

NATURAL RESOURCES INVENTORY

ENFIELD NEW HAMPSHIRE 2021



COVER PHOTOGRAPH BY KITTIE WILSON Loon on Nesting Raft

NATURAL RESOURCES INVENTORY 2021, PREPARED BY
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TABLE OF CONTENTS

INTRODUCTION	2-3	
GEOGRAPHICAL AND HUMAN POPULATION DATA	4	
MAJOR GOALS OF THE 2021 NATURAL RESOURCES INVENTORY	4	
MATERIAL AND METHODS	5	
RESULTS	5-7	
DISCUSSION	8-21	
ACRES OF WATER HABITAT IN ENFIELD	22	Table One
PROPERTIES WITH HYDRIC SOILS IN ENFIELD	23-27	Table Two
PROPERTIES WITH WETLANDS, SWAMPS, OR EXCEPTIONAL MOISTURE	28-30	Table Three
PROPERTIES OVERLYING AQUIFERS IN ENFIELD	31-32	Table Four
PROPERTIES WITH RIPARIAN OR SHORELINE BUFFER	33-35	Table Five
CONSERVATION DISTRICT PROPERTIES AND OTHER CONSERVATION LAND IN ENFIELD	36-37	Table Six
PROPERTIES WITH HISTORIC DEER YARDS IN ENFIELD	38-42	Table Seven
PROPERTIES WITH POTENTIAL WILDLIFE CORRIDORS	43-47	Table Eight
PROPERTIES WITH PERMANENT OPENINGS	48-55	Table Nine
PROPERTIES WITH PRIME FARMLAND IN ENFIELD	56-64	Table Ten
PROPERTIES WITH FARMLAND IMPORTANT TO THE STATE OF NH	65-71	Table Eleven
PROPERTIES OWNED BY THE TOWN OF ENFIELD	72-74	Table Twelve
VERNAL POOLS IN ENFIELD	75-77	Table Thirteen
APPENDIX Figure 1 and MAPS 1-7	78-85	Fig one and Maps 1-7
REFERENCES AND RECOMMENDED ACTION ITEMS	86-87	

INTRODUCTION

THE ENFIELD CONSERVATION COMMISSION WAS CREATED IN 1972 BY WARRANT ARTICLE 14, proposed by BOB HEWITT. AT ITS CREATION IT ASSUMED THE RESPONSIBILITIES AS DELINEATED IN: RSA 36-A OF THE STATE OF NEW HAMPSHIRE. THE FOLLOWING IS A LISTING OF THE RESPONSIBILITIES OF CONSERVATION COMMISSIONS IN THE STATE OF NEW HAMPSHIRE:

- 1) Conduct research into its local land and water areas.
- 2) Seek to coordinate the activities of unofficial bodies organized for similar purposes.
- 3) Keep an index of all open space and natural, aesthetic or ecological areas, all marshlands, swamps, and other wetlands.
- 4) Keep accurate records of its meetings and actions.

While the Conservation Commissions have NO regulatory authority they do have advisory authority.

RSA 36-A also permits the Conservation Commissions to do the following:

- 1) Recommend a program for the protection, development and better use of all areas in the index.
- 2) May receive gifts of money, both real and personal, in the name of the city or town, subject to the approval of the local governing body, such gifts to be managed and controlled by the Conservation Commission.
- 3) May acquire in the name of the city or town subject to the approval of the local governing body, the fee in such land or water rights, or any lesser interests and shall manage and control the same, but the city or town or Commission shall not have the right to condemn property for these purposes.
- 4) May advertise, prepare, print and distribute books, maps, charts, plans and pamphlets necessary for its work.

RSA31:110-113 provides for local designation and management of town or city forests, by vote of town meeting, to the Conservation Commission.

RSA 482-A (Dredge and Fill in Wetlands) allows a Conservation Commission to intervene or request time to investigate a permit application filed with DES Wetlands Bureau if a Commission makes this request within 14 days of the date a standard application is signed by the town clerk. The Bureau must then delay action on that application until a report is received from the Commission or until 40 days from the date of the clerk's signature. The Conservation Commission is the ONLY municipal body with authority to intervene.

The Conservation Commission for the town of Enfield has the responsibility for identifying the natural resources within its boundaries, protecting those already established and working to enhance existing areas and to conserve new areas as they become available. Natural resources includes, but are not limited to, the following categories: Wildlife and wildlife corridors and habitat, water quality, unique geological features such as waterfalls, wetlands and bogs, vernal pools, rivers and streams, escarpments, sensitive ecological areas, views, and trails.

Renewable resources are living or biotic resources and others such as soil and water which are closely associated with and affected by living organism. Living resources in any area are intricately tied together when one is touched all are touched. (1)

Despite humans' present position of dominance on Earth they are still dependent upon other living things for their survival. Congregated in urban communities human populations may assume that they have risen above nature, but the bread they eat comes from grain plants formed from soil and sunlight. The soil, with its community of microorganisms to maintain its health and fertility, was formed by the work of generations of green plants and animals, transforming rock and sunlight energy into the organized network of materials needed for the growth of plants that provide food for all animals and humans. We are therefore dependent upon the ecological interrelationships of living things with their physical environment. (1)

GEOGRAPHICAL AND HUMAN POPULATION DATA OF ENFIELD NH

The Town of Enfield NH covers 25,792 acres (40.3 sq miles) and is in Grafton county NH between approximately 43 degrees 64 minutes North Latitude and 72 degrees 15 minutes West Longitude. Its highest elevation above sea level is 1,834 FT on Methodist Hill. The lowest elevation is 745 FT at Mascoma Lake.

The Community of Enfield is bordered to the west by the communities of Lebanon, northwest by Hanover, north east by Canaan, east by Grafton, all in Grafton County and south east by Springfield, south by Grantham and south west by Plainfield, all in Sullivan County.

The 2020 census recorded a total human population in Enfield NH of 4,573, a decline of 1.14 % since 2010 according to the World Population Review (worldpopulationreview.com).

MAJOR GOALS OF THE 2021 NATURAL RESOURCES INVENTORY FOR ENFIELD NEW HAMPSHIRE

- 1) Identify by map, block, and lot number all properties in Enfield NH with one or more of the following natural resource features: Hydric Soils, Conserved Land, Aquifers, Riparian or Shoreline Buffers, Prime Wetland, Swamps or Exceptional Moisture, Potential Wildlife Corridors, Prime Farmland, Farmland soil of State Wide Importance, Historic Deer yards, Permanent Openings, Land owned by the State or the Town of Enfield.
- 2) Identify all properties owned at present by Real Estate Corporations, out of State owners, Conservation Societies or Trusts, Those in R1, R3, R5, and Conservation District designated areas.
- 3) Detect Wildlife Corridors used by animals moving from one habitat to other areas.
- 4) Identify those parts of Enfield which are part of the Mascoma River Watershed.
- 5) Enumerate the total acres of properties with Natural Resources.
- 6) Determine the Farmland currently being used to grow food, fiber, oilseed crops, or forests.
- 7) List the location of Vernal Pools in Enfield.

MATERIALS AND METHODS

Using the 2019 property maps for Enfield every piece of property was identified by Map, Block and Lot. Property Tax records were used to determine acres of each parcel, organizational ownership, out of State ownership and R1, R3, R5 and conservation district listed in the index. Then, using transparent overlays showing property boundaries, each of the maps from GRANIT, NH Fish & Game, UNH extension was used to trace the extent of the natural resource on to the transparent overlay. The transparent overlay and the natural resource maps were of the same size and larger in size than the maps in the printed NRI, thus facilitating a fairly accurate determination of the extent of each natural resource feature on the property. The properties, with each natural resource, were indexed by map, block, lot, and acres in separate tables using the Town Property Maps. (e.g., Map 1, Map 2, etc).

Game cameras were positioned on properties where potential wildlife corridors were noted on the color map 5 (see map section pg 78-85) and along road ways after obtaining approval from land owners. These cameras were equipped with daylight and infrared detection capabilities and motion detection sensors. This work is still ongoing as seasonal differences in wildlife movement will require 12 month of data collection.

Most property owners with designated prime farmland and or farmland important to the State of New Hampshire were contacted and asked if there were any crops (food, fiber, oilseed or forest) grown on their property in the last five years.

A map was obtained from the 2003 Natural Resource Inventory report of the Mascoma Watershed, prepared by the Society for the Protection of the New Hampshire Forests, for the Mascoma Watershed Conservation Council.

RESULTS

There are 25,792 acres of land in Enfield NH, 21,034 acres (82 %) of that have one or more important environmental characteristics on them. There are 6,414 acres (25%) of conserved land, mostly in the Conservation District. There are 2,140 acres of water habitat in Enfield NH (table 1). Most of Enfield NH is within the Mascoma River watershed (fig 1). Four thousand one hundred twenty and nine tenths

acres (4,127.9) of this are conserved acres (2). Part of this watershed contributes to the Crystal Lake watershed. There are approximately 6,192 acres of land, parts of which contain hydric soils (table 2, map 2). Hydric Soils are those poorly or very poorly drained.

There are more than 1,097 acres in Enfield, parts of which have prime wetlands, swamps or soils with exceptional moisture. The major areas are: north of Lockehaven, west of Jones Hill, around Mud Pond, East of Oak Hill, and along Bog Road South of George Pond (table 3).

There are about 4,339 acres in Enfield, portions of which overlay aquifers. There are 4 major aquifers: one along Bog Road, two along route 4A from the Lower Shaker Village to just east of where the Knox River enters Mascoma Lake, and one on Route 4 where it crosses the Enfield/ Canaan border. This last aquifer extends into Canaan, where the Town of Enfield has one of its four municipal wells (table 4, map 1).

There are at least 1,268 acres in Enfield, parts of which have riparian or shore line buffers (table 5, map 3). The greatest amount of this habitat is around Crystal Lake, Mascoma Lake, George Pond, Spectacle Pond, and along the Mascoma River next to Route 4.

There are 6,414 acres (25%) in Enfield that are currently in the Conservation District. Most are under the protection of the Upper Valley Land Trust, the New Hampshire Fish and Game, and The State of New Hampshire. However, the Grafton Pond Land Trust, the Society for The Protection of New Hampshire Forests and the Paine Preserve also are conserved property outside the Conservation District of Enfield. There are several large pieces of property in the Conservation District that are not presently conserved, one being 319 acres owned by the Enfield Land Company (table 6, map 6).

There are 3,748 acres in Enfield that contain historic deer yards on them (map 4) but only 1,121 acres are still available as such (table 7). A Deer Yard is an area where deer herds may overwinter and typically consist of coniferous forests of pine and hemlock where they can find forage and shelter from snow. Over the last 17 years there has been considerable logging in Enfield, which has reduced the amount of actual winter cover for deer.

There are 9,882 acres with Potential wildlife corridors on them, however 2,004 acres of that are owned by out of State residence or Real Estate entities. Most of the potential corridors are on properties listed in the 2019 Town Property Maps 13, 15, and 17 (table 8 map 5).

At least 4,735 acres of land in Enfield have areas that have been declared to have "permanent openings" (table 9). Fifteen percent have openings directly onto roads and hence offer wildlife avenues for migratory movement but also increase the opportunity for road kills of wildlife. The largest pieces of property with openings onto roadways are found along Follensbee Road, George Hill Road, Grafton Pond Road, Klug Road, Lockehaven Road , Old Country Road (a class VI road), Jones Hill Road and Choate Road (table 9, map 4).

Game cameras have been placed along some of these roads to document wildlife crossing. At present some of these roadways are not signed with warnings to motorists about such hazards.

There are at least 6,478 acres in Enfield with some part having been identified as containing Prime Farmland Soil (table 10, map 7). Some parcels, 49 out of 161, (29%) had no acreage recorded on the available property tax records and are noted on tables under acres as ND, no data. There were also 4 parcels, totaling 2,480 acres (38 %) that are owned by either a real estate agency (581 acres), the Upper Valley Land Trust (490 acres), the State of New Hampshire (1,080 acres), or a private individual (329 acres). Some of these are protected from development while others are not. Farm land is often easily converted into building sites and the loss of these parcels to homes would be a loss of prime soil.

There are also at least 5,911 acres in Enfield that have Farmland soil Important to the State of New Hampshire (table 11, map 7). Many of these parcels also have Prime Farmland on them as well. See map 7.

Much of the farm land in Enfield has already been developed for other uses, particularly along Route 4A in the R1 District, Lockhaven Road in the R1 District, Jones Hill Road in the R3 District, and George Hill Road in the R5 District.

According to the 2020 Annual Report for the Town of Enfield, the Town owns 59 Parcels of land. Five of these have important Natural Resources. Their locations are as follows:

Map	Block	Lot	Acres	Location
9	45		165	Grafton Pond Road along Bicknell Brook
13	49		50.44	off Oak Hill Road, land locked with vernal pools, moose and deer habitat
16	18		20	on class VI road abutting Mud Pond and Crystal Lake Brook R3 District
16	20		10	on class VI road at the border of Enfield and Canaan R3 District
25	37		12.10	on Shaker Hill Road in Suky Marsh R3 district

DISCUSSION

MASCOMA RIVER WATER SHED

Most of Enfield is in the Mascoma River Watershed, all of Canaan is, about one half of Dorchester and one quarter of Lyme (fig 1). Some of these communities have large areas of forested land, farmland, and pastures that shed water from rain and snow into the tributaries of the Mascoma River or directly into the river itself. The headwaters of the Mascoma River begin in Dorchester and as it makes its way to the Connecticut River it picks up drainage from the land in Dorchester, Lyme, Orange, Canaan, Enfield, Grafton, Plainfield, Grantham, Springfield, Hanover and Lebanon. This amounts to 124,597 acres of land draining into the Mascoma River, only 15,519 acres (12.5 %) of which is conserved. The forested and grasslands in these communities are essential to controlling the runoff of rain and snow into the tributaries and eventually the Mascoma River itself. Protection of the watershed also serves to control erosion and hence silting of the tributaries, rivers, ponds and eventually the lakes that the runoff passes through (2).

The Mascoma River Watershed covers at least eleven communities, each with its own governing and legislative bodies, and master plans for development. But much of the land in the watershed is privately owned. Protecting more of that watershed from development, logging and roads is essential if downstream Townships are to control the risk of flooding (map 1). Prime wetlands play a significant role in filtering and controlling runoff. There are at least five large prime wetlands in Enfield (map 2). These wetlands are located around Jones Hill, an R3 District and are already highly subdivided, along Bog Road south of George Pond, an area that is currently undergoing subdivision, another south east of the junction of Lockhaven and Potato Roads and a fifth along Bicknell Brook draining Grafton Pond. In addition there are ten smaller wetlands distributed throughout Enfield (map 2).

