



# CANDLEWOOD LAKE AUTHORITY

P.O. BOX 37 • SHERMAN, CONNECTICUT 06784-0037 • (860) 354-6928 • FAX (860) 350-5611

## Minutes of Meeting August 10, 2011

### Attending:

H. Berger	Sherman
P. Schaer	Sherman
E. Hayes	Sherman
H. Mayer	New Milford
J. Hodge	New Fairfield
J. Murphy	Brookfield
W. Lohan	Brookfield
G. Dufel	Danbury
E. Siergiej	Danbury

### Absent:

M. Calandrino	Danbury
B. Kemble	New Fairfield
R. Guendelsberger	New Milford
M Toussaint	New Milford
F. Cioffi	Brookfield

L. Marsicano, CLA Executive Director  
M. Howarth, CLA Public Education Director  
F. Frattini, CLA Administrative Coordinator  
D. Vane, Chief of Marine Enforcement, CLAMP

Recorder: M. Howarth

Guests: D. Gilbert – CT Bass Federation Nation  
J & S Wodarski, CLUB-A

Howie Berger, Chairman, called the regular meeting of the Candlewood Lake Authority to order at 7:35 P.M. at Brookfield Town Hall, Brookfield, CT. He welcomed the guests.

Secretary's Report: In the absence of a Secretary, Administrative Coordinator, Frances Frattini asked if there were any changes to the minutes of July 13, 2011, Phyllis Schaer moved to accept the minutes of July 13, 2011 as written, seconded by John Hodge and voted with all in favor. Minutes have been accepted.

Chairman's Report – Howie Berger, reported on the June 20<sup>th</sup> meeting with John Shue, Chuck Burnham and Brian Wood of FirstLight Power Resources (FLPR) and the CLA delegates, Howie Berger, Bill Lohan, Phyllis Schaer, John Hodge, Harold Mayer and the Executive Director, Larry Marsicano. He noted that the meeting covered what the CLA does in relationship with FirstLight and their contribution to our budget going forward. He advised that FirstLight did give him a check for the balance of the 2010/2011 contribution. They did request that a

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meeting be set prior to the end of August to discuss future funding of the CLA. Mr. Hodge noted that it appears that FLPR has issues with the CLA as FLPR is willing to spend for projects of their choosing. He did ask that and was told by FLPR, "What has the CLA done for FLPR?" Phyllis noted that a bill for 2011/2012 would be going out to FirstLight this week. It appears that they have similar issues with all the lake authorities not just Candlewood but also Lillinonah and Zoar. They need to have a better understanding of what the CLA does that is required by the FERC license. Mr. Berger noted that the Lake Patrol costs the CLA around one hundred sixty thousand (\$160,000.) dollars per year; if FLPR does not like anything else that the CLA does there is one thing that they are responsible for and that is the recreational quality on the lake and they can contribute to the cost of the Patrol. He noted that Mr. Hodge had an eloquent submittal to FERC regarding this and withdrawing the support of the Town of New Fairfield for the SMP, also HVCEO sent a letter as well as the Towns of Sherman and Brookfield withdrawing support of the SMP. The five Towns, the CLA, the State Representatives and Senators as well as Congressman Murphy are all in agreement relative to the actions of FLPR. If by the end of August there is no commitment of restored funding the CLA will take further action. The money paid to the CLA by FLPR is a reimbursement for services rendered not a charitable contribution.

Mr. Berger noted that the CLA had done research on an "effective" deep drawdown to control the Eurasian Water Milfoil which has appeared to have worked this year – now the need for research on an "effective" shallow drawdown has been done by the CLA – Mr. Marsicano will present with his report.

Vice-Chairman's Report: In the absence of the Vice Chairman there was no report.

