Town of Thompson Conservation Commission Conservation & Open Space Plan



CONSERVATION AND OPEN SPACE PLAN

THOMPSON, CONNECTICUT December 2005

This document was prepared by the Open Space Study Committee for the Thompson Conservation Commission.

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Acknowledgements:

The Open Space Study Committee is grateful to the following organizations and individuals who contributed in many ways to the efforts of the committee:

Quinebaug Shetucket Heritage Corridor, Inc. for awarding their 2003 Partnership Program Grant to the Thompson Conservation and Wetlands Commission,

Woodstock Conservation Commission – Jean Pillo, Reva Seybolt, Paul Wilbur for their encouragement and time in sharing their open space conservation process which inspired us to do a natural resources inventory and prepare a Conservation and Open Space Plan for Thompson,

Green Valley Institute (GVI) for guidance and technical and educational support.

Steve Broderick, Co-Director of GVI, for his guidance, encouragement and support and his wisdom and experience in all things relating to land use,

Sue Westa, Co-Director of GVI, for her thoughtful guidance in our planning work,

Mike Altshul, GIS Specialist, GVI, for providing Thompson with large scale GIS maps of natural resources, his encouragement and support in all things relating to GIS,

Holly Drinkuth, Conservation Commission Liaison, GVI, for her encouragement and assistance with our open space planning and for her assistance in digitizing our summary mapping,

Ruth Cutler, Land Trust Specialist, GVI, for her support and assistance regarding land preservation,

Paula Stahl, Community Design Specialist, GVI, for her support and assistance with all our planning questions,

Sandy Prisloe, Geospatial Extension Specialist, UCONN Cooperative Extension System, for his educational contribution to developing our GIS skills,

Jim Gibbons, UCONN Extension Education Specialist, for his time, encouragement and expertise in land use planning,

Eric Thomas, Thames River Basin Watershed Coordinator, CT DEP Bureau of Water Management, for his support and assistance with all things relating to water resources,

Neal Hagstrom, DEP Fisheries, for providing fisheries data,

Nick Bellantoni, CT State Archaeologist, for his time and assistance with developing a map and a data base for our archaeological treasures,

John Filchak, Executive Director, Northeast Connecticut Council of Governments, for his assistance with our parcel mapping and his encouragement for improved land use planning,

Dr. Robert Craig, Director of Bird Conservation Research, Inc., for his time and support of our efforts to preserve wildlife habitat.

Ed Greenough, United States Army Corps of Engineers, for contributions to our GIS database,

Tom Worthley, Extension Forester, UCONN Cooperative Extension for providing tree farm information,

The Towns of Woodstock, Pomfret and Brooklyn, for allowing their Open Space and Conservation Plans to serve as models,

Douglas Williams, First Selectman, and the Board of Selectmen for their enthusiasm and support of conservation and open space planning.

Diana Couture, Judy Hosmer and Ida Ransom, Thompson Assessor's Office, for patiently providing us with parcel data.

Bill Birch, Head Custodian, Thompson Public Schools, for his generous assistance on lecture night,

John Rice, Planning and Zoning Commissioner, for his encouragement and assistance in publishing this document,

Randy Blackmer, Resident, for his contribution to our local historic archaeological database, Jane Ellison, Resident, for her enthusiastic assistance in creating our cemeteries database,

Joel Hiatt, Pilot, for generously donating the flights for our aerial photographs,

Colin Hill, Student, for his contribution to our parcel mapping,

Joe Iamartino, President, Thompson Historical Society, for his encouragement and contributions to our historic database.

Jane and David Johnson, Residents, for their enthusiastic assistance in documenting all of our local historic archaeological sites,

Joan Luster, Resident, for her contribution toward our archaeological preservation efforts,

Members of other Town of Thompson Boards and Commissions and Thompson Residents who reviewed the original draft and provided comments.

To all those who contributed in some way and were inadvertently omitted, we are grateful.

CONSERVATION AND OPEN SPACE PLAN FOR THOMPSON, CONNECTICUT

Prepared by the Thompson Open Space Study Committee (OSSC)

Executive Summary

INTRODUCTION

This Conservation and Open Space Plan and the Natural Resources Inventory are intended to complement and to further the goals of the Thompson Planning & Zoning Commission's Plan of Conservation and Development. This Open Space Conservation Plan was prepared by the Open Space Study Committee (OSSC) with assistance from local, regional and state governmental agencies. Also, many Thompson residents contributed by participating in the Natural Resources Inventory survey and public presentations and offering their insights and comments. We are grateful to all who participated in this project.

NATURAL RESOURCES INVENTORY

The Open Space Conservation Plan is based upon the Natural Resources Inventory. Five categories of resources were inventoried: Water Resources, Agricultural Resources, Forest + Wildlife Resources, Recreational Resources and Cultural/Historic/Archaeological Resources. Water Resources include surface water resources such as lakes, rivers and wetlands and groundwater resources such as underground reservoirs or aquifers. Agricultural Resources include prime farm soils, significant state farm soils and active farm lands. Forest and Wildlife Resources include all forested areas in town with emphasis on large unfragmented chunks of forestland along with waterways that naturally offer connections between the forestlands. Recreational Resources include all Federal, State and Municipal properties which offer recreational opportunities, along with the Thompson Recreation Commission which offers organized recreational opportunities. Cultural/Historic/Archaeological Resources include historic structures and landscape features such as stone walls and stone structures as well as documented archaeological sites.

The inventories were accomplished through use of existing digital data available from the Connecticut Department of Environmental Protection (DEP) on CDs, ground observations, interviews with agricultural landowners and interdepartmental information exchange at the Town Hall. All the data has been stored and analyzed in Geographic Information System (GIS) format and used to generate maps some of which are included in the Plan.

PURPOSE

The purpose of this plan is to illustrate our natural and cultural resources and to make recommendations and provide guidelines that, if accepted and implemented by the town, could ensure that Thompson would continue to be an attractive and desirable town in which to live and conduct business. The goals of this proposal are:

- 1. To preserve, protect, and improve water resources,
- 2. To promote and retain agriculture,
- 3. To promote best forest management practices,
- 4. To protect, improve, and preserve habitat that is suitable for indigenous wildlife especially those species that are rare and endangered,
- 5. To promote and improve opportunities for recreational activities,
- 6. To retain scenic features of the landscape,
- 7. To preserve historic, archaeological and cultural resources,
- 8. To encourage the careful location of new business, industry and residential development,
- 9. To make recommendations to, and support the efforts of Thompson boards and commissions in making land-use decisions.

RECOMMENDATIONS

The following summary of recommendations is meant to further the purpose of the Plan.

Water Resources

- Develop and implement Aquifer Protection regulations,
- Protect critical areas of public supply watersheds,
- Identify water quality improvement projects,
- ❖ Increase protection of headwater wetlands and watercourses,
- ❖ Amend regulations to increase stream buffers and promote undeveloped buffers,
- Pursue acquisition and/or conservation easements on undeveloped shorefront and on identified priority areas.

Agricultural Resources

- Protect and preserve farmland and agricultural activities.
- ❖ Adopt a Right to Farm ordinance¹,
- Support programs that encourage agricultural profitability.

Forestry and Wildlife Resources

- ❖ Encourage forest management and habitat protection through voluntary participation,
- * Emphasize prevention of forest fragmentation in land use development decisions,
- Protect habitat corridors.
- Support the natural processes of forests and wetlands.

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¹ See Connecticut General Statutes Section 19a –341.

Recreational Resources

- Promote opportunities for outdoor activities including hunting, fishing, swimming, boating, hiking, and bicycling,
- ❖ Provide increased opportunities for playgrounds, sport fields and parks,
- Encourage development of greenways for recreation and protection of wildlife habitats,
- ❖ Plan for greenways to be linked with neighboring towns and states.

Cultural, Historic, Archaeological Resources

- ❖ Assure protection of aesthetic, historic, cultural and archaeological resources,
- Preserve the town's character and rural environment.
- ❖ Promote and preserve the village history in each of Thompson's ten villages.

General

- ❖ Acquire land and/or conservation easements in identified priority resource areas by various means especially the use of subdivision open space set-asides,
- ❖ Encourage best use of the land including techniques such as creative zoning, and conservation development regulations by utilizing the Natural Resources Inventory and the Conservation Commission's capacity to furnish vital information,
- ❖ Implement review of development proposals by the Conservation Commission prior to land-use commission decision making. Using the Natural Resources Inventory, the Conservation Commission has the capacity to furnish vital information to land-use boards and commissions when considering development applications,
- ❖ Encourage private donation of land to land trusts and other non-profit tax-exempt conservation organizations,
- ❖ Encourage the use of environmentally clean sources of energy, such as hydroelectric, solar and wind,
- Manage town-owned renewable natural resources such as forests for income to support open space acquisition,
- Encourage the use of porous materials instead of impervious materials wherever possible to allow stormwater to be naturally absorbed,
- Support the preservation of scenic vistas, stone walls and other aesthetic and historic landscape features.
- Avoid night time outdoor light pollution by adopting regulations to address this issue. Night time light pollution is a significant problem worldwide. Artificial night time lighting affects biological rhythms of animals and humans and reduces our ability to see the night sky.
- Support appropriate economic growth that fits in with the rural character of the community.

Conclusion

The Town's Natural Resources Inventory and this Open Space Conservation Plan are intended to support preservation efforts and sensible growth strategies that are compatible with natural and cultural resource management and preservation.

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INTRODUCTION

The town of Thompson is located in the northeast corner of Connecticut. Made up of ten villages, Thompson's geographic location as a crossroads began with the various Native American trails, followed by the Old Connecticut Path, the Middle Post Road, the turnpikes, railroad lines and the state and federal paved roadways. It shares borders with Massachusetts and Rhode Island and has long been noted for its rural beauty and cultural heritage. As a border town, Thompson lends a unique contribution to the federally recognized Quinebaug Shetucket National Heritage Corridor, also known as The Last Green Valley.

