of the lake ecosystem are endangered in this process.

DEP has developed a phosphorus control method which uses a phosphorous loading model to determine an allowable increase in phosphorous export from the watershed. The method arrives at this figure by coordinating the lake's sensitivity to phosphorus (DEP supplied) with information on the current water quality (DEP supplied) and the level of protection the town selects for the lake. The latter factor is a policy decision to be made by the town or towns in the watershed based on the importance and use of the lake.

Once the allowable increase in phosphorous export from the watershed has been determined, it can be allocated on a per acre basis to the future area likely to be developed in the lake's watershed. DEP provides a guide to the percentage of land that will be developed for types of towns and regions.

The phosphorus control method is based on the lake maintaining water quality with no noticeable degradation. It accounts for future growth; however, projecting growth in any given watershed is difficult and inexact. Therefore, it may be necessary to adjust the phosphorous control information as new information on both water quality and growth become available. Ordinances should be able to be changed to reflect the updated data without amending the comprehensive plan.

The following table is a listing of lakes and lake watersheds in Norway. The table includes the direct drainage area in Norway and the percentage of the watershed that is in Norway. It also lists the allowable phosphorous load from Norway which would produce an increase in phosphorous concentration of 1.0 parts per billion (which is considered the change in phosphorous concentration which will cause a noticeable change in water quality), when combined with the allowable load from the remainder of the watershed outside of Norway.

Lake Data

Lakes/Ponds	Lake Area (acres)	Drainage Area in Norway (acres)	% of Watershed in Norway	Phosphorus Load lbs/ppb/yr
Little Penn	96	770	100	8.02
North	165	790	100	7.36
Penn	948	9,673	84.4	97.7
Sand	136	538	100	8.51
Mud	29	340	100	3.04
Round	15	126	100	1.14
Furlong		29	12.2	0.26
Speck 1 (south)		34	84.6	0.39
Speck 2 (north)		66	75.3	0.72
Little (Otisfield)		2	0.8	0.02
Thompson (Oxford...)	42,262	2,866	12.8	47.12
Sebago (Naples...)		9,867	8.8	304.64

Maine Department of Environmental Protection

The following table provides some additional information and establishes the amount of phosphorus that may be permitted from a development in pounds per acre (column to far right). The second column provides the water quality category as assigned by the DEP. It is directly related to the current lake water quality and the sensitivity of the lake or pond to additional phosphorus load. All lakes in Norway are Moderate/Sensitive, meaning that their water quality is average and that they are sensitive to additional phosphorous load. The third column provides the lake protection level. It is assigned by the town through the comprehensive plan. A Medium level of protection has been selected for all of the lakes except Sebago, which has been assigned a high level of protection. This is done for two reasons: it is a public drinking water supply, and its watershed is in a more remote area of Norway that should remain more rural.

Lake Protection – Phosphorus Allowances

Lakes/Ponds	Water Quality Category	Protection Level (factor)	Phosphorous Load lbs/ppb/yr	Developable Acres	Phosphorous Load lbs/acre
Little Penn	MS	Med (1)	8.02	154	.05
North	MS	Med (1)	7.36	158	.05
Penn	MS	Med (1)	97.7	1934.6	.05
Sand	MS	Med (1)	8.51	80.7	.10
Mud	MS	Med (1)	3.04	51	.06
Round	MS	Med (1)	1.14	18.9	.06
Furlong	MS	Med (1)	0.26	2.9	.09
Speck 1 (south)	MS	Med (1)	0.39	3.4	.11
Speck 2 (north)	MS	Med (1)	0.72	6.6	.11
Little (Otisfield)	MS	Med (1)	0.02	0.4	.05
Thompson (Oxford...)	O	Med (1)	47.12	573.2	.08
Sebago (Naples...)	O	High (0.5)	152.32	1480	.21

Town and Maine DEP

Ground Water

Ground water is water that is derived from precipitation that infiltrates the soil, percolates downward, and fills the tiny, numerous spaces in the soil and cracks or fractures in the bedrock below the water table. Wells draw water from permeable layers or zones in the saturated soil and fractured bedrock. In general, the saturated areas which provide adequate quantities of water for use are called aquifers. Two major types of aquifers occur in Maine: sand and gravel aquifers and bedrock aquifers. Wells in sand and gravel aquifers yield from 10 gallons per minute (gpm) up to 2,000 gpm while wells in fractured bedrock generally yield from 2 to 25 gpm.

Sand and gravel aquifers: A sand and gravel aquifer is a water-bearing geologic formation consisting of sands and gravels left by the melting glaciers and subsequent melt-water rivers and streams that were once part of this area of Maine (roughly 12,000 years ago). The sand and gravel deposits range from ten feet to more than one hundred feet thick.

Sand and gravel aquifers are generally large, continuous, sand and gravel deposits that extend along a river valley. The sand and gravel deposits fill the valley between the hills on either side to create a fairly flat valley floor. In most cases, the flow path of ground water through the aquifer is from the valley walls towards a stream or river flowing along the valley floor. The stream, then, acts as a drain where ground water enters the surface water drainage system, and flows downstream.

Water in the aquifer moves between the sand and gravel grains at a rate that is determined by the sizes of the pores (called the porosity) and the steepness of the flow path (called the hydraulic gradient). The flow rates of ground water through the sand and gravel found in the area average from 10 to 500 feet per day.

Sand and gravel aquifers can be contaminated from any substances that seep into the ground directly or are carried into the ground after dissolving in water. A common misperception is that sand and gravel filter and treat contaminants reasonably well. In fact, filtration and treatment are highly dependent on the kind of contaminants. Organic materials such as domestic sewage may be filtered and treated reasonably well, but most potential contaminants, especially petroleum based products and chemicals, pass through the pores of the sand and gravel without any appreciable filtration or treatment. And, once contaminants enter the water table, they may travel thousands of feet over time.

The slow rate of ground water movement causes this resource to be particularly sensitive to contamination. Once contaminants enter the ground water, they do not flush out of the system readily and residual contaminants are often left on the particles of sand or gravel to leach slowly into the surrounding ground water. Often hundreds of years are necessary for an aquifer to clean itself naturally.

A large and highly productive sand and gravel aquifer runs adjacent to the Little Androscoggin River along the southeasterly part of town. This aquifer is part of a much larger one which extends, somewhat intermittently, from Greenwood in the north, southerly to Gray. An area of high yield (over 50 gallons per minute) runs nearly continuously from north to south down the Little Androscoggin.

