

Town of

P.O. Drawer 519

Open Space Steering
Committee



East Lyme

108 Pennsylvania Ave

Niantic, Connecticut 06357

Phone: (860) 691-4114

Fax: (860) 739-6930

May 29, 2009

This is a report of the open space steering committee, which worked from the fall of 2006 to the fall of 2007 at which time its Charter expired. At this time the groundwork had been laid for this final report. Between then and now Arthur Carlson and the Director of Planning, Meg Parulis worked together to complete the report. In order to get maximum public participation the findings were presented to the following boards and commissions for their information and comments: Conservation, Planning, Parks & Recreation, Water & Sewer, Harbor Management, Inland Wetlands and Board of Selectmen. In addition, five open sessions were offered to the public, plus several presentations to civic groups. Approximately 300 citizens have heard this plan. Their inputs were solicited and were overwhelmingly positive.

This report sets out the role of open space in general and in particular ways for our community. If this plan is followed we should expect a positive return in the form of permanently protected new lands, which will measurably enhance this town and if not followed could negatively impact this town. The body of this report will address these points in detail.

To start we will define open space using the Connecticut Department of Environmental Protection's definition of open space: "any land whose preservation or restricted use would maintain and enhance the conservation of natural and scenic resources, protects natural streams or water supplies, promote the conservation of soils, wetlands, beaches or tidal marshes, enhances the value to the public of abutting or neighboring parks, forest, wildlife preserve, natural reservations or sanctuaries or other open spaces enhance our public recreation opportunities, preserve historic sites or promote orderly, urban or suburban development".

How Much Open Space Do We Have?

It's key to understand and define how much open space we actually have, and what functions it performs as just outlined in the open space definition above. To start our study we developed Map 1. Plotted in green are all the lands greater than ten acres that have no buildings or several buildings on them, i.e. its essentially open space and undeveloped. This map we call "perceived open space" as it's what one sees as one drives or walks through the town. We make no determination of ownership or if there is public access, or if the town has some control over its use, say through Zoning or Planning Regulations. These questions will be answered in the next two maps.

Map 1 depicts a significant amount of green that translates to the casual eye as a lot of open space and to many, a lot of accessible and preserved open space. In fact, sixty-percent (60%) of the total land in East Lyme may be perceived as open space. This, for example may explain why we often hear a statement from persons challenging a new subdivision with the phrase, “I have been walking on that land for years, and we have trails on it”. Truth be known, that person was most likely using private property. Hence, our title for Map 1, of “Perceived Open Space.” It’s probably also why some believe we have too much open space.

Map 2 “Open Space with Institutional Lands,” shows the open space that is not privately owned, but may or may not be open to the public, or owned by the public and may or may not be subject to Zoning or Planning Regulations. Some of these lands referred to as dedicated open spaces are shown in dark green and represent 17% of the total land of East Lyme. The four largest parcels include Nehantic State Forest, Bobrow property, Rocky Neck State Park and Oswegatchie Hills Nature Preserve. The small green tracts for the most part are parts of subdivisions. In principle these tracts are too small and too scattered to function, as we need. This will become apparent later in this report. It is important to note the Yale property is private and closed to the public and we have, as far as we can tell, no definitive status on its future. Stones Ranch, Camp Rell and Bride Lake are closed to the public. We presume they will stay as permanent open space based on their current use, although we are not guaranteed their preservation in perpetuity.

Map 3 “Actual Open Space”, depicts open spaces owned by the public, not necessarily the Town, and that anyone can walk on when they choose. Of these lands the State properties are not subject to Town Zoning or Planning Regulations.

What one can see from Maps 1, 2 and 3 then, is we perceive approximately 60% open space and actually have approximately 17%, as shown on Map 3, readily open to the public.

Having described the state of our open space we next determined what functions open space should have. The Connecticut Department of Environmental Protection definition of open space gives us insight regarding this matter. We postulate eight functions of open space that have clear benefits to the citizen. In addition we also assigned a subjective numerical value to each attribute, based on what we judged as relative importance. This aided us to objectively evaluate each open space, although the subjective nature is obviously not an absolute.

There may in fact be other lands that initially do not rate very high or perhaps not at all but could provide the final piece in a puzzle, a keystone function if you will. For example, suppose we have two forest blocks separated by a small connecting parcel. It may be that although the small parcel may have little virtue in and of itself, it is large as a connector or a keystone. We may also find trade-offs are necessary; say between active recreation and agricultural land. Our advice here would be to see if you could have both functions on the same land and if not a choice would have to be made. But whichever way one goes, it may be possible to have the same land revert back to a previous function.

The eight functions of open space are described and rank ordered in Table 1. Note that water quality and quantity are what we consider the single most significant attribute of open space. See Appendix A for a discussion of points rating system and biodiversity.

TABLE 1

Number	Characteristics	Rating (Points)
1	<u>Drinking water quality and quantity protection.</u> The land does this by slowly releasing precipitation run off and filtering the precipitation through dry soil and wetlands.	5
2	<u>Access to water usage.</u> Provide public access to fresh and salt water for recreation, e.g. small boat access, shellfish harvesting site.	4
3	<u>Farmland.</u> To preserve farmland for its highest and best use which is agricultural usage. We define farmland as either based on soil type “prime farmland” locally important soils, the historical fact that farming has or still does take place.	4
4	<u>Active and passive recreation.</u> Ball fields, footpaths and passive uses, just observing the woods, waters and wildlife.	3
5	<u>Forest block/greenway.</u> A 100-acre parcel is worth far more than 100 one-acre lots ecologically speaking, also we can connect big parcels via a green way for travel between parcels, perhaps from one end of town to the other.	3
6	<u>Unique geological features.</u> This can include rock ledges, outcroppings and other results of glacial travel for beauty, teaching and study.	2
7	<u>Cultural/historical.</u> Preserve the land, buildings, fields, etc of earlier times, which show in a living way our history as a people.	2
8	<u>Biodiversity.</u> Keep enough land open and minimize stress on it so that a natural growing situation may exist which can be a precursor to alerting us to changes for better or worse.	2

As one looks at the eight characteristics we delineate for open space it appears reasonable to suggest that the common denominator of them is that they provide at their most fundamental level both physical and mental health aspects to the individual. For example, clean drinking water is fundamentally a health issue, as is active recreation in the form of walking or sport, and the mental gains range from learning, observing, to the contemplative. The latter three are more subjective, but we offer a quote from William Chapman White from his 1954 book “Adirondack Country” on the importance of the forest “As a man tramps the woods to the lake, he knows he will find pines and lilies, blue heron and golden shiners, shadows on the rocks and the glint of light on the wavelets, just as they were in the summer of 1354, as they will be in 2054 and beyond. He can stand on a rock by the shore and be in a past he could not have known, in a future he will never see. He can be part of time that was and time yet to come.” Hence, the mental aspect.

Having set out our open space attributes and having the geology, topography, soils, water, wetlands, aquifer, watershed, biodiversity and historical data we can now determine what open space should be saved if at all possible. All of this data is based on appropriate science and is reasonably accurate.

Because we have identified protection of our water sources in general and our drinking water in particular as most important, we look at this first and see if we can join the other characteristics into the same land. Map 4 depicts our four main watersheds and their respective aquifers, two of which supply our public Town drinking water and two that may be still developed as drinking water supplies. The two we currently use are the Pattagansett and Bride Lake aquifers. These two are wholly in East Lyme while the Four Mile River watershed is about 98% in East Lyme and the Latimer Brook watershed has more area of its watershed outside of Town than in. The majority of the Latimer Brook watershed is in Montville, Connecticut. By considering the entire watershed rather than the part of it that is the aquifer we are considering the entire area of influence on our drinking water. This is a holistic approach and we think a more complete and correct approach. So-called Level A and Level B aquifer protection does not cover the entire watershed, and is more directed to protection around well sites.

We have defined the terms aquifer and watershed as follows: Aquifer means saturated stratified sand and gravel or bedrock volumes that act to store rainwater. Our aquifers of interest are saturated stratified drift aquifers and the area in which we locate our wells. Ground water moves within these aquifers on the order of inches to feet per day. Watershed lands encompass the aquifer upon which practically all the precipitation that falls within them ultimately flows into the aquifer. In general, the saturated sand and gravel aquifer has less absorptive and pollutant capturing capability than the upland till area of the watershed. Hence the saturated sand and gravel aquifer is the most vulnerable to pollutants.

The remaining watersheds in town are small or have other limitations such as possible salt-water intrusion. Therefore we preclude their inclusion as a public source of drinking water although they may still be adequate for private uses. Note within the four watersheds the aquifer areas are shown within tan boundaries and represents a thickness of a few feet to approximately 80 feet deep (see Map 4). Currently all well pumping stations except one are located south of I-95 and are located within the Pattagansett and Bride Lake watersheds. In discussion with the Municipal Utility Engineer we note that of the two unused aquifers for public water, the Four Mile River aquifer has more drinking water volume potential than the Latimer Brook aquifer but the Latimer Brook aquifer is very important as it empties into the Niantic River, thus being a water quality issue for the Niantic River and Long Island Sound.

There are two major threats to our aquifers. First, contamination, which we have some control over. Secondly, a depletion caused by a shortage of rain and/or increased consumption. Contamination is quite easy to envision if a tanker truck has an accident on I-95 directly in the Bride Lake or Pattagansett watershed or worse directly over the aquifer. We might be able to mitigate this with a catch basin system, but this solution is beyond the scope of this report. Also travel along route 161 would carry the same dangers as I-95 travel. Secondly and more subtle is the effect of creating impervious surfaces such as paved driveways and parking lots, or the footprint of a house which by its very nature removes that piece of soil from carrying out its filtering function of chemicals and solid particles and reducing the water runoff rate, hence reducing the time-dependant storage capacity of the aquifer. In short, we decrease the natural filtering by the soil and increase the rate of run off. Recent research, cited in the Niantic River Basin study, points out that when the impervious surface in a watershed approaches 10% both the quality and quantity of the drinkable water becomes degraded. See Appendix E for a discussion of impermeable surfaces. Map 5 “Land Cover” depicts the percent of impermeable surface in each watershed. Note that we are currently close to 10% impervious surface in the Pattagansett watershed. This calls for close further study in order to maintain the quantity and quality of this water resource. This is predominantly a Planning and Zoning task.

As previously noted, the I-95 corridor has the potential for accidental spillage of toxic substances, e.g. fuel oil. Spillage of course is also possible from an accident on the Boston Post Road, but the lesser traffic there would imply less chance of such a problem. Hence we can see as we move north of I-95 and then north of Boston Post Road the potential for accidental discharge is less. Of course we can’t move the aquifers but we can do our reasonable best to protect the watershed and its aquifers from over building and spillage of toxic chemicals.

With these water quality problems in mind, and with the other eight attributes of open space as determined in Table 1, we then looked at the entire town and asked the following questions:

- What open lands exist in public and private hands that would be very useful to have protected in perpetuity in their natural or near natural state? The operative phrase is “in perpetuity.”
- What steps could be recommended to accomplish this? Looking first at Map 2 we see three large State Government and Private space properties, Stones Ranch, Bride Lake and Yale. Each of these properties provides significant water quality and quantity protection to the Four Mile River, Pattagansett and Bride Brook aquifers. Nehantic State Forest also provides watershed protection but we assume its status as State Forest more or less guarantees its protection. Our recommendation for these three big parcels is that the Town hold discussion with these entities to make clear how important their lands are to our public drinking water supply. In our estimation Bride Brook and Stones Ranch are secure as far as resale is concerned. The Yale property is more of an unknown. We should meet with the Yale people and make clear how important their land is to the well being of East Lyme. Our hope is that Yale has already decided to maintain their land in its natural state in perpetuity. If the Yale property could be secured as an open space in perpetuity, we would have a superlative forest block including the Niantic State Forest, Yale, Stones Ranch and our Bobrow property.

Using the open space attributes of Table 1, we then selected relatively large non-public properties that would be important to secure in their existing more or less natural states. These open spaces are depicted on Map 6 and detailed in Table 2 where we list the attributes of each and how they rank. Map 6A replicates Map 6 but with the aquifer added and illustrates how we attempted to include the most sensitive areas as open space, i.e. those over or close to the aquifer.

The 65 open spaces on Map 6 represent some open space under the Public Act 490 program (Appendix F), the Oswegatchie Hills Nature Preserve and the Route 11 Greenway, all of which proceeded the additional selections by the Open Space Steering Committee. After the year charter of the Open Space Steering Committee expired, the Director of Planning and Arthur Carlson developed the maps, checked the data for accuracy and commenced writing the Steering Committee report. Before the report was finished the Director of Planning resigned employment with the Town and Arthur Carlson completed the report. The lands the Committee selected were based on the eight natural resource elements developed by the committee to characterize open space, as well as the numerical rating scale to assist in quantifying the lands. The lands previously designated under P.A. 490, Oswegatchie Hills Nature Preserve and the Route 11 Greenway, were also rated.

Map 6 and Table 2 provide an inventory of various open spaces, none of which other than the Oswegatchie Hills Nature Preserve, the Bobrow Property (Plants Dam) and property number 14 are permanently protected as open spaces. Property 14 recently had its development right deeded to the State of Connecticut. Lands under P.A. 490 are not guaranteed permanently open as they can be sold or developed at any time.