THOMPSON'S TEN VILLAGES

QUADDICK, MECHANICSVILLE, GROSVENORDALE, NORTH GROSVENORDALE, EAST THOMPSON, WILSONVILLE, FABYAN, THOMPSON HILL, WEST THOMPSON AND QUINEBAUG

TOWN WEBSITE: WWW.THOMPSONCT.ORG

Thompson is home to an abundance of water resources. The three major rivers that flow through the town – the Five Mile, Quinebaug and French Rivers – support significant aquifers, important wetlands, a variety of recreational activities, and they hold the promise of a reliable and enduring water source for the residents of the town. The Five Mile River, a high water quality stream, is vulnerable to degradation due to increasing development pressures. The Quinebaug and French Rivers have poor water quality due to years of pollution resulting from the location of mills along their banks. Efforts to improve water quality have been and continue to be made by DEP and the Army Corps of Engineers. The West Thompson Dam is under the jurisdiction of the Federal Government which has the responsibility of maintaining flood control and effecting improvements to the Quinebaug River and its surrounding floodplain. The town's Inland Wetlands Commission serves to protect wetlands and watercourses from the potential negative impacts of development and other land use activities.

Thompson has a rich historical heritage in farming. Settlers who came to this area worked to clear the land and make it usable to feed themselves and their livestock. Today, this arable land is quickly disappearing as human populations increase and economic trends shift. This results in the rise of land values and taxes as the demand for new housing increases. These factors make it increasingly difficult for local farmers to maintain viable agricultural activities. Loss of arable land alters nature's ability to sustain the purity of our air and water.

Current research has demonstrated that wildlife has the best chance to survive and thrive when provided with large areas of forests, open land and water resources that are connected. Such connections support better forage opportunities and are essential for a viable genetic breeding pool. These connections are known as "green belts" or wildlife corridors, and preserving these corridors is crucial to preserving the variety of wildlife habitat currently enjoyed in Connecticut. Due to increasing land development and decreasing land diversity, habitat changes are already impacting wildlife populations in Thompson. Maintaining local forest and water resources is critical to supporting wildlife and fish. Implementing sound land use and conservation policies is necessary to promote biological diversity.

Recreational opportunities, such as hunting, fishing, swimming, boating, hiking, bicycling and horseback riding are currently enjoyed by the citizens of Thompson. These activities as well as potential new opportunities like a skateboarding park and new hiking trails are valuable elements in the quality of life

enjoyed by Thompson residents and visitors. Ensuring that these opportunities are not lost is an important goal.

Thompson is fortunate to have many historic buildings, cultural sites, scenic vistas, active farms, stone walls, scenic roads, and fine buildings representing many periods in history. There is a sense of pride in both the natural and man-made beauty of the town. The people of this town also hold a long-standing tradition of Yankee independence and volunteerism. In the survey described in Thompson's 1999 Plan of Conservation and Development there is strong support to maintain the rural and historic nature of Thompson.

PURPOSE OF THE PLAN

The primary function of this Plan is to provide the resource data necessary to make wise land-use decisions. The Natural Resources Inventory allows for the identification of those areas worthy of preservation and/or protection and identification of the land areas that are most suitable for development.

The Plan includes recommendations to assist in wisely managing land development and carefully protecting the environment so that Thompson remains a rural community with a balanced approach to sustaining its natural and cultural heritage.

ECONOMIC BENEFITS OF CONSERVATION PLANNING

There are many economic as well as environmental benefits to sound conservation and open space planning. First, farm, forest and open space land typically provide a town more money in tax revenues than they require in service expenditures. This is demonstrated in the results of the Cost of Community Services (COCS) studies reported by the Southern New England Forest Consortium in the table below, comparing the COCS for Residential, Industrial/Commercial, and Open Space properties per dollar of tax revenue collected.

Expenditures Per \$1 of Revenue Collected

Residential Land \$1.14 Commercial Industrial \$0.43 Forest, Farm + Open Space \$0.42

Source: Cost of *Community Services in Southern New England*, Southern New England Forest Consortium, 1995

Second, communities with sound conservation plans have been shown to improve their bond ratings. These ratings reflect the fact that unlimited and/or mismanaged growth can make a community extremely expensive to manage and threaten its fiscal health. Good conservation and land use planning promotes cost-effective development, helps ensure a high quality of life and avoids the need for expensive environmental clean-ups that may result from poor land use decisions. Recent experience in the Town of Brooklyn following adoption of their Open Space and Conservation Plan in 1993 indicates that rating

agencies, such as Moody's, respond positively to the existence and implementation of Open Space plans as they tend to reduce the risks of environmental problems that derive from poor land use decisions (Broderick, 2000). By adopting a plan of open space and conservation that provides a solid basis for managing our environmentally sensitive areas, we believe that Thompson can attain better open space management and support fiscal health.

Third, wise land conservation allows nature to recharge our groundwater, cleanse our drinking water, prevent soil erosion and absorb floodwaters. It would be very expensive for us to do this outside the natural cycle.

Fourth, studies have shown that private residential property adjacent or close to permanently protected open space increases in value faster than similar properties elsewhere. This benefits not only the individual homeowners, but also the entire town in the form of an increased grand list.

Finally, natural resource based recreation and outdoor based tourism are big businesses today, and as Connecticut continues to urbanize they promise to continue to grow. If managed wisely, the significance of Thompson's historic districts, combined with the beauty of its countryside and large tracts of forests, will have increasing potential for attracting tourist and recreational dollars to our community.

THE NATURAL RESOURCES INVENTORY AND THE PLAN

The Conservation and Open Space Plan is based upon the Natural Resource Inventory and is grouped into five main categories: Water Resources, Agricultural Resources, Forest + Wildlife Resources, Recreational Resources and Cultural/Historic/Archaeological Resources. In 2003 the Open Space Study Committee started the inventory with the generous support of the Green Valley Institute and a Partnership Grant from the Quinebaug Shetucket Heritage Corridor, Inc. Using Geographic Information System (GIS) software, data was acquired from the Connecticut Department of Environmental Protection, the Northeast Connecticut Council of Governments, ground observations, landowner participation, the Thompson Assessor's Records, the Recreation Commission's documents and the Historical Society's documents. These data were used to generate maps illustrating the natural and cultural resources in the town. Some maps are included in the Plan, and a list of GIS generated maps is included in the appendices of the Plan.

WATER RESOURCES

Preface

The importance of this fragile natural resource is described in Connecticut State Statutes section 22a-36,

"The wetlands and watercourses of Connecticut are an interrelated web of nature, essential to an adequate supply of surface and under groundwater, to hydrological stability and control of flooding and erosion, to the recharging and purification of groundwater, and to the existence of many forms of animal, aquatic and plant life."

Objectives

The objectives regarding water resources are to provide recommendations and information leading to:

- 1. Improvement and preservation of water quality for drinking and recreational purposes,
- 2. Implementation of proactive measures that prevent pollution and degradation of water resources,
- 3. Identification of areas of special significance and their preservation in perpetuity,
- 4. Assurance of the availability of water for use by farms and industry to the extent that is compatible with item 1.
- **5.** Maintenance and improvement of the wildlife environment in watersheds and stream corridors.

GROUNDWATER

Aquifers, Groundwater & Public Drinking Water Sources

Aquifers are underground water reservoirs capable of providing a clean and abundant source of water. The majority of households in Thompson rely on private wells which draw from groundwater or aquifers. There is one public drinking water supply district in Thompson which is regulated by the CT DEP. Those wells are owned by Crystal Water Co. of Danielson, a subsidiary of The Connecticut Water Company, and service households and businesses in sections of Grosvenordale and North Grosvenordale. Map # 1 shows where stratified drift deposits are located and the depth of water reserves within those deposits. The importance of knowing the location of the greatest source of potential drinking water is that land uses over those aquifers should be under continual review in regard to existing aquifer protection regulations in order to avoid potential contamination of the aquifers so the resources will be available for future use.

SURFACE WATER

Watercourses

Thompson has three major watercourses all flowing from North to South. The Five Mile River rises in the northeast corner of Thompson and is fed by tributaries that mostly lie within the town. A few brooks with sources in Massachusetts and Rhode Island also feed the Five Mile River. The Quinebaug and French Rivers are primarily drawn from watersheds in Massachusetts.

The Five Mile River, in the eastern part of town, has many contributing or feeder streams that are mapped. One important feeder, Rocky Brook, originates in Douglas. It is one of three pristine watercourses in Thompson capable of supporting native trout. Robbins Brook, Poor Farm Brook and Blackmore Brook have sources in Rhode Island. Blackmore Brook is another one of the three pristine watercourses in Thompson capable of supporting native trout. The Five Mile River originates in East Thompson north of Little Pond and flows east through Jerry's Swamp, then south through Quaddick Lake

to Lower Pond. It is classified by the Connecticut DEP as a Class A stream which means it can be used for "potential drinking water supply, fish and wildlife habitat, recreational use, agricultural and industrial supply and other legitimate uses including navigation." Because of the excellent water quality of the Five Mile River and its deep underlying aquifer, it holds the potential for future public water supplies. Thompson should make sure that it remains a Class A stream.

The French River flows into Thompson from Webster and is centrally located. Along the Thompson stretch of the French River are dams and mill sites dating back to 1812. One of the feeder streams originates in Thompson and flows north into Webster before joining the French River there. Other brooks, particularly Long Branch, originate in Webster and flow into Thompson before joining the river. Long Branch Brook is another one of the pristine watercourses in Thompson that supports native trout. The French River is classified by the DEP as Class D/B which indicates "unacceptable quality," the goal is Class B. "Class D waters may be suitable for bathing or other recreational purposes, certain fish and wildlife habitat, industrial uses and navigation...may have good aesthetic value." North Grosvenordale Pond is centrally located along the French River and is one of those sites of aesthetic value. The Heritage Park trail skirts a portion of the Pond and offers a boat launch for those who wish to enjoy this water resource.