The U.S. Geological Survey, the Maine Geological Survey, and the Androscoggin Valley Council of Governments have cooperated on extensive studies of the aquifer, and the Norway and Oxford Water Districts and the Paris Utility District have conducted extensive studies on their wellheads, the area that contributes water to their wells.

In Norway, the aquifer underlies the southeasterly portion of the downtown and the land south and east of Route 26. Immediately south of the Norway town line,
there is a high yield area capable of producing in excess of 500 gallons per minute. (The Norway Town well is located in this high yield area.)

Development on the aquifer in Norway and just to the north and south in Paris and Oxford, respectively, has been extensive. The area surrounding Norway's well, in Oxford, has experienced significant commercial and industrial development as well as some residential development. The flat, gravelly soils and location on Route 26 just south of the population center of Norway-Paris make this a prime location for such development. Thus far, sewage from some of this area has been collected and pumped to the Norway Sewage Treatment Facility located just upstream on the banks of the river. The Oxford Water District extended water into this area of northern Oxford a few years ago, increasing the potential for additional commercial development in the wellhead area.

In the early 1990s, the Norway well was contaminated by MBTE, most probably from a leak from a nearby gasoline station. The well was shut down and water was purchased from Paris. After extensive work and years of work, the contamination was cleaned so that the well could once again be used. Ground water in the area is also threatened by other gasoline and petroleum storage tanks, vehicle repair and maintenance facilities, and industrial facilities not connected to the sewer. Additionally, drainage from large parking and other impervious surfaces in the area could degrade ground water quality. The Route 26 transportation corridor also presents a potential threat from accidents. It also appears that the extensive development around the Norway well has changed the flow characteristics of the aquifer somewhat. Recharge in the vicinity of the well has been reduced by the large impervious areas. Therefore, water is pulled to the well from further away. It appears that this has had the effect of

lowering the groundwater table in the vicinity of the Norway well.

Some of the downtown area underlying the aquifer in Norway is a relatively low yield sand plain. It, however, serves to recharge the aquifer. The downtown area of Norway presents threats to the aquifer's quality in the form of underground petroleum storage tanks at gasoline stations and possibly at other business locations, leaking sewer lines, and floor drains. In the area south of Route 26, Norway's closed solid waste and demolition debris dumps are located over the aquifer as are the sewage treatment lagoons. While the current lagoons, completed in 1990, have a substantial liner system, the old lagoons were located in the same area and were not adequately lined. Also, in this area is the Norway-Paris Transfer Station. The Station and all floor drains in the complex are connected to the Norway sewer system.

Additionally, to the south of the downtown along Route 26, commercial development poses potential threats to the ground water supply. Most notably, a combination gasoline station, car wash and oil change facility poses a substantial threat.

Bedrock Aquifers: Most of the private individual wells in Maine are drilled into bedrock where they penetrate through water-bearing cracks (called fractures). These water-bearing fractures are bedrock aquifers. Because most fractures are small, the bedrock aquifers produce relatively small amounts of water generally suitable for domestic purposes and small businesses. Drilled wells into bedrock will continue to be a water supply source for rural residences, and larger bedrock aquifers might be a supply source for commercial development, recreational facilities, or clusters of houses which might occur outside the downtown area. Additionally, a study identified a potential bedrock aquifer in the area around Bird Brook just north of the Norway Downtown as a possible source for a public water supply. Other than this potentially large bedrock aquifer, the locations of bedrock aquifers have not been mapped.

Bedrock aquifers are highly susceptible to contamination. The fracture system in the rock is often generally extensive and interconnected over large distances. Since the water is confined to the narrow fractures, it may move very quickly over the large distances especially when it is being pumped for a water supply. Generally, shallow soils above the bedrock do not treat or filter most contaminants. Therefore, the wells drilled in bedrock are quite susceptible to contamination.

While underground gasoline tanks provide the greatest threat, residential development on septic systems can contaminate ground water with nitrates and possibly other substances.

Impacts on Water Resources - Non-Point Pollution

Non-point pollution is pollution that is created by virtually all land use activities, ranging from urban development to agricultural and forestry operations. While a few types of non-point pollution--such as erosion of streambank channels--occur due to natural forces, the primary concern is with pollution resulting from human activities and disturbance of the land. In addition to having a negative impact on surface waters--lakes, streams, and rivers, as well as wetlands--non-point sources may also seriously affect ground water. Any activity which disturbs the land or changes its use has some impact on either surface or ground water quality.

Most federal and state laws have addressed point sources of pollution: those sources that are generated by homes and businesses connected to a central sewage collection system and by some industries that discharge directly to surface waters. These laws have helped to clean up at least 70 percent of the pollution load to our rivers and have made most of the rivers and streams in Maine swimmable and fishable most of the time. However, the federal and state laws addressing non-point pollution are more subtle, do not address all sources, and are often difficult to enforce.

Several potential threats to ground water have already been discussed as has phosphorous contamination of lakes. The State has developed Best Management Practices that should be used to control the non-point pollution from various sources and land use activities. They present the best methods to use in keeping pollution from the sources to a minimum. Alternative Best Management Practices may be applied to the same type of pollution source. Laws requiring their use are not specific and often non-technical people find them difficult to understand and apply. Municipalities must often be involved in controlling non-point pollution through their local planning boards and actions by the town to control sources for which they are responsible such as roads, solid waste sites, and other town facilities.

Some types of non-point pollution and potential sources are presented so that the Town may be aware of them as they plan for and review future development.

Some non-point pollutants include:

Erosion and resulting sediment. Eroded soil particles are carried away and deposited as sediment in lakes, streams, rivers, or wetlands. Soil particles can irritate fish gills and reduce sunlight required for plant life. Sediment can cover habitat, destroying wildlife feeding and breeding areas.

Hazardous Materials. These materials can be toxic to living organisms. Some such as mercury, lead and PCBs can accumulate in the tissues of living organisms, causing problems for wildlife, and possibly human, food chains.

Petroleum Products. Although not all petroleum products are considered to be hazardous, they may impact both surface and ground waters either by creating toxic conditions or by degrading drinking water conditions.

Non-hazardous Leachable Materials. Some chemicals, although not hazardous, can also degrade the environment. Perhaps the best example is road salt which has been known to contaminate aquifers so that water cannot be used for drinking purposes.

Nutrients. Nutrients may over-fertilize water bodies. The over-fertilization causes changes in the aquatic community by stimulating certain types of plants and organisms which choke out other life and may also degrade water during their decay. The effects of phosphorus in lakes, as noted earlier, are the best example of this.