The thin blue, irregular lines on map 2 are surface streams, seasonal or permanent. Such water courses are subject to pollution and through seepage may carry pollutants into wells that do not go below bedrock. (Personal communication with Director of Public Works, Enfield)

HYDRIC SOILS

Hydric soils, classified by the Natural Resources Conservation Service (NRCS) as poorly or very poorly drained soils, are formed under conditions of saturation flooding or pond formation long enough to develop anaerobic conditions in the upper part. Due to soil saturation hydric soils undergo chemical reactions and physical processes which differ from those found in upland soils. Hydric soils are one of the three diagnostic environmental characteristics used to identify wetlands, the others being the presence of wetland vegetation and the soil type (14).

Before buildings can be erected on land with hydric soils a technician from the State must visit the site and determine just where the hydric soil ends and then mark a distance of 50 feet from that point in all directions. All excavations and construction must be beyond those points.

Hydric soils are important because they favor the formation of many types of wetlands. Such soils have the appropriate soil chemistry for enhancing different plant growth and they also have higher soil carbon. The anaerobic conditions favor different bacterial organisms like members of the genus *Bacillus* and *Clostridium*.

Table 2 lists the major properties in Enfield with hydric soil. They are found on Town Tax Maps 5, 12, and 18. There are about 6,192 acres of property that contain hydric soils in Enfield. A large area (232 acres) lies north of Lockehaven Road between French and Graham Roads. In 2005 that area was surrounded by a dense softwood forest. The 2019 Town Tax Map 17 shows the area to be markedly subdivided into lots. Fortunately, there is still a 386 acre parcel nearby owned by the Society for the Protection of New Hampshire Forests where there are wetlands. These wetlands are located along Potato Road, Lockehaven Road and Goss Road.

WETLANDS

In 2004 the State Legislature officially defined the term "wetlands" (RSA 482-A: 2 X) as follows: wetlands means an area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions. As with hydric soils this vegetation includes, but is not limited to, cattails, sedges, and water lilies, cranberry bushes and pitcher plants. Red maples, also called swamp maples, are a common tree along the borders of wetlands as are white birch. At the same time, 2004, the legislature enacted RSA 674: 55 which stipulated that whenever the term "wetlands or wetland" appears in a local zoning ordinances or planning regulations it has the meaning established in RSA 482-A: 2 X. But RSA 674:55 does NOT limit the authority of municipalities enacting land use regulations based only on environmental characteristics, such as vegetation, wildlife habitat, open space, drainage, potential for flooding, and protection of natural resources including critical or sensitive areas and ground water. Therefore if a municipal regulation includes the term "wetlands" its meaning is governed by RSA 482-A: 2 X and rules regarding the protection of wetlands apply. BUT, if the municipal regulations use other terms, such as hydric soils, the meaning is governed by local ordinance or regulation, NOT the State. This means that simply by changing the term used to describe the conditions of the land the municipal authorities (Planning Board) can alter the permitted use of the land. (Crystal, Sandy. 2009 Wetlands Bureau, NH Dept of Environmental Services (DES).

PRIME WETLAND

In 1992, the Enfield Conservation Commission prepared a report on Enfield's wetlands which rated 20 areas as being wetland. The designation of lands as "prime wetlands" under RSA 482-A: 15, requires a vote by the towns legislative body (the town citizens eligible to vote) according to RSA 675:2 and RSA 675:3. At the town meeting in 1992 five of the 20 wetlands were voted to be designated as PRIME WETLANDS (map 2). Prime Wetlands are defined in RSA 482-A:15 as "any area falling within the jurisdictional definition of RSA 482-A:3 and RSA 482-A:4 that, because of their size, unspoiled character, fragile condition or other relevant factors, make them of substantial significance". Jurisdictional

Definitions referred to include: any bank, flat marsh or swamp in and adjacent to any waters of the State, as provided in RSA 482-A: 3, 1. The wetland "Values" referred to in RSA 482-A: 1 include: plant, fish, and wildlife habitat, commerce, recreation, and aesthetic enjoyment, adequate ground water levels, handling of runoff by streams, channels, and flood and silt absorption.

A municipality establishes Prime Wetland by the following means: The Conservation Commission maps and designates the prime wetland lying in whole or in part within the municipality's boundary in accordance with DES administrative rules. Once the prime wetlands are mapped and delineated they must be approved by a vote of the municipality's legislative body (RSA 675:2 RSA 675:3).

Once the legislative body approves prime wetland designation for an area the maps and designations must be filed with DES. Dredge and Fill permit applications received by DES after filing the maps CANNOT be approved without a finding by clear and convincing evidence that the proposed development activity will NOT result in significant net loss of the prime wetlands value. DES must also notify the Municipal Governing Body, Planning Board and the Conservation Commission before granting a dredge and fill permit application affecting prime wetlands (Susan Slack, ESQ, Protecting New Hampshire wetlands: Municipal Issues, Town & City Magazine, July/August issue, 2005).

The five Prime Wetlands approved by the Town Meeting in 1992 are as follows (map 2, table 3, pg. 28).

- 1) Prime Wetland #1, Northern part of town, along drainage off the Mascoma River. Most of the land in this area is privately owned.(Town Tax Map 15, District R1 and R3).
- 2) Prime Wetland #4, North central part of town. It connects Mud Pond and Crystal Lake via Crystal Lake Brook. The town of Enfield owns two parcels in this wetland but most of the land in this area is in private hands. (Town Tax Map 16, District R3) this wetland extends into Canaan.
- 3) Prime Wetland # 9. East central part of town along drainage, between Oak Hill and Potato Roads south of Lockhaven Road. The Town owns one parcel, but most of the wetland is in private hands .(Town Tax Map 13, District R5).
- 4) Prime Wetland # 10, southeast from prime wetland #9 on the east central border of Enfield and Grafton, along Bicknell Brook drainage, District R5. The upper portion, on the Enfield Grafton line, is privately owned, the middle portion is owned by the town of Enfield and is

under the protection of the Upper Valley Land Trust (UVLT), the lower portion, where the brook enters Crystal Lake, is in private hands on one side and in the Collette Foundation on the other side.(Town Tax Map 9, District R5).

- 5). Prime Wetland # 14 is south of George Pond, in the south eastern part of town and extends along Little Brook drainage. The State of NH owns 33 acres in this wetland the remainder is in private ownership or the Conservation District (Town Tax Map 4 and 9 A

Wetlands are the core of life for the majority of plants and animal species and provides diverse habitats with numerous forested edges needed by many species. Riparian woodlands and shore line buffers and wetlands are utilized by over 90% of the regions wildlife species, and provide the preferred habitat for over 40% of local species. There are at least 2,365 acres in Enfield whose properties contain riparian or shoreline buffers (tables 3, 5, and maps 2, 3). RSA 482-A: 1 states:” it is found to be for the public good to protect and preserve its submerged lands and its wetlands from despoliation and unregulated alteration because that would affect the value of these areas.” Such values include:

- 1) Habitats and reproduction areas for plants, fish, and wildlife.
- 2) Sources of nutrients for finfish, crustacean, shell fish and wildlife.
- 3) The natural ability of wetlands to absorb flood water and silt.
- 4) Maintain adequate ground water levels for animals and humans.
- 5) Commerce, recreation and aesthetic enjoyment.

In order to work in prime wetlands, where a significant impact on the resources noted above is likely to occur, a public hearing may be required. (Sandy Crystal, Wetlands Bureau, DES. Nov 2009).

A 100 foot buffer between prime wetlands delineations and any disturbance is required. This has been determined by the fact that the 100 foot buffer will remove about 70% of the pollutants that the disturbance might produce and thus protect the adjacent prime wetlands.

Prime wetland # 1(map2) is also known as the Mascoma River Ox Bow because of the large pond. The topography is nearly level and therefore this area of the river has slower moving water, mucky substrate and a large wetland/flood plain habitat surrounding it. The soil here is classified as greenwood muck by the NRCS soil mapping unit. Greenwood muck has a very rich, thick organic layer due to the lack of oxygen in the soil because of water saturation and is ideal for wetland plant growth, which promotes

a diversity of wildlife, including beaver, muskrat, deer, bear, ducks, Great Blue Herons, raptors, and song birds. The town once owned acreage on one side of the pond but this has been sold to a private party according to the town's records. All of the other parcels in this R1 and R3 District are in private hands according to town records. Maintaining the un-fragmented riparian and shoreline habitat in these areas is extremely important for water quality, erosion prevention, fisheries habitat, wildlife corridors and flood control.

Prime wetland #4 (map2) is adjacent to and north of Mud Pond. This prime wetland extends well into Canaan. There are several transition zones: open water, emergent wetland, scrub- shrubs wetland, forested wetland culminating in upland forested buffer around the entire area. Transition habitats are exceptional for their diversity of wildlife. They attract ducks, beaver, muskrat, moose, deer, mink, amphibians, and many species of birds, all of which can be expected to utilize this area. The primary soil type is greenwood mucky peat and this deep, nearly level and very poorly drained organic soil supports a wide variety of wetland vegetation, including pitcher plants, sheep laurel, Labrador tea, cranberries, sedges, Blue Flag. The area offers aesthetic value to hikers, wildlife photographers and bird watchers. It should be conserved in its entirety. The town of Enfield owns two parcels according to town land records, a 10 acre site at the border of Enfield and Canaan and a 20 acre site along Crystal Lake Brook. Unfortunately, much of the wetland in this area is in private hands and in the R3 District and one parcel of 230 acres extends from Lockhaven Road to the Canaan /Enfield border. The town should make an effort to purchase this parcel. It contains a large softwood forest, ideal for deer yards and a large road less area which makes an excellent wildlife corridor between Mud Pond and Crystal Lake, (map2).

Prime wetland #9, lies between Oak Hill and Potato Roads, south east of prime wetland #4 (map2). Tax Map 13 show that Blocks 5, 9, 7A, 22, 40, 44, 49 are in the wetland area. In 2004 the National Wetland Inventory (NWI) listed the area to be prime wetland with extensive hydric soils. This area is also noted to contain prime farmland soil and farm land soils important to the State of New Hampshire (tables 10, 11). The area is heavily timbered and wood appears to be the major product harvested from this land. This area is a significant wildlife habitat and should not be further subdivided for home sites.

Prime Wetland #10 (map2) is on the border of Enfield and Grafton and contains the drainage from Grafton Pond via Bicknell Brook. The hydric soil area is extensive from the Enfield/Grafton border all along Bicknell Brook and spreads out near Crystal Lake, where the brook empties into the lake. The vegetation in this drainage course is extremely important in reducing silting of the lake. Trees and shrubs should not be removed along Bicknell Brook as they reduce silting of the stream itself. Boy's Camp road crosses Bicknell Brook and contributes to the silting of the brook. Logging has occurred along Boys Camp road to the roads edge. In time scrub and shrubs will grow in this area due to the removal of much of the canopy,

allowing sun light to reach the ground. This will provide habitat for rabbits and mice and browse for moose and deer. But in the mean time run off from the timbered slopes will contribute to the silting down towards Crystal Lake.

Prime wetland #14(map2) lies south of George Pond in the southern part of town and continues along Little Brook drainage next to Bog Road. The drainage into this wetland comes from the eastern facing slopes of the Conservation District property as well as the western facing slopes of George Hill. As with the other prime wetlands the soil supports a wide range of wetland vegetation. The upland regions along Little Brook are dryer for much of the year and have stands of beech, hemlock, white pine, ash, oak, and sugar maple on them. This wetland and the uplands surrounding it support a wide variety of wildlife including, moose, deer, foxes, coyotes, bear, bobcats, porcupines, snowshoe hares and grouse. This prime wet land is in the R5 District, but building sites are within a flood plain on many of the properties.

Once the town, at its 1992 town meeting, voted prime wetland status to these five areas and the maps delineating the areas were filed with the Department of Environmental Services (DES) dredge and fill permit applications require a finding by clear and convincing evidence that the proposed development activity will not result in significant net loss of the prime wetland value. In addition DES must notify the municipal governing body, Planning Board, and the Conservation Commission before a dredge and fill permit can be granted.

There are numerous other wetlands in Enfield (map2) some quite small but all of them provide important habitat for vegetation and various kinds of wildlife. One of the larger wetlands that was NOT designated as a prime wetland at the 1992 town meeting vote is the one north of Spectacle Pond, in the north east corner of Enfield, near the Enfield/Canaan border (map2). The drainage from Spectacle Pond flows north out of the pond and into Canaan. Spectacle Pond is about 95 acres (table 1) and the wetland to the north is only 20 acres. Nevertheless, the area provides habitat for a diverse accumulation of plants and wildlife. Deer, moose, bear, fisher, beaver, King Fisher, Great Blue Heron, red Spotted Newt are present around this wetland. The upland soil, surrounding the wetland, is well drained and this transition zone offers additional habitat. The town of Enfield should seriously consider a warrant article designating the 20 acres as prime wetland, thus providing it and the wildlife that rely on it the protection needed.

Wetlands are not just important habitats for plants and wildlife. Map one shows that all of the major aquifers in Enfield are around or receive drainage from prime wetland areas. The Towns four municipal wells are located in the northwest part of Enfield, three of them along Lovejoy Brook, and the fourth obtains drainage from Moose Mountain. These four wells are in the area of prime wetland #1, which extends into Canaan. Prior I well has a capacity of 64 gallons per minute, Prior II well, 30 gallons per

minute, Marsh well 36 gallons per minute. The McConell well, with a capacity of 125 gallons per minute is off line most of the time because it contains uranium that is emitting alpha radiation above the EPA recommended safety level for drinking water (Enfield Dept. Public Works). Alpha radiation is a low energy particle that is blocked by the skin, however if one eats, drinks or breathes substances containing levels of alpha radiation higher than the EPA recommended levels it can be harmful over long periods of time, hence the well has limited use. In a 2011 report by Dan Sundquist, Director of Land Conservation Planning, Society for the Protection of New Hampshire Forests it was noted that Enfield has 2,111 acres of stratified drift aquifers equaling 8% of the total land area of the community. Nine acres of which had high yield wells, those with greater than 75 gallons per minute, and no very high yield wells, those with greater than 150 gallons per minute. The Town of Enfield issued a water quality report in 2018 from the Water Dept. with help from the EPA, New Hampshire DES, Upper Valley Lake Sunapee Regional Planning Commission and the Enfield Conservation Commission that established a comprehensive well head protection area encompassing about 1,300 acres in Enfield and parts of Canaan to protect the water supply from contamination originating from petroleum and pesticide products. Nevertheless, some private wells, along Route 4, have been found to contain MTBE, a gasoline additive. Whether this is a result of leakage from underground storage tanks or from exhaust fumes from automotive traffic on Route 4 has not been determined (Dept Public Works). In planning land use in Enfield it is important to keep in mind that water availability is not an inexhaustible resource and depends upon the wetlands and stratified drift aquifers to supply it.