The Quinebaug River, in the western part of town, drains an area of 174 square miles with dams in Massachusetts controlling 100 of those square miles.² The West Thompson Dam, built in 1964 by the US Army Corps of Engineers, was calculated to have prevented \$12.8 million in flood damage by 1994. The maximum flood storage capacity at the dam amounts to 8.3 billion gallons at a maximum level of 50.5 feet. Three hydraulic gates are used to control the release of water.

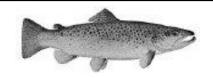
There are many opportunities for water based recreational activities in Thompson. The lakes and ponds in town appear in Map #5. All but one of these allows public access.

MORE COMPLETE INFORMATION REGARDING WATER QUALITY STANDARDS AND CLASSIFICATIONS CAN BE FOUND ON THE DEP'S WEBSITE AT:

www.dep.state.ct.us/wtr/wq/wqsinfo.htm.

MAP #2

3 MAJOR RIVERS
WITH
TRIBUTARIES



THREE NATIVE TROUT STREAMS
ROCKY BROOK
LONG BRANCH BROOK
BLACKMORE BROOK

5

² US Army Corps of Engineers brochure concerning West Thompson Dam

Wetlands

Thompson has an abundance of wetlands. Almost 20% of the town is classified as wetland soils, and these wetlands form diverse habitats for a variety of wildlife. The classes of wetlands we have in Thompson are: forested wetlands - deciduous, coniferous and mixed, shrub swamps, deep marshes, herbaceous wetlands and wet meadows which are mostly found in agricultural fields. Forested wetlands are the most abundant type in town, and deep marshes and herbaceous wetlands are the least abundant. It is important to emphasize extra protection for those types of wetlands that are rare; they are also fragile. It is the rare habitats that contribute greatly to the variety of species we see in town. Thompson is home to a few Atlantic White Cedar Swamps. These cedar swamps are a threatened plant community according to scientists Ken J. Metzler and D. L. Wagner, 1998. The largest one in Thompson is now protected by the Nature Conservancy and Wyndham Land Trust.

Wetlands contribute to our everyday lives in a variety of ways. They provide flood control, water supply, fish and wildlife habitat, recreational opportunities, some pollution abatement, community aesthetics and educational opportunities. Observing nature might also be considered a benefit of our wetland systems. Fish eating birds, like Great Blue Herons, Ospreys and Bald Eagles, are attracted to the water resources here.

Undeveloped Shorelines and Stream Corridors

Stream corridors are shown in **Map # 4** with 300 foot wide corridors. The importance of these corridors is for wildlife to get from one undeveloped area to another. Development has caused breaks or fragmentation of forested or undeveloped tracts of land. Thus, such breaks restrict critical movement of wildlife through those areas. One way to compensate is to connect the remaining forest tracts or undeveloped tracts with each other. Stream corridors are a good way to accomplish this. It requires a natural or undeveloped setback from a stream's banks extending 150 feet on each side. This would provide protection for the stream as well as a natural corridor for wildlife to travel through.

The US Army Corps of Engineers manages 1,672 acres along the Quinebaug River and its floodplain. This provides one excellent stream corridor with multiple uses including a wildlife corridor.

Pollution concerns

Some major sources of pollution and environmental harm include:

- Industrial waste in silts along the French River from old factory operations in Wilsonville, North Grosvenordale, Grosvenordale and Mechanicsville,
- Failing septic systems, i.e. lakeside dwellings not served by a sewer,
- Lawn, garden, and farm fertilizers,
- Invasive species of plants including watermilfoil and purple loosestrife.

Industrial waste, such as heavy metals and chemicals, has contributed to buried contaminants in river beds. These contaminants are held in the river sediments until they are disturbed or flushed out by heavy water flow and released into the surface waters which wash out to sea. The contaminants have a toxic effect on aquatic life. Failing septic systems release bacteria, viruses and nutrients into the ground and surface waters causing pollution to groundwater and surface water bodies. Overuse of fertilizers can have a toxic effect on aquatic life and groundwater reserves when improperly applied or when they are washed downstream by storm water. Invasive plants include both aquatic and terrestrial species. Once they are introduced into a lake or an upland area, they multiply rapidly and expand their territory. Native plants decline and the ecosystem is degraded.

Water Resources Recommendations

- 1. Increase protection of all the wetlands and brooks that feed the three major watercourses by increasing the buffer zones or regulated areas,
- 2. Increase the buffer zones or regulated areas surrounding the rare wetland soil types to further protect them from the adverse effects of development encroachment,
- 3. Increase communication with public organizations in Massachusetts and Rhode Island to achieve pollution control on the watercourses flowing into Thompson from those states,
- 4. Support the State's Aquifer Protection Program designed to protect the wellhead land surrounding public drinking water supplies,
- 5. Give a high priority for protection to the watershed and brooks that feed the Five Mile River,
- 6. Limit removal of earth materials over stratified drift deposits to ensure that there is no detrimental impact to the aquifer. Investigate whether current regulations adequately address this issue,
- 7. Establish overlay zones to further regulate development or prohibit high-risk land uses in critical public water-supply watersheds, potential high-yielding aquifers, and aquifer recharge areas.
- 8. Include clear watershed protection goals in the Town Plan of Conservation and Development with an emphasis on limiting the impact of non-porous surfaces in Thompson,
- 9. Amend Inland Wetlands Commission regulations to encourage the establishment of stream corridor protection zones along all perennial and intermittent streams. Routinely integrate use of appropriate natural resource inventory maps into future permit application deliberations by the land use commissions.
- 10. Pursue acquisition and/or conservation easements on undeveloped shorefront and on identified priority areas,
- 11. Initiate a public education program to highlight the importance of watershed protection and water quality issues,
- 12. Identify water quality improvement projects.

Conclusion

Water resources are vital to the health and well being of all living things. With increased awareness of how our land-use activities affect our water resources, we can better protect these vital resources for ourselves and for future generations.

WATER RESOURCES MAPS 3,4,5,6 + 7

AGRICULTURAL RESOURCES

Preface

The State of Connecticut's Policy and Management Conservation and Development group has placed a high priority on strategies "to maintain and increase a long-term, in-state food producing capacity." ³

Objectives

In concert with this statewide goal, our Town goal is to preserve important farm land and provide incentives for the continuation of agricultural activities without unduly restricting the rights of property owners

Background

Thompson is fortunate to have retained active farming operations in the town and to have landowners who maintain agricultural fields for lease to farmers. In addition to their farm crops and products, these farms add immeasurably to the aesthetic beauty and rural character of Thompson and, as such, are one of its greatest assets. Farmland also provides excellent wildlife habitat for many species and in some cases recreational opportunities for hunting, walking, horseback riding and bird watching for town residents. Farmland provides more in tax revenue than it consumes in services.

The majority of farm acreage is devoted to pasture for dairy and beef cattle, horses and for the production of silage and hay. Additional farm acreage is devoted to nursery crops and orchards. Smaller enterprises include horse farms, Christmas tree farms, apiaries, and maple sugar production among others. Many residents raise animals and have market and home gardens.

As Map # 8 shows, Thompson contains 7760 acres of prime and important farm soils. These are soils which the Department of Agriculture has identified as particularly productive and valuable for farming. This is a vital asset essential to the maintenance of agriculture.

DEPARTMENT OF AGRICULTURE: 7760 ACRES OF PRIME AND IMPORTANT FARM SOILS IN THOMPSON ASSESSOR'S RECORDS UNDER PUBLIC ACT 490: 2440 ACRES OF FARM LAND IN THOMPSON OSSC'S AGRICULTURAL SUMMARY MAP: 2444 ACRES OF FARM LAND IN THOMPSON

Farmland is severely threatened by loss to development for the following reasons:

- Farmland soils are not protected by State statutes as are wetland soils.
- Most of Thompson's farmland is ideally suited to development.

³ The Connecticut Office of Policy and Management's Conservation and Development Policies Plan for Connecticut, 1998-2003 Page 68

- Many active farms and prime farm soils are adjacent to or within Thompson's most rapidly developing neighborhoods.
- Farm owners have been caught in an increasingly challenging economic squeeze. While the cost of business rises, the markets for farm goods hold steady or decline.
- Many farms are family businesses, and the land represents their greatest asset. It also represents a liability due to increasing taxes and other financial considerations.

Developing and implementing a farmland preservation plan would provide a viable means to preserving this important resource. Providing tax relief to farmers would also help to preserve the few active farming operations left in Thompson today. Currently, Public Act 490 provides a lower tax assessment on farm land. However, PA 490 alone will not ensure that we do not lose active farming operations. Connecticut General Statutes (CGS) Section 12-81(m) enables a municipality to adopt a town ordinance to abate 50% of the annual property taxes on dairy farms and fruit orchards, providing that they stay in farming for at least ten years. Additionally, CGS Section 12-91(b) provides municipalities with the ability to adopt an ordinance for tax exemptions of farm machinery.

The simplest and most direct way to promote local farm profitability is to encourage Thompson's citizens to purchase "Thompson Grown" produce, including fruits, vegetables, flowers, corn, hay and silage, Christmas trees, honey, maple syrup, greenhouse and nursery products.

Approach

The following methods were used to gather information on agricultural activities in Thompson. Visits were held with local farmers and agricultural landowners to inventory how their land is currently being used. Existing maps of parcel plots, state and local prime soils, and orthophotos (aerial photos) were used in this process. Visual surveys were also conducted from roadsides.

Using this information, maps were created to indicate where active and dormant farmland is located. The agricultural resource data combined with other data layers can be used to show areas of prime farmland soils that are contiguous with other natural resources. These are high priority areas for the application of protective strategies.