Some sources of non-point pollution include:

Residential Land Use. There are several potential impacts including erosion, underground fuel storage (if used), septic system effluent and application of fertilizers and pesticides. Nitrate, a by-product in the breakdown of sewage in a septic system, is not treated by the soil. It enters the groundwater and may contaminate it. Generally, nitrate contamination is handled by dilution. Lot location and size must be designed to prevent the concentration of nitrate from septic systems.

Commercial Activities. Potential impacts from such development include erosion, improperly disposed of chemicals, and runoff from large roofs and parking areas. Runoff can carry sediments, phosphorus, oils, and other substances to streams or may enter the groundwater through dry wells. Underground petroleum storage is a major issue with some uses. Additionally, fire can release dry chemicals in storage at commercial stores and warehouses.

Industrial Activities. Of particular concern are industries which store, handle, or use various types of petroleum products and other chemicals. Leaks, spills, or illegal dumping can contaminate ground and surface waters as the material leaches down through the ground, or is washed into streams or other water bodies.

Gravel Pits. Any excavation that reduces the amount of soil also reduces the earth's capacity to absorb any potential contamination and increases the chance for ground water degradation. Inadvertent spills and leaks of petroleum-based fluids during the refueling and/or maintenance of heavy equipment operating in the pit is one source of pollution. Pits also make attractive areas for illegal dumping of wastes.

The known sources of potential groundwater contamination noted in the previous plan have been addressed. These sources are not expected to cause further problems, although in several cases, some pollution may still remain. The sources included:

Old Wilner Wood Products site on Alpine Street - cleaned up and is now athletic fields for the high school.

Old sewage treatment lagoons - closed and cleaned. May be some residual groundwater contamination.

Old town dump and demolition dump - closed according to DEP standards. May be some residual groundwater contamination and continued slow leaching.

Other Natural Resources

Floodplains: Floodplains are areas adjacent to waterbodies and wetlands that become inundated, or flooded, when the water body cannot handle all of the flow entering it. Flooding is usually caused by excessive runoff from large rainstorms and from snowmelt. Sometimes, ice dams form along rivers and streams and increase the severity of the flooding. Proper planning is needed to insure that property is not destroyed and, in particular, floods are not made more severe due to construction and filling on floodplains.

The Federal Emergency Management Agency has mapped 100- and 500-year floodplains. For planning purposes, the 100-year floodplain will be used. The 100-year floodplain includes land adjacent to a watercourse which is subject to inundation from a flood having at least a one percent chance of occurring in any one year. It should be noted that the 100-year flood can certainly occur more than once in a 100-year period. The State has published a model floodplain management ordinance. It requires that the floodway, that portion of the floodplain which has a one percent or greater chance of flooding each year, be kept free of encroachment so that the 100-year flood can be carried without substantial increases in flood elevation. This is the area where a flood creates extremely destructive forces. The ordinance also requires flood proofing construction standards for the flood fringe, that portion between the floodway and the limits the projected flooding. However, where feasible, construction in the flood fringe should be minimal in order to prevent the need for emergency evacuations, minimize potential property damage, and insure that flood levels are not increased either upstream or downstream.

The Little Androscoggin River, the Crooked River and Pennesseewassee Outlet have the most notable floodplains in Norway. Along these water courses, flooding is likely and damage to property constructed in the floodplain could be significant. Floodplains also surround most of the streams, lakes and wetlands in Norway. However, floodplains adjacent to the streams and lakes are not extensive; generally, little

property exists in these areas. Most notably, flooding of these areas causes damage to roads, bridges and culverts. Extensive floodplains surround North Pond and the southerly finger of Pennesseewassee Lake; however, these are located on wetlands where no construction has occurred. These extensive wetlands play an important roll in holding water and reducing the extent of flooding in other areas of Norway.

The most notable floods on the Little Androscoggin River in the recent past occurred in March 1936, March 1953, and April 1987. The 1987 flood was the greatest at least since 1913 and probably since 1820. The **1936, 1953,** and **1987** floods had recurrence intervals greater than 100 years.

Wildlife: Wildlife is an important natural resource. In addition to being an important part of the natural ecosystem, it contributes immensely to the character of the town and to the recreation potential of residents and visitors. Wildlife species are a product of the land and, thus, are directly dependent on the land base for habitat. Wildlife habitat is constantly changing through natural succession, increasingly by human activities and development. As local and regional conditions and land use practices change, the wildlife of an area can also be expected to change, for all wildlife requires adequate habitat to sustain their populations. If a habitat does not exist, or an existing habitat is lost, various types of species will not occur. Through thoughtful land use planning, adequate habitat and, in particular, areas of critical concern can be managed to maintain wildlife as a viable resource.

Although there are many types of habitat important to numerous species, the following five habitats are considered critical:

- Wetlands, especially moderate and high value waterfowl and wading bird habitat
- riparian areas (shorelands of lakes, ponds, rivers, streams and wetlands)
- deer wintering areas
- rare, endangered, or threatened species and surrounding habitat
- occurrences of rare or unique natural communities and/or other critical habitats
- extensive tracks of undeveloped land including a variety of habitat types

Norway's numerous wetland areas, woodlands, and farmlands provide outstanding wildlife habitats. Due to their limited nature, and their importance to wildlife, any loss of these areas will have an immediate, negative impact on wildlife.

Wetlands, as previously noted, provide breeding and feeding areas for a variety of wildlife. Riparian areas, those areas along watercourses, help support high levels of wildlife populations. They improve fish habitat by providing food and shade (thus keeping waters cool); they are the primary habitat for many furbearers; and they provide travel lanes for numerous wildlife species.

While deer range freely over most of their habitat during spring, summer, and fall, snow in excess of 18 inches forces them to seek out areas which provide protection from deep snow and wind. Size, shape, and location of these wintering areas vary from year to year, or within a given year, especially if driven from an area by timber cutting or development. Most wintering areas, however, are traditional in the sense that they are used year after year, and generally the largest "yards" support the largest wintering populations and coincide with the largest undeveloped blocks of forest land. Smaller areas support fewer numbers of wintering deer. Wintering areas are comprised mostly of spruce or fir, but other softwoods such as cedar, pine or hemlock may be present. Deer wintering areas may represent only 10% of the total deer range, but, without such areas, deer will not survive in any but the smallest numbers. Although many types of human activity are not compatible with deer yards, good timber management can be beneficial.