Treasurer's Report: Phyllis Schaer, Treasurer, noted that the audit is ongoing and as noted the bill for 2011/2012 will be going out to FirstLight. Mr. Berger went over his numbers on how the one hundred sixty thousand (\$160,000.00) dollar figure for the operation of the Lake Patrol was arrived at. It was noted that the bulk of the money is spent at the start of the fiscal year – July, August and September and if the money was not received then the approximate \$66 thousand for the operation of the patrol next May and June could cause there to be little or no patrol in those months. He did note that there are other areas in the budget that could be cut to reduce expenses should the income fall short. Should FLPR decide not to continue to fund the CLA as in the past then the Finance Committee will look at reducing expenses. Mr. Hodge noted that the money should come from the Patrol and if it is an issue it is between FLPR and DEEP (Department of Energy and Environmental Protection) not the Towns or the CLA. Without funding of 1/6<sup>th</sup> from FLPR there would be no Lake Patrol for May and June of 2012 – this is a public safety issue. Discussion on who is responsible for public safety on the lake followed. Mr. Hodge read from the CLA enabling ordinance of 1972 Paragraph #4 which states "The Lake Candlewood Lake Authority shall possess and **may** exercise all powers granted by the Connecticut General Statutes for Lake Authorities, including without limitation, powers relating to the enforcement of boating laws on said lake and such other powers as from time to time may be granted to said Authority by the legislative bodies of all member towns and by the General Statutes." He noted it says, "may". Mr. Berger read a proposed motion and it was decided that it needed to be reworded and would be brought back under Public Safety.

Executive Director: Larry Marsicano noted that his report is attached to these minutes. He reported that he met with the New Fairfield seniors today. He has been invited to speak at the Lake Lillinonah Friends of the Lake event on August 11, 2011 where DEEP Commissioner Estey will be the featured speaker. He noted that WESCON had two false positives for zebra mussels determined after sending samples to other labs that are more familiar with ZM resulting in

negative results for ZMs. He has been in touch with Lake Champlain regarding their ZM program and they also analyzed Candlewood samples concluding they were negative for ZMs as well.

Mr. Marsicano gave a power point presentation on the history of shallow drawdowns – as with the deep drawdowns it appears that to be effective they need to get the lake down by mid- to end of December and keep it down for thirty or more days – this information has been sent to FLPR but no word from them to date.

Mr. Lohan questioned the recent calcium levels in the lake – Mr. Marsicano responded that these levels are within the range, albeit the low end of the range, for Candlewood. The Housatonic River has higher levels.

Public Education Director: Mark Howarth noted his report is attached to these minutes. He advised that the ZM signs have been installed at the State ramps and one will be going up at Squantz Pond State Park soon. Signs for the communities will be available at the CLA booth at the Dragon Boat Race. The Dragon Boat Race is a week from Saturday, August 20<sup>th</sup> – volunteers are still needed for the booth, docks and to help with the teams – if interested just let him know. This year there are 18 teams up from 16 last year and the sponsorship is also up.

Public Safety: Ed Hayes – Committee Co-Chair, reported that they had met and had approved New Milford Park and Recreation’s request for a marker permit to place buoys in the area of their Town Park – (this is not a new permit request it is just that DEEP had requested they reconfigure the location of the buoys). The Sherman Board of Selectmen has appointed the POST Certified officers on the Lake Patrol as constables. They plan on inviting FLPR to ride with the patrol to see what the patrol does on a daily basis. The future meetings of the Committee will be moved to the Lake Club in Brookfield.

Howie Berger noted that as Ed Hayes and Jerry Murphy have agreed to Co-Chair the Public Safety Committee he would appoint them and ask the delegates to approve the appointment – Phyllis Schaer moved to accept the Co-Chairmen for the Public Safety Committee as noted above, seconded by John Hodge and voted with all in favor. Co-Chairs have been approved.

Phyllis Schaer moved that the Marker Permit Application for Swim Area and Speed buoys be approved per the recommendation of the Public Safety Committee – seconded by John Hodge and voted with all in favor. Motion carried, application will be forwarded to DEEP.

Howie Berger read the motion pertaining to FLPR: “The CLA has determined that without the annual contribution of FirstLight Power (equal to the same amount each of the member towns pays) the Authority will have to cut in excess of sixty thousand (\$60,000.) dollars. This reduction will come from the Public Safety Operating Budget. The Public Safety Committee will advise the Authority on *how this action will effect public safety* on Candlewood Lake in fiscal year 2011/2012, moved by Jerry Murphy and seconded by Ed Hayes. Discussion – amended the motion to read how *this action will effect cuts to public safety*. Amendment was accepted by the maker and second of the motion. The motion as amended was voted with all in favor and carried.