It should be noted that the identification of important open spaces in this study does not affect the ownership, as it is private land, but if we could secure it as it currently exists, it would be extremely beneficial for the Town. If the current owners choose not to discuss their lands, that is their right. On the other hand if property owners express interest, there are three ways the Town could secure protection of the attributes outlined in Table 1. The first is outright purchase if such lands come on the market. The second is to have the Town buy the development rights with stipulated Town uses such as footpath creation or water access; however the owner would still own the property and it could be sold but with Town-agreed upon stipulations. Thirdly, the Town could accept the land as a gift, a rare but not unheard of deed. In all cases the Town should make known its interest in the right of first refusal on all the properties listed in Table 2. Getting the right of first refusal would give the Town time to consider its options.

In Table 2 most of the lands selected to date have multiple uses. This opens up the possibility of agricultural use and active and passive recreation along with watershed or aquifer protection on the same parcel. The Hathaway property is a good example of this, where we would gain approximately ¼ mile of lakefront, about ten acres of ball fields, some agricultural space and could construct footpaths. These activities are possible while having it filtering rainwater and slowly discharging it into the aquifer it's over. See Appendix A regarding the recreational potential of this land, which is in addition to its obvious water quality attributes.

Regarding the potential for footpaths we can envision approximately fifty-miles of footpaths in Town. This could be accomplished by securing the land or by purchasing easements on the private property segments of the system. Footpaths are depicted on Map 6B and Map 7. Note should be taken that adjoining towns also have footpaths and it's therefore logical to consider how we might connect to their system. The issue of private landowner liability concerning footpaths on their property has been addressed by the Connecticut General Assembly. Reading from the Connecticut Forest and Park literature we find: "The Landowner Liability Law (Connecticut General Statutes Section 52-557) provides substantial limited protection from liability to individual landowners who allow their land to be used by the public for recreation without charge." See Appendix H for a more complete discussion.

Having identified the attributes open space may have (shown in Table 1) we believe it is not a stretch to conclude that open spaces bring to our Town characteristics and attributes that are as important to our overall well-being (physical and mental health) as public education, libraries, police and fire protection, road maintenance and other Town services and functions. We need not rank order these functions, as they change with circumstances, but should recognize that open space preservation provides, over the long-term, attributes the Town needs. The importance of open space preservation should therefore not be an afterthought as it has been in the past but a fore thought as this plan suggests.

A legitimate question to ask is what affect will removing lands we either buy outright, purchase the development rights for, or accept as a gift, have on our taxes? The answer is multi-faceted: For example, if the Town received land as a gift it is no longer taxed, and the tax burden would shift to the remaining tax payers to maintain the same level of tax revenue. This tax increase is quite small. For example, a parcel that currently pays \$10,000.00 in taxes if given, as a gift, would cost each tax payer approximately one dollar per year.

A conservation easement would reduce the taxes on the land as it is still privately owned and the Town would have to pay off the cost of purchasing the development rights; however we would secure in perpetuity a desired use we determined to be needed. The landowner would pay reduced taxes. The last case would be outright purchase, we now own it, there is no tax income and we have to pay off the purchase price. In all these cases, considering the uses of the lands we have prescribed, we expect lesser maintenance costs as the land has primarily a passive use unlike a Town building, library building or a school.

A “Cost of Community Services” study performed in eight Connecticut towns similar to East Lyme compared the dollar cost to provide town services per dollar of revenue raised which showed that “for each dollar of property tax revenue generated by working and open lands, on average only 31 cents is required in municipal services, versus \$1.11 cents for a residential property. Hence an open space in effect subsidizes a residential property.” See Appendix H for more details.

Finally, if the town were to adopt our open space plan, a process which will most likely be measured in years, the town would look like Map 7, our “Open Space Vision”. This thought brings me to an observation I developed during the course of this study. Simply put: I cannot think of a single piece of open space that was secured for the public, usually after a disagreement, that has been regretted by the next generation. To test this observation, ask if you regret McCook Point, the Niantic Bay Overlook, Oswegatchie Hills Nature Preserve, Sam Peretz Park, Rocky Neck State Park, Nehantic State Forest or Yellowstone National Park or the White Mountains of New Hampshire.

SUMMARY FINDINGS

1. The protection of our drinking water supply both in quality and quantity is a most important function, and we can aid and abet this by minimizing human influences on the watersheds and their aquifers we depend on for our drinking water. The majority of the lands the Open Space Committee selected have this virtue.
2. Open spaces can have multiple uses as defined in Table 1 without degrading any one use.
3. We can add approximately fifty miles of footpaths for use by the public. Also the possibility is there to connect to footpath systems in adjoining towns.
4. Agriculturally viable lands exist in East Lyme, which could in fact increase agricultural activity within Town. There is a nascent agricultural movement in East Lyme, which will be covered in depth in the “Plan for Conservation and Development” prepared by the Planning Commission.

5. The Town has limited access to recreational water resources. Some of the open spaces the Steering Committee selected provide for more active recreation and increased fresh water and salt-water access. These are on Lake Pattagansett and Smith Cove. See Appendix A and D.
6. Most of the lands selected form relatively large contiguous blocks, thereby increasing their ecological importance.
7. We introduced the idea that open space lands should not be an after thought, but rather realized as an important Town resource. They perform functions on par with such other public services such as education, libraries, police and fire protection and Town Hall services. In short, open space lands are an integral part of the fabric of the Town. We have not paid much attention in the past to this resource's role, as most in East Lyme have never thought of not having publicly accessible -open space. Now that we have shown the difference between what we perceive as open space and what's actual open space, only aggressive actions will work as the pressures are high to build on these lands and the time is short. The open spaces we have selected if built out could support approximately 2,000 houses. This is approximately a one third increase in housing, with the associated increase in taxes, traffic, school and other town services. The Town may choose this route, but should do so knowing the advantages and disadvantages thereof.
8. Open spaces and farmlands actually subsidize residential costs as shown by the economic analysis in Appendix H.
9. There are State and Federal monies available to secure the type of land recommended to be preserved as open space, e.g. watershed, aquifers and farmland.
10. The Town should write to all land owners listed in Table 2 explaining the intrinsic value of their land to the town, asking that if they anticipate changes in ownership the Town be given notice, or better still, the right of first refusal regarding outright purchase or buying the development rights. This is a critical initiative.
11. Because some of our watersheds, Four Mile River and Latimer Brook in particular, extend beyond our town boundaries, it is necessary to interact with these towns over the use of their lands within their watersheds which affect our drinking water.
12. Map 7 entitled "Open Space Vision" shows the final product. We have watershed protection, large forest blocks reasonably connected, and a footpath system of serious size that results in permanently protected open spaces with public access. These new accessibilities would be accomplished by obtaining conservation easements, outright purchase or gifts. Map 7 shows 30% protected open space controlled by the Town, i.e. open to citizen use.
13. Map 3 is actual current open space. If the Town does not act seriously now most of these parcels would most likely be gone, essentially forever. The expression: Once it's gone, it's gone, is most likely true.
14. Public Act 490, which provides tax relief for lands that can be qualified as farm, forest or open space is an extremely important piece of legislation. However land under P.A. 490 is not protected as forest, open space or farmland in perpetuity. It can be developed at any time. Some towns make more use of this vehicle than others. East Lyme seems to be utilizing this Public Act well and should continue to encourage its use.

15. If and when, or perhaps before the widening of I-95 takes place, the Town/State should seriously consider the possibility of constructing a catch basin system to capture accidental chemical spills before they run off into our watershed and/or aquifers. It may be possible to extend this idea to other key roads in town.
16. The lands that have been identified as important open spaces are based on this initial study. There will most likely be additional properties that would provide useful open space functions as we think and develop this plan over the years to come. Therefore no new lands should be ruled out simply because we have not identified them today.
17. Although it was not discussed explicitly in the text, any deed or covenant that goes with a new open space acquisition should be written clearly, outlining what can, and can not be done with the open space.

CONCLUSIONS

There is a large difference between perceived open space and actual open spaces, i.e., lands permanently protected from development and in some measure open to the public. All other open spaces, perceived and private are open to building and other uses provided for in our Zoning and Planning Regulations. This dichotomy means that our building density could increase significantly along with a resultant loss of perceived and private open space. This loss would in general raise Town expenses and reduce the protection of our drinking water supply and open space uses such as farming, recreation and the other open space attributes discussed in Table 1.

I diverge here to make a point by using a thought from a Robert Frost poem entitled, “A Road Not Taken.” The last lines seem appropriate for our Town at this point in time: “Some where ages hence: Two roads diverged in a wood, and I – I took the one less traveled by, and that has made all the difference.” We are at the divergence in the road. If the Town does nothing regarding the proposed Open Space Plan, we would get, we believe, a set of negative consequences. If we carry out the proposed plan we will conserve important town natural resources, beauty and well-being.

And finally I want to state again an observation that occurred to me during this study: “I cannot think of a single piece of open space that was secured for the public, usually after some disagreement, that has been regretted by the next generation.”

APPENDICIES: A, B, C, D, E, F, G, H, I, J

- A. Biodiversity, open space rating system and public access to our Town's fresh and salt water.
- B. During the course of this study a letter from the Director of the Parks & Recreation department was received regarding their needs for open space. This is shown in appendix B. It points to some needs which this proposed plan can for the most part meet, i.e., the additional active areas and a park/forest setting on Pattagansett Lake which the Hathaway property does extremely well.
- C. A United States Department of Agriculture study dated April 2008, which discusses the expected impact of climate changes on watersheds.
- D. An article by William R Bentley regarding Carbon Storage and Connecticut's forests. This is an issue coming to the forefront and we should be at least aware of what the thinking is regarding the forest impact on global warming. We may in a small way be able to help with our forest open space.
- E. In appendix D is a map of Smith Cove. Marked by an X is a potential small boat launching area. The parcel in question borders Pine Grove Road and its ownership based on a cursory examination of the assessor's records is not clear. This will obviously require some investigation. We have discussed the potential of this site with the Harbor Management Commission and they are in agreement with the launching site idea.
- F. In appendix E we show and discuss the nature of an impermeable surface in a watershed and how it affects the quality and quantity of water within the watershed. This information is from the Niantic River Watershed Protection Plan dated September 2006.
- G. Appendix F provides up to date information on Public Act 490. It provides a "Declaration of Policy" of the Act and copies of the procedures for classifying lands under this Act.
- H. Appendix G provides a cost analyses of open space and farmlands tax revenue versus residential tax revenues, versus the cost to provide municipal services.
- I. Appendix H is literature regarding private landowner liability and the Connecticut Forest and Parks Association experience with establishing and maintaining their roughly 825 mile blue trail hiking path system which they developed over the last 80 years.
- J. Appendix I is the history of the Open Space Steering Committee.

APPENDIX A

Appendix A covers three topics: first, how we considered biodiversity, second how we developed and tested the subjective open space rating scale used in Table 2 and third a discussion of public access to our Town's fresh and salt waters.

- Biodiversity

We looked at biodiversity from two points of view.

First that habitat destruction is the greatest threat to biodiversity and therefore if we could protect habitat we by definition protected biodiversity. To quote professor and naturalist Edward O. Wilson, "invasive species are the second greatest threat to global biodiversity; the first is habitat destruction." In this study we address habitat destruction. Also it is generally accepted that the larger the open space the more diversity that can be protected, which is the reason we tried to connect individual parcels to form greenways. A good example of this is the grouping of the Girl Scout camp, White Gate Farm and the Cedar Ridge Golf course. Approximately one half of the open spaces chosen had forest block/greenway potential.

- The second way to protect biodiversity is using data, which actually calls out explicit biodiverse spaces to be protected. This data is from the "State and Federal listed Species and Significant Natural Communities" located in distinct areas in East Lyme. The Town gets updated maps every six months identifying (in a relatively vague way) where these significant natural communities exist. The information is also listed in Table 2 under the heading of biodiversity, which are identified in the NDDB. The following paragraph explains the NDDB>
- NDDB information "Locations of species and natural communities are based on data collected by the CT Geological and Natural History Survey, other units of DEP, private conservation groups and the scientific community and compiled by the NDDB. The information is not necessarily the result of comprehensive or site-specific field investigations; in some cases locations have been derived from literature or museum searches or historic records. Exact locations have been buffered to produce the generalized locations. The exact species or community locations fall somewhere within the shaded area and not necessarily in the center. Information on this map does not include Natural Area Preserves, designated wetland areas or wildlife concentration areas."

If land development is to occur within an identified sensitive area and State or Federal money is involved a mitigation plan must be made to protect to some degree what is in the sensitive area. IF private money is used there is generally no required demand for mitigation. Hence, this is a good reason for purchasing these properties.

