

**JULY 2015**

**ESSEX LONG TERM PLANNING COMMITTEE**

**REPORT TO BOARD OF SELECTMEN**

**“PLANNING TO PRESERVE THE BEST OF ESSEX”**

Andrew St. John, Chair  
Peter Kellerman  
Michael Dyer  
Robert Coviello  
Edwin Howard  
Mike French  
Sue Lufkin  
Joe Bourneuf  
Skip Crocker  
Lisa O'Donnell

## **TABLE OF CONTENTS**

### **Executive Summary**

- I. PURPOSE AND NEED
- II. BACKGROUND AND FOUNDATIONAL WORK
- III. RISK MANAGEMENT APPROACH
  - a. Community Defining Resources of Essex
  - b. Threats and risk
  - c. Actions
  - d. Organization of Results
- IV. RISK ASSESSMENT RESULTS
  - a. Character defining resources
  - b. Threats and risk
- V. CDRE: NATURAL BEAUTY AND OPEN SPACE
  - a. Marsh and river
  - b. Woods
  - c. Scenic byways
  - d. Chebacco Lake
- VI. CDRE: HISTORIC LEGACY
  - a. Museums and shipbuilding heritage
  - b. Town Hall and other significant architecture
  - c. Fire-pump hand tub
- VII. CDRE: ECONOMIC
  - a. Agriculture
  - b. Clamming and fishing
  - c. Small business – antique shops, restaurants
  - d. Artisanry & trades – boatbuilding
  - e. Home occupations
  - f. Tourism
- VIII. CDRE: QUALITY OF LIFE
  - a. Stable, small population and small-town feel
  - b. High quality of education and schools
  - c. Water access and recreational opportunities
  - d. Water resource protection district
  - e. Town buildings, facilities, services and infrastructure
- IX. RISK MANAGEMENT: RECOMMENDED ACTIONS
  - a. Zoning Actions
  - b. Fiscal Actions
  - c. Regulatory Actions
  - d. Community Activity
  - e. Analysis of actions and management plan

## TABLES

- E-1. Community Defining Resources of Essex (CDREs), Ranked.
  - E-2. Threats to CDREs, Ranked.
  - E-3. Recommended Actions, Ranked by Effectiveness.
- 
- 1. Town of Essex Planning Documents and Initiatives, 2002-2014.
  - 2. CDREs Scored by “Importance”.
  - 3. Threats Scored by “Total Impact”.
  - 4. Threats Ranked by “Total Impact”.
  - 5. Marsh and River: Threats.
  - 6. Woods: Threats.
  - 7. Scenic Byways: Threats.
  - 8. Chebacco Lake: Threats.
  - 9. Museums and shipbuilding heritage: Threats.
  - 10. Town Hall and significant architecture: Threats.
  - 11. Agriculture: Threats.
  - 12. Clamming and fishing: Threats.
  - 13. Small business: Threats.
  - 14. . Artisanry and trades: Threats.
  - 15. Home occupations: Threats.
  - 16. Tourism: Threats.
  - 17. Stable, small population and small-town feel: Threats.
  - 18. High quality of education and schools: Threats.
  - 19. Water access and recreational opportunities: Threats.
  - 20. Water resource protection district: Threats.
  - 21. Town buildings, facilities, services and infrastructure: Threats.
  - 22. Summary of Actions: Effectiveness and Likelihood.
  - 23. Risk Management: Effectiveness of Actions and Likelihood of Their Enactment

## APPENDICES, (MAPS, LINKS TO ALL THE PLANNING DOCUMENTS)

## EXECUTIVE SUMMARY

Essex is a beautiful town with a unique heritage, much beloved by its residents. The work of the Essex Long-Term Planning Committee (LTPC) has confirmed a strong desire on the part of all residents to preserve what is best in the Town, while continuing the strong tradition of independence and entrepreneurship. With this document the LTPC has undertaken an examination of assets essential to the Town's character and the threats to those assets. We conclude by considering and recommending actions to mitigate those threats. This Committee is united in its feeling that inaction is not likely to preserve the character of Essex.

This present effort builds upon several important planning exercises carried out by the Town and its citizens over the last dozen years. In the last two years, the LTPC has engaged in a systematic process designed to identify the most important resources available to the Town (we have named these Community-Defining Resources of Essex or CDREs), to assess the threats posed to those resources, and to develop recommendations for proactive planning measures that the Town can take that combine maximum effectiveness with the highest likelihood of enactment. We have leaned heavily on the good work done previously by the citizens and officials of Essex, and have also sought new input from the public in a series of listening sessions in 2008 and in community surveys conducted in 2008 and 2010.

This risk assessment and management approach is commonly used in scientific, industrial and community planning efforts and is generally considered indispensable in many technical and planning disciplines. It allowed the LTPC to assign quantified values to many otherwise subjective community assets and provided an auditable trail for the development and prioritization of planning strategies.

We submit these results and recommendations to the Town in full realization that we are a small group of fallible people trying to gauge the hopes and desires of a diverse and talented community. We have done our utmost to integrate the good work done by so many over the last dozen years, and have included references thereto, in effect creating a synthesis of their work with our own analysis and recommendations.

The summary of results follows.

### ***Community-Defining Resources***

The LTPC review identified and ranked the eighteen most important "Community Defining Resources of Essex" (CDREs) and grouped them into four categories: Natural Beauty and Open Space, Historic, Economic, and Quality of Life. Individual scoring followed by group discussion and consensus resulted in a ranking of the CDREs as shown in the following table:

**Table E-1. Community Defining Resources, Ranked.**

<b>Rank</b>	<b>CDRE</b>
1	Marsh and river
2	Water Resource Protection District
3	Town buildings, facilities & infrastructure
4	Tourist destination
5	Museums and shipbuilding heritage
6	Stable, small population and small-town feel
7	High quality of education and schools
8	Scenic byways
9	Town Hall and other significant architecture
10	Water access and recreational opportunities
11	Small businesses - antique shops, restaurants
12	Artisanry & trades / boatbuilding
13	Clamming and fishing
14	Woods
15	Fire Pump- Hand Tub
16	Agriculture
17	Chebacco Lake
18	Home occupations

***Threats***

The LTPC identified and ranked threats to the CDREs based upon a review of previous planning and analysis work and group discussion and consensus. These threats were scored based upon severity of the “impact” on affected CDREs and the likelihood of the threats’ occurrence. The threats were ranked by “total impact”, which accounts for the importance of the affected CDRE, the impact and the likelihood of the threat. Note that a single threat may affect more than one CDRE, in which case the threat’s total impact on multiple CDREs is accounted for. The ranked results appear in the following table:

**Table E-2. Threats to CDREs, Ranked.**

Rank	Threat
1	Inappropriate commercial development
2	Inappropriate residential development
3	Underfunded maintenance of Town property
4	Light Pollution
5	Invasive Species
6	Decline of commercial vitality
7	Pollution in Waterways
8	Erosion of river / lake banks
9	Museum Funding Challenges
10	Loss of Boat Building Industry
11	Inappropriate municipal development
12	School Budget Cuts
13	Noise pollution
14	Inappropriate signage
15	High Housing Prices
16	Loss of Town Hall for municipal offices
17	Over-fishing (in Essex)
18	Limited water access at Conomo
19	Outdated / inadequate Town facilities
20	Loss of significant architecture
21	Clearcutting woodlands

### *Actions*

The final step of this risk management process identified and analyzed possible actions by the Town (zoning and other bylaws, financial , organizational, and community activity) to prevent or mitigate threats. The LTPC ranked the effectiveness of such actions against single or multiple threats, again through discussion and consensus. We also gauged the likelihood of enactment of these actions (scale of 1 to 5, lowest to highest likelihood), whether by Town boards, Town Meeting, or other organizations and accounted for this factor in the scoring and ranking. The summary results appear in the following table:

**Table E-3. Recommended Actions, Ranked by Effectiveness.**

Action	Type	Ranking, Effectiveness Only	Likelihood of Enactment	Ranking, Effectiveness and Likelihood
Village district / small business overlay	Zoning	1	4	1
Zoning districts throughout town	Zoning	2	1	8
Scenic overlay	Zoning	3	5	2
Creation of commercial / industrial district	Zoning	4	3	3
Develop all communication platforms	Community	5	2	7
Town buys conservation restrictions (scenic)	Financial	6	1	11
Restoration of Town Hall	Community	7	4	4
Reinvigorate Shipbuilding Museum	Community	8	3	6
Institute for historic boat building	Community	9	1	15
Grant funding (private, state, federal)	Financial	10	4	5
Increase CPC %	Financial	11	2	10
Provide affordable & senior housing	Community	12	2	12
Provide public restrooms	Community	13	3	13
Provide animal control facility	Community	14	2	16
Review / enforce signage ordinance	Zoning	15	5	9
Historic district (Historic "group")	Zoning	16	4	14

These actions provide a road map for prioritizing and planning actions by the Town. Gauged strictly by effectiveness, four zoning actions would have the greatest benefit. The Town's voters have recently shown more inclination to accept zoning initiatives than in the past, particularly when small in scale and for clearly targeted purposes. The Village business and scenic overlay districts would be the most effective and were seen to have strong chances of enactment. Town-wide zoning also has significant benefits, but passage would likely be more difficult.

## I. PURPOSE AND NEED

The Board of Selectmen charged the LTPC as follows in their letter dated April 23, 2007:

“the success of our community will be contingent on a vision of where we want to be and how we shall get there.... The Long-term Planning Committee is to draft a comprehensive set of recommendations to be presented to the Board of Selectmen. Recommendations made by the Committee should clarify a long-term vision (e.g., 25 years) and strategy for the Town while embracing the Town's history and culture... The Committee's work should identify the unique community character of the Town that promotes economic growth while maintaining and enhancing the character of the community.”

The LTPC completed the “Village Initiative” in 2009, after concluding that much of the Town’s essential character and many of its needs meet in its central business area. Following this focused project, we expanded our view Town-wide and determined to re-assess the thoughts of our fellow citizens. This was the aim of the 2010 LTPC survey, which provided an updated snapshot with regard to Essex’s critical (“character defining”) resources, its needs, and a good deal of detail on people’s thinking about their Town. In conjunction with the foundational work done over the previous decade, these results provided the basis for a truly Town-wide approach to long term planning.

The LTPC settled on a risk management approach to this problem, as a way of prioritizing the character defining resources of Essex, identifying the threats and assessing the risks posed, and identifying actions that could be taken to address those risks. This approach also quantifies the benefits of these actions, particularly since some actions can mitigate several identified risks. We also attempted to quantify the probability of implementing these actions, as a further aid to mapping a future course of action.