Agricultural Resources Recommendations

A formal town policy for the protection and promotion of farming would serve to establish Thompson as a town that welcomes and encourages agriculture.

Specific recommendations are:

- 1. Adopt a Right to Farm Ordinance. Such an ordinance would set forth Thompson's position in support of farmland protection. Adopt an ordinance similar to Section 19a –341 of the Connecticut General Statutes, which declares that proper and accepted agricultural practices shall not constitute a nuisance,
- 2. Consider the impact of development upon agriculture as a key component to the Town's Plan of Conservation and Development. Maintain or provide protective vegetative buffers on land adjacent to existing farmland to limit the effects of dust, noise and odors, when development occurs next to an ongoing farming operation,
- 3. Promote farm profitability by seeking out opportunities to help Thompson's farms remain profitable; e.g., establish a local farmers' market.
- 4. Acquire development rights to key parcels of land by utilizing the State Department of Agriculture's Purchase of Development Rights Program,

- 5. Work with willing landowners to permanently protect valuable and strategic farm parcels from development while keeping them in private ownership,
- 6. Assist the farming community by making information available about Federal, State and other programs that provide grants for Open Space related to agriculture,
- 7. Adopt town ordinances aimed at agricultural land preservation and acquisition, and tax abatements in accordance with the Connecticut General Statutes,
- 8. Assist farm land owners who seek alternative revenue from the land without limiting the ability to farm, i.e. tourism, power production,
- 9. Support equine interests as a means of preserving open space,
- 10. Coordinate with neighboring towns in Connecticut, Massachusetts and Rhode Island to support and preserve agricultural interests.

Conclusion

It makes good sense to support agriculture. It contributes to the local economy, requires minimal services from the town, provides open spaces, scenic vistas and wildlife habitat and corridors. It also provides a living presence of our history.



HORSES HAVE BEEN AN INTEGRAL PART OF THOMPSON'S RURAL AND AGRICULTURAL PAST.

THEY ARE APPRECIATED FOR THEIR CONTRIBUTIONS TO WORK AND PLEASURE.

ENCOURAGING HORSE OWNERSHIP AND EQUINE INTERESTS WOULD FURTHER DEMONSTRATE
THOMPSON'S COMMITMENT TO ITS HERITAGE, RURAL LIFE, AND OPEN SPACE NEEDS.

FOREST AND WILDLIFE RESOURCES

Preface

Forests clean our air, moderate our climate, play a role in providing steady supplies of clean water and a wide range of resources from timber to food. They provide habitat for people and for millions of plant and animal species.

"Nothing gives more yet asks less in return than a tree."

Jonathan Chapman (Johnny Appleseed)

Objective

The objectives for protecting and maintaining forest and wildlife resources are:

- Manage forests to protect the health and diversity of our native wildlife populations,
- Support local forest-based industries,
- Maintain large forested areas to protect water and air quality,

- Minimize and where possible prevent forest fragmentation,
- Maintain and enhance the beauty of Thompson's rural character,
- Provide ongoing forest-based recreational and educational opportunities.

Background

Forests, the natural vegetative cover in Connecticut, provide many important benefits in addition to timber and firewood. They remove carbon dioxide and pollutants from the air, produce oxygen, and play a major role in preventing erosion. Forests also cleanse and moderate the flow of our water supply. They provide habitat for native wildlife species. Forestland, like farmland, provides more in tax revenue than it consumes in services.

Forest based industries in Thompson include activities such as local tree farms, sawmills and maple sugaring. Such commercial resource-based activities contribute to our local economy without changing Thompson's rural character.

THERE ARE 497 ACRES OF STATE FOREST IN THOMPSON.

PRESENTLY, THERE ARE 5 REGISTERED *TREE FARMS* IN THE TOWN OF THOMPSON TIMBER FROM THOMPSON'S FORESTS IS LITERALLY SOLD ALL OVER THE WORLD.

Most of the extensively forested areas of town are privately owned. These areas are subject to possible future fragmentation, especially if there is no attempt to develop a coordinated plan to manage and assist private property owners in understanding both the commercial and ecological value of these lands.

The Conservation and Development Policies Plan for Connecticut, 1998-2003 includes policies specifically directed toward protecting and enhancing forestlands and wildlife resources (Office of Policy and Management, 1998). Specifically, Policy C in the Natural and Cultural Resources section of the Plan states that it is the policy of the State to:

"Encourage management of natural resources that preserves the diversity of habitats and species and achieves sustainable yields of renewable resources. In particular, retain healthy, vigorous forestlands and achieve sustainable yields of forest resource-based benefits through scientific management of these resources. (pp. 105)"

The primary threat to the forest's continued ability to provide these benefits is fragmentation due to residential development. Fragmentation inhibits active forest conservation and management practices that yield such positive results as enhanced timber production, watershed protection, wildlife habitat, wildlife corridors, scenic vistas, and protection of air quality. Some degree of forest fragmentation is inevitable as our town continues to develop. Land use and conservation plans must therefore consider measures that allow economic growth and development to occur while mitigating these negative effects. While research has clearly shown that large tracts of forest land provide greater habitat than many small tracts, this may be a difficult goal to achieve. Connecting forested tracts to one another with vegetated "corridors" is essential for wildlife populations to intermingle and avoid the devastating effects of genetic inbreeding. Creating wildlife corridors connecting both large and smaller tracts of forestland is central to a successful and coordinated plan to conserve forested lands and wildlife diversity in the Town of Thompson.

Most of the forestland in Thompson is privately owned, and many of these are small individual parcels of land. As long-term development pressures increase and larger forested tracts of land are subdivided into buildable lots, the forest will continue to "fragment" into smaller and smaller individual parcels interspersed with housing. As fragmentation becomes more pervasive, the ability of the forest to provide its many benefits declines rapidly. One tool communities in Connecticut have to help minimize forest fragmentation is conservation subdivision techniques. Conservation subdivisions, in contrast to traditional subdivisions, provide for housing units to be gathered creatively on a portion or portions of the parcel while the remainder of the parcel continues to serve as forest, field or open space in conservation. Thus, the conservation land continues to provide benefits to wildlife, linkages to other non-developed land, and potential trails and common areas for residents to enjoy.

IN THE FIVE-YEAR INTERVAL FROM 1999 THROUGH 2003 THERE WERE 185



BUILDING PERMITS ISSUED IN THOMPSON FOR NEW HOMES.



Connectivity through the use of wildlife corridors is a key to the survival and maintenance of a healthy and diverse wildlife population. Moreover, wildlife corridors can work well when planned in combination with stream buffers to protect water quality and wetlands resources. Wildlife corridors support the movement of all forms of wildlife who use these corridors to get from one core habitat or seasonal range to another. These corridors are critically important in northeastern Connecticut.

SOME WILDLIFE SPECIES, ESPECIALLY PREDATORS, REQUIRE A MINIMUM OF 5 ACRES TO THRIVE.

Wildlife corridors that connect important habitat are shown in **Map# 9.** These corridors generally follow rivers and streams that are also being recommended for further protection with stream or watercourse buffers. In addition to providing both seasonal migratory route support and necessary resting, escape and nesting habitat, these corridors, when of sufficient width, also provide buffers between human and wildlife activity.

The State of Connecticut's PA490 program allows for land to be taxed on use rather than market value if certain criteria are met. There are three categories of PA490 land – open space, farmland and forest. All PA490 lands are considered to be "uncommitted" open space because after 10 years in the program, this land can be sold with no recapture fee for the 10-year reduction in taxes. Therefore, although participation in the PA490 program is an incentive to preserve open space, it is not a long-term commitment. Participation in the PA490 program is a key element of managing forested lands and supporting wildlife habitat, because a forest management plan prepared by a certified forester is required. While PA490 land represents about 50% of the total area of Thompson, these lands cannot be considered "committed" open space.

THERE ARE APPROXIMATELY 15, 200 ACRES OF PA490 LANDS IN THOMPSON: 1,087 IN FORESTRY 2,440 IN FARMLAND 11,673 IN OPEN SPACE

THOMPSON = 48.6 SQUARE MILES OR 31,104 ACRES

MAP #10 - COMMITTED OPEN SPACE
THE TABLE ASSOCIATED WITH MAP 10 LISTS THE PROPERTIES
THAT ARE PERMANENTLY PROTECTED WITH ACREAGE

Forest and Wildlife Resources Recommendations

Specific recommendations for forest and wildlife resources are:

- 1. Minimize wildlife habitat fragmentation by adopting conservation subdivision techniques. Consider requiring Special Permit for traditional subdivisions, and require traditional subdivision applicants to demonstrate that the design has less impact on natural resources.
- 2. Utilize the Natural Resource Inventory mapping for subdivision applications to identify those forest and wildlife resource areas that are worthy of preservation, in need of linking corridors, potential recreation sites, etc..
- 3. Protect and enhance habitat connectivity by designating habitat corridors,
- 4. Support hunting and fishing,
- 5. Encourage consideration of forestry management and wildlife habitat preservation in the land use decisions of Town commissions and boards,
- 6. Foster forest management and habitat protection through voluntary participation in best management practices and voluntary participation in education programs,
- 7. Forge working relationships between the Thompson Conservation Commission, local land trusts, state and regional associations, and nationally based conservation organizations,
- 8. Utilize existing Planning & Zoning subdivision regulations regarding open space set asides to preserve forest land and wildlife habitat,
- 9. Purchase land or conservation easements on valuable forest land and wildlife habitat areas or wildlife corridors.

Conclusion

Forests are the lungs of the earth. They not only provide habitat for many creatures, they provide building materials and furnishings for our homes. Trees are a renewable resource when managed properly. Through careful planning and wise use, our forests will continue to give us wood products, clean air, wildlife habitat and abundant natural beauty.