- Natural Resource Elements

To assist in focusing the discussion of the relative values of proposed open space land, we developed a quantitative scale, which gives us a way to measure the total attribute level if you will, of a particular open space. We gave the function of highest importance a value of 5 and those of lesser value 4, 3 or 2. To rate each of the Natural Resourced Elements of Table 2 we asked the question: What characteristics could we least afford to lose, at least in a potential sense. That is, we still have the characteristic, but perhaps we now have less of it. For example we considered clean drinking water as the most important attribute open space can provide to East Lyme, particularly since approximately 80% of the Town gets Town supplied water and we live, travel and build over our water supply. We then compared each resource element to another, again asking the question which attribute could we best afford to give up, not- not have but what could we afford to lose part of most easily. For some natural elements we could not separate out a distinct value, which is why we have one resource element worth 5 points, i.e., drinking water and 2 at 4 points and 2 at 3 points and 3 at 2 points. We also experimented with different relative value rating but the end results stayed about the same. This we assumed reflected a reasonable quantitative system.

It should be noted also that the Steering Committee started on day one considering passive and active recreation as valid open spaces and that ball field and woods both have their place in such a plan.

- Water Access

This resource element was aimed at increasing public access to our fresh water lakes, ponds and streams as well as the salt water. Regarding fresh waters, there is very little public access outside of boat launching areas on Powers Lake, Pattagansett Lake, Gorton Pond and Dodge Pond. There is little access to streams. Access would provide for fishing and other recreational needs. Because there is such limited access and then usually limited to boat launching only, the resource element was highly rated to indicate its importance. The same reasoning regarding salt-water access was followed.

APPENDIX B

Parks & Recreation Department Correspondence regarding recreational needs.

Town of

41 Society Road

David M. Putnam
Director



East Lyme

Niantic, Connecticut 06357

Phone (860) 739-5828
Fax (860) 691-2409

PARKS & RECREATION DEPARTMENT

MEMORANDUM

To: Open Space Steering Committee
From: David Putnam, Director
Date: February 26, 2007
Re: Parks and Recreation Preliminary Open Space Needs

The Parks and Recreation Department would like the Open Space Steering Committee to review the following future needs of the Parks and Recreation Department:

- Additional active areas for ball fields are needed. The minimum accepted standard for play fields is 10-acres/1,000 population. Presently the town has approximately 140 acres of play field sites, which includes the public schools, Peretz Park @ Bridebrook, Smith-Harris Park (Little League and PeeWee Football), and Veterans Memorial Park. The town is presently approximately 40 acres short in this area. The property on Roxbury Road across from Corey Lane (State Property) should be strongly looked as a potential site for more play fields for Soccer, Lacrosse, Football and Baseball.
- The department recommends that areas north of route 95 be investigated for a park setting preferably on land surrounding Pattagansett Lake. Possible Active and Passive activities should be explored.
- With the re-alignment of the railroad tracks – and the re-building of the boardwalk consideration should be made so that vehicle access can be made to the Amtrak Beach.
- With increased use, possible transient boat docking facilities and a trailhead for the Boardwalk being located at Cini Park a permanent bathroom/storage facility is recommended.
- Pressure from dog owners continues in our park settings. It is recommended that the town explore the possibility of developing an area exclusively available for dogs to roam off leash in a maintained area.

Cc: Parks and Recreation Commission

Town of East Lyme Active Recreation Areas Inventory

Name of Facility	Swimming	Picnic	Boat Launch	Playscape	Pavilion	Beach	Hiking Trail	Baseball	Softball	Soccer/Lax	Football	Basketball	Field Hockey
Parks and Recreation Facilities													
Town of East Lyme													
McCook Point Park	x	x		x	x	x	x						
Hole-in-the-Wall Beach	x				x	x	x						
Cini Park/Amtrak Beach	x	x	x car top			x							
Veteran's Memorial Park		x					x	x	x				
Smith Harris Park		x						xxxx					
Peretz Park @ Bridebrook				x				x	xx	xxx		xx	
Niantic Bay Boardwalk							x						
Oswegatchie Hills							x						
Bobrow Property													
Board of Education Facilities													
East Lyme High School	x indoor pool							x	x	x	x		x
East Lyme Middle School				x						x			
Flanders Elementary School				x					x				
Lillie B. Haynes Elem. School				xx									
Niantic Center School				xx					x				

APPENDIX C

Climate change impact on watersheds.

USDA-UM Studies Climate Impacts on Watersheds

April 24, 2008

A U.S. Department of Agriculture-funded study done at the University of Massachusetts Amherst shows that rising temperatures due to climate change will reduce the availability of water in the Connecticut River Watershed during the summer when demand is highest and increase sediment and pollution loads carried by rivers and streams. The river serves as Greater Boston's primary water supply and is home to thousands of species of plants and animals in a national Fish and Wildlife Refuge.

Changes in the watershed will add to existing pressure on ecosystems and have important consequences for agriculture, forestry, fisheries and water supplies. Results of the study were published earlier this year online in *Climatic Change*.

"The response of watershed systems is a new area of climate change research, and the U.S. Environmental Protection Agency is calling for proposals to study this issue," says Timothy Randhir, a professor of natural resources conservation. "With additional funding, I hope to expand this research to the national level." Graduate student Eric Marshall co-authored the study.

"Fortunately, sound land-use planning can help protect the watershed, including the maintenance of forests in urban areas, reducing loss of open space throughout the watershed and protecting flood plains," says Randhir. "Low-impact development and smart growth principles can go a long way in our ability to handle climatic impacts."

"Communities will need to plan for water stress months and implement water conservation practices throughout the year," says Randhir. "Water harvesting along with a network for upland storage could help manage water resources, and maintaining vegetation along streams will provide a buffer between surface runoff and sensitive streams."

Computer models used to predict changes over the next 40 years showed a decrease in the annual amount of water running off the surface of the land to feed streams and rivers in the watershed, which contains 390 towns and cities and an estimated 2.3 million people. Large changes in the timing of this runoff were also predicted.

"Typically, we see precipitation held as snow throughout much of New England in winter, and a slow release of water during the spring melting season. But warmer temperatures associated with climate change will change this pattern," says Randhir. "This is expected to decrease the annual snowpack and can cause large increases in runoff during the winter months, especially January. Systems that handle stormwater in urban areas will have to add extra capacity to avoid being overwhelmed by flooding."

Warmer temperatures were predicted to decrease runoff by up to 71 percent in the late summer months of July and August when demand is highest, resulting in reduced stream and river flows that could threaten community water supplies and the production of power at 16 hydroelectric

dams located on the Connecticut River. Lower water levels in streams and rivers would mean less water for agriculture and make it more difficult to navigate rivers.

Many species of animals may have trouble adapting to the change. "Fish need adequate water flowing in rivers and streams in order to migrate," says Randhir. "We can expect to see severe strains on spring fish runs, and changes in the watershed also will increase environmental stress on other species including mammals and birds."

Randhir expects water quality to decrease as surface temperatures rise. Sediment loads carried by rivers and streams were predicted to rise by 50 percent between June and October while the volume of waters receiving the sediment decreased. In addition, changes in the watershed will alter the balance of key nutrients such as nitrogen and phosphorus, resulting in more frequent and intense blooms of algae and increased growth of aquatic plants.

Stormwater systems in urban areas will have to plan for the added sediment and pollution, and greater amounts of sediment will be carried into Long Island Sound, where the Connecticut River meets the sea. Higher sediment loads and pollutant levels could also impact the ability of fish to migrate, and place additional stress on aquatic ecosystems.

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APPENDIX D

Climate Carbon Storage and Connecticut's forests. Verbal permission was given by the Connecticut Forest and Park Association to include this article.

Because trees, especially many forest trees, live for a long time, forests are valuable carbon sinks. Conversely, the destruction of forests, especially by fire or fire following land clearing, releases enormous amounts of carbon dioxide.

plus the various other life forms in soil can store an additional amount of carbon as wood and starch (food for future respiration or growth). In temperate regions, this storage may be equal to or more than the carbon stored above ground.

Because trees, especially many forest trees, live for a long time, forests are valuable carbon sinks. Conversely, the destruction of forests, especially by fire or fire following land clearing, releases enormous amounts of carbon dioxide. Current estimates suggest 18 percent to 25 percent of the annual increase in atmospheric CO₂ is from deforestation. Consequently, maintenance of growing healthy forests is an important strategy in combating global warming,

Forest products are a way of prolonging the carbon stored by forests. Solid wood products like lumber and plywood have longer lives than fiber or energy products. Consequently, forest management that favors producing larger trees suitable for solid wood products will store more carbon and often yield more financial returns.

Losses and gains

In Connecticut 1,859 million acres are forested. This is about 60 percent of the state's land area. The forests are concentrat-

ed in the Northwest Corner and the east central hills, and the eastern edge at the Rhode Island border. Over the past decade or more, the major increases in forest area have been in Hartford and Litchfield counties and the biggest losses are in Windham and New London counties.

Between 1952 and 1998, Connecticut's timber inventory more than doubled to 3.2 billion cubic feet. Preliminary estimates are that the timber inventory probably increased over 3.5 billion cubic feet by 2005. About two-thirds of this volume is in commercial hardwoods, and most of the current growth is in hardwoods. The current inventory of trees and shrubs is 108 million metric dry tons of biomass.

Each year, Connecticut's timber volume grows by more than 1.7% – about 61.6 million cubic feet. Only eight-tenths of 1 percent of Connecticut's timber volume is removed – about 28.2 million cubic feet, which gives a growth to removal ratio of 2.2 to 1. It is important, however, to understand that removals are not just harvests for sale and use. Of the 28.2 million cubic feet removed, 17.5 million cubic feet went to forest products or logging residue. Land use conversion and development – deforestation by another name – was the cause of 10.7

million cubic feet of removals. This volume of deforested biomass is higher than the 9.7 million cubic feet average estimated over 1985 to 1998.

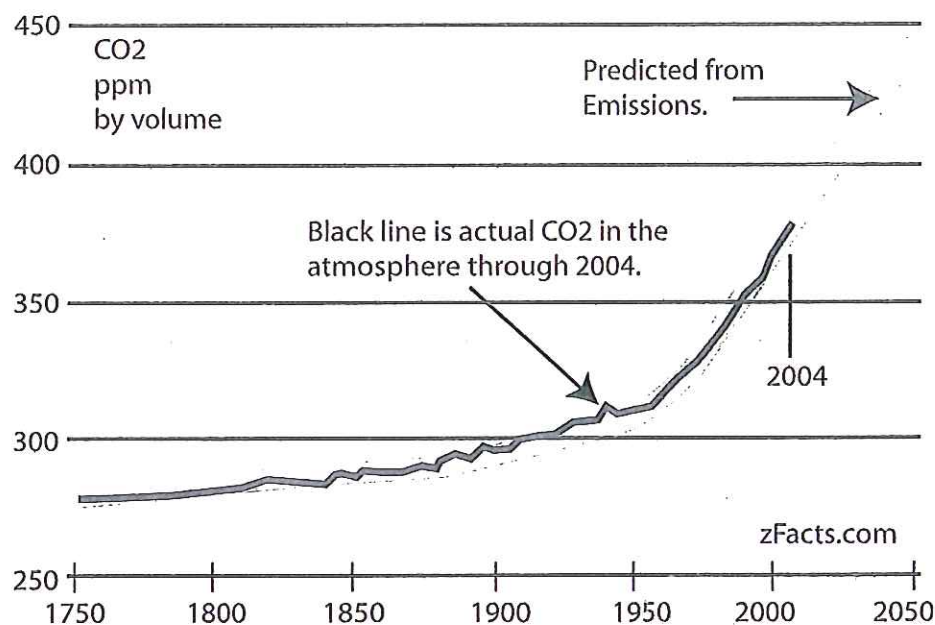
Connecticut forests held 127.5 MMT of live above ground biomass in 2005, which is 234 MMTCO₂e. The growth each year adds 1,881 MT of biomass – 3.5 MMTCO₂e. Removals are 861 MT, of which 534 MT go into forest products or logging residue. Deforestation removes another 327 MT¹ – or 0.6 MMTCO₂e. While we cannot be sure that none of the deforested volume ended up in the forest products chain, the land went out of production and is no longer sequestering carbon in forest biomass form.

Connecticut forests could absorb more carbon. One obvious way would be to grow larger trees, which would yield lumber for logs and solid wood product. Another is to move toward various “smart growth” strategies that leave larger tracts of trees undisturbed.

Incentives for Carbon Sequestration

The Kyoto Protocol, which the United States did not sign, has spawned attempts to use market forces to favor reduction in greenhouse gases and sequestration of more CO₂. Two kinds of markets are emerging that will favor more efficient use of fossil fuels and more effective sequestration of carbon. The first is carbon exchange markets, of which the Chicago Carbon Exchange is an interesting example. Several similar markets are emerging in Europe as tougher pollution standards are employed. A report on carbon markets is available on the CFPA Web site (www.ctwoodlands.org).²

Connecticut has been a leader in establishment of the Regional Greenhouse Gas Initiative (known as RGGI and pronounced “Reggie”), which will begin operation in 2009. California has a similar agreement, and others are developing. These voluntary approaches create a scarcity of rights to pollute greenhouse gases and the markets for



continued on page 12

BY WILLIAM R. BENTLEY

When the Intergovernmental Panel on Climate Change released its revised report last February, Americans began to think more about global climate changes. Al Gore's film, "An Inconvenient Truth," helped bring attention to the issue in a more vivid way, and the Nobel Prize award to the panel and Mr. Gore raised the nation's attention considerably.