## II. BACKGROUND AND FOUNDATIONAL WORK

A great deal of planning activity has been undertaken in Essex since 2000. The Town has addressed major land use, infrastructure, operational and financial issues, in our opinion quite a commendable effort by citizens and Town officials. As in any small town, there is tension between residents’ desire for services and their willingness and ability to provide the resources necessary to support them. Any planning initiative must start with the recognition that, without the economies of scale enjoyed by larger towns, per capita costs for basic services in Essex are higher. This condition will continue to require reliance on non-tax revenues of various kinds, including state and federal grants and income from Town-owned property, most notably Conomo Point taxes, rents, and sales.

Table 1 summarizes the results of the most important of these planning projects.



**Table 1. Town of Essex Planning Documents and Initiatives, 2002-2014.**

Year	Report	Sponsor / Author	Summary
2002	Open Space and Recreation Survey	Open Space Committee	<p><b>Residents polled as to “importance of preserving open space”:</b></p> <p>Drinking water supply – 97%                      Wildlife habitat – 91%</p> <p>Buffer zones for wetlands/marsh – 88%                      Agricultural lands – 81%</p> <p>Passive recreation areas – 81%</p>
2003	EO 418 Community Development Plan	Metropolitan Area Planning Commission (MAPC)	<p>“The Town of Essex seeks a proactive planning process that carefully balances the need for economic development, encompassing residential and non residential uses, with the preservation of key natural, scenic, historic and recreational resources.” Established priorities as follows.</p> <p><b>Open Space and Natural Resources</b></p> <ul style="list-style-type: none"> <li>• Identify, prioritize and increase natural resource and open space areas.</li> <li>• Secure identified priority open space parcels through purchases, gifts, conservation restrictions, state and federal grant programs, and municipal and private conservation groups.</li> <li>• Create a management plan for Essex River and salt marsh buffer zones.</li> <li>• Protect drinking water supply.</li> <li>• Promote better stewardship of protected lands.</li> </ul> <p><b>Zoning and Economic Development</b></p> <ul style="list-style-type: none"> <li>• Encourage home occupations, small businesses, farms and shellfishing.</li> <li>• Carefully manage siting of larger commercial/industrial uses; use planning/zoning and financial tools to achieve a sound balance between conservation and appropriate development.</li> <li>• Strengthen Essex as a tourist destination.</li> <li>• Route 22 Corridor overlay district, with multi- family development of up to 6 units allowed by right if 25% affordable, and controls on commercial and industrial development.</li> <li>• Central Village overlay district, with mixed-use development on Martin Street, Main Street and Western Avenue, 3-4 multi- families allowed by right if one unit kept permanently affordable.</li> <li>• Eastern and northern parts of Southern Avenue with current, low residential density and limitations on commercial and industrial uses.</li> <li>• John Wise Avenue open space district, with lower density, options of open space residential design (OSRD) and one-acre lots if affordable units are provided.</li> </ul>

Table 1 (continued). Town of Essex Planning Documents and Initiatives, 2002-2014.

Year	Report	Sponsor / Author	Summary
2003	EO 418 Community Development Plan (continued)	Metropolitan Area Planning Commission (MAPC)	<p><b>Housing</b></p> <ul style="list-style-type: none"> <li>• Retain Town’s rural character while preserving existing businesses and allowing housing opportunities for a variety of incomes and family sizes.</li> <li>• Plan thoughtful growth using planning tools such as mixed-use and higher density “in- fill” developments in areas where development already exists.</li> <li>• Address housing needs of young families and seniors, e.g., multi-unit housing, zoning to “re-develop”, and accessory uses.</li> </ul> <p><b>Transportation</b> Suggested multi-modal and landscaping improvements for Causeway and adjacent areas.</p>
2006	Town of Essex Community Development Strategy	Planning Board & Board of Selectmen	<p>Reiterated many 2003 CDP themes, and added focus on:</p> <ul style="list-style-type: none"> <li>• Acquiring open space: Hardy’s Hatchery/Vitale/Benotti parcels; south Essex woods; Alewife Brook buffer, Essex Woods including the Parsonage Lot, parcels and tax title land in the Maple Swamp area, working with the Manchester Essex Conservation Trust and other organizations; lands along John Wise Avenue, including Hardy’s Hatchery, Vitale and Benotti parcels and Giddings Farm (important habitat {Biomap priority sites} and natural landscapes; land east of Conomo Point along Conomo Point Road (supporting wildlife habitat; Pennoyer/ Febiger/Collier/Allen Lands off Eastern Avenue (important habitat including wetlands.</li> <li>• Adopting Alewife Brook overlay district to protect wildlife habitat, shellfish resources and Essex rural character.</li> </ul> <p>All four “priority list” items since realized: replacement of Senior Center, Route 133 reconstruction, implementation of Community Preservation Act, and Open Space Residential Design (OSRD) by-law.</p>

Table 1 (continued). Town of Essex Planning Documents and Initiatives, 2002-2014.

Year	Report	Sponsor / Author	Summary
2007	Open Space Plan	Open Space Committee	<ul style="list-style-type: none"> <li>• Goal A: Protect and preserve Essex's open spaces, particularly the Essex Woods and the historic vistas of the Route 133 Scenic Byway.</li> <li>• Goal B: Support and improve recreational opportunities and access to open spaces for all Essex citizens.</li> <li>• Goal C: Improve public education and awareness of the unique nature of Essex's natural resources and challenges to preservation.</li> <li>• Goal D: Strengthen the Town of Essex's capacity for preserving and protecting open space strategically and proactively</li> </ul>
2009	Essex Village Initiative: Village Commercial Corridor	Long-Term Planning Committee	<p>"Many of Essex's critical planning needs converge in the Village, including economic development, zoning, housing, recreation, stewardship of natural resources, and safe transportation...The Village is the geographic, economic, and social core of the Town of Essex. It should balance thoughtful residential and business development with preservation of cultural, natural, historic, and recreational resources and be an attractive destination for residents and visitors alike." Report recommended the following actions:</p> <ul style="list-style-type: none"> <li>• <b>Uniform Design Plan</b> – Consistent design theme for streetscape elements throughout the Village (implementation underway)</li> <li>• <b>Transient Dock and Boardwalk</b> – Expansion of docking facilities with associated boardwalk (planning underway)</li> <li>• <b>Town Landing</b> – Enhancement of landing, campus plan for museum and other associated improvements (study and concept design by Icon Architecture complete, 2013)</li> <li>• <b>Spar Pond</b> – Landscaping, seating and interpretative display board (complete)</li> <li>• <b>Community Path</b> – Phased development of walking/bike trail on former railroad spur parallel to RT133 (tabled; however, there is an historic, interpretive walk in the Village)</li> <li>• <b>Freight House and Antique Hand Tub</b> – Relocation and display (tabled)</li> <li>• <b>Town Hall Restoration</b> – Restoration and possible reuse of Town Hall (ongoing)</li> <li>• <b>New Public Safety Building</b> – Renovated and expanded building or new building (in planning).</li> <li>• <b>Zoning and permitting</b> – Various zoning and permitting strategies for village core.</li> <li>• <b>Parking Study</b> – Parking study of village core to identify existing supply, deficiencies and opportunities (not started).</li> <li>• <b>Tennis Courts</b> – New tennis courts on site of existing courts (planning complete; awaiting funding.)</li> <li>• <b>Causeway East</b> – Strategic planning study for east end of Causeway (not started).</li> </ul>

Table 1 (continued). Town of Essex Planning Documents and Initiatives, 2002-2014.

2009	Three Phases of Planning Assistance	Community Investment Assoc. / Taintor	<p>Action plans for:</p> <ul style="list-style-type: none"> <li>• Planning Board. Reorganize and improve the zoning bylaw, including site plan review, and consider new zones: Scenic Overlay District, Village Overlay District, Full Essex Districting, and OSRD (complete).</li> <li>• Board of Appeals. Procedural guide for project applicants “Information Sheet: Zoning and Permitting Resources in Essex” (complete).</li> <li>• Long Term Planning Committee. Implementation and funding strategies for Village Initiative projects.</li> <li>• Conomo Point Planning Committee. Conceptual plan for Northern Conomo Point (in process).</li> <li>• Town Administrator and Board of Selectmen. Identification of potential grants (ongoing).</li> </ul>
2010	Essex Long-Term Planning Survey	Long-Term Planning Committee	<p>Citizens identified important Town characteristics, in order, as:</p> <ul style="list-style-type: none"> <li>• Natural beauty</li> <li>• Safe community</li> <li>• Good school system</li> <li>• Rural, small town feel</li> <li>• Strong community ties</li> </ul> <p>They also ranked planning and development issues;</p> <ul style="list-style-type: none"> <li>• Management of natural, historic and recreational resources</li> <li>• Resolution of Conomo Point planning</li> <li>• Community services (school system, library, senior services)</li> <li>• Economic development (tourism, business district)</li> </ul>
2010	Northern Conomo Point Planning Study	Taintor / Community Investment Assoc.	<p>Three redevelopment scenarios for Northern Conomo Point</p> <ul style="list-style-type: none"> <li>• Scenario 1. Retain existing dwellings and increase public benefit.</li> <li>• Scenario 2 (Options A and B). Compliance with DEP wastewater flow limits.</li> <li>• Scenario 3. No Residential Uses with Land for Public Benefit.</li> </ul> <p>Report included guidance for phased implementation and fiscal analysis for all scenarios.</p>

Table 1 (continued). Town of Essex Planning Documents and Initiatives, 2002-2014.

2011	Pocket Parks and Design Recommendations	KD Turner & Community Investment Assoc., for the LTPC	Concept plans for three pocket parks (parks completed).
2012	Report: "Feasibility and Cost Study Replacement of Municipal Buildings"	Reinhart Associates, for the Town Building Committee	<p>"Study of three buildings and sites for variable municipal uses:</p> <ul style="list-style-type: none"> <li>• Town Office/ Library building at 30 Martin Street</li> <li>• Existing Public Safety Complex building/ site at 24 Martin Street</li> <li>• Town property on John Wise Avenue adjacent to Spring Street Cemetery.</li> </ul> <p>"Each of four municipal functions, Fire, Police, Library, and Town Offices studied to determine the appropriate space needs for each based on current requirements, professional general practice standards and predictable growth."</p>
2013	"Revisiting Town Landing, Essex, MA Harbor Plan"	Icon Architects, for the Long Term Planning Committee	Conceptual plan for Town Landing area to better integrate its many uses and make it a more attractive place for both residents and visitors.

### Planning Board Activities

The Planning Board has worked hard in recent years and has successfully enacted a number of improvements and additions in the Zoning Bylaw, notably, executing much of the blueprint provided by the Community Investment Associates report “Three Phases of Planning Assistance”. In addition to refining the section on definitiond, several progressive new sections were added to the Bylaw, including Open Space Residential Design, Wind Energy Conversion systems, and an update of the section covering the Water Resource Protection District. The Board has also worked closely with the Conomo Point Planning Committee and the Selectboard to establish overlay zoning districts at Conomo Point. Taken together, these actions may indicate a softening of the Town’s historic antipathy to districting.

