

**EAST LYME HARBOR MANAGEMENT & SHELLFISH COMMISSION  
REGULAR MEETING MINUTES  
SEPTEMBER 18, 2018  
7:30 PM  
EAST LYME TOWN HALL**

Chairman  
Stephen Dinsmore

Treasurer  
Donald F. Landers Jr.

Secretary  
Joseph Hitchery

**Members Present:** Steve Dinsmore, Joe Hitchery, Don Landers, Rick Kanter, Don MacKenzie, Greg Murin,

**FILED**

**Members Absent:** Bill Mountzoures

**Ex Officios present:** Paul Dagle

**Guest:** Ron Johnson

*Sept 25 2018 AT 8:15 AM/PM*  
*Kaunthellm*  
\_\_\_\_\_  
EAST LYME TOWN CLERK

**1. Call to Order:** S. Dinsmore called the meeting to order at 7:30 PM

**2. Approval of Minutes of Meeting of August 20, 2018**

**MOTION:** (Landers/Murin) to approve the August 20, 2018 minutes as amended:

**Page 2, section 5, ¶ 1-** Geoff Steadman will be there to answer any questions on behalf of the Commission.

**Page 6A, section 5, ¶ 1-** Letters ~~have been~~ **will be** sent to State Senator Formica, State Representative Holly Cheeseman and State Representative Kathleen McCurdy.

**Page 1, heading-Regular Special Meeting**

**Vote: Approved Unanimously**

**3. Public Delegations**

Ellen Fratus-10 Second Ave. Waterford, CT. submitted for the record letters from the Niantic River Advocacy group. They also stated they were in support of the Commission's position on the proposed solar farm.

Tim Longredan-59 Woodlawn New London, CT. stated he sent an email to the chairman, regarding moorings on the Waterford side of the Niantic River as well as shellfish filtering capacity both of which have been portrayed inaccurately at previous commission meetings. He also sent and submitted a second letter titled, "WELSCO Policy Review," (dated 9/17/18) commenting on the Commission's Harbor Management plan as well as state statutes and the coastal management pact relating to aquaculture and use of public lands. He thought it would be helpful for members to know what is in

all the documents before the discussion on the proposed WELSCO policy. Both documents were submitted for the record.

#### **4. Reports**

##### **A. Shellfish**

R. Kanter reported the Niantic River was open for shell fishing but heavy rains received in the last 24 hours may close the river to shell fishing.

##### **B. Harbor Master**

Chairman Dinsmore informed the members that letters of recommendation for Harbor Master appointment were sent to the state and he understands at least one person had been contacted. R. Johnson informed the Commission the state contacted him and asked for a resume.

##### **C. Treasurer**

D. Landers informed the members that he still needs to pay outstanding invoices for Crocker Boat Yard with costs equally shared with the Waterford Harbor Management Commission. D. Landers will be discussing the issue with the town hall staff to see how it should be handled. The members stated that in the future the Commission should be notified ahead of time before any work is done to the Harbor Master boat and that multiple quotes are obtained.

##### **D. Ex-Officio**

P. Dagle informed the Commission the Harbor Management Plan and proposed ordinance were presented to the Board of Selectmen. The Board had some questions and suggestions that will be included in the revision for presentation at their October 3 meeting.

#### **5. OLD BUSINESS**

##### **A. Harbor Management Plan-Update**

The Harbor Management Plan and Ordinance will be refined to reflect changes by the Board of Selectmen. If the Board passes the Ordinance they will set a Public Hearing and Town Meeting, if it passes the Ordinance will go into effect 10 days later.

#### **6. NEW BUSINESS**

##### **A. Correspondence:**

Invitation from NOAH, National Marine Fisheries, Milford Laboratory, for open house on October 13, 9:00-1:00. Anyone interested should contact S. Dinsmore.

R. Kanter responded to the letter from the Niantic River Advocacy Group. He stated there were inaccuracies in the letter. In paragraph 4 a reference was made, presumably about him having a conflict of interest being on WELSCO and the East Lyme Harbor Management and Shellfish Commission. He stated he had no financial interest which would require him to recuse himself.

R. Kanter also corrected the assumption that he co-authored the new policy which he did not. He stated he did author the 2002 policy.

## **B. Waterford Solar Farm**

S. Dinsmore stated he reached out to all of East Lyme's representatives and had heard back from State Senator Formica who had the same concerns the Commission had concerning the Solar Farm.

## **C. WELSCO Aquaculture Policy Statement-Subcommittee formation**

S. Dinsmore received comments from members and it was clear to him that the members are divided in their views on the WELSCO Policy. He spoke to P. Harris from WELSCO and they decided it would be beneficial to form a subcommittee consisting of two members of each Commission. J. Hitchery and D. MacKenzie volunteered to be on the subcommittee. The members discussed areas of concern in the proposed policy. P. Dagle suggested their comments would carry more weight if they were connected to the new Harbor Management Plan. J. Hitchery asked members to email him with specific questions or concerns they would like him to address.

**MOTION: (Landers/Kanter) to appoint J. Hitchery and D. MacKenzie to the subcommittee to work with WELSCO and others to develop a policy statement for aquaculture shell fishing in the Niantic River. Vote: Approved. In favor: Dinsmore, Murin, Kanter, MacKenzie, Landers. Opposed-none. Abstaining-Hitchery.**

## **7. FINAL COMMENTS**

S. Dinsmore informed the members that a past member was in a rest home and if anyone would like to visit him an address would be provided.

D. Landers asked T. Londregan for a short report on his aquaculture lease in the bay.

T. Londregan stated that it was a 4 phase period and they were now in phase two and will be going to phase 3 in 2019. He stated that approximately 3 acres are cultivated at this time. It has been a good growth year. The scallops do not like the area so he will be changing from a one year product to a two year product next year. He is working on a grant for from NRAC for bay scallop product to create an industrial product for food consumption.

## **8. ADJOURNMENT**

**MOTION: (Landers /Kanter to adjourn at 8:33 PM**

Respectfully Submitted

Sue Spang  
Recording Secretary

To: East Lyme Harbor Management Commission  
From: Niantic Bay Shellfish Farm LLC  
Date: 9-17-18

### WELSCO Policy Review

It is my understanding that this commission (ELHMC), has been asked by the Waterford East Lyme Shellfish Commission (WELSCO), to comment/vote on the consistency of their latest policy statement with regards to consistency to the ELHMC Plan (ELHMP or HMP). With my previous experiences with other Harbor Management Commissions, it is crucial that members speak to consistency with the HMP. Upon DEEP review, the DEEP will determine whether or not what the Commission has presented is indeed reflective of their HMP or not. A previous SDF NBSF submitted, with an inconsistency review from another local HMC, was approved by DEEP with no letter of explanation to this HMC. DEEP is required to send a letter of explanation if they go against a HMP, not their decisions. In this case, the DEEP comment was, "This determination/letter by the HMC is the least substantiated decision/letter we have ever received." If anyone on ELHMC would like this documentation for review, so as to not fall into the same issues, I can provide documentation upon request.

Below, I have presented certain facts and possible issues derived from the ELHMP. I hope you find this helpful. Lastly, before delving into the details, I should remind this commission that when presented with a previous proposal for WELSCO 7, this commission determined that such a proposal was outside their realm of jurisdiction and thus decided not to comment on it. This attitude should be a consistent one, we are not reviewing WELSCO's Policy statement from a shellfish stand point, nor are we reviewing any past or current applications/proposals pending or otherwise.

Let us remember that the "East Lyme Harbor Management Plan: A plan for the balanced use of the East Lyme Harbor Management Area for recreational and other purposes and for the protection of environmental resources..." (A-5) should be utilized for fair and equitable use of the area in question, WELSCO's jurisdictional bounds. Furthermore, do not forget that when the ELHMC were "...preparing the plan, the commission shall consider the following factors: (1) Recreational and commercial boating; (2) recreational and commercial fisheries and shell fisheries; (3) fish and shellfish resources, including leased or designated shellfish beds; (4) conservation of natural resources..."(B-3). It should be clear that under state Statute, as well as local law, aquaculture has a legal place/right within the waters overlapped by WELSCO and ELHMC.

In the ELHMP Ordinances, this commission acknowledges the authority of WELSCO, so let us get that issue out of the way; "The East Lyme Harbor Management Commission shall have charge of all shellfisheries and shellfish grounds lying in the Town of East Lyme not granted to the Waterford-East Lyme Shellfish Commission by Section 26-287 of the Connecticut General Statutes, Revision of 1958, as amended, and not under the jurisdiction of the commissioner of agriculture, including all rivers, inland waters and flats adjacent to all beaches and waters within the limits and marine bounds (below the mean high water line) of the Town." (C-1)

I-2 of the ELHMP indicates that "With authority provided by the General Statutes and the Town's Harbor Management Ordinance, the HMC prepared the East Lyme Harbor Management Plan establishing Town goals, policies, and other provisions for beneficial use of the East Lyme HMA for recreational, commercial, and other purposes, and for protection of the Town's natural coastal resources." A clear indication that within the HMA commercial activity is an acceptable use.

Also noted on I-2 “The Plan [ELHMP] complements the Town’s Coastal Area Management Program, as well as the East Lyme Plan of Conservation and Development (POCD) and waterfront zoning regulations, by focusing on issues most pertinent to the safe, orderly, and beneficial use of the HMA and protection of the HMA’s natural coastal resources.” Let us consider the following excerpt from the Town's very own POCD,

“Shellfish, particularly scallops but also including hard clams (quahogs), soft shell clams and oysters, are an important resource of the Niantic River estuary. Harvesting of shellfish is regulated by the Waterford-East Lyme Shellfish Commission, which also engages in seeding and in research activities to improve the resource. Once abundant, the scallop fishery failed entirely in the mid-1960's; the collapse was eventually attributed to a number of unfavorable conditions occurring simultaneously, the most damaging of which were starfish and drill predation and fouling by the seaweed codium. With the institution of aquaculture programs, the scallop population has re-established itself. Continued local management of the shellfish resource is a high priority, particularly because of the susceptibility of the scallop to changes in its environment...(170)”

Once again, we not only note the importance of shellfish but also the important function WELSCO plays, as well as aquaculture, in sustaining this resource which is given special consideration above other activities.

The POCD, which is upheld by the ELHMC, indicates that in our coastal waters we are to “support continued local regulation, aquaculture programs and research efforts to maintain and improve East Lyme’s shellfish resources. (183)” That is about as clear cut as a directive can get. Before we move past the POCD, just read the following excerpts from pages 86-89, “Aquaculture depends on clean water entering the River and ocean free from siltation and pollution. In turn, farmers and the land they steward provide many environmental benefits that are often overlooked.” After noting statistics from a survey the following is concluded; “East Lyme should clearly establish itself as a town that welcomes and encourages agriculture.” Lastly, “In summary, agriculture and aquaculture are the oldest uses of land and water in East Lyme.”

Moving back into ELHMP we should keep in mind the following, “The Plan does not replace existing state and federal programs that regulate in-water and waterfront activities. Nor does it give the HMC regulatory power to approve or deny the proposals that it reviews. (I-7)” In other words, in-water structures are regulated by the State and Federal Agencies, not local authorities. Just as this commission does not have the authority to alter dock requirements by the DEEP, they do not have the power to limit or control other structure with regards to aquaculture as there is no MOU between the ACOE and the State of CT. The consideration of any specifics regarding gear type to determine consistency is well outside the scope of this commission.

In one of the opening paragraphs of *Town Goals and Strategies* the following is stated, “That care—or stewardship—is for the purpose of ensuring that the natural, cultural, and economic values of the HMA are sustained for the future.” Aquaculture is just that, the stewardship of a natural resource which has very significant cultural and economic value to the Town. WELSCO is attempting to carry forward their charge of enhancing shellfish resources which have, as the ELHMP notes, been severely hindered due to poor land management, let WELSCO carry forth their charge.

5-15c “Continued efforts by the State Department of Energy and Environmental Protection and Bureau of Aquaculture to monitor commercial fisheries, including shellfisheries, in the East Lyme area and establish, with consideration of recommendations from the HMC, appropriate controls as necessary

to ensure the continued viability of fisheries resources should be encouraged and supported.” In other words, aquaculture should be encouraged and supported so long as,

“Any aquaculture activities in the HMA, including but not limited to activities regulated exclusively by the Connecticut Department of Agriculture Bureau of Aquaculture (DA/BA) and utilizing structures such as but not limited to docks, racks, cages, bags, and nets as well as buoys to mark the location of such activities, should be designed, constructed, and maintained to avoid any significant adverse impacts on navigation, coastal resources, and public safety in the HMA. Applications for aquaculture activities submitted to the DA/BA or any other agency should be reviewed for consistency with the Harbor Management Plan. (5-32r)”

At several points the ELHMP epitomizes the priority of shellfish cultivation by placing it ahead of other water-dependent uses; “Proposals affecting the real property on, in, or contiguous to the HMA that would cause acute and/or cumulative adverse impacts on: a) shellfish resources; or b) opportunities for shellfish cultivation and/or harvesting should be avoided. Proposals that could affect shellfish resources or cultivation and/or harvesting opportunities should be carefully designed and evaluated to avoid adverse impacts on those resources and opportunities.(5-33o-r)”

6-14, 4b “Scallop resources, including scallop populations and habitat, should be protected and, to the extent feasible, possible, enhanced. Moorings tackle should not be placed on significant important scallop resource areas identified by the Waterford-East Lyme Shellfish Commission.”

WELSCO wishes, to the extent feasible, enhance their shellfish resources within their jurisdiction by entering into a venture with a commercial entity(ies) just as the ELHMP allows for ELHMC to enter into ventures with commercial entities so as to better enhance shellfish resources. These are but a few examples of your very own plan supporting the concept of commercial shellfishing specifically aquaculture. Clearly any general policies of WELSCO formed around the above are consistent with the HMP, remember what is being reviewed, a policy statement from WELSCO.

P.S. A definition for those who are not aware of said definition.

Shellfish Concentration Areas: Areas defined in the Connecticut Coastal Management Act for the purpose of that Act as actual, potential, or historic areas in coastal waters in which one or more species of shellfish aggregate. As such, shellfish concentration areas area among a number of coastal resources of the state as defined in the Act. (ELHMP)

"Shellfish Concentration Areas" means actual, potential or historic areas in coastal waters, in which one or more species of shellfish aggregate. CGS section 22a-93(7)(N)

Consider also this excerpt from the Connecticut Coastal Management Act:

Shellfish Concentration Area

38 TO MANAGE THE STATE'S FISHERIES IN ORDER TO PROMOTE THE ECONOMIC BENEFITS OF COMMERCIAL AND RECREATIONAL FISHING, ENHANCE RECREATIONAL FISHING OPPORTUNITIES, OPTIMIZE THE YIELD OF ALL SPECIES, PREVENT THE DEPLETION OR EXTINCTION OF INDIGENOUS SPECIES, MAINTAIN AND ENHANCE THE PRODUCTIVITY OF NATURAL ESTUARINE RESOURCES AND PRESERVE HEALTHY FISHERIES RESOURCES FOR FUTURE GENERATIONS [CGS SECTION 22A-92(C)(1)(I)].

**Boat Monitoring at the Connecticut River,  
Niantic River and Shaws Cove  
Movable Railroad Bridges  
Memorial Day through Labor Day, 2011**

Prepared for:  
Connecticut Department of Transportation  
2800 Berlin Turnpike  
Newington, CT 06111

FILED IN EAST LYME  
CONNECTICUT  
SEP 10 2011 AT 2:55 AM/PM  
*[Signature]*  
EAST LYME TOWN CLERK

Lower CT River Valley Council of Governments  
145 Dennison Road  
Essex, CT 06426  
[www.ctriver.org](http://www.ctriver.org)  
January 16, 2013

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## **Executive Summary**

The Connecticut River Estuary Regional Planning Agency (CRERPA), now the Lower Connecticut River Valley Council of Governments (RiverCOG), was contracted to monitor boating in the Connecticut and Niantic Rivers and Shaws Cove during 2010 and 2011. Meetings between representatives of CRERPA, Amtrak, the Connecticut DOT, the Connecticut DEP (now the CT DEEP) and the Connecticut Marine Trades Association resulted in a methodology that was mutually agreeable to all parties, thereby maximizing the use of the results by all parties.

Monitoring occurred every other week during the time between Memorial Day and Labor Day Weekends – the summer boating season. Teams of two monitors were employed at each of the three movable bridges at the three waterways. The monitors collected information regarding the number, types and heights of boats that passed through the bridge. Information was collected on weather conditions. Bridge closure information was collected which provided the duration of bridge closure and the number and type of boats that were delayed traveling both inbound and outbound. The information was analyzed and has been presented in order to provide an estimate of the number of boats using the three waterways, the number of trains that passed during the monitored time, the duration of bridge closures and the number of boats impacted by those bridge closures.

Review of the information gathered indicates that the closures of the three movable bridges in the Connecticut River, the Niantic River, and the Shaws Cove – presents minimal impact to the boating activity in those three waterways. Bridge closure times are such that between 70% and 92% of the bridge closings are limited to thirty minutes or less. Although boats are delayed by the bridge closings, information collected and analyzed for the two years suggests that the overall number of boats delayed is minimal as well. In the Connecticut and Niantic Rivers, approximately 1 in 8 to 10 boats is delayed by bridge closures. Comparison of closure information for 2010 and 2011 indicates that a slightly lower percentage of boats delayed in 2011 than in 2010, further minimizing impact to boating during the two years. The percentage of boats delayed in Shaws Cove, however, ranges between 30 % and 60% with most days averaging between 25% and 40% of boats delayed.

## Introduction

This report presents the second of two annual analyses of boat traffic passing through the movable railroad bridges located at the Connecticut and Niantic Rivers and Shaws Cove in southeastern Connecticut. Where the report for 2010 presented significant background on the history of the railroad and the agreements reached and permits acquired to establish the partnership between the Connecticut Department of Transportation, the Connecticut Department of Environmental Protection (now the Department of Energy and Environmental Protection) and Amtrak, the 2011 report will present an analysis for 2011. Comparisons between the two years are included in this document.

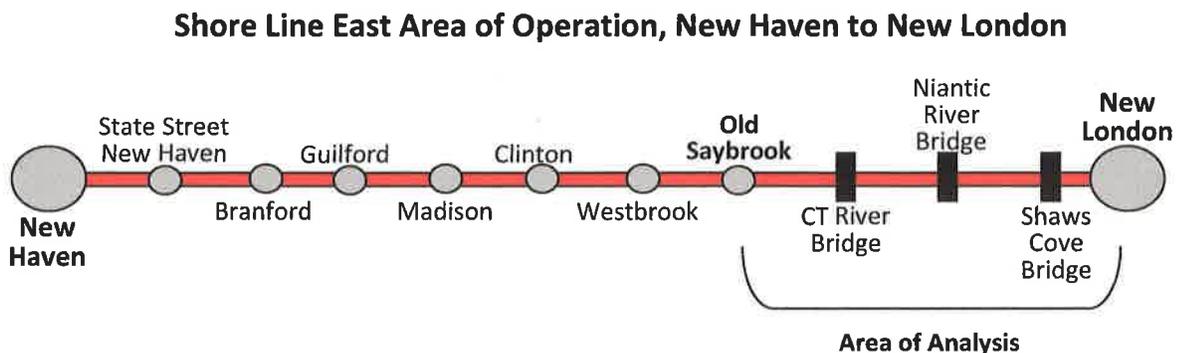
As explained in the 2010 report, the reason for the analysis of marine traffic at the three movable bridges located between Old Saybrook and New London is to provide data which will assist the CTDOT properly plan for the further expansion of Shore Line East rail service between those two southeastern Connecticut municipalities. Given past concerns expressed over the potential impacts of additional bridge closings that a greater level of Shore Line East service might cause the recreational boating industry, the two years of boat counting provide data that have enabled officials to better determine appropriate service schedules which will serve the transportation public more effectively while minimizing any adverse impacts to the recreational boating to the greatest extent possible.

## Connecticut, Niantic and Shaws Cove Movable Bridges and Potential Impact to Marine Traffic

As stated above, it was known that additional closings of three movable railroad bridges located between Old Saybrook and New London will be necessary in order to expand rail service to New London. In order to fully gauge the impacts of the expansion on marine traffic, it was concluded that the boat monitoring investigation analyzing the extent of marine traffic at the movable bridges should be conducted for a second year as well. The second year of data serves to provide a check against the first year of counting as well as allow for conclusions regarding any differences that may be exposed. A cursory look at the 2011 data has already indicated that the number of boats passing beneath the three movable bridges was down from the counts from 2010, likely because of a significant rise in the cost of boat fuel between the two periods.

## Area of Analysis

As with the 2010 study, counts were taken at the three movable bridges located between Old Saybrook and New London. The bridges are located at the Connecticut River between Old Saybrook and Old Lyme, at the Niantic River between East Lyme and Waterford, and at Shaws Cove in New London (see Figure 1).



**Boat Monitoring Program**

The following explanation summarizes the analysis methodology used for both the 2010 and 2011 summer season:

**A. Methodology Assumptions:**

Based upon the practicalities of providing monitoring between 12 and 14 hours per day every day of the summer between Memorial Day and Labor Day and previous agreements between the stakeholders, the 2011 monitoring program was carried out using the same scheduling as occurred during the 2010 boating season. That agreement stipulated that a representative sampling of boating activity in the three waterways affected by the movable bridges could be achieved on a staggered every-other-week basis. Holiday weekends – Memorial Day, the Fourth of July, and Labor Day – were again be counted at all three waterways to provide a baseline for what were likely three of the busiest weekends of boating during the summer. The monitoring program again consisted of twelve (12) hour days on Monday through Thursday, commencing at 7am and concluding at 7pm. On Fridays, Saturdays, Sundays and Monday’s of the three holiday weekends, fourteen (14) hour days were planned with monitoring commencing at 7am and concluding at 9pm.

As a result of the monitoring schedule, the total number of count days between Memorial Day and Labor Day for all three bridge locations include:

Weekdays:	27 days
Weekends/Holiday Weekends:	36 days

**B. Monitoring Locations:**

- 1). Connecticut River. For the Connecticut River movable bridge, monitoring took place at DEP Marine Headquarters property at Ferry Landing in Old Lyme on the river’s east side. From the Ferry Landing location, boats passing through the railroad bridge from both upstream and downstream directions can be easily observed and counted. When the bridge is set to its down position to allow trains to pass, queued boats can be readily observed and documented. In that the bridge normally remains down for between approximately 7 to 8 minutes and upwards of twenty or more minutes, sufficient time exists to conduct accurate counts. The DEP Boating Division was contacted and made aware of the presence of monitoring analysts.
- 2). Niantic River. For the Niantic River opening bridge, monitoring was conducted from the rear parking lot of Waterford’s Sunset Ribs restaurant on the east side of the channel leading to the two Niantic River movable bridges. From that location, queuing on the upstream side of the Niantic movable bridge was easily observable. Counts of queued boats moving north into the Niantic River were monitored by counting the number of boats that moved through the channel immediately following the bridge opening. The Waterford Police were notified of the presence of the analysts.
- 3). Shaws Cove. For the opening bridge at Shaws Cove, monitoring was conducted from the public area located off Howard Street which accesses the northern shoreline of Shaws Cove. The

location is one that Amtrak has used for its operations. At Shaws Cove, the only navigational movement through the bridge occurs as a result of entering or exiting the cove. Counting was much less rigorous in this location than in either the Niantic or Connecticut Rivers. The New London Police were notified of the presence of the analysts.

C. Total Hours:

Based upon a schedule of counting every other week in a staggered fashion at all three bridge locations, the total hours scheduled – equal at all three locations – totaled 2,232 hours, or 744 hours per bridge.

D. Counting Methodology:

Staff of the Connecticut River Estuary Regional Planning Agency used the identical field survey sheet that was a printed version of a Microsoft Excel spreadsheet. The survey forms include two sections of information. One section included the number of observations; weather observations; the code for the day of week the counts were taken; the time each boat that passed underneath the bridge; whether the vessel was power, sail or “other”; its direction of travel; and estimates whether the boat would be able to pass under the bridge if the bridge were in the down position. The second section of information includes entries related to the bridge closings themselves. Specifically, the data form includes the time of bridge closing, opening and the duration of closure; the number of vessels waiting on both the inbound and outbound sides of the bridges; identification of whether the vessels were sail or power; and the number of trains passing per bridge closing.

The analysts transcribed their field survey forms onto the electronic version of the form and then emailed them to CRERPA staff at the agency’s Old Saybrook office. In addition, the field survey sheets were collected for the record of the monitoring.

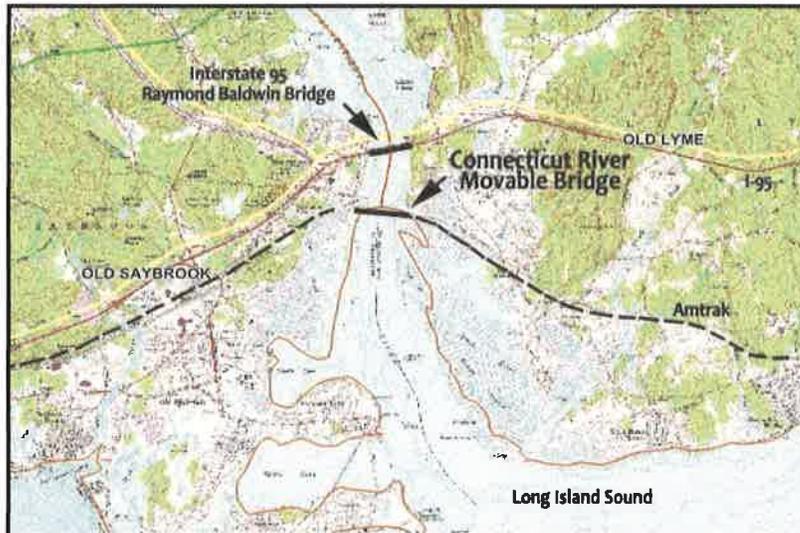
E. Analysis:

The data was reviewed for accuracy and consistency and was then broken up into numerous separate data sets for analysis. Those data sets included counts related to each specific waterway, vessel traffic at particular times of day, vessel traffic related to direction of travel, minutes per bridge closing, number of vessels queuing while waiting for the bridges to open, the direction the queuing vessels were traveling, whether those vessels were power or sail boats, percentage of boats waiting for a bridge to open compared to those passing while the bridge was open, and variations of those criteria. Charts were produced to visually explain the raw numbers, which are presented in report appendices.

Following the analysis of the 2011 data, comparisons will be made between the 2010 and 2011 data to determine where variations may have occurred. Staff of CRERPA made every attempt to offer explanations for variations based upon information gleaned through interviews with professional and recreational boaters.