MAP#11 - FOREST SUMMARY

MAP# 12 - PRODUCTIVE FOREST SOILS

MAP# 9 - STREAM CORRIDORS WITH FOREST SUMMARY

RECREATIONAL RESOURCES

Preface

Thompson's natural features offer many recreational opportunities. The West Thompson Dam Recreational Area and Quaddick State Park are two examples of outdoor recreational facilities centered around abundant water and forest resources.

Objective:

The objectives regarding Thompson's recreational resources are:

- Maintain and improve existing recreational resources,
- Create additional recreational opportunities for citizens of all ages,
- Connect existing and future trails and greenways where possible.

Background

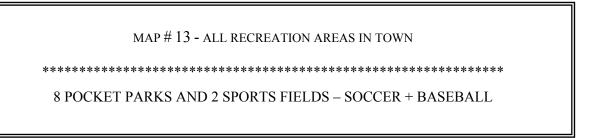
Thompson has an active Recreation Commission that offers a variety of organized activities. "Our mission is to enhance, promote, and support quality recreational facilities and opportunities for all residents of the community." (Thompson Recreation Commission) The Commission has the responsibility for supervision and management of all the public playgrounds, swimming pools, gymnasiums, recreation places, athletic fields and equipment and facilities. In addition to the town supervised recreational facilities, there are other recreational opportunities such as golf courses, auto racing and equipment facilities, under private ownership. Additionally, there are opportunities for non-organized activities which include swimming, boating, fishing, hunting, bird watching, hiking, bicycling and horseback riding.

THOMPSON RECREATION COMMISSION - CREATED JANUARY 29, 1970

Recreational Resources

Certain significant resources already exist

- The Town has established riverside paths and recreation areas including parks and sports fields.
- The State administers Quaddick State Park which provides recreational opportunities such as swimming, boating, and picnicking.
- The Federal Government through the Army Corps of Engineers maintains and administers West Thompson Lake and its floodplain. This area provides a variety of recreational activities including camping, boating, picnicking and hiking trails.



A key to the continuity of the region's natural and aesthetic resources is the development of a town greenways system that would be linked to regional greenways using the State's enabling legislation. In 1995, the Connecticut legislature established the Connecticut Greenways Council and declared an interest in creating a statewide greenways system (PA95-335). A greenway is defined as:

"...a corridor of open space that (1) may protect natural resources, preserve scenic landscapes and historical resources or offer opportunities for recreation or non-motorized transportation, (2) may connect existing protected areas and provide access to the outdoors, (3) may be located along a defining natural feature, such as a waterway, along a manmade corridor, including an unused right-of-way, traditional trail routes or historic barge canals or (4) may be a greenspace along a highway or around a village."

The Open Space Study Committee's vision is to tie green spaces, some of the key aesthetic and historic resources, and the non-motorized recreational areas (swimming areas, picnic areas, natural areas/wildlife corridors and trails) into a greenway system throughout town, thus combining the features of multiple resource use and appreciation with multiple resource protection.

Recreational Resources Recommendations

- 1. Promote and provide for increased public recreational facilities,
- 2. Provide opportunities for active and passive recreation,
- 3. Encourage creation of greenways,
- **4.** Link greenways to neighboring towns and states,
- **5.** Map all open space, conservation and recreational easements for the land use boards' consideration for future linkages.

Conclusion

More people are showing an interest in outdoor activities because of the physical and mental health benefits. As our population grows there will be an increased need for more recreational opportunities.

CULTURAL, HISTORIC AND ARCHAEOLOGICAL RESOURCES

Preface

Thompson is proud to be one of the 35 towns within the Quinebaug Shetucket National Heritage Corridor. "It is the mission of the Quinebaug-Shetucket Heritage Corridor, Inc. to conserve, celebrate and enhance the significant historical, cultural, natural and scenic resources of the Last Green Valley while promoting a quality of life based on a strong, healthy economy compatible with the region's character." *QSHC Vision 2010: A Ten-Year Plan*

Objective

The objective for Thompson's cultural, historical and archaeological resources is to assure their preservation, conservation and protection.

Background

Thompson is fortunate in having buildings from a variety of historic periods, such as, colonial and industrial. Stone walls, stone structures, picturesque vistas and scenic roads are a common sight in

Thompson. By the 1840s, Thompson's eight major manufacturing mills led to the town being one of the leading textile centers of Connecticut. These textile firms were successful because of access to cotton and advancing rail links in the country. Significant deforestation occurred during this period due to the need for firewood for workers, beams for the mills, and acreage to plant grain and graze cattle to feed the growing work force. Dams which powered the mills altered the water flow of the rivers and streams, resulting in homes built in flood plains surrounding the artificial mill ponds. Cleared fields were left to grow over when the mill era passed and farmers sought new and more fertile lands out west.

The Town has always had a strong and active interest in history. Much of Thompson Hill is listed on the National Register of Historic Places Properties and the Connecticut State Registry of Historic Places Properties, as well as designated as a Preservation District. Additionally in 1986 the Connecticut Historical Commission inventoried all historic structures and a copy of this inventory is available at the Town Hall and at the Library. It is titled, *Townwide Historical and Architectural Survey of Thompson*, *CT*. The Thompson Historical Society is actively working to document and preserve the unique history of Thompson and has an extensive collection of historic photos and documents.

VISIT THE THOMPSON HISTORICAL SOCIETY AT THEIR WEBSITE: WWW.THOMPSONHISTORICAL.ORG

Existing Aesthetic, Cultural and Historic Resources

Thompson has an abundance of stone structures scattered about the landscape. Some of these sites predate European arrival in this country, but there are no written accounts from those times. The history is in the landscape with these sites; the sites themselves are the historical record. For this reason it is prudent that we make every effort to preserve these locally significant historic archaeological sites for future generations. (Map # 14)

The primary source of historical data concerning Thompson is contained in numerous references in the classic two-volume book by Ellen Larned on the History of Windham County. Richard Bayles' book on the same subject, published ten years later, provides more accessible edited sections, and extracts are now available on the web site. There is no current comprehensive inventory but there is a wealth of information and material collected by the Thompson Historical Society. Interest in the history remains strong and is valued by the community. Preservation has been underway and there are resources that have already been established and maintained. They are:

- Thompson Common Preservation District established April 24, 1989
- 1842 Town Hall leased and maintained by Thompson Historical Society
- 1902 Library now known as the Ellen Larned Memorial Museum also leased and maintained by Thompson Historical Society.
- Tourtellote Memorial room at the Tourtellote High School with its collections of memorabilia and artifacts
- Collections of artifacts and memorabilia of the Thompson Historical Society
- Publications of the Thompson Historical Society including:
 - o Echoes of Thompson published 2003 detailing Thompson's history
 - o Millennium Edition CDs containing digital photographs, maps and documents relating to the history of Thompson

The State Archaeologist's Office has documentation for 46 known Archaeological sites ranging from prehistoric to industrial. Additionally, the State Archaeologist informs us that there are areas in Thompson that are considered to be areas of archaeological sensitivity. Those sites and the sensitive areas are referenced in Map # 15.

Thompson's rich history can also be read on the landscape. The following list is an attempt to point out some of the treasures that have endured since colonial and pre-colonial times: bermed chambers, cairns and burial mounds, early industrial mill buildings and artifacts of same, early mill housing, old churches, old barns and farm structures, old houses and school houses, rural roads bounded by fieldstone walls and/or mature trees, and scenic vistas and viewsheds.

Cultural, Historic and Archaeolgical Resources Recommendations

- 1. Preserve and protect our distinctive cultural, historical and archaeological resources,
- 2. Consider pursuing Historic and Archaeological Preservation Easements to protect these resources.
- 3. Designate and maintain historic buildings and historic districts,
- 4. Promote and preserve the village history in each of Thompson's ten villages,
- 5. Promote certification of historical and architectural resources,
- 6. Protect scenic and visual resources,
- 7. Encourage the preservation of stone walls, especially boundary walls,
- 8. Preserve the town's character and rural environment through acquisition of significant properties or conservation easements or innovative regulations such as conservation subdivisions,
- 9. Preserve the existing dirt roads and encourage the designation of scenic roads,
- 10. Create regulations that consider noteworthy historic, archaeological and cultural features in development proposals.

Conclusion

An understanding of the need to protect and conserve these resources and the sense of pride and appreciation they instill is vital to the future of our community. We recommend that this section be periodically updated and that these resources be considered in any future Plan of Conservation and Development.

CONCLUSIONS

RESOURCES AND PRIORITIES

Each of the resource categories has an intrinsic value. However, when a resource area contains more than one resource, that area has greater value or priority.

Resources:

- Water Resources (wetlands, watercourses, aquifers)
- Agricultural Resources (active agricultural land, fallow or abandoned fields)
- Forest & Wildlife Resources (undeveloped forested land, stream corridors and all other undeveloped land)
- Recreational Resources (parks, playgrounds, trails, sport fields and water bodies)
- Historical, Archaeological and Cultural Resources (structures such as old barns and historic mills and homes, stone walls and stone mounds, archaeological sites, and scenic vistas and roads, bridges, libraries, etc.)

Co-Occurring or Multiple Resources

Where an area has been identified as having co-occurring resources, such areas assume a higher priority than single resource areas. The greatest priority should be given to areas that have been identified as having the most co-occurring resources. For example, the northeast corner of Thompson contains a large area of multiple resources. There are headwaters, large acreage of diverse swampland, abundant underground water reserves or aquifer, a vast area of rare plant species, a native trout stream, and these resources are connected to a large tract of forested land. The more co-occurring resources, the higher priority is given to that area.

Multiple Resource Priority Areas Recommendations

- Multiple resource priority areas should receive the greatest protection and the greatest consideration for either acquisition or deed restrictions.
- In evaluating land-use proposals, multiple resource priority areas should be carefully considered with a goal of preserving and protecting these important areas.