### Conomo Point Planning

Most notably the work by the Conomo Point Planning Committee and the Board of Selectmen has produced a process diagram that has been accepted by Town Meeting and is continuing to move toward resolution of the many issues involved. The sale and lease of portions of Town-owned land at Conomo Point are beginning to generate revenue that will be a major benefit to the Town.

## III. RISK MANAGEMENT APPROACH

The LTPC was faced with a complex problem involving Essex’s resources, a changing economic, demographic and political environment, and limitations on possible actions available to the Town. We decided that a risk assessment and management approach would be effective, as it allows for the quantification of many otherwise subjective community assets and values, and an auditable trail for the development and prioritization of planning strategies. This approach is commonly used in scientific, industrial and community planning efforts and is generally considered indispensable in many technical and planning disciplines.

In the broadest terms, the two main elements are:

- Risk assessment: identifies and prioritizes important assets, and identifies and ranks threats to those assets. The “risks” account for the values of the asset and the likelihoods and consequences of the threats.
- Risk management: identifies and analyzes possible actions to prevent or mitigate threats and results in an implementation plan to select and prioritize the actions to be taken.

#### a. Community Defining Resources of Essex

The LTPC reviewed the previous planning work and, through group discussion, identified and ranked the most important “Community Defining Resources of Essex” (CDRE). 18 CDREs were identified and grouped into four categories: Natural Beauty and Open Space, Historic, Economic,

and Quality of Life. The CDREs were scored by individuals on a scale of 1 – 5, from least “important” to most “important”, after which group found consensus on the scoring and ranking.

b. Threats and risk

The LTPC also reviewed previous planning work and analysis to identify and rank threats to the CDREs. Threats were scored to indicate the “Impact” on each affected CDRE, again on a scale of 1 to 5, from least to most impact. Finally, the likelihood of the threat occurring is assigned a number from 1 to 5, from least to most likely.

The “Total Impact” score is the result of multiplying the “Importance” score of the CDRE with the “Impact” score and the “Likelihood” score of the threat. Note that a single threat may affect more than one CDRE; in this case, the multiplication is repeated for each CDRE and the products added up.

c. Actions

The risk management part of the process identifies and analyzes possible actions to prevent or mitigate threats. Here, we assessed the effectiveness of actions against single or multiple threats, again on a 1 to 5 scale, from least to most effective.

The last element of the analysis was to gauge the likelihood of enactment of these actions, also on a 1 to 5 scale, from least to most likely. Actions may be zoning, financial or regulatory actions, or community activity, and may be enacted administratively (action of Town boards or other organizations) or by legislation (Town Meeting). Actions have accordingly varying likelihoods of implementation.

Calculation of the “Total Benefit” of an action takes its effectiveness and likelihood of enactment and multiplies those with the relevant “Total Impact” scores. The highest ranking actions will thus be the ones that effectively mitigate likely threats to CDREs, and have in addition a reasonable chance of enactment. The management plan in Chapter 7 selects and prioritizes the actions to be taken.

d. Organization of Results

The mathematics of the analysis was tabulated on an Excel spreadsheet. The summary results of the risk assessment appear in Section IV, followed by detailed discussion of the CDREs, threats and actions in Sections V through VIII. Section IX comprises the identification and assessment of possible actions by the Town to address the risk, followed by recommended actions based on their overall effectiveness. The Appendix includes the spreadsheet in its entirety.

## IV. RISK ASSESSMENT RESULTS

a. Character defining resources

The LTPC identified 18 CDREs and grouped them into four categories: Natural Beauty and Open Space, Historic, Economic, and Quality of Life. Individual members scored the CDREs on

a scale of 1 – 5, from least to most “Important”. The group met over a series of meetings and found consensus on the scoring and ranking, with the results as shown in Table 2.

**Table 2. CDREs Scored by “Importance”.**

	Resources	Importance	Rank
<b>Natural Beauty and Open Space</b>	Marsh and river	4.9	1
	Woods	2.8	14
	Scenic byways	3.4	8
	Chebacco Lake	2.3	17
<b>Historic</b>	Museums and shipbuilding heritage	3.8	5
	Town Hall and other significant architecture	3.3	9
	Fire Pump- Hand Tub	2.5	15
<b>Economic</b>	Agriculture	2.4	16
	Clamming and fishing	2.9	13
	Small businesses - antique shops, restaurants	3.0	11
	Artisanry & trades / boatbuilding	3.0	12
	Home occupations	2.0	18
	Tourist destination	4.5	4
<b>Quality of Life</b>	Stable, small population and small-town feel	3.7	6
	High quality of education and schools	3.6	7
	Water access and recreational opportunities	3.0	10
	Water Resource Protection District	4.8	2
	Town buildings, facilities & infrastructure	4.7	3

b. Threats

The review of previous planning work enabled LTPC to identify threats to the CDREs. We scored them in two ways: 1) to indicate the “Impact” of each on affected CDREs, again on a scale of 1 to 5, from least to most impact; and 2) to assess the likelihood of the threat occurring, on a scale of 1 to 5, from least to most likely. These two values, along with the Importance values of the affected CDREs, result in the “Total Impact” scores, as described in the risk management methodology described in Section III. The detailed results appear in Table 3, and a summary ranking of the threats in Table 4. These tables are useful for context in the detailed discussion of the CDREs and threats in Sections V through VIII.



**Table 3. Threats Scored by “Total Impact”.**

THREAT	CDRE	Natural				Historic			Economic						Quality of Life					TOTAL IMPACT = IMPACT X LIKELIHOOD X CDRE IMPORTANCE	THREATS RANKED BY TOTAL IMPACT
		Marsh and river	Woods	Scenic byways	Chebacco Lake	Museums and shipbuilding heritage	Town Hall and other significant architecture	Fire Pump- Hand Tub	Agriculture	Clamming and fishing	Small businesses - antique shops, restaurants	Artisanry & trades / boatbuilding	Home occupations	Tourist destination	Stable, small population and small-town feel	High quality of education and schools	Water resource protection district	Water access and recreational opportunities	Town buildings, facilities & infrastructure		
	Importance -->	4.9	2.8	3.4	2.3	3.8	3.3	2.5	2.4	2.9	3.0	3.0	2.0	2.1	3.7	3.6	3.0	3.0	4.7		
Inappropriate commercial development	Impact X Likelihood	15	4	25	5	4	4	0	16	0	4	4	0	10	16	0	25	0	0	428	1
Inappropriate residential development		15	6	20	3	4	0	0	16	2	0	0	0	4	12	9	25	4	0	399	2
Inappropriate municipal development		0	0	12	0	3	15	0	4	0	0	0	0	4	3	0	0	0	12	187	11
Inappropriate signage		3	3	4	4	5	5	0	2	2	4	2	0	8	8	0	0	0	0	156	14
Noise pollution		12	4	0	12	0	0	0	0	0	0	0	0	0	16	0	0	0	0	157	13
Light Pollution		0	0	0	0	20	20	0	0	20	0	0	20	0	20	0	0	0	0	316	4
Pollution in Waterways		5	0	0	5	0	0	0	0	15	0	0	0	0	0	0	25	15	16	276	7
Invasive Species		20	20	0	20	0	0	0	0	15	0	0	0	0	0	0	0	0	10	290	5
Over-fishing (in Essex)		10	0	0	3	0	0	0	0	10	10	0	10	0	0	0	0	0	0	135	17
Clearcutting woodlands		0	5	5	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	42	21
Erosion of river / lake banks		15	0	0	4	15	0	0	0	15	0	0	0	15	0	0	0	15	0	260	8
School Budget Cuts		0	0	0	0	0	0	0	0	0	0	0	0	0	15	15	0	0	12	167	12
Museum Funding Challenges		0	0	0	0	20	0	0	0	0	0	20	0	0	12	12	0	0	0	224	9
Underfunded maintenance of Town property		0	0	0	0	0	25	0	0	0	9	0	0	0	12	15	0	12	25	361	3
Loss of Town Hall for municipal offices		0	0	0	0	0	10	0	0	0	0	0	0	0	10	0	0	0	16	145	16
Outdated / inadequate Town facilities		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	25	118	19
Decline of commercial vitality		2	0	0	0	6	2	1	0	0	20	9	6	20	6	1	0	1	16	286	6
Limited water access at Conomo		0	0	0	0	0	0	0	0	0	0	0	0	15	15	0	0	15	0	132	18
Loss of Boat Building Industry		0	0	0	0	15	0	0	0	0	0	25	0	15	15	0	0	0	0	218	10
High Housing Prices		0	0	0	0	0	0	0	0	0	9	9	9	0	20	0	0	0	0	146	15
Loss of significant architecture	0	0	0	0	6	15	0	0	0	0	0	0	0	6	0	0	0	0	94	20	

**Table 4. Threats Ranked by “Total Impact”.**

Rank	Threat
1	Inappropriate commercial development
2	Inappropriate residential development
3	Underfunded maintenance of Town property
4	Light Pollution
5	Invasive Species
6	Decline of commercial vitality
7	Pollution in Waterways
8	Erosion of river / lake banks
9	Museum Funding Challenges
10	Loss of Boat Building Industry
11	Inappropriate municipal development
12	School Budget Cuts
13	Noise pollution
14	Inappropriate signage
15	High Housing Prices
16	Loss of Town Hall for municipal offices
17	Over-fishing (in Essex)
18	Limited water access at Conomo
19	Outdated / inadequate Town facilities
20	Loss of significant architecture (3)
21	Clearcutting woodlands

Sections V through VIII address our consideration of the individual CDREs in detail, including identification of threats to each of them and assessment of risks. Section IX summarizes the threats and risks. Section X identifies and assesses actions to mitigate or prevent those threats.

## V. CDRE: NATURAL BEAUTY AND OPEN SPACE

### (a) Marsh and river

By any measure, the waterway, salt marsh, mudflats and islands known as the “Essex River” are the Town’s most important and well-loved resource, as confirmed in every survey, workshop and study available. The LTPC 2010 Town-wide survey found that “the unique/natural beauty of Essex is viewed as the most important attribute contributing to the character of the town”, and

further that “increased focus on environmental protection and preservation of natural resources” is viewed as highly important by more than three-quarters of respondents. The River in particular is at the heart of our history, our economy, our recreation, our love the natural environment and the identity of our community.

In historical perspective, access to the Essex River for both Native American and European settlers of Essex was the defining element of their lives and culture. From the earliest times, fishing and shellfishing have been a principal food and bartering source. With the establishment of boatbuilding and related commerce, access to the river became the lifeblood of the Town. Essex developed as a place of worldwide commerce, providing its citizens with multiple opportunities to experience culture from all over the world.

By the 1940's the economy of Essex could no longer depend on shipbuilding, and its commercial enterprises had to change and adapt. The river still provided the link, with clamming and fishing providing local seafood and shellfish to the restaurants and distributors that sprang up across town. Essex changed from a place of nearly all hands-on craftsmen to a town catering mainly to tourists, people who came to enjoy seafood and the vistas of the river and surrounding marshes. As tourism increased in Essex, businesses moved to focus on the recreational boating and fishing that continue to provide the majority of access to our greatest natural resource, the Essex River. Essex continues today to be a small town tied to its river, while continuing to define itself based on a rich maritime heritage.