USCGS Maps of the Three Movable Railroad Bridges between Old Saybrook and New London

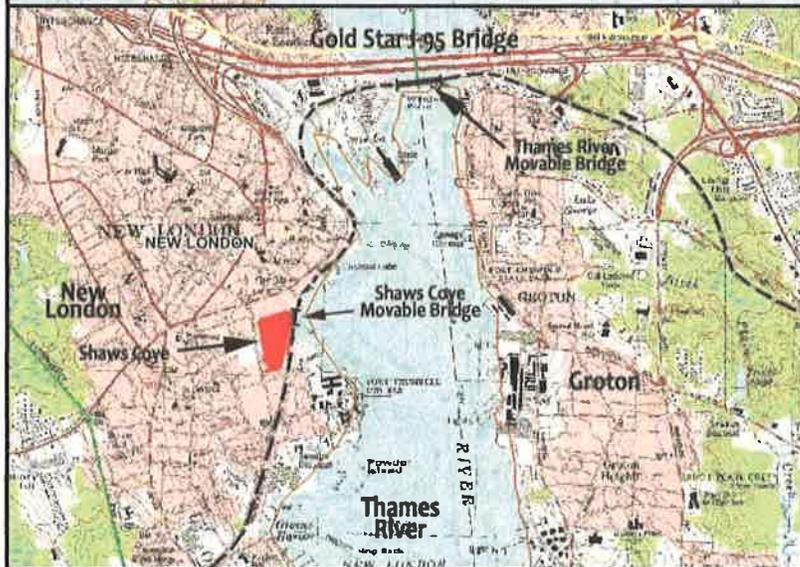
**Connecticut River  
Movable RR Bridge**  
Old Saybrook  
Old Lyme



**Niantic River  
Movable RR Bridge**  
East Lyme (Niantic)  
Waterford



**Shaws Cove  
Movable RR Bridge**  
New London  
Groton



### Presentation of Results

The follow section of the report presents various comparisons of results for the boat monitoring conducted during the time period from Friday, May 27, 2011 (Memorial Day weekend) to Monday, September 5, 2011 (Labor Day weekend). It is noted that due to the varying categories of data collection and the varying methods of statistical compilation using that data, monitoring totals are not always identical, but are considered accurate to within 3 to 5%. From the standpoint of conducting a planning study, the results, comparison and conclusions reached are considered accurate.

### Overall Comparison of Boat Activity

The three waterways where boating is being monitored and where the three movable bridges that are the subject of this investigation differ significantly from the standpoint of their geographic configurations and the boat traffic that is found in each. Although the Connecticut River is usually home to the largest amount of boat traffic with the Niantic River and Shaws Cove following in that order, monitoring data for the total number of boats in the Connecticut and Niantic Rivers was the same, with a difference of less than 0.25% . For the purposes of this monitoring project, boating extends approximately 15 miles north of the mouth of the Connecticut River and includes the shores of eight municipalities including Haddam, East Haddam, Lyme, Chester, Deep River, Essex, Old Lyme and Old Saybrook. Boating in the Niantic River extends approximately 3 miles north of its mouth and includes the municipalities of East Lyme and Waterford. Shaws Cove is a small enclosed cove off the Thames River in New London.

### Boating Traffic as a Function of Waterway

Comparison of the boating traffic monitored in the three waterways during the survey period indicates that both the Connecticut and Niantic Rivers hosted just under 50% of the total traffic During the 2010 boating season, the Connecticut River hosted approximately 15% more traffic than the Niantic (22,779 boats v. 15,983 boats). The difference was due to a 30% drop in surveyed activity at the Connecticut River; the Niantic remained the same.

<b>TOTAL BOAT TRAFFIC by RIVER</b>				
<b>Connecticut River, Niantic River, Shaws Cove Movable Bridges</b>				
<b>Memorial Day to Labor Day, 2011</b>				
	<b>Connecticut River</b>	<b>Niantic River</b>	<b>Shaws Cove</b>	<b>Total</b>
<b>MONDAY</b>	2,553	1,766	230	<b>4,549 (14%)</b>
<b>TUESDAY</b>	718	1,438	112	<b>2,268 (7%)</b>
<b>WEDNESDAY</b>	847	1,512	175	<b>2,534 (8%)</b>
<b>THURSDAY</b>	1,057	1,077	112	<b>2,246 (7%)</b>
<b>FRIDAY</b>	2,161	2,032	522	<b>4,715 (15%)</b>
<b>SATURDAY</b>	4,145	3,962	472	<b>8,579 (26.5%)</b>
<b>SUNDAY</b>	3,594	3,311	365	<b>7,270 (22.5%)</b>
<b>Total</b>	<b>15,075 (49.6%)</b>	<b>15,098 (49.7%)</b>	<b>1,988 (0.7%)</b>	<b>32,161</b>

Shaws Cove, which is a small enclosed basin hosting only two marinas represented less than 1% of the total traffic. Overall boating traffic on Saturdays and Sundays for all three waterways accounted for approximately 49% of boat traffic during the entire week with Mondays and Fridays contributing another 29%.

**Boating Activity as a Function of Direction of Travel Direction**

As might be expected, traffic entering and exiting the waterways varies but is close to a 50/50 balance of inbound and outbound traffic. The overall total for the three waterways shows that just under half the boat count travel outbound while just over half travel inbound. The highest rate of northbound (inbound) traffic occurs on Tuesdays, perhaps reflecting a pattern of access to boat servicing facilities immediately following a weekend. Other than Tuesday’s 16% differential between northbound and southbound traffic, the remaining days are relatively equal in their northbound/southbound distribution.

Monday’s relatively high boat count total (as compared to succeeding weekdays) is likely influenced by the three Monday holidays during the summer (Memorial Day, 4<sup>th</sup> of July and Labor Day) as well as long weekends taken by boaters throughout the summer. Tuesday, Wednesday and Thursday together account for approximately 18% of the total weekly traffic. It is noted that the statistics do not identify multiple runs made by the same boat.

<b>TOTAL BOAT TRAFFIC by DIRECTION</b>				
<b>Connecticut River, Niantic River, Shaws Cove Movable Bridges</b>				
<b>Memorial Day to Labor Day, 2011</b>				
	<b>Northbound</b>	<b>Southbound</b>	<b>Total</b>	<b>% N to S</b>
<b>MONDAY</b>	2,523	2,026	4,549	55/45
<b>TUESDAY</b>	1,090	1,178	2,268	48/52
<b>WEDNESDAY</b>	1,259	1,275	2,534	50/50
<b>THURSDAY</b>	1,119	1,127	2,246	50/50
<b>FRIDAY</b>	2,400	2,315	4,715	51/49
<b>SATURDAY</b>	4,330	4,249	8,579	50/50
<b>SUNDAY</b>	3,828	3,442	7,270	53/47
<b>Total</b>	<b>16,549</b>	<b>15,612</b>	<b>32,161</b>	<b>51/49</b>

**Weather Impacts on Boating Activity**

For the most part, recreational boating is a fair-weather activity that greatly impacts the financial success of boating facilities that cater to those boaters. As previously reported, interviews with marina

owners and operators as a part of this investigation reported that boating activity increases with fair weather, or, perhaps more accurately, boating activity decreases with poor weather. Interestingly, although the overall boating activity dropped, most of that decrease occurred within the Connecticut River. This could be in part due to lost boating time that occurred as a result of the impacts of upstream debris flowing down the river when Tropical Storm Irene passed through New England. A second factor in the lower boating activity was potentially the lower number of sunny days surveyed. Higher fuel prices are also reported to keep boats off the water and in their slips. Note that the total number of boats where weather was reported was slightly lower than the total boats counted (31,927 vs. 32,161).

<b>Boating Activity as a Function of Weather</b>					
<b>Connecticut River, Niantic River and Shaws Cove</b>					
Memorial Day through Labor Day, 2011					
	<b>Sunny</b>	<b>Cloudy Partly Cloudy</b>	<b>Rainy</b>	<b>Foggy/Hazy</b>	<b>Total</b>
<b># of Boats</b>	16,304	14,148	931	544	31,927
<b>% of Boats</b>	51%	44%	3%	2%	100%

During the 2011 boating season, boat monitors identified approximately 51% of the days as “sunny” as compared to 74% during the 2010 boating season. During the 2011 season, boat monitors identified approximately 44% of the days as either “cloudy” or “partly cloudy” as opposed to only 22% during the 2010 boating season. Days identified as “rainy” and “foggy” or “hazy” were approximately equal to those identified during the 2010 boating season.

#### “Tall” vs. “Short” Boats

When it comes to the issue of bridge closures and delayed boats, it is thought that those boaters that wait for bridge openings fall into two categories: boaters that are delayed as a result of not being able to pass through closed bridges due to the height of their boat, and boaters who *choose* to wait even though their boat could pass through the closed bridge. The latter category is boaters who would rather not chance a collision with the bridge or who don’t mind waiting.

<b>Comparison of “Tall” Boats vs. “Short” Boats</b>				
Memorial Day through Labor Day, 2011				
	<b>“Tall”</b>	<b>“Short”</b>	<b>Total</b>	<b>% Tall/Short</b>
<b>Connecticut River</b> Clearance: 19ft, Mean High Water 22 ft, Mean Low Water	2,855	12,204	15,059	20/80
<b>Niantic River</b> Clearance (existing bridge): 11ft, Mean High Water; 14 ft, Mean Low Water	2,979	12,111	15,090	20/80
<b>Shaws Cove</b> Clearance: 3 ft, Mean High Water; 6 ft, Mean Low Water	1,542	236	1,778	87/13

Past interviews with marina operators and owners regarding the state of mind of those boaters who have to wait for closed bridges, suggested that most boaters accept that such delays are just a part of boating in areas upstream of the movable bridges. Very few are reported to get upset to the point of moving to downstream boating facilities. Only one story has been related regarding a boater who moved from an upstream marina to a downstream marina.

As a part of the monitoring program, monitoring analysts were asked to estimate the height of boats as a part of their duties. "Tall" designations were assigned to those boats that appeared unable to pass under a closed bridge while a "short" designation referred to boats that appeared short enough to navigate under the bridge even if it was closed for a passing train. Since all sailboats had to wait for bridge closures they were identified as "tall". Larger powerboats rigged with retractable fishing gear and/or antennae that *appeared* to have a height that prevented them from passing under a closed bridge were also identified as being "tall".

First, it must be recognized that the data representing "tall" and "short" boats is a rough estimate that was influenced by a number of factors, not least of which was the ability of the analysts to visualize the boats next to the bridge. This ability to estimate heights varies tremendously in differing individuals. That said, the most notable statistic is the comparison between the distribution of tall boats between the three movable bridges. Review of the height estimates shows that 1 in 4 boats would have to wait for a closed bridge at both the Connecticut River and Niantic River movable bridges. At the Shaws Cove bridge, however, almost 9 of 10 boats were of such height so as to have to wait for a closed bridge that opens. What this data probably reflects more than anything else is the low bridge clearance found at Shaws Cove.

#### Boating Activity as a Function of Boat Type

Boating analysts were asked to differentiate boats into three different categories: power boats, sail boats and "other" types. Although the categories identified as "powerboats" and "sailboats" are self explanatory, the category of "other" (which only accounted for approximately 3 to 4% of the total traffic) is less simple and included commercial vessels such as tugboats, barges, workboats, cruise and tour boats and other similar non-recreational vessels. Although cruise and tour boats are recreational, they are commercial in nature and were thus excluded from the power boat count. Note that a few of the monitored boats were not identified, resulting in slightly lower totals in this table.

<b>Number of Powerboats, Sailboats and "Other" Boats</b>				
<b>Memorial Day through Labor Day, 2011</b>				
	<b>Connecticut River</b>	<b>Niantic River</b>	<b>Shaws Cove</b>	<b>Total</b>
<b>Sailboats</b>	1,500 (10%)	311 (2%)	398 (22%)	<b>2,209 (7%)</b>
<b>Powerboats</b>	13,491 (90%)	13,742 (91%)	1,354 (76%)	<b>28,587 (89.5%)</b>
<b>Other</b>	68 (<1%)	1,037 (7%)	26 (2%)	<b>1,131 (3.5%)</b>
<b>Total</b>	<b>15,059</b>	<b>15,090</b>	<b>1,778</b>	<b>31,927</b>

As was expected, power boats again far exceeded the number of sailboats in all three waterways. In the Niantic River, power boats outnumbered sailboats by almost 40 to 1. In the Connecticut River, power boats outnumbered sailboats by about a 9 to 1 margin. In Shaws Cove, that margin was approximately 3.5 power boats to every sail boat. Again, as expected, the percentage of “other” boats was significantly higher in the Niantic River than in either the Connecticut River or Shaws Cove. That higher percentage is due to the various cruise and tour boats that operate out of the Niantic River as well as the possible contribution of boats working on the Niantic River Bridge. It is noted that, for the most part, work boats associated with the bridge work weren’t reported to have moved in beyond the inner highway bridge to any great extent.

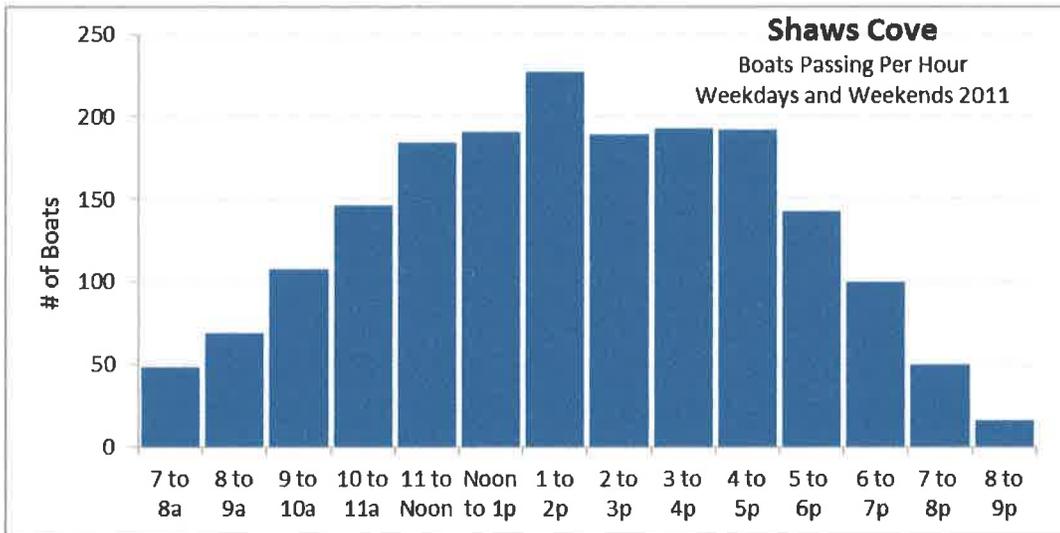
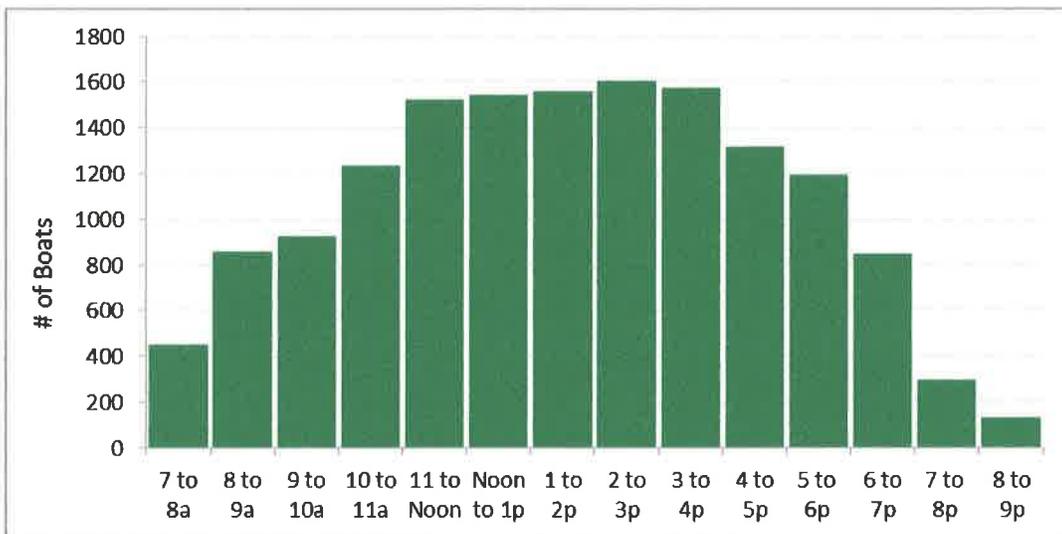
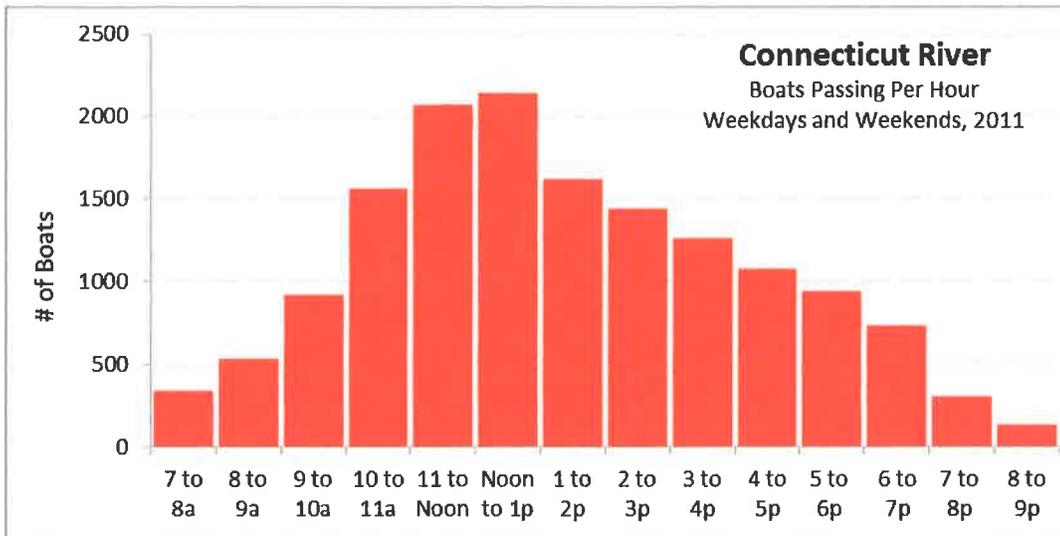
Where the Niantic River had an unusually high percentage of “other” types of boats amongst its boat traffic, Shaws Cove was unique in that it included a much higher percentage of sailboats with almost 20% of the boats powered by sail. Perhaps this higher percentage is due to the differing boating conditions – conditions more favorable for sailing – as one moves easterly along the Connecticut shoreline toward the more open waters off Rhode Island. The Niantic River had the lowest percentage of sailboats (2%) while the Connecticut River was in the middle with sailboats totaling 8% of the total boat traffic.

Overall, power boats account for approximately 90% of all boating traffic traveling in and out of the three waterways, sailboats accounted for approximately 7% of the traffic and “other” boats accounted for approximately 3% of the traffic. As a note, the overall total number of boats identified by type was slightly lower than the total count in that 234 records had no boat type recorded.

#### Boating Activity as a Function of Time of Day

Review of the collected data in the three waterways as a function of time of day again indicates a pattern of boating that is best described by the common statistical “bell curve”. The three charts of boat traffic shown on the following page demonstrate a small level of boating frequency early and late in the day with the maximum amount occurring in the middle part of the day. What could be described as a “plateau” in boat numbers occurs through the middle of the day in the Niantic and Shaws. A more defined “peak” appears in the CT River data.

The three colored graphs below show three highlighted time periods from 7am to 9am, 11am to 1pm and 4pm to 6pm. In all three waterways, the greatest number of boats passes under the bridges during the midday period with the evening period having the second most amount of traffic. The morning window is the time where the fewest boats are present in the river and passing through the movable bridges.



## Bridge Closings

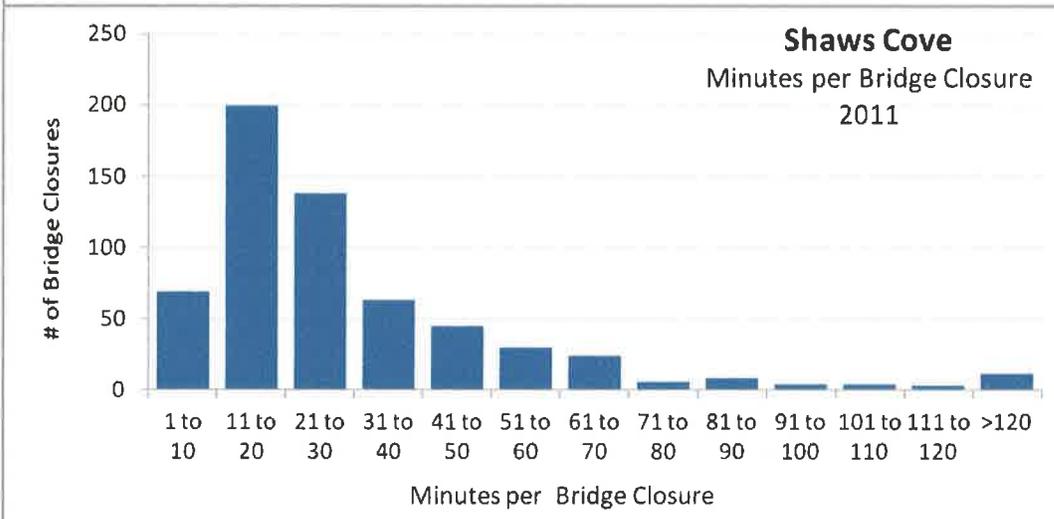
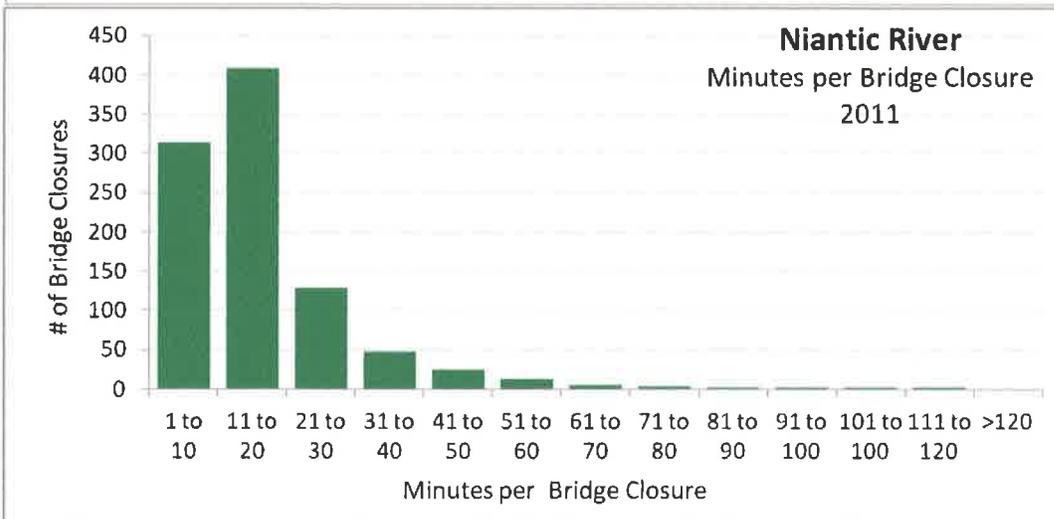
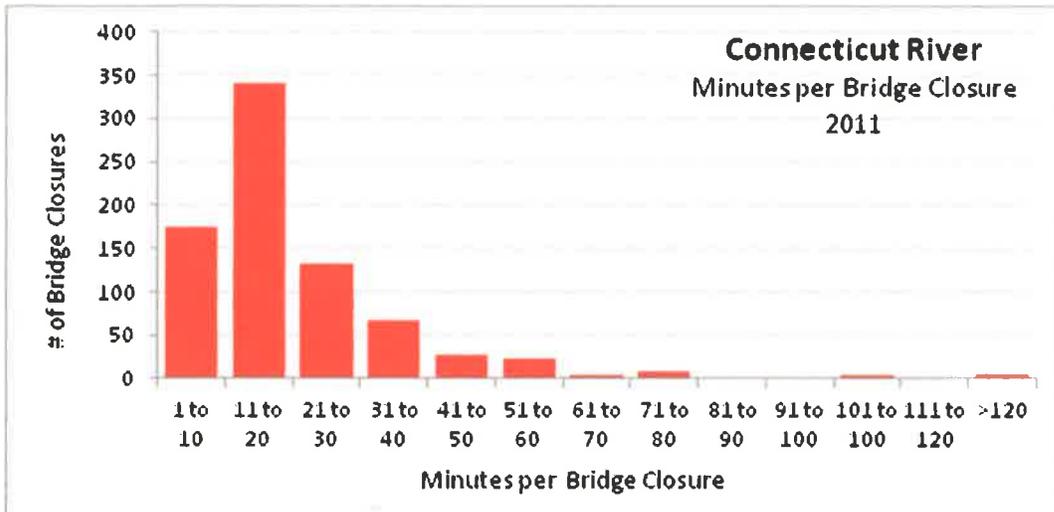
An important criterion by which the Amtrak system is measured is the duration of bridge closings. United States Coast Guard regulations require that boats wait for closed bridges no more than twenty minutes. Although Amtrak makes every attempt to comply with that federal regulation, it's not always possible. Dispatchers at the CETC in Boston and bridge tenders on the three bridges are often in a position to decide whether to open a bridge after the crossing of a single train when they are aware that another train, perhaps slightly delayed, approaches. Is the bridge left in the closed position for 30 or 40 minutes to wait for the delayed train, or is it more effective to raise (open) the bridge and then quickly close it when the delayed train finally approaches? Another important factor involved is the fact that the bridges are almost 100 years old; constant operation and wear has left them in need of replacement.

One of the primary reasons behind monitoring boat activity in the Connecticut River, the Niantic River and Shaws Cove is to better understand the impacts of movable bridge closings on the marine traffic that passes through those movable bridges. With the possibility of additional trains being added to the tracks between Old Saybrook and New London, concern has been raised by some over negative impacts that could be created in the event of more bridge closings.

The following chart shows the breakdown of monitored bridge closings as a function of time closed:

<b>Minutes Per Bridge Closing for Three Movable Bridges</b>				
Memorial Day to Labor Day, 2011				
<b>Minute Interval</b>	<b>Connecticut # of Closings</b>	<b>Niantic # of Closings</b>	<b>Shaws # of Closings</b>	<b>Average # of Closings</b>
<b>0 – 10</b>	175 (22%)	314 (33%)	69 (11%)	22%
<b>11 – 20</b>	340 (43%)	408 (43%)	199 (33%)	40%
<b>21 – 30</b>	133 (17%) <span style="border: 1px solid black; padding: 2px;">82% &lt;30 min</span>	129 (14%) <span style="border: 1px solid black; padding: 2px;">90% &lt;30 min</span>	138 (23%) <span style="border: 1px solid black; padding: 2px;">67% &lt;30</span>	18% <span style="border: 1px solid black; padding: 2px;">80% &lt;30</span>
<b>31 – 40</b>	67 (8%)	47 (5%)	63 (10%)	8%
<b>41 – 50</b>	28 (4%)	24 (3%)	45 (7%)	5%
<b>51 – 60</b>	23 (3%)	13 (1%)	30 (5%)	2.5%
<b>61 – 70</b>	4 (<1%)	5 (<1%)	24 (4%)	1.5%%
<b>71 – 80</b>	9 (1%)	3 (<1%)	6 (1%)	<1%%
<b>81 – 90</b>	3 (<1%)	2 (<1%)	8 (1%)	<1%
<b>91 – 100</b>	3 (<1%)	2 (<1%)	4 (<1%)	<1%
<b>&gt;100</b>	9 (1%)	2 (<1%)	19 (3%)	2%
<b>Total</b>	<b>794</b>	<b>949</b>	<b>605</b>	<b>100%</b>

The following three graphs show the distribution of durations of bridge closings for the three movable bridges in question:



A review of the bridge closure data for the three movable bridges indicates that, of the closures that were monitored, the percentage of closings of less than a 30 minute duration was 90% in the Niantic River, 82% in the Connecticut River and 67% at Shaws Cove. Closures at the Niantic and Connecticut River bridges that are 20 minutes or less both occur approximately 43% of the time, while Shaws Cove bridge closures meet the 20 minute regulation approximately 33% of the time. A comparison of the total number of boats delayed during those 30 minute intervals shows that in the Niantic, 92% of the delays occurred during the 30 minute closure interval with only 8% of the delays occurring during closures of greater than 30 minutes. In the Connecticut River, the percentage of boats delayed during the 30 minute interval dropped to 81% with 19% of being delayed during closures exceeding 30 minutes. In Shaws Cove, the percentage of boats delayed during the 30 minute interval dropped further to 70% with 30% being delayed during bridge closures lasting longer than 30 minutes.