The Maine Department of Inland Fisheries and Wildlife (IF&W) has mapped deer wintering areas, but they are subject to change based on development patterns and timber harvesting. The Planning Board must review large scale development to insure that deer wintering areas are not adversely impacted when feasible. IF&W has also mapped moderate and high value wetlands. Most are included in shoreland zoning and therefore are afforded some protection including the 250 foot riparian area included in shoreland zoning.

While the critical areas identified meet the specific needs of certain wildlife species and are necessary for their survival, they alone cannot support adequate levels of population numbers and diversity of wildlife.

In order to maintain a diversity of wildlife, extensive undeveloped tracts of land, also mapped by IF&W, are desirable. Bear and bobcat are a few of the species that require large tracts for their feeding and breeding needs. Cutting off travel ways and isolating species on small tracts can lead to disease and detrimental breeding patterns. A variety of habitat types ranging from open field to mature timber is also necessary to meet the habitat requirements of many wildlife species throughout the year. In fact, farmland and open space is an important resource for many species. Since different species have different habitat requirements and home ranges, loss of habitat will affect each species in different ways, ranging from loss of individual nesting, feeding, and resting sites, to disruption of existing travel patterns.

While the loss of habitat from a single development may not appear to be detrimental, the cumulative loss will reduce the capacity of the area to maintain and sustain viable wildlife populations.

It is not within the scope of this project or any general planning project to map the various habitats needed to maintain a diverse wildlife resource. Special habitats such as wetlands, riparian areas and deer wintering areas (to the extent feasible) have been mapped. And large tracts of undeveloped land have also been mapped. However, to support a diverse wildlife community, it is recommended that sufficient areas of forest and agricultural open space be maintained through land use controls and the review of development. As the human population continues to increase, additional pressures will be levied on existing wildlife resources. For example, the loss of farmland to development, or the construction of a new road in a subdivision, thereby dividing previously unbroken land, accelerates the loss of wildlife habitat. The resulting impacts on wildlife populations and diversity can be reduced by preserving critical areas, maintaining the maximum amount of land in forest and agricultural uses, and designing and locating future developments in ways which reduce the physical loss of wildlife habitat.

Unique Natural Areas

In 1990, the Maine Natural Heritage Program (MNHP) reported a number of rare, endangered plants and animals in Norway, and these were reported in the previous plan. Mapping information provided from the MNHP for this plan had no sites.

One site that has been identified locally as an important unique area is Ordway Grove. The importance of this grove of white pine has been confirmed by a visit from a naturalist hired by the Sierra Club to develop a guide to ancient forests. From the research done on the project, the naturalist believes Ordway Grove to be the tallest stand (156') of white pine in the state of Maine; he also believes that the trees are approximately 400 years old with the forest being at least 6,000 years old. He noted that it might be the “finest” stand of white pine on the continent.

Scenic Resources

The scenery of Norway is a natural resource that contributes to the character of the community and makes it a desirable place to live. Over the past few years, the views available from many locations in Norway have attracted development of new year-round and seasonal homes selling for significantly more than the average home in the area. There are almost an unlimited number of great views and landscapes in Norway. The previous comprehensive planning committee considered many of these views and selected what they considered to be the most spectacular. A major criteria in selecting them was their accessibility from public access locations. The following table lists these locations.

Scenic Views
Available from Public Access Points

View #	View Location	Direction of view	View
1	Upton Road about 1,000 ft. from Round the Pond Road	south	Penn. Lake & Pike's Hill Area
2	Crockett Ridge Road just south of Larson Road	west	Penn. Lake and Brown Hill in the distance
3	Ridge Road	east	Overlooking Norway Center
4	Morrell Road about 150 ft. south from Ridge Road	northeast	Overlooking Thurston's Farm
5	Backside of Pikes Hill about 500 ft. from end of road	north	Pike's Hill Area (winter view)
6a.	Backside of Pikes Hill about 500 ft. from Brackett Road	west/south	
6b.	Backside of Pikes Hill at the end of Bracket Road.	south	Oxford
6c.	Backside of Pikes Hill about 500 ft. from Wallace Road	north	Narrow view
7	Rest Area on Route 117	north	Penn. Lake
8	Pennesseewassee Lake	all	Ridge lines from lake

Source: Norway - Paris Heritage Trust, Norway Comprehensive Plan Committee

Land use regulations provide only minimal protection for these scenic views and their viewsheds (the land that can be seen from the view point). However, they are an important resource and contribute to the character of the community. They should be protected from development which could adversely impact them. Ordinances should require assessments of the impacts upon scenic views and viewsheds and ordinances should require mitigation of development features to protect the views and viewsheds to the extent feasible. This may mean working with developers to design development such that a view corridor is maintained and that development does not interrupt ridgelines and other important features of the viewshed.

HISTORIC AND ARCHAEOLOGICAL RESOURCES

History

White settlement of the Town of Norway began in the late 1780s. Previous and concurrent to this, groups of migrant Indians (the Pigwacketts and Pasaconuways) spent portions of the year in the area fishing in the spring and hunting in the autumn and winter. The first settlers came from older settlement in Gray and New Gloucester and by 1789 a grist and sawmill had been established. The 1790 Census enumerated the population at 448.

On March 9, 1797, the Town of Norway was incorporated while Maine was still a part of the Commonwealth of Massachusetts. Prior to its incorporation, Norway was composed of several proprietorships: Lee's Grant, Rust's Purchase, Cumming's Purchase, and Waterford Three Tiers. When combined, the proprietorships gave Norway an area of 30,041 acres.

During the first half of the 19th Century, Norway experienced steady growth as did the rest of the nation. Between 1861 and 1865, Norway's development was impeded by diversion of capital to the war effort and also by the fact that the Town sent over one-third of its adult male population to serve in the Union armies. After the war, the Town again experienced growth of both commercial and residential areas. Within the village itself, there were two distinct commercial districts; those at the east end of the village on the second waterfall and those businesses on the first waterfall at the west end of Town. Those businesses and industries included manufacturers of rag paper, furniture, farm implements, stoves and ivory piano keys. A shoe factory, bakeries, carriage shops, a tannery, carding, grist and saw mills, printers, gun makers, book bindery and several dry goods stores are other examples of local enterprise. Further growth was significantly aided by the 1880 completion of the Norway Branch Railroad Line between Norway and the Grand Trunk Railroad at South Paris.

The Town was surrounded by numerous independent farms and fruit orchards of various sizes. Several orchards enjoyed a thriving export business of apples and pears until 1932 when they were almost entirely destroyed by the "big spring freeze." Agricultural occupations were prevalent until after World War II.