### ***Threats and Risks***

The Committee’s assessment of threats to the marsh and River is summarized in Table 5, which characterizes:

1. The potential impact of a threat, on a scale of 0-5, meaning from no impact to serious impact.
2. Likelihood of threat occurring, on a scale of 0-5, meaning from no chance to certainty.

“Inappropriate development”, both commercial and residential, are high impact threats that have significant likelihood of affecting uplands and bordering vegetation, particularly when “orders of condition” are relied upon for natural resource protection. Noise pollution from power boats was seen as an episodic degradation. Water pollution due to influx from storm runoff remains a significant issue for the clam fishery. Invasive species, such as phragmites and green crabs, and erosion of the river banks are high impact and ongoing threats.

**Table 5. Marsh and River: Threats.**

Marsh and river: Threats		
Impact	5	Inappropriate commercial development
Likelihood	3	
Impact	5	Inappropriate residential development
Likelihood	3	
Impact	3	Inappropriate municipal development
Likelihood	0	
Impact	3	Inappropriate signage
Likelihood	1	
Impact	4	Noise pollution
Likelihood	3	
Impact	5	Pollution in Waterways
Likelihood	1	
Impact	5	Invasive Species
Likelihood	4	
Impact	5	Over-fishing (in Essex)
Likelihood	2	
Impact	5	Erosion of river / lake banks
Likelihood	3	
Impact	1	Decline of commercial vitality
Likelihood	2	

***(b) Woods***

The geography of Essex encompasses the confluence of river systems, watersheds, wetlands, and woodlands. The woodlands in particular help provide for clean watersheds and storage for storm waters, as well as clean air, open space, and recreational opportunities in all seasons. The soils here have never been turned, helping to maintain a tremendous assemblage of birds, mammals, reptiles, amphibians, insects and plants, all there to be seen and studied by interested observers. Moreover, the upland woods and wetlands have a critical connection to the health of our salt marshes and coastal waters, each serving as nurseries for the young of many species. There is also a rich history of human use, including cutting of timber for shipbuilding in Essex, and many interesting landmarks and stories.

A good deal of Essex's woodlands are protected. The Manchester Essex Conservation Trust's "Wilderness Conservation Area", comprising approximately 1,100 acres among the 3,500 acres of contiguous woodland and wetlands, is bounded roughly by Route 128, School Street/Southern Avenue, Apple Street (Essex), and the Gordon and Chebacco woods. Essex County Greenbelt also owns land in this area proximate to Apple Street. Other significant tracts of woods lands lie east of Southern Avenue extending to the Gloucester line. The area in northern Essex bounded

by Choate Street, Belcher Street, Route 22 and Sagamore Street currently lacks the protected status afforded by land trust ownership.

The LTPC 2010 Town-wide survey found that “the unique/natural beauty of Essex is viewed as the most important attribute contributing to the character of the town”, and further that “increased focus on environmental protection and preservation of natural resources” is viewed as highly important by more than three-quarters of respondents. Woodlands have not risen in the public mind to the importance of the marsh and River, but are important as an element of the Town’s open spaces.

The Essex Open Space Plan summarizes: “The residents of Essex will derive the greatest benefit from living here in the future if the town’s unique history is preserved while, at the same time, enough contiguous open space remains to maintain valuable habitats that can protect and preserve its flora and fauna.”

### ***Threats and Risks***

The woods in Essex have generally not been the target of large-scale development because of siting difficulties owing to wetlands, poor soils, and abundant ledge. The rising value of real estate in Essex, particularly in housing, and improving septic treatment technology raise the feasibility and likelihood of development. While much of the critical areas of the woods has been protected, there still exist several threats that the Town should consider, as summarized in Table 6.

Inappropriate residential and commercial development are relatively low probability, high consequence threats. Significant projects would usually require site review by the Planning Board, involving as they would intensive site preparation, with studies of the possible pollution of wetlands and waterways, and traffic impacts, among other issues. Inappropriate development in this context would be characterized as impinging on protected lands or critical habitat or affecting viewsheds from protected lands or critical habitat, significantly increasing traffic on roads near these lands, or siting activities involving toxic materials proximate to water resources.

Invasive species have the potential to significantly alter woodland habitat, outcompeting native plants and disrupting food supplies for woodland animals. Invasive plants are the most common threat and many in fact are already well established. They commonly move on vectors along roads and pathways and through dumping of trash and yard waste. This has been documented as a problem in protected wooded areas in Manchester by the MECT.

**Table 6. Woods: Threats.**

Woods: Threats		
Impact	2	Inappropriate commercial development
Likelihood	2	
Impact	2	Inappropriate residential development
Likelihood	3	
Impact	3	Inappropriate municipal development
Likelihood	0	
Impact	3	Inappropriate signage
Likelihood	1	
Impact	4	Noise pollution
Likelihood	1	
Impact	5	Invasive Species
Likelihood	4	
Impact	5	Clearcutting woodlands
Likelihood	1	
Impact	1	Decline of commercial vitality
Likelihood	0	

***(c) Scenic byways***

The natural beauty of Essex is most obvious and accessible in everyday life from the main roads in town, Southern Avenue, Eastern Avenue and John Wise Avenue, where the traveler is met with views of dense woods and wetlands, marshes and estuary, open fields and pastures, and productive farmland. The “Scenic Byway” of John Wise Ave. (Rt. 133) in many ways exemplifies Essex’s character, in that it is known for its natural beauty, historic rural character, and agricultural richness.

These unique open spaces, preserved through hundreds of years, are an important part of what makes up the special character of Essex. Our local economy and community identity are strongly connected to these natural resources. Fishing, farming and shipbuilding have contributed to the town’s vitality for centuries. Today, people come from far and wide to experience our natural heritage, contributing to the success of our tourist, restaurant, and antique businesses.

In 2007, the Open Space Committee released its Open Space Plan for Essex. Based on public hearings and a town-wide survey, it concluded that the town’s primary goal should be to “protect and preserve Essex’s open spaces, particularly the Essex Woods and the scenic vistas of the Route 133 Scenic Byway”; and “The agricultural vistas along John Wise Ave and Southern Ave are renowned, and have been designated as Heritage Landscapes by the Commonwealth”. The

2003 Community Development Plan also identified the John Wise Ave corridor as “prioritized open space parcels with outstanding characteristics”. The 2010 town survey identified open space and environment as residents’ number one priority. The scenic resources of the town are clearly central to the character of Essex.

### ***Threats and Risks***

The Southern Avenue and John Wise Avenue corridors were identified in the EO 418 Community Development Plan (2003) as top priorities for preservation. The Southern Avenue area has some degree of protection due to protection of woodlands on its western side, mainly by the Manchester Essex Conservation Trust. The Coolidge Trust established narrow strips of protected land along both sides of the road, among the lands it acquired for protection in the late 1800s and early 1900s. The threats along Southern Avenue are similar to those characterized in subsection (b) above.

John Wise Avenue is particularly vulnerable to inappropriate commercial, residential and municipal development, that is, development that would erode the Scenic Byway’s visual, historical and environmental values. The highest potential impacts are from commercial and residential development, where the scale and uses are not restrained by Essex’s current zoning bylaw. The possibility of large parcels being converted to housing developments, and their deleterious effects on the character of the road, are somewhat mitigated by the recently adopted Open Space Residential Development (OSRD) bylaw, which allows for clustered housing and retention of more open space relative to the bylaw for standard residential lot size and frontage criteria. There have as yet been no large scale residential subdivisions along these corridors, but the likelihood is seen as strong, given the value of real estate and the limited amount of land available for development.

Inappropriate commercial development has the highest impact and is a certainty, given that the past six years have seen several boat storage and landscape businesses appear in what was previously contiguous farmland. The bylaw currently does not prevent these and other uses such as industrial storage (heavy equipment and materials), industrial manufacturing, and vehicle repair shops. The open flat land and direct access to Route 133 makes these parcels particularly desirable for commercial development, especially so because all other towns in the area have zoning bylaws that restrict such uses.

Of the pasture, hayfields, and woods along the south side of John Wise Avenue, only 70 acres of Alprilla farm is under agricultural restriction. The Hardy farm, 95 acres of Alprilla farm, and the Storey farm remain unprotected. Single residence lots have proven to be highly vulnerable as well, the more so since one commercial conversion degrades neighboring lots and may hasten their subsequent use conversion. One can easily imagine John Wise Avenue becoming a commercial strip similar to that seen on Route 133 on the north side of Ipswich. This area of Essex has so far remained largely intact as many similar stretches of colonial farmland in and around Cape Ann have been degraded by commercial sprawl.

There is currently concern by some citizens that the Town may site a large public safety facility on John Wise Avenue proximate to the Spring Street Cemetery, citing that its size and the

associated noise and traffic would be detrimental to the neighborhood. The committee notes the potential impact of this conceptual police and fire building, while acknowledging ongoing planning work and the possibility of other design and siting outcomes.

**Table 7. Scenic Byways: Threats.**

Scenic byways: threats		
Impact	5	Inappropriate commercial development
Likelihood	5	
Impact	5	Inappropriate residential development
Likelihood	4	
Impact	3	Inappropriate municipal development
Likelihood	4	
Impact	4	Inappropriate signage
Likelihood	1	
Impact	5	Clearcutting woodlands
Likelihood	1	
Impact	1	Decline of commercial vitality
Likelihood	0	

#### ***(d) Chebacco Lake***

Chebacco Lake, our "Great Pond", is a beautiful wooded area providing recreation and interpretative trails at Centennial Grove and recreational opportunities on the water. It has evolved from a place of seasonal use to a year-round residential neighborhood. It ranks relatively low among the Natural Beauty and Open Space CDREs, possibly reflecting the efforts in recent years to protect the Lake and its surroundings. The *Chebacco Lake & Watershed Association's* website <http://www.chebaccolake.org/about/> provides a wealth of information on the challenges and rewards the Lake offers. It thoroughly documents continuing efforts to protect the Lake and its surroundings for, and from, adjoining property owners, citizens of Essex and Hamilton, and the public. Essex's Centennial Grove and Open Spaces Committees have worked alongside the Association, and are actively concerned in many issues affecting the Lake.

#### ***Threats and Risks***

The significant threats to Chebacco Lake are episodic noise pollution from power boats, a quality of life issue perhaps best addressed by its residents and users, and invasive species, notably the cabomba weed, whose infestation has been exacerbated by phosphate fertilizer and septic system runoff from abutting properties (summary in Table 8). A major issue is the declining alewife population, which despite a reported rebound in 2013 has seen serious depletion in recent decades. This reflects much larger environmental quality issues, although the Essex DPW is working to clear debris in Alewife Brook to encourage the fish's upstream migration.