Bridge closings in excess of 40 minutes occur in less than 9% of the closings at the Connecticut River and less than 4% of the closings at the Niantic River. The Shaws Cove bridge remains closed for periods longer than 40 minutes in just over 20% of the closures. The higher percentage of longer closures at the Shaws Cove bridge was described by Amtrak officials as being a result of an increased amount of freight train movement that occurs in the New London and Groton area when compared to areas further south around either the Connecticut or Niantic River bridges as well as the generally slower speed of trains either leaving or approaching New London Station. In addition, longer periods of time can pass when boats are neither looking to enter or exit Shaws Cove, allowing the tender to leave the bridge in the closed position, especially during weekdays.

Summarizing, the shortest bridge closing durations occur at the Niantic River movable bridge (which continues to be under active construction), followed closely by those at the Connecticut River movable bridge. The least optimal closing durations occur at Shaws Cove.

#### Boats Delayed by Bridge Closings

As discussed above, the delaying of boats by bridge closures tends to be one of the focus points for those concerned about adverse impacts to the marine industry if additional trains are added between Old Saybrook and New London. As a result, data was again collected which reflects how many boats were delayed by bridge closings, from which direction they were traveling, whether or not such boats were delayed due to their heights relative to the bridge height or the boat operator *chose* to wait so as not to have a "close call", and how those numbers compared to the overall number of boats passing through the three movable bridges.

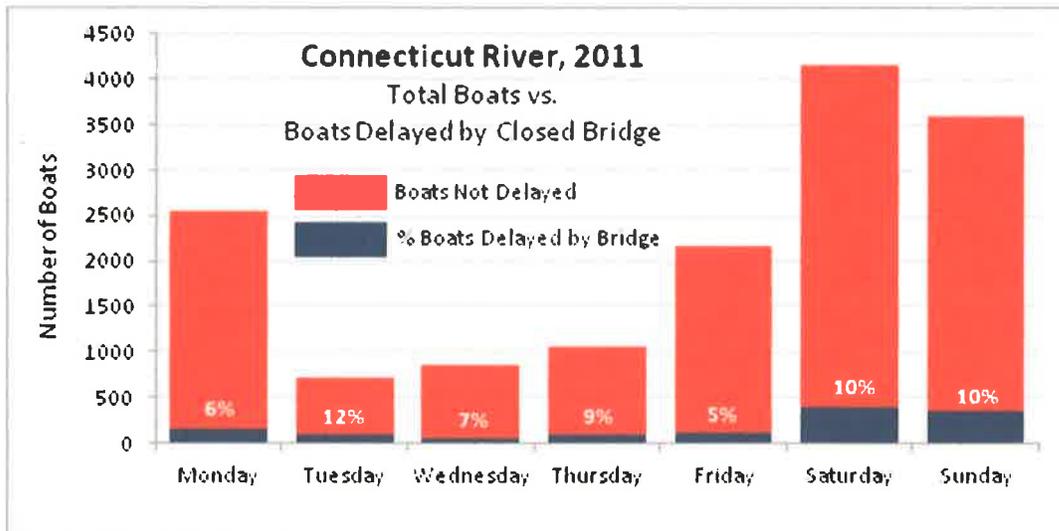
Analysts for the 2011 boating season were again asked to record the time of bridge closing as measured from the beginning of the downward movement of the bridge to its final stop following its opening. During that period, the analysts recorded the number of boats that queued both on the north (outbound) and south (inbound) side of the bridges, recording what type of boat was queued (power vs. sail) and whether or not the boats could pass under a closed bridge if the operator so chose. For the later piece of data, analysts were asked to "estimate" whether such boats could pass. Sailboats were universally considered as being too tall to pass under a closed bridge. The judgment came in on the larger power boats, many that could have passed if their fishing or antennae rigging was lowered. Through interviews, it was generally found that most power boaters would choose to wait than to go

through the process of lowering gear. When asked how boaters generally felt about waiting for bridge closures, a number of marina owners and operators said that most boats accept that such occurrences are part of boating and didn't get upset over having to wait. There were those few, however, that don't want to wait.

Connecticut River

As discussed previously, monitoring data for 2011 shows that the Connecticut River is host to just under half (49.7%) of the boat traffic in the three waterways affected by movable bridges that are the subject of this investigation.

The graphs and tables shown below reaffirm the distribution of boat traffic on the seven days of the week with most of the traffic occurring on Monday (due to three holiday weekends and long weekends) and Friday through Sunday. These tables and graphs also compare the percentages of boats that have are delayed by bridge closings as a function of the total number of boats passing through that bridge. Unlike the 2010 boating season, the percentage of boats delayed by bridge closings seemed more random, with higher percentages on both some weekdays and some weekend days. On the weekends (including Mondays), when the greatest number of boats were monitored, approximately 1 out of every 10 boats ended up delayed by bridge closings on Saturdays and Sundays. On Fridays and Mondays, that percentage dropped to slightly more than 1 in 20 boats. With the percentage of boats delayed ranging between 6% and 12% during the seven days of the week, the average percentage of boats delayed by bridge closings was approximately 8.5%, down from a percentage of 10% in 2010.



Delay as a Function of Three Periods of the Day

For weekdays only in the Connecticut River, collected data shows that almost 6 in 10 bridge-caused boat delays occurred during the 11am to 1pm period of the day in four of the five days. Only Wednesdays had fewer midday boat delays than delays in the morning and evening. The second-highest number of boat delays occurred as a result of bridge closings during the 5pm to 7pm evening time period when 1 in 4 of all passing boats were delayed. The lowest number of waiting boaters occurred during the 7am to

9pm morning period when almost 1 in 5 of all passing boats were delayed by bridge closings. The higher percentage of delays during the middle part of the day is reflective of the greater number of boats in the waterway during those hours of the day when compared to the morning and evening periods.

<b>Number/Percentage of Boats Delayed by Closing of the CT River Bridge <i>Weekdays</i></b>						
<b>Three Key Time Periods, Memorial Day to Labor Day, 2011</b>						
	<b>M</b>	<b>Tu</b>	<b>W</b>	<b>Th</b>	<b>F</b>	<b>Total</b>
<b>7a to 9a</b>	20 (26%)	7 (14%)	9 (38%)	4 (7%)	6 (18%)	<b>46</b> <b>(19%)</b>
<b>11a to 1p</b>	40 (51%)	36 (71%)	5 (20%)	40 (74%)	15 (45%)	<b>136</b> <b>(57%)</b>
<b>4p to 6p</b>	18 (23%)	8 (14%)	10 (42%)	10 (19%)	12 (37%)	<b>58</b> <b>(24%)</b>
<b>Total</b>	<b>78</b> <b>(100%)</b>	<b>51</b> <b>(100%)</b>	<b>24</b> <b>(100%)</b>	<b>54</b> <b>(100%)</b>	<b>33</b> <b>(100%)</b>	<b>240</b> <b>(100%)</b>

<b>Number/Percentage of Boats Delayed by Closing of the CT River Bridge <i>All Days of Week</i></b>								
<b>Three Key Time Periods, Memorial Day to Labor Day, 2011</b>								
	<b>M</b>	<b>Tu</b>	<b>W</b>	<b>Th</b>	<b>F</b>	<b>Sa</b>	<b>Su</b>	<b>Total</b>
<b>7a to 9a</b>	20 (26%)	7 (14%)	9 (38%)	4 (7%)	6 (18%)	48 (23%)	34 (21%)	<b>128</b> <b>(21%)</b>
<b>11a to 1p</b>	40 (51%)	36 (71%)	5 (20%)	40 (74%)	15 (45%)	111 (54%)	103 (63%)	<b>350</b> <b>(57%)</b>
<b>4p to 6p</b>	18 (23%)	8 (14%)	10 (42%)	10 (19%)	12 (37%)	47 (23%)	26 (26%)	<b>131</b> <b>(22%)</b>
<b>Total</b>	<b>78</b> <b>(100%)</b>	<b>51</b> <b>(100%)</b>	<b>51</b> <b>(100%)</b>	<b>54</b> <b>(100%)</b>	<b>33</b> <b>(100%)</b>	<b>206</b> <b>(100%)</b>	<b>163</b> <b>(100%)</b>	<b>609</b> <b>(100%)</b>

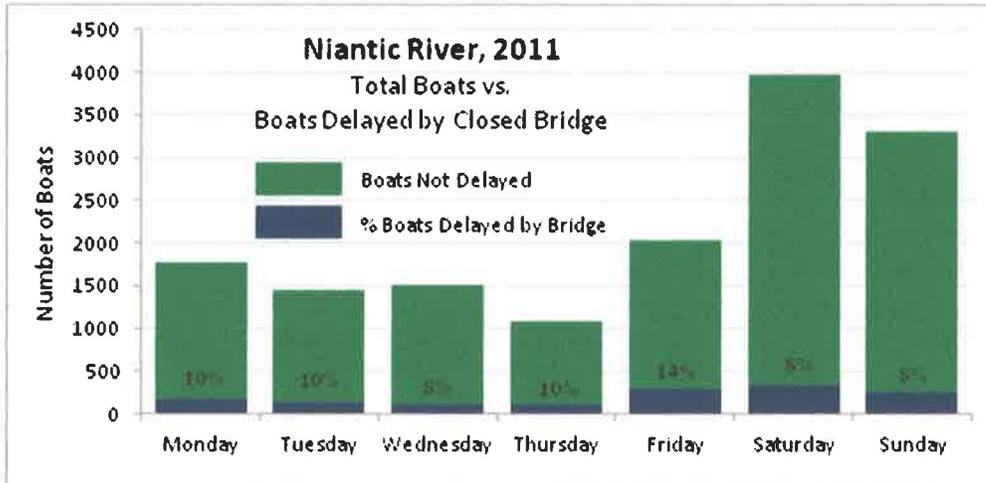
When including Saturday and Sunday in the statistics, the overall percentage of boaters delayed by bridge closings was identical during the middle part of the day with a slightly greater percentage delayed in the morning (19% vs. 21%) and a slightly fewer percentage delayed during the evening period (24% vs. 22%). Given the numbers involved, the differences are seen as insignificant.

### Niantic River

A relatively constant level of boating activity in the Niantic River in 2011 when compared to that in 2010 (15,098 boats counted in 2011 vs. 15,998 boats counted in 2010) demonstrates the consistency of activity even in the face of factors that reduced monitored boating within the two other waterways. During the 2010 boating season, boating activity in the Connecticut River was higher than that in the Niantic River by a factor of approximately 5.5 boats to 4 boats, respectively (22,779 boats in 2010 vs. 15,098 boats in 2011). Again, during the 2011 boating season, there were no reports of any significant boating disruption due to the reconstruction of the Niantic movable bridge. Although the percentages of boats delayed by the closed movable bridge in the Niantic was slightly higher or the same for most

days of the week when comparing 2010 and 2011, the number of boats delayed remains fairly stable at about 1 in every ten boats.

In an opposite trend from the 2010 boating season, the overall percentage of boats delayed by bridge closings in the Niantic River during the 2011 boating season was *slightly higher* than those delayed at the Connecticut River movable bridge. During the 2011 boating season, the percentage of delayed boats within the Niantic River ranged between 8% and 14% while those delayed in the Connecticut River ranged between 5% and 12%. The average percentage of delays in the Niantic was just under 1 in 10 boats. Note that this comparison doesn't include Shaws Cove due to differing conditions, both in total number of boats and bridge clearance limitations there when compared to the Niantic and Connecticut Rivers.



Delay as a Function of Three Periods of the Day

In the Niantic River a higher percentage of boats were monitored as being delayed by bridge closings during the 11am to 1pm period than during the 7am to 9am and 4pm to 6pm time periods. The relationship of greater delays during the mid portion of the day wasn't seen in the 2010 statistics when the greatest percentages were delayed during the 4p to 6p evening period. The greater number of delays during the mid part of the day would seem to be consistent with the greater number of boats in the waterway at that time of the day. Only counts of delayed boats on Mondays and Wednesdays showed similar percentages between the midday and evening periods. The morning period was always monitored as having lower numbers of boats and a corresponding lower percentage of delays.

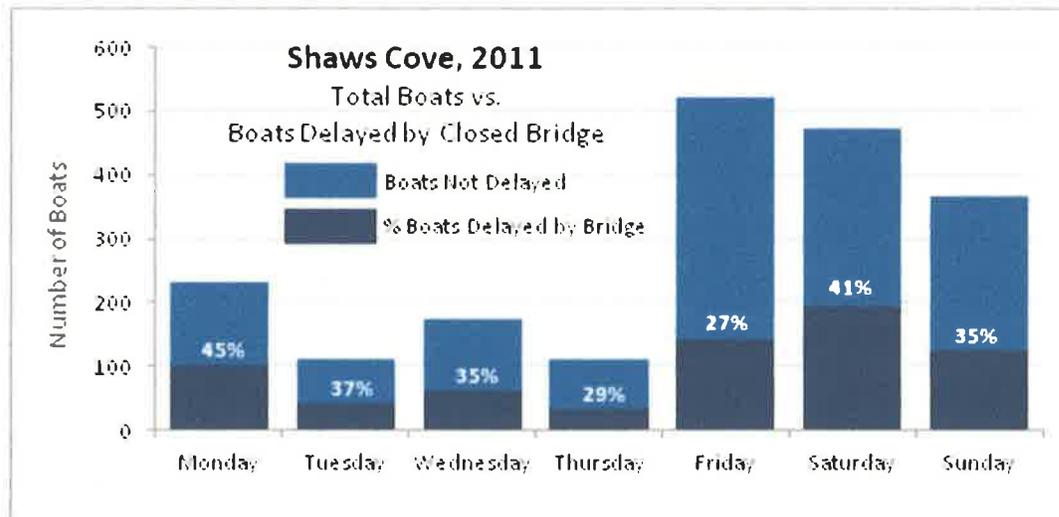
Number/Percentage of Boats Delayed by Closing of the Niantic River Bridge Weekdays						
Three Key Time Periods, Memorial Day to Labor Day, 2011						
	M	Tu	W	Th	F	Total
<b>7a to 9a</b>	3 (4%)	4 (5%)	7 (12%)	2 (4%)	9 (8%)	<b>25</b> <b>(6.5%)</b>
<b>11a to 1p</b>	40 (51%)	53 (62%)	26 (46%)	31 (57%)	64 (58%)	<b>214</b> <b>(55.5%)</b>
<b>4p to 6p</b>	36 (45%)	28 (23%)	24 (42%)	21 (39%)	37 (34%)	<b>146</b> <b>(38%)</b>
<b>Total</b>	<b>79</b> <b>(100%)</b>	<b>85</b> <b>(100%)</b>	<b>57</b> <b>(100%)</b>	<b>54</b> <b>(100%)</b>	<b>110</b> <b>(100%)</b>	<b>385</b> <b>(100%)</b>

Number/Percentage of Boats Delayed by Closing of the Niantic River Bridge <i>All Days of Week</i> Three Key Time Periods, Memorial Day to Labor Day, 2011								
	M	Tu	W	Th	F	Sa	Su	Total
<b>7a to 9a</b>	3 (4%)	4 (5%)	7 (12%)	2 (4%)	9 (8%)	30 (14%)	13 (11.5%)	<b>68</b> <b>(10%)</b>
<b>11a to 1p</b>	40 (51%)	53 (62%)	26 (46%)	31 (57%)	64 (58%)	120 (58%)	44 (39%)	<b>378</b> <b>(53%)</b>
<b>4p to 6p</b>	36 (45%)	28 (23%)	24 (42%)	21 (39%)	37 (34%)	58 (28%)	56 (49.5%)	<b>260</b> <b>(37%)</b>
<b>Total</b>	<b>79</b> <b>(100%)</b>	<b>85</b> <b>(100%)</b>	<b>57</b> <b>(100%)</b>	<b>54</b> <b>(100%)</b>	<b>110</b> <b>(100%)</b>	<b>208</b> <b>(100%)</b>	<b>113</b> <b>(100%)</b>	<b>706</b> <b>(100%)</b>

The table below shows the distribution when Saturdays and Sundays are considered in addition to the weekdays. The seven day distribution shows a slightly higher percentage of delays during the morning period and a slightly lower percentage of delays during the midday period. The percentage of boats waiting during the evening period remains relatively constant around 37%.

### Shaws Cove

Unlike the higher numbers of boats in the Connecticut and Niantic Rivers, Shaws Cove is limited in that it is a small protected cove off the Thames River with a limited number of boats. Where the other two waterways have numerous marinas, public boat launches and private residential docks, Shaws Cove is limited to three boating facilities: Crocker's Boatyard, T. A. Scott (aka Captain Scott's Marina), and Hellier's Yacht Sales. The total number of slips available in the cove remains at 276 with an additional 12 mooring spaces being provided by Hellier's. During the 2010 boating season, 237 slips and all 12 moorings were occupied, resulting in a boat population of 249 boats. The cove was at capacity during the 2011 boating season as well, give or take a few slips. Further, with a 3 foot clearance at Mean High Water and a 6 foot clearance at Mean Low Water, all but the smallest of boats cannot move in and out of the cove without the opening of the Shaws Cove movable bridge. To add additional challenges, that stretch of rail also accommodates more local freight traffic than other areas of the study area, resulting in longer average bridge closings than at the Niantic and Connecticut Rivers.



As shown on the two-color graph above, significantly higher percentages of boats were delayed by bridge closures in Shaws Cove when compared to those experienced in the Connecticut and Niantic Rivers (5 - 12% in Connecticut and 8 - 14% in Niantic vs. 27 - 45% in Shaws Cove). In fact, the percentage of boat delays in Shaws Cove approaches 5 to 10 times that in the other two waterways. This is due to a combination of longer bridge closure durations and the low clearance of the Shaws Cove movable bridge. A significant difference between Shaws Cove and the other two waterways, however, is that the limited distance between the docks and the movable bridge allows many boaters to remain in their slips as they wait for bridge openings. Since monitors only counted boats that exited slips and were waiting within the cove basin as those delayed by the closed bridge, the number of boaters actually waiting for the closed bridge to open may have been those waiting in the cove as well as some additional boaters who were still in their slips.

Delay as a Function of Three Periods of the Day

Review of the table of data for boats delayed by bridge closings at Shaws Cove for weekdays only (below) shows that a greater percentage of boats were delayed during the evening time period than during the morning and midday periods with the exception of Thursday. This pattern of delay was seen during the 2010 boating season as well.

<b>Number/Percentage of Boats Delayed by Closing of Shaws Cove Bridge <i>Weekdays</i></b>						
<b>Three Key Time Periods, Memorial Day to Labor Day, 2011</b>						
	<b>M</b>	<b>Tu</b>	<b>W</b>	<b>Th</b>	<b>F</b>	<b>Total</b>
<b>7a to 9a</b>	2 (5%)	4 (27%)	5 (20%)	1 (6%)	2 (5%)	<b>14</b> <b>(10%)</b>
<b>11a to 1p</b>	17 (43%)	2 (13%)	5 (20%)	11 (65%)	9 (24%)	<b>44</b> <b>(31%)</b>
<b>4p to 6p</b>	21 (52%)	9 (60%)	15 (60%)	5 (29%)	27 (71%)	<b>82</b> <b>(59%)</b>
<b>Total</b>	<b>40</b> <b>(100%)</b>	<b>15</b> <b>(100%)</b>	<b>25</b> <b>(100%)</b>	<b>17</b> <b>(100%)</b>	<b>38</b> <b>(100%)</b>	<b>140</b> <b>(100%)</b>

<b>Number/Percentage of Boats Delayed by Closing of Shaws Cove Bridge <i>All Days of Week</i></b>								
<b>Three Key Time Periods, Memorial Day to Labor Day, 2011</b>								
	<b>M</b>	<b>Tu</b>	<b>W</b>	<b>Th</b>	<b>F</b>	<b>Sa</b>	<b>Su</b>	<b>Total</b>
<b>7a to 9a</b>	2 (5%)	4 (27%)	5 (20%)	1 (6%)	2 (5%)	7 (6%)	11 (15%)	<b>32</b> <b>(10%)</b>
<b>11a to 1p</b>	17 (43%)	2 (13%)	5 (20%)	11 (65%)	9 (24%)	47 (41%)	24 (33%)	<b>115</b> <b>(36%)</b>
<b>4p to 6p</b>	21 (52%)	9 (60%)	15 (60%)	5 (29%)	27 (71%)	60 (53%)	37 (52%)	<b>174</b> <b>(54%)</b>
<b>Total</b>	<b>40</b> <b>(100%)</b>	<b>15</b> <b>(100%)</b>	<b>25</b> <b>(100%)</b>	<b>17</b> <b>(100%)</b>	<b>38</b> <b>(100%)</b>	<b>114</b> <b>(100%)</b>	<b>72</b> <b>(100%)</b>	<b>321</b> <b>(100%)</b>

Review of the table of data for weekdays *and* weekends (above) suggests that the same pattern of greater late-day delays than during morning or midday periods continued through to the weekend as well. The table also suggests that an overall higher percentage of boats in Shaws Cove experience bridge closure delays, this due to the greater boating activity found on weekends. For all seven days of the week, evening delays totaled just over 50% of all monitored delays at Shaws Cove with the morning delays monitored at 10%. Monitoring of delays for the midday period showed a percentage of 36%.

<b>Comparison of Number of Boats Delayed per Hour Memorial Day to Labor Day, 2011</b>				
	<b>Connecticut River</b>	<b>Niantic River</b>	<b>Shaws Cove</b>	<b>Totals</b>
<b>7a to 8a</b>	27	24	14	65
<b>8a to 9a</b>	69	36	17	122
<b>9a to 10a</b>	87	114	41	242
<b>10a to 11a</b>	136	109	56	301
<b>11a to Noon</b>	162	186	41	389
<b>Noon to 1p</b>	142	159	57	358
<b>1p to 2p</b>	136	86	76	298
<b>2p to 3p</b>	96	116	67	279
<b>3p to 4p</b>	132	96	58	286
<b>4p to 5p</b>	82	141	98	321
<b>5p to 6p</b>	74	130	57	261
<b>6p to 7p</b>	36	58	43	137
<b>7p to 8p</b>	18	25	18	61
<b>8p to 9p</b>	10	11	8	29

Review of the table of data for the number of boat delays at differing hours of the day (above) generally shows a pattern of increased number of delays near the noon hour and then again at around the 5p hour. In the Connecticut River, the afternoon peak occurs during the 4p hour.

**Marinas, Boatyards, Moorings and Private Residential Docks: Upstream Boat Potential**

The relationship between boats monitored in the Connecticut and Niantic Rivers and Shaws Cove continues to be of interest when boating *potential* is considered. Although the number of slips and estimates regarding the occupancy rates was determined to be relatively accurate for the purposes of this report, there continues to be an unknown with respect to the daily launching of boats from the numerous public boat ramps upriver of the movable bridges located in both the Connecticut and Niantic Rivers. In all three waterways, a select number of owners/operators of the various boat docking facilities, the local harbormasters and various members of local Harbor Management Commissions were contacted in order to confirm stability in the number of boaters occupying slips and moorings. For private residential docks, recent aerial photographs were again inspected to confirm that numbers remained fairly constant between the 2010 and 2011 boating seasons. The conclusion is that the number of slips and moorings occupied during the 2011 boating season *is* consistent with the number of

slips and moorings occupied during the 2010 boating season. Although several new private residential docks have been constructed in the Connecticut and Niantic Rivers, the small number of new structures is considered insignificant.

### Connecticut River

The following information for 2011 provides updates for the information presented for 2010. As in 2010, the information was gathered through the use of aerial photographs for the marinas, yacht clubs and boat yards in the area located between the Connecticut River movable bridge and just north of the Goodspeed Bridge between Haddam and East Haddam, a distance of approximately 12 miles. In summary, the information shows that occupancies went up slightly in some cases and down in others. The resulting total percentages were essentially unchanged.

<b>Slips and Moorings within Connecticut River, Haddam and East Haddam South to Long Island Sound, 2011</b>								
	<b>Total Slips (a)</b>	<b>Slips Occupied (b)</b>	<b>Total Moorings (c)</b>	<b>Moorings Occupied (d)</b>	<b>Private Docks (e)</b>	<b>Private Docks Occupied (f)</b>	<b>Estimated Total Potential (a + c + e)</b>	<b>Estimated Occupancy (b + d + f)</b>
<b>Chester</b>	780	673 (86%)	12	12 (100%)	10	9 (90%)	802	694 (87%)
<b>Deep River</b>	309	283 (92%)	50	50 (100%)	19	17 (89%)	378	350 (93%)
<b>East Haddam</b>	0	0	0	0	9	8 (89%)	9	8 (89%)
<b>Essex</b>	385	302 (78%)	214	214 (100%)	53	48 (91%)	652	564 (87%)
<b>Haddam</b>	156	142 (91%)	0	0	25	23 (92%)	181	165 (91%)
<b>Lyme</b>	65	65 (100%)	140	136 (97%)	30	27 (90%)	235	228 (97%)
<b>Old Lyme</b>	105	96 (91%)	108	100 (93%)	52	47 (90%)	265	243 (92%)
<b>Old Saybrook</b>	1,035	955 (92%)	239	239 (100%)	42	38 (90%)	1,316	1,232 (94%)
<b>Estimated Totals</b>	<b>2,835</b>	<b>2,516 (89%)</b>	<b>763</b>	<b>751 (98%)</b>	<b>240</b>	<b>217 (90%)</b>	<b>3,838</b>	<b>3,484 (91%)</b>

Estimated Total Potential is an estimate of the total number of slips, moorings and private residential docks available while Occupancy Estimate represents an approximation of the number of boats in the Connecticut River as seen on aerial photographs and as confirmed with marina owners and operators. In the absence of more detailed information, an approximation of the number of boats moored at private residential docks is used based upon a 90% rate of occupancy, slightly less than the occupancy rate seen for local marinas. This approximation is considered reasonable in that some docks have

multiple boats while others are swimming docks where property owners may not have boats, at least of any significant size.

Within the Connecticut River, there are a total of 32 boating facilities that provide slips for recreational and commercial boating. Within those 32 facilities, there are approximately 2,835 slips which hosted approximately 2,520 boats during the 2011 season, an occupancy rate of approximately 89%. Despite what most considered a somewhat depressed economy with accompanying higher fuel prices, the marina owners and operators interviewed for this 2011 investigation reported that the boating season was successful for the most part. Monitoring of a lower number of boats in 2011 when compared to the number monitored in 2010 was mostly the result of a drop in boating within the Connecticut River. This drop in boating activity was possibly due to a combination of factors including somewhat poorer weather, higher fuel prices and, likely most significant, a period where boating was all but halted due to water quality impacts caused by Tropical Storm Irene. The water quality impacts, which included the floating of a significant amount of storm debris and mud down river from as far north as Vermont, created a situation where boats removed from the river in preparation for the storm weren't returned to the water. This period extended from August 28<sup>th</sup> through the typically busy Labor Day weekend which finished on Monday, September 5, 2011. On Labor Day weekend along during the 2010 boating season, an additional 1,300 boats passed through the Connecticut River movable bridge. That number, however, represents only a third of the decrease in the Connecticut River between 2010 and 2011.

Within the area in question, there are approximately 760 moorings in place, both private and public. Of those 760 moorings, approximately 750 were occupied for an occupancy rate of approximately 98%. In addition to the number of slips available in the lower Connecticut River, there are approximately 240 private residential docks that are, for the most part, at full capacity. For the purposes of this planning study, an occupancy rate similar to that for marinas was used to estimate the occupancy rate for boats at private residential docks. Old Saybrook (1,232), Chester (694) and Essex (564), in descending order, had the greatest number of boats within the investigation area.