On May 9, 1894, a fire started in the C.B. Cumming's pancake factory and swept down Main Street destroying about 85 buildings valued at about $275,000. Rebuilding began almost immediately. By January of 1895, more than 50 dwellings were rebuilt.

The end of the 19th Century and the beginning of the 20th Century saw many technological advances in communication and transportation, and Norway advanced along with them. In 1915, a wireless was installed, and Main Street had been paved to the Paris Town Line for automobiles. By 1922, Norway was the center of the commercial activity in this part of Oxford Hills. There were 12 grocery and provision stores in the village. It was a time of great social and cultural development. The Opera House held many local productions as well as road company productions. The Town always had its own band made up of local citizens. Norway and South Paris citizens also supported a semi-professional baseball team. It was a time for community involvement and community pride in its accomplishments. The Exhibition Hall at the Oxford County Fair brought pride and awards to many citizens who displayed their farm produce and manufactured articles. "The Fair" begun on Main Street in Norway in 1846 and was the culminating social event of the year.

During the past two decades of the 20th Century, much traditional character of the community has changed. The many farms and orchards which once thrived and supported the economic base of the community have disappeared. Individual groceries and other stores have yielded to national chains. However, Norway continues to be an important commercial center for surrounding rural areas. The business district retains much of the appearances of earlier periods and many of the buildings are now on the National Register of Historic Places.

Historic Resources

Regionally Significant Resources: Randall Bennett in Oxford, Maine: A Guide to its Historic Architecture stated, "much of the later 19th and early 20th Century atmosphere of the Main Street area could, with a careful plan towards the preservation, adoption and rehabilitation of important surviving structures, became itself a viable alternative to the sprawling shopping malls that have encroached along busy Route 26." Subsequently, the State of Maine Commission of Historical Preservation suggested that a large portion of the Main Street area be nominated to the National Registry of Historic Places. On February 5, 1988, the commercial district of Norway from Danforth Street to Pleasant Street was identified as a historical district by the United States Department of the Interior.

The following table provides a list of all of the historic structures located within the Town Historical District. Refer to the Comprehensive Plan maps for the Historic District boundaries and site locations.

Regionally Significant Historic Resources

Map Reference	Address	Brief Description
1	279 Main Street	Grammar School - 1866 - Greek Revival
2	265 Main Street	Evans - Cummings House c. 1855
3	265 Main Street	Store - between 1851-58 - Greek Revival
4	265 Main Street	Bartlett Store - between 1851-58
5	265 Main Street	Store - noncontributing - c. 1960-70
6	221 Main Street	Hathaway Block - 1881
7	225-27 Main Street	Store - 1894
8	229 Main Street	Woodman's Store - 1894 - log face added c. 1936
9	219 Main Street	Opera House Block - 1894
10	201 Main Street	Oddfellow's Block - 1894 (1st story) 1911 (upper)
11	199 Main Street	Z.L. Merchants Store - between 1895-1901
12	Main Street	J.J. Newberry c. 1960 - noncontributing
13	Main Street	(New England Furniture) ?Aubuchon Hardware noncontributing - c. 1960-70
14	185 Main Street	Denison - Hathaway House c. 1855 - remodel 1893
15	171-75 Main Street	Noyes Block - 1894
16	169 Main Street	Savings Bank Block - 1894
17	167 Main Street	Tucker Block - 1894
18	Main Street	Hawkins House - 1894
19	161 Main Street	Dr. Frank Barker House - 1894
20	163 Main Street	Dr. Augustus French House - 1894
21	165 Main Street	Victorine Blanchard House - 1894 - remodel 1913-24 Colonial Revival Style
22	Main Street	Norway Memorial Library - 1938 - Georgian Revival
23	Main Street	Baker House - 1894
24	Main Street	Hobbs Variety Store - 1894
25	Main Street	Store 1913 - 1924
26	Main Street	Knights of Pythias Hall - 1894

Map Reference	Address	Brief Description
27	144 Main Street	Danforth Block - 1896
28	146 Main Street	Asa Danforth House - 1830
29	134-36 Main Street	U.S. Post Office - 1940 - Georgian Revival
30	Main Street	Schiavi Block - 1950 - noncontributing
31	Main Street	Norway Water District - 1860 - moved to site 1863
32	160 Main Street	Old Beal Block - c. 1852
33	170 Main Street	Pike's Blue Store - 1885
34	174 Main Street	Norway National Bank - 1926
35	178 Main Street	Weary Club - 1926
36	182 Main Street	Store - 1860-1865 - Greek Revival
37	194 Main Street	Crooker Building c. 1865-75
38	198 Main Street	Leavitt Hardware -1816
39	200 Main Street	Store - 1916
40	204 Main Street	Barjo's - noncontributing - facade added - 1946, Art Deco influence
41	206 Main Street	Jackson's Store - 1899
42	208 Main Street	Henry Bangs House - 1806 - remodel 1907
43	Main Street	Mark Poole Smith House - 1832 moved to site c. 196
44	234 Main Street	Increase Robinson House 1818 - Federal style
45	Main Street	Universalist Church - 1829, removel-1865
46	Bridge Street	Advertiser Block - 1848, enlarged c. 1887
47	9 Whitman Street	Stephen & Edward Cummings House - 1886
48	8 Whitman Street	Norway Grange - 1909 - Colonial Revival
49	Whitman Street	Battery Storage Building c. 1918
50	Whitman Street	Storage Building - 19th century - noncontributing
51	13 -15 Deering Street	Clement - Noyes House c. 1937 - Greek Revival
52	19 Deering Street	James Crooker House c. 1860-65 - Greek Revival
53	21 Deering Street	House c. 1840-55 - Greek Revival

Map Reference	Address	Brief Description
54	Deering Street	Edward Cummings House - 1924 - Colonial Revival
55	Deering Street	House c. 1860-1880 - Greek Revival Trim
56	Deering Street	House c. 1880-1895 - Queen Anne Style
57	Deering Street	Samuel Farrar House c. 1840-1850
58	12 Deering Street	Ichabod Bartlett House c. 1820
59	8 Deering Street	House c. 1860-70
60	11 Cottage Street	House c. 1850-55
61	13 Cottage Street	Ames House c. 1880
62	10 Cottage Street	Baptist Church - 1889
63	17 Cottage Street	House c. 1850 - noncontributing
64	21 Cottage Street	Peter Frost House c. 1870
65	23 Cottage Street	Jonathan Blake House c. 1840-1850 - Greek Revival
66	25 Cottage Street	House c. 1880-1890
67	Cottage Street	Mixer House c. 1880
68	Cottage Street	Daniel Beal House - 1852
69	Cottage Street	George Beal House - 1852
70	Cottage Street	Arthur Hebbard House c. 1897 - Queen Anne style
71	8 Cottage Street	Masonic Temple - 1887 - Queen Anne style
72	Cottage Street	Rex Theater - 1913, brick facade added 1924-34

SOURCES:
Bennett, Randall H., Oxford County, Maine: A Guide to Its Historic Architecture, 1984
McAllister, Rev. Don L., Bound by Memories Ties, A Pictorial History of Norway, Maine
Maine Historic Preservation Commission, National Register of Historic Places

Other Important Resources: In addition to the historically significant structures located in the Town Historic District, there are many homes located throughout the community which are considered to be historically significant. The following table provides a list those properties located outside the Town Historic District. They are grouped by the area of the town in which they are located.