There are about 480 households in Enfield at present, (2021), that rely on municipal well water. In 2019 those 480 households used 25,746,700 gallons of water and in 2020 those same households used 26,607,100 gallons, an increase of 860,400 gallons (Enfield Dept Public Works). In 2020, a Water use Consumption Advisory was issued for the State of New Hampshire as the entire State was abnormally dry. The majority of the northern half of the State, including Grafton county, received 25-50% less precipitation than normal. Sustainable planning must take into consideration that the water supply is going to be variable and unpredictable over time and if the carrying capacity (number of households relying on the municipal water supply) is not maintained below what can be supplied in times of drought Enfield will have exceeded its municipal well water availability.

WILDLIFE PROTECTION

Tables 5-9 list the properties that have essential environmental characteristics necessary for the protection of wildlife in Enfield. There are approximately 1,268 acres of land with riparian or shore line

Buffer, (map 3). This habitat can be found in five major areas of Enfield: The northwest corner of Enfield along Route 4, the area surrounding Spectacle Pond, around the east and south sides of Crystal Lake, around George Pond and the prime wetland to the south of George Pond, and portions on the east side of Mascoma Lake. These areas are vital to the movement of wildlife within the town of Enfield. The town owns a single 30 acre parcel (Tax Map 15, block 14) according to the town records. The Town did own another parcel (Tax Map 15, block 44) but it has been sold to a private party, according to town records. The Society for the Protection of New Hampshire Forests owns 102 acres (Town Map 17, block 22), the rest of this land is in private ownership. The largest amount of this land is recorded on Tax Map 15 and lies between Shaker Hill Road to the south and the Enfield/Canaan town line to the north and Jones Hill Road to the east. There are 650 acres in this area that contain riparian or shore line buffer, most of it within the R1 and R3 District. Tables 6, 7, 8, 9 lists properties in the Conservation District and other conserved land (table 6, map 6). Those with historic deer yards, dense soft wood stands, and permanent openings (table 7, 9 map 4) and those with potential wildlife corridors (table 8, map 5).

Properties with “permanent openings” are those that connect directly to roadways. Map 4, 5, and 6 illustrate the extent to which Enfield has already fragmented the potential wildlife corridors from each other with roads. Roads are human corridors. When wildlife has to use roads as corridors to move from one habitat to another road kill numbers go up and this pose a threat to both humans and wildlife (13). The loss of safe corridors for wildlife to move from one conserved area to another is particularly troublesome for threatened and endangered species as they can become isolated and disconnected from both essential habitat and other members of their species(10). Slow moving animals such as turtles, salamanders, snakes and porcupines comprise significant numbers among the flattened fauna (13).

Table 6 is a list of the properties within the Conservation District as well as other areas in Enfield where wildlife preserves can be found. There are approximately 6,414 acres of land in all that are currently in conservation in one form or another, 25% of Enfield. Much of this is owned by the State of New Hampshire, the UVLT, NH Fish & Game, or the Society for the Protection of New Hampshire Forests. However, as map 6 shows, two of the areas are widely separated from the largest area of conserved land, the Conservation District. Habitats may vary in their suitability for use on a seasonal basis and therefore wildlife need corridors to move from one area to another as availability of food, shelter, and water may dictate. Table 8 lists properties with potential wildlife corridors the largest un-fragmented area is in the Conservation District where, due to its ownership, there is permanent preservation (map 5, 6). However from table 8 it can be seen that there are large parts that are owned by Real Estate agencies, Construction Companies, out of state parties or private citizens in New Hampshire. Development of these properties would potentially fragment these corridors making their use by wildlife more difficult. Fortunately, at the present time, each of the four major potential corridors have their own wetland and three of these have prime wetlands, which as noted are core areas for wildlife survival. Barriers in the form of roads already cross these corridors, Route 4, Route 4A and Lockehaven

Road. The construction of “safe passage” ways under or over Route 4 and 4A is the only way to handle these barriers. The Nongame and Endangered Wildlife Program have partnered with the New Hampshire Department of Transportation and the New Hampshire Department of Environmental Services, in an effort to find ways to mitigate wildlife corridor barriers (10) (Michael Marchand, coordinator Nongame and Endangered Wildlife Program, NH Fish and Game Dept). Lockehaven Road in Enfield cuts across three of the major wildlife corridors (map 5). Increasing traffic on Lockehaven Road by expanding the width of the road to encourage greater cross town use would pose a serious risk to wildlife and drivers and should not be done.

WHALEBACK AND METHODIST HILL REGION OF ENFIELD

This area is separated from the main part of Enfield by interstate 89. As a result safe wildlife movement between these two areas is greatly restricted. The need for passage ways under or over this barrier was not appreciated when the highway was constructed and should be addressed. Methodist Hill in Enfield extends from Exit 16 to William Gage Road, a distance of about two miles, after which it enters East Plainfield. The Enfield portion of Methodist Hill is well subdivided and new home construction is under way. At present there is no safe way for wildlife on the East side of HWY 89 to reach the West side of HWY 89 and thus gain access to the habitat on Methodist Hill. Therefore the importance of the property on the East side of HWY 89 for the protection of wildlife in Enfield cannot be over emphasized. The Conservation District property, the Mountcalm golf course and the Henry Latimer wildlife Management area off of SmithPond Road are critical areas, acting as buffers approaching HWY 89, and provide habitat for wildlife.

FORESTED AREAS AND DEER YARDS IN ENFIELD

Forested land in Enfield is a mixture of deciduous and evergreen trees consisting of red oak, white oak, white pine, eastern hemlock, spruce, yellow birch, white birch, red maple, sugar maple, American beech, and poplar. The forests in Enfield are all secondary growth forests. Enfield is located just north of the south-north forest boundary of New Hampshire, according to the US Forest Service 2015 Forest Inventory Analysis (14). Forested areas in Enfield are widely distributed (map 4) but the largest amount is found along the north east and south east section of the community near the Enfield/Canaan and Enfield/Grafton boundaries (map 4). Properties listed on Town Tax Maps 9, 12 and 13 accounts for 25% of the forested land in Enfield (table 7). Over the last 17 years there has been considerable logging activity in Enfield due to both harvesting for lumber and clearing for development. Throughout New

Hampshire there has been a 1.5 % decline in forested areas (14). The evaluation of the number of seedlings of different trees in forests in New Hampshire suggests that as large oaks and pines die or are harvested the forest re-growth will be dominated by American beech, red maple, balsam fir, and red spruce(14). Climate changes can also affect forest composition and in the future New Hampshire may

see oak/ hickory forest types dominate rather than the maple, beech, birch or the spruce, fir forest types (14). Because forests provide food, shelter, and nesting sites and their canopy influences the degree to which scrub and shrubs can grow beneath them forest types greatly influence the wildlife population's variety and density (14.)

Deer yards are among the important contributions forests can make to the protection of wildlife. In order to be considered a deer yard two characteristics must be present. First it must have a core area with a high concentration of dense softwood trees for protection from winter snow and cold. Second it must have adjacent to it or mixed within the core itself hardwood trees that can provide nuts and seeds for food. Of the 15% of Enfield that is densely forested (3,868 acres) only 29% (1,121 acres) qualify as deer yards (table 7). Of the deer yards that do exist, 17 out of 24 are located in the Conservation District (map 4). The loss of usable habitat is a major cause of wildlife decline. Enfield is surrounded by townships with contiguous habitat that represent potential wildlife corridors out of Enfield. Animals require nutritious food, clean water and a safe place to live and reproduce. If deprived of any one or more of these necessities they will move to places where they can find them and they won't be coming back.

For those residents of Enfield who wish to become more informed about plant and wildlife habitat loss, there are organizations that can provide more information. To find them access the internet and type in: new hampshire natural heritage bureau or the nongame and endangered species program of the new hampshire fish and game.

Ecosystems are composed of assemblages of plants and animals and their physical environment into food webs, with the alpha predators at the top. The movement of energy through the food web determines the volume of life forms a particular habitat can support (1). The second law of thermodynamics points out that in any transfer of energy from one form to another there is always some loss of energy. At the bottom of the food web are the plants which derive their energy from the sun via photosynthesis and at the top of the web is the largest predator in the habitat. Humans are among those alpha predators. The fact that we use domestic animals rather than wildlife as our prey is beside the point. Energy from plants produces meat on cows, sheep, goats, pigs, and chickens which we eat. Predators such as coyotes, bobcats, foxes, prey on smaller members in a food web and in so doing provide a benefit to our public health, although most people do not know it. These animals use a wide variety of rodents as a significant part of their diet. Here in New Hampshire, the white footed mouse,

Peromyscus leucopus, is the major host for the spirochete that causes Lyme Disease. The vector tick, *Ixodes scapularis*, acquires the infection when it feeds on the mouse in its larval stage and can pass the spirochete onto the nymphal stage of the tick as it goes through its own life cycle. The nymphal stage of the tick will feed on humans and can at that time transmit the spirochete to us. Predators can kill and eat thousands of white footed mice in a year. By reducing the numbers of these maintenance hosts for the spirochete and hosts for the larval stage of the tick, they perform a public health service to humans that we could not afford to do for ourselves.

The final limit on the number of animals any habitat can support (its carrying capacity) is determined by the amount of energy available in green plants. When living communities are destroyed and the land made bare the energy from the sun, upon which animals including humans depend, is lost (1). Humans are part of most ecosystems on Earth, including those in Enfield. Humans also have the ability to alter and even destroy habitats through development. We can displace plants and wildlife in the process and thus affect ecosystems in ways that are ultimately not in our best interests.

PRIME FARMLAND AND FARMLAND IMPORTANT TO THE STATE

The Natural Resources Conservation Service (NRCS) defines prime farmland as “land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops and is also available for these uses.” Prime farmland soils produce the highest yields with the least expenditure of time and energy, farming this land results in the least environmental damage.

The NRCS has designated portions of 6,478 acres in Enfield as containing some prime farmland (table 10). These soils are found in small segments, widely scattered throughout the community, and thus have never supported agribusiness type farming (map 7). Nevertheless, in times past vegetable crops, fruit orchards, blue berry and strawberry plots, corn and potato fields and melons were grown in Enfield in far greater amounts than at the present time. The decline in the production of this farm land is NOT because of the change in the soil but rather because of the change in land use. New Hampshire has undergone a significant increase in the conversion of agricultural land to home building sites. The limited policy response to this farmland loss has only encouraged the conversion. Most farmland is level and this makes preparing it for home development less costly to the developer (American Farmland Trust 2020, no farms no food (9). This conversion is not in our best interests over time. Once farmland is covered by roads and houses it is lost forever.

Enfield also has properties designated as having farmland of importance to the State of New Hampshire (table 11). This farmland is classified by the NRCS as land that is NOT prime or unique but is nevertheless important for the production of food, feed, fiber, forage, oilseed, or forest crops. By continuing to

encourage development on these farmlands governing and legislative bodies are doing a disservice to future generations.

Farmland can also provide a benefit to wildlife, depending upon the vegetation being cultivated. The Bobolink, a ground nesting bird, requires large fields of grass surrounded by forest edge for nesting. By cutting these fields for hay several times a year the cover these birds require is lost. This has been a major factor in the disappearance of this bird from Enfield. There are several very large fields in Enfield that could serve as nesting sites. Were a reduction in property tax, based on the loss of income from reducing the number of hay harvests on this land, granted to the land owners they might be encouraged to stop cutting these fields until after the nesting season for those birds is over. By so doing the Bobolink and other ground nesting birds would have more useful habitat provided to them.

SLOPE OF THE LAND

Slope is the amount of rise or fall in feet for a given horizontal distance and is expressed as a percent. A 15% slope means that for a 100-foot horizontal distance, the rise or fall in height is 15 feet. Slope is one significant aspect of landform that presents limitations for development. As slopes become steeper the expense of building increases. Furthermore, increased slope means there is greater chance of erosion, structural problems and water pollution problems. In general, slopes greater than 25% are considered too steep to provide adequate sites for construction of roads, homes, and septic systems. On steep slopes soils are usually shallower, the volume and velocity of surface runoff is greater and the erosion potential greater than on flatter areas. The consequences of erosion are loss of soil resulting in sedimentation of surface waters and loss of the productive capacity of the land. Map 7 shows steep slopes of 15-25% and greater than 25% as determined by NRCS soils maps. Twenty five percent of Enfield contains areas of steep slopes where development would be restrictive and another 24 % of the area contains slopes between 15 and 25% where development would be problematic. The vast majority of the land with steep slopes is in the Conservation District (map 7). But other such areas are scattered throughout the town. Only 50% of Enfield is considered by the NRCS soils maps to have less than 15% slopes and much of this is located in wetlands. This has been one of the reasons the farmlands have been a prime targets for development. The establishment of hiking trails offering panoramic views is a much better way to use the land in Enfield. Attempts to make Enfield a tax rich community through the construction of homes will only destroy what the land has to offer and altering planning ordinances to encourage this is not in the best interest of the current citizens or future generations. Increasing human density only increases traffic congestion, air and ground pollution, more municipal service requirements,

trash accumulation and the cost of disposal with the result that the tax burden on the citizens increases as many studies have shown(4,pgs 11-22).