Connectivity Plays a Major Role

An important goal of this conservation plan is to avoid fragmentation of the undeveloped lands in town; thus, it is essential to provide linkages between such undeveloped areas. The purpose of such linkages is to provide a safe means of travel for wildlife as it goes from one habitat to another finding what it needs to survive. Where multiple resources occur, connectivity is a vital aspect of protecting and preserving the diverse functions of those areas.

FINAL COMMENTS

In addition to the specific recommendations in each of the resource categories previously covered in the Plan, the following general recommendations are important.

General Recommendations

- 1. Acquire land and/or conservation easements in identified priority resource areas
- 2. Encourage best use of the land including techniques such as creative zoning, and conservation development regulations by utilizing the Natural Resources Inventory and the Conservation Commission's capacity to furnish vital information,
- 3. Implement review of development proposals by the Conservation Commission prior to land-use commission decision making. Using the Natural Resources Inventory, the Conservation Commission has the capacity to furnish vital information to land-use boards and commissions when considering development applications,
- 4. Encourage private donation of land to land trusts and other non-profit tax-exempt conservation organizations.
- 5. Encourage the use of environmentally clean sources of energy, such as hydroelectric, solar and wind,
- 6. Manage town-owned renewable natural resources such as forests for income to support open space acquisition,
- 7. Encourage the use of porous materials instead of impervious materials wherever possible to allow stormwater to be naturally absorbed,
- 8. Support the preservation of scenic vistas, stone walls and other aesthetic and historic landscape features,
- 9. Avoid night time outdoor light pollution by adopting regulations to address this issue. Night time light pollution is a significant problem worldwide. Artificial night time lighting affects biological rhythms of animals and humans and reduces our ability to see the night sky,
- 10. Support appropriate economic growth that fits in with Thompson's rural character,
- 11. Continue to increase communication between and among the boards, commissions and departments in town.

We realize that the goals and objectives of this plan will take time to achieve. Changes in our ways of valuing and conserving our natural and cultural resources will be a process involving many people. Landowners, regulatory boards and commissions, developers, and a variety of professionals will all be working toward their own objectives for the use and management of land.

It is our hope that with use of the data from the Natural Resources Inventory and the guidance within this document, cooperative land-use decisions will achieve a balance between conservation and development.

LIST OF TOWN GENERATED GIS MAPS:

#1	GROUNDWATER RESOURCES (STRATIFIED DRIFT DEPOSITS)
#2	THREE MAJOR RIVERS AND NAMED STREAMS
#3	WETLANDS AND WATERCOURSES
#4	PERENNIAL AND INTERMITTENT STREAM CORRIDORS
#5	SIGNIFICANT WETLANDS, HEADWATERS AND NATIVE WILD TROUT STREAMS
#6	SHORELINE
#7	WATER QUALITY
#8	PRIME AND IMPORTANT AGRICULTURAL SOILS AND ACTIVE AGRICULTURAL LAND SUMMARY
#9	FOREST AND WILDLIFE RESOURCES SUMMARY WITH STREAM CORRIDORS
#10	COMMITTED OPEN SPACE
#11	FOREST AND WILDLIFE RESOURCES SUMMARY
#12	PRODUCTIVE FOREST SOILS
#13	RECREATION AREAS
#14	LOCALLY SIGNIFICANT HISTORIC ARCHAEOLOGICAL SITES
#15	ARCHAEOLOGICAL DATA
#16	PROPERTY LINE MAP (2002 DATA)
#101	WATERSHED BASINS (TRANSPARENT OVERLAY TO MAP 7)

LIST OF DATA LAYERS AVAILABLE:

Agriculture summary

Ten most noteworthy wetlands

Archaeologically sensitive areas

Archaeological Sites

Cemeteries

Shoreline

Developed shoreline

Forest summary

Headwaters

Streams

Waterbodies

Organic soils

Farm soils

Wetland soils

Locally significant historic archaeological sites

Privately owned committed open space (land trusts, etc.)

Municipal and private open space

DEP properties

Federal properties

Slopes $\geq 25\%$

Stratified drift

Soils

Aquifer protection wells

Hydrography

Dams

Land Use Land Cover

Natural Diversity Data Base Sites

Agricultural lands in PDR

Roads/Streets

Surficial Materials

Town Boundary

Wild Trout Streams

Water Quality – Streams

Water Quality – Groundwater

USGS Quadrangles

Conservation Easements (unfinished)

Parcel Lines

Parcel Polygons (unfinished)

Stream Buffers

DEP Boat Ramps

Lakebathy (bottom contours)

DEP: Leachate Waste Disposal Sites

Orthophotos

Co-Occurring or Multiple Resources (existing, but not acquired yet)

44 LAYERS

LIST OF LARGE SCALE NATURAL RESOURCES MAPS generated by GVI:

Archaeological Site Areas + Areas of High Potential for Archaeological Findings					
Hydrographic Features					
Agriculture + Forest Resources Summary Areas					
Land Use Land Cover Categories	(Base Map)				
Surficial Materials	(Base Map)				
NDDB Sites, Watershed Basins, Wild Trout Areas	(Overlay)				
Water Resources Summary Areas	(Overlay)				
Farmland Soils	(Overlay)				
Wetland Soils	(Overlay)				
Property Parcels	(Overlay)				
Potential Stratified Drift Aquifer Areas	(Overlay)				
Significant + Permanently Protected Open Space	(Overlay)				
Topography	(Base Map)				
Ground + Surface Water Quality Classifications	(Base Map)				
Orthometric Aerial Photography	(Base Map)				
Co-Occurring Resources Inventory	(Base Map)				

APPENDIX 4

Committed Open Space (as depicted on Map 10)

PROPERTY	ACRES	
Airline State Park Trail (North Trail)	65.0	65
Quaddick State Forest	265.0	265
Quaddick Reservoir (DEP owned)	39.0	39
Quaddick State Forest	151.0	151
Quaddick Reservoir (DEP owned)	203.0	203
Quaddick State Park	93.0	93
Quaddick Reservoir (DEP owned)	130.0	130
Quaddick Reservoir Water Access	6.0	6
Quaddick Reservoir Water Access	0.5	0.5
Quaddick State Forest	35.0	35
FARMLAND PRESERVATION (EDDY)	40.5	40.5
FARMLAND PRESERVATION (BUTTS)	22.6	22.6
W. Thompson Lake+Floodplain (USACE)	18.5	18.5
W. Thompson Lake+Floodplain	10.0	10.0
(USACE)	1745.0	1745
Wyndham Land Trust	20.0	20
Nature Conservancy	86.5	86.5
Wyndham Land Trust	42.5	42.5
Wyndham Land Trust	57.0	57
Wyndham Land Trust	30.0	30
Town Duhamel's Park	2.5	2.5
Town Grosvenordale Common	<.5	0.5
Town M.R. Fisher Elem Sch Playscape	<.5	0.5
TOWN TEEG playground	<.5	0.5
Town Wilsonville Playscape	<.5	0.5
Town Riverside Park	19.0	19
Town Heritage Way Park - west side	14.5	14.5
Town Heritage Way Park - east side		
Town Bull Hill Rec Area	71.0	71
Town Ball Fields	14.0	14
Town Oscar Swanson Memorial Park	<.5	0.5
Total Acres		3173.6

Locally Significant Historic Archaeological Sites (as depicted on Map 14)

ID	LOCATION	FEATURE
1	Anderson Rd Area	chamber
2	Rt 12/Wilsonville Area	chamber
3	Lowell Davis Rd Area	stone boat-shaped cairn
4	Lowell Davis Rd Area	cairn field
5	Sunset Hill Rd Area	cairns
6	along I-395/Wilsonville Area	cairns
7	Pasay Rd Area	standing stones, dolmen (thunder rock)
8	Lowell Davis Rd Area	partial cairn remains
9	Riv. Dr + I-395 Area	chamber, standing stones
10	Chase Rd Area	cairns
11	E Thompson Rd	tomb chamber circa 1840
12	E Thompson Rd	chamber circa 1200 AD
13	E Thompson Rd	ship cairn + cairns
14	Spicer Rd	partial chamber remains
15	Baker Rd State Forest	cairns
16	Border Trail Area	chamber
17	Border Trail Area	cairn field
18	Brandy Hill Area	2 chambers
19	Quinebaug Area	chamber
20	Kingsbury Rd area	unmarked burial site

Recreation Areas – Publicly owned (as depicted on Map 13)

ID	PARK_NAME	ACRES	AUTHORITY	LOCATION	USE	
				off Main St, behind cemetery+Carriage		
1	Duhamel's Park	2.5	Thompson	House	Fishing, Bird Watching, Picnic	
2	Grosvenordale Common	<.5	Thompson	Riverside Drive	Swingset, Basketball Hoop	
	M.R. Fisher Elem Sch					
3	Playscape	<.5	Thompson	Riverside Drive, behind the School	Playscape for ages 5-12	
4	TEEG playground	<.5	Thompson	65 Main Street	2 swingsets, one for infants	
5	Wilsonville Playscape	<.5	Thompson	corner of Wilsonville + Pompeo Roads	Playscape for ages 2-12	
6	Riverside Park	19.0	Thompson	Riverside Drive	Walking, Biking, Fishing, Picnic, Band Gazebo, Softball Field	
	Heritage Way Park - west					
7	side	14.5	Thompson	Riverside Drive	Walking, Biking, Fishing, Boating	
	Heritage Way Park - east		Th			
8	side		Thompson		0 5 11 1111 5 1	
9	Bull Hill Rec Area	71.0	Thompson	end of Messier Road	Soccer Fields, Hiking Paths	
10	Town Ball Fields	14.0	Thompson	Red Bridge Road		
1,,	Oscar Swanson Memorial	_	T I	Di ancida Dei a Na Orana accadala	David a David	
11	Park	<.5	Thompson	Riverside Drive, No. Grosvenordale	Passive Park	
12	State Mechanicsville Park	<.5	State	Riverside Drive	Picnic, Fishing	
13	State Rest/Picnic Area	<.5	State	Quinebaug Road, Route 131		
14	State Rest/Picnic Area	<.5	State	Riverside Drive, Route 12		
			_	from Thompson Road thru E. Thompson to		
15	State AirlineTrail	65.0	State	MA.	Hiking, Horseback Riding	
16	Quaddick State Forest	265.0	State	north end of Quaddick Lake		
17	Quaddick State Forest	151.0	State	north end of Quaddick Lake		
18	Quaddick State Park	93.0	State	off Quaddick Town Farm Road	Swimming, Boating, Fishing, Walking	
	WTL Federal Property N of					
19	197	18.5	Fed Govt	north of Route 197 to MA.	Primarily Flood Control	
	WTL Federal Property S of	4745.0	.	south of Route 197 to West Thompson	Primarily Flood Control, also Boating, Hiking,	
20	197	1745.0	Fed Govt	Lake+Dam	Campground	
21	Federal Property	0.6	Fed Govt	west side of lake	N/A	