**Table 8. Chebacco Lake: Threats.**

Chebacco Lake: Threats		
Impact	5	Inappropriate commercial development
Likelihood	1	
Impact	3	Inappropriate residential development
Likelihood	1	
Impact	4	Inappropriate signage
Likelihood	1	
Impact	4	Noise pollution
Likelihood	3	
Impact	5	Pollution in Waterways
Likelihood	1	
Impact	5	Invasive Species
Likelihood	4	
Impact	3	Over-fishing (in Essex)
Likelihood	1	
Impact	5	Clearcutting woodlands
Likelihood	1	
Impact	4	Erosion of river / lake banks
Likelihood	1	

## VI. CDRE: HISTORIC LEGACY

### *(a) Museums and shipbuilding heritage*

In the 300 years between 1650 and 1950 more than 3,000 fishing schooners and coastal freighters were built in Essex, a record unqualified by any town in the country. The tenacity and skill of generations of local boatbuilders are documented in the fleets of Essex vessels plying their trade in the New England fisheries, in the coastal trade the length of the Eastern seaboard, and in the history of schooner racing in the United States and Canada.

The Essex Historical Society and Shipbuilding Museum provides for education, preservation, and study of traditional Essex shipbuilding and the community that supported it. As their mission states, they “value the skills, creativity, learning abilities, and connectedness to their environment of the Essex shipbuilders, and believe that building a clear understanding and appreciation of their unique craftsmanship serves as a valuable model for us today”. The Museum runs a lively and interactive education program for students of all ages.

In addition, the knowledge and tradition of Essex shipbuilding has been kept alive by Harold Burnham, who has built seven wooden schooners, including the Thomas A. Lannon and the Ardelle, both of which operate as certified passenger vessels from the Port of Gloucester. Education in the shipbuilding trades has been a critical and generous aspect of Harold's efforts, for which he was awarded a National Heritage Fellowship by the National Endowment for the Arts in 2012.

### ***Threats and Risks***

The continuation of a vibrant working and educational waterfront is tied to the general health of the Essex River and the well-being of the downtown area. Inappropriate development in this sense would be that which detracts from the historical aesthetic, particularly near the Town Landing, worsens light pollution, or is of disproportionately large scale relative to the area.

Macroeconomic trends affecting small businesses, museum fundraising and new boatbuilding projects are a threat. Our maritime heritage faces significant risk if the Shipbuilding Museum and Burnham Boatbuilding are unable to sustain their educational and trades missions.

**Table 9. Museums and shipbuilding heritage: Threats.**

Museums and shipbuilding heritage: Threats		
Impact	4	Inappropriate commercial development
Likelihood	1	
Impact	2	Inappropriate residential development
Likelihood	2	
Impact	3	Inappropriate municipal development
Likelihood	1	
Impact	5	Inappropriate signage
Likelihood	1	
Impact	4	Light Pollution
Likelihood	5	
Impact	5	Erosion of river / lake banks
Likelihood	3	
Impact	5	Museum Funding Challenges
Likelihood	4	
Impact	2	Decline of commercial vitality
Likelihood	3	
Impact	5	Loss of Boat Building Industry
Likelihood	3	
Impact	2	Loss of significant architecture
Likelihood	3	

### ***(b) Town Hall and significant architecture***

Essex Town Hall, completed in 1893-94, was designed by architect Frank Weston of Boston and Malden. The new building was described in the March 1894 issue of *The Library Journal*:

Essex (Mass.) Public. Library, The new town-hall and library building was dedicated on the afternoon of Feb. 15. A large audience was present at the dedication exercises, which included an oration by Rev. D. O. Mears, music, several short addresses, and the reading of poems. In the evening there was a concert, followed by dancing.

The building which combines town-hall and library has just been completed after plans by Frank W. Weston, a Malden architect. The lower story is built of field-stone, and the upper part, including the tower, of wood. The interior is finished in antique oak, and the walls are painted in hues of brown and yellow. In the upper story is situated the town-hall proper. It has a seating capacity for 550. There is a stage and a gallery which will allow of entertainments being given there. One-half of the lower floor is devoted to the library, and will accommodate several thousand books. From the entrance there is a hallway that turns abruptly to the right, and on this passage are doors leading to the offices of the selectmen, the treasurer, and other officials. There are three entrances to the building, the main entrance being through an attractive carriageway into a spacious vestibule.

In the tower is the clock, with chime-bells, which strike the hour, presented to the town by L. G. Burnham.

Both the land and the building were gifts of the late T. O. H. P. Burnham, of Boston, who was a native of Essex. Mr. Burnham died in 1891, and by his will the town received \$30,000, half of which was for the town and the other half for a public library. Previous to this the town had come into possession of \$5000 through the will of the late Dr. J. D. Russ, also a native of Essex. It was decided to build the town-hall and the library together.[2]

The building was added to the National Register of Historic Places in 2007.

### ***Threats and Risks***

A 2012 study by the Town Building Committee found that:

“The study of the reuse of 30 Martin Street for individual use by either Town Offices or Library indicate that either use is feasible, but the Library use would require significant development of the less desirable existing Basement area for necessary Library functions. An option to renovate this building for continued Town Offices/Library shared-use would require a significant addition

to the building and probable poorer efficiencies of space and function to fit within the constraints of 118 year old structure.” (Feasibility and Cost Study – Replacement of Municipal Buildings - Essex, MA by Reinhardt Associates, 4/30/12).

Based on this study, a proposal was developed to move the Town offices out of the building to a nearby commercial space. The response to the proposal at Town Meeting was negative, with a strong current supporting the preservation of the building.

In 2015 the Town Meeting voted \$4.2 million for repair and renovation. Town Hall will be getting a complete overhaul outside and will become ADA compliant inside, with sprinklers, access to the third floor and the necessary renovations to support these changes. The building, in the words of a selectman, “will be elegant, stately and code compliant.”

**Table 10. Town Hall and significant architecture: Threats.**

Town Hall and other significant architecture: Threats		
Impact	4	Inappropriate commercial development
Likelihood	1	
Impact	5	Inappropriate municipal development
Likelihood	3	
Impact	5	Inappropriate signage
Likelihood	1	
Impact	4	Light Pollution
Likelihood	5	
Impact	5	Underfunded maintenance of Town property
Likelihood	5	
Impact	5	Loss of Town Hall for municipal offices
Likelihood	2	
Impact	1	Decline of commercial vitality
Likelihood	2	
Impact	5	Loss of significant architecture
Likelihood	3	

***(c) Fire pump and hand tub***

The Essex Veterans Fireman’s Association owns a very old piece of fire equipment, a fire pump known as a hand tub, which they store in a lean-to garage behind the fire station. Its proper name is “Essex 2” and its motto is “We Will Try”. Both names are proudly displayed, one on the side of the carriage and the other on the suction hose. The hand tub was built in 1882 by L. Buton & Son in Waterford, New York, number 676. It served the town for 40 years until it was replaced in 1922. It was pulled by men, horses and sometimes by street car. It was operated by

20 to 40 men and injuries were common. The hand tub is in very good condition and ready to be permanently displayed in an appropriate building, where the Association can have access to it for parades and musters, and generally preserve it as an antique for the Town folks and visitors alike to enjoy. It deserves to be properly displayed.

## VII. ECONOMIC

### *(a) Agriculture*

There is now a renaissance of farming in Essex. In recent years, three farms have started up, growing vegetables, poultry, beef, pork and grains. These farms are being run by young farmers (all under the age of 30), all with a strong land, environmental, and social ethic. There are currently over 20 acres in vegetable production, adding over 10 part and full time jobs to the local economy, with their focus being direct marketing: community share agriculture (CSA), farmers markets and restaurants. This new community of farmers is vital and growing, and is expected to become more and more central to our local economy and fundamental to the character of Essex.

This new wave of agriculture has not been strongly noted in the studies and surveys of recent years, and was thus ranked only sixteenth among the 18 CDREs in the risk assessment. However, re-use of agricultural land for “farm-to-table” food production has clearly significant value for many people and correlates strongly with several highly ranked CDREs: scenic byways, tourist destination, and small town feel.

### *Risks and Threats*

The land now in agricultural use and with potential for future use is concentrated on the John Wise Avenue and Southern Avenue corridors, especially the latter, with other significant holdings on Apple Street, Lufkin Street, among other sites. The threats and risks are similar to those for scenic byways, in particular as described for John Wise Avenue, that is, the highest potential impacts are from commercial and residential development, where the scale and uses are not restrained by Essex’s current zoning bylaw. Details of the assessment appear in Table 11.

**Table 11. Agriculture: Threats.**

Agriculture: Threats		
Impact	4	Inappropriate commercial development
Likelihood	4	
Impact	4	Inappropriate residential development
Likelihood	4	
Impact	4	Inappropriate municipal development
Likelihood	1	
Impact	2	Inappropriate signage
Likelihood	1	

***(b) Clamming and fishing***

The river and marsh are bedrock Essex. Between river and marsh the clam flats and their shellfish beds are also immutably bound to the Essex character. Since earliest human habitation commercial and recreational clammers have harvested clams from these flats during the low tides, working year round as weather and tides permit. A partner to Essex's rich ship-building heritage, this occupation has remained an integral part of Essex community life.

Renowned for their sweetness and tenderness, Essex clams are supplied fresh locally and shipped throughout the region. The fried clam, that iconic staple of eastern Massachusetts cuisine, was by all accounts first savored in Essex.

The images of the flats and the clammers working them are important identifiers for Essex. The shellfish beds also provide a livelihood for dozens of commercial clammers. This local industry provides work for town residents in harvesting and retailing clams, oysters and seaworms for bait. The use of local natural abundance for the good of the community adds maximum value to a resource we are fortunate to possess.

Surveys of residents have reinforced the desire to continue and strengthen the shellfishing industry here in Essex. The most important way to ensure this is to maintain and improve the health of the shellfish beds.

As well as access to the clam flats, the Essex River also provides access to the ocean, saltwater recreation and fishing. The owners of dozens of boats moored at the marinas support local shops and restaurants, in addition to the marinas themselves. Sightseeing, kayaking, paddleboarding and sailing on the river help support the local economy and enhance the quality of life in Essex.

### ***Threats and Risks***

The most significant threats to the shellfishing industry are degradation of the flats and declining shellfish populations. The health of the clam population is closely tied to the weather, and cyclical shellfish populations continue to decrease with the warming of the ocean. In years ahead sea level rise may well deny access to many flats now exposed at low tide, a problem for the shellfish and those who harvest them. There is disagreement about whether clam flats can move inland with sea level rise, but the one sure thing is the inevitability of change.

Other factors stressing the flats include local and regional pollution, invasive species and over-harvesting. Stormwater runoff, carrying nutrients, herbicides and pesticides from the land, requires state mandated clam flat closures after any significant rain events. The pollution stresses the clams, while the closures stress the shellfishermen, restricting the days when they are able to dig and harvest clams.