Watershed Management: Harold Mayer, Committee Chairman, advised they met and spoke about Zebra Mussels and FLPR monetary support. He did want to report that the Milfoil in the lake has been very good – this the second week in August and it is still not a nuisance.

Gary Dufel asked if the Asian Clam is as much of a concern as the Zebra Mussel. Mr. Marsicano noted that the Asiatic Clam is already in Candlewood, the Housatonic, Lillinonah and Zoar. Mrs. Schaer advised that the Invasive Species Task Force has tried to keep the focus on all

Invasive Species, as the recommendations are to help control the spread of all aquatic invasive species. Mrs. Schaer advised she would do more research on the Asiatic Clam and report back. Mrs. Schaer reported that the Zebra Mussel Task Force will be meeting on August 17<sup>th</sup> and over the winter they will begin meeting with Massachusetts.

Equipment/Facilities: Ed Siergiej, Committee Chairman, reported that everything is in good shape.

Public Awareness: In the absence of the Committee Chairman, Mr. Berger noted that an appeal letter will be going out in the fall. There is a program on Charter Community Access Public TV with Mr. Marsicano and Mrs. Schaer regarding the Zebra Mussels. There have been a number of articles on the lake – the PR person hired is doing a good job of keeping Candlewood in the news.

Old/New Business: Mr. Berger noted that Ed Siergiej has agreed to act as Secretary. John Hodge nominated Ed Siergiej for the position of Secretary that had been vacated by Rich Stroh, seconded by Phyllis Schaer and voted with all in favor. Mr. Siergiej is the new Secretary for this year.

Ed Hayes reported that the Town of Sherman had reconsidered contributing to the Weevil Funding and did agree to send two thousand (\$2000.00) dollars.

Mr. Berger noted that the CLA is down a number of delegates, some have resigned and others have been absent for months, he asked the delegates from these Towns to speak to their CEO's regarding replacement delegates.

With no further business to come before the Candlewood Lake Authority, Harold Mayer moved to adjourn, seconded by John Hodge. Meeting adjourned at 9:05 P. M.

Respectfully submitted,



Ed Siergiej Secretary  
Frances Frattini, Administrative Coordinator

r/b/lm

*These minutes are not considered official until they have been approved at the next regularly scheduled meeting of the Candlewood Lake Authority.*



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***Executive Director's Report  
July 8, 2011  
Larry Marsicano***

*The following report summarizes activities July 8, 2011 to August 8, 2011.*

## **ZEBRA MUSSELS**

On the morning of Sunday, July 17<sup>th</sup>, we visited the start of a fishing tournament at the Squantz Cove State Launch. The tournament was a CT Bass Federation Nation Tournament and those coordinating efforts were ensuring all participants had signed off on a form to confirm their adhering to protocols to prevent zebra mussels from entering Candlewood Lake. The CLA's tri-fold was also being distributed.

We continue to monitor for zebra mussel veligers in Candlewood, Lillinonah, Zoar, and the Housatonic River. During the week of July 25<sup>th</sup>, we reported to Delegates and FirstLight that two separate analyses for samples taken in Candlewood by WCSU were positive for veligers. Later that week we received results of analyses of the same samples from a different researcher who did not corroborate the original findings and reported that to you and FirstLight. Samples have since been sent to another independent research group out at Lake Champlain. The researchers at WCSU have also been in touch with others to understand why they got the presumably false positive results.

On Thursday, July 21<sup>st</sup>, Phyllis, George Linkletter and I taped a show for Charter Community Access Channel 21 on zebra mussels, which have been running on local community access over the last several weeks.

## **EURASIAN WATERMILFOIL**

We were asked by our Chairman to review historical drawdowns during the alternate years (not deep draw years) since the mid 1980s and determine if those "shallow" drawdowns had changed in terms of timing, depth, and duration. The purpose was to see if improvements on the "shallow" drawdown were possible, and if so, make a request to FirstLight to follow a particular drawdown format. At a meeting with FirstLight on July 20<sup>th</sup> (see below under *FIRSTLIGHT POWER SUPPORT OF OPERATING BUDGET*) they informed us that the request would need to come in before the end of the following week before decisions on drawdown are made. A letter with that request and logic behind the request was sent on July 29<sup>th</sup> to FirstLight, later to members of the drawdown Technical Committee and is attached to this report.

