

East Lyme Commission for the Conservation of Natural Resources
Special Meeting Minutes
Thursday, April 30, 2015, 7:00 p.m.
East Lyme Town Hall – Conference Room #1

Present: Arthur Carlson, Chairman
Mark Christiansen, Member
Marvin Schutt, Member
Ron Nichols, Alternate

Absent: Penny Heller, Member
Tom Kalal, Member
Laura Ashburn, Alternate

Also Present: Rose Ann Hardy, Ex-Officio

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CONNECTICUT
MAY 5 2015 AT 11:52 AM/PM
[Signature]
EAST LYME TOWN CLERK

Call to Order

Chairman Carlson called the April 30, 2015 Special Meeting of the East Lyme Commission for the Conservation of Natural Resources to order at 7:05 p.m.

I. Discussion of Niantic River Headwaters Preserve Memorandum

Chairman Carlson distributed a draft of the letter and its accompanying materials to the Commission for review to clarify the location of the property and state the purpose and importance of securing and preserving the Niantic River Headwaters Preserve as open space in perpetuity. Recommendations and suggestions were made and the letter was amended.

Motion (1): Motion made Mr. Nichols, seconded by Mr. Christiansen, to approve and send the attached letter and supporting documents to the Board of Selectmen, cc'd to the Board of Finance, as amended. Voice vote, 4-0, all in favor. Motion carried.

II. Adjournment

Motion (2): Motion made Mr. Christiansen, seconded by Mr. Nichols, to adjourn the April 30, 2015 Special Meeting of the East Lyme Commission for the Conservation of Natural Resources at 8:30 p.m. Voice vote, 4-0, all in favor. Meeting adjourned.

Respectfully Submitted by:

Agnes Miyuki, Acting Recording Secretary for the Town of East Lyme

Town of

P.O. Drawer 519
Commission for the
Conservation of Natural
Resources



East Lyme

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MEMORANDUM

To: East Lyme Board of Selectman
From: Arthur D. Carlson, Chairman of Natural Resources Commission
Date: April 29, 2015
Re: Niantic River Headwater Preserve

The Natural Resources Commission strongly recommends securing the Niantic River Headwater Preserve as an open space in perpetuity. The attached information package regards the environmental information the Natural Resources Commission has used to recommend the securing of the Niantic Headwater Preserve as open space. This property was one of a number that has value as open space to East Lyme, and is included in the Plan of Conservation and Development (POCD) developed by the Planning Commission and the University of Connecticut as a contractor.

Information Package:

1. Figure 1 is a plot which shows the watershed in which this property exists. This is the same watershed that the Oswegatchie Hills is in. In fact both properties function similarly in that they are both forest block greenways using the open space criteria as outlined in the POCD. Because both are devoid of roads and houses (buildings) and exist in relatively natural states they both have only clean runoff water entering the Niantic River and then into the Long

Island Sound. Appendix 1 discusses the problem with runoff into Long Island Sound and the second article the particular run off from Pine Grove since the installation of sewers. A main negative runoff to Long Island Sound is nitrogen. If the Niantic River Headwater Preserve is not secured as open space it will most likely be built out, thereby changing the nature of runoff of clean water to one of nitrogen, pesticides and perhaps sewage. Hence we lose the dilution factor of the existing Niantic River Headwater Preserve.

2. The Niantic River Headwater Preserve will also function as does the Oswegatchie Hills, as a passive and active recreational area. It will also extend the forest block/greenway north of I-95 along the proposed Route 11 corridor to near the northern boundary of East Lyme.

3. Other supporting considerations:

A. The value of this property is shown by the fact that the DEEP (State of Connecticut) will spend \$500,000 for securing this property for its water runoff quality forest block/greenway and recreational potential.

B. The New England Forestry Foundation wants to invest approximately \$200,000.00 in its forestry potential. This is a philanthropic organization, forestry based that has ownership in more than 26,000 acres and holds conservation easements on over 1,150,000 acres in New England. They are skilled, knowledgeable stewards of open space.

C. Economic studies consistently show that in towns of our size open space uses approximately \$0.31 of each tax dollar raised while residences use an average of

\$1.11. Hence open space supports the tax base in a positive manner. Also properties adjacent to or near open space increase in value. See Appendix 2 for a list of Connecticut towns, our size, and how the relative cost of various types of land use compare.

D. The survey conducted seven years ago to determine the desires and needs of the citizens of East Lyme, clearly showed very strong support for preservation of open space and water resources. See Appendix 3.