TABLE ONE**ACRES OF WATER HABITAT IN ENFIELD NEW HAMPSHIRE**

Mascoma Lake	1,158
Crystal Lake	401
Eastman Pond	335
Spectacle Pond	95 in Enfield
Smith Pond	63
George Pond	49
Cole Pond	17
Mud Pond	14
Half Mile Pond	8
Total acres	2,140

Data from NH Fish& Game

TABLE TWO

PROPERTIES WITH HYDRIC SOILS IN ENFIELD

MAP	BLOCK	LOT	ACRES	ORGANIZATION*
1	5		581	HillPoint Farms LLC
1	5	1	66	
3	10		191	UVLT
4	2		39	
4	1	2	35	
4	1	1	21	
4	1		16	
5	13	2	93	
5	25	4	10	
5	25	5	10	
5	25	6	11	
5	25	7	11	
5	26		15	
5	27		8	
5	6	1	21	
5	6	2B	17	
5	6	4	14	

MAP	BLOCK	LOT	ACRES	ORGANIZATION
5	4		121	
5	2		49	
5	12	1	6	
5	12	2	5	
5	12	3	5	
5	12	4	7	
5	14		107	
5	19		40	
5	15		48	
5	25	1	12	
5	25	2	13	
5	25	3	22	
6	10		124	
7	17	1	21	
8	15		70	
8	38&38-2		69	
8	43		65	
8	65		2,755	
9 A	1	1	12	
9 A	7		117	
10	11		68	
11	27		14	

MAP	BLOCK	LOT	ACRES	ORGANIZATION
11	24	1	8	
11	23		ND	
12	11	1	120	
12	16		23	
12	16B		25	
12	19		8	
13	35 A		17	
13	35		172	
14	63	1	10	
14	63	2A	13	
14	64		8	
14	66	6	ND	
14	66	4	ND	
14	68	16	ND	
14	68	17	ND	
14	68	18	ND	
14	68	19	ND	
14	69		48	

MAP	BLOCK	LOT	ACRES	ORGANIZATION
16	12		230	
16	22		39	
16	25		20	
16	32	1	13	
16	35		5	
16	35	1	8	
17	2		120	
17	2	1	64	
17	5	2	30	
17	7	1	76	
17	10		18	
17	12		60	
17	14	1	5	
17	14	2	5	
17	14	3	5	
17	15	9	125	
17	15	9A	14	
17	15	8	21	
17	19	1	ND	
17	20		ND	

MAP	BLOCK	LOT	ACRES	ORGANIZATION
17	29	2	5	
41	9		5	
41	10		11	
42		4	7	
42		3	6	
42	12		5	
TOTAL			6,192 acres	

*properties with no organization listed are privately owned

TABLE THREE

PROPERTIES WITH WETLANDS, SWAMPS OR EXCEPTIONAL MOISTURE

MAP	BLOCK	LOT	ACRES	ORGANIZATION*
1	10		95	Green Links Construction Co
4	2		39	
4	1	2	35	
5	1		11	
5	12	5	9	
5	14		107	
5	25	7	11	
5	12	6	5	State of New Hampshire
8	6		97	
8	43		65	
9A	6		130	
9A	7		117	
11	29		8	
11	27		14	
11	28		ND	
12	11		106	
12	3	9	6	

MAP	BLOCK	LOT	ACRES	ORGANIZATION
13	5		100	
13	7		30	
13	9		46	
13	13		5	
13	22		122	
13	40		28	
13	44		42	
13	44	1	ND	
13	49		ND	
15	16		53	
15	15		22	
15	2		15	
15	14		30	Town of Enfield
15	26		57	
15	33		60	
15	43	A	31	
15	44		44	Town of Enfield
15	47		10	
15	47	6-1	ND	
15	47	6-2	ND	

MAP	BLOCK	LOT	ACRES	ORGANIZATION
15	47	B	ND	
15	47	C	ND	
15	47	D	ND	
16	12		120	
16	17		14	
16	18		20	Town of Enfield
16	19		14	
16	20		10	Town of Enfield
Total				1,700 plus Acres

*properties with no organization listed are privately owned

TABLE FOUR

PROPERTIES OVERLYING AQUIFERS IN ENFIELD

MAP	BLOCK	LOT	ACHES	ORGANIZATION*
1	3		100	
1	4		30	
1	4	1	ND	
1	4	2	ND	
1	5		581	Heidi Palmer Real Estate Inc
1	5	1	66	Conkey Enterprises LLC
1	10		95	Green Links Construction Co
4	2		39	
4	1	2	35	
4	1	1	21	
4	1		16	
4	5		33	State Of NH
5	1		11	
5	2	1	5	
5	2	2	49	
5	2	3	5	
5	2	4	5	
5	4		12	

MAP	BLOCK	LOT	ACRES	ORGANIZATION
8	65		2,755	NH Fish & Game
9	6		ND	
9A	7		107	
15	8		6	
15	11		ND	
15	13		5	
15	13	1	7	
15	15	2	15	
15	16		53	
16	12		230	
16	17		14	
16	18		20	Town of Enfield
16	19		14	
16	20		10	Town of Enfield

Total 4,339 Acres

*properties with no organization listed are privately owned

TABLE FIVE

PROPERTIES WITH RIPARIAN OR SHORELINE BUFFER

MAP	BLOCK	LOT	ACRES	ORGANIZATION*
8	54		41	
8	50		24	
8	38		69	
9	23	A	5	
9	2		31	
9	6		130	
10 A	71		ND	
12	28	1	14	
12	28	2	19	
12	28	3	ND	
12	33		22	
12	33	1	22	
12	34		18	
15	23	A	20	
15	26		57	
15	28	1	9	
15	29		9	
15	31		11	

MAP	BLOCK	LOT	ACRES	ORGANIZATION
15	33		6	
15	44		25	TOWN OF ENFIELD
15	43	A	31	
15	77		245	
15	84		5	
15	79		9	
15	80		10	
15	82		10	
15	34		8	
15	36	1	10	
15	40		13	
15	43		10	
15	45		10	
15	47		101	
15	40	A	5	
15	47	1	10	
15	47	6-2	8	
15	47	6-1	6	
15	47	D	3	
15	47	C	3	
15	47	B	3	

MAP	BLOCK	LOT	ACRES	ORGANIZATION
15	47	A	3	
15	71		10	
17	22		102	Soc Protection NH Forests
17	20		215	
17	21		36	
17	15	2	10	
17	15	3	10	
17	15	4	10	
17	15	5	15	
17	15	6	10	
17	25		18	
17	25	1	39	
47	12		ND	
47	1	2	ND	
47	1	1	16	

Total 1,268 Acres

*properties with no organization listed are privately owned

TABLE SIX

Conservation District Properties and Other Conservation Land in Enfield

MAP	BLOCK	LOT	ACRES	OGANIZATIONS*
3	9		120	
3	10		191	UFLT
4	2		39	
5	4		121	
6	5		120	
6	6		95	
6	10	4	124	
6	31		319	Enfield Land CO
6	41		19	
6	44		20	
6	42	A&B	76	
6	48		ND	
7	5		255	UFLT
7	5	A&B	542	UFLT
7	6		49	
7	8		37	
7	9		52	
7	10		103	NH Fish & Game
7	12	1	14	

MAP	BLOCK	LOT	ACRES	ORGANIZATION
7	12	2	17	
7	12	3	ND	
7	20		53	
8	6		97	State of NH
8	65		2,755	NH FISH & GAME
8	18		147	
8	17		45	NH FISH & GAME
9	5	7	250	Paine Preserve
9A	6	4	14	
10	10		178	
10	11		68	
10	12		115	
13	35		172	Grafton Pond Land Trust
13	35	A	17	Grafton Pond Land Trust
13	26	1	53	Soc Protection of NH Forests
13	26	2	35	Soc Protection of NH Forests
17	22		102	Soc Protection of NH Forests

Total 6,414 Acres

*properties with no organization listed are privately owned

TABLE SEVEN

PROPERTIES WITH HISTORIC DEER YARDS IN ENFIELD

MAP	BLOCK	LOT	ACRES FORESTED	COMMENTS
1	5		581	40/581 are deer yards
2	48		255	25/255 are deer yards
2	55		144	35/144 are deer yards
3	65		ND	40 acres around Half Mile Pond
3	10		191	18/191 are deer yards
3	65		ND	102 are deer yards
3	1	1	38	12/38 are deer yards
4	65		ND	60 acres are deer yards
7	1		16	8/16 are deer yards, out of State owner
7	2		38	15/38 are deer yards, State of NH F&G
7	2A		8	4/8 are deer yards
7	5		255	30/255 are deer yards, UVLT
7	5A		490	90/490 are deer yards, UVLT
7	10		103	8/103 are deer yards, State of NH F&G
7	12	1	14	2/14 are deer yards
7	12	2	17	2/17 are deer yards
7	20		53	10/53 are deer yards

MAP	BLOCK	LOT	ACRES	COMMENTS
7	21		167	75/167 are deer yards, out of State
8	2		87	18 are deer yards, Out of State Owner
8	6		97	10 are deer yards, State of NH
8	7		ND	3 are deer yards
8	15		70	2 are deer yards, Out of State Owners
8	39		ND	4 are deer yards, Out of State Owners
8	40		ND	10 are deer yards
8	41		10	4 are deer yards, Out of State Owners
8	42		ND	15 are deer yards
8	43		65	3 are deer yards
9	5	7	ND	10 are deer yards
9	62		35	15 are deer yards
9	63	1	ND	4 are deer yards
9	63	2	ND	4 are deer yards
9	63	3	ND	4 are deer yards, Out of State Owners
9	63	4	ND	4 are deer yards, Out of State Owners
9	68	1	5	2 are deer yards
9	68	2	5	1 is deer yard
9	68	3	5	1 is deer yard
9	68	4	5	1 is deer yard
9	68	5	5	1 is deer yard

MAP	BLOCK	LOT	ACRES	COMMENTS
9	68	6	5	1 is deer yard
9	68	7	6	1 is deer yard, Out of State Owners
11	17		203	80 are deer yards
12	3	7	ND	2 are deer yards
12	3	8	5	3 are deer yards
12	3	9	6	4 are deer yards
12	3	10	5	4 are deer yards
12	3	11	5	4 are deer yards
12	4	1A	8	2 are deer yards
12	4	1B	1	1 is deer yard
12	4	2	15	2 are deer yard
12	5		30	9 are deer yard
12	7	1	12	2 are deer yard
12	8		11	3 are deer yards
12	10	1	26	3 are deer yards
12	10	4	ND	4 are deer yards
12	11	1	120	80 are deer yards
12	16		23	10 are deer yards
12	16	B	25	15 are deer yards
12	16	C	24	12 are deer yards
12	16	F	15	4 are deer yards
13	24		ND	2 are deer yards

MAP	BLOCK	LOT	ACRES	COMMENTS
13	25		10	2 are deer yards
13	26		15	5 are deer yards
13	26	1	53	5 are deer yards, SOC Protection
13	27		5	1 acre is deer yard
13	28		23	3 acres are deer yard
13	29		11	4 acres are deer yards
13	29	1	11	3 acres are deer yards
13	30		19	4 acres are deer yards
13	32		5	1 acre is deer yard, Grafton Pond
13	34	1	15	4 acres are deer yards
13	35		172	75 acres are deer yards, Grafton Pond Land Trust
13	35	A	17	2 acres are deer yards, Grafton Pond Association INC
13	37		ND	3 acres are deer yards, Grafton Pond Association INC
13	38		6	2 acres are deer yards, Out of State Owner
13	39		ND	3 acres are deer yards, Out of State Owner

MAP	BLOCK	LOT	ACRES	COMMENTS
13	40		28	5 acres are deer yards
13	41	1	12	5 acres are deer yards
13	41	2	12	5 acres are deer yards
13	41	3	11	3 acres are deer yards, Out of State Owner
13	41	4	11	6 acres are deer yards, Out of State Owner
13	41	5	11	6 acres are deer yards, Out of State Owner
16	12	ND	ND	6 acres are deer yards
Approx acres with forests			3,736	Acres that qualify as deer yards 1,121

TABLE EIGHT

PROPERTIES WITH POTENTIAL WILDLIFE CORRIDORS

MAP	BLOCK	LOT	ACRES	ORGANIZATION*
1	1		100	
1	3		100	
1	4		30	
1	5	1	66	Conkey Enterprises
1	5		581	HillsPoint Farm LLC
1	10		95	Green Line Construction Co
2	48		255	
2	49		150	
2	55		144	
2	57		45	
3	2		75	
3	8	2	ND	
3	9		120	
3	10		191	UVLT
4	1		16	Out of State Owner
4	1	1	21	
4	1	2	35	Out of State Owner
4	2		39	

MAP	BLOCK	LOT	ACRES	ORGANIZATION
5	4		121	
5	13		22	
5	13	2	93	
5	15		48	
5	15	1	10	Out of State Owner
7	5		255	UVLT
7	5	A	490	UVLT
7	5	B	52	UVLT
7	6		49	
7	8		37	
7	10		103	NH Fish & Game
7	21		167	Out of State Owner
8	6		97	State of New Hampshire
8	17		45	NH Fish & Game
8	18		147	Out of State Owner
8	65		2,755	NH Fish & Game
9 A	7		117	

MAP	BLOCK	LOT	ACRES	ORGANIZATION
10	10		178	Chiplin Enterprise INC
10	11		68	
10	12		115	Out of State Owner
12	2		13	
12	5		30	
12	7		7	
12	8		11	
12	9	1	5	Crystal Lake Realty
12	11		106	
12	11	1	120	
13	1		77	
13	3		20	
13	4		46	
13	5		100	
13	7		30	
13	9		46	
13	22		122	
13	28		23	
13	29		11	
13	29	1	11	

MAP	BLOCK	LOT	ACRES	ORGANIZATION
13	30		19	
13	31		16	
13	32		5	Grafton Pond Land Trust
13	33		18	
13	40		28	Out of State Owner
13	44		42	
13	45		58	
13	45	1	15	
15	27		42	Out of State Owner
15	33		60	
15	35		114	Transit Construction Co. Lowell Mass
15	41		ND	
15	41	1	15	
15	41	2	10	
15	41	3	71	
15	41	4	ND	
15	44		25	Town of Enfield NH
15	46	1	ND	
15	46	2	ND	
15	47		101	
15	48		7	
15	50		7	

MAP	BLOCK	LOT	ACRES	ORGANIZATION
15	51		7	
15	55		14	
15	58		17	
15	61		40	Out of State Owner
16	6		12	
16	6	2	66	Out of State Owner
16	6	3	60	Out of State Owner
16	7		70	
16	12		230	
16	56		100	
17	5	2	30	Out of State Owner
17	6		30	Out of State Owner
17	10		18	
17	11		11	Out of State Owner
17	12		60	Out of State Owner
17	15	9	125	
17	17		108	Out of State Owner
17	21		36	
17	20 & 22		385	Soc. Protection NH Forests

*properties with no organization listed are privately owned

TABLE NINE

PROPERTIES WITH PERMANENT OPENINGS IN ENFIELD NH

MAP	BLOCK	LOT	ACRES	COMMENTS
2	16		ND	this property is now part of a subdivision Bordered by Apple Lane and Orchard Rd
2	30			1,2,4,5,6,7, 8,9,10,11,12,13,14,15,16,17,18,19, 30,31,31A. All of these lots are part of a Subdivision with Methodist Hill Rd as the only egress in case of forest fire.
2	46		92	5 acres are openings along William Gage Rd
2	47		ND	3 acres are openings along William Gage Rd
2	52		61	3 acres are openings along Rice Rd, Out of State Owner
2	54		75	10 acres are openings along Rice Rd.
5	13		22	8 acres opening on to George Hill Rd
5	13	2	93	10 acres opening on to George Hill Rd
5	14		107	20 acres opening on to George Hill Rd
5	15	1	10	5 acres opening on to George Hill Rd
6	1		25	8 acres are openings along Eastman Hill Rd
6	3		10	6 acres are openings along Eastman Hill Rd
6	5		128	10 acres are openings along Follensbee Rd

MAP	BLOCK	LOT	ACRES	COMMENTS
6	6		95	5 acres are openings along Follensbee Rd
6	7		23	5 acres opening along Follensbee Rd
6	10		124	20 acres opening along Follensbee and Eastman Hill Rd
6	10	1	ND	4 acres are openings along Follensbee Rd
6	10	4	ND	5 acres are openings along Follensbee Rd
6	12		13	opening on to Eastman Hill Rd
6	13	A	10	8 acres are openings along Eastman Hill Rd DJD ASSOCIATES LLC Owners
6	13	B	48	12 acres are openings along Eastman Hill DJD ASSOCIATES LLC Owners
6	31		319	Conservation District, Enfield Land Co. LLC
7	11		60	4 acres opening on to Route 4A
7	17	1	21	7 acres opening on to Route 4A
7	19		32	8 acres opening on to Route 4A
7	20		53	10 acres opening on to Route 4A, Spec 4A Owners
7	20	1	5	5 acres opening on to Route 4A
7	21	1	ND	Opening on to Route 4A, Lake Condo Asso.
7	21	2	ND	Opening on to Route 4A, Lake Condo Asso.

