

Minutes of the East Lyme Zoning Commission January 23, 2025, Regular Meeting

Date and Time: 1/23/2025 7:29 PM to 8:35PM

Present: Members: Anne Thurlow, Chairman, Nancy Kalal, Secretary, Norman Peck, Michael Foley, Debbie Jett-Harris. Alternates: Jim Liska, Sarah Susco, Cathy Yuhas.
Recording Secretary: Jessica Laroco.

Absent: Member: Denise Markovitz. Staff: William Mulholland. Ex-Officio: Roseanne Hardy.

Location: East Lyme Town Hall Upper Conf Room 108 Pennsylvania Avenue

1. **Call to Order and Pledge**

Ms. Thurlow called the January 9, 2025, Regular Meeting of the East Lyme Zoning Commission to order at 7:29PM and led the Pledge of Allegiance.

2. **Attendance**

Ms. Thurlow called the roll and noted Member Denise Markovitz was absent. She seated Mr. Liska in her stead. Ms. Thurlow also noted that Staff William Mulholland and Ex-Officio Roseanne Hardy were absent.

3. **Public Hearing**

3-a Continuation of application of William R Sweeney Esq., attorney, for John and Sally Kelsey for a Special Permit to modify a legal pre-existing, non-conforming camping resort under Section 12.1.1A from seasonal to year-round operations.

-Attorney Sweeney of Tobin, Carberry, O'Malley, Riley & Selinger Law Firm in New London, CT, attorney for the applicant, noted this application had been withdrawn pending additional documents requested by Mr. Mulholland for the application's completeness. The applicant would likely reapply at a future date.

MOTION 1

Mr. Foley moved to close the Public Hearing.

Ms. Jett-Harris seconded the motion.

Motion passed 6-0-0.

4. **Regular Meeting**

4-a Continuation of application of James Bernardo, agent for Thomas Gardner, for modification to previously approved Coastal Area Management (CAM) site plan for property identified as 7 North Dr, Assessor Map 08.2 Lot 154.

-Ms. Kalal read a memo from Mr. Mulholland into the record (Attachment 1).

-Attorney Sweeney of Tobin, Carberry, O'Malley, Riley & Selinger Law Firm in New London, CT, attorney for the applicant, made the following comments:

- In May 2024 CAM approval was obtained from the EL Zoning Commission by the owners for 2 lots known as 7 and 11-13 North Dr, with the intention of constructing 2 homes. These are not waterfront lots, but they are located in the AE floodplain, west of and above the VE and the LiMWA floodplains.

-The approved plans called for the basement slab to be set 8 feet above sea level and when the excavator began digging, they uncovered a silty material and large table sized boulders and ended up taking out more material than anticipated. The groundwater also uncovered was thought to interfere with the foundation.

- The subsequent crushed gravel that was brought in to provide a stable base raised the finished basement slab from 8 feet to 8.7-9 feet above finished grade and required additional grading around the foundation to accommodate this increase. The finished house would be near a foot taller than the approval from May.

-The boulders uncovered during excavation were placed on the property line near the Yacht Club to construct a wall.

- The owner failed to appear before the Board at that time to seek formal modification approval.
- When Mr. Mulholland became aware of the construction of the wall, and the height change he was concerned and at that time Attorney Sweeney was hired. Mr. Mulholland was concerned that the wall constructed could be considered a soil and erosion control structure and would be a structure regulated by the CT DEEP, as per the statute, the structure could be intended to be a soil and erosion control structure or have the effect of being a soil and erosion control structure.
- The engineer hired by the owner agreed with Mr. Mulholland.
- The wall has been deconstructed, and the site has been regraded. Attorney Sweney provided pictures to the Commissioners showing same.
- The approval being sought includes a 9 foot increase, this new height will bring the finished structure to 29.3 feet, which is below the 30 foot maximum height allowed in the R-12 zone in which this structure sits.
- The applicant apologizes for not coming to the Board prior to the changes being made.

-Ms. Kalal noted that while the applicant is seeking a modification, they were doing so after the work had already been completed.

-Attorney Sweeney agreed but noted that the approval is within the scope of work which could be approved according to FEMA regulations, and zoning regulations.

-Mr. Liska noted that although the modification application may have been done out of order, had it been done in the correct order, it would have had the same results.

MOTION 2

Mr. Foley moved to approve the application of James Bernardo, agent for Thomas Gardner, for modification to previously approved Coastal Area Management (CAM) site plan for property identified as 7 North Dr, Assessor Map 08.2 Lot 154.

-Reasons:

1. Applicant is consistent with all applicable goals and conditions of the CAM Act.
2. Applicant has taken all reasonable measures to mitigate any adverse impacts of the proposed activity on both coastal resources and future water dependent uses.

Ms. Jett-Harris seconded the motion.

Ms. Kalal opposed the motion.

Motion passed 5-1-0.

4-b Continuation of application of William R Sweeney Esq., attorney, for John and Sally Kelsey for a Special Permit to modify a legal pre-existing, non-conforming camping resort under Section 12.1.1A from seasonal to year-round operations.

-Withdrawn

5. Disposition of Minutes

Approval of Minutes of January 9, 2025, Regular Meeting

MOTION 3

Ms. Jett-Harris moved to approve the Minutes of the January 9, 2025, Regular Meeting of the East Lyme Zoning Commission as presented.

Mr. Liska seconded the motion.

Motion passed 6-0-0.

6. Old Business- There was none.

7. Subcommittee Reports

7a. Subcommittee- Text Amendment Mixed Use CA Zone

-Mr. Peck noted they are still working.

7b. Subcommittee- RU 80/40 Redistricting

-Ms. Jett-Harris read a letter to the subcommittee (Attachment 2)

-Ms. Kalal and Ms. Jett-Harris read a letter to the subcommittee (Attachment 3)

-Ms. Jett-Harris made the following comments:

-The goal is to show the other commissioners there is enough need to bring this to a Public Hearing.

-The POCD is available on the eltownhall.com website and it puts elements into place to help the Town do what it needs to do, and she read some excerpts from that (Attachment 4)

-Waterford CT has increased their tracts of land to 5-acre zoning and a portion of the area to be rezoned butts up against Waterford.

-She noted a map that the subcommittee was interested in, found in the POCD (Attachment 5)

-She also indicated perhaps 3 acres would suffice in protecting the water in East Lyme.

-Mr. Peck stated his interest in a Public Hearing. He also noted his concern about the expansion of aquifer protection zones. He had been on the Board when the borders were changed and at that time the Board had been advised by an attorney that should the borders be reduced by the state, and an applicant apply for, and be denied based off of their location outside the borders the state had changed but within the desired borders of the ZC, then the applicant would have grounds for an appeal. He wondered if this had changed.