Of the approximately 3,500 boats present, the number of sailboats was estimated to be approximately 10% of the total, which is consistent with the number of sailboats monitored in the Connecticut River at the movable railroad bridge. This percentage is consistent with the percentage monitored in 2010 as well. It is noted that what is *not* included in this estimate of boat capacity is the number of boats that are brought to the water by day and launched at the numerous State and Town boat launches in the lower river. Among others, a major public launching site is in Old Saybrook immediately south of the I-95 Baldwin Bridge, a location just upriver from the Connecticut River movable railroad bridge. In the Niantic River, estimates have indicated that an additional 200 boats can be added to the waterway each weekend.

### Niantic River

The following estimates are 2011 updates for the 2010 information gathered through the use of aerial photographs for the marinas, yacht clubs and boat yards in the area located between the Niantic River movable bridge and Route 156 to the north. As was the case in the Connecticut

River, occupancies went up slightly in some cases and down in others. The changes were not significant enough to alter the total percentages.

<b>Slips and Moorings within East Lyme and Waterford on the Niantic River, 2011</b>								
	<b>Total Slips (a)</b>	<b>Slips Occupied (b)</b>	<b>Total Moorings (c)</b>	<b>Moorings Occupied (d)</b>	<b>Private Docks (e)</b>	<b>Private Docks Occupied (f)</b>	<b>Estimated Total Potential (a + c + e)</b>	<b>Occupancy Estimate (b + d + f)</b>
<b>East Lyme</b>	660	630 (95%)	75	56 (74%)	135	121 (90%)	<b>870</b>	<b>807 (93%)</b>
<b>Waterford</b>	115	110 (96%)	57	52 (91%)	76	69 (91%)	<b>248</b>	<b>231 (93%)</b>
<b>Total</b>	<b>775</b>	<b>740 (95%)</b>	<b>132</b>	<b>108 (82%)</b>	<b>211</b>	<b>190 (90%)</b>	<b>1118</b>	<b>1,038 (93%)</b>

In the Niantic River, the investigation extended from the Niantic River movable bridge north to the Route 1 crossings over the western branch of the river, a distance of approximately 3 miles. Within that area, there are a total of 12 boating facilities ranging from a several full-service marinas to small boat clubs. Within those 12 facilities, there are approximately 775 slips which hosted approximately 740 boats during the 2011 season, an occupancy rate of approximately 95%. As was the case with the marina operators in the Connecticut River, marina owners and operators interviewed for the 2011 investigation reported that the 2011 boating season was successful, despite somewhat less favorable weather conditions than during the monitored period in 2010 and despite higher fuel prices. Although more of an estimate than in the Connecticut River, there are approximately 132 moorings in place in the Niantic River, both private and public. Of those 132 moorings, approximately 108 were occupied for an occupancy rate of approximately 82%. In addition to the number of slips available in the Niantic River, a review of aerial photographs indicates that there are approximately 211 private residential docks that are estimated to be at 90% occupancy, or 190 boats. East Lyme is again host to approximately 78% of the boats in the Niantic River (807) while Waterford is host to the remaining 22% (231). The larger boating facilities along the East Lyme shore are responsible for the greater number of boats in that municipality.

#### Shaws Cove

The following 2011 counts are based upon select interviews with operators and review of aerial photographs for the marinas and boating facilities inside of the Shaws Cove movable bridge. Mooring field totals were determined through interviews and confirmed using aerial photographs.

Shaws Cove, the most restricted of the three waterways, includes three boating facilities plus a boat launch. Those boating facilities provide slips for recreational and commercial boats. Crocker's Boat Yard, the largest of the three facilities, includes 205 slips. T. A. Scott, also known as Captain Scott's Marina, includes 55 slips. Finally, Hellier's Yacht Sales includes 19 slips. The total number of slips available is 274. With 12 moorings in the cove, the total potential availability is 286 slips and moorings. With 238 of the 274 slips occupied and all 12 moorings occupied, the occupancy during the 2010 season was estimated to be 250 boats, for an 87% occupancy rate. Unlike either the Connecticut or Niantic Rivers, Shaws Cove has no significant public launching facilities of which to speak.

Slips and Moorings within Shaws Cove, 2011								
	Total Slips (a)	Slips Occupied (b)	Total Moorings (c)	Moorings Occupied (d)	Private Docks (e)	Private Docks Occupied (f)	Estimated Total Potential (a + c + e)	Occupancy Estimate (b + d + f)
Shaws Cove New London	274	238 (86%)	12	12 (100%)	0	NA	286	250 (87%)

Perhaps due to the location of Shaws Cove with respect to more open waters of Long Island, Fisher's Island and Block Island Sounds, the number of sailboats within Shaws Cove is higher as a percentage of the total with approximately 3 of 10 boats being powered by sail. Due to the low clearance at Shaws Cove (3 feet MHW, 6 feet MLW), the ratio of power to sail boats is of less interest than in the other two waterways because most boats, other than the smallest of boats, have to wait for bridge openings to pass in and out of the cove.

### Comparisons

The number and types of boats were counted every other week between Memorial Day and Labor Day in 2010 in order to establish what was agreed upon as a representative sampling of boating patterns in the Connecticut and Niantic Rivers and Shaws Cove during that period.

### Total Boats by River

The Connecticut River was monitored as having **15,075** boats passing beneath the movable railroad bridge during 2011, or **49.6%** of the total monitored in the three waterways. Comparing the total number of boats monitored for the 2010 and 2011 boating seasons suggests that boating activity in the Connecticut River declined by almost 30% in 2011. The Niantic River was monitored as having a total of **15,098** boats pass beneath that bridge, or **49.7%** of the total. Although the absolute number of monitored boats was almost identical, the percentage of the overall total was greater due to less activity in both the Connecticut River and Shaws Cove. Shaws Cove was monitored as having a total of **1,988** boats pass beneath the movable bridge, or **6%** of the total. Although the overall percentage of boats in Shaws Cove was similar to 2010 (6% in 2011 vs. 7% in 2010), the absolute number was down almost 30% (1,988 in 2011 vs. 2,853 in 2010). From the perspective of days of the week, a total of **64%** of the marine traffic passed beneath the three bridges on Fridays, Saturdays and Sundays, **14%** passed on Mondays, and a total of **22%** passed beneath the bridges on Tuesdays, Wednesdays and Thursdays. For the 2011

boating season, these percentages suggests that slightly less boating activity occurred on weekends and slightly more activity occurred on weekdays.

### Boat Types

Consistent with the percentages monitored during the 2010 boating season, of every ten boats counted in the three waterways counted in 2011, **90%** were recreational powerboats, **7%** were recreational sailboats, and **3%** were “other” types of boats (primarily commercial). Approximately **90%** of boats in the Connecticut and Niantic Rivers and **80%** of boats in Shaws Cove were identified as powerboats; approximately **10%** of the boats in the Connecticut River were sailboats while only **2%** of the boats in the Niantic River were sail-powered. Shaws Cove had upwards of **22%** of its boats identified as sailboats. Of the three waterways, the Niantic River included the highest percentage of boats identified as “other” with a total of **7%**.

### Number of Boats per Hour

Perhaps the most informative of statistics continue to be those describing how many boats pass beneath the three movable bridges during given hours of the day. The collected data shows that during three different two hour periods in the morning, midday and evening, the fewest number of boats were monitored between 7am and 9am. The next fewest number were monitored between the hours of 4pm and 6pm with the largest number of boats monitored between the hours of 11am and 1pm.

### Bridge Closings

Using the U. S. Coast Guard regulatory requirement for bridge closings of no more than 20 minutes in duration, the Niantic River movable railroad bridge – despite being under construction – was able to limit closing durations to 20 minutes or less **43%** of the closings monitored during the 2011 season, significantly down from the 77% monitored during the 2010 boating season. The Connecticut River movable railroad bridge also had closings of 20 minutes or less **43%** of the monitored closings, again significantly less than the **65%** monitored during the 2010 season. The Shaws Cove movable bridge, with greater freight train activity, had closings less than 20 minutes only **33%** of the monitored closings, down from **57%** for the 2010 boating season. For durations of 30 minutes or less, the Niantic River bridge closing durations met that criteria 90% of the time, only down slightly from the 92% frequency reported in 2010. The Connecticut River bridge met the 30 minute closure duration criteria **82%** of the time, almost equal to the **84%** frequency in 2010. The Shaws Cove movable bridge was closed 30 minutes or less for **67%** of the monitored closings, down only 2% from the 2010 season. For closings of 40 minutes or less, all three bridges met that criterion over **90%** of the time with the three bridges have closure durations of between 90% and 95%.

### Boats Delayed for Bridge Closings

Given that more boats were monitored as being in the waterways during the midday portion of the day, it seems logical that more boats will be delayed by bridge closings that occur during those hours. As was the case in 2010, the Connecticut and Niantic Rivers were again fairly comparable in terms of the percentage of boats that were delayed by closed bridges. Past interviews with many of the marina owners and operators suggest that delays to boaters caused by bridge closings are sometimes inconvenient but considered to be part of the boating experience.

In the Connecticut River, delays caused by bridge closures occurred for between 5% and 12% of the boaters with higher percentage of delays occurring on weekends when a greater number of boats were on the river. In the Niantic River, a slightly higher range of percentages – 8% and 14% - were delayed by bridge closings. Unlike in the Connecticut River, the percentage of boats delayed was slightly lower on the weekends than during the weekdays. As was the case in 2010, fewer boats were delayed by bridge closings at the Niantic River than at the other two waterways. It is thought that, with generally shallower water depths, the Niantic River is likely occupied by generally smaller boats that can pass beneath the Niantic River movable bridge even when closed.

Closures of the Shaws Cove movable bridge, with its differing operating conditions and limited bridge clearances, delayed between 27% and 45% of all monitored boats. The frequency of delays at Shaws Cove seemed more random during the 2011 boating season with higher delay frequencies occurring both during the week and on weekends.

**Comparisons of Select Boating Activity Data, 2010 and 2011**

The following comparisons illustrate the most significant differences in statistics between the 2010 and 2011 boating seasons. Note that minor corrections were required for the 2011 data for the Niantic River and Shaws Cove due to slight differences in days counted between 2010 and 2011. The correction was included in the comparisons as a way of “equalizing” the information to the greatest extent possible.

**Overall Boating Activity**

As described elsewhere, the most startling change in boating activity showed up in the total number of boats monitored in the Connecticut River and Shaws Cove. Where the Niantic River boating activity, as measured by monitored activity, remained constant, monitored boating activity in the Connecticut River and Shaws Cove dropped by 40% and 25% respectively (see explanation below). Overall, total boating activity monitored decreased by between 20 and 25%. The number of boats monitored is shown on the two following tables:

<b>2010</b>	<b>TOTAL BOAT TRAFFIC by RIVER</b>			<b>2010</b>
	<b>Connecticut River, Niantic River, Shaws Cove Movable Bridges</b>			
	<b>Memorial Day to Labor Day, 2010</b>			
	<b>Connecticut River</b>	<b>Niantic River</b>	<b>Shaws Cove</b>	<b>Total</b>
<b>MONDAY</b>	3825	2128	398	<b>6351 (15%)</b>
<b>TUESDAY</b>	1122	1138	191	<b>2451 (6%)</b>
<b>WEDNESDAY</b>	1104	997	196	<b>2297 (5%)</b>
<b>THURSDAY</b>	1110	989	236	<b>2335 (6%)</b>
<b>FRIDAY</b>	3453	2687	510	<b>6650 (16%)</b>
<b>SATURDAY</b>	5648	4377	633	<b>10,658 (26%)</b>
<b>SUNDAY</b>	6517	3667	689	<b>10,873 (26%)</b>
<b>Total</b>	<b>22,779 (55%)</b>	<b>15,983 (38%)</b>	<b>2853 (7%)</b>	<b>41,615</b>

<b>2011</b>	<b>TOTAL BOAT TRAFFIC by RIVER</b>			<b>2011</b>
	Connecticut River, Niantic River, Shaws Cove Movable Bridges Memorial Day to Labor Day, 2011			
	<b>Connecticut River</b>	<b>Niantic River</b>	<b>Shaws Cove</b>	<b>Total</b>
<b>MONDAY</b>	2553 <b>(-33%)</b>	1765 <b>(-17%)</b>	230 <b>(-42%)</b>	<b>4549 (-28%)</b>
<b>TUESDAY</b>	718 <b>(-36%)</b>	1438 <b>(+21%)</b>	112 <b>(-41%)</b>	<b>2268 (-7%)</b>
<b>WEDNESDAY</b>	847 <b>(-23%)</b>	1512 <b>(+34%)</b>	175 <b>(-12%)</b>	<b>2534 (+9%)</b>
<b>THURSDAY</b>	1057 <b>(-5%)</b>	1077 <b>(+8%)</b>	112 <b>(-53%)</b>	<b>2246 (-4%)</b>
<b>FRIDAY</b>	2161 <b>(-37%)</b>	2032 <b>(-24%)</b>	522 <b>(+2%)</b>	<b>4715 (-29%)</b>
<b>SATURDAY</b>	4145 <b>(-27%)</b>	3962 <b>(-9%)</b>	472 <b>(-25%)</b>	<b>8579 (-20%)</b>
<b>SUNDAY</b>	3594 <b>(-49%)</b>	3311 <b>(-10%)</b>	365 <b>(-47%)</b>	<b>7270 (-33%)</b>
<b>Total</b>	<b>15,075 (-39%)</b>	<b>15,098 (-6%)</b>	<b>1988 (-30%)</b>	<b>32,162 (-23%)</b>

Allowing for challenges in the schedule of monitoring, both the 2011 Niantic River and Shaws Cove numbers could be approximately 5% lower than the similar period in 2010. Correcting for this discrepancy, Shaws Cove boating activity in 2011 may have decreased by approximately 25% from 1010 rather than 30%. In the Niantic River, accounting for a 5% decrease would mean that 2011 boating activity in the Niantic was essentially the same as in 2010. The almost 40% decrease in the Connecticut River does not require correction of any kind.

Comparison of Types of Boats, 2010 and 2011

Along with the overall number of boats monitored, it is interesting to show that, for the most part, the percentages of power boats to sail boats to “other” boats moving through the three waterway bridges remained fairly constant despite the lower number of boats monitored in the Connecticut River and Shaws Cove. The biggest percent change occurred in the distribution of sail boats to power boats in Shaws Cove. Overall, the percentage of three boat types in the three waterways remained remarkably constant.

<b>2010</b>	<b>Number of Powerboats, Sailboats and “Other” Boats</b>			<b>2010</b>
	Memorial Day through Labor Day, 2010			
	<b>Connecticut River</b>	<b>Niantic River</b>	<b>Shaws Cove</b>	<b>Total</b>
<b>Powerboats</b>	20,685 (91%)	14,638 (92%)	2,281(80%)	<b>37,604 (90%)</b>
<b>Sailboats</b>	1,971 (8%)	307 (2%)	525 (18%)	<b>2,803 (7%)</b>
<b>Other</b>	123 (1%)	1,038 (6%)	47 (2%)	<b>1,208 (3%)</b>
<b>Total</b>	<b>22,779</b>	<b>15,983</b>	<b>2,853</b>	<b>41,615</b>

<b>2011</b>		<b>Number of Powerboats, Sailboats and "Other" Boats</b>			<b>2011</b>	
Memorial Day through Labor Day, 2011						
	Connecticut River	Niantic River	Shaws Cove	Total		
<b>Powerboats</b>	13,491 (90%)	13,742 (91%)	1,354 (76%)	<b>28,587 (90%)</b>		
<b>Sailboats</b>	1,500 (9.5%)	311 (2%)	398 (22.5%)	<b>2,209 (7%)</b>		
<b>Other</b>	68 (0.5%)	1,037 (7%)	26 (1.5%)	<b>1,131 (3%)</b>		
<b>Total</b>	<b>15,059</b>	<b>15,090</b>	<b>1,778</b>	<b>31,927</b>		

Comparison of Boating and Weather Conditions

Based upon weather description by monitors, boats traveling during times described as "sunny" were lower by almost 25% in 2011 as compared to 2010 while boats traveling during times reported as "cloudy", "partly cloudy" and "hazy" were up by a little less than 25%. Boats traveling during times reported as "rainy" were approximately equal when comparing 2010 to 2011. Many more boats traveled during times that were reported as "foggy" than in 2010. Given past testimony from marina operators which suggests that weather has a great impact on boating, the poorer weather reported during the monitoring periods may had made some contribution to the 20 to 25% decrease in boating during the in 2011monitored boating season.

<b>2010</b>		<b>Boating Activity as a Function of Weather</b>					<b>2010</b>	
Connecticut River, Niantic River and Shaws Cove								
Memorial Day through Labor Day, 2010								
	Sunny	Cloudy Partly Cloudy	Rainy	Hazy	Foggy	Windy		
<b># of Boats</b>	26,457	7809	1178	285	83	17		
<b>% of Boats</b>	74%	22%	3%	< 1%	< 1%	< 1%		

<b>2011</b>		<b>Boating Activity as a Function of Weather</b>				<b>2011</b>	
Connecticut River, Niantic River and Shaws Cove							
Memorial Day through Labor Day, 2011							
	Sunny	Cloudy Partly Cloudy Hazy	Rainy	Foggy			
<b># of Boats</b>	16,300	14,150	932	545			
<b>% of Boats</b>	51%	44%	3%	2%			

Note that in 2011, the categories of “foggy” and “hazy” were combined while the category of “windy” was not recorded.

Comparison of “Tall” Boats vs. “Short” Boats

As described elsewhere, “tall” boats are those which would not be able to pass under a closed movable bridge while “short” boats are those that would be able to pass whether the bridge was open or closed. This information is the most subjective of all information in the study in that it required the monitors to make estimations of boat height from a distance and an angle which, for the most part, was not optimum for making such judgments. Taking these cautions into account, the information is still useful for comparison purposes.

<b>2010</b>	<b>Comparison of “Tall” Boats vs. “Short” Boats</b>			<b>2010</b>
	Memorial Day through Labor Day, 2010			
	“Tall”	“Short”	Total	% Tall
<b>Connecticut River</b> Clearance: 19ft, Mean High Water 22 ft, Mean Low Water	5144	17,371	22,515	23%
<b>Niantic River</b> Clearance (existing bridge): 11ft, Mean High Water; 14 ft, Mean Low Water	3908	12,391	16,299	24%
<b>Shaws Cove</b> Clearance: 3 ft, Mean High Water; 6 ft, Mean Low Water	2157	514	2671	81%

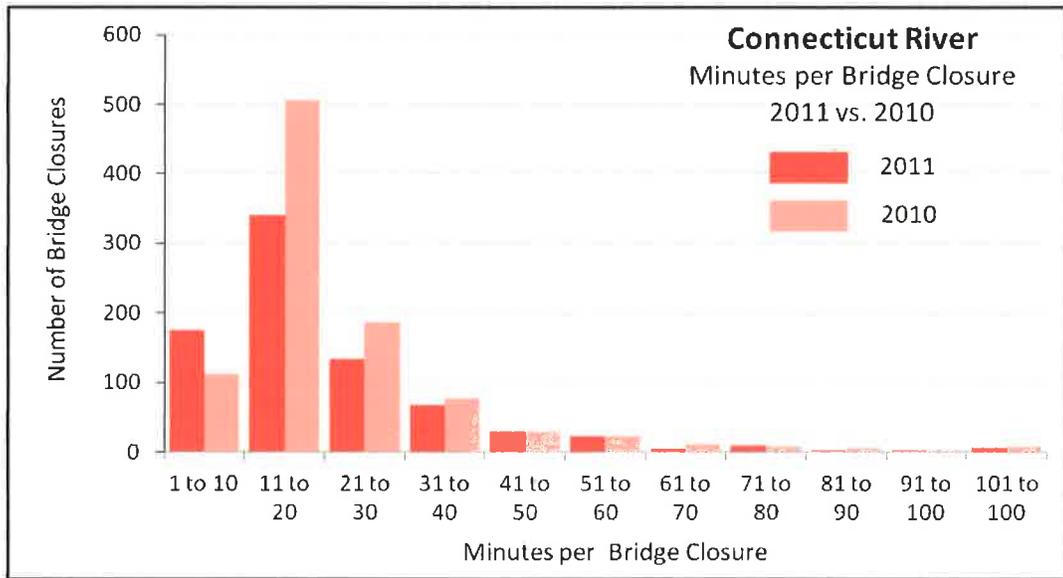
<b>2011</b>	<b>Comparison of “Tall” Boats vs. “Short” Boats</b>			<b>2011</b>
	Memorial Day through Labor Day, 2011			
	“Tall”	“Short”	Total	% Tall
<b>Connecticut River</b> Clearance: 19ft, Mean High Water 22 ft, Mean Low Water	2845	12,204	15059	20%
<b>Niantic River</b> Clearance (existing bridge): 11ft, Mean High Water; 14 ft, Mean Low Water	2979	12,111	15,090	20%
<b>Shaws Cove</b> Clearance: 3 ft, Mean High Water; 6 ft, Mean Low Water	1542	236	1778	87%

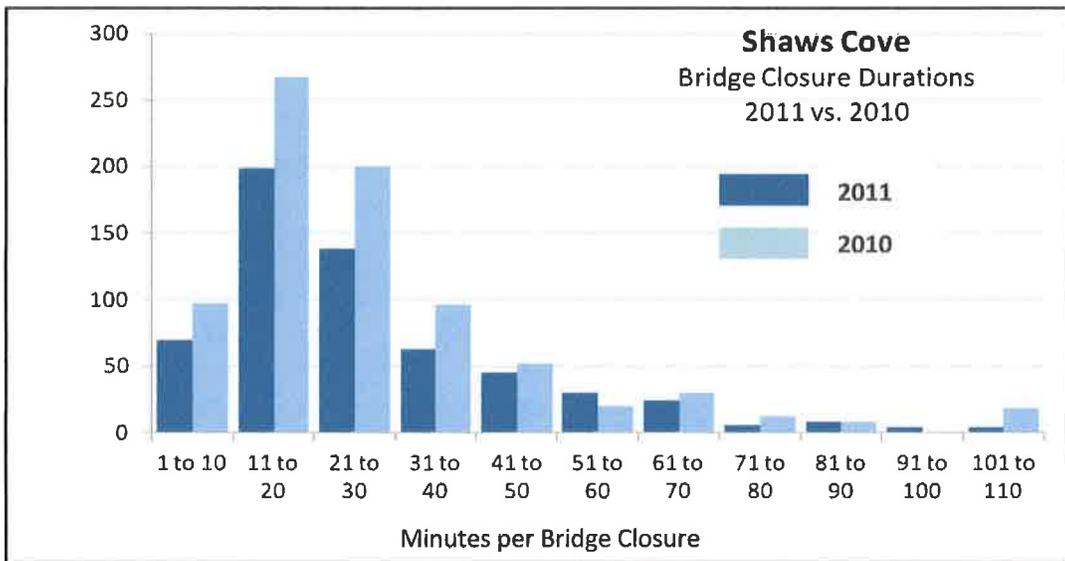
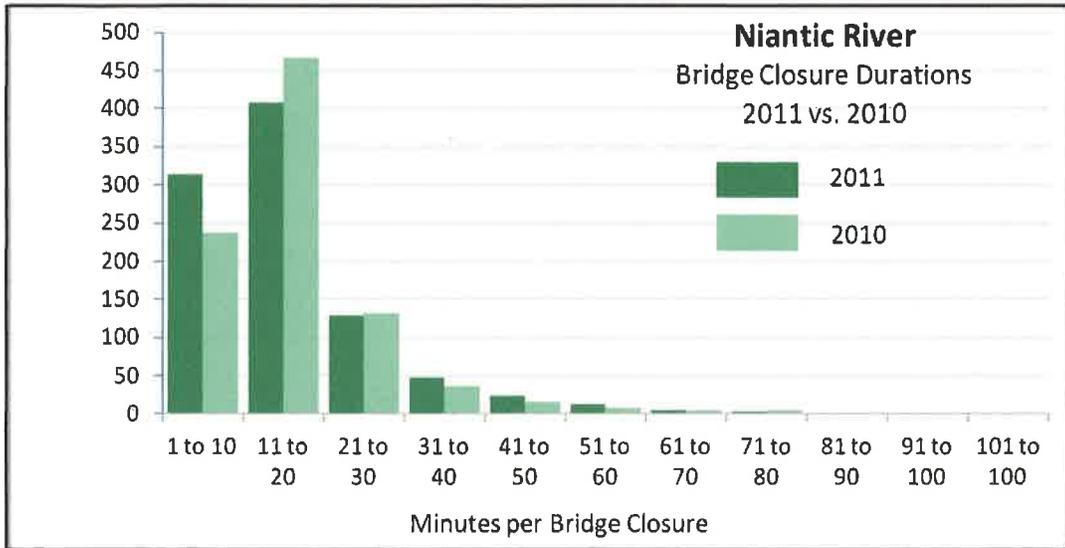
Although the overall number of boats counted decreased by between 20 to 25% from 2010 to 2011, the percentages of “tall” boats vs. “short” boats was fairly consistent.

Comparison of Bridge Closing Durations

The three colored graphs below were plotted to compare bridge closing durations between the 2010 and 2011 boating seasons. The most observable difference between the two years can be seen in the data for the Connecticut and Niantic River movable bridges. The monitored data shows that, for the time periods where monitoring occurred, bridge closings of durations between 10 to 30 minutes decreased while bridge closings between 1 and 10 minutes increased, demonstrating that bridge closures likely created less impact in terms of how long the bridge closing durations were. An increase in the shorter duration closing with a corresponding decrease in longer duration closings would seem to be an improvement in bridge operations, at least with respect to impacts on boating activity.

The exception to this pattern shows up in the monitored data at Shaws Cove where decreases in the duration of 10 to 30 minute closings was *not* accompanied by a corresponding increase in the 1 to 10 minutes closure duration.



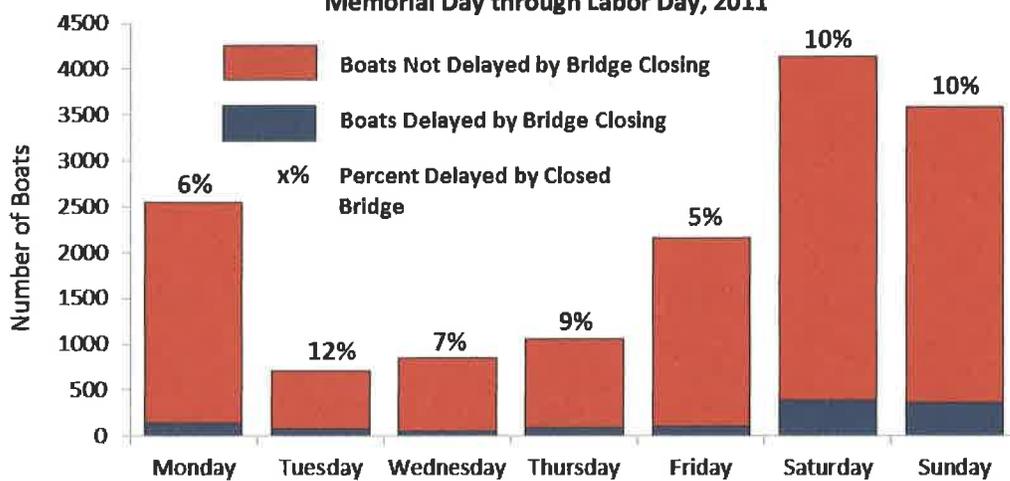


Comparison of Boat Delays Created by Bridge Closings, Connecticut River

The following two graphs, each taken from their respective reports in 2011 and 2010, allow for the comparison of what percentage of the overall monitored boats were delayed by bridge closings in the Connecticut River. Comparison suggests that more boats in the Connecticut River were delayed by bridge closings on weekends than were delayed during the week where percentages decreased.