E. Nine separate entities have recognized the Niantic River Headwater Preserve as a valuable open space. These are:

1. DEEP (State of Connecticut)
2. Southeastern Connecticut Council of Government
3. The Niantic River Watershed Committee
4. The Route 11 Greenway Committee
5. The New England Forestry Foundation
6. East Lyme Board of Selectman (June 2012)
7. East Lyme Planning Commission
8. Commission for the Conservation of Natural Resources
9. East Lyme Inland Wetlands Commission

Summary:

The securing of the Niantic River Headwater Preserve is valuable for the protection it provides to the Niantic River by having only clean runoff water flowing into it, and on a larger scale, Long Island Sound. Also it starts to make real the vision of a forest block/greenway along our easterly town boundary, along which Latimer Brook flows. The attributes of the Niantic River Headwater Reserve are essentially the same as Oswegatchie Hills Nature Preserve. There is even a defacto size comparison if one combines the area of the Niantic River Headwater Preserve with apparent land locked area within the watershed North of I-95.

The Town can secure this piece of property by investing approximately one-third of its total open space market value.

Three part ownership issues between the State of Connecticut, New England Forestry Foundation and the Town are solvable if each party keeps in mind that the issue is writing an easement that protects this resource in perpetuity. If in the future this board is involved in say eminent domain issues, each party could get the percentage back that it originally invested.

We are also quite convinced that the next generation will not regret the securing of this open space for their use, or their children's.

State legislature passes 'Blue Plan' bill for future of Long Island Sound

By JUDY BENSON
Day Staff Writer

The state House of Representatives on Wednesday approved legislation to create the Long Island Sound Blue Plan, which will result in the development of a coordinated state strategy to guide future uses of the Sound's waters and submerged lands.

The bill, which was introduced by Gov. Dannel P. Malloy, was approved in a unanimous 146-0 vote timed for Earth Day. The bill now heads to the Senate, where a vote is expected sometime next month.

"The Long Island Sound is critical for Connecticut's economy and the millions of people who rely on its resources, and that's why this legislation is so important," Malloy said in a news release. "Action now means protecting our vital coastline tomorrow, allowing comprehensive and regional planning of the Sound for the long-term. There is a pressing need for us to act."

State Rep. James Albis, D-East Haven, co-chairman of the Environment Committee, was one of the leading supporters of the bill.

"I am glad that my colleagues recognize the great need for a responsible plan for Long Island Sound's future," he said. "It is critically important that the state act now and arrive at a plan for protecting one of Connecticut's most via-

ble economic resources to ensure the stewardship of Long Island Sound."

The bill requires the state Department of Energy and Environmental Protection to coordinate an inventory of the Sound's uses and its resources, and to develop a plan to preserve and protect the estuary

that would include maps, illustrations and other materials. The plan would be created with a 16-member committee by 2019, with opportunity for public comment.

Committee members would include University of Connecticut marine sciences faculty, along with representatives

of oil and gas distribution industries, shellfishing, non-profit environmental groups, shoreline towns, boating, commercial fishing industries and recreational fishing and hunting, among others.

The plan and inventory would be reviewed and updated every five years.

4/7/15

Appendix 1

Pine Grove sewers reduce nutrients in Niantic River

Report shows how project improved water quality

By JUDY BENSON
Day Staff Writer

East Lyme — Sewers installed in the Pine Grove neighborhood in 2008 and 2009 reduced nitrogen input into the Niantic River by 43 percent just two years after completion of the project, a U.S. Geological Survey report concludes.

The report, presented last week to the Niantic River Watershed Committee, verifies the value of sewer projects in improving water quality in

MORE INFO

To view the report, visit:
<http://pubs.usgs.gov/sir/2015/5011/>

the river, and quantifies the benefit from sewers in the 35-acre, 172-home neighborhood on the south side of Smith Cove, said John Mullaney, hydrologist with the USGS' Connecticut office,

Dan Danila, a member of the watershed committee and director of the Friends of Oswegatchie Hills Nature Preserve, a protected forest on the river, said the study results provide useful informa-

tion for efforts of both groups.

"What we're afraid of is that the river is going to reach a tipping point in nitrogen levels," he said. "Any reduction in nitrogen is important."

Excess nitrogen is one of the main reasons the river is considered "impaired" for wildlife habitat by the state Department of Energy and Environmental Protection. High levels of nitrogen can overload a waterway with nutrients -- a condition called eutrophication -- and cause nuisance algae blooms that can lead to hypoxia, or low levels of dissolved oxygen needed by marine life.