-Mr. Foley asked for a map or drawing showing the proposed changes and wondered how many of the properties in the area to be changed were vacant.

-Ms. Jett-Harris noted that the only uncontaminated Town well is located north of I-95, in the area proposed to be rezoned.

-Ms. Thurlow wondered if there was a way to tighter correlate the number of acres to helpfulness of rezoning about water protection.

-Ms. Kalal stated that according to the CT DEEP, if the Town adds 10% impervious surfaces to an area you decrease the amount of filtration and water quality downhill from that area significantly. The larger the area to be protected by limiting the amount of impervious surface allowed, the more water can be filtered and would end up in the drinking aquifers.

-Mr. Liska noted that the Town is likely to take care when laying salt down in the winter, but perhaps the public is not and the answer to that may be education for the public.

8. New Business

8-a Any business on the floor, if any, by majority vote of the Commission.

-Ms. Jett-Harris wondered about the trees in front of Stop & Shop.

8-b Correspondence – There was none.

9. Public Delegations

-David Tretter, 21 Brainerd Rd, wished for the Zoning Commission to revisit the ADU opt-out. He wished the Board would reconsider the decision. He asked the Board for an answer and Ms. Thurlow let him know that Public Delegations is not a Q&A period.

-Mr. Peck noted that Mr. Tretter could get a majority of the Board to pursue the change, or he could apply to the Zoning Commission for a Text Amendment to the Zoning Regulations.

-Lisa McGowan, 33 Spinnaker Dr, wondered if there was a set cap or limit to the time the public was allowed to speak during public delegations. She also asked the Board to carefully consider the changes proposed and make the maps and documents available before hiring an attorney or having a public hearing.

10. Zoning Official- There was none.

11. Comments from Ex-Officio- There was none.

12. Zoning Board Liaison to the Planning Commission

February 11, 2025- Jim Liska

13. Comments from the Chairman

-Ms. Thurlow noted that Attorney Bleasdale would be at the 2/20/25 meeting for questions about the possible affordable housing appeals moratorium. She asked that Commissioners email questions to Jessica Laroco before so Atty Bleasdale can be prepared and efficient. She also noted that the STR AD Hoc committee would be meeting again on Monday 1/27/2025 at 7PM and then there would be 1 more Public Hearing before the recommendation is made to the BOS.

14. Adjournment

MOTION 4

Ms. Jett-Harris moved to adjourn the January 23, 2025, Regular Meeting of the East Lyme Zoning Commission at 8:35PM.

Mr. Foley seconded the motion.

Motion passed 6-0-0.

Respectfully submitted,
Jessica Laroco,
Recording Secretary

Town of

Zoning Department



East Lyme

108 Pennsylvania Ave
Niantic, Connecticut 06357

(860) 691-4114

Fax (860) 691-0351

MEMO TO: East Lyme Zoning Commission

FROM: William Mulholland, Zoning Official *WM*

RE: Coastal Area Management (CAM) Site Plan Review
7 North Dr, Niantic

DATE: January 22, 2025

On May 2, 2024, the Zoning Commission conducted a CAM Site Plan Review to construct two single-family dwellings on number 7 and number 11-13 North Drive in Niantic. The application was represented by Jim Bernardo, a land surveyor. Upon review, the Commission approved the site plan for both properties.

In July of 2024, a building permit was issued to construct the new single-family dwelling on the 7 North Dr property. Construction began immediately thereafter. A few weeks later I conducted a field inspection of the property to assess compliance with the approved plan. The inspection revealed the foundation install and rough site grading had been completed. In addition, a soil and erosion control retaining wall had also been constructed along the northerly property line.

A review of the approved plan and comparison with the existing site conditions raised several zoning compliance questions. Subsequent discussions with the owner's agents revealed the existing site conditions were not in compliance with the zoning commission approval.

As a result of this finding, I ordered corrective action to ensure compliance. This could be accomplished by using one of two methods. One, by lowering the foundation and regrading the site, or two, by applying to the Commission for a new CAM application (which would address the new grades and the foundation elevation). I note here that the soil and erosion control wall has already been removed. Technically, this structure would initiate an automatic referral to the Connecticut DEEP for additional review. The applicant has chosen to reapply to the Zoning Commission for a new application which upon review the Board may approve, modify or deny. Attorney William Sweeney is here and will give a brief presentation.

Motion to Approve: Application of James Bernardo, agent for Thomas Gardner, for modification to previously approved Coastal Area Management (CAM) site plan for property identified as 7 North Dr, Assessor Map 08.2 Lot 154.

-Reasons:

1. Applicant is consistent with all-applicable goals and conditions of the CAM Act.
2. Applicant has taken all reasonable measures to mitigate any adverse impacts of the proposed activity on both coastal resources and future water dependent uses.

Motion to Deny: Application of James Bernardo, agent for Thomas Gardner, for modification to previously approved Coastal Area Management (CAM) site plan for property identified as 7 North Dr, Assessor Map 08.2 Lot 154.

-Reason(s):

MARK CHRISTENSEN
dropped this off before
the meeting and asked to
have it read

Attachment 2

Letter to Zoning on Oct 17, 2024

Hello Zoning Commisioners;

I am Mark Christensen, and I had a recent application before zoning, which I withdrew before it went to a public hearing, and I briefly wanted to explain my actions. Although the application was withdrawn, the reasons behind the application are still present. I withdrew due to the cost I would need to pay for certified mailings, as explained to me by Mr. Mulholland, as well as the fact that town staff needed to send documentation and get a reply from neighboring towns and a state agency, and the time for that was now limited.

So now for the reasons behind the application: The 2 most important natural resources in the Town of East Lyme are---water and water! The first is drinking water, which comes from Aquifers, which are fed by their surrounding watersheds and much of the town depends on. The second is water that ultimately flows into the Niantic River from a watershed north of the River, much of it in East Lyme. The Niantic River is integral to supporting many businesses in Niantic, and brings many tourists who spend money at boatyards, for fishing excursions, as beachgoers, restaurants etc. It is important that this water be kept clean and viable to serve as an attraction for people who spend money at local businesses, which in turn support the tax base.