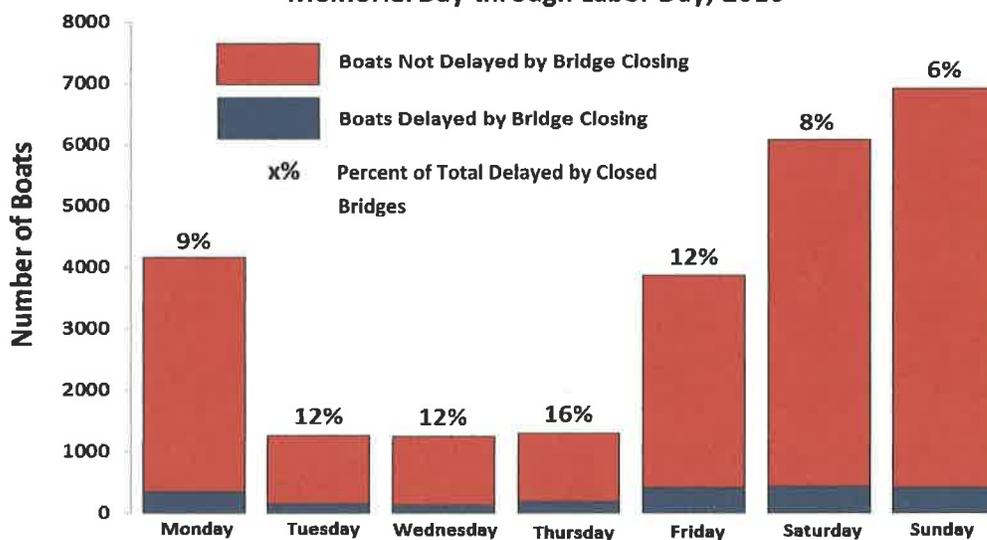
## Connecticut River

**% of Boats Delayed by Bridge Closings vs. Total Boats Passing  
Memorial Day through Labor Day, 2011**



## Connecticut River

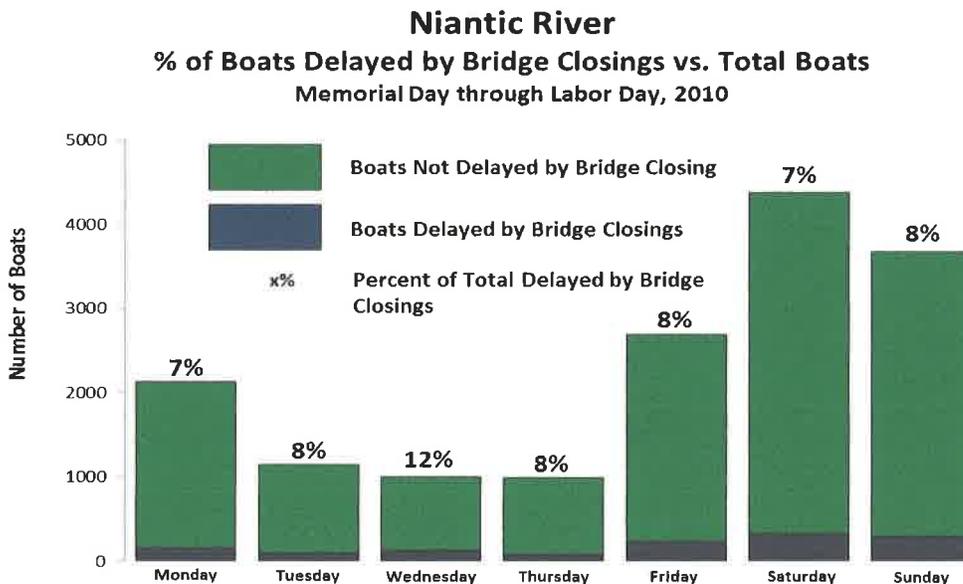
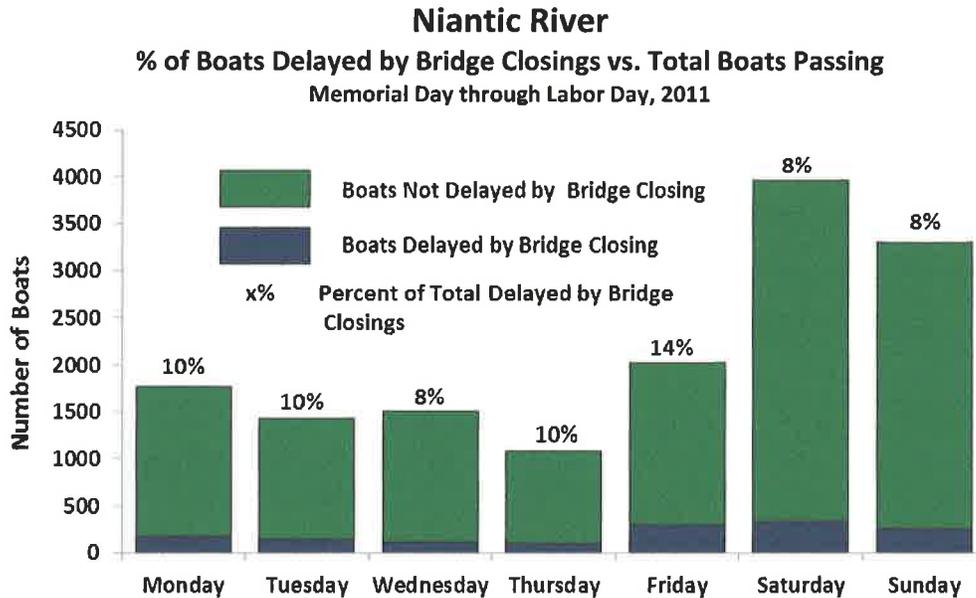
**% of Boats Delayed by Bridge Closings vs. Total Boats Passing  
Memorial Day through Labor Day, 2010**



### Comparison of Boat Delays Created by Bridge Closings, Niantic River

The following two graphs, each taken from their respective reports in 2011 and 2010 allow for the comparison of what percentage of the overall monitored boats were delayed by bridge closings in the Niantic River. Comparison suggests that a general trend of a slightly higher percentage of boats were delayed by bridge closings in the Niantic River *during weekdays* in 2011 than occurred during the 2010

boating season. The percentage of boats delayed when comparing 2010 and 2011 weekends remained fairly constant at around 8% when the majority of boating occurs. Compared delays as a percentage of total boats increased most substantially on Fridays in 2011 whereas a decrease in percentage of delayed boats occurred on Wednesdays of 2011.

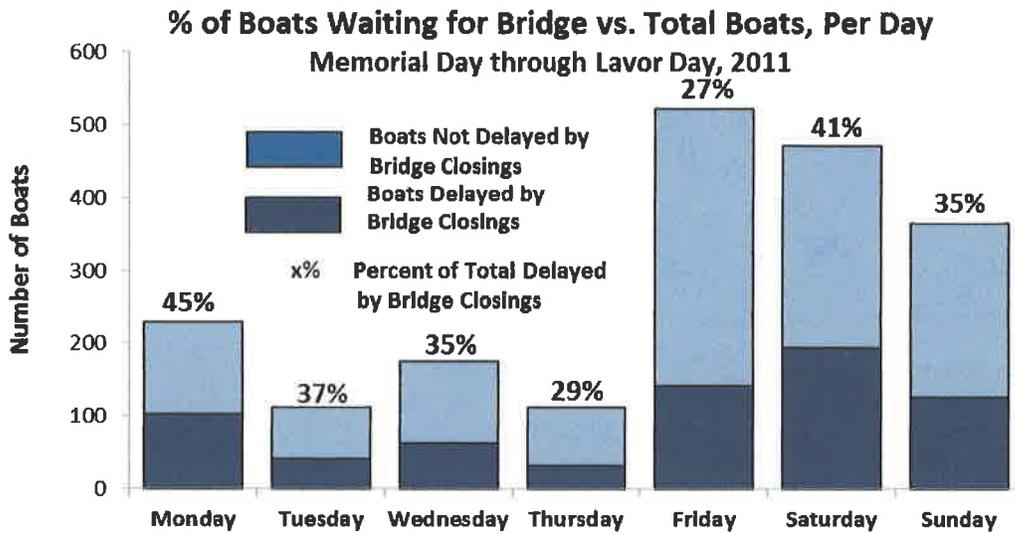


Comparison of Boat Delays Created by Bridge Closings, Shaws Cove

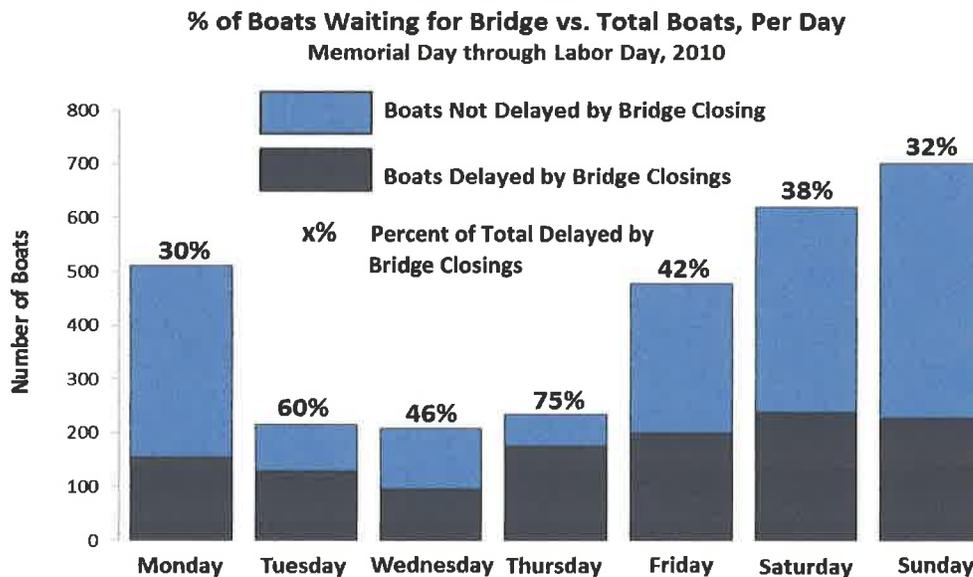
The following two graphs, each taken from their respective reports in 2011 and 2010 allow for the comparison of what percentage of the overall monitored boats were delayed by bridge closings in Shaws Cove. Comparison suggests that delays as a percentage of total boats decreased for the Tuesday through Friday period, increased on Mondays and was only slightly higher on Saturday and Sunday. In

that most of the boating occurs on Friday through Sunday, it would appear that the percentage of boats delayed during the most active boating days of the summer was fairly consistent with some improvement at the beginning of the weekend. It should be noted that the relatively small number of boats that went into the percentage calculations may render the delay percentages less meaningful than in the Connecticut and Niantic River calculations.

## Shaw's Cove



## Shaw's Cove



## Recommendations

Recommendations made following the monitoring of boats during the 2010 boating season are again proposed following monitoring during the 2011 boating season. With the exception of approximately 30% fewer boats monitored on the Connecticut River and Shaws Cove waterways during the 2011 season, monitored percentages were comparable between the two boating seasons.

The following recommendations are carried forward as recommendations in the 2011 report:

### Educational Brochures.

Although it is understood that information regarding the interrelationship of northeast corridor train operations, the three movable railroad bridges in question and marine traffic has been produced in the past, it is again recommended that a new informational brochure be designed and distributed to the numerous marinas, boat yards, yacht clubs, town halls and local libraries in order to better educate the public regarding the operation of the railroad bridges at the Connecticut River, Niantic River and Shaws Cove. Brochures would include simple explanations of operations of the bridges to inform the boating public and others of how it works. There would be an explanation of dispatching out of Boston's South Station and how the local bridge tenders perform their jobs. Also included would be explanations of why bridges may remain in a closed position for longer than desired, or why most often bridges cannot be opened because a boater wants to pass and how the approach of higher speed trains and even slight delays create situations where the finely-tuned bridge openings and closings are not always optimally timed. Explanations would also include that, although the U.S. Coast Guard rules and regulations require movable bridges to be closed for no more than 20 minutes at a time, northeast corridor operations and the numerous variables that impact the operations don't always allow for bridges to maintain that type of schedule. Like all Amtrak dispatchers, the men and women who handle the train operations between New Haven and New London are multi-taskers that face split second decisions involving several trains at a time traveling in opposite directions at sometimes greatly varying speeds.

### Educational Link on the DOT and CMTA Websites

There are several links for informative websites in prominent locations within the banners of the Connecticut Marine Trades Association website ([www.ctmarinetrades.org](http://www.ctmarinetrades.org)) and of the Connecticut DOT website ([www.ct.gov/dot](http://www.ct.gov/dot)). Both the CMTA and the Department should consider adding another educational link that would summarize how Connecticut's movable bridges operate during the summer months. The emphasis on the educational material would be to explain the interactions of Amtrak and train operations with why the movable bridges operate the way they do, including why bridges may be closed for slightly longer than some boaters may desire. A web-based explanation of the intricacies of the train operations and how they relate to bridge openings may go a long way toward a better understanding of the factors involved in a very complicated system. With a better understanding, perhaps the public – boaters in particular – will realize that the movable bridge operational system is a complicated choreography that works amazingly well and that can likely accommodate additional bridge closings for Shore Line East trains between Old Saybrook and New London without significant impact to recreational or commercial boaters.

### Conclusions

Review of the information gathered and analyzed between the Memorial Day and Labor Day weekends during 2010 and 2011 suggests that the closures of the three movable bridges between Old Saybrook and New London – the Connecticut River movable bridge, the Niantic River movable bridge, and the Shaws Cove movable bridge – presents minimal impact to the boating activity in those three waterways. Bridge closure times are such that between 70% and 92% of the bridge closings are limited to thirty minutes or less. Although boats are delayed by the bridge closings, information collected and analyzed for the two years suggests that the overall number of boats delayed is minimal as well. In the Connecticut and Niantic Rivers, approximately 1 in 8 to 10 boats is delayed by bridge closures. Comparison of closure information for 2010 and 2011 indicates that a slightly lower percentage of boats delayed in 2011 than in 2010, further minimizing impact to boating during the two years. The percentage of boats delayed in Shaws Cove, however, ranges between 30 % and 60% with most days averaging between 25% and 40% of boats delayed.

From: Niantic River <nianticriveracc@gmail.com>  
To: Ellen Fratus <emfratus@aol.com>  
Subject: Fwd: WELSCO Policy Statement <<Not-Sensitive>>  
Date: Tue, Sep 18, 2018 3:23 pm



FILED IN EAST LYME  
CONNECTICUT  
Sept 20, 2018 AT 2:55 AM PM  
*Brook Thomas*  
EAST LYME TOWN CLERK

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From: **Dinsmore, Stephen D** <[SDINSMOR@gdeb.com](mailto:SDINSMOR@gdeb.com)>  
Date: Fri, Sep 14, 2018 at 8:17 AM  
Subject: RE: WELSCO Policy Statement <<Not-Sensitive>>  
To: Niantic River <[nianticriveracc@gmail.com](mailto:nianticriveracc@gmail.com)>, [mount6@aol.com](mailto:mount6@aol.com) <[mount6@aol.com](mailto:mount6@aol.com)>, [rick.n.kanter@gmail.com](mailto:rick.n.kanter@gmail.com) <[rick.n.kanter@gmail.com](mailto:rick.n.kanter@gmail.com)>, [dfanders@atlanticbb.net](mailto:dfanders@atlanticbb.net) <[dfanders@atlanticbb.net](mailto:dfanders@atlanticbb.net)>, [jhitchery@gmail.com](mailto:jhitchery@gmail.com) <[jhitchery@gmail.com](mailto:jhitchery@gmail.com)>, [don@boatsinc.com](mailto:don@boatsinc.com) <[don@boatsinc.com](mailto:don@boatsinc.com)>, [gmmurin555@gmail.com](mailto:gmmurin555@gmail.com) <[gmmurin555@gmail.com](mailto:gmmurin555@gmail.com)>  
Cc: [mmickerson@eltownhall.com](mailto:mmickerson@eltownhall.com) <[mmickerson@eltownhall.com](mailto:mmickerson@eltownhall.com)>, [kgalbo@eltownhall.com](mailto:kgalbo@eltownhall.com) <[kgalbo@eltownhall.com](mailto:kgalbo@eltownhall.com)>, [bstevens@eltownhall.com](mailto:bstevens@eltownhall.com) <[bstevens@eltownhall.com](mailto:bstevens@eltownhall.com)>, [ptd33@aol.com](mailto:ptd33@aol.com) <[ptd33@aol.com](mailto:ptd33@aol.com)>, Dan Steward <[dsteward@waterfordct.org](mailto:dsteward@waterfordct.org)>

If you would like to have this or other items entered into the public record, please present them during public delegations during our regular meeting.

Steve Dinsmore

**From:** Niantic River <nianticriverac@gmail.com>

**To:** Ellen Fratus <emfratus@aol.com>

**Subject:** Fwd: WELSCO Policy Statement

**Date:** Fri, Sep 14, 2018 12:05 pm

**Attachments:** WELSCO Public Hearing Minutes.pdf (2327K), WELSCO policy vs ELHMP.pdf (88K), Traffic Study 2010 and 2011.pdf (1801K)

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----- Forwarded message -----

**From:** Niantic River <nianticriverac@gmail.com>

**Date:** Mon, Aug 27, 2018 at 7:43 PM

**Subject:** WELSCO Policy Statement

**To:** <sdinsmor@gdeb.com>, <mount6@aol.com>, <rick.n.kanter@gmail.com>, <dflanders@atlanticbb.net>, <jhitchery@gmail.com>, <don@boatsinc.com>, <gmurin555@gmail.com>

**Cc:** <mnickerson@eltownhall.com>, <kgalbo@eltownhall.com>, <bstevens@eltownhall.com>, <ptd33@aol.com>, Dan Steward <dsteward@waterfordct.org>

Dear Commissioners:

On behalf of the Niantic River Advocacy Coalition, I am writing to ask that you consider the following issues as you contemplate your decision on whether to support WELSCO's Aquaculture Policy Statement. I would like to start with the observation that, to date, when observing your commission, you have not addressed the seminal question "Does Type II aquaculture (which requires tens of thousands pieces of gear) belong in the Niantic River?" and instead focused on the verbiage and lack of management plans of a policy statement that is clearly inconsistent with your harbor management plan (HMP). The point here is that there seems to be a forgone conclusion that Type II is appropriate. We believe that if you do, you will find it wholly inconsistent with your management plans. We are fully supportive of Type I Aquaculture when limited in total size within the river.

As a reminder, this process got started in order to accommodate an application by a commercial business to utilize the otherwise recreational shellfishing areas in the River. WELSCO inappropriately self-modified their policy and attempted to self-initiate a lease without any public input. Fortunately, the Waterford Town Attorney forced them to roll that back. We regret that they have restarted the process again, for the benefit of a single business while ignoring public input.

WELSCO has not demonstrated the capability or responsibility to the local community to work within the appropriate processes nor to reflect the communities' inputs into its proceedings and recommendations.

Niantic River Advocacy Coalition

11 hrs ·

Very concerning for the Niantic River! NRAC fully supports the arguments STRSTH makes about location, management plans and track record of the company – all important considerations. However this is not the only threat facing the river.

Just as STRSTH supports solar energy, yet not this implementation, NRAC supports aquaculture but not the implementation of Type II (gear based) aquaculture located in the Niantic River.

While the management plans support shellfishing, they don't support the consequences that Type II aquaculture would impose on the river and the community at large. Despite this, WELSCO is proceeding to self-modify their plan specifically to shoehorn this model into the river, without the support of other commissions. While the harbor management plans support shellfishing, they do not support reducing safety, navigation, public access or recreational space, negatively affecting the aesthetic of the river, negatively altering the character of the shoreline community, failing to preserve tidal flats, or allowing structural encroachments in areas of open water. These are not trade-offs that should be made to accommodate a private business, especially one with a track record of operating a commercial business in the river without the proper permits.

Proceeding with Type II aquaculture in the location of the Niantic River will forever alter the aesthetic of the river, the recreational benefit and degrade the economic investments that existing businesses and property owners have made because of the visual blight and structural impediment that such a farm would impose on this small, narrow and beautiful estuary that is currently enjoyed by all.

The towns and state should find an area that is a win for everyone.

#smartaquaculture

# Solar project poses threat to Niantic River

**By FRED GRIMSEY and DEB MOSHER DURN**  
Save the River Save the Hills (STRSTH) has recently discovered that the 55,000 solar-panel

This solar installation, as proposed, could do serious damage, especially given the track record of the company.

project in Waterford is proposed to be on 93 acres in a currently forested area between two tributaries — Oil Mill Brook and Stony Brook — to the Niantic River, not at the original site of the old Waterford Airport or the landfill. While we are a strong supporter of renewable solar energy, we feel that this site off Old Mill Road in Waterford is an inappropriate place to install it.

Waterford has spent taxpayers money to study the tributaries to the Niantic River and to create plans to protect the water quality of this estuary. In 2009, the town paid for the creation of The Stony Brook Watershed Management Plan. In 2006, the state of Connecticut, with the help of the four towns in the watershed

and some Clean Water Act federal monies, produced the Niantic River Watershed Protection Plan. Both documents contain guidelines and recommendations to reduce storm-water runoff, the number one cause of pollution in the Niantic River. The proposed plans supporting the petition for the solar installation ignore these two plans.

STRSTH has officially requested to be an intervenor in the solar company's Petition for a Declaratory Ruling from the Connecticut Siting Council to start the work on the installation this fall without a public hearing or environmental review. We have hired a professional engineer to review the plans of the proposed installation and have con-

firmed our fears that the company proposing the solar project has not learned from the devastating results from the installation they created on Walnut Hill Road in East Lyme. (In 2014, the East Lyme site discharged silt and destroyed area wetlands on another tributary to the Niantic River. There is currently a lawsuit from downstream property owners against the same company.) The Waterford plans do not have sufficient stormwater mitigation built into the construction or the final product. STRSTH has worked too hard for too long on water quality in the Niantic River to allow it to be potentially destroyed by stormwater runoff from this proposed solar farm.

It makes no sense to deforest an area and degrade water quality in the Niantic River to provide solar energy. We have been fighting for 15 years to keep development from happening in the Oswegatchie Hills which overlook the Niantic River, so that the ecosystem of the river won't be destroyed. This solar installation, as proposed, could do the same damage as developing the Hills, especially given the track record of the company in East Lyme.

Save the River Save the Hills is for solar energy, but not at the expense of water quality. This should not be a trade-off. The town and the state should find an area that creates a win for everyone. #SMARTSOLAR

Fred Grimsey is president of Save the River Save the Hills and Deb Mosher Durn is the vice president.

Niantic River Advocacy Coalition  
Page Liked · 11 hrs ·

Very concerning for the Niantic River! NRAC fully supports the arguments STRSTH makes about location, management plans and track record of the company – all important considerations. However this is not the only threat facing the river.

Just as STRSTH supports solar energy, yet not this implementation, NRAC supports aquaculture but not the implementation of Type II (gear based) aquaculture locate... [See More](#)

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9/18/2018

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From: Terry Lineberger <terrymlne@aol.com>

To: EMFRATUS <EMFRATUS@aol.com>

Subject: pics to print

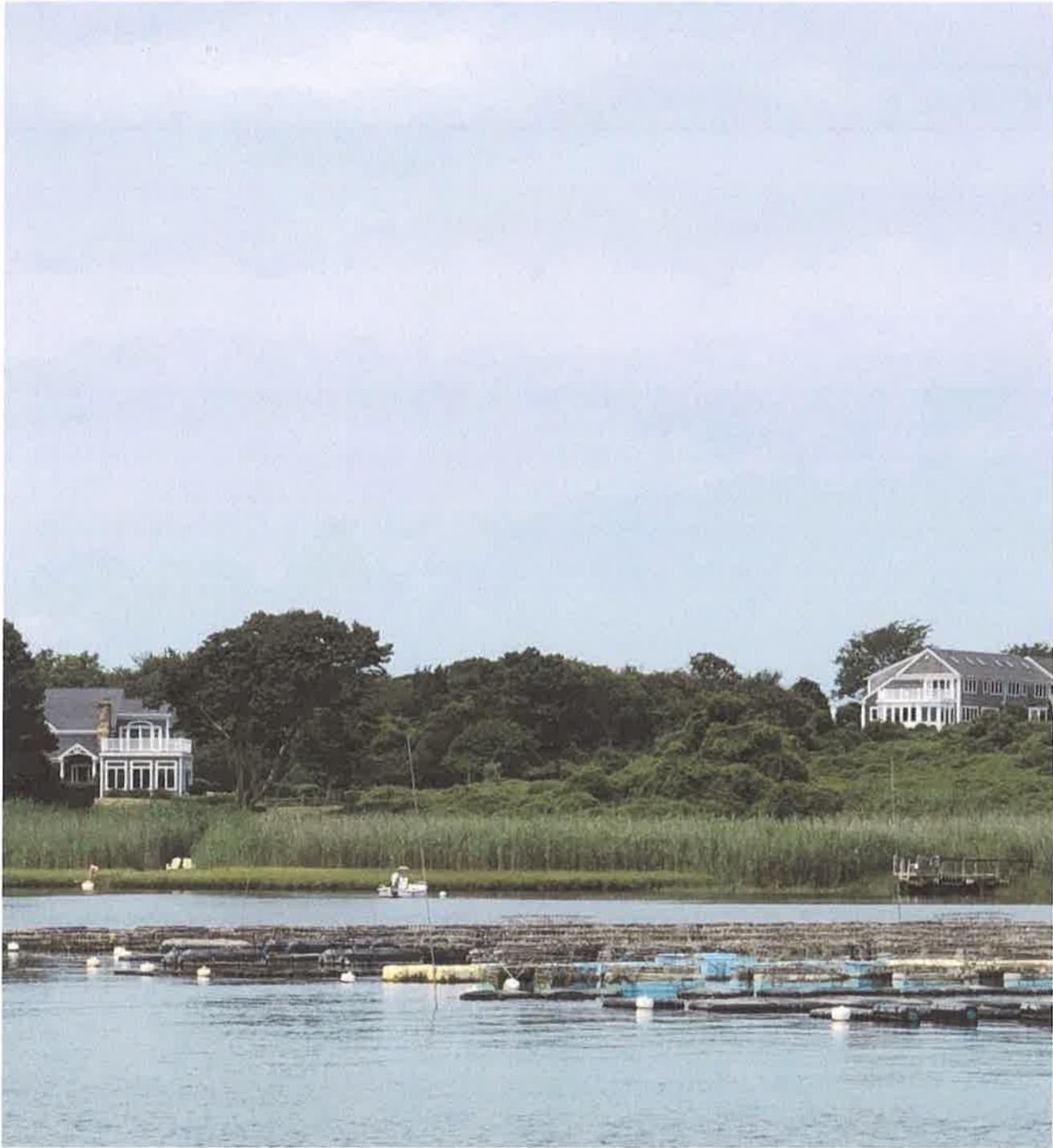
Date: Tue, Sep 18, 2018 7:39 am

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Terry Lineberger  
703.201.6030 cell  
[terrymlne@aol.com](mailto:terrymlne@aol.com)

*Chatham Ma. Shellfish Farm.*







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Niantic River Advocacy Coalition @nianticriveradvocacy

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### Niantic River Advocacy Coalition

10 hrs ·

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Proceeding with Type II aquaculture in the location of the Niantic River will forever alter the aesthetic of the river, the recreational benefit and degrade the economic investments that existing businesses and property owners have made because of the visual blight and structural impediment that such a farm would impose on this small, narrow and beautiful estuary that is currently enjoyed by all.

The towns and state should find an area that is a win for everyone.

#smartaquaculture

## Solar project poses threat to Niantic River

By FRED QUINCY and DEB MULLER/ELTOWN

Stratford has been in the process of installing a 1500 solar panel array in the Niantic River. The project is located on the east bank of the river, just off the old MD Road at Stratford. The project is located on the east bank of the river, just off the old MD Road at Stratford. The project is located on the east bank of the river, just off the old MD Road at Stratford.