Carbon dioxide is the leading greenhouse gas. It traps heat radiated from the sun with the Earth's atmosphere, thus creating the greenhouse effect that we now call global warming. The rapid increase in CO₂ levels is well documented, and current levels may be the highest in the past 655,000 years. While some of the recent warming may be part of a long-term cycle, virtually all scientists attribute much of the increase in average temperatures to higher levels of CO₂. Fossil fuel burning since the Industrial Revolution (beginning in the mid-1700s) caused these levels.

The consequences will be global, but we also may see dramatic changes in Connecticut. We could experience over 100 days of temperatures over 90 degrees, many over 100 degrees. Our vegetation will change as northern species like sugar maple and central species like red oak disappear. Insect pests will increase, and birds and mammals will change. Our climate is predicted to eventually become like that of North Carolina today.

Carbon Sequestration by Forests

One solution to increased CO₂ in the atmosphere is to capture and store carbon in plants. Plants naturally store carbon in photosynthesis: CO₂ from the atmosphere combines with water from the soil to make oxygen (which is released back into the atmosphere) and sugars. The sugars are eventually converted to various starches, celluloses, and other components of plants. All plants store carbon above ground and below ground in roots.

In trees, the woody stems and branches are the visible form of the net photosynthate after respiration. The root systems of trees



Robert Pagnini

CLIMATE, CARBON STORAGE, AND CONNECTICUT'S FORESTS

A forester looks ahead

Climate and forests

continued from page 11

trading rights. The results are more focus on reducing gas emissions instead of more ways to sequester carbon.

Another alternative is an international carbon fee. Most economists agree that such fees are the fairest and most effective social tool for encouraging less pollution and more carbon sequestration. Jeffrey Sachs estimates that a \$25 per metric ton of CO₂ would be effective. However, the fees are often called a carbon tax, and taxes are increasingly unpopular in America, Europe, and other economic centers. Also, getting an international agreement on a fee level would be even more difficult than the next round of treaty negotiations to replace the Kyoto Protocol.³

Don't exclude Connecticut as a carbon sink

Connecticut needs to advocate a broader policy approach to replace the Kyoto Protocol in 2012. Given the huge amount of carbon stored in forests and the potential to store more and release less, the new protocol should count forest growth in all forests, not just new plantations and other projects. The current discussion of finding carbon sinks virtually excludes all forest growth in Connecticut and other northeastern states. Three consequences flow from this exclusion. First, an enormous annual increment to the total sequestered carbon is ignored. Two, carbon sequestration cannot easily be added to the incentives that encourage working forests. Three, the loss of forest biomass and future growth to development is ignored and, in a policy sense, it is invisible.

The latter consequence is important in much of the forested area of North America. Forty percent of Connecticut's forest removals are forests that are cleared for commercial and residential development. Some of the removed timber is harvested, rather than burned or placed in landfills, and moves into solid wood and fiber products. However, those lands are permanently

Connecticut Land Uses

Forest	60%
Farm	9%
Other ¹	31%

The current discussion of finding carbon sinks virtually excludes all forest growth in Connecticut and other northeastern states.

removed from the forest base and future growth and carbon sequestration.

One important note about urban forests: Our knowledge of urban trees and their salutary effects on the urban environment has increased rapidly in the past 20 years.⁴ Urban trees also sequester carbon above and below ground. However, urban vegetation requires much more tending over time, requiring fossil fuels to trim and harvest plants and to grind cuttings. The net carbon sequestration, as a consequence, is negative. This does not diminish the great importance of urban vegetation but simply says urban forestry as it's now practiced does not add to the net annual sequestration of carbon.

Recommendations

I have made several recommendations to the Connecticut Forest & Park Association for its advocacy program:

- ▶ Join with several other non-profit organizations, like Environment Northeast and Winrock International, in supporting use of the Forest Service FIA⁵ system for estimating carbon sequestration at the state level.
- ▶ Encourage the development of carbon exchange markets, like the Chicago Carbon Exchange, even if they have little immediate direct benefit for Connecticut.
- ▶ Promote or take lead to develop market mechanisms that can aggregate carbon and forest values in Connecticut.
- ▶ Encourage more research on urban forests from the perspective of carbon sequestration
- ▶ CFPA should advocate three other positions that will encourage working forests and reduce the pressure to convert forests to other land uses.
- ▶ Support making the tax deductions for donation of conservation easements over a 15-year period a permanent part of the US Tax Code and adding this as a deduction against Connecticut income taxes.
- ▶ Explore multi-pronged approaches to encouraging sustainable forest management on Connecticut's private forestlands.

- ▶ Encourage Connecticut and national research organizations to conduct studies on the potential of various institutional mechanisms to lead forest owners to sequester more carbon and not deforest or change land use.

William Bentley is a consulting forester and an associate of CFPA.

Footnotes

¹ MMTCO₂e is the abbreviation for million metric tons carbon dioxide equivalent.

² See Whitman, Austin. 2007. The Carbon Markets: Forests, Credits, and Uncertainty. A Report for the Connecticut Forest and Park Association. 50 p.
http://www.ctwoodlands.org/research/research_notes.html.

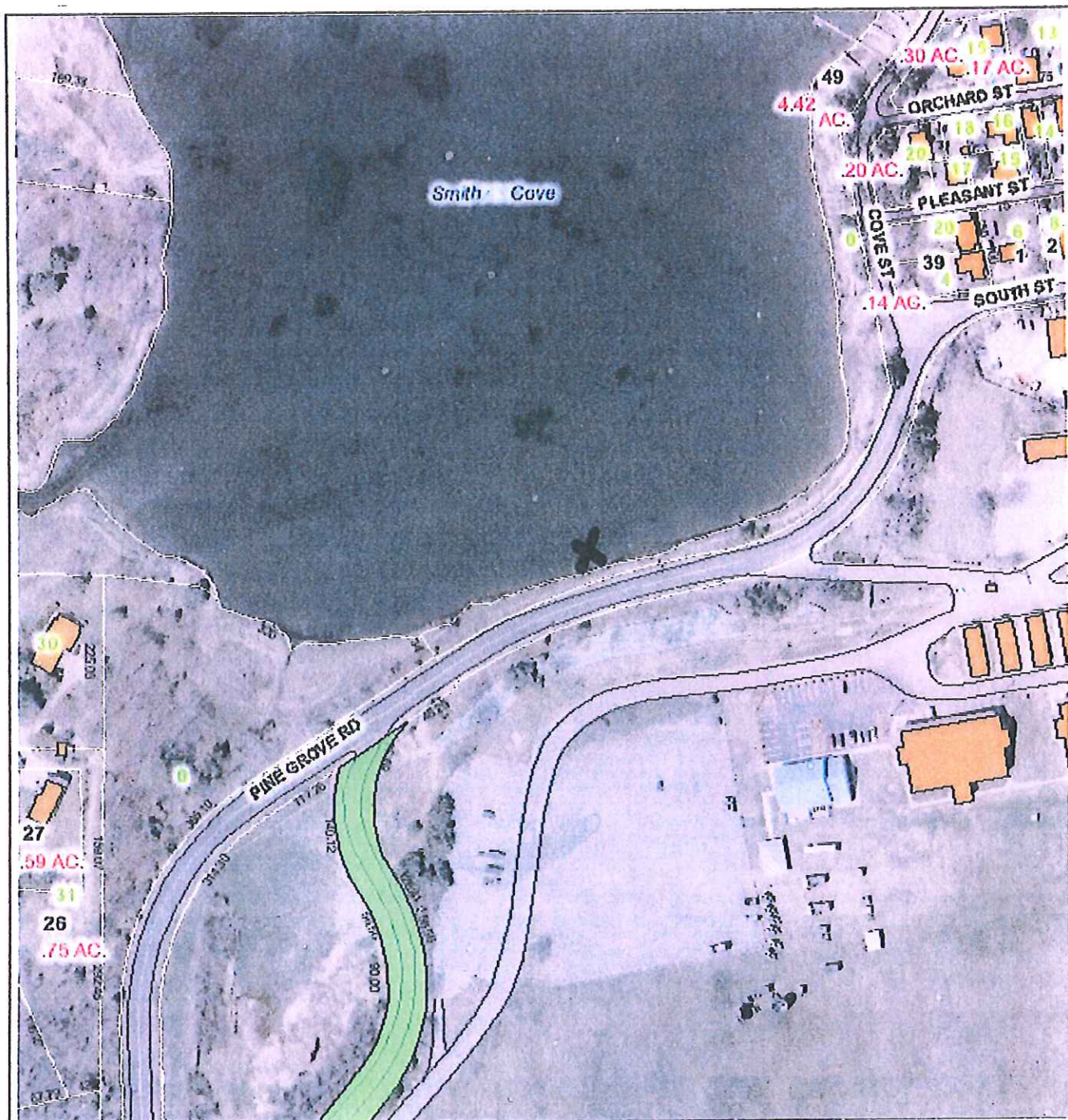
³ See Sachs' article, "The Road to Clean Energy Starts Here" in the May 2006 Scientific American.

⁴ For example, see the Work of Dr. David Nowak and his colleagues with the USDA Forest Service on urban forestry and the health and climate benefits. Northeastern Forest Experiment Station publications can be found at http://www.fs.fed.us/nc/newtown_square/publications/

⁵ FIA stands for Forest Inventory and Analysis, a program of estimating forest volumes and growth, plus many other variables, which is conducted by the USDA Forest Service.

APPENDIX E

Potential small boat launch site.



Interactive Map



Date:
11/16/07

APPENDIX F

Two landmark studies, the Eight Mile River Watershed Management Plan and the Niantic River Watershed protection plan were consulted during this study. Meg Parulis, former Director of Planning was involved in the Niantic River Watershed protection plan and provided invaluable insights for us. It is from the Niantic River Watershed Protection Plan that the quantification of impermeable surface affects on water quality was used. Section 4.5 of the Niantic River Watershed Protection Plan describes the impervious surface problem. Map 5 of the Open Space Plan shows the percent of impermeable surface in East Lyme.

Map 4.5-10 shows the Niantic River Watershed use areas. Map 1B shows the Eight Mile River Watershed Management Plan areas, part of which is also in East Lyme.

Figure E-1 is from a Connecticut Department of Environmental Protection brochure entitled, "Rainfall as a Resource." The four scenarios show how on a percentage basis, that as the natural ground cover is removed, and replaced with an impervious surface, the rainwater distribution changes.

HADDAM

SALEM

LYME

EAST LYME

SSSEX

WILD & SCENIC RIVER STUDY

c:\gis\BarnHills\projects\lirrept_topo.apr



Created for the Elephantine River
Wild & Scenic Study Committee
by the CT River Special
Conservation District

DATA SOURCES
Hydrology, town
boundaries, roads, CT DEP
Open-space, INCO Study Comm.