I believe both are in jeopardy, and a partial remedy lies with the Zoning Commission. Several years ago, the town adopted new "Aquifer Protection" standards and the protections to water in the aquifer that were once standard have been reduced. A smaller area of Aquifer Protection was created, based on some suggestions from the STATE of Ct. It really amounted to "WELLHEAD Protection", not Aquifer protection. This change, however, allowed for development of lots of impervious surfaces, with more one the way and this will produce runoff that will carry road salt and other contaminants that

eventually can make its way into the groundwater and bring with it various pollutants. Specifically, Sodium has been found in increasing levels each year in town wells, and the trend line shows a continual upward projection. In fact, 4 of 6 wells show sodium levels higher than the accepted standard of 28ppm. Not surprisingly, the wells with the most rapid increase in sodium levels are the wells in the Aquifer Protection area which includes the area under I-95, currently under construction. As a side note, when the new exit 74 interchange was being proposed and reviewed at a Town meeting, I asked CONNDOT official and engineers to design a spill mitigation system into the plan, in order to prevent spills resulting from accidents getting into the Aquifer. I pointed out that The New London Water Authority was required by Ct. Dept of Health to design a spill mitigation system along I-395 if they were to connect the Millers Pond water into their water system. Former 1st Selectman Mark Nickerson also stated that he had asked DOT officials for such a precaution. ^{Farm} Current State Rep. Holly Cheesman also asked the Ct. Dept. of Health to intervene and get DOT officials to include a spill mitigation design into the exit and entrance ramps, which are directly over the "Aquifer Protection Area". Request were all denied, and when I queried State officials as to why they couldn't accomplish this task, they finally answered "because there is no regulation that says we must". It should be clear that we cannot rely on State officials to protect drinking water in East Lyme. You should also know that tougher EPA standard for drinking water are soon to be enacted, specifically the acceptable levels of PFAS, also known as "forever chemicals", as they don't degrade, and always find their way into groundwater. Finally, many people in town have felt secure knowing that we can access water from the New London Reservoir system during the Summer months when the local population increases due to Summer visitors. What many don't know is that the agreement with New London also mentions that East Lyme must send potable water to New London that meets their standards. If East Lyme doesn't have satisfactory water to send in Winter, we won't get water from New London in the Summer. In reviewing the minutes of the Aquifer Protection Agency, it looks as though that group has not met in a year, and other than

approving business registrations, other issues regarding Aquifer Protection that I have outlined are not dealt with. It seems that needs to change, in order to best protect East Lyme drinking water. In comparing East Lyme Aquifer Protection area with New London Water Authority, we see that in the New London Reservoir system, large tracts of land that feed the Reservoir are fenced off, and hiking, fishing and boating or trespassing are not allowed. In East Lyme, we have some of our most heavily developed and travelled and paved over areas within the Aquifer Protection Zone. It seems inevitable that these areas will either need some expensive remediation to provide drinking water or be abandoned when they can't meet required standards a few years away from now. We do however, have a partial answer to the problem in the 4 Mile Aquifer, which is currently untapped. Better protections should be put in place through zoning.

The same is true for the Niantic River and that can be protected by protecting the Watershed in East Lyme that feeds that river. The Niantic River Watershed committee has done studies on that issue and more protection is needed, especially if a large multifamily development occurs along the River. These reports are available from the Town, I hope you are able and interested in acting upon this information. I suggest that a sub-committee of Zoning be established and protection of land in the North end of Town be considered as a reasonable solution to these issues. I think members of Zoning and Conservation Commissions would work well on a sub-committee, consulting with staff from the town Water Dept. and I will volunteer for such a sub-committee. I do believe the future of East Lyme depends on action taken now. I am submitting just a small bit of data as documentation of my concerns, more is available for your considerations. I thank you for your service to the town and for your consideration of my suggestion. I hope a zoning

Sincerely,

Mark Christensen

66 Grassy Hill

E-Lyme

I hope a zoning change and public hearing can be held to address this issue in the near future.



Mark Christensen
dropped this off
tonight before the
meeting and wants
it to be read.

MEMO

FROM: Penny Howell-Heller, East Lyme Commission for the Conservation of Natural Resources

TO: Ben North

CC: Joe Bragaw, Chris Lund, Kevin Seery

RE: Sodium levels in East Lyme town well water

Thank you for providing the Commission with sodium concentration readings for all East Lyme drinking water wells, 2005-2022. I have examined the data and the full Commission discussed this analysis at their October meeting. We offer the following comments:

- Although the system-averaged readings are currently slightly above the health guideline of 28 ppm, the readings have increased significantly since 2005. Most importantly, individual wells show much different patterns of exposure. All but two have a significantly increasing trend since 2005. And all but two have current readings above the health guideline of 28 ppm.
- Well 6 and Well 1A have shown the greatest increase over the time series. Joining their data in 2022 has masked their individual upward trends. Both wells are increasing about 1.5 ppm /year.
- Well 4 levels are the most variable, and had the highest concentration of the time series (42.8 ppm) recorded in 2018. Levels have been above the health guideline for the last six years.
- Although well 2A levels are below the health guideline and show no trend, nearby well 3A/3B levels have been above the guideline for several years and show an increasing trend of almost 1 ppm /year, having doubled over the time series.
- Well 5 is the only well north of I-95 and has recorded the lowest sodium levels, much below the health guideline but also showing a significant increasing trend.

Western Connecticut University hosted a webinar October 17, 2022, presenting sodium data trends in Connecticut surface and groundwater. Dr. Victoria Kelly presented decades of data showing that road salt contamination is a statewide problem and about 90% of sodium in lakes and groundwater comes from road salt, with the rest from natural sources. Her studies also have determined that it takes about a decade to flush salt from a system after the sources STOP. In other words, continued application will always result in some NaCl leaching into the ground, which enhances leaching of heavy metals (lead, cadmium, chromium, iron, etc.) into lower ground levels where well water is drawn. The variables determining how much road salt leaches into neighboring wells are: distance from (any size) road application and the total surface cover of impervious surface (e. g. roofs, driveways, parking lots, rock outcroppings, etc.).

This webinar ended with a listing of Best Management Practices:

- All road salt is stored completely covered from the weather.
- Roads are brined before a storm hits so loose salting is not needed or only minimally applied.

- Road salt is discharged in a predetermined (computer) controlled manner and amounts used are recorded so excessive amounts can be identified.
- Efficient plow blades are used with 'live edges' that closely meet the contours of the road.

We are asking if practices in East Lyme follow these guidelines. If some are not, please outline what practices are followed.

Solutions to impediments to following these guidelines include consolidating services with neighboring towns to share expensive resources and the town offering training for private contractors so they are aware of the consequences of haphazard application. Establishing through zoning 'restricted salt use' areas, with posted signs and enforcement, on roads within or near the established Aquifer Protection Areas, which surround town wells, will minimize short-distance salt leaching and educate the traveling public about the vulnerability of their drinking water supply.