### ***LAND USE ISSUES***

We reviewed implementation of a buffer at the Bannon Residence at the Northwest Passway in Danbury on Monday, July 25<sup>th</sup> and have sent along approval to Danbury Land Use staff. Our comments on 21 Cedar Drive were received and we were asked to meet with the engineer onsite. That meeting also occurred on July 25<sup>th</sup>. Site plans were revised several times and included additional stormwater measures and a buffer. We will be sending along our approvals in time for the next Danbury EIC meeting on August 10<sup>th</sup>.

On August 3<sup>rd</sup>, we transported New Fairfield Land Use staff and attorney Richard Smith, along with attorneys and property owners, to Pine Island to discuss alleged violations. FirstLight has also started removing derelict docks and debris from the shores of Pine Island.

### ***WATER QUALITY MONITORING***

Water quality monitoring was performed on Candlewood Lake and Squantz Pond on July 14<sup>th</sup>. Measured water quality parameters of interest were calcium levels which ranged from 14.3 mg/L (New Fairfield site) to 15.8 mg/L (Sherman site), and was 8.5 mg/L in Squantz Pond.

### ***FIRSTLIGHT POWER SUPPORT OF OPERATING BUDGET***

On Wednesday, July 20<sup>th</sup>, a delegation from the CLA (Howie, Phyllis, Harold, Bill and Larry) met with representatives from FirstLight (John Shue, Charles Burnham, and Brian Wood) to discuss their policy change regarding funding of the CLA. At that meeting they presented a check for the balance of their 2010/2011 fiscal year contribution. They had not determined if or how they would continue support in future years, including the current fiscal year. They viewed their contribution as a charitable donation; conversely the CLA views the contribution as something they should consider a line item in their budget. Another meeting is tentatively to take place toward the end of August.

Several of the CLA member municipalities have submitted to FERC retracting support or confirming not supporting the SMP due to the recent FirstLight policy decision. We attended a special meeting of the HVCEO on July 21<sup>st</sup> where they agreed to submit a letter to FERC withdrawing SMP support as well.

### ***OTHER***

We presented to over 20 members of the business community from the Greater Danbury area as part of the Leadership Danbury program at Down the Hatch Restaurant on Thursday, July 28<sup>th</sup>. We spoke on Candlewood Lake, the CLA organization, and current issues.



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July 29, 2011

Mr. John Shue  
FirstLight Power Resources  
20 Church Street, 16th Floor  
Hartford, CT 06103

**Re: 2011 – 2012 Shallow Drawdown**

Dear John:

As promised at our meeting on July 20<sup>th</sup>, I'm sending along our observations on historical "alternate year" drawdowns or the shallow drawdowns that were conducted in winters between the years when deep drawdowns were performed. Based on these observations, we are recommending some parameters for the upcoming shallow drawdown in the hopes you can weigh those against your financial models and let us know if FirstLight can match our recommendations that are contained in the last paragraph.

The attached Figures 1 – 6 will help in conveying some of our observations and bases for recommendations. The widely accepted premise is that drawdown efforts between 1984 and 1995, both deep and shallow drawdowns, collectively provided better control of Eurasian watermilfoil than those efforts following 1995. There is some data to support that collected by CL&P found in Attachment A. There is considerable anecdotal information and public support on this, with the available science showing that an effective draw down must happen before the end of the year and before significant ice formation and snowfall to allow freezing of the milfoil roots.

The following paragraphs provide background data for you:

Note in Fig. 1 the consistency in how the shallow drawdown was performed from 1984 thru 1990. A minimum depth ranging from 420 to 423 feet below sea level was achieved well before December 31<sup>st</sup> of each alternate year. In some instances lake level

went down even lower after January 1<sup>st</sup> and in most instances lake level began to climb back up by around January 30<sup>th</sup>. Similar steps were also taken in the 1995-1996 and possibly the 1993-1994 shallow drawdowns, although lake level data is missing in the latter of the two (Fig. 2). The other drawdown that occurred during an alternate drawdown year between 1991 and 1996 was the 1991-1992 drawdown and that was characteristic of an effective deep drawdown (see Attachment A).