SEE SEWERS PAGE C3

Sewers boost river water quality

FROM C1

In the study, groundwater from each of 20 monitoring wells was sampled a total of 18 times. The samples were collected before, during and after the sewer project. Chemical analysis of the samples before the sewer installation confirmed that the main source of nitrogen in the groundwater was discharges of treated wastewater from septic systems, the study states.

Nitrogen concentrations before the sewer averaged about 7.5 mg per liter. After sewers began operating, nitrogen levels fell to an average of about 5.2 mg per liter, the study shows. The largest decline was in a sample that had nitrogen levels of 20 mg per liter before sewerage, and 8.3 mg per liter afterward. Mullaney said his analysis estimated the total nitrogen input from the Pine Grove neighborhood was 1,675 pounds per year before sewerage, falling to about 963 pounds per year afterward.

Since groundwater moves slowly, he said, it will take several years for all the remaining wastewater from septic tanks to flow into the river. By the time it is completely discharged, the study said, nitrogen levels in Pine Grove

year to 423 pounds per year.

He said the response to sewerage was relatively quick. "We were seeing things within a two-year period," he said.

Danila said the results provide support for the position he and other members of the Friends' group have taken urging the town to proceed with a sewer project in Saunders Point, the neighborhood to the north of Smith Cove. In addition, he said, it strengthens arguments against a housing project proposed by Landmark Development for a forested area near the Oswegatchie Hills Preserve, where the developer wants to tie into town sewers to treat 118,000 gallons per day of wastewater from 840 housing units. The developer is appealing the Water and Sewer Commission's decision to allocate 14,434 gallons of sewage capacity per day to the proposed development.

The study, Danila said, verifies the need for the town to reserve its remaining sewage capacity for neighborhoods on the river, such as Saunders Point and portions of downtown Niantic, rather than for a new development. According to the USGS study, Saunders Point is contributing about 1,500 pounds per year to 4,300 pounds per year of ni-

to existing neighborhoods we know are contributing" to excess nitrogen in the river, he said.

Brad Kargl, the town's utility engineer, said the Water and Sewer Commission hopes to commission a feasibility study of a project to sewer Saunders Point, a neighborhood of about 250 homes. DEEP is reviewing a proposed scope of work for the study to determine whether it will provide funding for the work, he said.

Mullaney said his study was funded with an initial grant of about \$160,000 from DEEP and the USGS, with some supplemental funding added in later years.

The Planning Commission will consider at its meeting at 7 p.m. Tuesday at Town Hall whether Landmark's latest application to build in the Oswegatchie Hills is consistent with the Plan of Conservation and Development, according to the agenda. The application from the developer is to turn 123 acres in the hills into an affordable housing district in which 87 acres would be set aside as open space. The application will later go before the Zoning Commission for a public hearing.

Day Staff Writer Kimberly Drellich contributed to this story.

**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

NATURAL RESOURCES AND OPEN SPACE

Researchers read four statements regarding the protection of natural resources and open space in East Lyme. Respondents were asked if they strongly agreed, somewhat agreed, somewhat disagreed or strongly disagreed with each. The cumulative totals for those strongly and somewhat agreeing are presented within the following table.

The final column of the table presents results when "don't know" respondents are removed from the data.

Statements	Strongly and Somewhat Agree	Strongly and Somewhat Agree (without DK's)
A network of footpaths throughout town connecting open spaces is desirable	86.5	90.1
The town should continue to acquire land in Oswegatchie Hills and other areas of town for open space purposes	85.3	90.7
I would pay \$100 more per year in taxes to have the town acquire more open space	52.5	56.8
The town has enough open space	25.8	29.3

Survey respondents were asked if each of seven different preservation or protection actions were very important, somewhat important, somewhat unimportant or not at all important.

The following table presents the cumulative totals for those reporting very and somewhat important. Results with and without "don't know" respondents are presented.

Protections or Preservation Actions	Very and Somewhat Important	Very and Somewhat Important (without DK's)
Protection of Lakes, Rivers, Streams, LI Sound	98.5	98.7
Protection of Drinking Water Resources	97.3	98.5
Preservation of Historic and Cultural Resources	96.0	96.7
Protection of Scenic Views and Vistas	94.0	95.7
Protection of Large Un-fragmented Forests	93.8	96.6
Preservation of Agricultural Lands	93.0	94.2
Protection of Unique Geologic Features	91.3	95.8