The burgeoning invasive green crab population poses another threat. Green crabs will consume several times their weight in clams each day and have no natural predators in local waters. Shellfishermen have begun to harvest the crabs simply to remove them from the flats. Culinary experiments have begun exploring the commercial possibilities of this resource. Changing ocean temperatures continue to improve conditions for the crabs, which will likely continue to be a worsening threat to the clam flats and those who rely on this resource to earn a living.

As the clam flats continue to be stressed by pollution and predators, shellfishermen continue trying to earn a living between the tides. There is no general agreement on numbers, but it's clear that the clam populations are continuing to decline. Nurturing the resource in Essex will require careful control, monitoring and support. In summary, the flats and the many factors that affect these resources need to be carefully managed to ensure that this pillar of the Essex community remains healthy and intact for future generations.

**Table 12. Clamming and fishing: Threats.**

Clamming and fishing: Threats		
Impact	2	Inappropriate commercial development
Likelihood	0	
Impact	2	Inappropriate residential development
Likelihood	1	
Impact	4	Inappropriate municipal development
Likelihood	0	
Impact	2	Inappropriate signage
Likelihood	1	
Impact	4	Light Pollution
Likelihood	5	
Impact	5	Pollution in Waterways
Likelihood	3	
Impact	5	Invasive Species
Likelihood	3	
Impact	5	Over-fishing (in Essex)
Likelihood	2	
Impact	5	Erosion of river / lake banks
Likelihood	3	

***(c) Small business***

In a small town like Essex, most businesses are small businesses by any measure. Essex, with a population of 3,504 (2010 census), is comprised of 1731 properties, of which 1,600 are residential and 131 commercial. Commercial and industrial properties make up just under 10% of the real estate tax base of the town and contribute about one million dollars in annual real estate tax revenue. In addition to real estate taxes, commercial properties account for approximately \$166,387 in personal property taxes, \$163,000 in commercial excise taxes and \$206,000 in business related licenses and permits. Beginning in 2013, the local meals tax will contribute an estimated \$170,000 to the general fund. These income sources add another half million in non residential deposits.

As well as being an important part of the revenue stream in Essex, small businesses are an important part of the lifeblood of the town. Essex is steeped in nearly three centuries of mom and pop stores and industries from the earliest farming and fishing pursuits to shipbuilding and now visitor oriented shops, restaurants, museums and recreational activities. Thousands come to Essex each year to shop, dine and appreciate our local history and beautiful landscape.

Essex's central business district, located along the causeway (Route 133) and Main Street, houses a multitude of businesses related directly to tourism. As our Committee's "Essex Village Initiative" stated in 2009: "The Village is the geographic, economic, and social core of the Town of Essex. The Town should balance thoughtful residential and business development with preservation of cultural, natural, historic, and recreational resources and be an attractive



destination for residents and visitors alike.” The Committee rated small businesses 11<sup>th</sup> out of 18 CDREs, in particular for its contribution to a vibrant functioning “Village” for residents and visitors alike.

The Downtown area includes a two-location museum, a Cultural District, an historical walking tour, several small pocket parks and scenic vistas, ten eateries, twenty antique and gift shops, three marinas and a number of recreation and service related businesses. “Downtown” brings Essex to life every day.

The 2008 economic collapse placed considerable stress on Downtown businesses, with effects persisting today. The ongoing economic recovery has eased matters somewhat, but e-commerce and other dramatic changes in commerce are contributing negative factors, especially for the antiques retailers. Several businesses have closed, some commercial sites have reverted to residential use. Others businesses are open only seasonally and have curtailed hours and staff at non-peak times.

### ***Threats and Risks***

The Long Term Planning Committee identified the Downtown business area as a highly important district, where our critical planning needs converge, including economic development, zoning, housing, recreation, stewardship of natural resources, and safe transportation (“Essex Village Initiative”, 2009). The vitality of the Downtown and its businesses depends on a vibrant working waterfront, the environmental health of the Essex River, the aesthetic attractiveness of the area, and a condition of general economic health. Thus, environmental degradation of the River, inappropriate signage and light pollution are significant threats.

The Committee saw commercial projects as the only likely type of inappropriate development, which in this case would anything that detracts from the historical aesthetic, particularly near the Town Landing, worsens light pollution, or is of disproportionately large scale relative to the area. Poorly maintained Town offices, or worse – relocation of Town offices away from the Downtown – would reduce visits and foot traffic by Essex residents. High housing prices may have the effect of encouraging further conversions of use from business to residential.

**Table 13. Small business: Threats.**

Small businesses: Threats		
Impact	2	Inappropriate commercial development
Likelihood	2	
Impact	4	Inappropriate signage
Likelihood	1	
Impact	5	Over-fishing (in Essex)
Likelihood	2	
Impact	3	Underfunded maintenance of Town property
Likelihood	3	
Impact	4	Decline of commercial vitality
Likelihood	5	
Impact	3	High Housing Prices
Likelihood	3	

***(d) Artisanry and trades***

Essex remains an old-fashioned New England town where you can find people that can design, build and fix practically anything, in the tradition of our small town character and unique history of river commerce, including shipbuilding, fishing, shellfishing and, now, recreational use. Many of these small businesses are home occupations or are sited in multi-use lots and buildings.

***Threats and Risks***

The important threats (Table 14) are similar to those that threaten our home-grown boat building industry, as well as overall commercial vitality. High housing prices and inappropriately scaled commercial development are threats to the viability of home and multi-use settings for many of these businesses.

**Table 14. Artisanry and trades: Threats.**

Artisanry & trades: Threats		
Impact	2	Inappropriate commercial development
Likelihood	2	
Impact	2	Inappropriate signage
Likelihood	1	
Impact	5	Museum Funding Challenges
Likelihood	4	
Impact	3	Decline of commercial vitality
Likelihood	3	
Impact	5	Loss of Boat Building Industry
Likelihood	5	
Impact	3	High Housing Prices
Likelihood	3	

***(e) Home occupations***

The Essex bylaw governs home occupations lightly, which, combined with the lack of defined residential and commercial zoness, allows residents to operate modest businesses out of their homes. Businesses include plumbers, electricians, hair stylists, auto repair shops, massage therapists, realtors, fencing instructors, boat repair shops, construction and landscaping, to name a few.

The Home Occupation provision in the Essex Zoning Bylaw allows business owners to help keep the cost of operating a business down, be home for their children after school, work flexible schedules, avoid child care and commuting expenses, provide services to other residents, provide an alternative work environment for their employees, and be more involved in the community. In some cases Home Occupations are a hedge against high housing prices.

The ability to operate a business out of the home makes it easier for Essex residents to make a living. Home occupations allow the natural entrepreneurial spirit of Essex residents to flourish.

***Threats and Risks***

No responsible party has suggested eliminating the Home Occupation provision in the bylaw. Massachusetts underlying zoning code should be monitored to ensure that no threat arises to this important element of Essex character. High housing prices, being a threat to every person of modest means, will always threaten the existing character of the town. Clamming is intimately linked with Home Occupations, and threats to that resource are addressed in a later section.

**Table 15. Home occupations: Threats.**

Home occupations: Threats		
Impact	5	Over-fishing (in Essex)
Likelihood	2	
Impact	3	Decline of commercial vitality
Likelihood	2	
Impact	3	High Housing Prices
Likelihood	3	

***(f) Tourism***

Tourism is a crucial economic engine in Essex, ranked fourth among the 18 CDREs in our assessment. Our location on the North Shore's "Gold Coast", proximate to Manchester, Gloucester, Ipswich, Hamilton and Wenham, and just 30 miles from Boston, is ideal for visitation. Essex is also at the heart of the "Great Marsh", the salt marshes and tidal rivers, and their rich biodiversity, that runs from the Parker River to Gloucester. The beauty of the Essex River draws boaters, kayakers, fishermen, birders, and casual tourists to the Town. Development is less concentrated for miles inland, in particular along the major roads into Essex, thus giving the area a rural, open feel.

Essex's many restaurants and antique shops, its history and the River make it an excellent tourist destination, with the potential for greater visitation and commerce. We don't offer high-rise hotels, slick gimmicks or ballyhoo; rather, Essex offers comfort in a laid back atmosphere. To the business community this atmosphere is important because it provides a steady flow of folks from "away", desirous of experiencing what we have to offer. To the taxpayer, a healthy business community is a mighty contributor to the town's benefit.

The Town's citizens, business community and elected officials certainly understand what makes Essex attractive; these features are prominently highlighted among the CDREs identified herein. Much has been done in recent years to enhance, preserve and publicize them, including the Route 133/Causeway road improvement project, the Historic Walking Trail, the Shipbuilding Museum's education and outreach programs, and our many appearances in movies and television shows.

***Threats and Risks***

In many ways the threats to tourism are all those that affect the environmental, historic and scenic richness of Essex, as shown in Table 16. Inappropriate development, as described previously with respect to the marsh and River and scenic byways, would have a similar impact

on tourism, as would inappropriate signage. Other forms of degradation of the River, such as bank erosion, and the decline or loss of the boatbuilding industry would rob Essex of its unique character.

**Table 16. Tourism: Threats.**

Tourism: Threats		
Impact	4	Inappropriate commercial development
Likelihood	3	
Impact	2	Inappropriate residential development
Likelihood	2	
Impact	4	Inappropriate municipal development
Likelihood	1	
Impact	4	Inappropriate signage
Likelihood	2	
Impact	4	Light pollution
Likelihood	5	
Impact	5	Erosion of river / lake banks
Likelihood	3	
Impact	5	Decline of commercial vitality
Likelihood	4	
Impact	5	Limited water access at Conomo
Likelihood	3	
Impact	5	Loss of Boat Building Industry
Likelihood	3	

## VIII. CDRE: QUALITY OF LIFE

### *(a) Stable, small population and small-town feel*

Even when Essex was “Chebacco parish” within the Town of Ipswich , its inhabitants valued living in a relatively stable community (“The world of John Cleaveland : family and community in eighteenth-century Massachusetts”, Christopher M. Jedrey, 1981). By the late 19th century, with a population of around 1,600, Essex was home to three shoe factories, generating well over \$7 million in today's currency. This, together with the better known shipbuilding industry already described, employed almost 50% of the working population, and characterized the town perhaps as much as its farms and fisheries.

Today Essex is prized for its small town ambience in the midst of relatively unspoiled fields, marshes, and recently returned woodlands. Current population growth is fairly slow, increasing by only 80 people (2.3%) since 2010. More significantly, only 25 new homes were built in this same time period. Population density (250/square mile) remains the lowest in Essex County. “Small town feel” ranked sixth among the 18 identified CDREs.