The Commission acknowledges and appreciates the time and effort that Public Works puts into keeping the town's roads safe to travel. Solutions to this health risk are doable. We would appreciate a timely reply before the next winter season.

East Lyme Commission for the Conservation of Natural Resources

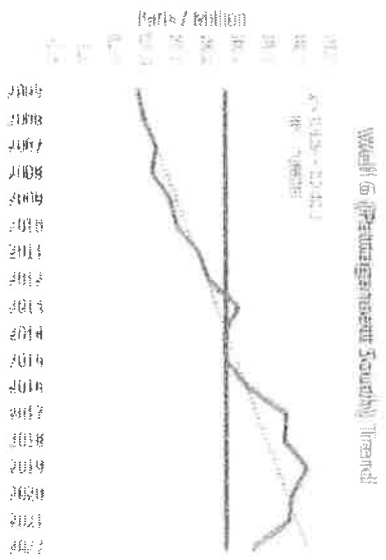
Penny Howell-Heller, Secretary CCNR
Art Carlson, Chair CCNR
Mark Christensen
Don Danila
Laura Ashburn
Harvey Beeman
Marjorie Meekhoff
Rose Ann Hardy, Ex-Officio

Note:

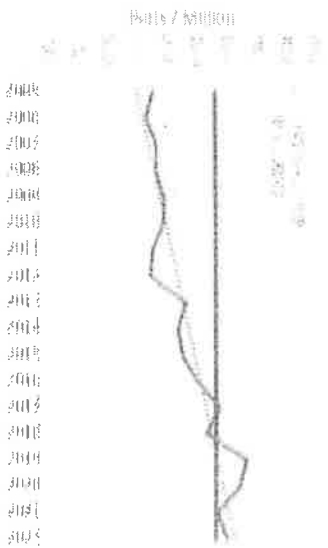
Red line = health guideline of 28 ppm

Blue line = the year's salt value

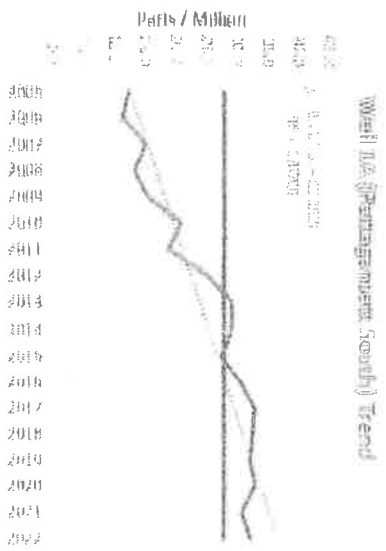
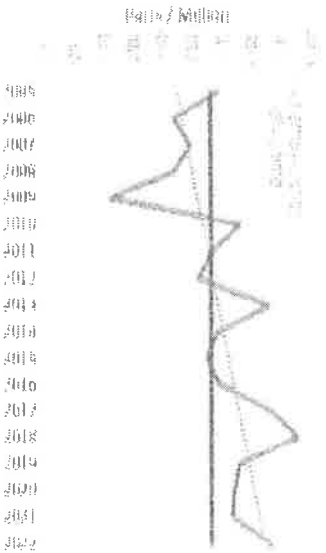
Dotted line = trend (equation shown)



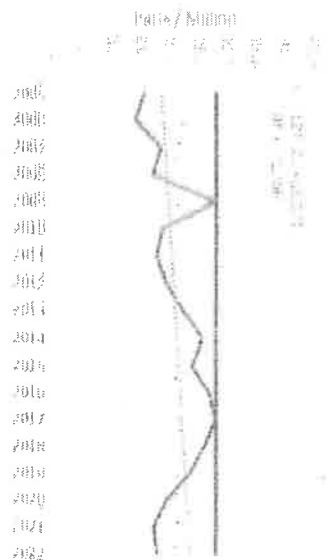
World 2A (Indonesia) Trend



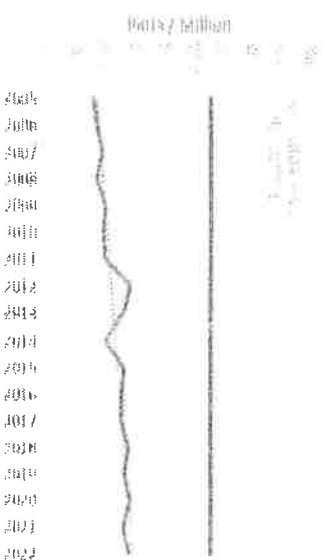
World 4 (Dordogne France) Trend



World 2A (Indonesia) Trend

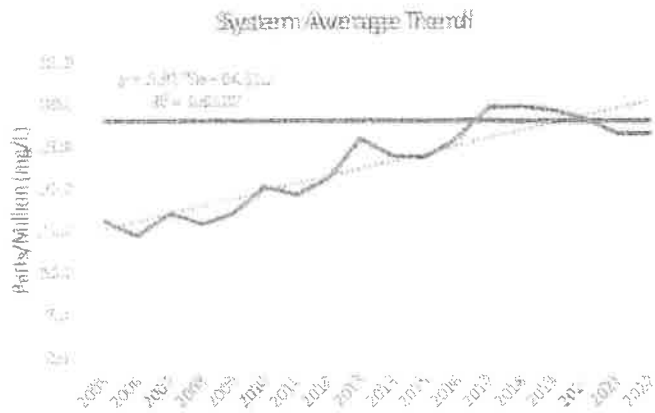


World 5 (Petrogenesis North) Trend



above red line
is sodium

N. of 95
North in
of town.



	AVERAGE ANNUAL INCREASE	
	(Slope)	R-square
Well 6	1.61	0.89**
Well 1A	1.42	0.87**
Well 3A/3B	0.95	0.82**
Well 4	0.87	0.39
Well 5	0.36	0.73**
Well 2A	0.29	0.12
System Ave	0.898	0.83**

****statistically significant p<0.01**

FORWARD

Connecticut State law requires a municipal planning commission to prepare and adopt a Plan of Conservation and Development (POCD). Section 8-23 of the Connecticut General Statutes (CGS), as amended by Public Act 15-95, sets forth required procedures by which each municipality must prepare or amend and adopt a POCD. Effective July 1, 2016, any municipality that does not adopt a POCD at least once every ten years shall be ineligible for discretionary state funding unless such prohibition is expressly waived by the OPM Secretary. The 10-year clock for discretionary state funding eligibility re-sets whenever the municipal POCD is prepared or amended and adopted in accordance with CGS Section 8-23.