This solar installation, as proposed, could do serious damage, especially given the track record of the company.

and James River Water Authority. The project is located on the east bank of the river, just off the old MD Road at Stratford. The project is located on the east bank of the river, just off the old MD Road at Stratford.

Based on the fact that the company proposing the solar project has not followed the rules of the Maryland Department of the Environment, the project is located on the east bank of the river, just off the old MD Road at Stratford.

It makes no sense to divert an area and degrade water quality in the Niantic River to generate solar energy. The town has been fighting for 15 years to keep development from happening in the Niantic River, which is a state park. The project is located on the east bank of the river, just off the old MD Road at Stratford.

Stratford has spent thousands of dollars to study the water quality in the Niantic River and to create plans to protect the water quality of the river. In 2008, the town paid for the creation of the Niantic River Watershed Management Plan. In 2016, the town of Cambridge, with the help of the four towns in the watershed,

STRSTH has officially proposed to be an active river in the water company's Private Use, a Department of the Environment. The project is located on the east bank of the river, just off the old MD Road at Stratford.

The project is located on the east bank of the river, just off the old MD Road at Stratford. The project is located on the east bank of the river, just off the old MD Road at Stratford.

It makes no sense to divert an area and degrade water quality in the Niantic River to generate solar energy. The town has been fighting for 15 years to keep development from happening in the Niantic River, which is a state park. The project is located on the east bank of the river, just off the old MD Road at Stratford.

Terry Fratus Lineberger, Emily Askew and 3 others 4 Shares

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### Niantic River Advocacy Coalition

15 hrs ·

REMINDER:

Upcoming Meetings:

EL Harbor Mgt Commission, Tuesday, 9/18, 7:30 PM EL Town Hall

Search

1. There was a public hearing in May at which the public was overwhelmingly opposed to the revised policy statement. Attached are 30 pages of letters submitted into the official record explaining the opposition – many points of which tie directly to your harbor management plan (HMP). The letters span Pages 4-33 of the attachment – all of which were ignored by WELSCO. Of note:
  - a. WELSCO ignored the public comment and moved forward with the policy anyway
  - b. WELSCO ignored Waterford Harbor Management's unanimous opposition to the policy
  - c. WELSCO's pattern is such that you can be assured your commission will be ignored as well. They claim they have to go to public hearing to make modifications, but history shows they treat that as a 'check the box' exercise. They ignore the public and other town commissions. Even if you require them to come to you for approval, they have the authority to overrule you by a 2/3rds vote.
  
2. Attached is a traffic study that was done in 2010 and 2011 on the volume of boats coming in and out of the Niantic River from Memorial Day to Labor Day. The recreational traffic on the river is significant. In summary:
  - a. 27 weekdays were studied
  - b. 36 weekend/holidays were studied
  - c. 744 hours of time were spent counting boats
  - d. each day spent was 12 hours long (7am – 7pm) w/holidays 7am to 9pm
  - e. every boat was counted that came under the bridge entering or departing the river
  - f. Despite the CT River under consideration being 15 miles and 8 municipalities, the Niantic River was 3 miles and 2 municipalities yet there was less than a .25% difference in the boat traffic
  - g. There were 15,098 boat movements in and out of the Niantic River in 2011 – a recession year where boat sales plummeted.
  - h. NO recreational craft were considered that did not depart the river (jet skis, kayaks, small sailboats, personal SUPs, etc.) and therefore the recreational volume on the river far exceeds what was counted.
  
3. Attached is commentary that was provided to your commission in Fall of 2017 discussing the areas of your HMP that are inconsistent with the implementation of Type II aquaculture in the Niantic River. Despite being mailed to the commission electronically and hand delivered, the Chair did not enter the public correspondence into the record, nor discuss it with the commission, nor distribute it to the commission. When the public demanded that it be reviewed prior to any vote of support for a Type II commercial lease on the river, they were threatened they would be thrown out of the meeting. The attached discusses specific sections of the HMP and why Type II aquaculture is inconsistent with the same.
  
4. We would also like to express our concern about cross commission membership between WELSCO and your commission. We watched as the joint member actively defended the policy he co-authored. We believe this represents a conflict of interest. As a result, WELSCO has undue influence over your commission on matters related to commercial shellfishing . We request the joint member recuse himself from the debate and abstain from voting on this matter.
  - a. Approval of this policy will create a straight line from your commission to Type II aquaculture in the Niantic River because there is no escalation/subsequent approval by the Selectmen in East Lyme.
  - b. The policy gives WELSCO the authority to add, subtract, and modify the areas intended for Type II aquaculture without seeking your future approval. WELSCO does not have to consider your management plan when making those changes. Approving this policy will give WELSCO "sole authority" to redefine commercial (Type I and Type II) lease areas on the river.
  
5. While WELSCO argues that it is a small area in proportion to the overall river's size, usable space in the river is small and already constrained as you repeatedly note in your HMP. Type II commercial aquaculture is so onerous from a visual and volume of gear perspective, that it is unfair to burden the local businesses who are established on the river and the property owners who have paid a premium and invested in river front property who will be affected economically to the negative. Of note:
  - a. Your HMP does not accommodate for Type II commercial aquaculture in the river – only in the Bay. So, the policy is clearly in conflict with your HMP

- b. Commercial Type II aquaculture has been shown to be successful in the Bay and there has been little to no public opposition.
  - c. Due to the onerous nature of what Type II aquaculture entails, approving it on the river will shift the economic balance that currently benefits the many businesses and homeowners and shift it to the predominant benefit of ONE business.
6. It has become abundantly clear that WELSCO does not have the management capability to effectively manage Type II aquaculture.
- a. they have indicated they have no management plans
  - b. they have no criteria by which to measure success of a 'trial period'
  - c. their history demonstrates they do not understand their jurisdictional authority (which is limited to the taking of shellfish from the river and the licensing of that activity) nor have they demonstrated respect for the defined processes.

It is our sincere hope that you consider these factors in your decision and do not accept WELSCO's revised policy statement as written. Further, we hope that you do not, under any policy statement allow Type II aquaculture that restricts the recreational use of the river, has a negative economic impact on the existing businesses and property owners, or creates a safety risk to our citizens. It is an option to re-affirm that the existing policy statement is appropriate for WELSCO and the River and should remain as currently stated. The Niantic River is too small, too congested and too highly utilized recreationally to be burdened with thousands of pieces of gear that float on the water at all times while the remaining becomes visible with the ebb and flow of the tide and all of the consequences that causes to everyone around such a farm.

The solar farm to which your commission so vehemently voiced opposition represents .005% of the acreage of the Town of Waterford. As you well know, whether it be .005% or 1% - location matters and has a significant downstream impact on everyone around it, as you appropriately voiced in your discussions about the solar farm. The Niantic River is not the location for Type II commercial aquaculture. We would encourage this commission to address that seminal question – does Type II aquaculture belong in the Niantic River – before you get down to editing a policy statement that is clearly inconsistent with your HMP.

Respectfully,  
Robin Lineberger  
Niantic River Advocacy Coalition

Attachments: Public Hearing Formal Letters  
Traffic Study on Niantic River 2010-2011  
Comments on ELHMP consistency w/WELSCO Policy Statement



**Niantic River Advocacy Coalition comments on consistency of WELSCO modified  
aquaculture policy statement with the ELHMP**

East Lyme Harbor Management / Shellfish Commission is in process of reviewing the modified WELSCO Aquaculture Policy Statement regarding its consistency with the Harbor Management Plan (HMP). While we, the public, do support both recreational and commercial shellfishing, as members of the local business and residential community, we respectfully request the Commission NOT support the modified policy as it will directly lead to Type II (gear based) aquaculture in the Niantic River. We believe it is the wrong plan for the river and is not consistent with the mandates in the HMP as laid out below.

**1. Issue #1**

a. **Excerpt from the East Lyme HMP:**

- i. It is also recognized that the lower Niantic River is a relatively small and shallow estuary and that if boating activities increases and available open water diminishes, significant serious navigation conflicts may develop. It is therefore necessary that all moorings locations in the lower River be carefully managed and limited to specifically designated areas to ensure that mooring use does not unreasonably restrict recreational sport fishing and other beneficial water activities nor contribute to boating congestion and other navigation issues problems in this part of the River.
- ii. Use of public waters for navigation is the central and essential public right and generally takes precedence over other rights. The public has the right to pass and re-pass on navigable waters without interference or obstruction. Where an obstruction does occur, it constitutes a public nuisance.

- b. **Observation/Concern:** While the paragraph i. above addresses moorings, the impact and implications of Type II aquaculture are the same, we would argue worse, as the installation of new moorings. It will completely limit access to the proposed areas, re-route vessel traffic (powered and unpowered) into the narrower channel areas. Serious navigation conflicts will arise and create a significant safety issue, particularly with the unpowered users. As paragraph ii. states, the obstruction caused by 10 acres of gear is a clear public nuisance to navigation safety in this small estuary.

**2. Issue #2**

- a. **Excerpt from the East Lyme HMP:** Determination of the precise number of all moorings locations, size of moored vessels, and specific locations for placement of all mooring tackle in the lower Niantic River should be made by the Harbor Master in consultation with the Harbor Management Commission and be based on consideration of water depths, the capacity of the lower river to accommodate additional moorings locations without adverse effects on safe and efficient navigation safety and natural resources (including fishery resources); and the availability of suitable shoreline access sites to serve additional moorings locations

without disturbing the existing quality of life and traditional character of shorefront residential neighborhoods and unduly infringing on the littoral rights of waterfront property owners.

- b. **Observation/concern:** As discussed above the installation of acres of Type II aquaculture has the same net effect of additional moorings as it will remove the 10 acres from public use, reroute traffic and create inefficient and unsafe navigation. Further, approval of this policy, and thus Type II aquaculture, will result in gear that floats on the water 100% of the time while other gear will protrude from the water during tidal changes (ebb and flow). As a result of gear installation, it is likely that it will accumulate floating debris, algae will accumulate on the gear, birds will try to get at the shell fish, and they will perch on the gear. In total, this will significantly disturb the existing quality of life and traditional character of the shorefront residential neighborhoods that border the river. It should also be noted that it will negatively impact businesses as their customers come, in part, to experience the traditional character of the area 'the aesthetic'. In particular, the Inn at Harbor Hill and the marinas in the lower river.

### **3. Issue #3**

- a. **Excerpt from the East Lyme HMP:** The relatively shallow area providing valuable fisheries habitat just north of the Bar and south of the federal channel (see Map 6-2) is should be identified as a natural area of special significance. As such, it should be protected from any significant adverse impacts that might be caused by nearby use and development activities.
- b. **Observation/Concern:** As a result of approving this policy, WELSCO will have sole authority over increasing/decreasing existing lease areas and the designation of new lease areas in the river. Despite the wording that they will go to public hearing on these issues, they have demonstrated that they ignore public input. The public was overwhelmingly opposed to this very policy statement at the public hearing in May and WELSCO ignored not only the public, but the unanimous opposition to this policy of Waterford Harbor Management. The public has concerns that it will suffer adverse effects caused by the installation of 10 acres 'gear' which will result in the loss of some habitat, the change of tidal and current flows in and around the area. And even if your commission disagrees with their lease designation changes, WELSCO can overrule you by a 2/3rds vote.

### **4. Issue #4:**

- a. **Excerpt from the East Lyme HMP:** 'Niantic Bay Planning Unit: "Consideration may be given to plan implementation should be established through a cooperative agreement between the East Lyme Shellfish Commission and a commercial shellfishing 'company. '
- b. **Observation/Concern:** The HMP is clear about where (and where not) commercial shellfishing operation should be considered. It is only contemplated in Niantic Bay. A commercial shellfishery is NOT contemplated in the any of the Niantic River Planning Units. The public believes that commercial Type II aquaculture, is not consistent with the plan.

**5. Issue #5**

a. **Excerpt from the East Lyme HMP:**

- i. Avoid conflicts among vessels operating in the HMA, including conflicts between motorized and non-motorized vessels and conflicts between recreational and commercial vessels.
- ii. Future in-water and waterfront development activities should not result in any further constriction of the navigable waterway, navigation or water circulation conditions in the channel.

- b. **Observation/Concern:** As discussed in a previous section, the removal of 10 acres of public access water which is used by recreational boaters, particularly unpowered users, small powered vessels, and personal watercraft, will force them into the areas where the larger motorized vessels operate creating congestion and significant safety issues. Further, it has not been studied how the installation of 10 acres of 'gear' affixed to the river's floor will affect the tidal and current circulation. A complete study should be conducted, and it should include an understanding of how the changing current will affect the shifting bottom and sediment deposits (near or in the channels) that will result from a change in flow and a significant slowing as the water moves around and in the proposed lease areas.

**6. Issue #6:**

a. **Excerpts from the East Lyme HMP:**

- i. Encourage and support water-based tourism activities and the associated economic, recreational, and other benefits of those activities in the Town without disturbing the existing quality of life and traditional character of the Town's waterfront and shorefront residential neighborhoods (see Goal 10).
- ii. To ensure that current and future water uses and activities affecting the real property on, in, or contiguous to the East Lyme Harbor Management Area do not adversely affect the character of shorefront neighborhoods.
- iii. Protect and enhance the existing quality of life and traditional character of in shorefront residential neighborhoods.
- iv. Construction of in-water structures should not have a significant impact on coastal resources, water-access opportunities, scenic quality, and traditional water uses. In all cases, alternatives to the construction of fixed structures to reach navigable water should be considered where those alternatives would reduce potential adverse impacts on coastal resources, water access opportunities, scenic quality, and traditional water uses.
- v. Activities in the Harbor Management Area and use and development of the waterfront should be carefully planned, reviewed, and regulated to avoid any significant adverse impacts on the quality of life in waterfront neighborhoods.
- vi. In-water and waterfront activities should not cause nuisance impacts that

adversely affect waterfront residential areas, including but not limited to noise, litter, unshielded light, and wave impacts. State boating regulations limiting motorboat noise levels should be effectively and strictly enforced.

- vii. The planning and review of new facility development and activities in the HMA should take into consideration not only cumulative impacts on coastal resources and the capability of coastal marine accommodate increased development (see Coastal Resources Policies) but also potential impacts on the existing character and quality of life in shorefront residential neighborhoods. Potential adverse impacts should be minimized or eliminated.
  - viii. Adverse visual impacts that may be caused by development on, in, or contiguous to the HMA and that may affect the character, quality, or public enjoyment of the HMA should be avoided.
  - ix. The traditional character and beneficial quality of life associated with shorefront residential areas in this planning unit should be protected. All boating uses and other water access activities should be carried out in a manner that does not adversely affect the shorefront residential areas.
- b. **Observation/Concern:** It is abundantly clear from the numerous passages above that the HMP is particularly sensitive to the impact of a use of the River to the tourism activities, economic impacts and the quality of life of the existing shorefront residents and businesses. It is also abundantly clear that Type II commercial aquaculture negatively impacts all of these goals. Approving this policy statement will directly result in the removal of 10 acres from recreational use of the water and the installation of thousands of pieces of gear (more than 17,000 in the current pending lease application), the significant impact to the 'aesthetic' will negatively impact water based tourism thus negatively affect established businesses and the local economy. Similarly, it will affect the shorefront residents' quality of life as discussed earlier. Further, it will impact the property values of the shorefront properties.

## **7. Issue #7**

- a. **Safety:** In addition to the rerouting of non-motorized and motorized vessel traffic, we have grave concern for accidents associated with the impact of humans and their vessels and the potential of thousands of pieces of Type II aquaculture gear. The pending application WELSCO is about to consider has in excess of 17,000 pieces of gear proposed for installation. Navigation buoys do not preclude boaters from entering the area in the day or night. There are significant issues of safety that could result in injury and personal property damage.
- b. **Liability:** This safety issues also raises the issue of liability. If the local authorities approve the installation of 10 acres of gear, knowing these risks in advance, and an

accident occurs, it is highly likely that they will be held, in part, responsible for the liability.



**Waterford-East Lyme Shellfish Commission**  
Public Hearing Minutes  
 Thursday May 17, 2018  
 Waterford Town Hall, 6:30 pm



Members present: Peter Harris, Tom Bowlen, Paul Spakowski, J. Patrick Kelly, Elizabeth Gellinas, Eric Kanter, Larry Tytla and Fred Grimsey

Guests: Attorney Robert Avena -Town of Waterford and Abby Piersall, Director of Planning  
 Town of Waterford

- 1) The meeting was called to order at 6:31 pm and a quorum established.
- 2) Pledge of Allegiance was recited.
- 3) Chair Harris gave an introductory presentation.
- 4) Public Input

**Robin Lineberger** of the Niantic River Advocacy Coalition submitted written comments (attachment 1); read into record by Paul Daversa.

**Gary D. Smith** of Waterford submitted written comments (attachment 2); read into record by Attorney Robert Avena.

**Carol and Richard Dudek** of 134 Niantic River Road read and submitted written comments (attachment 3).

**John Hughes** of 52 Niantic River Road read and submitted written comments (attachment 4).

**Terry Lineberger** submitted written comments (attachment 5) read into record by Ellen Fratus.

**Jane Adams**, Chair of the Waterford Harbor Management Commission read and submitted written comments (attachment 6).

**John Starrett** of 132 Niantic River Road submitted written comments (attachment 7) read into record by Roy Nelson of 16 Sixth Avenue.

**Barbara Kamicker** of Old Oak Lane commented on her support of aquaculture.

**Paul Daversa** of 168 Niantic River Road opposed the policy statements validity; needs defined standards and measurements.

**Dave Hirsh** of 30 Oswegatchie Road commented on insurance liability issues and enforcement.

**Don Danila** of 24 Pattagansett Drive supports aquaculture; shellfish decrease nitrogen loading, increase visibility and benefit eel grass.

**Dave Turner** of 68 Ridge Rd supports aquaculture.

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**Jane Wadsworth** of Mago Point requested clearly defining license/ agreement; approval and compliance and better explanation of recreational shellfishing.

**Denise Garofalo** of 15 Ledge Road commented on shellfish survival with all the combatants.

**Aaron Rosenberg** of 163 Niantic River Road commented on water quality, recreational usage limitations and compromising the aesthetics of the river.

**Scott Gladstone** of 30 Niantic River Road commented on benefit of aquaculture; issues with policy and protocol errors; need defined procedures.

**Debra Hadaway** of 377 Mago Point Way commented on commission's ability to sustain and enhance recreational shellfishing; who will actually benefit from an aquaculture project.

**Michelle Pedro** of 120 Oswegatchie Road where does policy benefit recreational activities; information on open and closed areas; agrees with Paul Daversa's comments.

**Marcia Benvenuti** of Waterford noted concern with who is affected by right of ways in Welsco areas 4 and 5, better guidelines and procedures to measure policy goals.

**Liz Harris** of 5 South Ridge Road supports commercial aquaculture; noted benefit to local businesses.

**Craig Pedro** of 120 Oswegatchie Road commented on defining gear descriptions; policy changes should be addressed and comments submitted by the NRAC should be considered.

**Mark Mazzella** of Spithead Road commented on areas for projects having documented studies; benefit of a project for the water or for the applicant, opposed to policy.

**Orin Wilson** of 17 Second Avenue commented aquaculture and areas may be beneficial but will take away from the recreational shellfishing.

**Ron Barhorst** of 162 Niantic River Road concerned with policy stating change of areas and the standards within the policy.

**Carol Silva** of Quaker Hill commented aquaculture would not be unfavorable to small businesses.

**Jim Foertch** of 1 Leary Drive commented on criteria and policy's framework; policy should not be as specific as a license.

**Maria Moulthrop** of 71 Quarry Dock Road commented on the percent of shellfish survival and recreational areas affected.

**Fred Wise** of 138 Niantic River Road commented on Oyster Farm outside Hole in the Wall supports local business, no specifics on oysters in policy; focus should be on non-commercial; opposed to commercial and Type II gear in the river.

**Tim Londregan** commented on benefits of oyster filtration; all the Harbor Management Plans include aquaculture; policy percentage of use vs other large use in the river; noted attorney involvement and hatchery benefits.

**5) Commission Closing Comments**

Mr. Kelly reviewed historical legal issue; past experimental projects and discussed the state charter and town ordinance.

Mr. Kanter reviewed the safety of shellfish consumption; protocol and tests requirements of DA/BA; criteria for chosen Areas 1 – 6; protective storage of gear and protocol of aquaculture ventures.

**6) Adjournment**

The meeting was adjourned at 8:45 pm on a motion by Mr. Spakowski, seconded by Mr. Kelly. All in favor, motion unanimous.

Respectfully submitted,

Amy Tinker  
Secretary

**TO:** Peter Harris, Chair  
Waterford East Lyme Shellfish Commission (WELSCO)

Robert Avena, Esq.  
Waterford Town Attorney

**RE:** Niantic River Advocacy Coalition Comments on  
Public Hearing on Draft Policy Statement May 17, 2018

On behalf of the Niantic River Advocacy Coalition, we request that these comments be accepted into the permanent record of the Public Hearing on changes to WELSCO's Aquaculture Policy Statement 2018.

First, let us begin by reiterating that the Niantic River Advocacy Coalition is supportive of responsible commercial aquaculture (in general and in the Niantic River). It is the view of the Niantic River Advocacy Coalition that WELSCO is not yet prepared to receive, evaluate, or approve experimental Type II (gear based) aquaculture projects or to approve up to 5-year commercial Type II aquaculture projects and therefore shouldn't be adopting a policy statement that addresses such.

We have arrived at this conclusion because although WELSCO may have authority to bring forward for approval where in the river aquaculture may be acceptable, and the manner in which shellfish are taken from the river, it has no authority to lease land nor the expertise to do regulatory reviews. WELSCO is getting beyond its statutory powers, which are limited to designating the manner in which shellfish can be taken, the licensing of such taking, and in connection therewith, adopting reasonable regulations and fix license and permit fees to that taking. Anything else is beyond WELSCO's statutory authority.

We are NOT supportive of and are very skeptical of Type II commercial aquaculture in the Niantic River as we believe it is in direct conflict with the existing policies and plans of the Waterford East Lyme Shell Fish Commission (WELSCO) itself, the Waterford Harbor Management Commission (WHMC), and the East Lyme Harbor Management / Shellfish Commission (ELHM/SC). We hold this view because we cannot reconcile how the installation of a Type II aquaculture project can avoid:

- a. Reducing the public accessibility and recreational use of the Niantic River
- b. Reducing public safety
- c. Impeding use of navigable waters
- d. Negatively impacting local environmental conditions in the river
- e. Reducing available recreational shellfishing areas
- f. Negatively impacting the aesthetics of the river
- g. Negatively impacting the traditional character of the shoreline community

All of which are specific reasons for disapproving proposed projects in the river by one or more of the local management commissions listed above.

Even if WELSCO did have the authority and the expertise for such an undertaking, the current and draft policy statements do not:

- 1. Direct the candidate projects to be in alignment with WELSCO's stated mission of sustaining and enhancing recreational shellfishing.

2. Require an applicant to fully describe the experiment, how it aligns with WELSCO mission, and the evaluation criteria to be used to evaluate success or failure.
3. Indicate that WELSCO has developed proper implementation, monitoring, and management plans for approved projects and that they will be used to properly manage the respective towns aquaculture resources.
4. Indicate how the granting of up to 10 Acres of Type II aquaculture and an unlimited amount of Type I aquaculture can possibly sustain or enhance recreational shellfishing when it will remove the acreage from recreational use.

The Policy states: "...it is the mission of the Waterford-East Lyme Shellfish Commission to sustain and enhance recreational shellfishing." We do NOT believe that Type II Aquaculture is in alignment with WELSCO's mission statement because:

1. The mission statement is for sustaining and enhancing recreational shellfishing, not commercial aquaculture farms
2. Implementing Type II commercial aquaculture in the river will remove, at a minimum, 10 acres of recreational shellfish beds. And as currently written, has no limit to the acreage that can be deemed for Type I commercial use.

Further evidence that WELSCO does not have the expertise to manage such projects in the river are found throughout the draft policy statement.

The draft policy statement does not make reference to any implementation, management and performance assessment plans necessary to responsibly manage commercial aquaculture, particularly Type II aquaculture. So, we must assume that these plans do not exist.

1. We do not believe that WELSCO can adequately carry out its self-appointed role, under the draft policy statement, without the establishment and enforcement of these plans and the expertise to execute them.
2. These plans are necessary for the applicants and the public in that they establish a common understanding of what is expected by both, and an objective framework within which the project(s) can be established, observed, managed and evaluated.
3. These plans must be established, reviewed, and agreed upon by the Boards of Selectman of both East Lyme and Waterford prior to any applications being considered as this is key to protecting the public's interest in the administration of the Towns' assets.

The draft policy statement indicates any aquaculture project be on an "experimental basis and if deemed successful, potentially a small commercial operation, limited in its size, scope and duration" could be granted (for up to 5 years with subsequent renewals)

1. The policy statement does not explicitly state that an experimental project must be in furtherance of the WELSCO stated mission: to sustain and enhance recreational shellfishing. To approve projects outside this scope strays from the Mission of WELSCO and is outside their stated mandate.
2. A responsible policy statement would address a framework within which experimental projects would be assessed:
  - a. For an experimental Type II aquaculture application to receive a favorable review, the experiment must be demonstrated to either sustain and / or enhance recreation shellfishing.
  - b. The experiment should not be deemed successful by merely providing shellfish to be distributed in the river. This is effectively a compensation strategy, not an

experimental outcome. The requirement to provide shellfish produced is better suited for a lease / license agreement rather than a condition of an experimental aquaculture demonstration.

3. The policy statement does not require that the applicant provide a full description of the proposed experiment in the application or other means.
  - a. An Application for a less than 2-year experimental Type II commercial aquaculture project should include a complete description of the experiment to be conducted in the river. It should minimally include:
    - i. An overview of the experiment, its approach and the processes to be conducted.
    - ii. The benefits of the outcome / project to sustaining and/or enhancing recreational shellfishing in the Niantic River (beyond providing shellfish produced to be distributed in the river).
    - iii. Measurements to be taken, before, during, and after the completion of the experiment that will be used to demonstrate the success or failure of the experiment.
    - iv. The measurement thresholds to be achieved by a successful experiment. Again, these should be directly tied to the achievement of the WELSCO mission.
    - v. Achieving the financial goals of an individual business is not relevant to sustaining and enhancing recreational shellfishing in the river. Certainly not the central goal.
4. The policy statement indicates that if successful, a longer, up to five-year project can be approved. The policy is not explicit that the project must be an extended version of the successful experiment. By omission, there is a potential for expansion of an unrelated, different and longer-term Type II commercial aquaculture project.
  - a. A sound policy would be explicit that any approved follow-on project based on successful experimental results must be an implementation of the same type proven by the experiment.

The draft policy statement indicates that: "commercial operations limited in size to 10 acres of total aquaculture footprint area at any one time (the 10 acres will constitute the total acreage of all aquaculture operations combined utilizing type II aquaculture with emphasis on restoration of native shellfish."

1. It is unclear if the 10 Acre limit applies only to Type II aquaculture and thus Type I aquaculture could consume the remaining acreage of the designated lease areas.
  - a. Both Type II and Type I should be established individually and in total so that the vast majority of the rivers shellfishing areas remain available to recreational shellfishing.

Below are a number of areas that are key in the implementation, Management, and Performance review plans necessary, but nonexistent, in WELSCO's draft policy and further demonstrate that WELSCO does not have the expertise nor is prepared to adopt a policy to manage commercial aquaculture:

1. Policy states: "The applicant assumes all liability if any third-party damage occurs."
  - ii. The applicant should be required to provide liability insurance.
  - iii. The applicant should be required to post a bond sufficient to remove any gear from the River.
2. Policy states: "At the conclusion of the initial experiment, applicants will be required to present their results for consideration of a small-scale commercial license."