Site	Location
Northern Norway	
Micah Upton House c. 1830	Upton Brothers Road
Benjamin Fuller House, 1794, 1840s	Old Greenwood Road north of Ridge Road
Jonathan Swift House c. 1828	Old Greenwood Road north of Ridge Road
Uriah Holt House c. 1810	Ridge Road
Pierce House c. 1811, 1890s	Jack Heath Road
Wright House, 1925	Greenwood Road
William Frost House c. 1815	Buck Road off Shedd Road
Geo. Shedd - Claude Haskell Farm c. 1854	
Silas Merriam House	
French Farm c. 1789	
Judkins - Shaner House - 1831	
Samuel Foster Farm c. 1822	
Fuller - Needham Farm	
Charles Frost Farm c. 1879	
Flint - Burns House 1837	
Dr. Wilburn B. Miller House	
Jones - Farnum House c. 1821	
Mountain View Farm	Below Noble's Corner
William Gledhill House 1839	
David Bennett Farm c. 1871 (also known as Charles Richardson Farm)	
Noyes-Rowe-Brown Farm c. 1843 (also known as Pleasantdale Farm)	Greenwood Road
Boober-Blanchard House	Greenwood Road
Norway Center/Norway Lake	
Nathan A. Foster Farm c. 1840	
Norway Lake Schoolhouse c. 1868, 1907, 1975	Route 118

Site	Location
Pike-Roberts House c. 1815-25	Don Wood Road
James L. Patridge House, 1881	
Mother's Club Hall Building	
Albion Stevens Residences c. 1850	
Norway Cheese Factory, 1882	Tucker Road
Alfred Shattuck Farm c. 1848	Tucker Road
First Congregational Church, 1840	Ridge Road at Norway Center
Watson-Knightly Farmstead c. 1835-40	Watson Road
Ebenezer Hobbs House c. 1820	Water Street
Pike's Hill	
Dudley Pike House, 1803	Pike's Hill Road
Smith-Walker Farmstead 1790s, c. 1820 (Smith-Bradbury Farm)	Walker Road
Solomon Millett House 1790s, 1810, 1853	Brackett Road
Cummings - Easton House 1908	Highland Avenue
Joel Millet Farm	
Horse Hill Farm c. 1789	
Reuben - Noble - Wm. B. Perry Farm 1832	
Henry - Noble - Theodore Lasselle Farm c. 1841 (now known as "The Whippowill")	
Peter Everett - Elbridge Gammon Farm c. 1868	
Cobb - Gammon Farm c. 1816	
Frost Farm	
Frank P. Stone Residence c. 1893	
Henry Pike Farm	
Jacob Bradbury Farm c. 1825 (Harry Walker's)	
Herring-Frank Pike Farm c. 1788	
Stone-Goodspeed House 1893-94, 1896	Highland Avenue

Crockett Ridge	
Nathaniel Bennett House c. 1795	Crockett Ridge Road
Anthony Bennett Farm c. 1790s	Just north of Nathaniel Bennett
Bartlett-Tubbs-Noble Farm c. 1812	
Heywood Club - 1907	
Crockett Farm c. 1833	
Penley-Knight-Orre Farm c. 1819	
David Wilkins-Nathan Noble Farm c. 1839	
Millettville	
Moses Parsons Homestead/Parsons-Thurston Farm	
Nathan Millett Farm	
Henry C. Reed House 1858	
Millett-Lovejoy Farm c. 1817	
Levi Millett-Sam Kornhonen Farm c. 1824 (Lee Grant Lot #9)	
George Westleigh - W. Berry Farm c. 1810	
Steep Falls	
Stephen Greenleaf House 1834	
Hosea Huntress House 1881	
Titus Olcott Brown Homestead	
Pool-Rowe House 1834	
Dr. Calvin E. Evans House c. 1875	Fair Street
Norway Village	
Christ Church (Episcopal) 1897	Paris Street at Green Street
United Methodist Church, 1880	
Sanborn Shoe Corporation (Norway Shoe Factory) 1895	Lynn and Beal Streets
William Frost Jones House 1896	Pleasant Street
Richard Evans House c. 1833	Pleasant Street

Yagger	
Peter Towne Farm c. 1812	
Sylvanus Cobb Farm c. 1804	
Hall-Delano-Emerson Farm c. 1815	

Sources:
Bennett, Randall H. Oxford County, Maine: A Guide to its Historic Architecture, 1984.
McAllister, Rev. Don L., Bound by Memories Ties, A Pictorial History of Norway, Maine
Maine Historic Preservation Commission, National Register of Historic Places

Listed below are additional structures/sites where additional research should be done to determine their historic significance and whether or not preservation is warranted.

- Steep Falls - mill sites
- C.A. Stephen's property - specifically the "old well"
- Sites known by locals to have been used by the Indians - specifically the Corn Mill Boulder
- Norway Center

Local Cemeteries: The following is a list of both public and private cemeteries located in Norway:

- Chapel (No. Norway)
- Frost Hill
- Hall Family
- Holt - McSherry Residence
- Merrill Hill (last burial 1973)
- Millett Family
- Norway Center
- Pike's Hill
- Rustfield, 1986
- Shedd (last burial 1968)
- Towne Family
- Upton Family
- Norway Pine Grove
- Packard Family

Archaeological Resources

Archaeological resources are physical remains of the past, most commonly buried in the ground. Archaeological sites are defined as either prehistoric or historic. Prehistoric sites are those areas where remains are found which were deposited before written records were kept by civilization. The physical remnants from these sites provide us with important information about the prehistory of an area. Historic sites are more recent, occurring after written records began.