Map for planning purposes.
Ken Geisler, June 10, 2006

MAP 1B

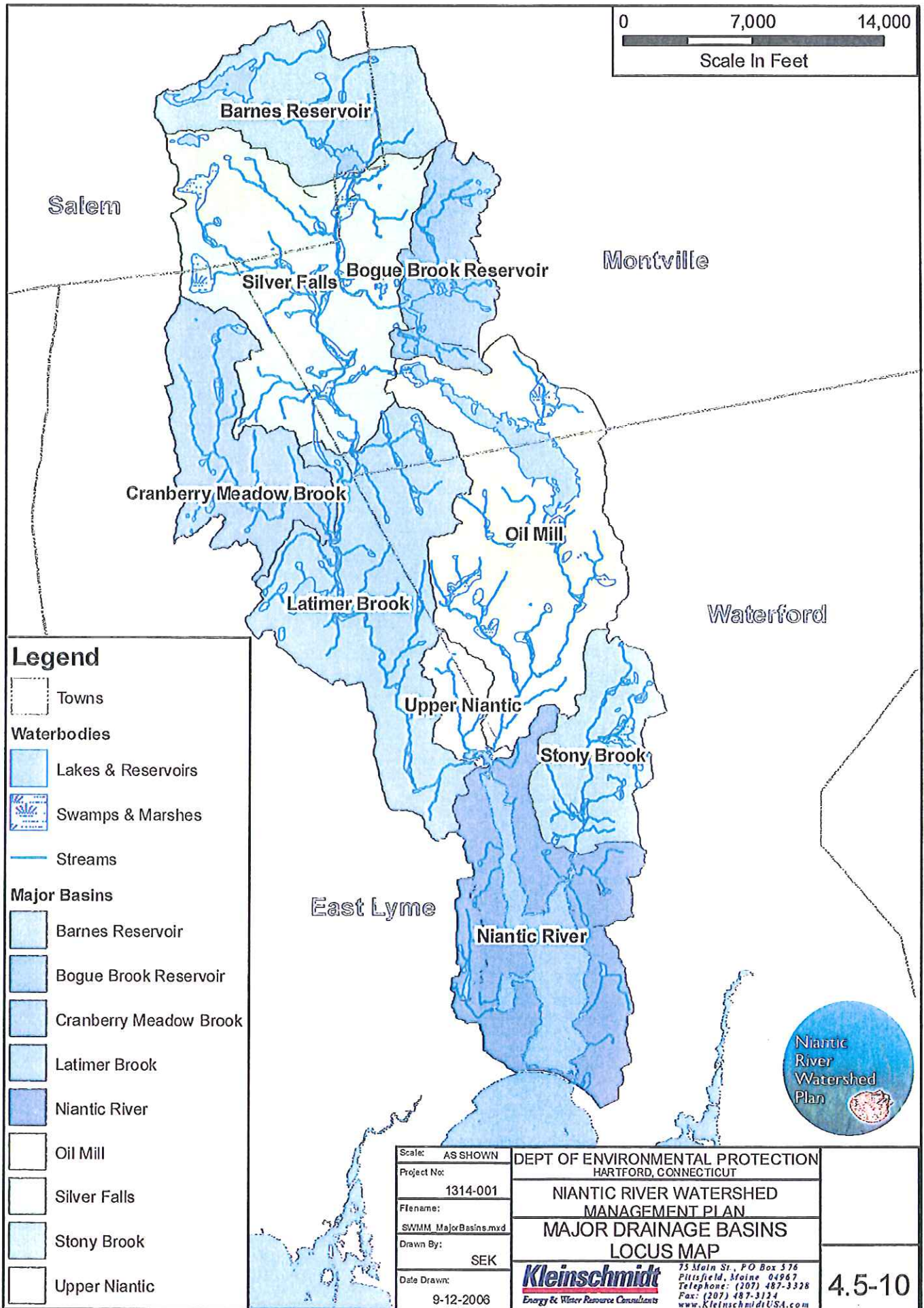
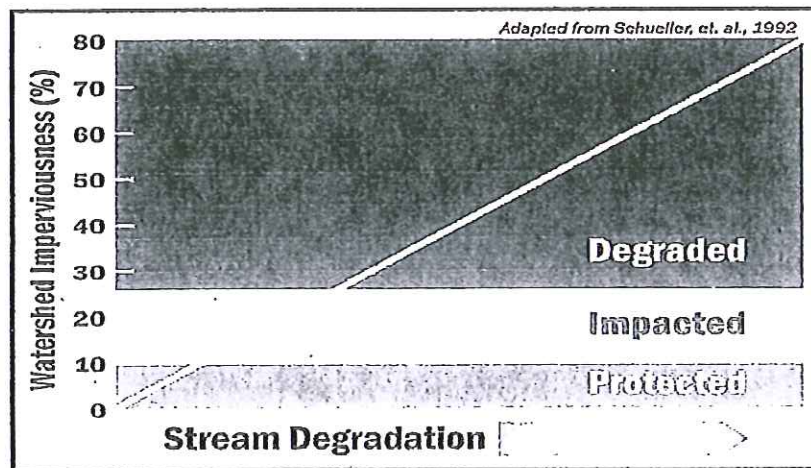


Figure 4.5-1. The Relationship between Watershed Imperviousness and Stream Degradation



(adapted from UCONN NEMO, 2006 and Schueler, 2002)

References

- Civco, D.L., J.D. Hurd, E.H. Wilson, C.L. Arnold, and S. Prisloe, 2002. *Quantifying and Describing Urbanizing Landscapes in the Northeast United States*. Photogrammetric Engineering and Remote Sensing 68(10): 1083-1090.
- Schueler, T.R., 1994. *The Importance of Imperviousness*. Watershed Protection Techniques, vol. 1(3): pp. 100-11.
- Sleavin, W.S., Prisloe, L. Giannotti, J. Stocker, D.L. Civco. 2000. *Measuring Impervious Surfaces for Nonpoint Pollution Modeling*. Proc. 2000 ASPRS Annual Convention, Washington, D.C. 11 p.
- Center for Watershed Protection, 2003. *Impacts of Impervious Cover on Aquatic Systems*. Ellicott City, MD. Pp. 150.

From Niantic River Watershed Protection Plan

4.5 Watershed Land Use and their Threats to Water Quality

Civco and others (2002) have described land use as, “the common denominator underlying many of the issues that our communities face from nonpoint source water pollution and open space preservation to sustainable economic development and community character”. Changes in land use are the result of community decision-making with regard to all of these community objectives. Development converts vegetated land to mostly impervious surfaces. When the pattern of development emanates from urban areas to suburban and rural areas, we call this pattern ‘urban sprawl’. Therefore, as settlement expands into rural areas, building and road density increases in these areas increasing the area of impervious surfaces.

The area of impervious surfaces in a watershed is essential to understanding nonpoint source pollution potential and consequent management requirements (Schueler, 1994; Sleavin *et al.*, 2000). Impervious surfaces include any surface that water cannot infiltrate, such as parking lots, paved roads, sidewalks, buildings, rooftops, and highly compacted earth. Impervious surfaces not only increase the total volume of runoff, but also transmit pollutants readily and can even contribute to thermal pollution. Therefore, much of the impervious surface we recognize in our community is associated with transportation or buildings. Schueler (1994) noted that the transportation system typically contributes the most to total impervious area in a watershed.

Impervious surfaces lead to four major impacts to a watershed. In no particular order, these are *altering the natural flow of water, aquatic habitat loss, decreasing water quality, and loss of biological diversity*. As a watershed’s imperviousness increases, the quality of its streams decreases. Early and recent work by the Center for Watershed Protection (CWP) in the Chesapeake Bay Watershed established a close relationship between a watershed’s imperviousness and the state of water and habitat quality degradation in streams (CWP, 2003). Figure 4.5-1 illustrates this relationship and reflects the degree of stream degradation as *degraded, impacted, and protected*.

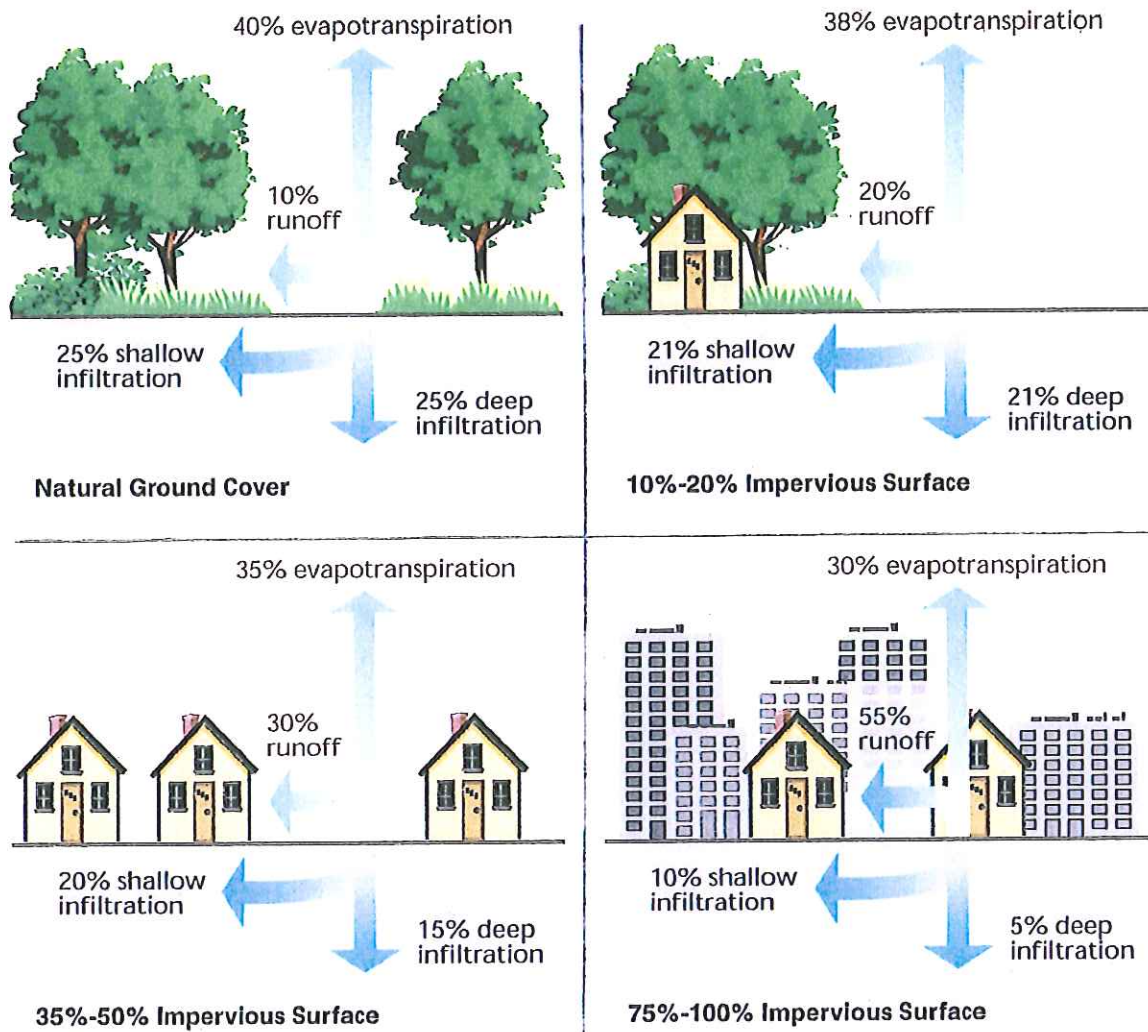


Fig. 3.21 -- Relationship between impervious cover and surface runoff. Impervious cover in a watershed results in increased surface runoff. As little as 10 percent impervious cover in a watershed can result in stream degradation.
 In Stream Corridor Restoration: Principles, Processes, and Practices (10/98).
 By the Federal Interagency Stream Restoration Working Group (FISRWG) (15 Federal agencies of the U.S.)

Figure E-1

APPENDIX G

Public Act 490

The “Declaration of Policy” statement from the Act outlines the intent of Public Act 490.

Declaration of Policy: It is hereby declared that it is in the public interest to encourage the preservation of farm land, forest land and open space land in order to maintain a readily available source of food and farm products close to the metropolitan areas of the state, to conserve the state’s natural resources and to provide for the welfare and happiness of the inhabitants of the state [and] that it is in the public interest to prevent the forced conversion of farm land, forest land and open space land to more intensive uses as the result of economic pressures caused by the assessment thereof for purposes of property taxation at values incompatible with their preservation as such farm land, forest land and open space land.

Samples of the required applications are shown for farmland, open space and forestland.



APPLICATION TO THE ASSESSOR FOR CLASSIFICATION OF LAND AS FOREST LAND

Declaration of policy: It is hereby declared that it is in the public interest to encourage the preservation of farm land, forest land and open space land in order to maintain a readily available source of food and farm products close to the metropolitan areas of the state, to conserve the state's natural resources and to provide for the welfare and happiness of the inhabitants of the state [and] that it is in the public interest to prevent the forced conversion of farm land, forest land and open space land to more intensive uses as the result of economic pressures caused by the assessment thereof for purposes of property taxation at values incompatible with their preservation as such farm land, forest land and open space land.

*A copy of a report issued by a Certified Forester must accompany this application; otherwise it cannot be accepted.
Please print. Complete all appropriate sections, using additional sheets if necessary. See reverse for additional filing information.*

Name of Owner(s): _____

Property Location: _____

Mailing Address: _____

(Number & Street) (Town) (State) (Zip Code)

Total acreage of land: # _____ Portion qualified as forest land by Certified Forester: # _____

(Acres) (Acres)

Certified Forester's Name: _____ Certificate # _____ Expires: _____

Certified Forester's Address: _____

(Number & Street or P.O. Box) (Town) (State) (Zip Code)

Date of Certified Forester's Report: _____ (Enter date issued, not the date you received the report.)

Has the use or acreage of this land changed since the date the Certified Forester's report was issued? ☐ YES ☐ NO

If YES, enter date of change and explain: _____

Do you have land classified as forest land in any other Connecticut town? ☐ YES ☐ NO

If YES, enter name of other town(s): _____

*Complete Items 1 and 2, entering location and number of acres in each tract. List each such tract separately.
Assessor will complete Items 3 and 4 if application is approved.*

1	2	3	4
TRACT	# ACRES	ASSESSED VALUE	EXEMPT ASSESSMENT
TOTAL ACRES:			
TOTAL CLASSIFIED USE ASSESSMENT:			

Owner's Affidavit

I DO HEREBY DECLARE under penalty of false statement that the statements made herein by me are true according to the best of my knowledge and belief, and that I have received and reviewed §12-504a through §12-504e, inclusive of the Connecticut General Statutes concerning a potential tax liability upon a change of use or sale of this land.

DATED: _____ /S/ _____

DATED: _____ /S/ _____

Assessor's Verification Section

Acquisition Date: _____ Map / Block / Lot: _____ Total Acreage: _____ Acreage Classified: _____

Vol. / Page: _____ Date Recorded: _____

Application approved: ☐ YES ☐ NO Reason for denial: _____

/S/ _____ Assessor _____ Date _____

Sec. 12-504a. Conveyance tax on sale of land classified as farm, forest or open space land by record owner.