Discretionary state funding includes, but is not limited to, any source of funding that a state agency administers through a competitive process. Examples include, but are not limited to, the Urban Action Program, Small Town Economic Assistance Program (STEAP), Clean Water Fund, Drinking Water State Revolving Fund, as well as various housing, historic preservation, brownfields remediation, open space and farmland preservation programs.

The Plan shall consider the following:

- the community development action plan of the municipality, if any;
- the need for affordable housing;
- the need for protection of existing and potential public surface and ground drinking water supplies;
- the use of cluster development and other development patterns to the extent consistent with soil types, terrain and infrastructure capacity within the municipality;
- the state plan of conservation and development;
- the regional plan of development;
- physical, social, economic and governmental conditions and trends;
- the needs of the municipality including, but not limited to, human resources, education, health, housing, recreation, social services, public utilities, public protection, and transportation;
- the objectives of energy-efficient patterns of development, the use of solar and other renewable forms of energy and energy conservation; and
- protection and preservation of agriculture. ✓

The Plan shall also:

- be a statement of policies, goals and standards for the physical and economic development of the municipality;
- provide for a system of principal thoroughfares, parkways, bridges, streets, sidewalks, multipurpose trails and other public ways as appropriate;
- be designed to promote, with the greatest efficiency and economy, the coordinated development of the municipality and the general welfare and prosperity of its people and identify areas where it is feasible and prudent (i) to have compact, transit accessible, pedestrian-oriented mixed use development patterns and land reuse, and (ii) to promote such development patterns and land reuse;
- recommend the most desirable use of land within the municipality for residential, recreational, commercial, industrial, conservation and other purposes and include a map showing such proposed land uses;
- recommend the most desirable density of population in the several parts of the municipality;

- note any inconsistencies with the following growth management principles: (i) redevelopment and revitalization of commercial centers and areas of mixed land uses with existing or planned physical infrastructure; (ii) expansion of housing opportunities and design choices to accommodate a variety of household types and needs; (iii) concentration of development around transportation nodes and along major transportation corridors to support the viability of transportation options and land reuse; (iv) conservation and restoration of the natural environment, cultural and historical resources and existing farmlands; (v) protection of environmental assets critical to public health and safety; and (vi) integration of planning across all levels of government to address issues on a local, regional and state-wide basis;
- make provision for the development of housing opportunities, including opportunities for multifamily dwellings, consistent with soil types, terrain and infrastructure capacity, for all residents of the municipality and the planning region in which the municipality is located; and
- promote housing choice and economic diversity in housing, including housing for both low and moderate income households, and encourage the development of housing which will meet the housing needs identified in the housing plan prepared pursuant to section 8-37t and in the housing component and the other components of the state plan of conservation and development prepared pursuant to chapter 297. In preparing such plan the commission shall consider focusing development and revitalization in areas with existing or planned physical infrastructure.

The Plan provides the guidance for the physical development of East Lyme. It is an active, fluid, and evolving document, resulting in specific and relevant proposals for implementation by local Boards and Commissions, or by Town Meeting. It is intended to be relevant for at least 10-years, but ideally 20-years. Its focus is on physical development, such as density, infrastructure, and undeveloped areas. The Plan contains important demographic, social, and economic information, which in turn will allow the town to better identify and forecast future community needs and services. Other topics, including zoning, preservation of community character, and the acquisition of open space are discussed in the Plan. The POCD is a comprehensive document, not only utilized by the Planning and Zoning Commissions, but also other Town Boards and Commission as well as Town-elected leaders and municipal officials.

New requirements of CGS 8-23 require the Plan incorporate sustainability and resiliency initiatives and the identification of areas served by existing sewerage systems, where sewer systems are planned and to be avoided. This document updates the expiring Goals & Objectives of East Lyme's 2009/2010 Plan of Conservation and Development, incorporates sustainability and resiliency through Sustainable CT action items, and identifies existing sewerage systems, planned sewerage systems and the areas for sewer avoidance. The POCD provides a legally defensible standard for zoning changes, and brings the community further into compliance with anticipated changes to the state's enabling laws.

Chapter 5 - Natural Resources

5.1 Environmental Quality

A primary goal of the Plan of Conservation and Development is to maintain and, where possible, enhance the environmental quality of East Lyme's land and water resources. Clean and adequate supplies of water are essential for future growth and prosperity of the Town.

Environmental quality should be the concern not just of conservationists, but of all citizens, because destruction or disturbance of environmentally sensitive areas results in real losses to the social and economic welfare of the community.

East Lyme contains a wide variety of natural resources and environmentally diverse/sensitive areas including aquifers, steep slopes, beaches and dunes, surface waters, inland and tidal wetlands. Some of East Lyme's sensitive environmental areas have already been adversely affected by adjacent development or other factors. Where possible, this plan aims to decrease further impacts or improve existing damage.

Inadequate management of natural resources can create hazards from flooding, destroy productive habitats, jeopardize drinking water supplies and limit recreational enjoyment.

In East Lyme, Pattagansett Lake, Gorton Pond and Dodge Pond have all been adversely affected by adjacent development. These bodies of water provide many desirable functions including sites for many types of human recreational activities, augmenting our well drinking water supply as part of aquifers, and serving as wildlife habitat. Similar to town shoreline neighborhoods, the lakes also provide economic benefits for the town from enhanced tax revenues on waterfront properties and spending by both residents and visitors to the lakes for a variety of goods and services.

Erosion caused by over development of coastal shore fronts has resulted in a loss of storm protection and the need for high-maintenance protective structures. Higher than acceptable levels of bacteria in bathing waters have necessitated the closing of beaches in town on several occasions. In each case, there exists either an actual or potential cost to the public or loss of revenue as a result of the resource being impaired.

5.2 Environmentally Sensitive Areas

The following land and water areas are considered environmentally sensitive, either because they serve valuable natural functions or because their improper use will impair the functioning of other resource areas.

5.2.1 Aquifers

Within the Town of East Lyme, there are four stratified drift aquifers and numerous bedrock aquifers, which provide the Town with its drinking water supply. The aquifers and their recharge areas must be protected from contamination by chemical and biological pollutants. (Reference: Protecting Drinking Water in East Lyme, East Lyme Commission for the Conservation of Natural Resources, 2018)

5.2.2 Surface Waters

Rivers, streams and inland water bodies serve as conduits and storage areas for flood waters and therefore, should be protected from encroachment and filling, which could lessen their carrying capacity. East Lyme utilizes surface waters for potable water supply, and these waters are valuable recreational resources and also support animal life. Latimer Brook and Bride Brook both support anadromous fish runs (alewife in both and also sea trout in the former). Bride Lake has one of the largest spawning populations of alewife in New England (Reference: Atlantic States Marine Fisheries Commission, 2017 River Herring Stock Assessment Update. Volume II: State-specific Reports) They should therefore be protected from erosion and sedimentation, chemical runoff and domestic sewage leachate.