APPENDIX 7
State of Connecticut DEP List of Leachate Waste Disposal Sites (as depicted on Map 7)

AV_LEGEND	LWDS_NO	LWACTIVE	LWFLOW	NAME	AKA	LWNAME	DESCRIP
INDUST PIT	3300001	INACTIVE	GROUND	Tilcon Tomasso		INDUSTRIAL PIT	former asphalt production lagoon
LANDFILL	3300002	INACTIVE	GROUND	Thompson		LANDFILL	closed mixed waste and industrial sludge landfill
INDUST PIT	3300003	ACTIVE	GROUND	Sanitary Dash Mfg.		INDUSTRIAL PIT	metal sludge lagoon
INDUST WTR	3300004	ACTIVE	SURFACE	Sanitary Dash Mfg.		INDUSTRIAL WASTEWTR	industrial discharge
COOL WTR-S	3300005	ACTIVE	SURFACE	Deran Confectionary		COOLING WTR - SURFACE	cooling water discharge
INDUST WTR	3300007	ACTIVE	SURFACE	Belding Chemical Industry		INDUSTRIAL WASTEWTR	industrial discharge
SEWAGE PLT	3300010	ACTIVE	SURFACE	Marianapolis College		SEWAGE TREAT PLANT	STP
LANDFILL	3300011	ACTIVE	GROUND	Conn. DOT		LANDFILL	bulky waste disposal
SEPTGE PIT	3400001	ACTIVE	GROUND	Thompson		SEPTAGE LAGOON	septage disposal
AGRIC WSTE	3400002	ACTIVE	GROUND			AGRICULTURAL WASTE	Manure storage
SEWAGE PLT	3700001	ACTIVE	SURFACE	Thompson		SEWAGE TREAT PLANT	STP
SPILL	3300006	INACTIVE	GROUND	Blain Oil Co.		OIL/CHEMICAL SPILLS	petroleum spill
SALT	3300008	ACTIVE	GROUND	Thompson		SALT STORAGE	salt storage
SALT	3300009	ACTIVE	GROUND	Conn. DOT		SALT STORAGE	salt storage
CONTM WELL	3300012	ACTIVE	GROUND			CONTAMINATED WELL	Public & private wells contaminated by town salt pile





Thompson, CT
Property Line
Map 16

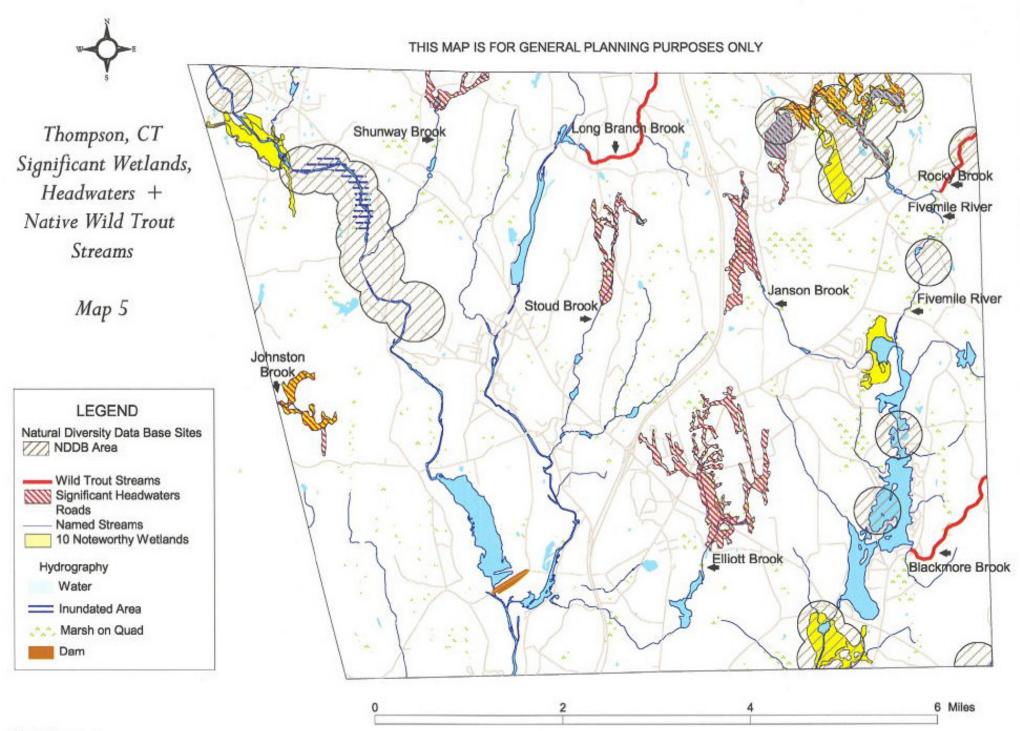
LEGEND

Parcels

Town Boundaries

DATA SOURCE: Parcel Line Data (2002) digitized by NECCOG





Data Source: CT DEP Environmental GIS Data for CT 2003 Ed.



6 Miles





Groundwater Resources

Greater than 40 Feet 0 to 40 Feet

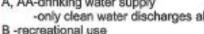
Roads

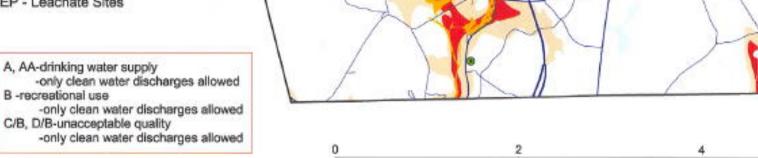
Town Boundaries

Public Water Supply Watershed

Public Water Supply Wells

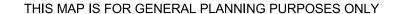
DEP - Leachate Sites





DATA SOURCE:

CT DEP Environmental GIS Data for CT 2003 ED.





Thompson, CT
Prime and Important
Agricultural Soils and
Active Agricultural
Land Summary

Map 8



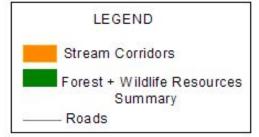
DATA SOURCE: Soils from DEP CT GIS Data 2003 Ed. Agricultural Lands determined by ground observations.