### ***Threats and Risks***

The residents and natural resources, and the commerce necessary to support both, coexist in a difficult balance, as they have these past few centuries. Again, the threats are similar to those that affect the environmental, historic and scenic richness of Essex, as well as several others, as shown in Table 17. Inappropriate development, as described previously with respect to the marsh and River and scenic byways, would have a similar impact on Essex’s small town nature, as do emerging quality of life issues like inappropriate signage and noise and light pollution. Essex has been spared the large scale development that has so greatly increased the size and footprint of many small eastern Massachusetts towns, in part because of geography and poor soils. We cannot rely upon “Title 5” growth control forever, especially as advanced septic treatment systems gain acceptance under that code. Even “appropriate” residential development can cumulatively erode a town’s character. We note that the OSRD bylaw is a positive step in the direction of thoughtful, controlled growth.

The whole picture of a small town necessarily includes proper attention to Town government, and we identified significant threats due to school budget cuts (medium probability) and lack of attention to Town buildings, in particular Town Hall, a central feature of the Downtown and a unique, quaint and well-loved bit of architecture.

Local economic stagnation, whether as a reflection of national trends in some manner focused more locally, poses a significant threat, though it was seen as a relatively low probability. High housing prices are a high impact and high probability risk, that is, they could encourage the gentrification of the Town and force many locals out, including those who provide many of the unique and/or essential trades and services for which we are known.

**Table 17. Stable, small population and small-town feel: Threats.**

Stable, small population and small-town feel: Threats		
Impact	4	Inappropriate commercial development
Likelihood	4	
Impact	4	Inappropriate residential development
Likelihood	3	
Impact	3	Inappropriate municipal development
Likelihood	1	
Impact	4	Inappropriate signage
Likelihood	2	
Impact	4	Noise pollution
Likelihood	4	
Impact	4	Light Pollution
Likelihood	5	
Impact	5	School Budget Cuts
Likelihood	3	
Impact	3	Museum Funding Challenges
Likelihood	4	
Impact	4	Underfunded maintenance of Town property
Likelihood	3	
Impact	5	Loss of Town Hall for municipal offices
Likelihood	2	
Impact	3	Decline of commercial vitality
Likelihood	2	
Impact	5	Limited water access at Conomo
Likelihood	3	
Impact	5	Loss of Boat Building Industry
Likelihood	3	
Impact	5	High Housing Prices
Likelihood	4	
Impact	2	Loss of significant architecture
Likelihood	3	

***(b) High quality of education and schools***

Essex has been in the Manchester-Essex Regional School District since 1999, a district well noted for high quality local education. The Regional Middle and High School (grades 6-12) has been cited repeatedly as one of the top performing schools in the country and is known particularly for its all-around academics, its debate team, its nationally recognized “Green Team” and several of its athletic programs. The Essex Elementary School (K-5) prepares its students well for high school and beyond. We also note that the Essex Shipbuilding Museum is a unique

and growing educational feature for our students, offering an array of hands-on activities and classrooms for various ages.

In brief, the school system is highly valued and strongly supported by all residents and is a big reason for high property values in both of the towns it serves. It ranks seventh among the 18 CDREs in our assessment.

### ***Threats and Risks***

The highest risk to the quality of our school system is the medium probability, high impact threat of school budget cuts. Inappropriate residential development in this case means that which would quickly add to single-family housing stock and cause enrollment to rise sharply, resulting in pressure on the per-pupil budget, also seen as medium probability. Funding challenges at the Shipbuilding Museum would curtail the educational opportunity there. Details appear in Table 18.

**Table 18. High quality of education and schools: Threats.**

High quality of education and schools: Threats		
Impact	3	Inappropriate residential development
Likelihood	3	
Impact	5	School Budget Cuts
Likelihood	3	
Impact	3	Museum Funding Challenges
Likelihood	4	
Impact	5	Underfunded maintenance of Town property
Likelihood	3	
Impact	1	Decline of commercial vitality
Likelihood	1	

### ***(c) Water access and recreational opportunities***

Essex River and Chebacco Lake provide superb opportunities for water access and recreation for its residents and visitors. Local marinas and touring businesses allow anyone to get out on the marsh and the river, where activities include boating, fishing, kayaking, clamming, birding, windsurfing and walking.

### ***Threats and Risks***

Significant ongoing threats include pollution from improperly treated septage, invasive species and erosion of the river banks.



**Table 19. Water access and recreational opportunities: Threats.**

Water access and recreational opportunities: Threats		
Impact	2	Inappropriate residential development
Likelihood	2	
Impact	5	Pollution in Waterways
Likelihood	3	
Impact	5	Erosion of river / lake banks
Likelihood	3	
Impact	4	Underfunded maintenance of Town property
Likelihood	3	
Impact	1	Decline of commercial vitality
Likelihood	1	
Impact	5	Limited water access at Conomo Point
Likelihood	3	

***(d) Water Resource Protection District***

Essex has municipal water of excellent quality, due in part to its 100% sourcing from underground. The Water Resource Protection District is a protective radius of 500 feet around the well-heads on Centennial Drive. This District and the Town-operated treatment facility have been very effective in maintaining the high quality of our water over the years. The Committee ranked this second out of 18 CDREs.

***Threats and Risks***

Inappropriate commercial and residential development and water pollution within the wellheads' watershed are clear high-impact threats. The Committee sees the likelihood as certain for all three since they have already occurred. It is unlikely that the Protection District's small area addresses the entire watershed; it will likely prevent exacerbation of these threats close to the wellheads, but development outside the District remains problematic.

**Table 20. Water resource protection district: Threats.**

Water resource protection district: Threats		
Impact	5	Inappropriate commercial development
Likelihood	5	
Impact	5	Inappropriate residential development
Likelihood	5	
Impact	5	Pollution in Waterways
Likelihood	5	

***(e) Town buildings, facilities, services and infrastructure***

The LTPC sees Town facilities and services as a critical element that touches many of the other CDREs we identified, in particular the historic, economic and quality of life issues centered in the Downtown area; this CDRE is ranked third out of 18. Town buildings have had citizens' scrutiny for some time and have been the focus of the Buildings Committee work over the past four years. The Committee feels that it is in the long term interest of the Town to "achieve the most reliable municipal facilities capable of supporting long term growth and use, coupled with comparatively lower first cost and lower continuing maintenance cost", and recommended the construction of a new public safety facility and a new Town office and library facility, while repurposing or selling the existing Town Hall and TOHP Library building. Some aspects of these recommendations have been controversial, especially the proposed John Wise Avenue location of the public safety building and moving the offices and library out of Town Hall.

It has become clear that Essex citizens want to retain and refurbish Town Hall (an idea further explored in a later section), though it may well entail extra expense relative to other options, and the Selectmen have taken several actions recently toward that goal. Another major challenge is the condition of the police and fire departments' facilities. The Public Safety building on Martin Street is structurally and functionally obsolete, undersized, and lacking necessary features for safe and efficient discharge of both fire and police protection. The Selectmen and the Public Safety Committee are currently working to supplement the Building Committee's report, by refocusing on sharing of services and identifying our "right sized" public safety needs and the attendant specifications for new buildings.

***Threats and Risks***

Threats to this resource might hinder a proactive, smart building program, and might result in its poor design and implementation. "Outdated/inadequate Town facilities" of course names the problem; it has high impact and is a certainty. Identifying and raising financial resources are critical, and indicate as "school budget cuts", "underfunded maintenance of Town property", and

“decline of commercial vitality”. The Committee reflects public sentiment by naming “Loss of Town Hall for municipal offices” as a serious threat.

There is some concern by citizens about the location and potential scale of new buildings. We express this concern as “inappropriate municipal development”, in essence a caution for judicious planning, siting and design, with sensitivity to environmental and neighborhood concerns.

**Table 21. Town buildings, facilities, services and infrastructure: Threats.**

Town buildings, facilities & infrastructure: Threats		
Impact	4	Inappropriate municipal development
Likelihood	3	
Impact	4	Pollution in Waterways
Likelihood	4	
Impact	2	Invasive Species
Likelihood	5	
Impact	4	School Budget Cuts
Likelihood	3	
Impact	5	Underfunded maintenance of Town property
Likelihood	5	
Impact	4	Loss of Town Hall for municipal offices
Likelihood	4	
Impact	5	Outdated / inadequate Town facilities
Likelihood	5	
Impact	4	Decline of commercial vitality
Likelihood	4	

## **X. RECOMMENDED ACTIONS**

The Committee’s risk management work started with consideration of four types of actions: zoning actions, other regulatory actions, financial actions and community activity. We identified and analyzed possible actions to prevent or mitigate the threats identified. Then we assessed the effectiveness of actions against single or multiple threats, again on a 1 to 5 scale, from least to most effective.

The last element of the analysis was to gauge the likelihood of enactment of these actions, also on a 1 to 5 scale, from least to most likely.

### ***a. Zoning Actions***

Intelligent zoning would balance thoughtful residential and business development with preservation of cultural, natural, historic, and recreational resources, making the right

connections between residential and business uses in the by-law and zoning policy. In particular, Essex would continue to be a place with a diverse mix of housing options for all residents, including options that encourage locally grown small businesses, home occupations and other appropriate mixed-use approaches.

Several zoning actions, but not all considered, were seen as highly effective against multiple threats affecting the most important CDREs. These are:

- A scenic agricultural, residential overlay district and scenic byway conservation restrictions would help to preserve woodlands, agricultural land and other scenic land along the John Wise Avenue and Southern Avenue corridors. It would specifically prohibit such commercial uses as would negatively impact the character of the area. This would prevent further character-eroding commercial uses both on the large farmland parcels, as well as the small residential parcels.
- A “Village” overlay district, first suggested in this committee’s “Village Initiative”, would address no fewer than ten of the identified threats, and was seen as highly effective against inappropriate development of all kinds, light and noise pollution, decline of small businesses and the boatbuilding industry, and loss of significant architecture.

Recent road work and efforts to improve the attractiveness of the Causeway are encouraging, and other initiatives to enhance the business climate and the aesthetic appeal of the area would help more, in particular suggested architectural and design guidelines and measures for reducing light pollution.

The 2013 conceptual plan, “Revisiting Town Landing, Essex, MA Harbor Plan”, could be a useful adjunct to a Village zone, potentially improving the layout of that site and optimizing its multiple uses by multiple entities. The Town has an historic dedication of one acre of public land “for the men of Essex to build ships and employ workmen to that end”. This land is now within the busy Town Landing area, which includes a boat launch, a restaurant, and the Shipbuilding Museum. A thoughtful consideration of all these uses must include the possible future use of that land for its intended purpose – shipbuilding. The Town should protect that land, which, along with Burnham Boatbuilding, is the foundation for future “new buildings” of wooden sailing vessels.

- Zoning districts throughout town would be highly effective relative to inappropriate development of all kinds and decline of commercial vitality, small businesses in particular, especially if this action includes creation of a commercial/industrial district, which was also considered effective, though more narrowly, as a separate action.

Zoning actions seen as less effective were:

- An historic district would have modest benefit relative to the preservation and re-use of Town Hall. However, with regard to other historic structures in Town, their scattered locations may be more effectively addressed by identifying an historic "group" rather

than a conventionally defined district. This approach would be difficult to craft properly and to enact.