(a) Any land which has been classified by the record owner thereof as open space land pursuant to section 12-107e, if sold by him within a period of ten years from the time he first caused such land to be so classified, shall be subject to a conveyance tax applicable to the total sales price of such land, which tax shall be in addition to the tax imposed under sections 12-494 to 12-504, inclusive. Said conveyance tax shall be at the following rate: (1) Ten per cent of said total sales price if sold within the first year following the date of such classification; (2) nine per cent if sold within the second year following the date of such classification; (3) eight per cent if sold within the third year following the date of such classification; (4) seven per cent if sold within the fourth year following the date of such classification; (5) six per cent if sold within the fifth year following the date of such classification; (6) five per cent if sold within the sixth year following the date of such classification; (7) four per cent if sold within the seventh year following the date of such classification; (8) three per cent if sold within the eighth year following the date of such classification; (9) two per cent if sold within the ninth year following the date of such classification; and (10) one per cent if sold within the tenth year following the date of such classification. No conveyance tax shall be imposed on such record owner by the provisions of sections 12-504a to 12-504f, inclusive, following the end of the tenth year after the date of such classification by such record owner.

(b) Any land which has been classified by the record owner thereof as farm land pursuant to section 12-107c or as forest land pursuant to section 12-107d, if sold by him within a period of ten years from the time he acquired title to such land or from the time he first caused such land to be so classified, whichever is earlier, shall be subject to a conveyance tax applicable to the total sales price of such land, which tax shall be in addition to the tax imposed under sections 12-494 to 12-504, inclusive. Said conveyance tax shall be at the following rate: (1) Ten per cent of said total sales price if sold within the first year of ownership by such record owner; (2) nine per cent if sold within the second year of ownership by such record owner; (3) eight per cent if sold within the third year of ownership by such record owner; (4) seven per cent if sold within the fourth year of ownership by such record owner; (5) six per cent if sold within the fifth year of ownership by such record owner; (6) five per cent if sold within the sixth year of ownership by such record owner; (7) four per cent if sold within the seventh year of ownership by such record owner; (8) three per cent if sold within the eighth year of ownership by such record owner; (9) two per cent if sold within the ninth year of ownership by such record owner; and (10) one per cent if sold within the tenth year of ownership by such record owner. No conveyance tax shall be imposed by the provisions of sections 12-504a to 12-504f, inclusive, following the end of the tenth year of ownership by such record owner.

Sec. 12-504b. Payment of tax; land declassified; assessment change. Said conveyance tax shall be due and payable by the particular grantor who caused such classification to be made to the town clerk of the town in which the property is entered upon the tax list at the time of the recording of his deed or other instrument of conveyance. Such conveyance tax and the revenues produced thereby shall become part of the general revenue of such municipality. No deed or other instrument of conveyance which is subject to tax under sections 12-504a to 12-504f, inclusive, shall be recorded by any town clerk unless the tax imposed by said sections has been paid. Upon the recording of such deed and the payment of the required conveyance tax such land shall be automatically declassified and the assessor shall forthwith record with the town clerk a certificate setting forth that such land has been declassified. Thereafter, such land shall be assessed at its fair market value as determined by the assessor under the provisions of section 12-63 for all other property, until such time as a record owner may reclassify such land.

Sec. 12-504c. Excepted transfers. The provisions of section 12-504a shall not be applicable to the following: (a) Transfers of land resulting from eminent domain proceedings; (b) mortgage deeds; (c) deeds to or by the United States of America, state of Connecticut or any political subdivision or agency thereof; (d) strawman deeds and deeds which correct, modify, supplement or confirm a deed previously recorded; (e) deeds between husband and wife and parent and child when no consideration is received, except that a subsequent nonexempt transfer by the grantee in such cases shall be subject to the provisions of section 12-504a as it would be if the grantor were making such nonexempt transfer; (f) tax deeds; (g) deeds releasing any property which is a security for a debt or other obligation; (h) deeds of partition; (i) deeds made pursuant to a merger of a corporation; (j) deeds made by a subsidiary corporation to its parent corporation for no consideration other than the cancellation or surrender of the capital stock of such subsidiary; (k) property transferred as a result of death by devise or otherwise and in such transfer the date of acquisition or classification of the land for purposes of sections 12-504a to 12-504f, inclusive, whichever is earlier, shall be the date of acquisition or classification by the decedent; (l) deeds to any corporation, trust or other entity, of land to be held in perpetuity for educational, scientific, aesthetic or other equivalent passive uses, provided such corporation, trust or other entity has received a determination from the Internal Revenue Service that contributions to it are deductible under applicable sections of the Internal Revenue Code; (m) land subject to a covenant specifically set forth in the deed transferring title to such land, which covenant is enforceable by the town in which such land is located, to refrain from selling or developing such land in a manner inconsistent with its classification as farm land pursuant to section 12-107c, forest land pursuant to section 12-107d or open space land pursuant to section 12-107e for a period of not less than eight years from the date of transfer, if such covenant is violated the conveyance tax set forth in this chapter shall be applicable at the rate which would have been applicable at the date the deed containing the covenant was delivered and, in addition, the town or any taxpayer therein may commence an action to enforce such covenant; and (n) land the development rights to which have been sold to the state under chapter 422a. If such action is taken by such a taxpayer, the town

State of Connecticut
Form M-30, Rev. 9/02



Prescribed by the Commissioner
of the Department of Agriculture

APPLICATION TO THE ASSESSOR FOR CLASSIFICATION OF LAND AS OPEN SPACE

Declaration of policy: It is hereby declared that it is in the public interest to encourage the preservation of farm land, forest land and open space land in order to maintain a readily available source of food and farm products close to the metropolitan areas of the state, to conserve the state's natural resources and to provide for the welfare and happiness of the inhabitants of the state (and) that it is in the public interest to prevent the forced conversion of farm land, forest land and open space land to more intensive uses as the result of economic pressures caused by the assessment thereof for purposes of property taxation at values incompatible with their preservation as such farm land, forest land and open space land.

*Please print. Complete all appropriate sections, attaching additional sheets if necessary.
See reverse for additional filing information.*

Name of Owner(s): _____

Property Location: _____
(Number & Street) (Town) (State) (Zip Code)

Mailing Address: _____
(Number & Street or P.O. Box) (Town) (State) (Zip Code)

Check appropriate box: ☐ New Application ☐ Ownership Change ☐ Acreage Change ☐ Use Change

Total acreage of land: # _____ (Acres) Portion in actual use for open space purposes: # _____ (Acres)

Description of land: _____

*Complete Items 1 and 2, entering general description of land's use and show number of acres for each such use.
Assessor will complete Items 3 and 4 if application is approved.*

1	2	3	4
CURRENT USE	# ACRES	USE VALUE	USE ASSESSMENT
TOTAL ELIGIBLE ACRES:			
TOTAL CLASSIFIED USE ASSESSMENT:			

Is this property located in area designated as open space on the municipal plan of development? ☐ YES ☐ NO

Has there been any change in the property's use since the municipal plan of development was adopted? ☐ YES ☐ NO

If YES, describe the change: _____

Owner's Affidavit

I DO HEREBY DECLARE under penalty of false statement that the statements made herein by me are true according to the best of my knowledge and belief, and that I have received and reviewed §12-504a through §12-504e, inclusive of the Connecticut General Statutes concerning a potential tax liability upon a change of use or sale of this land.

DATED: _____ /S/ _____

DATED: _____ /S/ _____

Assessor's Verification Section

Acquisition Date: _____ Map / Block / Lot: _____ Total Acreage: _____ Acreage Classified: _____

Vol. / Page: _____ Date Recorded: _____

Application approved: ☐ YES ☐ NO Reason for denial: _____

/S/ _____ Assessor _____ Date _____

ASSESSOR: FORWARD COMPLETED COPY OF APPLICATION TO APPLICANT
OVER

Attachment for Forms M-29, M-30 and M-39
Applications to the Assessor for Classification of Land as Farm, Forest or Open Space Land

Sec. 12-504a. Conveyance tax on sale of land classified as farm, forest or open space land by record owner. (a) Any land which has been classified by the record owner thereof as open space land pursuant to section 12-107e, if sold by him within a period of ten years from the time he first caused such land to be so classified, shall be subject to a conveyance tax applicable to the total sales price of such land, which tax shall be in addition to the tax imposed under sections 12-494 to 12-504, inclusive. Said conveyance tax shall be at the following rate: (1) Ten per cent of said total sales price if sold within the first year following the date of such classification; (2) nine per cent if sold within the second year following the date of such classification; (3) eight per cent if sold within the third year following the date of such classification; (4) seven per cent if sold within the fourth year following the date of such classification; (5) six per cent if sold within the fifth year following the date of such classification; (6) five per cent if sold within the sixth year following the date of such classification; (7) four per cent if sold within the seventh year following the date of such classification; (8) three per cent if sold within the eighth year following the date of such classification; (9) two per cent if sold within the ninth year following the date of such classification; and (10) one per cent if sold within the tenth year following the date of such classification. No conveyance tax shall be imposed on such record owner by the provisions of sections 12-504a to 12-504f, inclusive, following the end of the tenth year after the date of such classification by such record owner.

(b) Any land which has been classified by the record owner thereof as farm land pursuant to section 12-107c or as forest land pursuant to section 12-107d, if sold by him within a period of ten years from the time he acquired title to such land or from the time he first caused such land to be so classified, whichever is earlier, shall be subject to a conveyance tax applicable to the total sales price of such land, which tax shall be in addition to the tax imposed under sections 12-494 to 12-504, inclusive. Said conveyance tax shall be at the following rate: (1) Ten per cent of said total sales price if sold within the first year of ownership by such record owner; (2) nine per cent if sold within the second year of ownership by such record owner; (3) eight per cent if sold within the third year of ownership by such record owner; (4) seven per cent if sold within the fourth year of ownership by such record owner; (5) six per cent if sold within the fifth year of ownership by such record owner; (6) five per cent if sold within the sixth year of ownership by such record owner; (7) four per cent if sold within the seventh year of ownership by such record owner; (8) three per cent if sold within the eighth year of ownership by such record owner; (9) two per cent if sold within the ninth year of ownership by such record owner; and (10) one per cent if sold within the tenth year of ownership by such record owner. No conveyance tax shall be imposed by the provisions of sections 12-504a to 12-504f, inclusive, following the end of the tenth year of ownership by such record owner.

Sec. 12-504b. Payment of tax; land declassified; assessment change. Said conveyance tax shall be due and payable by the particular grantor who caused such classification to be made to the town clerk of the town in which the property is entered upon the tax list at the time of the recording of his deed or other instrument of conveyance. Such conveyance tax and the revenues produced thereby shall become part of the general revenue of such municipality. No deed or other instrument of conveyance which is subject to tax under sections 12-504a to 12-504f, inclusive, shall be recorded by any town clerk unless the tax imposed by said sections has been paid. Upon the recording of such deed and the payment of the required conveyance tax such land shall be automatically declassified and the assessor shall forthwith record with the town clerk a certificate setting forth that such land has been declassified. Thereafter, such land shall be assessed at its fair market value as determined by the assessor under the provisions of section 12-63 for all other property, until such time as a record owner may reclassify such land.

Sec. 12-504c. Excepted transfers. The provisions of section 12-504a shall not be applicable to the following: (a) Transfers of land resulting from eminent domain proceedings; (b) mortgage deeds; (c) deeds to or by the United States of America, state of Connecticut or any political subdivision or agency thereof; (d) strawman deeds and deeds which correct, modify, supplement or confirm a deed previously recorded; (e) deeds between husband and wife and parent and child when no consideration is received, except that a subsequent nonexempt transfer by the grantee in such cases shall be subject to the provisions of section 12-504a as it would be if the grantor were making such nonexempt transfer; (f) tax deeds; (g) deeds releasing any property which is a security for a debt or other obligation; (h) deeds of partition; (i) deeds made pursuant to a merger of a corporation; (j) deeds made by a subsidiary corporation to its parent corporation for no consideration other than the cancellation or surrender of the capital stock of such subsidiary; (k) property transferred as a result of death by devise or otherwise and in such transfer the date of acquisition or classification of the land for purposes of sections 12-504a to 12-504f, inclusive, whichever is earlier, shall be the date of acquisition or classification by the decedent; (l) deeds to any corporation, trust or other entity, of land to be held in perpetuity for educational, scientific, aesthetic or other equivalent passive uses; provided such corporation, trust or other entity has received a determination from the Internal Revenue Service that contributions to it are deductible under applicable sections of the Internal Revenue Code; (m) land subject to a covenant specifically set forth in the deed transferring title to such land, which covenant is enforceable by the town in which such land is located, to refrain from selling or developing such land in a manner inconsistent with its classification as farm land pursuant to section 12-107c, forest land pursuant to section 12-107d or open space land pursuant to section 12-107e for a period of not less than eight years from the date of transfer, if such covenant is violated the conveyance tax set forth in this chapter shall be applicable at the rate which would have been applicable at the date the deed containing the covenant was delivered and, in addition, the town or any taxpayer therein may commence an action to enforce such covenant; and (n) land the development rights to which have been sold to the state under chapter 422a. If such action is taken by such a taxpayer, the town shall be served as a necessary party.

Sec. 12-504d. Appeals. Any person aggrieved by the imposition of a tax under the provisions of sections 12-504a to 12-504f, inclusive, may appeal therefrom as provided in sections 12-111 and 12-112.