MAP	BLOCK	LOT	ACRES	COMMENTS
8	3		14	opening on to Route 4A and Shaker Hill
8	15	A	7	opening on to Route 4A
8	43		65	8 acres opening on to Route 4A
8	48		ND	opening on to Boys Camp Rd
8	49	1	6	4 acres opening on to Boys Camp Rd
9	5	7	ND	35 acres opening on to Route 4A
9	9		12	10 acres opening on to George Hill
9	19		34	5 acres opening on to Boys Camp Rd Out of State Owners
9	20	3	9	5 acres opening on to Boys Camp Rd
9	27		18	5 acres opening on to Route 4A, out of State Owners
9	40		60	8 acres opening on to Route 4A
9	45		171	4 acres opening on to Grafton Pond Rd Town of Enfield Owner
9	50		26	10 acres opening on to Oak Hill Rd Out of State Owner
9	68	15	5	3 acres opening on to Route 4A
9	68	16	5	3 acres opening on to Route 4A

MAP	BLOCK	LOT	ACRES	COMMENTS
10	4		1,080	Fish& Game Conservation District
10	4	2	18	10 acres opening on Route 4A
10A	75	A1	ND	10 acres opening on Route 4A
10A	75	A2	ND	15 acres opening on Chosen Vale LN
11	22		30	15 acres opening on Shaker Hill
11	22	A	6	5 acres opening on Shaker Hill
11	23	17,18,19,20,25,26, 27, 28, 29	ND	All opening on to Shaker Hill Rd
12	11		106	3 acres opening on to Klug Rd Visions for Creative Housing Owner
12	11	1	120	7 acres opening on to Lockehaven Rd
12	20		11	5 acres opening on to Lockehaven Rd Out of State Owner
12	24		13	10 acres opening on to Boys Camp Rd
12	24	2	12	10 acres opening on to Boys Camp Rd
13	4		46	10 acres opening on to Oak Hill Rd Out Of State Owner
13	6		12	5 acres opening on to Oak Hill Rd
13	9		46	5 acres opening on to Oak Hill Rd
13	20		15	5 acres opening on to Blood Rd
13	42		30	5 acres opening on to Grafton Pond Rd

MAP	BLOCK	LOT	ACRES	COMMENTS
13	46	1	12	10 acres opening on Oak Hill Rd, Out of State Owner
13	46	2	20	15 acres opening on to Oak Hill Rd
14	31		1	opening on to Route 4
14	33		ND	opening on to Route 4
14	38		16	opening on to Route 4
14	42		165	opening on to Class 6 road (old county road)
14	44		8	opening on to Route 4
14	48	2	8	opening on to Maple St
14	52		ND	opening on o Maple St
14	53		ND	opening on to Maple St
14	54		30	opening on to Class 6 road (old county road)
14	55		9	opening on to Maple St
14	58		ND	opening on to May St
14	58	1	9	opening on to May St
14	58	3	ND	opening on to May St via 58-1
14	67		ND	ND
14	69		48	20 acres opening on to Love Joy Brook Rd
15	25		11	10 acres opening on to Jones Hill Rd
15	26		57	5 acres opening on to Jones Hill Rd
15	27		42	10 acres opening on to Jones Hill Rd

MAP	BLOCK	LOT	ACRES	COMMENT
15	33		60	6 acres opening on to Jones Hill Rd
15	34		8	3 acres opening on to Jones Hill Rd
15	35		114	30 acres opening on to Jones Hill Rd Owner Transit Construction co of Lowell inc MA
15	37		ND	5 acres opening on to Jones Hill Rd
15	38		ND	5 acres opening on to Jones Hill via Block 35,37
15	39		ND	10 acres opening on to Jones Hill Rd
15	40		13	10 acres opening on to Jones Hill Rd via Block 36
15	40	A	5	4 acres opening on to Jones Hill Rd
15	41		ND	3 acres opening on to Jones Hill Rd
15	42		5	3 acres opening on to Jones Hill Rd
15	42	2	ND	5 acres opening on to Jones Hill Rd
15	45		10	3 acres opening on to Jones Hill Rd
15	47		ND	opening on to Jones Hill Rd via Block 49,52
15	47	1	10	5 acres opening on to Jones Hill Rd
15	49		ND	8 acres opening on to Jones Hill Rd
15	77		ND	original 245 acres now blocked by homes along Shaker Hill Rd R1 district
15	81		ND	2 acres opening along Shaker Hill Rd R1 district
15	82		10	5 acres opening on to Shaker Hill Rd
15	83		20	15 acres opening along Shaker Hill Rd

MAP	BLOCK	LOT	ACRES	COMMENTS
16	59		19	15 acres opening along Choate Rd
16	63		57	opening along Scenic Rd
16	63	A	ND	3 acres opening along Choate Rd
16	63	B	10	5 acres opening along Choate Rd
17	2		120	15 acres opening on to Choate Rd, owner North Woodlands INC
17	3		ND	5 acres opening on to Choate Rd
17	4		45	5 acres opening on to Choate Rd
17	5	1	ND	5 acres opening on to Lockehaven Rd
17	6		ND	5 acres opening on to Lockehaven Rd
17	7		35	opening on to Lockehaven Rd
17	10		18	opening on to Potato Rd
17	14		23	5 acres opening on to Whitehouse Rd
17	15		24	opening on to Whitehouse Rd
17	15	2A	5	opening on to Whitehouse Rd
17	9		125	opening on to Class 6 Rd out of State owner
17	16		21	10 acres opening on to Potato & Whitehouse Rd
17	17	C	ND	opening on to Potato & Lockehaven Rd
17	19		12	opening on to Potato & Lockehaven Rd
17	19	1	10	opening on to Potato & Lockehaven Rd
17	22		102	opening on to Lockehaven Rd owner Soc for Protection of NH Forests

MAP	BLOCK	LOT	ACRES	COMMENTS
17	25	3	31	10 acres opening on to Lockehaven Rd
17	28		5	3 acres opening on to Lockehaven Rd
17	28	2	63	20 acres opening on to Lockehaven Rd & along Enfield/Canaan border
17	28	3	ND	3 acres opening on to Lockehaven Rd
17	29	1	ND	3 acres opening on to Lockehaven Rd
32	40	3	ND	opening on to Sargent St owner Sargent St properties LLC
			Approx. Total 4,735 acres	Total 705 acres (15%)

TABLE TEN

PROPERTY WITH PRIME FARM LAND SOIL IN ENFIELD

MAP	BLOCK	LOT	ACRES	ORGANIZATION*
1	5		581	Hillspoint Farm LLC
1	5	2	ND	Hillspoint Farm LLC
2	30	3	5	
2	30	19	ND	Methodist Hill LTD Partnership
2	32		24	
2	33		26	
2	33	1	13	
2	33	2	10	
2	33	3	10	
2	35		8	
2	36		28	
2	44		ND	
2	44	1	ND	
2	45		ND	
2	46		92	
2	55		144	
3	2		75	

MAP	BLOCK	LOT	ACRES	ORGANIZATION
5	7		329	
5	11		5	
5	11	1	16	
5	11	2	13	
5	11	3	ND	
5	13		22	
5	13	1	5	Out of State Owners
5	13	2	93	
5	14		107	
5	15		48	
5	15	1	10	
5	19		40	
5	25	1	12	
5	25	2	13	
5	25	3	22	
5	25	4	10	
5	25	5	10	
6	5		128	
6	10		124	Out of State Owners
6	10	1	ND	

MAP	BLOCK	LOT	ACRES	ORGANIZATION
7	5	A	490	Upper Valley Land Trust
7	6		49	
7	17		ND	
7	17		ND	
7	17	1	21	
7	18		ND	Out of State Owner
7	19		32	
7	20		53	
7	20	1	5	
7	21		167	Out of State Owner
7	21	1	ND	Lake View Condo Association
7	21	2	ND	Lake View Condo Association
8	59		ND	Town of Enfield NH
9	5	A	10	
9	5	B	11	
9	7		12	
9	7	1A	5	
9	7	1B	5	
9	9		12	
9	9	1	5	

MAP	BLOCK	LOT	ACRES	ORGANIZATION
9	9	2	5	
9	9	3	5	
9	9	4	ND	
9	68	9	6	
9	68	10	5	
9	68	11	5	
9	68	12	5	
9	68	13	5	
10	4		1,080	State of New Hampshire
10	10		178	L&M Holdings LLC
11	1		20	
11	4		ND	
11	5		5	
11	6		ND	
11	7		ND	
11	10		ND	
11	11		ND	
11	12		ND	
11	13		6	
11	14		ND	
11	15		32	
11	16		ND	Enfield Outing Club

MAP	BLOCK	LOT	ACRES	ORGANIZATION
11	17		203	HET-TRU LAND LLC
11	28		ND	
11	29		8	
12	11	1	120	
12	11	2	ND	
12	11	6	ND	
12	13	7	7	
12	13	9	ND	
12	13	10	ND	
12	20		11	
12	24	2	12	
13	8		11	
13	12		21	
13	13	1	5	
13	13	2	ND	
13	13	3	ND	
13	13	4	ND	
13	15		ND	
13	20		15	
13	21		10	
13	22		122	

MAP	BLOCK	LOT	ACRES	ORGANIZATION
13	23	1	9	
13	25		10	
13	25	1	5	
13	27		5	
13	45		58	
13	46	1	12	Out of State Owner
13	47	A	74	
14	47		35	Out of State Owner
15	8		6	Out of State Owner
15	14		30	Town of Enfield NH
15	16		53	
15	23	A	20	
15	26		57	
15	35		114	Transit Construction CO. of Lowell INC MASS
15	37		ND	
15	38		ND	
15	39		ND	
15	41		ND	
15	41	2	10	
15	43		10	
15	75	1	ND	

MAP	BLOCK	LOT	ACRES	ORGANIZATION
15	75	2	ND	
15	75	3	ND	
15	76		ND	
15	77		245	
15	78		ND	
15	79		9	
15	80		10	
15	81		ND	
15	82		10	
15	83		20	
15	84	1A	51	Living Waters Bible Church
16	36		ND	
16	36	A	ND	
16	37		25	
16	37	1	ND	
16	38	1	41	Out of State Owner
16	39		7	
16	40		9	
16	44		56	
16	53		ND	
16	58		16	Choate Property Management LLC

MAP	BLOCK	LOT	ACRES	ORGANIZATION
16	63		57	
16	63	B	10	
16	63		11	
16	64	1	ND	
17	1		22	New England Forestry Foundation, MASS
17	2		120	North Woodlands INC
17	4		45	Out of State Owner
17	5		30	
17	5	1	ND	
17	6		26	
17	7		35	
17	7	1	76	
17	9		9	
17	14		23	
17	14	3	5	
17	14	4	ND	
17	14	5	ND	
17	15		24	
17	15	1	5	
17	15	2	10	
17	15	9A	14	
17	17	C	108	

MAP	BLOCK	LOT	ACRES	ORGANIZATION
17	19		12	
33	3		27	
33	4		ND	

*properties with no organization listed are privately owned

TABLE ELEVEN

PROPERTIES IN ENFIELD WITH FARMLAND SOIL OF STATE IMPORTANCE

MAP	BLOCK	LOT	ACRES	ORGANIZATION*
1	5	2	ND	HillsPoint Farms LLC
1	5	3	ND	HillsPoint Farms LLC
1	5	14	ND	HillsPoint Farms LLC
2	27		79	
2	30	3	7	
2	30	19	ND	Methodist Hill LTD Partnership
2	32		24	
2	33	2	10	
2	55		144	
2	56		ND	
4	4		ND	
4	5		33	State of New Hampshire
5	2		49	
5	2	2	5	
5	2	3	5	
5	7		329	
5	14		107	
6	5		128	

MAP	BLOCK	LOT	ACRES	ORGANIZATION
6	6		95	Out of State Owner
6	10		124	Out of State Owner
6	24		16	State of New Hampshire
6	26		33	State of New Hampshire
6	31		319	Enfield Land CO. LLC
6	43		22	MK Property Enterprises
7	5	A	490	UFLT
7	6		49	
7	8		37	
7	21		167	Out of State Owner
8	15	A	7	
8	15	B	ND	
8	23		25	
8	60		26	New Hampshire Fish& Game
9	9	3	5	
9	9	5	5	
9	19	1	21	Out of State Owner
9	27		18	Out of State Owner
9	36		48	Out of State Owner
9	49	A	51	Out of State Owner
10	4		1,080	State of New Hampshire
11	2	8	ND	
11	2	9	ND	

MAP	BLOCK	LOT	ACRES	ORGANIZATION
11	5		ND	
11	16		ND	Enfield Outing Club
11	20	4	27	Town of Enfield
11	22		30	
12	11		106	Vision For Creative Housing
12	11	2	ND	
12	11	3	ND	
12	11	4	ND	
12	20		11	Out of STATE Owner
12	24		13	
12	24	1	22	
12	24	2	12	
13	9		46	
13	15		ND	
13	16	1	ND	Out of State Owner
13	17		ND	
13	18		ND	
13	19		ND	
13	23	1	9	
13	23	2	5	
13	25		10	
13	25	1	5	

MAP	BLOCK	LOT	ACRES	ORGANIZATION
13	27		5	
13	30		19	
13	31		16	
13	33		18	
14	47		35	Maple Street Enfield Acquisitions
15	16		53	
15	16	1	ND	
15	27		42	
15	28	1	9	
15	29		9	
15	30		15	
15	30	1	ND	
15	31		11	
15	33		60	
15	34		8	
15	35		114	Transit Construction CO LOWELL INC MASS
15	36		ND	
15	36	1	10	
15	40	A	5	
15	41		ND	
15	41	2	10	

MAP	BLOCK	LOT	ACRES	ORGANIZATION
15	42		5	
15	43		10	
15	45		10	
15	46	1	ND	
15	47	1	10	
15	48		7	
15	49		ND	
15	49	1	ND	
15	50		7	
15	51		7	
15	52		7	
15	55		14	
15	56		100	
15	57	A	ND	
15	58		17	
15	59		ND	
15	60	1	ND	
15	84	1A	51	Living Waters Bible Church
16	18		20	Town of Enfield NH
16	19		14	
16	38		47	

MAP	BLOCK	LOT	ACRES	ORGANIZATION
16	42		6	
16	43		ND	
16	48		17	
16	57		25	
16	58		16	Choate Property Management
16	60	1	ND	
16	63		57	
16	64		11	
16	64	1	ND	
17	1		22	New England Forestry Foundation Littleton MASS
17	2		120	North Woodlands INC
17	3		ND	
17	4		45	
17	5	2	64	New England Forestry Foundation
17	7	1	76	
17	9		9	
17	10		18	
17	11		11	
17	12		60	New England Forestry Foundation
17	16		21	
17	17	B	ND	Hersey Acres LLC