According to the Maine Historic Preservation Commission, no historic archaeological survey has taken place to date in Norway. There are two known prehistoric archaeological sites (22.1 and 22.2) in Norway. Their location is not provided and little is known about either site. Generally, prehistoric sites are the remains of Native American settlements. They often occur along rivers and navigable streams or

near large lakes. Site plan and subdivision reviews should consider the potential impact of development in these areas.

Conclusions

The Town of Norway has a significant number of historic structures in the Town Historic District and scattered throughout other areas of town. There are also a number of potential archaeological sites located along its rivers or near its lakes. New development and alterations of structures pose threats to these resources, including inappropriate renovation or alteration, deterioration and abandonment of historic buildings, incongruous adjacent development, and disturbance of archaeological sites.

Residents should consider protecting the extensive historic resources, especially those in the downtown and on the National Register by strengthening ordinances to insure that the historic features of structures are not destroyed by renovation and alteration. They should also develop methods that will encourage the maintenance and discourage the abandonment of structures and provide opportunities for the preservation of structures whose owners no longer consider maintenance feasible.

LAND USE

Norway has a total land area of approximately 44.56 square miles or 28,520 acres as reported by the State of Maine Planning Office. Norway includes a Downtown\Village Area located at the southeasterly corner of Town near the Paris Village Area. The Little Androscoggin River flows along the southern perimeter of the Norway Downtown Area, and Route 26, a major western Maine transportation corridor, transects this area.

The Norway Downtown Area has traditionally been the location of a mixture of commercial, industrial, and residential development. It has been served by public water and sewer since the late 1960s. Since the early 1970s, industrial uses in the Downtown Area have decreased. One industry, now New Balance, a maker of sport shoes, has located on the easterly fringe of the downtown. Another industry, C.B. Cummings, a dowel and wood product mill closed in 2003. There are also a few older homes and newer residential and commercial development located southerly of the downtown adjacent to the Route 26 corridor and extending to northern Oxford which is now heavily developed with commercial uses. Since over half of the traffic entering the downtown enters from Route 26, the Route 26 corridor can be considered the southerly gateway to the downtown. It has become an extension of the downtown or village area.

Due to geographic (land and water) constraints surrounding the Downtown, its future growth in size is limited. As noted, there has been minimal growth on the easterly fringe with New Balance and a new housing development. There has been growth along the southerly gateway, but additional suitable land for development along this corridor is limited.

Up through the 1960s, traditional development patterns in the remainder of Norway consisted of camps around the four lakes, farms and homesteads, and scattered newer housing development. Over the years since then, there has been increasing development around the lakes and in some of the rural areas of the town. Now there is a mix of year-round and seasonal development around the lakes with many structures, even those used only seasonally, being year-round houses as opposed to “camps” that used to line the lake shores.

Most farms have shut down due to economic pressures, although very little farmland has been sold off for extensive housing development. Several farms have changed to non-traditional operations such as raising domesticated caribou and deer. In the late 1970s through the 1980s, there was considerable new housing development in the rural areas of Norway. Some of it was second tier development around the lakes, but most was scattered in several areas of town on lots ranging in size from one to five acres. Much of the development occurred on existing town roads. Locations on Pikes Hill, Crockett Ridge Road, and in the Country Club Road area westerly of Pennesseewassee Lake have been the areas receiving the most development. During the 1980s, growth in Norway was minimal with much of it concentrated along the lakes. The trend of lake shore and second tier lake development has continued, but new development in other rural areas of town has also increased over the past few years.

Residential: A 1981 land use assessment of the town indicated that approximately two percent of the land area was devoted to residential development. It is expected that this number has not increased substantially since then even with the scattered rural development that has occurred. Norway’s current residential land use includes multi-family high density development located primarily in the Downtown and along Route 26 towards the Norway/Oxford Town Line, single-family development in the Downtown, single-family homes, both seasonal and year-round near the Town's lakes and ponds, one

large mobile home park along Route 26 and scattered residential development including individual mobile homes located throughout the Town.

Commercial: Commercial land use has occurred mainly in Downtown, on Cottage Street adjacent to the downtown, and in the Gateway area near Route 26 southerly and easterly of the downtown.

A few commercial uses are located on Route 117 northwest of the Downtown Area and at the intersection of Routes 117 & 118. Development at these locations include convenience services and support services for the recreational/boat users.

Home occupations (businesses operated in the home) and home related businesses (businesses located on the same premises as the owners residence) are scattered throughout the community.

Institutional and Related: A small percentage of the Town (less than one percent) is utilized by institutional and related type uses. These type of uses include two schools (Guy E. Rowe and Oxford Hills High School), one hospital (Stephens Memorial) and several churches located in the Downtown Area and throughout Town. The Guy E. Rowe School is located in the Downtown Area and the High School is partially located in Norway and partially located in Paris. Stephens Memorial Hospital also is on Main Street in the Downtown Area.

Industrial: Industrial activities are located in and immediately around the Downtown Area. However, there are no concentrations of more than one industrial facility in any location. This land use classification makes up less than one percent of the total acreage of the Town. As noted, New Balance located to a facility near the downtown, and a wood working plant located in the downtown recently closed.

Also, in recent years, the Growth Council of Oxford Hills has proposed developing a business and technology park. With little space remaining in the downtown for such an endeavor, the park is proposed for land adjacent to Route 117/118 just northerly of town and located on the easterly flank of Pikes Hill. The park has received approval from the Norway Planning Board. While a regional venture, the Town of Norway has made a considerable contribution to the effort.

Agriculture: The 1981 land use inventory reported approximately 650 acres of hayland and 1,400 acres of pastureland in Norway. Other farmland categories including row crop and orchards had less than 100 acres each. While all but one of the traditional farms have disappeared from Norway, many of the pastures and fields still remain being hayed at least once a year. These open fields contribute significantly to the character of Norway, but their role as productive agricultural land has diminished significantly. With the growing interest in locally produced agriculture, there may be opportunities for a few family farms and part-time farmers to turn existing farmland to more productive uses. There is no easy answer to preserving this part of the landscape and the wildlife habitat that the edges of the fields provide. In 2010, there were 13 parcels registered with the assessor as Farm and Open Space Land. These contained 64 acres of farmland and 576 acres for woodland.

Forestry: Forested land is the most prevalent land use making up 82% of the land cover in 1981. It undoubtedly still makes up at least 80%. Forest land occurs throughout the community bordering many of the Town's roads and rural homes. In 2002, there were 78 parcels consisting of a total of approximately 7,850 acres enrolled in the state Tree Growth program, and in 2010 there were still 78 parcels but containing only 6,295 acres. This represents a decrease of approximately 1,000 acres of registered woodland because 576 acres of woodland were changed from Tree Growth to Farm and Open Space as noted in the Agriculture section above.