5.2.3 Floodplains

Land areas adjacent to rivers and streams, which are inundated during floods, should not be developed since the presence of development will raise flood levels above natural levels and endanger other areas.

5.2.4 Inland and Tidal Wetlands:

Wetland areas are valuable flood-water storage areas and, in the case of tidal wetlands, buffers the surrounding area from storm wave action. They are also highly productive plant and animal habitats and improve water quality by trapping pollutants before they enter surface waters. Excavation, filling, building or sedimentation within wetlands impacts all of these functions.

5.2.5 Beaches, Dunes and Bluffs

These erodible coastal resources are, of course, highly valuable recreational resources. They also act as buffers to coastal flooding and dissipate wave energy during storms. These lands are inherently unstable and are highly susceptible to destruction through any modification.

5.2.6 Steep Slopes

Slopes provide habitat value. Slopes greater than 15 to 20 percent are highly erodible, and construction on them is likely to result in sedimentation of down-grade watercourses unless erosion control measures are taken. Erosion losses are exacerbated by the typically thin soil layer over rock on steep slopes, which requires major site modification to install foundations and septic systems.

As can be seen from these brief descriptions, damage to environmentally sensitive resources, and the related losses in public and private investment, occurs in three ways:

- (1) pollutants seep into the ground, impacting groundwater supplies;
- (2) natural materials and man-made pollutants are transported over the land and deposited in watercourses through erosion and sedimentation; and
- (3) land is exposed to the destructive force of flood and storm waters, a natural occurrence, but one which is aggravated by modification of natural water retention areas and development in floodplains. The objective of resource management is to control the use of sensitive lands in a manner that prevents, or at least minimizes, groundwater pollution, erosion/sedimentation and development in floodplains. This is accomplished by first directing intensive development away from sensitive lands, and second, by adopting controls for sensitive lands when they are used.

INTRODUCTION

How our community plans for and manages land use and development determines our economic, social and environmental well-being. Smart Growth promotes development that is good for the economy, community and the environment. The benefits of smart growth include the following:

- The creation of diverse housing options;
- The protection of farm and forest land;
- Diverse transportation options and less dependence on the automobile;
- Greater social interaction with neighbors;
- A lower cost for public services resulting in reduced taxes; and
- An overall higher quality of life.

The basic principles of Smart Growth, as provided by the United States Environmental Protection Agency ("EPA") are:

1. Promote mixed land uses;
2. Take advantage of compact building design;
3. Create a range of housing opportunities and choices;
4. Create walkable neighborhoods;
5. Foster distinctive, attractive communities with a strong sense of place;
6. Preserve open space, farmland, natural beauty, and critical environmental areas;
7. Strengthen and direct development towards existing communities;
8. Provide a variety of transportation choices;
9. Make development decisions predictable, fair, and cost effective; and
10. Encourage community and stakeholder collaboration in development decisions.

Our future depends on carefully integrating growth, environmental protection and economic opportunities into our local planning framework. Development guided by these smart growth principles enhances neighborhoods, reinforces community vitality, protects natural resources and creates a vibrant place to live, work, and play. The result is a high quality of life that drives economic competition, creates business opportunities, and improves the local tax base.

MISSION STATEMENT

"Safety, security, economic stability, beauty, maintenance of property values and infrastructure, are all important to the long-term physical development of East Lyme. As such, the mission of East Lyme is to create and sustain a healthy community, one whose residents have stability and security with the preservation of natural resources for future generations."

Articulated through the Planning Commission and Staff, the vision explains the intent of the Town and the community values for the 2020 Plan of Conservation and Development, as adopted by the Planning Commission:

- achieve a balance between conservation and development;
- ensure that changes enhance East Lyme;
- carefully balance the need for economic development and land use with the preservation of recreational, scenic, historic, cultural, agricultural, and natural resources;

- protect and enhance natural resources, community character, and the overall quality-of-life in an environmentally responsible and sustainable way; and
- direct future growth so that no one aspect of the town overwhelms the others.

VISION

Located on Long Island Sound, East Lyme is a coastal New England town, enhanced by its additional frontage along the Niantic River and the diversity of its population and land uses. East Lyme is characterized by beach communities; a traditional seaside village center along Route 156, the busy commercial corridor along Route 161, quiet residential neighborhoods, vast open spaces and substantial rural character. East Lyme's natural setting includes expansive water views and winding rural roads through a more rugged wooded upland terrain. East Lyme's people come together in a sense of community that supports activities ranging from youth sports to community parades. In order to achieve a balance between conservation and development, East Lyme's future challenge will be balancing the many facets of East Lyme, protecting and enhancing natural resources, community character, and the overall quality-of-life in an environmentally responsible way; directing future growth so that no one aspect of the town overwhelms the others. Therefore, the vision of East Lyme is to ensure that changes enhance East Lyme and seeks to carefully balance the need for economic development and land use with the preservation of recreational, scenic, historic, cultural, agricultural, and natural resources.

GOALS

1. Maintain the traditional New England character of the community and enhance the Niantic and Flanders Village identities of East Lyme.
2. Establish a coordinated, cooperative system of land-use decision making to ensure that development continues to meet high performance standards, specifically with regard to open space preservation, view corridor protection, environmental protection, sustainability, and landscaping and building design treatments consistent with East Lyme's New England setting.
3. Promote Compatible and Sustainable Economic Development
4. Support and cultivate a wide variety of economic activities that may be easily integrated into the community with little or no adverse impact on community resources.
5. Promote agricultural industries.
6. Identify and preserve the natural, historic, cultural and environmental resources and habitats of the community.
7. Protect East Lyme's native ecosystems, biodiversity and maintain the quality of East Lyme's wetlands, watercourses, and groundwater.
8. Promote wise use of land in the coastal area, which recognizes the importance of the Town's coastal resources and existing water-dependent uses.
9. Preserve existing period, historic New England style structures and sites through the use of Certified Local Government ("CLG") designation of historic properties, the Connecticut State Register and National Register of Historic of Historic Places or other implements, to include Historic Society.
10. Preserve the tradition of public access to East Lyme's shoreline, while weighing such access against the need to protect sensitive shoreline and inland water resources, and the rights of property owners.
11. Provide park and recreational facilities that meet the diverse needs of residents and visitors of all ages.
12. Provide facilities and services for a municipal government that meet future needs and maintain the quality and range of municipal services and facilities desired by the townspeople while maintaining and diversifying the tax base.