Alternate year drawdowns from 1996 thru 2008 (Figs. 3 & 4) are far more variable. Some reached the target depth ranging between 422 and 424 feet below sea level between December 1<sup>st</sup> and 30<sup>th</sup> but the lake began filling shortly afterwards (see Nov 97-May 98 drawdown in Fig. 3; and Nov 05-May 06 drawdown in Fig. 4). Others maintained the target depth for the traditional period of time, but don't reach the target depth until well after December 31<sup>st</sup> (see Nov 99-May 00 and Nov 01-May 02 drawdown in Fig. 3; and Nov 03-May 04 drawdown in Fig. 4).

Recent research has indicated that temperatures below freezing are required to kill the root stock left behind by overwintering Eurasian watermilfoil plants. Ice or snow over exposed lakebed can insulate the root stock and prevent conditions necessary for killing the roots from occurring. Observations of temperature show that periods of sub-freezing conditions do occur in January (Fig. 6). We believe this combination of factors explains why deep and shallow drawdowns conducted before 1995 were more effective. Target depths were reached by mid to late December and maintained there for approximately 30 or more days in the alternate years, and for approximately 60 days in deep drawdown years, thereby increasing probabilities of having the necessary subzero temperatures without snow and ice cover to protect root stock.

#### CLA recommendations:

Our recommendations, therefore, are to pattern the upcoming shallow drawdown after those performed from 1985 thru 1990: A target depth of 423 feet above sea level should be reached before December 30, preferably by mid December, and maintained there until at least the end of January. (The last drawdown performed during the alternate year, 2009-2010, came close to meeting those parameters with the exception that it never reached or went below 423 feet above sea level as shown in Fig. 5). Alternately, the water level could be lowered to approximately 424 feet above sea level by mid December and by another foot later in the month with the onset of the first cold period to take advantage of a peak power demand period.

We consider it to be in our collective best interests to achieve a shallow draw down this year in accordance with these scientific findings. The summer of 2010 was the worst year on record for milfoil in the Lake, recreational uses were impacted and safety became a concern. Much was written in the newspapers about the deplorable conditions and the CLA worked hard with your predecessor to get a proper deep draw down last winter. This year, we have seen some positive results, but the recreational

users remain vigilant that the best possible shallow draw down be put in place this year to continue this progress.

We appreciate your time in getting this information to those appropriate staff who would determine if our recommendations can be implemented as stated.