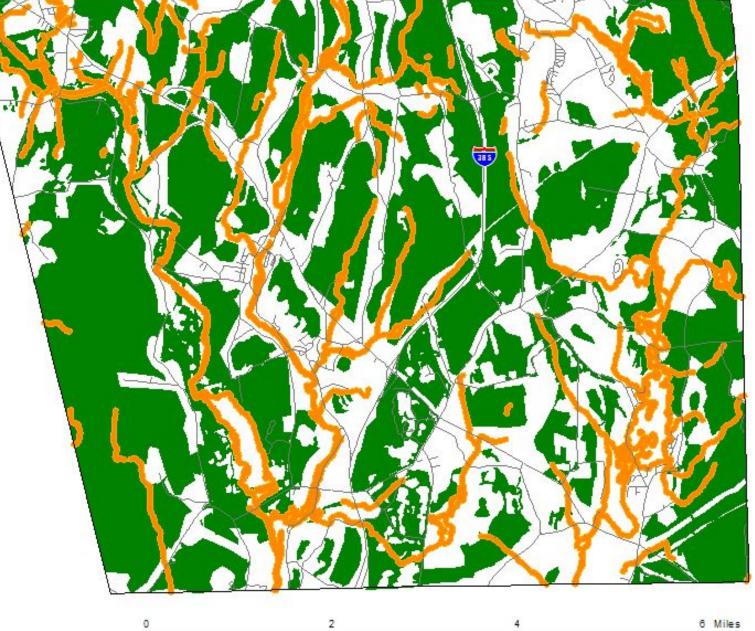




Thompson, CT
Forest + Wildlife
Resources
Summary with
Stream Corridors

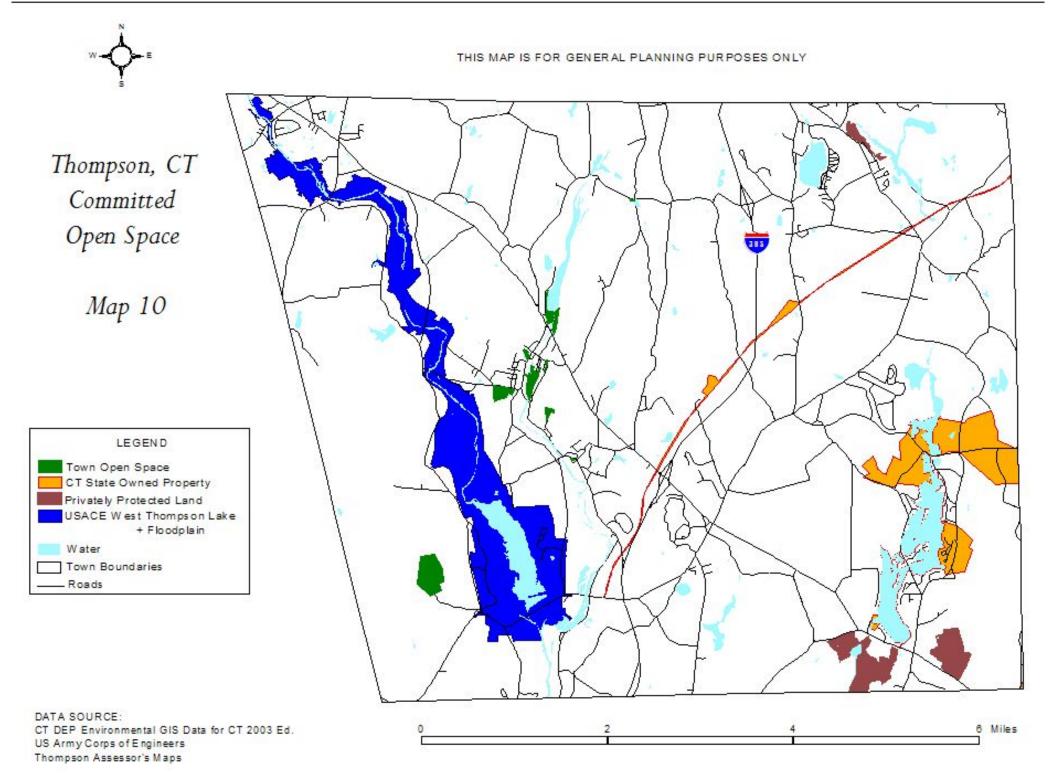
Map 9

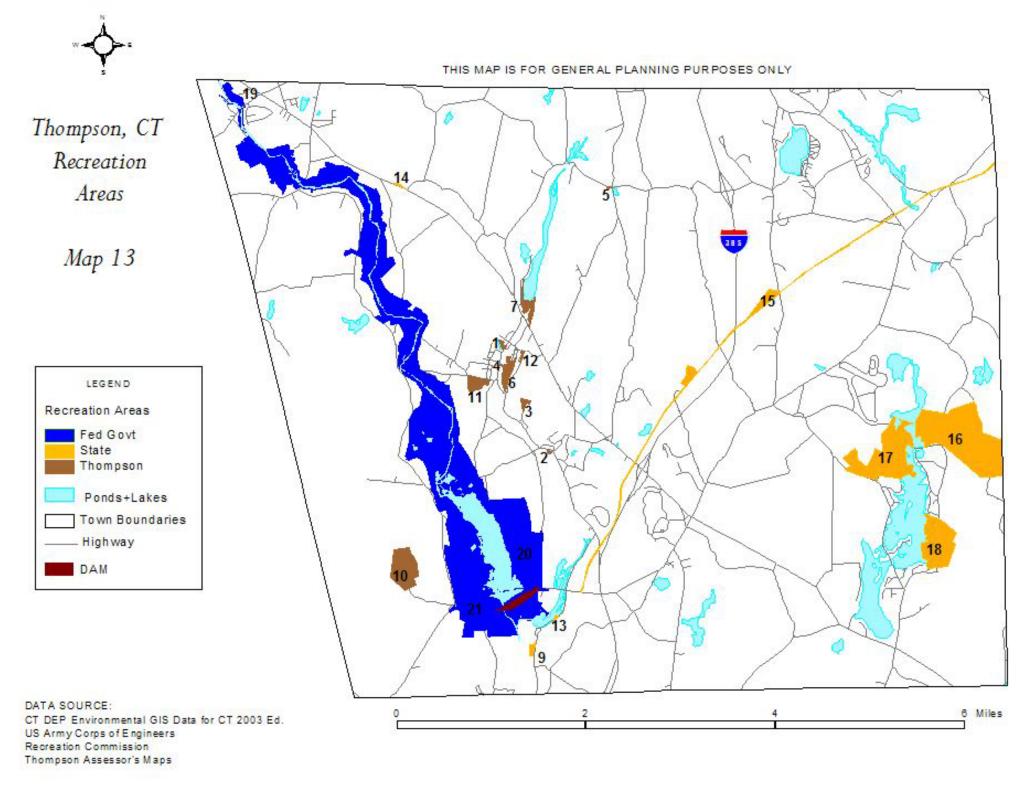




DATA SOURCE:

Forest Lands determined by ground observations Roads and Streams from DEP GIS Data 2003 Ed.





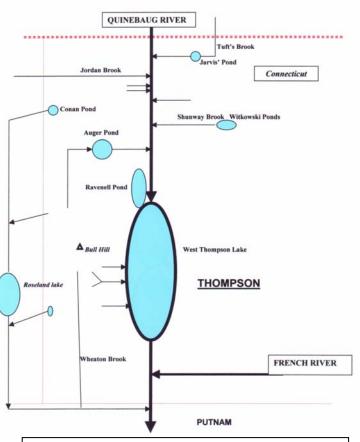
The Quinebaug River System in Thompson











Massachusetts

Stylized map of the watercourses associated with the Quinebaug River in Thompson



Top left: Coman Pond with peripheral conservation area.

Second left: Jarvis Pond Quinebaug by Rte.131.

Third left: Aerial view of Fabyan mill site and wetlands.

Bottom left: Major headwater in Bull Hill area.

Above right: Fabyan Mill site

The French River System in Thompson



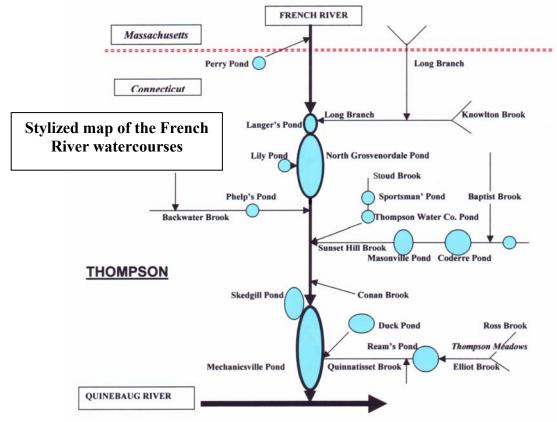
Above left: Langer Pond and mill site in Wilsonville Below left: Bridge over the river by the public library



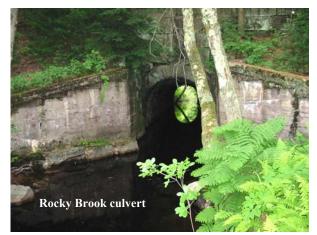
Above right: North Grosvenordale Pond on the French River Below right: West Thompson Dam and Mechanicsville Pond

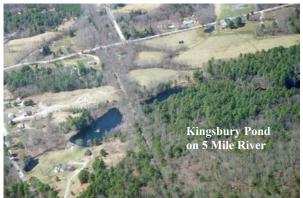


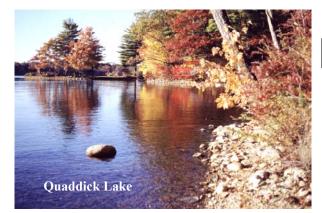




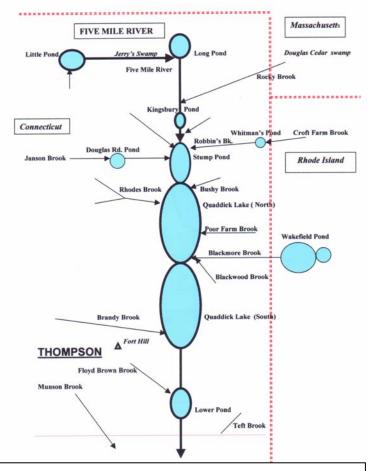
The Five Mile River System in Thompson



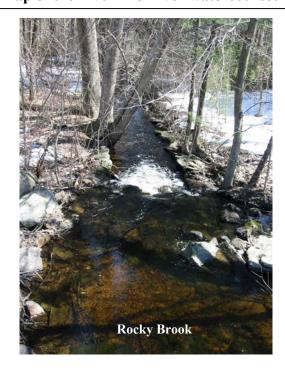








Stylized map of the Five Mile River watercourses



Examples of Agricultural Buildings and Land in Thompson that have Historical and Scenic Value



Barnes (Prince) Farm was built in the late 1700s in Fabyan - pictured here when it was still a working farm in the 1970s



Oliner Chapin's Farm was built in 1812 - now called "Sagerock Farm" and located on County Home Road.



One of the two surviving dairy farms on O'Leary Road



Field and barn off of Brickyard Road



Aerial view of Fort Hill Farm on Quaddick Road

Critical Wetlands and Major Aquifers in North East Thompson





The major aquifers and critical wetlands with co-occuring wild life habitat are situated in the North East section of Thompson and are pictured above.

Left: Little Pond with the Five Mile River leading to Jerry's Swamp. Right: Connecticut/Massachusetts border. Webster Lake pollution is of concern because water from the lake flows into the French River in Thompson.





Above left: The aerial photo illustrates the importance of using buffer zones around wetlands and water courses. Gravel was extracted too close to these sensitive areas. Above right: The Wyndham Land Trust has purchased land on the southern side of Jerry's Swamp and the area is now conserved. Below left and right: Photographs of the Wyndham Land Trust conservation area. This is an important biologically diverse wild life habitat.





<u>Examples of Important Archeological and Historic</u> Items in Thompson That Should Be Conserved







Left: This bermed chamber, according to carbon dating, was constructed several hundred years before the colonists arrived. Center: One of many stone cairns in Thompson believed to be of Indian origin.

Right: A Colonial era gravestone.



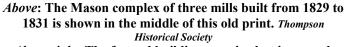


Left: The oldest church in Thompson built in 1803 on Thompson Road near Brandy Hill.

Right: One of the many historic stone walls in Thompson.

Nathan Chase, a Civil War veteran, constructed the one shown in this picture.





Above right: The far end building remains but is unused.

Below right: Houses built for the mill workers are still in use.