Figure 7 - Major Watersheds & Aquifers

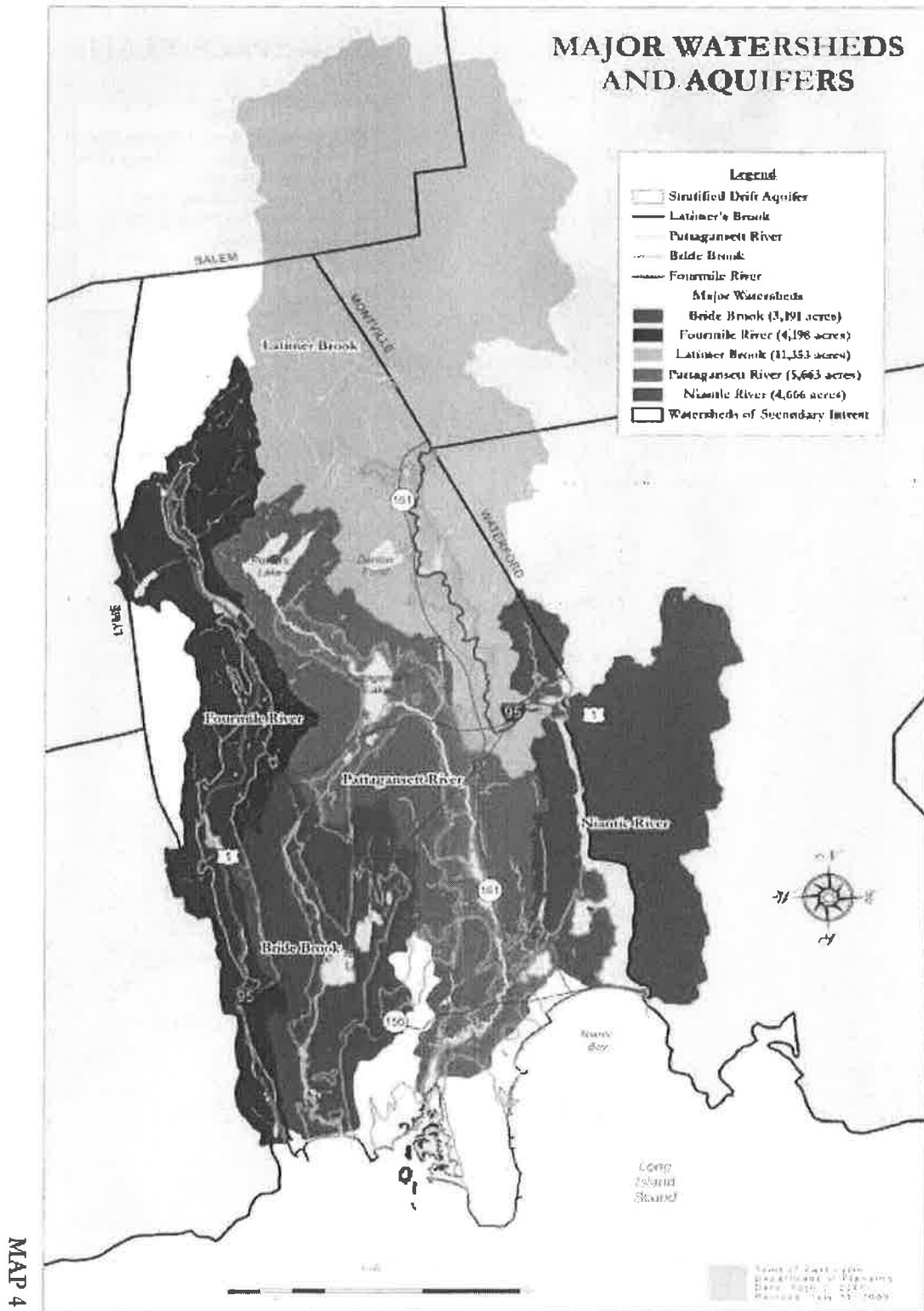
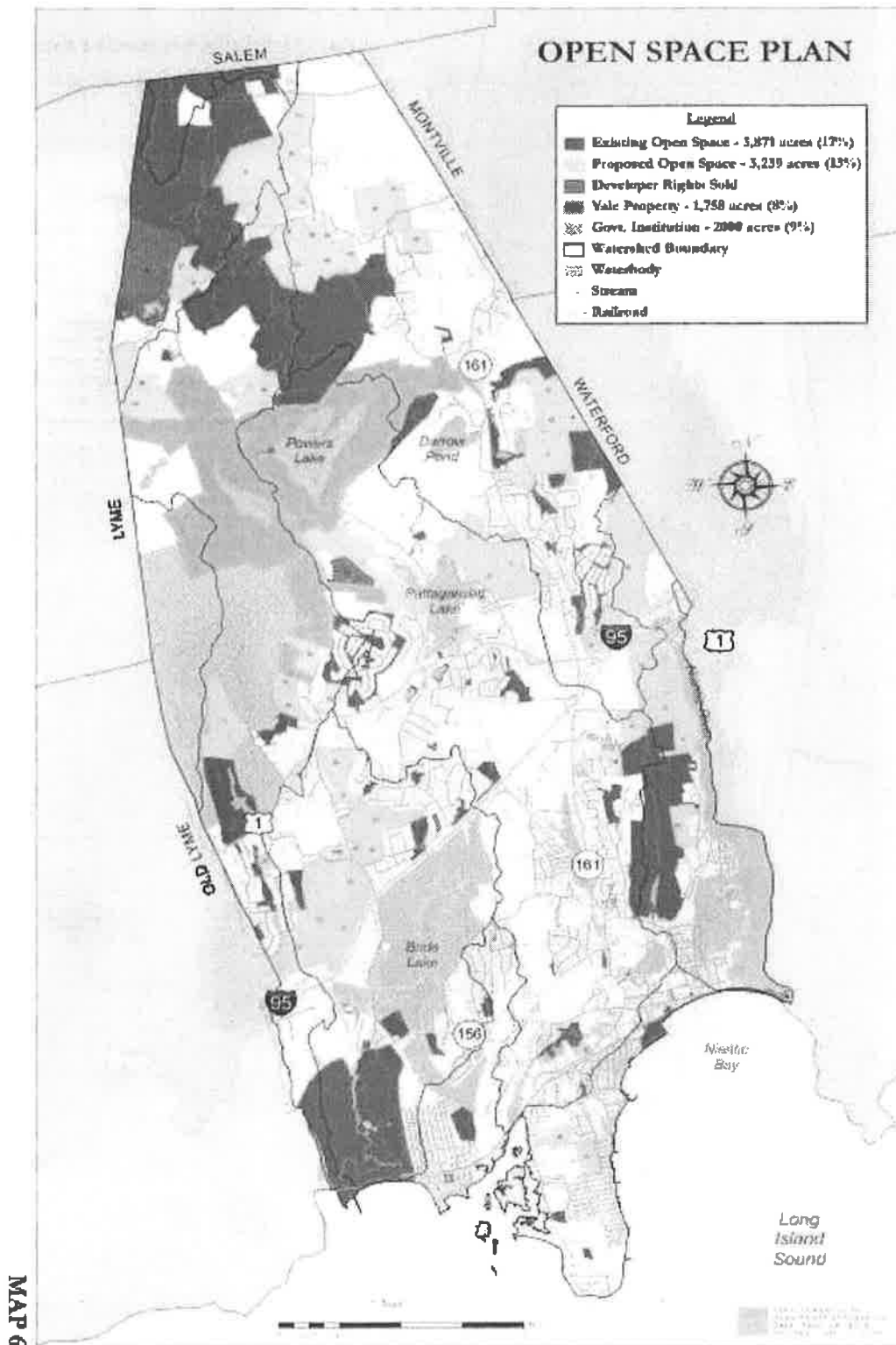