Kind regards,

CANDLEWOOD LAKE AUTHORITY

*Larry Marsicano*

Larry Marsicano  
Executive Director

Cc: Howie Berger, CLA  
Candlewood Lake Drawdown Technical Committee Members

### Lake Elevation Levels Between Deep Drawdowns 1984 - 1990

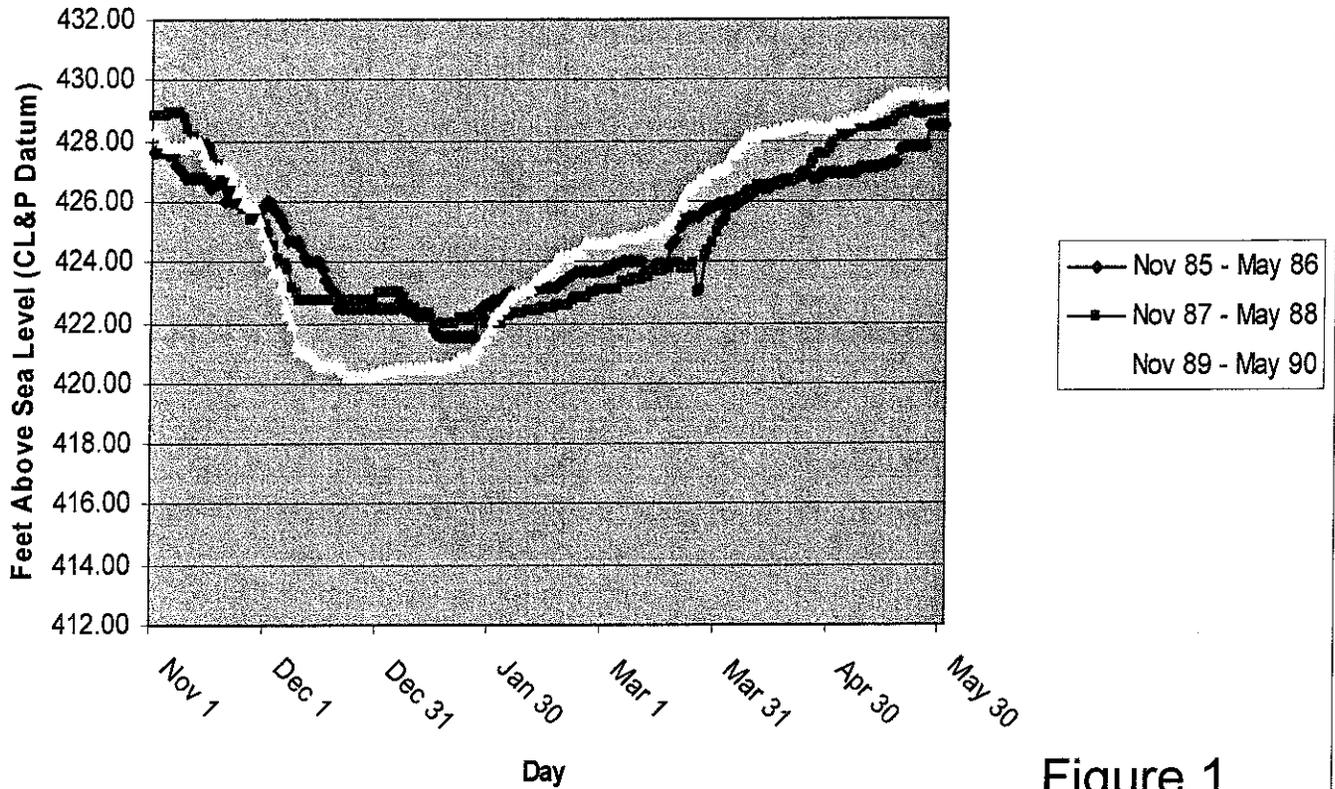


Figure 1

### Lake Elevation Levels Between Deep Drawdowns 1990 - 1996

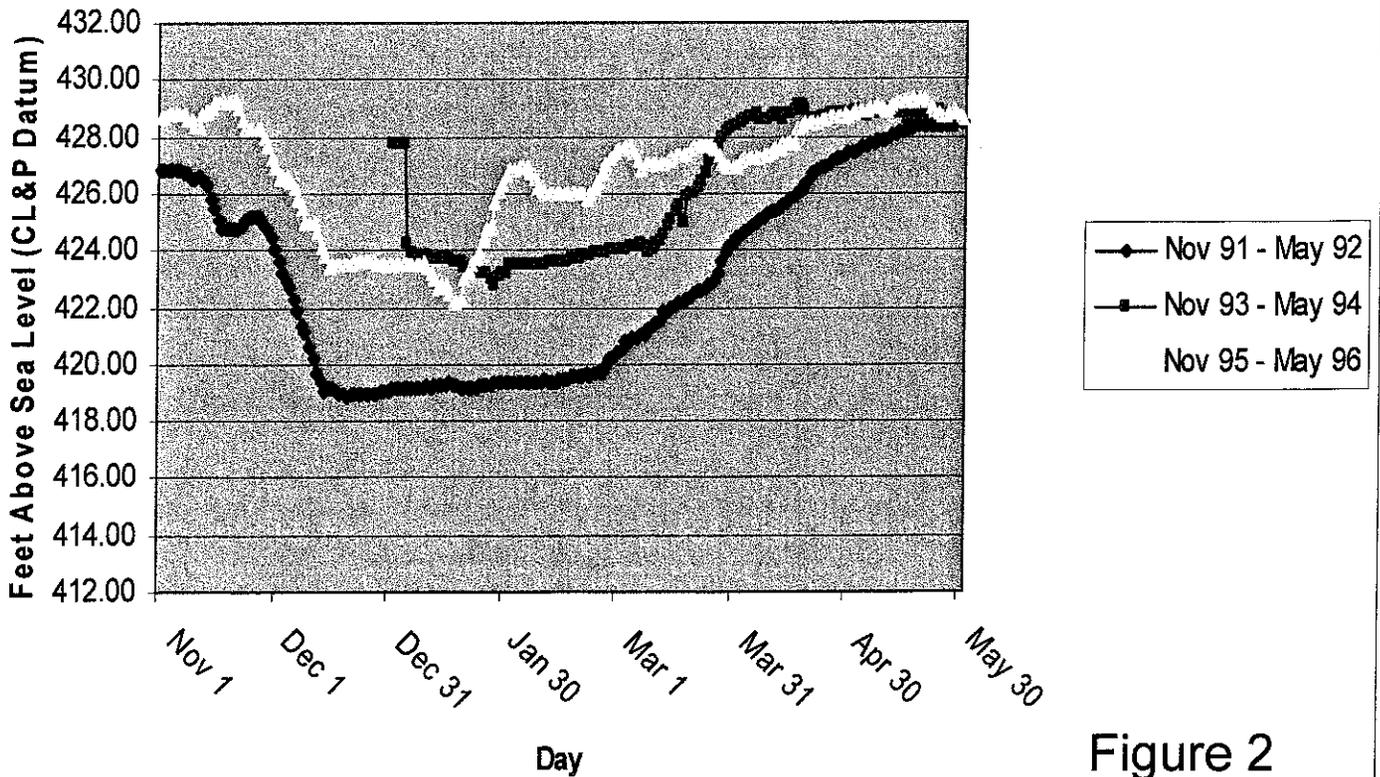


Figure 2

### Lake Elevation Levels Between Deep Drawdowns 1996 - 