Sec. 12-504e. Conveyance tax applicable on change of use or classification of land. Any land which has been classified by the owner as farm land pursuant to section 12-107c, as forest land pursuant to section 12-107d, or as open space land pursuant to section 12-107e, if changed by him, within a period of ten years of his acquisition of title, to use other than farm, forest or open space, shall be subject to said conveyance tax as if there had been an actual conveyance by him, as provided in sections 12-504a and 12-504b, at the time he makes such change in use and classification. Said conveyance tax schedule shall apply to fair market values as determined by the assessor under the provisions of section 12-63 for all other property.

State of Connecticut
Form M-29, Rev. 9/02



Prescribed by the Commissioner
of the Department of Agriculture

APPLICATION TO THE ASSESSOR FOR CLASSIFICATION OF LAND AS FARM LAND

The following section must be completed only if the land described in this application is leased / rented for farming.

I, _____ residing at _____				
(Name of Renter / Lessor)		(Number & Street)	(Town)	(State) (Zip Code)
DO HEREBY DECLARE under penalty of false statement, that I am renting / leasing for farming purposes, the land located at _____				
(Property Location)		(Town)	(State)	
Pursuant to a written lease or agreement that I entered into				
With _____				
(Owner's Name)		(Number & Street)	(Town)	(State) (Zip Code)
On the _____ day of _____, 19____				
or _____ day of _____, 20____	the term of which commences on			
On the _____ day of _____, 20____	and terminates on			
The _____ day of _____, 20____	in the amount of			
The _____ day of _____, 20____				
\$ _____	per acre	<input type="checkbox"/> month	<input type="checkbox"/> or year	<input type="checkbox"/> (Check appropriate box.)
/S/ _____	/S/ _____			
Signature of Owner (Lessor)		Signature of Renter (Lessee)		

ASSESSOR: FORWARD COMPLETED COPY OF APPLICATION TO APPLICANT AND
FORWARD COPY OF RENTAL STATEMENT TO
STATE OF CONNECTICUT
DEPARTMENT OF AGRICULTURE
765 ASYLUM AVENUE
HARTFORD, CONNECTICUT 06105
ATT: FRANK INTINO

FILING INFORMATION

The term "farm land" means any tract or tracts of land, including woodland and wasteland, constituting a farm unit. In determining whether land is farm land, the assessor shall take into account, among other things, the acreage of such land, the portion thereof in actual use for farming or agricultural operations, the productivity of such land, the gross income derived therefrom, the nature and value of the equipment used in connection therewith, and the extent to which the tracts comprising such land are contiguous.

An application for farm land classification must be filed on this form, as prescribed by the Commissioner of the Department of Agriculture, pursuant to §12-107c(b) of the Connecticut General Statutes. The property owner (or owners) must complete this form and file it with the assessor of the town where the farm land is situated. *If there is more than one owner, each must sign the application.* The filing period is between September 1st and October 31st, except in a year in which a revaluation of all real property is effective, in which case the filing deadline is December 30th.

Failure to file in the proper manner and form shall be considered a waiver of the right to such classification under §12-107c(c) of the Connecticut General Statutes as of the October 1st assessment date. *A separate application must be filed for each parcel of land.*

You are responsible for contacting the assessor to update your application if there is a change in use, acreage or ownership of this property after the assessor approves its classification. If there is a change of use or a sale of the classified land, the classification ceases (pursuant to §12-504h of the Connecticut General Statutes) and you may be liable for an additional conveyance tax. Please review attached copies of the statutes concerning the imposition of this tax (§12-504a through §2-504e, inclusive, of the Connecticut General Statutes).

Please be advised that the assessor may require information in addition to that contained in this application in order to make a determination regarding classification.

State of Connecticut
Form M-29, Rev. 9/02



Prescribed by the Commissioner
of the Department of Agriculture

APPLICATION TO THE ASSESSOR FOR CLASSIFICATION OF LAND AS FARM LAND

The following section must be completed only if the land described in this application is leased / rented for farming.

I, _____ residing at _____
(Name of Renter / Lessor) (Number & Street) (Town) (State) (Zip Code)

DO HEREBY DECLARE under penalty of false statement, that I am renting / leasing for farming purposes, the land located at _____

(Property Location)

(Town)

(State)

Pursuant to a written lease or agreement that I entered into

With

(Owner's Name)

(Number & Street)

(Town)

(State)

(Zip Code)

On the _____ day of _____, 19____, the term of which commences on
or _____ day of _____, 20____
On the _____ day of _____, 20____, and terminates on
The _____ day of _____, 20____, in the amount of
The _____ day of _____, 20____
\$ _____ per acre ☐ month ☐ or year ☐ (Check appropriate box.)

/S/

/S/

Signature of Owner (Lessor)

Signature of Renter (Lessee)

ASSESSOR: FORWARD COMPLETED COPY OF APPLICATION TO APPLICANT AND
FORWARD COPY OF RENTAL STATEMENT TO
STATE OF CONNECTICUT
DEPARTMENT OF AGRICULTURE
765 ASYLUM AVENUE
HARTFORD, CONNECTICUT 06105
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Sec. 12-504e. Conveyance tax applicable on change of use or classification of land. Any land which has been classified by the owner as farm land pursuant to section 12-107c, as forest land pursuant to section 12-107d, or as open space land pursuant to section 12-107e, if changed by him, within a period of ten years of his acquisition of title, to use other than farm, forest or open space, shall be subject to said conveyance tax as if there had been an actual conveyance by him, as provided in sections 12-504a and 12-504b, at the time he makes such change in use and classification. Said conveyance tax schedule shall apply to fair market values as determined by the assessor under the provisions of section 12-63 for all other property.

APPENDIX H

The study results presented in this appendix are referenced from “Planning for Agriculture: A Guide to Connecticut Municipalities,” a Publication of American Farmland Trust and Connecticut Conference of Municipalities. The data is from page 3 of the “Guide.”

Fiscal Benefits: Farm and Forest Lands Help Maintain Lower Property Taxes

Cost of Community Services (COCS) studies use municipal data to determine the fiscal contribution of various local land uses. These case studies compare the cost of municipal services needed for farm and forest land, residential, and commercial and industrial property to the revenues generated from these lands. Over 20 year of COCS studies around the country have shown that farmland and other open space generate more public revenue than they require in municipal services. Even when farmland is assessed at its current agricultural use value under *Public Act 490*, farmland generates a surplus to help offset the shortfall created by residential demand for public services. A review of COCS research in eight Connecticut Towns shows that for each dollar of property tax revenue generated by working lands, on average only 31 cents is required in municipal services.

Cost to Provide Community Services per Dollar of Revenue Raised

<u>Town (year of study)</u>	<u>Residential</u>	<u>Commercial and Industrial</u>	<u>Working and Open Land</u>
Bolton (1998)	1.05	0.23	0.50
Brooklyn (2002)	1.09	0.17	0.30
Durham (1995)	1.07	0.27	0.23
Farmington (1995)	1.33	0.32	0.31
Lebanon (2007)	1.12	0.16	0.17
Litchfield (1995)	1.11	0.34	0.34
Pomfret (1995)	1.06	0.24	0.19
Windham (2002)	1.15	0.24	0.19
Median	1.11	0.26	0.31
U.S. Median	1.19	0.29	0.37

APPENDIX I

Information regarding hiking footpaths and private landowner liability issues are discussed in the following literature from the Connecticut Forest and Park Association.



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Protecting the Trails

A Guide to Protecting Our Blue Trails

The statewide Blue-Blazed Hiking Trail system, established by CFPA in 1929, has grown to over 800 miles today. The Blue-Blazed Hiking Trails are managed and maintained by CFPA volunteers. CFPA is a private non-profit organization dedicated to the conservation and broad public enjoyment of forests, parks, and hiking trails in Connecticut.

Landowner Liability Law

The majority of the Blue-Blazed Hiking Trails are on private land and continue to be available for public use through the good will of the landowner. In 1971 the Connecticut General Assembly passed a resolution which '...declares that the Blue-Blazed Trail System shall be an integral part of the State Plan of Conservation and Development and that appropriate actions be taken to foster its preservation.' The Landowner Liability Law (Connecticut General Statutes Section 52-557) provides substantial limited protection from liability to individual landowners who allow their land to be used by the public for recreation without charge. Read the details [below](#).

Trails Are Threatened

Connecticut's Blue-Blazed Hiking Trails need protection because:

- The population of Connecticut has increased from 1.5 million when the Blue-Blazed Hiking Trail System began in 1929 to 3.3 million today.
- Improved transportation has allowed residential and business development to spread to areas once considered remote and/or unbuildable.
- Landowners change their ownership purposes or the land changes owners.
- Estates are divided among heirs or sold to others with little interest in preserving the natural landscape. This often results in the new owner/s having no knowledge of a Blue-Blazed Hiking Trail being located on the property.

What You Can Do

CFPA depends upon concerned individuals, especially those who hold positions of public trust, to help protect the 'quality of life' enhanced by trails in each community. You can:

- Work to include the Blue-Blazed Hiking Trails in your Town Plan, the list of your community's recreational opportunities, and other planning guides in your community.
- Recommend methods for preserving the right-of-way over lands crossed by trails through easement, acquisition or other means.
- Be alert to planned changes in land use that could impact the Blue-Blazed Hiking Trails and work with others to protect the trails as a resource.
- Thank the landowner for allowing public access and stress the importance of the Blue-Blazed Hiking Trail to the community and to the region.
- Actively support planning and zoning regulations that provide protection for trail land.
- Work with your town and with local land trusts to protect available trail land.
- Get involved in CFPA's Trail Protection effort - a network of people willing to send an 'alert' to CFPA when there may be a threat to trail access. Send us your name and contact information.
- Show your support by becoming a CFPA Member.

Landowner Liability Law

Connecticut General Statutes as amended Sec. 52-557f. Definitions. As used in sections 52-557f to 52-557I, inclusive: (a) 'Land' means land, roads, water, watercourses, private ways and buildings, structures, and machinery or equipment when attached to the realty; (b) 'owner' means the possessor of a fee interest, a tenant, lessee, occupant or person in control of the premises; (c) 'recreational purpose' includes, but is not limited to, any of the following, or any combination thereof; Hunting, fishing, swimming, boating, camping, picnicking, hiking, pleasure driving, nature study, water skiing, snow skiing, ice skating, sledding, and viewing or enjoying historical, archaeological, scenic, or scientific sites, or cutting and removing wood; (d) 'charge' means the admission price or fee asked in return for invitation or permission to enter or go upon the land. Sec. 52-557g. Owner of land available to public for recreation not liable, when. (a) Except as provided in Section 52-557h, an owner of land who makes all or any part of such land available to the public without charge, rent, fee or other commercial service for recreational purposes owes no duty of care to keep such land or the part thereof so made available safe for entry or use by others for recreational purposes, or to give any warning of a dangerous condition, use, structure or activity on such premises to persons entering for such purposes. (b) Except as provided in section 52-557h, an owner of land who, either directly or indirectly, invites or permits without charge, rent, fee, or other commercial service any person to use such land or part thereof for recreational purposes does not thereby: (1) Make any representation that the premises are safe for any purpose; (2) confer upon such person who enters or uses such land for such recreational purposes the legal status of an invitee or licensee to whom a duty of care is owed; (3) assume responsibility for or incur liability for any injury to person or property caused by an act or omission of such power. (c) Unless otherwise agreed in writing, the provisions of subsection (a) and (b) of this section shall be deemed applicable to the duties and liability of an owner of land leased to the state or any subdivision thereof for recreational purposes. Sec. 52-557h. Owner liable, when. Nothing in sections 52-557f to 52-557I, inclusive, limits in any way the liability of any owner of land which otherwise exists: (a) For willful or malicious failure to guard or warn against a dangerous condition, use, structure, or activity; (b) for injury suffered in any case where the owner of land charges the person or persons who enter or go on the land for the recreational use thereof, except that, in the case of land leased to the state or a subdivision thereof, any consideration received by the owner for such lease shall not be deemed a charge within the meaning of this section. Sec. 52-557I. Obligation of user of land. Nothing in sections 52-557f to 52-557I, inclusive, shall be construed to relieve any person using the land of another for recreational purposes from any obligation which he may have in the absence of said sections to exercise care in his use of such land and in his activities thereon, or from the legal consequences of failure to employ such care. Sec. 52-557j. Liability of landowner upon whose land snowmobiles, all terrain vehicles, motorcycles, mini-bikes or mini cycles are operated. No landowner shall be liable for any injury sustained by any person operating a snowmobile, all terrain vehicle, as defined in section 14-379, motorcycle or a mini-bike or mini cycle, as described in section 14-1, upon such landowner's property or by any passenger in such snowmobile, all terrain vehicle, motorcycle, mini-bike or mini cycle, whether or not such landowner has given permission, written or oral, for such operation upon his land unless such landowner charged a fee for such operation, or unless such injury is caused by the willful or malicious conduct of such landowner.