- i. The criteria against which the "results" will be measured should be included in the Applicant's experimental proposal and the Plans should indicate the periodic monitoring of the criteria during and at the conclusion of the experiment.
  - ii. These criteria should align/map to the mission of WELSCO –sustaining or enhancing recreational shellfishing.
3. As stated earlier, there are no objective criteria with which to evaluate how an applicant is abiding by this agreement. There is no definition of what the agreement will contain. For the protection of the applicant and the Public (the towns), implementation and management plans are needed.
4. Any agreements should be clear that the town authorities, upon determination the applicant is not abiding by the agreement can request that the gear be removed and if not removed by the applicant, the town will utilize the bond to have the gear removed.

The following terms, as set out in the policy statement, have not been defined:

- a. Successful (according to what criteria?)
- b. Experimental aquaculture project (ambiguous and not necessarily aligned with the mission of WELSCO)
- c. Small scale commercial operation
- d. Hazard
- e. Maintain gear in good order (according to what standard?)
- f. 2-year experimental agreement (where is this standard document for review?)
- g. Full license term
- h. Results (against what criteria?)
- i. Commercial License Agreement (where is this standard document for review?)

In closing, WELSCO's role is that of advisory, not regulatory, and it should not be adopting policy statements which are beyond its authority and expertise in the stewardship of a public trust asset. Again, WELSCO's statutory authority is limited to the *taking* of shellfish, and in connection therewith of that *taking*, to adopt reasonable regulations and fix license and permit fees. WELSCO has no authority (nor expertise) to manage the implementation, operation or regulation of commercial aquaculture in the Niantic River.

Respectfully,

Robin Lineberger  
Niantic River Advocacy Coalition

Cc: Dan Steward, Waterford First Selectman  
Robert J. Brule, Waterford Selectman  
Peter Davis, Waterford Selectman  
Mark Nickerson, East Lyme First Selectman  
Kevin Seery, East Lyme 1st Deputy Selectman  
Marc Salerno, East Lyme 2nd Deputy Selectman  
Rose Ann Hardy, East Lyme Selectman  
Dan Cunningham, East Lyme Selectman  
Paul Dagle, East Lyme Selectman

Holly Cheeseman, State Representative  
Kathleen McCarty, State Representative  
Paul Formica, State Senator  
Jane Adams, WHMC Chair  
Steven Dinsmore, ELHM/SC Chair  
Waterford RTM Members:

- Timothy Condon
- Andrew Frascarelli
- Jennifer Mullen
- Calley Merriman
- Michael Perkins
- John Appicelli
- April Cairns
- Mark Olynciw
- Sharon Palmer
- Baird Welch-Collins
- Mark Balestracci
- Pat Fedor
- Paul Goldstein
- Joshua Steele Kelly
- Richard Muckle
- Elizabeth Sabilia
- Carl D'Amato
- Thomas J. Dembek
- Susan Driscoll
- Ivy Plis
- Francisco Ribas
- Michael Rocchetti



Presented by: Gary D. Smith, PhD, P.E.

Owner of The Point Marina, 1 First Street, Mago Point  
Member & Past-President of the Mago Point Business Association  
Member & BOD of Niantic River Coalition Advocacy  
Family of Five Generations on the Niantic River

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Local Commissions, State Agencies and Federal Agency are all **Stewards of the public trust land and public waterways of the Niantic River**. To me, this means that the property and waterway of the Niantic River is owned by the Public Trust at large and it is the Stewards' fiduciary duty to the Public Trust at large to manage or look after the use of the River with the Public Trust's best interest being foremost.

As WELSCO's Policy notes, "The Niantic River is a small shallow estuary with a restricted outlet to Long Island Sound." It is also noted that the river is highly utilized recreationally. Therefore, allowing a commercial aquaculture operation to place thousands of pieces of gear for a hatchery or to grow out various types of shellfish, that will stick out of the water for many hours per day, will create a navigational and safety hazard, which is not the best use of the river; a commercial aquaculture operation will deface the river and the businesses and properties that derive their value from the aesthetics of this river will be irreparably harmed.

The Harbor Management Plans by East Lyme and Waterford for the Niantic River do not provide for thousands of pieces of gear that could create safety, navigation and aesthetic issues and/or could significantly alter the character of the shoreline neighborhoods. Every business on the river supports the tourism industry of the region. A commercial aquaculture operation would specifically remove recreational space from the public and potentially endanger those who use the river -- all for the sole benefit of one person to make a profit.

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***Questions on the proposed March 2018 revised Policy Statement:***

- This Policy Statement lacks any standards, procedures, protocol, standard lease agreement, management plan or regulations for commercial or recreational shell fishing or for conducting shellfish aquaculture within the Niantic River waters;
- Definition of a "small commercial operation"?
- Definition of a "small-scale commercial license"?
- It is noted that "commercial operations limited in size to 10 acres of total aquaculture footprint area at any one time". Does this mean 10 acres (435,600 s.f.) land area with gear spread over it or does it imply only the footprint area of the gear will not exceed the 10 acres?
- The policy qualifies "the 10 acres will constitute the total acreage of all aquaculture operations combined utilizing type II aquaculture (aquaculture with gear)...". Does this imply that type I aquaculture and/or bottom aquaculture could exceed the 10 acre limit?
- What is the area of each current WELSCO location 1 through 6?

- Is there a "less than two (2) year experimental agreement" prepared?

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*I would like to make it perfectly clear that I would not be against having an aquaculture project within the Niantic River as long as the following is complied with:*

1. Going forward, WELSCO needs to adhere to its Policy Statement for aquaculture projects:
    - A. to be on an experimental basis only, limited in their size, scope and duration;
    - B. favor experiments of scientific nature with emphasis on restoration of native shellfish;
    - C. so as not to infringe on any navigable water, private property, marine grasses or in any other way to create a hazard or lesson the use of the Niantic River;
    - D. to be in areas identified so as not to adversely affect areas open to recreational shell fishing; and
    - E. to assure applicants that a successful project does not automatically grant ongoing operations at the conclusion of the experiment.
- 
2. It is imperative that WELSCO:
    - A. develops standards for commercial aquaculture;
    - B. provide a clear policy for shellfish leasing;
    - C. given the controversial aspects of private aquaculture operations within public waters, WELSCO must be pro-active in determining the best locations for these activities taking into account all available planning resources, including the Harbor Management Plans and Plan of Conservation and Development;
    - D. develop a protocol for granting leases for commercial shell fishing;
    - E. develop regulations for managing shellfish aquaculture in the Niantic River, including jurisdictional authority, application process, and acceptable aquaculture area and activities;
    - F. with the assistance of Town Counsels, develop a uniform aquaculture lease agreement which better defines expectations and conditions for conducting shellfish aquaculture in the Niantic River;
    - G. develop a Shellfish Management Plan that contains current operating procedures and regulations for commercial and recreational shell fishing and for conducting shellfish aquaculture within the Niantic River waters;
    - H. set high priority to maintaining exceptional water quality with the recognition that access to, and use of, the River's most valuable natural resources needs to be balanced carefully and responsibly to protect the aquatic ecosystems and *preserve the scenic quality that draws so many people to the River.*

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3. **Applicants** for commercial aquaculture projects should be required to provide, but not limited to, the following so as to be able to assess the impact of the project on the river and on the public at large as well as the consistency of the project with the requirements of the local reviewing commissions:

*A. Tests and reports prepared by professionals in their field of expertise. e.g.*

1. An A-2 Survey of the proposed area tied into the State Coordinate's System;
2. A Bathymetric of the area that is tied into the NAVD88 elevation Datum;
3. Grain Size Analysis and Chemical Analysis of the river bed;
4. Benthic Analysis to determine the benthic community structures of the shallow water habitat and to determine the long term loss of benthic productivity for the Niantic River ecosystem;
5. The long term impact on tidal cycles and current velocities.

B. In addition, applicants should provide a comprehensive Business Plan, Market Analysis, Budget, Financial Statement and Proof of Insurance naming the Town and public at large as additional insured;

C. They should provide a Hazard Analysis defining the potential hazards and their long term effects, including temperature, dissolved oxygen, salinity, pH, metabolic waste products (ammonia, nitrites and nitrates), turbidity (concentration of phytoplankton), harmful algae bloom and adverse weather;

D. Also, a Risk Management Plan that defines how they will handle loss of production, impact of marketing, financial impacts, potential legal issues or Human Resource Management;

E. In order to monitor the impact of the project on the river an annual update of the tests and reports noted in 3A above should be required;

F. They should post a performance bond in an amount that would be sufficient to assure complete removal of gear and restoration of the river bed.

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Thank you.



Shellfish Commission:

Dear Waterford Harbor Management Commission: \*(I also sent this through email)

Why is the Niantic River identified as an open area for commercial aquaculture projects? Who is pocketing the money that is pushing this project?

We have lived at 134 Niantic River Road for over 22 years. The river is our home, our backyard, our entertainment and our love. We pay extra taxes to live here. We are proud of our River, our Town and our Representatives.

This river is unique. Yes, aside from its beauty it has the ability to produce shellfish. It pleases us to see people shell fishing across the river because it means this beautiful place is available for the enjoyment of others. It is also available for Waterford residents to swim, boat, water ski, kayak and play. The surrounding area is residential. Bringing in commercial entities is like building a large business in the middle of a residential area. It would not be allowed on land and should not be allowed on this river. There is plenty of room out in the bay for a commercial business.

Ten acres is a huge amount of water space; six acres in the middle of a residential area isn't better. There are no trees, bushes, fences etc. to hide the nets, buoys, pilings, floats and work boats. What kind of assurance will we have that more commercial operations won't be added? Think of what it would be like to have an industrial park as your main view from your backyard.

A number of years ago our neighborhood association was banned from putting our docks on the beach for winter storage because occasionally the tide would bring the water up onto the beach. As I understand it, the EPA decided the docks might interfere with the marine life of the river. This commercial project will interfere with 10 acres by disrupting the area where the netting, pilings, cages, and anchors are placed. Later the area will again be disturbed by moving large areas of shellfish and collecting them for sale. This does not make sense.

Finally, as residents on the river we pay higher taxes because of our water front and view. Will the Town compensate waterfront homeowners because we now looking at pilings, nets, buoys, floats and work boats?

Please, please reconsider what you are doing. Do not "open the door" to commercial usage of the river.

Sincerely,

Carol Dudek  
Carol and Richard Dudek



May 14, 2018

[Theriverwoman@att.net](mailto:Theriverwoman@att.net)

(860) 748-9554

May 14, 2018

Waterford/Enst Lyme Shellfish Commission  
15 Rope Ferry Road  
Waterford, CT 06385  
Attn. Commissioner Peter Harris

Re: Public Hearing, May 17, 2018 to discuss "Policy Statement on Aquaculture Projects in the Niantic River -- July 19, 2002, revised March 2018"

Commissioner Harris,

Please accept this letter as my input and comments relative to the inclusion of any aquaculture project planned for the Niantic River.

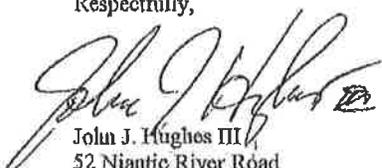
I feel the most detailed and informative literature available about the Niantic River is a book written by Nelson Marshall, Professor Emeritus of Oceanography and Marine Affairs, University of Rhode Island titled, "The Scallop Estuary, The Natural Features of the Niantic River" first published in 1994.

Professor Marshall references findings from studies produced by the United States Coast Guard, Northeast Utilities, Northeast Nuclear Energy Company and United States Department of Commerce, National Oceanographic and Atmospheric Agency. He goes into great detail discussing the "food column" which includes nutrients that feed the plankton, then shellfish and other living species that spawn and populate the Niantic River. In Chapter XVI, titled "The Future", Professor Marshall begins the chapter by saying, "Certainly a number of influences will affect the future of the Niantic River, but in my mind the most important and urgent need is the completion of sewer systems for communities surrounding it." The sewer system is complete on the east side, Waterford side, of the Niantic River. The sewer system is complete on the West side, East Lyme side, of the river from Route 156 to Smith Cove. Homes and businesses north of Smith Cove are dependent on septic tanks, leach fields and cesspools, creating what he calls "nutrient loading" with a nitrogen and bacteria rich runoff and potential for a catastrophe for all species and potential for health problems for those of us that use the river.

Allowing an aquaculture farm in a river that at times, must be closed due to a rain event does not sound rational or consistent. Expecting a farming system that includes spat and immature scallops and oysters downstream from the polluting areas in East Lyme seems counterintuitive and futile.

I am opposed to aquaculture in the Niantic River for many reasons but to approve the project without first doing what I feel is a very basic commitment to clean the environment would be a very serious oversight and blunder on the part of WELSCO and may cause irreversible harm to the Niantic River for years to come.

Respectfully,



John J. Hughes III  
52 Niantic River Road  
Waterford, CT 06385

May 15, 2018

Mr. Peter Harris  
Chair  
Waterford East Lyme Shellfish Commission  
c/o Waterford Town Hall  
15 Rope Ferry Road  
Waterford, CT 06385

RE: Public Comments: WELSCO 2018 Draft Aquaculture Policy Statement

Dear Mr. Harris

I respectfully request that this letter be entered into the official record of Public Hearing for Comments on WELSCO 2018 Draft Aquaculture Policy Statement.

I would like to start by sharing that my family represents three generations who have grown up on the Niantic River. My father, John E. Fratus, Jr., and his friends were affectionately known as the "River Rats" – spending their summer days clamming and scalloping and recreating on the river as children. As teens they would gather up scallops and clams and sell them to Harriet Brown's luncheonette across from Oswegatchie Fire House. He was a volunteer firefighter for more than 50 years, a former fire chief, as well as a Waterford Postman for 37 years and EMT instructor and Paramedic for L&M. A beloved and respected pillar of the community, he raised me in Oswegatchie, where I spent my youth playing on the river, at the beach on Sandy Point and jumping off 'High Rock' with my friends, swimming and learning to water ski. I have spent my adulthood raising my own children on the river, where every summer since they were born, they have played in the river, learned to sail, kayak, paddle board and earned their boating licenses from the home that we have owned in Mago Point for going on 9 years, and that will be our permanent retirement home in just three short years. Our home will be passed to our daughters and their children and yet another generation of my family will experience the recreational safe haven and gorgeous aesthetic that is the Niantic River. My family has a long history with and knows and loves this river. It is from this place that I write these words.

WELSCOs statutory authority is limited to the taking of shellfish and fixing permit and license fees to that activity, not introducing commercial businesses to the river that will remove a public trust asset from public use. It's not clear to me why they are now in the business of creating policy statements to orchestrate commercial aquaculture farms on the Niantic River.

With the adoption of this policy statement, WELSCO is asking the public to trust in its ability to steward a public asset, that will be given to commercial businesses for their sole use and profit. And WELSCO is asking this in the context of the following missteps on the part of its commission:

**1. Improper Actions:**

- a. Improperly modified its 2002 Aquaculture Policy Statement in October 2016;
- b. Improperly gave itself the power to independently create lease areas in public trust waters with no input from the public, other commissions or approvals from town officials and representatives;
- c. Improperly created a lease area known as WELSCO 7;
- d. Improperly gave itself the power to enter into lease agreements;
- e. Improperly entered into a lease agreement on behalf of Waterford in November 2016 with a commercial business;

May 15, 2018

- f. Allowed the applicant to draft the lease agreement, which it turns out, wasn't reviewed by the WELSCO commission at large prior to the Chair signing; and
- g. Sought no advice and counsel of the town attorney in any of the above actions;

**2. Premature Actions:**

- a. Prematurely released a commercial lease/license application:
  - i. with no input from the harbor management commissions of either town
  - ii. prior to the policy statement on aquaculture being fully defined;
  - iii. prior to public hearing and approval of a draft aquaculture policy
- b. Insisted, as recently as March 2018, on holding a dual public hearing on a specific commercial applicant and the draft policy statement (in tandem), resulting in the public being asked to weigh in on a specific commercial application while the policy that governs it has not been finalized nor approved;

**3. Poor Stewardship Actions:**

- a. WELSCO commissioners have been heard repeatedly, at public meetings, reassuring a commercial business owner to hang in there, they will take care of him. So much so, that the business owner has gone on local television and announced his project WILL go forward and it's only "politics" that are the cause of delay. (The Murray Renshaw Show, January 11, 2018);
- b. The WELSCO Chair has accompanied the same private business owner to other town meetings and business groups to advocate for support of this private business' efforts to set up an aquaculture farm in the river, instead of remaining an independent steward of the river;
- c. WELSCO has used this same commercial business' desire to place an aquaculture farm in the river to be the driver of all of its subsequent behavior (straying from its mission and statutory authority), instead of developing a thoughtful policy, independent of any particular business, with the necessary implementation and management plans that are in alignment with the stated mission (recreational shellfishing) and consistent with the harbor management plans of both towns.
- d. WELSCO is not bringing thought leadership to the table in consideration of other approaches to achieve its mission and is instead singularly focused on paving the way for a specific private business.

It is my conclusion that without the constant hand holding of the town attorney, WELSCO is not capable of properly managing its own affairs, never mind a public trust asset. WELSCO has demonstrated it does not have the management capability, is not impartial, and demonstrates a bias to support efforts that are contradictory to its own mission and statutory authority and is inconsistent with established harbor management plans.

With that said, the specific issues I have with the policy statement as drafted are:

- 1. This policy statement is a high-level mission statement that lacks implementation, management and performance assessment plans in order to execute the mission.
  - a. WELSCO has known since at least October 2016 that it wanted to head down a path to bring commercial aquaculture farming into the Niantic River. Yet, over the last 18.5 months, the commission has done nothing to create an independent management plan

- that serves to guide it in the implementation, management and assessment of commercial operations in the river.
2. WELSCO's stated mission is: "...to sustain and enhance recreational shellfishing."
    - a. The mission statement is for recreational shellfishing, not commercial aquaculture farms.
    - b. Implementing commercial aquaculture in the river will remove, at a minimum, 10 acres of recreational shellfish beds. This is contradictory to the stated mission.
    - c. The 'designated' lease areas 1-6 are in recreational shellfish areas and will be cut off from public access depending on areas approved for an applicant.
  3. WELSCO states: "...any aquaculture project be on an experimental basis and then if successful, potentially a small commercial operation, limited in its size, scope and duration."
    - a. What is "successful"? The policy statement is void of any definition or criteria that defines what constitutes success.
    - b. There is no defined framework in which "experimental" projects will be evaluated. Does any kind of experiment work? Does a proof of concept for a business work? Does an experiment that results in WELSCO achieving its mission statement work? Be specific.
    - c. WELSCO's current lease application asks the applicant only to describe their "business and operational objectives" – it does not ask the application to define what experiment will be conducted.
      - i. An experiment formulates a question to be answered, tests a hypothesis, predicts an outcome, measures results and analyzes the steps necessary to move forward should the experiment be successful. The application is void of any requirements to define an experiment.
  4. WELSCO states: "...commercial operations limited in size to 10 acres of total aquaculture footprint area at any one time (the 10 acres will constitute the total acreage of all aquaculture operations combined utilizing type II aquaculture (aquaculture with gear)) with emphasis on restoration of native shellfish."
    - a. It is unclear if the 10-acre limit applies only to Type II aquaculture and thus Type I aquaculture could consume the remaining acreage of the designated lease areas.
    - b. Let's be clear, the "emphasis" of a commercial business is profit. If the "emphasis" is to be restoration of native shellfish, investigating projects such as the development of oyster reefs, that actually would result in the sustainment and enhancement of WELSCO's mission, should be initiated.
  5. WELSCO states: "If approved, it is incumbent on the applicant to adhere to all Federal, State, Harbor Management, Local and other regulations that may be in effect, as to placement, size, construction, etc., so as not to infringe on any navigable water, private property, marine grasses or in any other way to create a hazard or lessen the use of the Niantic River."
    - a. Waterford Harbor Mgt is UNANIMOUS in its opinion that this policy statement conflicts with the Harbor Mgt Plan.
      - i. What modifications is WELSCO going to make to bring it into consistency w/the HMP?
      - ii. By proceeding with a policy statement that is inconsistent with the HMP, this edict will never be able to be realized – it will always be in conflict with the HMP – why is WELSCO setting applicants up for failure?
      - iii. When is WELSCO going to partner with Harbor Mgt to devise a plan that is consistent with the HMP and incorporate advice and counsel of this commission?
    - b. WELSCO, by definition, is creating a hazard and lessening the use of the river.

- i. A commercial operation will remove acres of recreational shellfishing and boating space from public use and install thousands of pieces of gear that in some cases float on the water and in some cases submerge and protrude with the ebb and flow of the tide. This creates such safety issues that it requires DEEP to place hazard markers all around it – yet it does not preclude a boater or non-powered vehicle from entering the area and colliding with the gear.
        - ii. How does this not create a hazard or not lessen the use of the river?
6. WELSCO states: "Projects shall be in areas identified by the Waterford-East Lyme Shellfish Commission so as not to adversely affect areas open to recreational shellfishing, as determined by the Waterford-East Lyme Shellfish Commission. "
  - a. How were these designated lease areas 1-6 created?
    - i. Was there public notice?
    - ii. A public hearing?
    - iii. Reviewed by Harbor Management?
    - iv. Approved by the Board of Selectman?
    - v. Approved by the RTM?
    - vi. Where is the analysis that went into choosing these 6 areas?
      1. What criteria were used to assess them?
      2. Where is the documentation that shows they don't interfere with recreational activities?
7. WELSCO states: "The applicant assumes all liability if any third-party damage occurs. "
  - a. Is the applicant required to provide liability insurance?
  - b. Is the applicant required to post a bond?
8. WELSCO states: "At the conclusion of the initial experiment, applicants will be required to present their results for consideration of a small-scale commercial license."
  - a. What are the criteria against which the "results" will be measured?
  - b. How do these criteria map to the mission of WELSCO – which is to enhance recreational shellfishing?
  - c. WELSCO plans to use these "results" to determine if a 5-year commercial lease will be granted yet other than the word "results", there are no defined performance metrics at all.
9. WELSCO states: "If the applicant fails to abide by this agreement in any way, as determined by the Waterford-East Lyme Shellfish Commission, the Waterford-East Lyme Shellfish Commission reserves the right to terminate the experiment with the responsibility on the applicant to promptly remove the project and all structures from the Niantic River. "
  - a. WELSCO is not authorized to enter into leases on behalf of either town. The towns' legal counsel will write the lease and are the ones who should determine if the lease is being adhered to – not WELSCO – who has an inherent bias toward shellfishing.
  - b. WELSCO, if it had the statutory authority, should be managing the commercial operations pursuant to their implementation, management and performance plans . . . that don't currently exist. So how will WELSCO determine if a business is compliant?
  - c. WELSCO is not qualified nor empowered with the legal expertise to determine lease compliance.
  - d. This clause would be executed in the case of failure to comply – so why does WELSCO think the applicant would remove the gear as required?

May 15, 2018

- i. Once again, a bond should be required to ensure that if applicant fails to comply with the lease agreement or the governing management plan, the taxpayers do not get stuck with the bill to remove the gear from the river.
10. WELSCO provides the geo-coordinates to 6 designated lease areas on the river:
- a. I refer you back to item #6 above
  - b. I can find no evidence these lease areas went through a public review and town approval process.
11. Where are the following standard documents to accompany this change in policy?
- a. Shellfish Management Plan, consisting of the operational model by which WELSCO will manage commercial operations in public trust waters, including:
    - i. Implementation
    - ii. Management
      - 1. Operational
      - 2. Risk
    - iii. Performance Review
  - b. Experimental Application
  - c. Experimental License/Lease Agreement
  - d. Commercial Application
  - e. 5-yr Commercial License/Lease Agreement
  - f. Renewal Request

In conclusion, this policy statement is premature, a departure from WELSCO's stated mission and statutory authority, not well thought out and does not contain the necessary factors for success to implement, execute, manage and assess commercial aquaculture operations in the Niantic River.

Respectfully submitted,

Terry Fratus Lineberger  
Waterford Homeowner

Cc: Dan Steward, Waterford First Selectman  
Robert J. Brule, Waterford Selectman  
Peter Davis, Waterford Selectman  
Rob Avena, Waterford Town Attorney  
Mark Nickerson, East Lyme First Selectman  
Kevin Seery, East Lyme 1st Deputy Selectman  
Marc Salerno, East Lyme 2nd Deputy Selectman  
Rose Ann Hardy, East Lyme Selectman  
Dan Cunningham, East Lyme Selectman  
Paul Dagle, East Lyme Selectman  
Holly Cheeseman, State Representative  
Kathleen McCarty, State Representative  
Paul Formica, State Senator  
Jane Adams, WHMC Chair

Steven Dinsmore, ELHM/SC Chair  
Waterford RTM Members:

- Timothy Condon
- Andrew Frascarelli
- Jennifer Mullen
- Calley Merriman
- Michael Perkins
- John Appicelli
- April Cairns
- Mark Olynciw
- Sharon Palmer
- Baird Welch-Collins
- Mark Balestracci
- Pat Fedor
- Paul Goldstein
- Joshua Steele Kelly
- Richard Muckle
- Elizabeth Sabllia
- Carl D'Amato
- Thomas J. Dembek
- Susan Driscoll
- Ivy Plis
- Francisco Ribas
- Michael Rocchetti

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**WATERFORD  
HARBOR MANAGEMENT COMMISSION**

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April 20, 2018

Mr. Peter Harris  
Chairman  
Waterford East Lyme Shellfish Commission  
15 Rope Ferry Road  
Waterford, CT 06385

Dear Peter,

I am transmitting the comments of the Waterford Harbor Management Commission (WHMC) in response to the Waterford East Lyme Shellfish Commission's (WELSCO's) draft revised Policy Statement on Aquaculture in the Niantic River (draft Policy Statement) which the WHMC received on March 21, 2018. Thank you for the opportunity to comment.

In summary, the WHMC finds that the draft Policy Statement is inconsistent with the Waterford Harbor Management Plan (WHMP) for the following reasons:

1. The approval of commercial aquaculture in the fragile and congested ecosystem of the Niantic River compromises if not conflicts with the many Harbor Management goals of the Town of Waterford
2. The draft Policy Statement would license structures that limit existing public access
3. The draft Policy Statement lacks implementation procedures that would enable the WHMC to assess and determine whether the proposal is consistent with certain mandates established in the WHMP.

**1. The approval of commercial aquaculture in the fragile and congested ecosystem of the Niantic River compromises if not conflicts with the many Harbor Management goals of the Town of Waterford**

The Niantic River is a popular recreational river. It is home to commercial and charter fishing boats and hundreds of recreational boats. Kayaks, canoes, stand-up paddleboards, and personal watercraft enjoy the protected harbor of the Niantic River. The State Boat Launch at Mago Point in Waterford is the state's busiest boat launch in Connecticut. Public safety and public access are key goals of the WHMC.

The WHMC agrees with WELSCO's opening paragraphs in its 2002 Aquaculture Policy Statement and believes that the heavy usage described in 2002 has become even greater in 2018.

The Niantic River is a small shallow estuary with a restricted outlet to Long Island Sound. It is a mostly residential area and is heavily used for a variety of marine recreational activities. The Niantic River has few identified areas open for aquaculture projects, which would not encroach

## WATERFORD HARBOR MANAGEMENT COMMISSION

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on these activities. One of these activities is shellfishing and it is the mission of the Waterford-East Lyme Shellfish Commission to sustain and enhance *recreational shellfishing*.

Therefore the Waterford-East Lyme Shellfish Commission has deemed that any aquaculture projects be on an experimental basis only, limited in their size, scope and duration. Due to the restricted area available for aquaculture projects in the Niantic River, the Waterford-East Lyme Shellfish Commission shall favor experiments of a scientific nature with emphasis on restoration of native shellfish. Aquaculture projects shall be defined as any experiment requiring any structure to be placed in the river, such as buoys, floats, nets, cages, lines, anchors, etc. [Emphasis added.]