Recreation and Cultural Land Uses: The majority of the Town's cultural attractions are located in the Downtown Area. Several recreational parcels of land are located north of the Downtown, including the largest public park at Pennesseewassee Lake and Frost Homestead (Western Foothills Land Trust) that is also open to the public. Other recreational land consists of relatively small parcels for baseball fields, tennis courts, and similar recreational facilities. A complete inventory of public, private and semi-public recreation facilities is provided in the Recreation Resources section.

Water and Wetlands: This listing is provided for perspective on the extent of the water resources in the town. This category represents the second largest use of land at almost 8 percent.

Future Land Use

During the 1990s, development in Norway was somewhat minimal with the population actually decreasing. Following a 22% growth rate in the decade of the 1980s, the 1990s seemed sleepy. Trends of continued development around lakes and scattered residential development throughout the town continued in the 1990s but were not particularly noticeable. Much of the past decade (2000 to 2007) saw considerable change with significant growth in the single-family housing and some splitting of larger houses in the downtown into multi-family. One element of the population trends in the 1990's may have simply been the lack of land for sale. Driving on Norway's roads during those years, for sale signs were not prevalent. If one wanted to build in Norway, they had to search for a piece of land. In the past decade, for sale signs were more noticeable. Property owners appeared to be more anxious to sell; land prices were higher, and increased property taxes made holding the land less attractive.

Trends of continued development around the four major lakes will continue with second and possibly even third tier development occurring because lake shore frontage has become increasingly scarce and expensive. Scattered residential development outside of the downtown is expected. This development will take on two aspects: people of moderate means looking for the great American dream of home ownership will continue to locate along existing roads and in small subdivisions throughout the town, and higher income housing will locate in areas with prime views both along existing roads and in new subdivisions.

Commercial and industrial development will locate in the downtown and in the Gateway areas to the south and north of the downtown. No substantial industrial/business office type of large scale development is expected outside of the downtown area.

Land Use Projections: Land use changes in Norway will be based on a number of factors. The most important ones will be year-round population growth, the economic climate and how the Oxford Hills area adjusts to it, and the demand for seasonal and retirement housing fostered by the lakes and views in Norway. The improvements to Route 26, the transportation corridor leading to Portland, may also be a major factor in the growth of the Oxford Hills area and Norway.

As noted in the section on the economy, the number of jobs has grown very slowly since the previous plan was prepared, and it is expected that some of the job growth is because more households now depend on more than one job than did in the 1980s. Therefore, with more jobs per household, the economy has not been a major factor in creating a demand for new housing. This trend is expected to continue. While the Oxford Hills area is trying to adjust to the changing economic climate in the nation and the state, it is not expected that there will be a substantial number of jobs created in the area that would lead to any significant demand for housing.

Job growth in the Portland area could play a role in the demand for residential housing in Norway with the new turnpike interchange in Gray and Route 26 from Gray to Mechanic Falls improvements. These

improvements bring the commute time to Portland well within the travel times from other Greater Portland bedroom communities. It can, therefore, be expected that there will be some housing demand created by economic growth in the Portland area.

However, such demand could well pale compared to the demand for seasonal homes and retirement housing. This is a growing trend in Maine, and anecdotal evidence points to some of this growth in Norway. Certainly, in the past several years, there has been increasing demand for lakeshore housing with the price of this property rising dramatically. Additionally, several new subdivisions have been developed to take advantage of views of the lakes and mountains. These are expected to attract higher income individuals and people selling homes in high priced housing markets to the south and moving to Norway for retirement or semi-retirement.

In the past decade most of the homes were constructed as year-round homes and will house year-round residents. It is expected that moderate population growth will occur over the next decade. Between 30 and 50 homes per year is a reasonable expectation for the future, depending on the economic cycle. It is anticipated that possibly 15 to 25 percent of the housing may be either seasonal in nature or higher income retirement houses that take advantage of the lakes and the views available in Norway. If subdivision trends over the past two decades are any indication, most new housing will consume from one to three acres with some consuming more. There is also some recent discussion indicating there may be more demand in the near future for moderate to slightly higher than moderate rentals or condominiums in the downtown area.

It is difficult to predict the potential demand for land and housing in Norway given a somewhat eractic growth rate of the past four decades, the recent economic downturn, the lack of local employment opportunities and the high price of gasoline. There is likely to be continued but modest growth of multi-family housing even though the most recent trend has not indicated this. There is also likely to be pressure for moderately large lot development outside the downtown area. Growth is expected to continue in sections of Pikes Hill and in the area of Pennesseewassee Lake. Lot sizes in the Pikes Hill area will be in the ¾ to 1 acre range while lots in the Pennesseewassee Lake area may tend to be somewhat larger at 1 ½ to 2 ½ acres. Other areas will not see the same pressure as these. The town will need to be diligent in managing the growth to protect the downtown integrity and the natural resources and ensure that development does not place excessive burdens on municipal services, the further development of which should concentrate on the downtown and gateway areas as well as a few other areas such as Pikes Hill and an area near the northerly intersection of Routes 118 and 117. It would also be exciting to see mixed use and mixed income housing units including higher income rentals or condominiums in the downtown.

Commercial development will most likely occur in the downtown, along Route 117 and 118 northerly of the downtown, and in the southern Gateway near Route 26, South Main and Paris Streets. Some existing housing will be lost to commercial development in these areas, thereby creating additional demand for housing in other areas of the town and the Oxford Hills region.

Industrial development will be minimal since there are no prime sites for it. However, over 50 acres in the Tech Park will be available for manufacturing and heavy office uses. While it is not expected that any industrial uses will locate in the downtown, the possibility should not be ruled out. Aside from the downtown, it is expected that the Tech Park will fulfill the demand for new industrial space.

The demand for land can be summarized as follows:

There will be minimal additional housing located in the village/downtown area of Norway due to the dense nature of existing development and competition from other uses, such as the hospital. With 50 homes being added per year and 25 percent of these being of a seasonal nature, the town needs space for approximately 38 new units per year in a “growth area” and 12 new “rural” units - homes that would take advantage of views or lake shore property.

Unfortunately, there are extremely limited areas to which water and/or sewer can be easily extended. Therefore, especially in the short term, the land for new housing will require the use of on-site sewage disposal and water supply. The area will have to have lot sizes commensurate with this, but should be located near the existing water and sewered area should it become financially possible in the future to extend the utilities.