MAP	BLOCK	LOT	ACRES	ORGANIZATION
17	17	C	ND	
17	19		12	
17	24		ND	
17	25		18	
17	25	1	39	
17	25	2	6	
17	25	3	31	
33	1		ND	
33	2		ND	
33	3		27	
33	4		ND	
49	15		ND	
49	16		ND	
49	18		ND	
49	19		ND	
49	20		ND	
49	21		ND	
49	24		ND	
49	25		ND	
49	37		ND	Out of State Owner

*properties with no organization are privately owned

TABLE TWELVE**PROPERTIES OWNEN BY THE TOWN OF ENFIELD 2020**

MAP	BLOCK	LOT	ACRES	LOCATION
2		53	0.75	Rice Road
6		8	0.28	Follensbee Road
8		13	0.20	NH Route 4A
8		59	0.50	NH Route 4A
9		10	0.50	George Hill Road
9		39	1.00	NH Route 4A
9		45	165	Grafton Pond Road
9		71	0.05	Palmer Road
10		5	1.15	Evenchance Road
10		6	0.50	NH Route 4A
10		7	0.30	NH Route 4
11		44	15.30	NH Route 4A
11		20-4	27	Lockehaven Road
12		1 A	0.01	Algonquin Road
12		13-6	7.11	Klug Road
12		31	0.03	Boy's Camp Road
13		49	50.44	Oak Hill Road

MAP	LOT	ACRES	LOCATION
14	3	0.45	Johnston Drive
14	4	0.60	Johnston Drive
14	6	0.09	Johnston Drive
14	47-1	0.53	US Route 4
14	56	0.04	Maple St
15	1	8.9	Lovejoy Brook
15	14	30.0	US Route 4
16	5	1.32	Lockehaven Road
16	18	20.0	Mud Pond
16	20	10.0	Canaan Road
17	8	0.07	Lockehaven Road
21	46	0.20	NH Route 4A
23	3	1.07	NH Route 4A
25	37	12.10	Shaker Hill Road
28	38	0.19	Shaker Blvd
30	16-A	0.06	Moore St
31	7-A	2.00	US Route 4
31	9	0.05	Oak Grove
31	14	0.04	Main St
31	27	0.24	Blacksmith Alley
31	33	0.17	Main St
32	12-1	0.08	Pine Drive

MAP	LOT	ACRES	LOCATION
32	46	1.45	197 Main Street
33	18	0.25	259 US Route 4
33	19	0.16	US Route 4
34	36	0.72	19 Main St
34	37	0.47	23 Main St
34	48-1	0.00	18 Depot St Building Only
34	54	0.48	25 Union St
34	57	0.79	Union ST
34	60	1.24	7 Shed St
34	61	0.97	15 Shed St
36	11-1	0.22	Mc Connell Road
36	14	2.20	31 Mc Connell Road
37	35	2.74	308 US Route 4
39	1	0.13	104 NH Route 4A
39	11	0.38	NH Route 4A
40	15	0.32	111 NH Route 4A
50	18	0.25	Graham Road
51	50	2.34	Hickory Overlook
51	115	1.90	Cardinal Place
51	122	1.46	Paul's Place

TABLE THIRTEEN**VERNAL POOLS IN ENFIELD**

Vernal Pools are wetlands of special consideration. A vernal pool is a temporary body of water which provides essential breeding habitat for certain amphibians and invertebrates such as wood frogs, spotted salamanders, common green and gray frogs, caddis fly larvae and fairy shrimp. These unique wetlands may be created by natural depressions in the soil or human made depressions from logging activities. They fill with water due to seepage, rain fall or snow melt and remain full, due to clay soil beneath them, long enough to allow development of the eggs laid by the animals that use them for breeding. The pools cycle annually from flooded to dry and vary in size, shape and location. In the 2004, NRI it was recommended that an inventory of the pools in Enfield be made. What follows is a listing of the location and condition of vernal pools found and revisited from 2013 through 2020 by Mr. Alan Strickland.

1) Goodhue Hill Road: Five different pools found, one has been used since 2013. May 6, 2015, wood frog and salamander eggs observed in two pools. April 27, 2017, salamander eggs observed in one pool. May 10, 2018, salamander eggs observed in one pool. April 23, 2019, salamander eggs observed in two pools. April 30, 2020, salamander eggs observed in one pool.

2) Moose Mountain: Two pools found. April 28, 2015, wood frog eggs observed in both pools.

3) Lily Pond: produced by beaver dam east of Smith Pond. May 14, 2018, salamander eggs observed. April 14, 2019, no egg masses observed.

4) Prospect Point: Three Ponds found. April 23, 2015, no egg masses observed. April 30, 2015, salamander egg mass observed in 1 pool, wood frog eggs observed in two other pools. April 29, 2020, salamander egg masses observed in two pools.

5) Shaker Mountain: Nine Ponds found. April 21, 2015, no egg masses observed in any pond. April 29, 2015, wood frog eggs observed in one pond. May 2, 2015, salamander egg masses observed in two ponds, wood frog eggs observed in 2 other ponds, both salamander and wood frog eggs observed on 1 pond. May 5, 2015, wood frog and salamander eggs observed in two more pools. April 13, 2016 no egg masses in one pool, April 19, 2016, no eggs in two pools, wood frog eggs in four pools, wood frog and salamander eggs in one pool. April 24, 2016, no egg masses in one pool, salamander eggs in another pool. May 8, 2017 salamander eggs in one pool, no wood frog eggs in the same pool. April 30, 2019, salamander eggs in one pool, May 1, 2019, wood frog and salamander eggs observed in five pools.

Salamander eggs only observed in one pool, April 23, 2020, salamander egg masses observed in one pool, May 14, 2020, salamander egg masses observed in one pool, numerous wood frog and salamander egg masses observed in three other pools.

6) Jim Petryk Preserve: April 24, 2015, no egg masses observed, April 27, 2015 no egg masses observed, May 3, 2015 salamander and wood frog egg masses observed, April 1, 2016 no egg masses observed, April 11, 2016 no egg masses observed, April 21, 2016 wood frog egg mass observed,

7) Bicknell Brook Colette 1: dumping ground for the town highway dept in the 1980's. May 4, 2015, wood frog egg masses observed, April 17, 2016, pool almost dry wood frog masses and salamander egg mass observed. Not likely to survive. May 10, 2018, salamander egg masses observed pool very shallow.

8) Bicknell Brook Colette 2: upper loop of Bicknell Brook, April 25, 2017 salamander and wood frog egg masses observed, May 9, 2018, salamander egg masses observed, wood frog egg mass observed, April 23, 2019, salamander and wood frog egg masses observed,

9) Enfield Post Office: April 11, 2016 wood frog egg masses observed, April 13, 2019, no egg masses, April 20, 2019, wood frog egg masses observed.

10) Harris Brook: pool a result of leak in Dam. April 11, 2016, no egg masses, April 18, 2016, wood frog egg mass observed, April 22, 2016, wood frog and salamander egg masses observed and one snapping turtle, May 1, 2016 picker frog and wood frog egg masses observed, April 28, 2020 salamander and wood frog egg masses observed.

11) Boys Camp Road: April 29, 2016, wood frog and salamander egg masses observed.

12) Mount Calm: May 16, 2016 salamander egg masses observed.

13) Crump 52: May 12, 2018 salamander egg masses, no wood frog eggs observed.

14) Drape on Bicknell Brook: May 16, 2017 salamander egg masses observed.

15) Eric Darmstaedter: Two pools April 29, 2017 both had egg masses.

16) Oak Hill Road: Maybe 1 pool, but never observed egg masses.

17) Bog Bluffs: May 5, 2015, 2 wood frog egg masses, April 17, 2016, 1 wood frog egg mass,

May 10, 2018, salamander egg masses observed

18) UVLT 995 acres: There are at least eighteen vernal pools observed, April 12, 2016, thirteen of the

Pools had egg masses. May 6, 2016, one pool had wood frog and salamander egg masses, April 27,

2017, Wood frog egg masses observed in one pool, May 11, 2018 salamander egg masses but no wood frog eggs seen, April 25, 2019 one pool had wood frog and salamander egg masses the other 17 pools were dry.

19) Enfield Land Company property, April 13, 2016 wood frog masses observed.

20. Lost Trail Fish and Game: At least five vernal pools were observed. April 13, 2016, one had wood frog eggs and one had Jefferson salamander egg masses. April 22, 2016, wood frog eggs and Jefferson salamander egg masses were seen in two of the pools, April 26, 2017 two pools had wood frogs and Blue Spotted salamander egg masses, others were dry, April 30, 2019, three of the pools had wood frog and /or salamander egg masses.

21) Russell Trust: No Date of observation noted, wood frog egg masses seen.

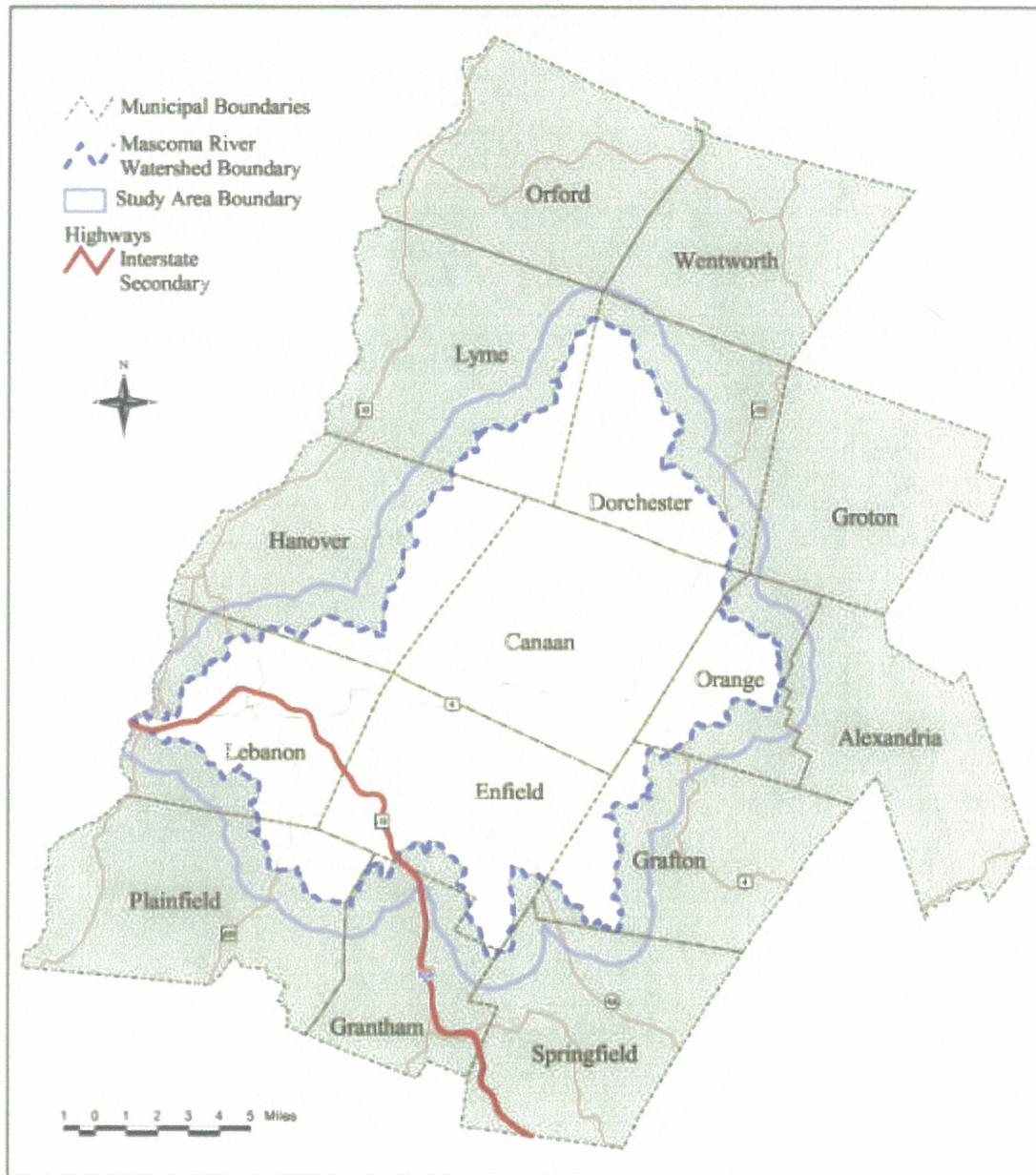
22) Pete Thompson property, There are at least five vernal pools at this site. On April 28, 2017 all five pools had either wood frog and salamander egg masses or just wood frog egg masses

Twenty Three, Smith Pond Road near Highway 89, two ponds seen. May 1, 2018 salamander egg masses, May 14, 2018 salamander egg masses

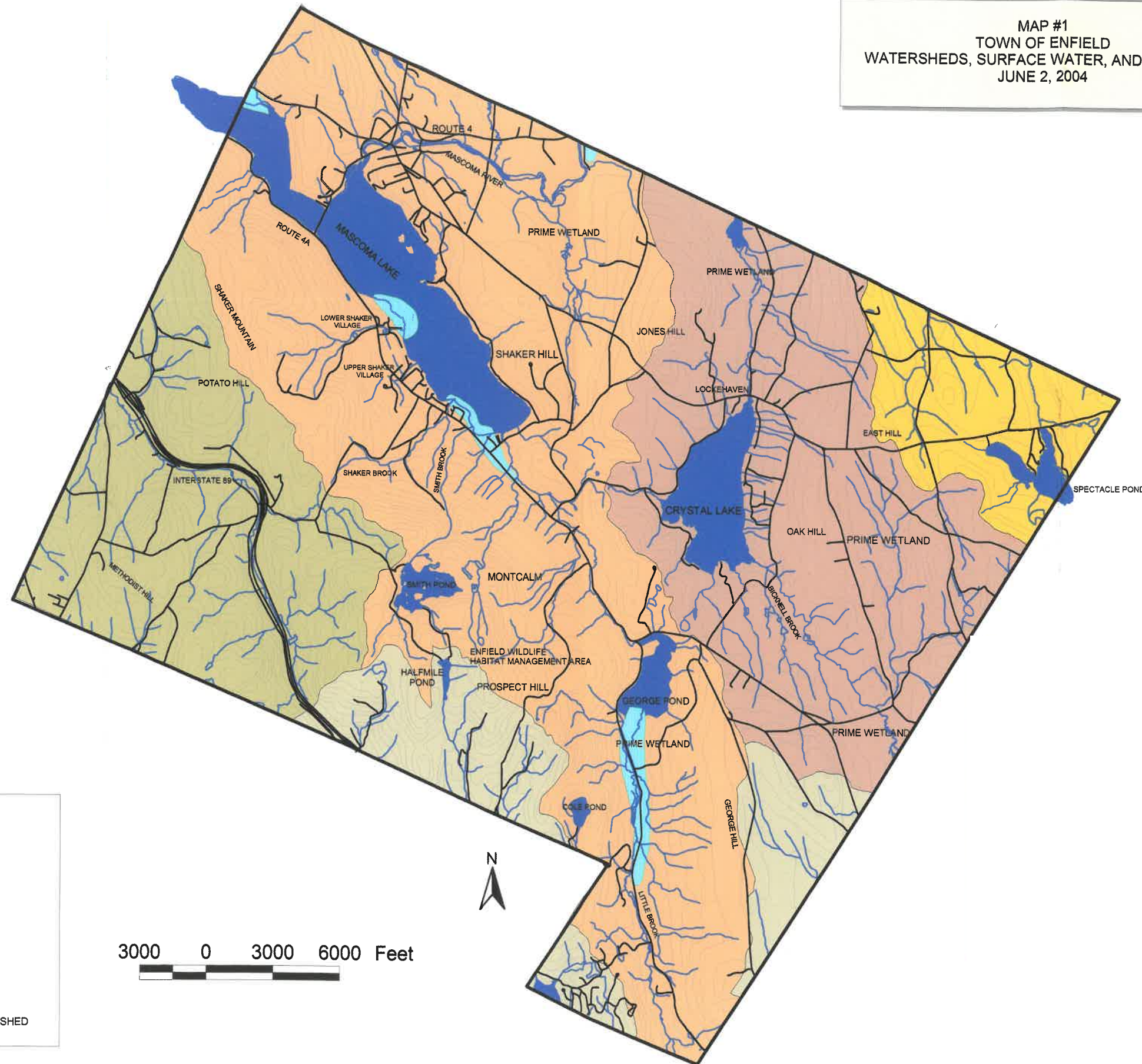
24) Greg Baker Drive, June 6, 2018 too late in the year to find egg masses.