[WELSCO 2002 Aquaculture Policy Statement, p. 1]

The Niantic River ecosystem is also a fragile one. The WHMP contains directives [Please refer to the Appendix for the extract of pages 8-12 of the WHMP that contains the full context of references and citations included in this response] as to the protection of coastal resources such as tidal wetlands, intertidal flats, eel grass, and other submerged aquatic vegetation (SAV). While *generally* aquaculture can benefit water quality, there are *specific* circumstances in which it does not. It is the view of the WHMC that many of those specific circumstances that can compromise or degrade an aquatic environment could be present in a commercial aquaculture proposal. Among those specific circumstances are: concentration of aquaculture gear, impact of aquaculture gear on tidal water flow and exchange, and effects of effluent discharge from concentrated shellfish populations. These concerns could be addressed or alleviated by an environmental impact analysis of the area and the structures proposed. The draft Policy Statement is silent as to the analyses that must be performed prior to application approval.

The Waterford-East Lyme Shellfish Commission will review applications for aquaculture projects on a case-by case basis and approval is based solely on the discretion of the Waterford-East Lyme Shellfish Commission. If approved, it is incumbent on the applicant to adhere to all Federal, State, Harbor Management, Local and other regulations that may be in effect, as to placement, size, construction, etc., so as not to infringe on any navigable water, private property, marine grasses or in any other way to create a hazard or lessen the use of the Niantic River. Projects shall be in areas identified by the Waterford-East Lyme Shellfish Commission so as not to adversely affect areas open to recreational shellfishing, as determined by the Waterford-East Lyme Shellfish Commission. All applications shall show consistency with all applicable laws, including filing of public notice, and be subject to a public hearing before the commission.

[WELSCO 2018 draft Policy Statement on Aquaculture Projects in the Niantic River—July 18, 2002, Revised March 2018, p.1]

Indeed, WELSCO's March 2018 intent to consider a commercial application for approval that lacks any environmental impact analysis prepared by licensed professionals is interpreted by the WHMC that the protection of the Niantic River is not a priority.

## WATERFORD HARBOR MANAGEMENT COMMISSION

The following extracts from the Niantic Bay Shellfish Farm Application to conduct Aquaculture Areas 2 and 5 dated 3/15/2018 demonstrate the absence of sufficient detail to evaluate gear concentration:

Planting of seed will occur from April until July. Initially, the first group of oyster seed will be placed in the Sepa baskets. The next group will move into the float gear primarily in Area 2. Then into the suspended gear in area 5....Remaining seed will either be planted on bottom in Area 2 or it will be stored at high densities in gear on bottom in the deeper portions of Area 2 as well as Area 5. [Emphasis added.]

[Niantic Bay Shellfish Farm Application to conduct Aquaculture Areas 2 and 5 dated 3/15/2018, p. 6]

From the West most side of the gear area, there will be two 290' long lines, running N and S, used to suspend lantern nets, these are two experimental lines to compare growth rates. 15' between lines, suspended by standard black lobster buoys 2 per net, 100 nets per line, each end 5' helix anchor. Third line, also suspended via larger poly balls, used with Sepa baskets interlocked. Additional area can support 8 more floating lines. First 163' of site designated for development of float gear. The remaining 200 feet is designated for sub-tidal apartment style cages fitted for vexar bags (3'x3'x5') as well as trays (3'x4'x 17") individually buoyed. First year 200 apartment style and 200 trays. Total possible, in this permit, trays/apartment style limited to less than 1/3 of total area or 1000 apartments or 1300 trays. Furthering permits required to apply for build out as similar with NBSF EL-3 lease 25% available per year.

[Niantic Bay Shellfish Farm Application to conduct Aquaculture Areas 2 and 5 dated 3/15/2018, p. 7-8]

As a consequence, the WHMC believes:

- The introduction of commercial aquaculture into the Niantic River is inappropriate and would restrict public access while increasing public safety concerns.
- The request to comment on the draft Aquaculture Policy Statement is premature insofar as it fails to provide implementing guidance that lays out the prerequisites for an aquaculture proposal that ensures the protection of the Niantic River. The WHMC notes that WELSCO intends to consider a commercial application for approval that provides no specific details as to the number, type, or concentration of gear nor does the commercial proposal contain any expert analyses of the presence of or impact on protected coastal resource characteristics of the sites.

### **2. The draft would license structures that limit existing public access**

It is the view of the WHMC that licensing commercial aquaculture operations in certain areas of the Niantic River conflicts with the goals and mandates of the WHMP. While aquaculture in designated shellfish resource areas is identified by the WHMP as a priority in those areas, that priority must be informed by the mandate that the proposed structures *shall* not restrict existing public access. The two citations follow.

## WATERFORD HARBOR MANAGEMENT COMMISSION

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Within designated shellfish resource areas, the following policies shall apply:

(e) The cultivation, transplantation, harvest and general management of shellfish shall have priority over all other uses within designated shellfish resource areas. This should not, however, be construed to deny a riparian owner's access to navigable waters as long as such access will not create a significant adverse impact to the shellfish habitat.

[Waterford Harbor Management Plan 2012, p 10.]

#### D. Public Access

Consistent with the Connecticut Coastal Management Act and the Waterford Coastal Program, public access to Waterford waters should be preserved and improved together with all proposed waterfront use and development. Accordingly, the following policies shall apply:

- (1) No proposed structures or uses shall restrict existing public access.
- (2) Plans reviewed by the Harbor Management Commission in accordance with Section 22a-113p of the Harbor Management Act shall be examined for potential impacts to existing or needed public access. The provisions of additional public access in conjunction with proposed plans is encouraged and will be viewed favorably by the Harbor Management Commission.

[Waterford Harbor Management Plan 2012, p 12.]

The WHMC consequently believes that any proposed aquaculture structures or methodology must not restrict existing public access. Area 5 is an area that is used by the public for boating, tubing, and water skiing, among other activities. This mandate—that public access not be limited—does not necessarily preclude aquaculture in areas of existing public access. Rather, it would require that all aquaculture gear be sufficiently deep, i.e., sufficiently below the water surface at mean low tide, to ensure that the public, such as vessels, would have unimpeded access through the area.

#### 3. The draft Policy Statement lacks implementation procedures that would enable the WHMC to assess and determine whether the proposal is consistent with certain mandates established in the WHMP

In light of the fact that WELSCO intends to consider a commercial application for approval in the absence of implementation procedures that would identify prerequisites for the applicant to meet, it would seem that WELSCO finds that evidence of compliance to be unnecessary or irrelevant to its decision. However, that information, i.e., the details as to what the standard of compliance is and the facts demonstrating that the standard has been met, is relevant to the WHMC in order to ensure consistency with the WHMP.

#### *Example: wetlands and submerged aquatic vegetation*

For example, the WHMC finds the following requirement in the draft Policy Statement to be inadequate to ensure consistency with the WHMP as it relates to Submerged Aquatic Vegetation: "It is incumbent on the applicant to adhere to all Federal, State, Harbor Management, Local and

## WATERFORD HARBOR MANAGEMENT COMMISSION

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other regulations that may be in effect, as to placement, size, construction, etc., so as not to infringe on any navigable water, private property, marine grasses or in any other way to create a hazard or lessen the use of the Niantic Rivers... All applications shall show consistency with all applicable laws, including filing of public notice, and be subject to a public hearing before the commission." [WELSCO 2018 draft Policy Statement on Aquaculture Projects in the Niantic River – July 18, 2002, Revised March 2018, p.1]

The Waterford Harbor Management Plan (WHMP) provides the following guidance for Preservation of Coastal Resources to the WHMC in implementing the goals of the Town of Waterford:

(2) **Tidal Wetlands, Intertidal Flats, Eel Grass and Other Submerged Aquatic Vegetation**

Tidal wetlands and intertidal flats are to be construed as one of the Town of Waterford's greatest assets and the following policy shall apply:

(a) The priority use for tidal wetlands and intertidal flats is preservation, limited uses and structures may receive regulatory approval if the resource impacts are minimal, no feasible alternatives exist and the use is of utmost importance to the well being of the community.

(b) The ecological values of intertidal resources for habitat, breeding, nutrient productivity, storm water retention and pollution control are well established and as such the use of these areas should be discouraged except in extreme cases of importance. This habitat is a non-renewable resource and the eel grass is of utmost importance in the production, growth and survival of the Niantic Bay scallop larvae.

[Waterford Harbor Management Plan 2012, p 11.]

Indeed, the Town of Waterford is obligated to ensure that wetlands are not degraded.

**What are municipal responsibilities toward tidal wetlands?**

Although activities within tidal wetlands are regulated by the DEEP, municipalities are responsible for ensuring that adjacent upland development does not harm these resource areas. The Connecticut Coastal Management Act contains policies and standards regarding tidal wetlands that must be applied during municipal coastal site plan review process. Generally speaking, land use boards and commissions in coastal municipalities must ensure that development will not result in degradation of tidal wetlands, and that tidal wetlands are preserved, protected and, to the extent practicable, restored. [Emphasis added.]

[Connecticut Department of Energy and Environmental Protection (CT DEEP) webpage entitled *Tidal Wetlands: General Information*, located at [http://www.ct.gov/deep/cwp/view.asp?a=2705&q=323824&depNav\\_GID=1625](http://www.ct.gov/deep/cwp/view.asp?a=2705&q=323824&depNav_GID=1625)

WELSCO's March 2018 intent to consider a commercial application for approval that fails to provide evidence by a licensed professional as to the presence of submerged aquatic vegetation is further support that the draft Policy Statement is insufficient in itself to ensure compliance with the WHMP.

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c/o Waterford Police Department, 41 Avery Lane, Waterford, CT 06385      Office: (860) 440-0548

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*Example: Bottom culture*

The draft Policy Statement states that "Bottom culture with no gear will also be considered Aquaculture and require written approval." Yet, research states that "[f]oothed rakes used for shellfishing can uproot eelgrass."<sup>1</sup> The light regulation envisioned for bottom culture, i.e., written approval, such that it could be casually allowed in areas of SAV is concerning and could be inconsistent with the WHMP depending on the activities. The WHMC is also concerned that such a proposed application would not be referred to the WHMC. We note that WELSCO intends to consider a commercial application for approval that envisions bottom culture without further permitting required, yet the locations encompassed and activities to occur are unspecified.

Indeed, the application for NBSF for Areas 2 and 5 contains the following statement:

Bottom planting is not included in the chart as the primary use of the gear areas are for exactly that gear. The additional lease areas if used for bottom planting which do not require any further permits could top 1 million oysters per acre not being utilized for gear. Given the circumstances and ecology of the area NBSF is not committing to bottom planting but it is a possible option being considered to a certain degree. [Emphasis added.]

[Niantic Bay Shellfish Farm Application to conduct Aquaculture Areas 2 and 5 dated 3/15/2018, p. 9]

As such, the WHMC is unable to conclude that the draft Policy Statement is consistent with the WHMP.

4. **The WHMC recommends that the draft Policy Statement clarify the following items:**
- a) The maximum portion, preferably specified in acreage, of the Niantic River that would be used for experimental aquaculture and the maximum portion that would be used for commercial aquaculture. The draft Policy Statement provides: "[T]he Waterford-East Lyme Shellfish Commission shall favor experiments of a scientific nature or commercial operations limited in size to 2% of the total recreation shellfishing conditionally open area with emphasis on restoration of native shellfish." [WELSCO 2018 draft Policy Statement on Aquaculture Projects in the Niantic River -July 18, 2002, Revised March 2018, p.1] In minutes of March 15, 2018 there was the following discussion, however, there is no similar language in the draft Policy Statement forwarded to the WHMC for review on March 16, 2018.

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<sup>1</sup> Section 300.18 *Submerged Aquatic Vegetation and Aquatic Habitats of Particular Concern*, Rhode Island Coastal Resources Management Program, Paragraph 8, Pg. 2.

## WATERFORD HARBOR MANAGEMENT COMMISSION

- d) Items D and E combined. Mr. Harris asked Mr. Londregan of NBSF to review the highlights of his application to an aquaculture project in Area 2 and Area 5. He noted he modified his application to established areas away from the Mago Point area, no rebar usage in construction and distanced from public launch areas. Members discussed the 2 year timeframe and the footprint area in the proposal that totals 0.9 acres. Members agreed the gear/structures would remain within the footprint and cannot exceed the 10 acre limit. Mr. Harris labeled the application 001 and will forward the application to the Waterford and East Lyme Harbor Commission's for their comment. Moving forward if the application was approved there would need to be a public notice sent and public hearing along with proper protocol procedures before any official lease was granted.

Attorney Avena commented that the percent of acreage to lease and actual size needs clarification. There was further discussion on the maximum space being leased to one company or applicant.

[WELSCO minutes, March 15, 2018]

- b) The Policy Statement should clarify how the maximum acreage discussed in (a) above would be allocated among Areas 1-6.
- c) At a minimum, the Policy Statement should require that all applications be accompanied by a complete schematic for the acreage to be licensed that would identify the gear type, quantity, layout, among other items as well as fallow areas in the full area under license.
- d) That the Policy Statement specify how the "portion" of shellfish to be provided to WELSCO, discussed in the following excerpt, will be determined. "During the project's life, the Waterford-East Lyme Shellfish Commission reserves the right to ask for a portion of shellfish produced to be distributed in the River in order to enhance the river's recreational shellfishing...." [WELSCO 2018 draft Policy Statement on Aquaculture Projects in the Niantic River—July 18, 2002, Revised March 2018, p.2]
- e) The draft Policy Statement provides that: "At the conclusion of the initial experiment, applicants will be required to present their results for consideration of a small-scale commercial license." [WELSCO 2018 draft Policy Statement on Aquaculture Projects in the Niantic River—July 18, 2002, Revised March 2018, p.2] The WHMC believes that the policy statement should articulate the basis on which the results of initial experiments will be assessed for determining whether a commercial license would be awarded.

Sincerely,



Jane B. Adams  
Chair

Waterford Harbor Management Commission

Cc: Dan Steward, Town of Waterford First Selectman  
Abby Piersall, Town of Waterford Town Planner  
Robert Avena, Attorney, Town of Waterford  
Waterford Harbor Management Commission

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# WATERFORD HARBOR MANAGEMENT COMMISSION

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## APPENDIX

### Extract from the 2012 Waterford Harbor Management Plan (pages 8-12)

#### Harbor Management Issues and Goals: Town of Waterford

1. Waterford's boating activity occurs along the Long Island Sound shoreline and in the numerous bays, coves and rivers. Boating, particularly vessels capable of navigating open water, emanates mostly from the Niantic River and Jordan Cove. Private Marinas and charter and commercial fishing operations line the eastern shore of the lower Niantic River around Mago point. A state launch area with parking for vehicles is located at Mago Point, and another one with parking for vehicles is located at Pleasure Beach on Jordan Cove. The development of a marina along Waterford's Thames River shoreline has been discussed and is in process. Limited small boating takes place in Alewife Cove. Many private residences along the east side of the Niantic River, on Jordan Cove, Smith Cove and other areas have their own docks and moorings.
  - a. Protected anchorage areas are extremely limited, especially for sea-going vessels. Permanent mooring areas are feasible only in the Niantic River, in Jordan Cove and on the Thames River, most of the rest of the shoreline being open and unprotected. Protected shellfish beds take up a great deal of space in the Niantic River. Other shoreline areas including Alewife Cove do not lend themselves to moorings. The intent of the Waterford Harbor Management Commission is to prevent unbridled proliferation of permanent moorings, especially commercial and multi-vessel moorings, that will cause congestion and adversely affect Waterford's water-dependent usage on the land side as well as the water side. The Commission recognizes waterfront residents' littoral and riparian rights and their traditional prerogative to anchor vessels on their own moorings in waters adjacent to their properties. Waterford to date has experienced very little in the way of problems associated with overuse.
  - b. It is the intent of the Commission to propose regulations regarding these limited existing boating facilities *to encourage the most efficient utilization of the waterfront for the best benefit of the public, to maintain the status quo where appropriate, to help the Town prevent encroachment by non-boating interests, and to give highest priority and preference to water dependent uses in suitable waterfront locations.* The Commission will regulate and distribution of mooring locations to ensure equitable, efficient and safe usage with special attention given to the protection of shellfish, fish and wildlife habitat and other environmental concerns. The Commission will investigate and pursue opportunities for the development of new areas and for improving existing areas for public access and use.
  - c. The Commission will encourage non-structural solutions to flood and erosion problems where feasible and where there are no environmentally satisfactory alternatives, to encourage minimally intrusive constructions along the shoreline.
  - d. The Commission will establish a Harbor Management Fund to be used in the administration and conduct of the Commission's business.
  - e. The Commission will strive to preserve the maritime character of the waterfront where possible and recommend against incursions of any type that tend to degrade the area's sensitive natural environment or destroy the pleasant ambience of Waterford's shoreline that the Town presently enjoys.

## WATERFORD HARBOR MANAGEMENT COMMISSION

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2. Waterford's coves are subject to silting. Alewife Cove has recently been dredged, but it is again filling. Jordan Cove and Smith Cove on the Thames River are experiencing similar problems. The Commission will monitor developing problems in this regard and advise the Flood and Erosion Control Board.
3. Federal channels are maintained in the Niantic and Thames Rivers. A major presence of the U. S. Navy and U. S. Coast Guard on the Thames River tends to reduce the Commission's responsibilities for that channel. The Niantic River channel, except for that portion located at the very mouth of the river, is a good distance from Waterford's shoreline. The Commission intends to monitor any structural encroachment - fish weirs, moorings, pilings, and so forth - and report such to the proper authorities, and work to discourage the dredging of new or expanded federal or local navigational channels, basins and anchorages unless critically necessary.
4. Many agencies, local state and federal, have responsibilities regarding the protection of wetlands, wildlife and fishing. In particular, Waterford has its own Shellfish Commission and participates in the Waterford-East Lyme Shellfish Commission which regulate the harvesting of oysters, clams and the internationally famous Niantic scallops. The Commission will provide what apropos information and advice it may have to support these agencies in the enforcement of their regulations.
5. Waterford has town owned beaches plus several other semi-private beaches, some of which are long standing and traditional swimming areas. In cases where these do not comply with the state buoing and other regulations, the commission will inform those responsible and aid them in compliance where possible.
6. The Commission sees a duty to enhance where possible water related recreational activities. However, in order to minimize potential conflict between competing activities, such as water-skiing, sailing, shellfishing, fishing, boating and swimming, the Commission will promulgate appropriate regulations to resolve conflicts between competing users in a manner which provides for the safe, orderly and efficient use of the water and waterfront by the public and provide the environment for a safe harbor and shore access for transient vessels.
7. The commercial and charter fishing businesses located in the Mago Point area of the Niantic River are significant and appropriate economic resources for the Town of Waterford. They are essentially self-regulating and self-enforcing with regard to state law and Town ordinances. They are well-run, long standing businesses, some of which date back to the early part of this century, and the Commission sees no need at present to change any regulation or to promulgate new ones regarding them.
8. The water quality of Waterford's shoreline, coves, bays and estuaries is subject to the ever present danger of pollution from accidental and purposeful discharges of waste, trash, debris and untreated sewerage. The Commission will advise the enactment of pertinent laws to prevent or minimize such pollution. The Commission will endeavor to define the waters of the Town of Waterford as a no-discharge zone and encourage the installation of pumpout facilities for vessels with toilets where possible.

The Commission will advise the Waterford Police Department to take action for the removal of derelict vessels which pose potential pollution or navigational hazards in accordance with section 15-9 of the General Statutes.

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9. The Commission notes that some waterfront communities in Connecticut have experienced problems relating to so-called "liveaboards/houseboats" and recognizes Waterford's susceptibility. Although nothing of the kind currently exists within its jurisdiction, the Commission will recommend ordinances regarding liveaboards or houseboats.
10. The Commission foresees the necessity of coordinating information and activities among the various agencies, commissions, departments and individuals with interests along the waterfront. Where it has expertise, the Commission will offer advice and assistance to departments such as police, fire, flood and erosion and the like. The Commission will also encourage adequate personnel to enforce pertinent regulations, and provide access to available resources (e.g. funds, information, and volunteer manpower) that support water development activities.
11. The Commission intends to work closely with the Long Island Sound Councils to carry out their long term goals and objectives for the improvement of the water quality of the Sound and the enhancement of uses for the Sound.

### Policies and Recommendations: Town of Waterford

To implement the goals presented in the previous pages the following policies and recommendations are part of the Waterford Harbor Management Plan:

#### 1. Waterford Water Use Plan

The Waterford Water Use Plan can be viewed in Appendix D and presents the Harbor Management Commission's recommendations for conservation, development and use of Waterford's waterways. In accordance with Section 22a-113n of the Harbor Management Act, all state and municipal regulatory decisions within the area of the Harbor Management Commission's jurisdiction shall be consistent with this water use plan, unless contrary actions are supported by a "show cause" justification.

#### A. Preservation of Coastal Resources

The preservation and improvement of significant natural resources in Waterford is consistent with the Connecticut Coastal Management Act and the Waterford Municipal Coastal Program and is further supported by the Waterford Harbor Management Plan.

##### (1) Shellfish Resources

Significant shellfish concentration areas, as mapped by the Division of Aquaculture within the Department of Agriculture and refined through consultation with the Waterford Shellfish Commission, have been designated. The Harbor Management Commission should periodically consult with the Shellfish Commission and update the water use plans if changes become necessary. Shellfish plans are included with Appendix D.

Within designated shellfish resource areas, the following policies shall apply:

(a) The cultivation, transplantation, harvest and general management of shellfish shall have priority over all other uses within designated shellfish resource areas. This should not, however, be construed to deny a riparian owner's access to navigable waters as long as such access will not create a significant adverse impact to the shellfish habitat.

(b) New navigation channels, turning basins, fairways, berthing areas, mooring areas and anchorages shall not be dredged in designated shellfish concentration areas nor should any new structures such as docks, pilings, breakwaters, groins, or sea walls be placed in

## WATERFORD HARBOR MANAGEMENT COMMISSION

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designated shellfish concentration areas unless it is demonstrated that the effected resource area has been permanently depleted or that no other feasible alternative exists and that any adverse impact to the shellfish resources are fully mitigated to the satisfaction of the Waterford and Waterford-East Lyme Shellfish Commissions.

(c) Moorings and anchoring are not prohibited in shellfish resource areas but the Harbor Master shall consult with the Waterford-East Lyme Shellfish Commission or the Waterford Shellfish Commission in the issuance of new mooring permits. Discharges are discouraged in shellfish areas.

(2) **Tidal Wetlands, Intertidal Flats, Eel Grass and Other Submerged Aquatic Vegetation**

Tidal wetlands and intertidal flats are to be construed as one of the Town of Waterford's greatest assets and the following policy shall apply:

(a) The priority use for tidal wetlands and intertidal flats is preservation, limited uses and structures may receive regulatory approval if the resource impacts are minimal, no feasible alternatives exist and the use is of utmost importance to the well being of the community.

(b) The ecological values of intertidal resources for habitat, breeding, nutrient productivity, storm water retention and pollution control are well established and as such the use of these areas should be discouraged except in extreme cases of importance. This habitat is a non-renewable resource and the eel grass is of utmost importance in the production, growth and survival of the Niantic Bay scallop larvae.

**B. Structures**

To ensure the orderly, safe, and efficient use of designated mooring areas, anchorages, fairways and other navigational areas, the following policies shall apply to new applications:

- (1) There shall be a fifteen (15) foot setback of all new structures from any designated channel, turning basin, fairway, mooring area, or anchorage in the Niantic River and Bay area and a fifty (50) foot setback from the Thames River federal channel. Existing structures which extend into the setback area may be subject to periodic removal, if required, for maintenance dredging.
- (2) No vessels at a dock permitted after the adoption of this plan shall extend into the limits of the channel, fairway, turning basin, mooring or anchorage setbacks, as delineated on the water use plan.
- (3) There shall be a ten (10) foot setback of new structures from property line extensions into navigable waters where practicable. This should not, however, be construed to deny a riparian owner's access to navigable waters. Setback requirements may be waived if some legitimate coastal and/or harbor management objective such as resource preservation is furthered.

**C. Special Regulations**

To resolve identified conflicts between harbor uses and to promote public safety, the following policies are incorporated into the water use plan:

## WATERFORD HARBOR MANAGEMENT COMMISSION

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- (1) To prohibit swimming in all designated channels and fairways as delineated on the water use plan and encourage the same to take place in designated swimming areas only.
- (2) To maintain unobstructed channels and fairways to promote safe passage of vessels.
- (3) To encourage water-skiing, swimming and boating in designated areas where safety permits.

**D. Public Access**

Consistent with the Connecticut Coastal Management Act and the Waterford Coastal Program, public access to Waterford waters should be preserved and improved together with all proposed waterfront use and development. Accordingly, the following policies shall apply:

- (1) No proposed structures or uses shall restrict existing public access.
- (2) Plans reviewed by the Harbor Management Commission in accordance with Section 22a-113p of the Harbor Management Act shall be examined for potential impacts to existing or needed public access. The provisions of additional public access in conjunction with proposed plans is encouraged and will be viewed favorably by the Harbor Management Commission. [*Italic emphasis added.*]

Date: May 16, 2018 at 9:44:59 PM EDT

To: <peterharris@yahoo.com>, <kelly817@sbcglobal.net>

Reply-To: John Starrett <john.starrett@sbcglobal.net>

Hello Peter and Pat,

I am a Waterford resident and am I have some concerns about the upcoming aquaculture project that I would like to voice at the public hearing on Thursday, May, 17, but unfortunately, I have to travel out of state to attend a funeral. I respectfully request that you read the letter below out loud into the public record at the meeting. I know it is short notice, but, if for some procedural reason, you are unable to read the letter into the record, I would appreciate it if you could let me know, and I will try to find someone else who is attending the meeting in person. Thank you in advance for your consideration on this important matter and thank you for your service on the shellfish commission.

#7

Sincerely,  
John Starrett  
132 Niantic River Road  
Waterford, CT 06385

I am reading this letter on behalf of John Starrett, who could not attend the meeting tonight. He resides at 132 Niantic River Road in Waterford and asked that his letter be read into the record.

I have several concerns I would like to voice with respect to the "Proposed policy statement on aquaculture projects in the Niantic River - Revised March 2018":

My first concern is with respect to liability: The Proposal states: "The applicant assumes liability if any third party damage occurs." How will that liability be enforced, and to what amount? Will the applicant be bonded, and if so, to what extent? Of similar concern, the proposal states, (...WELSCO reserves the right to have the applicant remove the structure prior to the project duration...). How will WELSCO ensure that the applicant removes the structures? If the applicant refuses or abandons the structures, how will they be removed, and who will pay for the removal?

A larger concern is the construction of the aquaculture structures in navigable waterways. The proposal states, "...as to placement, size, construction, etc., so as not to infringe on any navigable water..." As depicted in the nautical chart in the proposal, areas 4 and 5 would directly contradict the proposal. This area of the Niantic river is used as a navigable waterway for a wide assortment of watercraft, including recreation boaters, boaters towing waterskiers, boaters towing water tubers, kayakers, and canoes, among others. Just to be clear, the term "navigable waters" does not just apply to the channel as demarked by USGS channel buoys. In 1979, the U.S. Supreme court heard the case of Kaiser Aetna v. United States and determined what constitutes navigable waters. The tests asks whether the body of water (1) is subject to the ebb and flow of the tide, (2) connects with a continuous interstate waterway, (3) has navigable capacity, and (4) is actually navigable. Using these tests, courts have held that bodies of water much smaller than lakes and rivers also constitute navigable waters. Even shallow streams that are traversable only by canoe have met the test. Based upon this information, I respectfully request that you reject the request to implement an aquaculture structure in areas 4 and 5 as depicted in the nautical chart in the proposal because it would definitely infringe upon navigable water.

Thank you.