- Review and enhanced enforcement of the signage ordinance would have an aesthetic benefit in the downtown and along the arterial roads into Town, but the overall benefit is modest.

#### ***b. Fiscal and related actions***

These actions would be financial or “in kind” commitments by the Town, by their nature targeted more narrowly than zoning actions, but nonetheless seen as quite effective within their scope:

- Town purchase of conservation restrictions along scenic byways would likely be strips of protected land along the roadsides. Such restrictions have been very effective in historic and agricultural lands in other Massachusetts towns. In fact, such strips of preserved land exist in Essex and Manchester along Southern Avenue and School Street, respectively, and are owned by the Coolidge Trust, originally established in 1878. Such action along John Wise Avenue in particular would have significant benefit, particularly as an adjunct to the scenic agricultural, residential overlay district.
- Grant funding from private, and government sources would have modest benefit with regard to the Town’s environmental and historic resources. The amounts of money involved would generally be small and the scopes of action narrow.
- Increasing the Community Preservation Act (CPA) surtax would enhance historic and environmental preservation efforts, with particular effectiveness as regards Town-owned land and buildings.
- Conveying parcels of tax title lands to local land trusts, as the Town has generously done in the past, would have modest to significant benefit relative to five threats affecting environmental resources. This action has the added attraction of costing the Town nothing.

#### ***c. Community Activity***

“Community activity” covers a broad range of actions, some of which are closely to others already identified:

- Restoration of Town Hall would be highly effective with regard to historic preservation and much needed investment in our public buildings.
- A new institute for historic boatbuilding and reinvigorating the Shipbuilding Museum were considered as separate actions, but are twinned approaches to historic preservation and enabling the continuation of the boatbuilding industry in Essex. Both have significant benefits in support of these goals. Most agree that the Town should do everything it reasonably can to preserve and encourage the future growth of its traditional

boatbuilding trades. The torch is now carried by the Essex Shipbuilding Museum and H.A. Burnham Boatbuilding. These two actions would embody educational initiatives and public-private cooperation. The waterfront planning efforts mentioned above (Village District and Town Landing planning) are the foundational keys.

- Developing local affairs outreach and communication would improve citizens' knowledge of all issues, as well as public meetings and other events. There would also be increased awareness of social events, non-profits activities, fundraisers, etc. The benefit of this action would be modest; however, it would be spread widely, affecting public engagement on most, if not all, issues before the Town. Other than the idea of a local newspaper (not seen as a viable option) the Committee did not specify either the type of media or potential service providers.
- Providing affordable and senior housing was seen as significantly effective in reduce the risk of inappropriate residential development (i.e., 40B proposals), high housing prices, and the loss of historic architecture.
- Providing public restrooms, both in the Village area and at Conomo Point, would improve the attractiveness of those areas to residents and visitors alike. In the Village, this action would enhance prospects for many of the small businesses in the area and for the Shipbuilding Museum.
- Providing an animal control facility would bring minor benefit, as an improvement in Town facilities.

#### *d. Other actions*

The Committee in the course of its work identified two potentially beneficial actions outside the scope of the threat and risk assessment. These are:

- The Town can address the threat posed by terrestrial invasive species and reduce their impact by enforcing anti-dumping regulations and working more closely with local land trusts to educate people about the problem. It is noteworthy that the MECT took action to remove invasive purple loosestrife from the Wilderness Conservation Area. The benefits and risks of such efforts must be carefully weighed; however, the Town should consider possible cooperation in such efforts in the future.

Aquatic invasive species have become a serious problem in the Essex River and the salt marsh, in particular the phragmites plant and the European green crab. The Town should pursue all opportunities to act cooperatively with other "Great Marsh" stakeholders to mitigate these invasions and to prevent future invasions of other species.

- Since it is unlikely that the Town can afford to buy conservation restrictions on large parcels of agricultural and historic land along its main roads, or purchase the land

outright under 61A (more complete citation?) , it should encourage owners to work with conservation groups such as The Trustees of Reservations and Essex County Greenbelt.

*e. Analysis of actions and management plan*

Both the scoring for effectiveness and for likelihood of enactment were based upon group discussion and the judgment of individual members. The top five actions based strictly upon their effectiveness are shaded in green in the column “Rank”. Likewise, the top five accounting for likelihood of enactment are shaded beige. Scoring summary appears in Table 22. Details of the Committee’s scoring appear in Table 23.

The Committee felt that any action plan arising from this report should consider the reality of local politics, and so avoid “jousting at windmills” with proposals having little chance of success on Town Meeting floor or in other venues. However, we add the caution that the Town’s politics have been changing and will probably continue to do so, while the most effective actions are unlikely to change. This is particularly true in reference to zoning actions, which may see growing support in future years.

**Table 22. Summary of Actions: Effectiveness and Likelihood.**

Action	Type	Ranking, Effectiveness Only	Likelihood of Enactment	Ranking, Effectiveness and Likelihood
Village district / small business overlay	Zoning	1	4	1
Zoning districts throughout town	Zoning	2	1	8
Scenic overlay	Zoning	3	5	2
Creation of commercial / industrial district	Zoning	4	3	3
Develop all communication platforms	Community	5	2	7
Town buys conservation restrictions (scenic)	Financial	6	1	11
Restoration of Town Hall	Community	7	4	4
Reinvigorate Shipbuilding Museum	Community	8	3	6
Institute for historic boat building	Community	9	1	15
Grant funding (private, state, federal)	Financial	10	4	5
Increase CPC %	Financial	11	2	10
Provide affordable & senior housing	Community	12	2	12
Provide public restrooms	Community	13	3	13
Provide animal control facility	Community	14	2	16
Review / enforce signage ordinance	Zoning	15	5	9
Historic district (Historic "group")	Zoning	16	4	14

**Table 24. Risk Management: Effectiveness of Actions and Likelihood of Their Enactment.**

	Risk / Threat	Inappropriate commercial development	Inappropriate residential development	Inappropriate municipal development	Inappropriate signage	Noise pollution	Light Pollution	Pollution in Waterways	Invasive Species	Over-fishing (in Essex)	Clearcutting woodlands	Erosion of river / lake banks	School Budget Cuts	Museum Funding Challenges	Underfunded maintenance of Town property	Loss of Town Hall for municipal offices	Outdated / inadequate Town facilities	Decline of commercial vitality	Limited water access at Conomo	Loss of Boat Building Industry	High Housing Prices	Loss of significant architecture	Threat Impact x effective ness score	Rank	Like-lihood of enactment (0=no chance, 5 = sure thing)	Total benefit of action = Impact score x Effectiveness x Likelihood	Rank, including likelihood
	Total Threat Impact	428	399	187	156	157	314	276	290	135	42	260	167	224	361	145	118	286	132	218	146	94					
Category	Potential Action	Effectiveness (0=useless, 5=total cure)																									
Zoning Actions	Scenic Overlay (1)	5	5	5	5												2						6,421	3	5	32,105	2
	Historic district (Historic "group")																2					4	612	17	4	2,446	15
	Village District / Small business overlay	5	5	5	5	5	5											5		3	3	3	11,009	1	4	44,038	1
	Zoning districts throughout town	5	5	5														5					6,497	2	1	6,497	9
	Review / enforce signage ordinance				5																		781	16	5	3,905	10
	Creation of commercial / industrial district	5												3	3								3,898	4	3	11,694	3
Financial Actions	Town buys cons restr (scenic)	3	3	3	3																		3,510	6	1	3,510	12
	Grant funding (private, state, federal)								2					2			3	3					2,237	11	4	8,949	6
	Increase CPC surtax rate													3		3	4					3	1,860	12	2	3,720	11
	Convey tax title lands to non-profit land trusts	1	3					2	2	1													2,891	7	4	11,563	4
Community Activity	Restoration of Town Hall														2	5	5					5	2,506	8	4	10,024	5
	Institute for Historic Boat Building													2				3		5			2,397	10	1	2,397	16
	Reinvigorate Shipbuilding Museum													4				3		3			2,408	9	3	7,225	7
	Develop local affairs outreach and communication												2	2	2	2		2	2	2	2	2	3,547	5	2	7,094	8
	Provide affordable & senior housing		3																			4	1,572	13	2	3,144	13
	Provide public restrooms																4		4				998	14	3	2,995	14
	Provide animal control facility																4		4				998	14	2	1,997	17



**Table 24. Risk Management: Effectiveness of Actions and Likelihood of Their Enactment.**

	Risk / Threat	Inappropriate commercial development	Inappropriate residential development	Inappropriate municipal development	Inappropriate signage	Noise pollution	Light Pollution	Pollution in Waterways	Invasive Species	Over-fishing (in Essex)	Clearcutting woodlands	Erosion of river / lake banks	School Budget Cuts	Museum Funding Challenges	Underfunded maintenance of Town property	Loss of Town Hall for municipal offices	Outdated / inadequate Town facilities	Decline of commercial vitality	Limited water access at Conomo	Loss of Boat Building Industry	High Housing Prices	Loss of significant architecture	Threat Impact x effective ness score	Rank	Like-lihood of enactment (0=no chance, 5 = sure thing)	Total benefit of action = Impact score x Effectiveness x Likelihood	Rank, including likelihood
	Total Threat Impact	428	399	187	156	157	314	276	290	135	42	260	167	224	361	145	118	286	132	218	146	94					
Category	Potential Action	Effectiveness (0=useless, 5=total cure)																									
Zoning Actions	Scenic Overlay (1)	5	5	5	5												2						6,421	3	5	32,105	2
	Historic district (Historic "group")																2					4	612	17	4	2,446	15
	Village District / Small business overlay	5	5	5	5	5	5											5		3	3	3	11,009	1	4	44,038	1
	Zoning districts throughout town	5	5	5														5					6,497	2	1	6,497	9
	Review / enforce signage ordinance				5																		781	16	5	3,905	10
	Creation of commercial / industrial district	5												3	3								3,898	4	3	11,694	3
Financial Actions	Town buys cons restr (scenic)	3	3	3	3																		3,510	6	1	3,510	12
	Grant funding (private, state, federal)								2					2			3	3					2,237	11	4	8,949	6
	Increase CPC surtax rate													3		3	4					3	1,860	12	2	3,720	11
	Convey tax title lands to non-profit land trusts	1	3					2	2	1													2,891	7	4	11,563	4
Community Activity	Restoration of Town Hall														2	5	5					5	2,506	8	4	10,024	5
	Institute for Historic Boat Building													2				3		5			2,397	10	1	2,397	16
	Reinvigorate Shipbuilding Museum													4				3		3			2,408	9	3	7,225	7
	Develop local affairs outreach and communication												2	2	2	2		2	2	2	2	2	3,547	5	2	7,094	8
	Provide affordable & senior housing		3																			4	1,572	13	2	3,144	13
	Provide public restrooms																4		4				998	14	3	2,995	14
	Provide animal control facility																4		4				998	14	2	1,997	17

**APPENDICES, (MAPS, LINKS TO ALL THE PLANNING DOCUMENTS)**