Notes and observations supplied by Mr. Alan Strickland.

Figure 1: Mascoma River Watershed Study Area



MAP #1
TOWN OF ENFIELD
WATERSHEDS, SURFACE WATER, AND AQUIFERS
JUNE 2, 2004











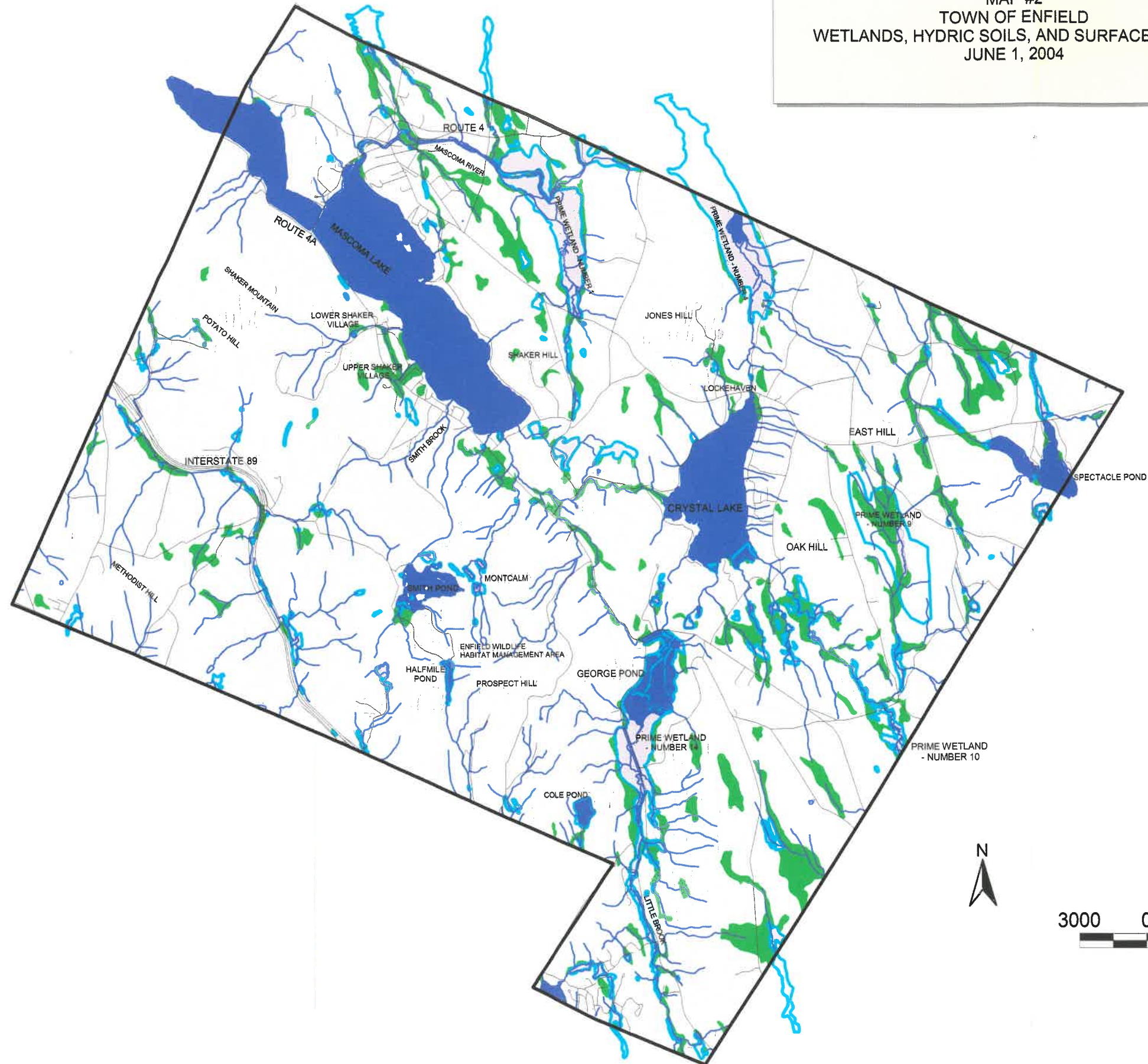
LEGEND

- TOWN LINE
- ROADS
- RIVERS, STREAMS
- AQUIFERS
- PONDS, LAKES
- CONTOURS
- CRYSTAL LAKE BROOK WATERSHED
- INDIAN RIVER WATERSHED
- LOWER MASCOMA RIVER WATERSHED
- MASCOMA LAKE WATERSHED
- SAWYER BROOK-STOCKER BROOK-EASTMAN WATERSHED

MAP #2
TOWN OF ENFIELD
WETLANDS, HYDRIC SOILS, AND SURFACE WATER
JUNE 1, 2004

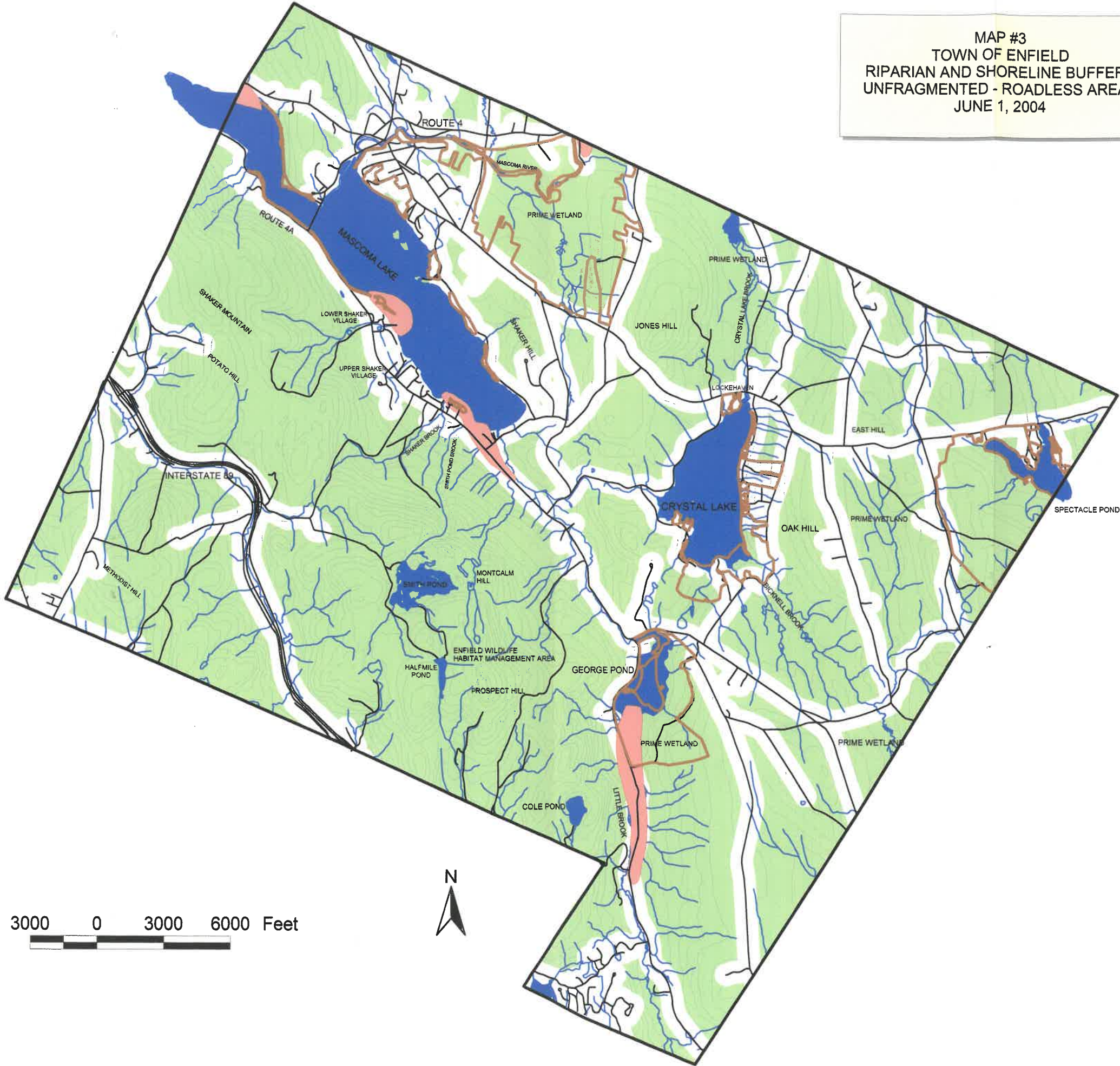
LEGEND

-  Town Boundary
-  Roads
-  River and Streams
-  Ponds and Lakes
-  Wetlands
-  NWI Wetlands
-  Hydric Soils
-  Contours



3000 0 3000 6000 Feet

MAP #3
TOWN OF ENFIELD
RIPARIAN AND SHORELINE BUFFERS
UNFRAGMENTED - ROADLESS AREAS
JUNE 1, 2004

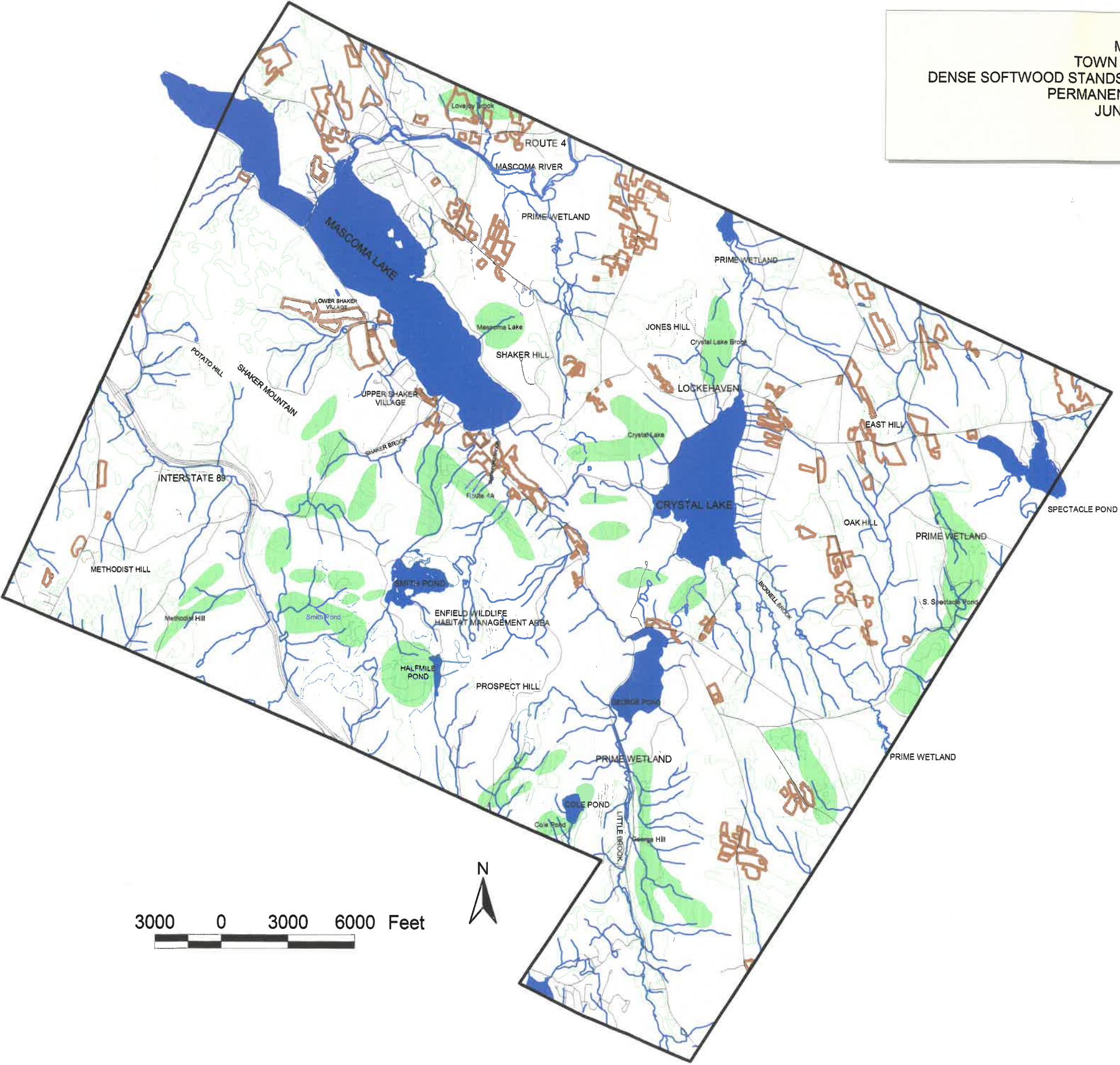


LEGEND

- Town Boundary
- Riparian/Shoreline Buffer
- Roads
- Aquifers
- Rivers and Streams
- Lakes and Ponds
- Contours
- Unfragmented - Roadless Areas