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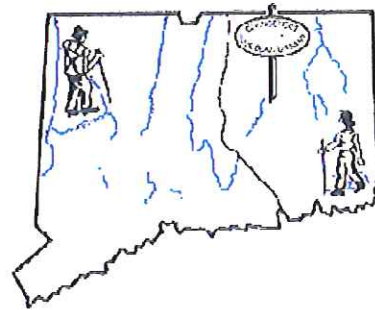
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Blue-Blazed Hiking Trails

Historic Trail Map

The Blue-Blazed Hiking Trail System is one of CFPA's most visible and lasting contributions to the recreational life of the state. The Association's first Trails Committee, established in 1929, was a small group of visionary outdoorsmen who were to continue their interest in trails for the remainder of their lives. Plans were laid out for four initial sections of a statewide forest trail system (New Haven, Waterbury, Litchfield, and Hartford) to be built and maintained by an all-volunteer force. This tradition of trail volunteerism continues today, with 100 CFPA volunteer Trail Managers and hundreds of volunteer assistants caring for 825 miles of Blue-Blazed Hiking Trails throughout Connecticut. Few organizations can claim such a record of commitment, spanning more than three quarters of a century, with one generation of volunteers passing the torch to the next.



Blue-Blazed Hiking Trails Today

The Blue-Blazed Hiking Trail System currently totals over 800 miles of hiking trails in 88 Connecticut towns. The trails are maintained by dedicated volunteers who contribute approximately 7,500 hours to trail work every year. The structure for administering this massive effort consists of the Trails Committee, a full time staff position (Trail Conservation Coordinator), and 100 volunteer Trail Managers. The trail volunteers are responsible for specific trails or for sections of the longer trails. They maintain the trails, schedule work parties, supervise other volunteers, and work with the landowners whose land the trails cross. The Trails Committee, as established in 1929, sets policy and standards for the Blue-Blazed Hiking Trails, and produces the [Connecticut Walk Book](#).

The majority of the Blue-Blazed Hiking Trails are on private land and exist only through the good will and cooperation of the landowners. Changes in land use and the spread of development have created a serious threat to the Blue-Blazed Hiking Trail System. You can help! Please review [A Guide to Protecting Our Blue-Blazed Hiking Trails](#). CFPA and the many trail volunteers need you to help protect the 'quality of life' enhanced by trails in each community.

CFPA welcomes new volunteers to help with the Blue-Blazed Hiking Trails. The Trails Committee organizes an Annual Trail Maintainers Workshop each spring, a Winter Trail Workshop, and schedules trail maintenance events throughout the year. These activities are led by seasoned trail volunteers and provide an excellent opportunity for land trusts, conservation commissions, park/rec agencies, and interested volunteers to learn trail construction and maintenance in a hands-on environment. Check the [Trail Work Parties](#) schedule and join us on the next project or workshop. You'll find it's a fun and rewarding experience!

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Blue-Blazed Hiking Trails ~ Trail Use Policy

CONNECTICUT FOREST & PARK ASSOCIATION POLICY ~USE OF THE BLUE-BLAZED HIKING TRAILS~

In 1929, the Connecticut Forest & Park Association (CFPA) established the Blue-Blazed Hiking Trail System. CFPA is a private, non-profit conservation organization with offices in Middlefield, Connecticut. The Blue-Blazed Hiking Trail System has grown over time to include roughly 825 miles of public hiking footpaths across the State of Connecticut. The Blue-Blazed Hiking Trails are maintained by dedicated CFPA volunteers. The Blue-Blazed Hiking Trails provide the hiking public with an outdoor experience of peace and respite. CFPA maintains these Trails to keep them safe for hiking and to ensure that any environmental impact is minimal.

The Blue-Blazed Hiking Trail System enjoys wide recognition and use throughout the State of Connecticut. The public has recognized the importance of these Trails as hiking trails, as Section 23-10a of the Connecticut Statutes states:

"Those portions of the Connecticut blue-blazed trail system which cross state property are hereby designated as state hiking trails."

Also, in 2001 the Blue-Blazed Hiking Trail System was designated an official state "greenway" by the Governor and the Connecticut Greenways Council. As a result of the Greenway designation, the Blue-Blazed Hiking Trail System will be included in the State Plan of Conservation and Development.

CFPA established and maintains the Blue-Blazed Hiking Trails for the benefit and enjoyment of the general public. However CFPA does not, for the most part, own the land traversed by these trails. While some properties are public forests or parks, most are in private ownership. All trail landowners are owed respect and gratitude by CFPA and those who use the trails. It is not CFPA policy to protect the Blue-Blazed Hiking Trails by pursuing adverse possession claims.

CFPA recognizes that the owner of a property crossed by a Blue-Blazed Hiking Trail has the ultimate control over what is allowed on his land and on that portion of the Blue-Blazed Hiking Trail. CFPA will strive to resolve any differences that may arise between a trail landowner and CFPA.

The purpose of this policy is to establish rules for the use of the Blue-Blazed Hiking Trails.

Use of Blue-Blazed Hiking Trails

I. State Lands

Approximately one-fourth of the Blue-Blazed Hiking Trail System is on land owned by the State of Connecticut. On these properties the use of the Blue-Blazed Hiking Trails are subject to the Connecticut law and state departmental policy described below. This law and policy constitute CFPA policy for the use of the Blue-Blazed Hiking Trail System on state land.

Section 23-10a of the Connecticut General Statutes states:

"Those portions of the Connecticut blue-blazed trail system which cross state property are hereby designated as state hiking trails."

The Department of Environmental Protection, Bureau of Outdoor Recreation, State Parks Division, Policy/Procedure #310, dated September 12, 1995, entitled "Multiple Use Trail Policy for Park & Forest Recreation Areas - Existing Trails" states in "Trail Use" Section I.1:

Trail uses, other than hiking, shall be prohibited on the Appalachian Trail and Connecticut Forest & Park Association maintained trails except where these trails utilize maintained roads or, where DEP Authorized or Blazed trails supporting other uses, coincide. No motorized, off-road use will be allowed, except where permission for such use is specifically authorized.

II. Non-State Lands excluding CFPA Lands and Easements

A. Pedestrian Footpath

The Blue-Blazed Hiking Trail System consists predominantly of a network of footpaths designed for hiking. Many of the Blue-Blazed Hiking Trails are situated on steep slopes and cliff edges and in densely wooded areas that pose serious hazards to those not traveling on foot. The Blue-Blazed Hiking Trails are neither designed nor maintained to the standard necessary to accommodate hoof, bicycle, or motorized vehicle traffic. CFPA volunteers design and construct bridges, install waterbars and other erosion control measures, and trim vegetation with foot traffic in mind. Other modes of transportation may destroy the Trails, cause erosion or damage, or create hazardous and unsafe conditions. The Blue-Blazed Hiking Trails are, in general, narrow, steep and winding enough that encounters between a hiker and a bicyclist or motorized vehicle could prove dangerous. For these reasons, it is the policy of CFPA that the Blue-Blazed Hiking Trails not be used by persons on motorcycles, all-terrain vehicles, bicycles, horses, llamas, and other hoofed animals or by persons using motorized vehicles, except as defined below.

B. Bicycle and Equestrian Traffic

Some portions of the Blue-Blazed Hiking Trail System are suited to multiple uses, such as equestrian and non-motorized bicycle traffic. CFPA supports these uses of the Blue-Blazed Hiking Trails in areas where the host landowner has granted permission and where CFPA has determined that the design of the trail is conducive to these uses (e.g. a woods road).

C. Motorized Vehicle Traffic

Motorized vehicles, including all-terrain vehicles, motorcycles and snowmobiles, may be used and enjoyed in a safe and responsible manner on certain trails with landowner permission and in accordance with all applicable laws and regulations. CFPA does not, however, support the use of motorized vehicles on any Blue-Blazed Hiking Trail except where the host landowner has granted permission for such use and has informed CFPA of such permission.

D. Other Motorized Vehicle Traffic

CFPA supports the use of motor vehicles (passenger cars, trucks, tractors, skidders, etc.) on the Blue-Blazed Hiking Trails in the following circumstances only:

1. where the trail follows a public road;
2. where the trail follows a farm road and the landowner has granted permission;
3. where the trail follows a woods road, logging road or skid trail and the landowner has granted permission.

III. CFPA Lands and Easements

A. CFPA Lands

Blue-Blazed Hiking Trails on land owned by CFPA in fee shall be designated for foot traffic only. Other uses shall be permitted only with written permission from CFPA or as allowed by a property management plan. CFPA lands may include other trails that are designed for multiple uses. Permitted uses on such trails will be determined by a property management plan.

B. CFPA Conservation Restriction and Easements

The use of Blue-Blazed Hiking Trails on land over which CFPA holds a conservation restriction or easement shall be that permitted under the terms of the restriction or easement. On such properties, CFPA shall seek to limit the use of the Blue-Blazed Hiking Trails to foot traffic only.

C. CFPA Trail Easements

The use of a Blue-Blazed Hiking Trail on land over which CFPA holds a trail easement shall be that permitted under the terms of the easement.

IV. All Lands

A. Emergency Vehicle Use

CFPA accepts the use of the Blue-Blazed Hiking Trails by fire, police, Connecticut Department of Environmental Protection, or other emergency vehicle in emergencies or when needed for enforcement, fire suppression or other purposes of this nature.

B. Universal Access

CFPA will strive to make sections of the Blue-Blazed Hiking Trails accessible to those who use wheelchairs and those who have difficulty walking where the host landowner has granted permission and where site and trail conditions (distance from trailhead, slope, wetness, rocks, roots, etc.) permit.

C. Dogs

Dogs provide companionship for many hikers, but can be a source of fear or annoyance for others. Unleashed dogs can be dangerous, create safety hazards, and be harmful to wildlife and fragile vegetation. To allow both dog-walkers and non-dog-walkers to enjoy the Blue-Blazed Hiking Trails, CFPA requires that dogs accompany hikers only if dogs are leashed and if the landowner allows dogs.

D. Camping

Camping is not permitted along the Blue-Blazed Hiking Trails except at designated sites with permission of the landowner.

E. Fires

Campfires are not permitted along the Blue-Blazed Hiking Trails except at designated sites with permission of the landowner.

F. Hunting

Hunters and hikers both seek enjoyment of the outdoors and share many conservation interests. Hiking and hunting are compatible uses for conservation land. With proper precautions taken, hikers and hunters may safely enjoy their outdoor pursuits.

Hikers should be aware that hunting with bow and arrow and firearms occurs on public and private properties crossed by the Blue-Blazed Hiking Trails, subject to all applicable laws and regulations. Hikers are strongly encouraged to wear blaze orange clothing during hunting seasons and to consult the State of Connecticut, Department of Environmental Protection, for information about hunting seasons and hunting safety.

G. Passive Winter Recreation

The Blue-Blazed Hiking Trails are not designed with uses such as cross-country skiing in mind. However, CFPA accepts passive winter recreational uses, such as cross-country skiing and snowshoeing, on the Blue-Blazed Hiking Trails except where prohibited by the landowner. Participants in passive winter recreational uses are urged to exercise good judgment and common sense.

H. General Behavior

Members of the public should behave in a decorous and courteous manner at all times while using the Blue-Blazed Hiking Trails. Trail users should:

- obey all signs;
- stay on established trails;
- carry out everything carried in;
- wear appropriate clothing and shoes and be properly equipped and prepared;
- leave the trail in better condition;
- report problems or hazards to CFPA.
- not take flowers, vegetation, mushrooms, rocks, etc.;
- not disturb wildlife.

Trail users should use caution and good judgment while using and planning to use the Blue-Blazed Hiking Trails. All trail users should consult the most recent edition of the Connecticut Walk Book (currently in its 19th edition) and the CFPA web site at <http://www.ctwoodlands.org>, for safety tips and more information.

Approved by the CFPA Trail Use Policy Subcommittee: January 23, 2002
Approved by the CFPA Trails Committee: March 27, 2002
Approved by the CFPA Board of Directors: April 17, 2002

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APPENDIX J

History of the Open Space Steering Committee

The Board of Selectmen under the leadership of Beth Hogan established the Open Space Steering Committee as the initial effort to update the 1999 Plan of Conservation and Development. The idea was to build on the recommendations in the 1999 Plan of Conservation and Development as former Director of Planning Meg Parulis stated, “with the benefit of the Town’s Geographic Information System (GIS) implemented over the last six years, we now have the tools to create a more strategic plan that will guide future land use decisions, direct public investments, aid open space preservation and guide protection of cultural resources that define community character.” This open space plan recommendation will be forwarded to the Planning Commission.

Members of the public who were appointed by the selectman and who worked on the open space plan were: Charlie Fenick, Cheryl Lozanov, Charles Reluga, Barbara McGrath, Francine Schwartz, Greg Ellis, Joe Mingo, Kathryn Burton and Marvin Schutt. Dave Putnam, Director of Parks and Recreation provided staff support as did Meg Parulis. Arthur Carlson was elected Chairman.

The Open Space Steering Committee appointment was for one year, from September 1, 2006 to September 1, 2007. By this time the basic findings and outline of the report had been established. As former chairman I continued to work with the Director of Planning, Meg Parulis to write the report. In May of 2008 the Director left for other employment and I finished the report in its present form.

ACKNOWLEDGEMENTS

As Chairman I would like to convey my appreciation and thanks to the committee members who worked over the course of a year to gather our thoughts and assemble the outline, which resulted in this product. I would also note that Meg Parulis, while she was Director of Planning, constantly provided needed information and I believe this report reflects her involvement, keen insights and an open mindedness to discuss new ideas.

Because of circumstances this report was written without the benefit of as much review by the committee and Director of Planning as I would have wanted. I believe though it reflects for the most part their consensus opinion.