Figure 6 - NRC Open Space Plan



preservation of open space. For Example: CT DEEP Open Space and Watershed Land Acquisition Fund - The Open Space and Watershed Land Acquisition (OSWA) Grant Program provides financial assistance to municipalities and nonprofit land conservation organizations to acquire land for open space, and to water companies to acquire land to be classified as Class I or Class II water supply property.

8. **Support open space acquisition projects as outlined in the Niantic River Watershed Protection Plan (August 2020):** Support this plan both as an active partner for parcels within town limits and as an advocate for parcels in other towns (i.e.: submitting testimony and/or letters of support).
9. **Promote opportunities to donate land for open space:** Develop a "Landowners Guide to Conservation Options."
10. **Protect high points:** High Points provide unique plant/animal habitats as well as contributing to town identity. Views of and from high points define much of Flanders and are valued by the citizens of East Lyme as important cultural resources.
11. **Maintain open space adjacent to water bodies:** Maintain Riparian Buffers along Waterbodies and Waterflows. The filtration of surface water runoff before it enters the hydrology system is vital to the health of the environment. This is true in all towns, but especially so in East Lyme due to its proximity to the ocean, and intense water consumption during the summer months.
12. **Maintain Open Space corridors between water bodies:** Connect "New" Open Space to Existing Open Space & Ecosystems. Designated open space should be situated to increase the size of existing natural patches and promote connectivity between ecosystems such as hilltops to valley floors, wetlands to forested areas, and so on.
13. **Support consistent funding of open space acquisition through annual town budget.** Allow private contributions to the fund through various measures including "Contribute to a Place" campaigns.

References:

- Connecticut State Green Plan, 2016-2020
- Niantic River Watershed Protection Plan, August 2020
- Land of Unique Values Study
- East Lyme Natural Resources Commission Open Space Plan
- Protecting Drinking Water in East Lyme, 2018, East Lyme Commission for the Conservation of Natural Resources

6.3.4 Sustainability

The Town's plan to acquire more open space also aligns with the State of Connecticut's land conservation goals. By 2023, the State of Connecticut aims to conserve 21% (673,210 acres) of Connecticut's land base, in accordance with Section 23-8 of Connecticut's General Statutes (State of Connecticut Green Plan, 2016). Opportunities to secure resources for open space acquisition should be actively pursued.

6.7 RECOMMENDATIONS

- 1. Preserve and maintain large, unfragmented tracts of open space:** Land fragmentation is a leading cause of habitat loss, as such preservation of land is essential. An increase in green space can also help regulate air quality and climate which counters the warming effects of the concrete paved surfaces.
- 2. Work to link existing open space parcels together:** By preserving large parcels of open space which connect with one another, contiguous habitats remain intact and, if desired, passive recreation opportunities are increased.
- 3. Preserve open space in areas that are more prone to the impacts of climate change (ex. flooding) to enable the land's natural ability to mitigate such disasters:** The prevention of new public infrastructure in flood prone areas is important in order to combat rising sea level. Prioritizing the coastal land as areas of open space and restricting development. The creation of teams which can identify climate related vulnerabilities in the town is important for combatting future issues. Projects to address storm surges and the damage they cause can be funded by the State of Connecticut. Maximizing nature's solutions by protecting and restoring forests, grasslands, and wetlands. On a larger national scale, the nature conservancy has conducted a study which estimates that natural solutions could mitigate more than a third of its carbon emissions. The southern edge of the town is an arm of Long Island Sound, the region's largest estuary and with the warming temperatures and sea level rise it is important to take action to protect the ecosystem and the species it houses. Varied stressors will form unforeseen results which makes it uncertain how quickly species will be able to adapt to these problems if at all. Connecticut must protect existing habitats and make plans to minimize projected changes on coastal environments.
- 4. Preserve and continue protection of Oswegatchie Hills and the Niantic River:** The Niantic River is an arm of the Long Island Sound estuary and provides an ecosystem for many species. East Lyme's commitment to the preservation of Oswegatchie Hills has been made clear throughout the years. As indicated in this plan, it is East Lyme's intention to preserve Oswegatchie Hills as open space in perpetuity.
- 5. Protect the Latimer Brook Watershed:** The southern portion of Latimer Brook flows directly into the Niantic River and Long Island Sound. Protecting the riparian buffer is essential to the health of the system. This need is exacerbated by the steep slopes down to the water channels, giving stormwater runoff little to no infiltration zone.
- 6. Encourage an Open Space Consortium:** The Commission for the Conservation of Natural Resources should meet at least annually with a collection of members from but not limited to: Aquifer Protection Agency, Niantic River Watershed Committee, East Lyme Land Trust, Eight Mile Wild and Scenic River Watershed Committee, Planning Commission, Zoning Commission, Inland Wetlands Agency, East Lyme Public Trust Foundation, Parks & Recreation Commission for purposes of collaboration.
- 7. Encourage continued public/private partnerships to pursue state, federal and private grant opportunities:** Partnership with a professional grant writer is strongly recommended to take advantage of all potential opportunities for state, federal and private grant dedicated to the