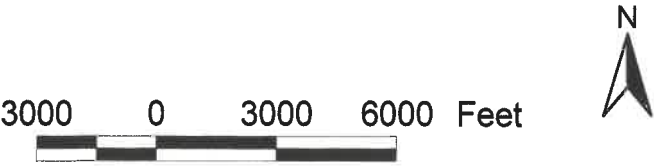


MAP #4
TOWN OF ENFIELD
DENSE SOFTWOOD STANDS, HISTORICAL DEER YARDS, AND
PERMANENT OPEN AREAS
JUNE 1, 2004



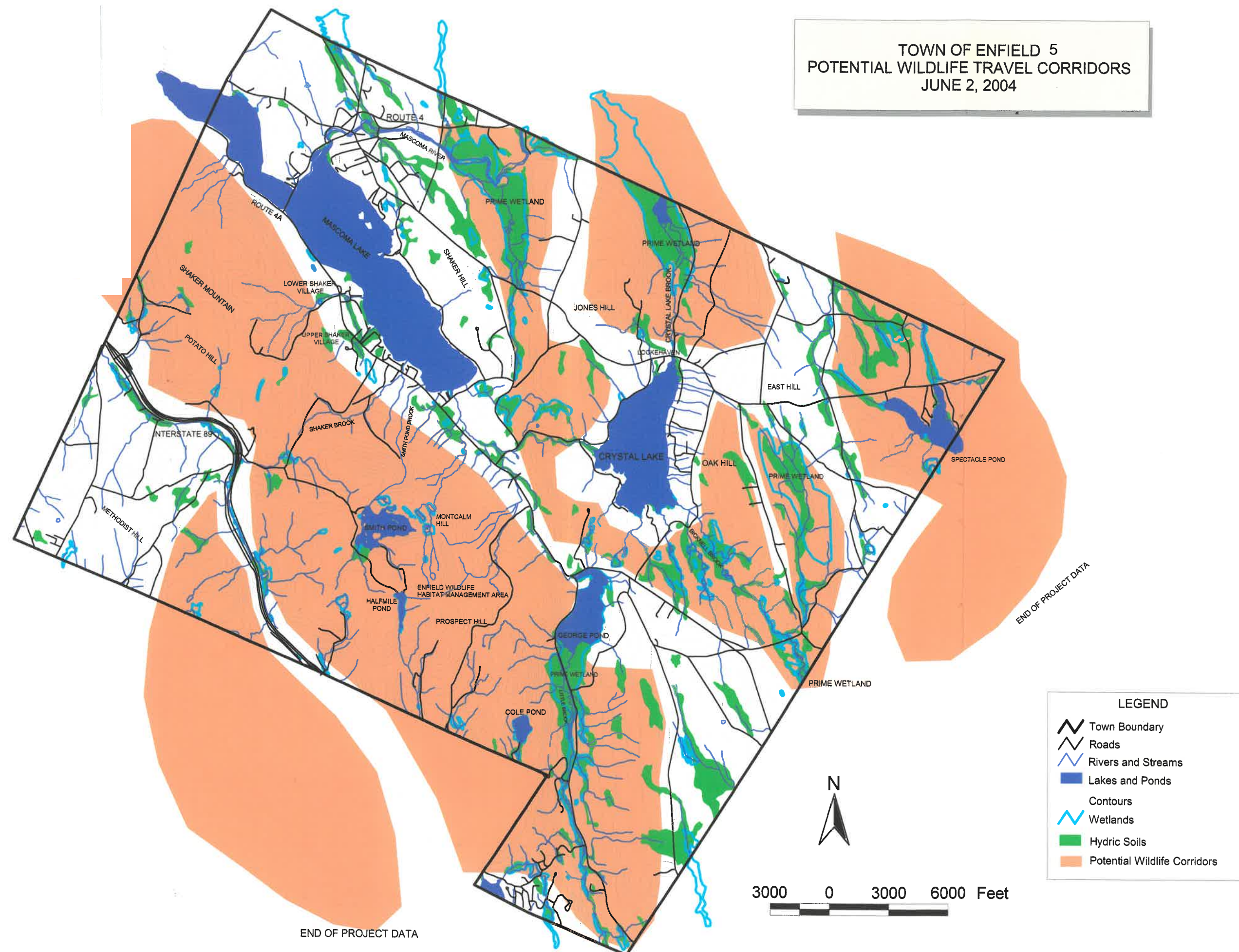
LEGEND

- Town Boundary
- Roads
- Permanent Openings
- Dense Softwood Stands
- Historical Deer Yards
- Surface Water
- Lakes and Ponds

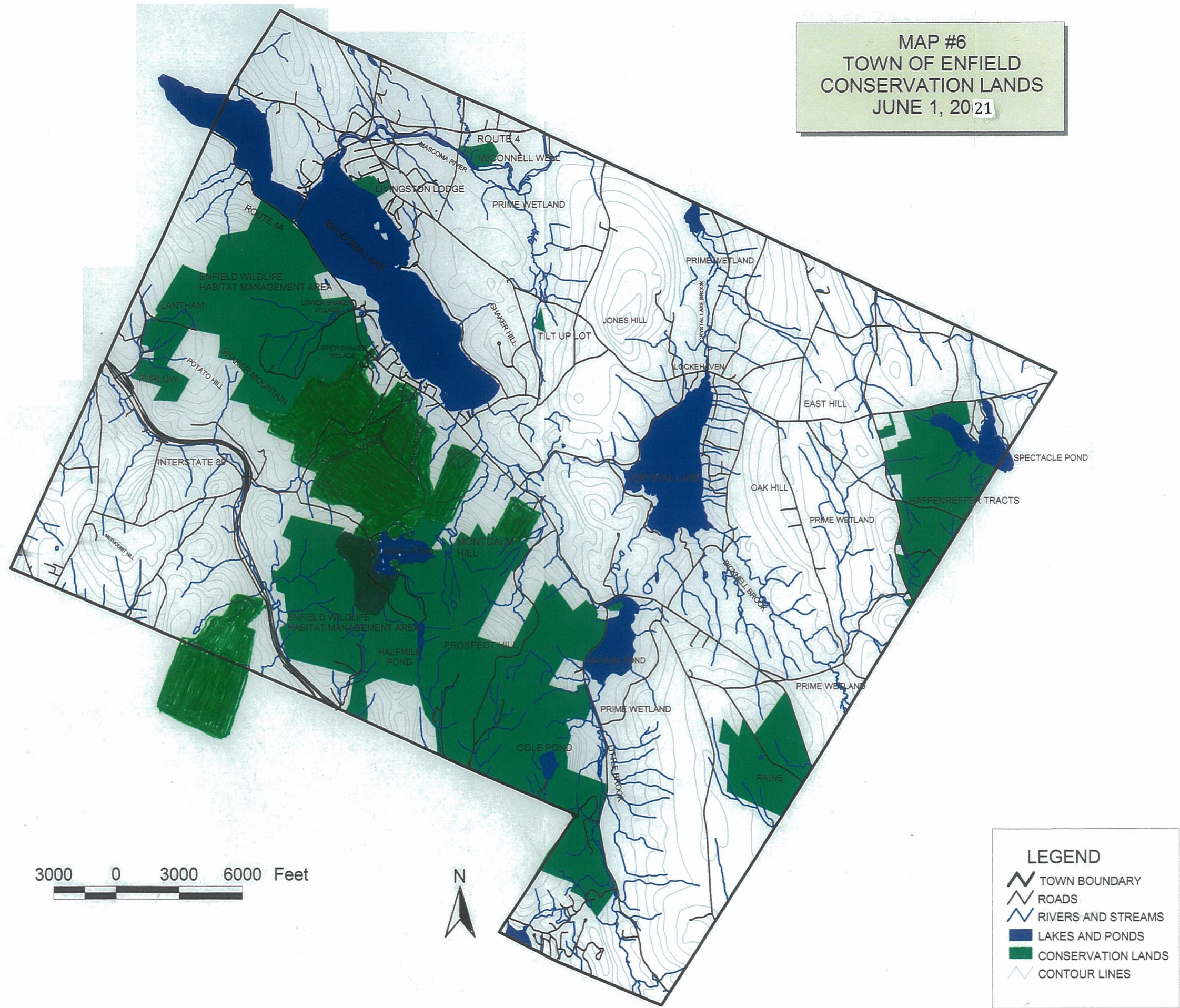


TOWN OF ENFIELD 5
POTENTIAL WILDLIFE TRAVEL CORRIDORS
JUNE 2, 2004

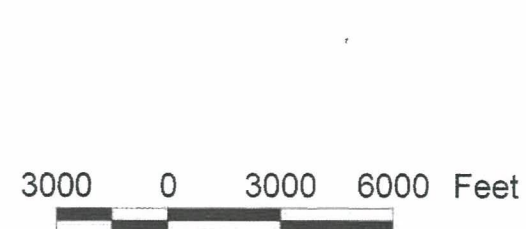
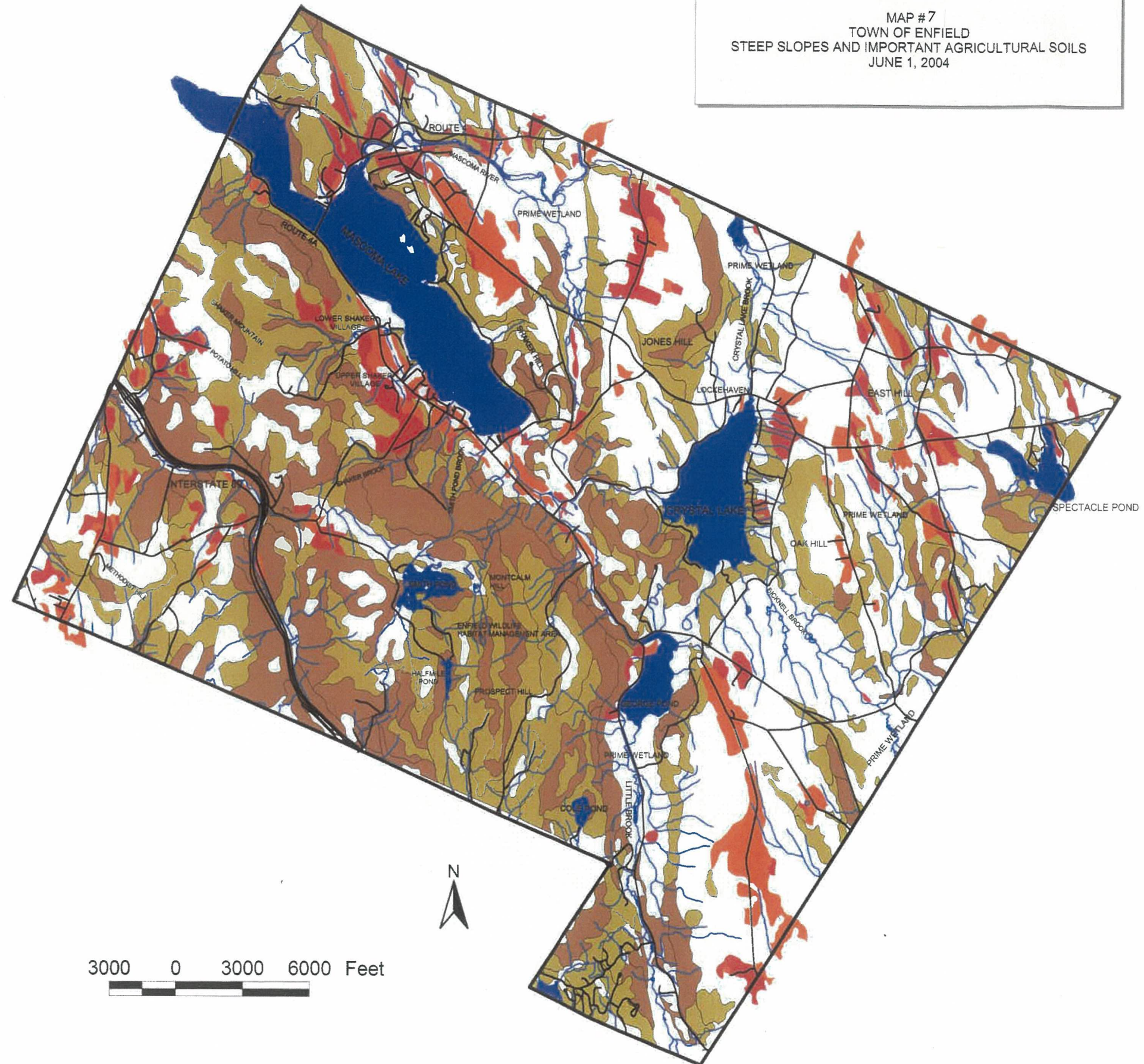
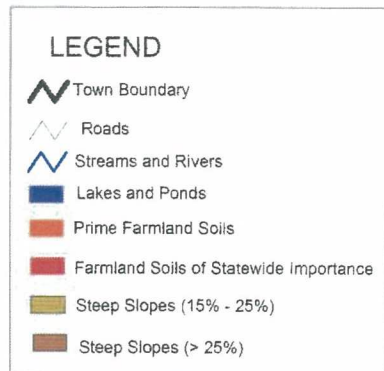
83



MAP #6
TOWN OF ENFIELD
CONSERVATION LANDS
JUNE 1, 2021



MAP #7
TOWN OF ENFIELD
STEEP SLOPES AND IMPORTANT AGRICULTURAL SOILS
JUNE 1, 2004



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<nongame and endangered species program of the new Hampshire fish and game>

ACTION ITEMS FOR THE CITIZENS OF ENFIELD TO CONSIDER

- 1) Consider Town purchase of wetlands that are pivotal in preserving wildlife habitat and protecting water quality.
- 2) Encourage land owners, whose property contains Prime Farmland to preserve such land from development.
- 3) Propose a Warrant Article to establish as Prime Wetland the 20 acres north of Spectacle Pond.
- 4) Keep housing development below the carrying capacity of the Town well water supply in drought conditions.
- 5) Adjust Zoning Ordinances so building vertically instead of horizontally is permitted.
- 6) Keep wildlife corridors from being further blocked by roads and development.
- 7) Offer property tax reductions to land owners that maintain habitats for ground nesting birds.
- 8) Recognize that Property Rights carry with it the responsibility to consider the best practices for land use
- 9) Cease throwing cans, bottles, and other trash out of your vehicles onto the road side. Take your trash home and place in your garbage can.
- 10) Petition the Board of Select Men to renegotiate the garbage collection contract with Casella so garbage is collected ONCE a week from May through September. The ambient temperature in Enfield during those months allows the common house fly to complete its life cycle in less than seven days. Under the present contract Casella collects the garbage every two weeks, year round. This allows at least 2 generations of flies to reproduce between collections from May through September. A single garbage can may yield 20,000 fly larvae per week during the May through September period. A single female house fly can lay up to 1,620 eggs in her life time.