2002

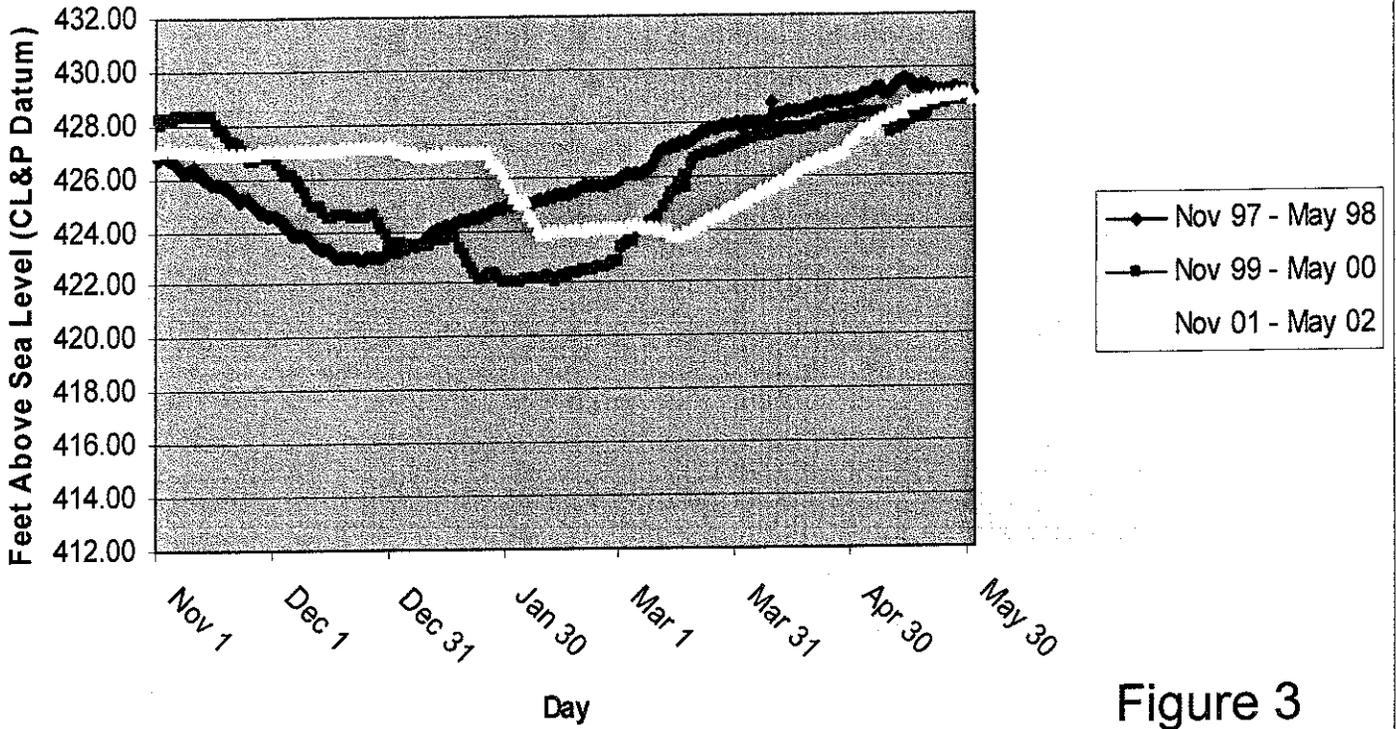


Figure 3

### Lake Elevation Levels Between Deep Drawdowns 2002 - 2008

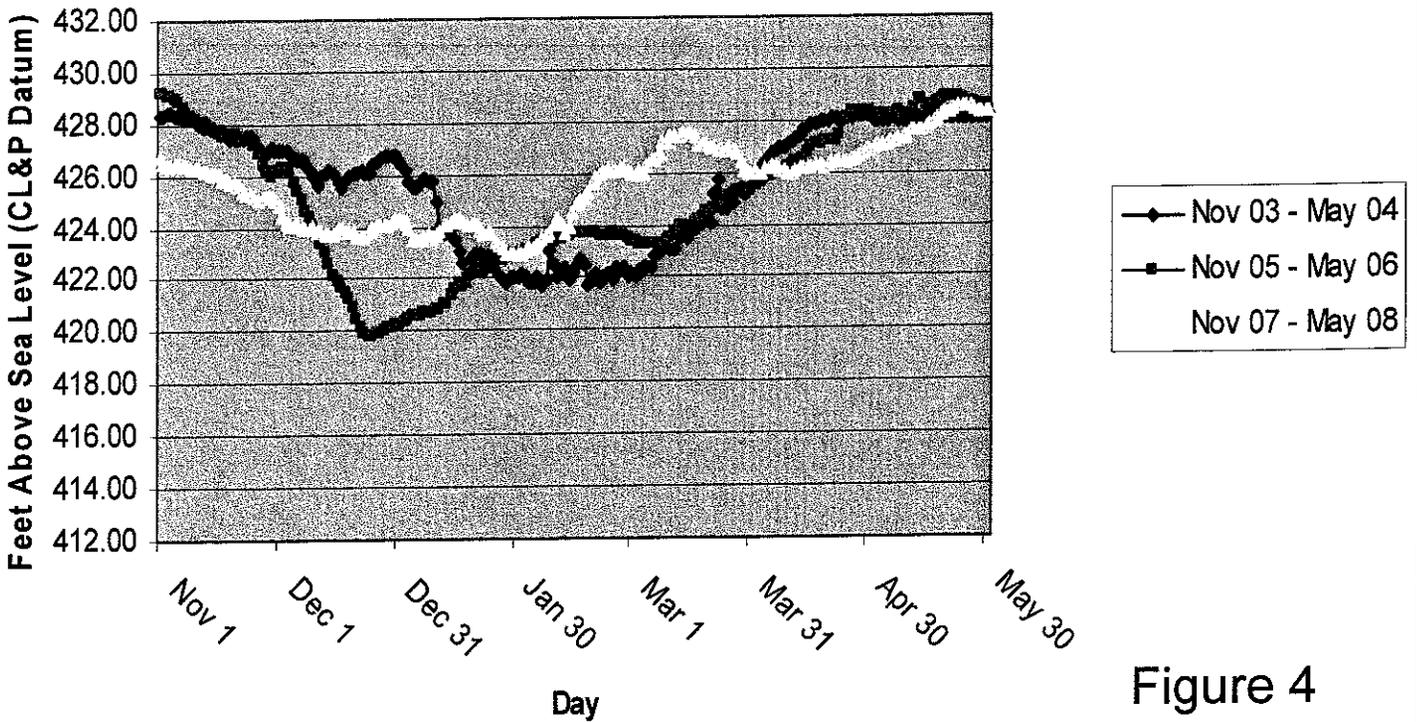


Figure 4

### Lake Elevation Levels Between Deep Drawdowns 2008 - 2010

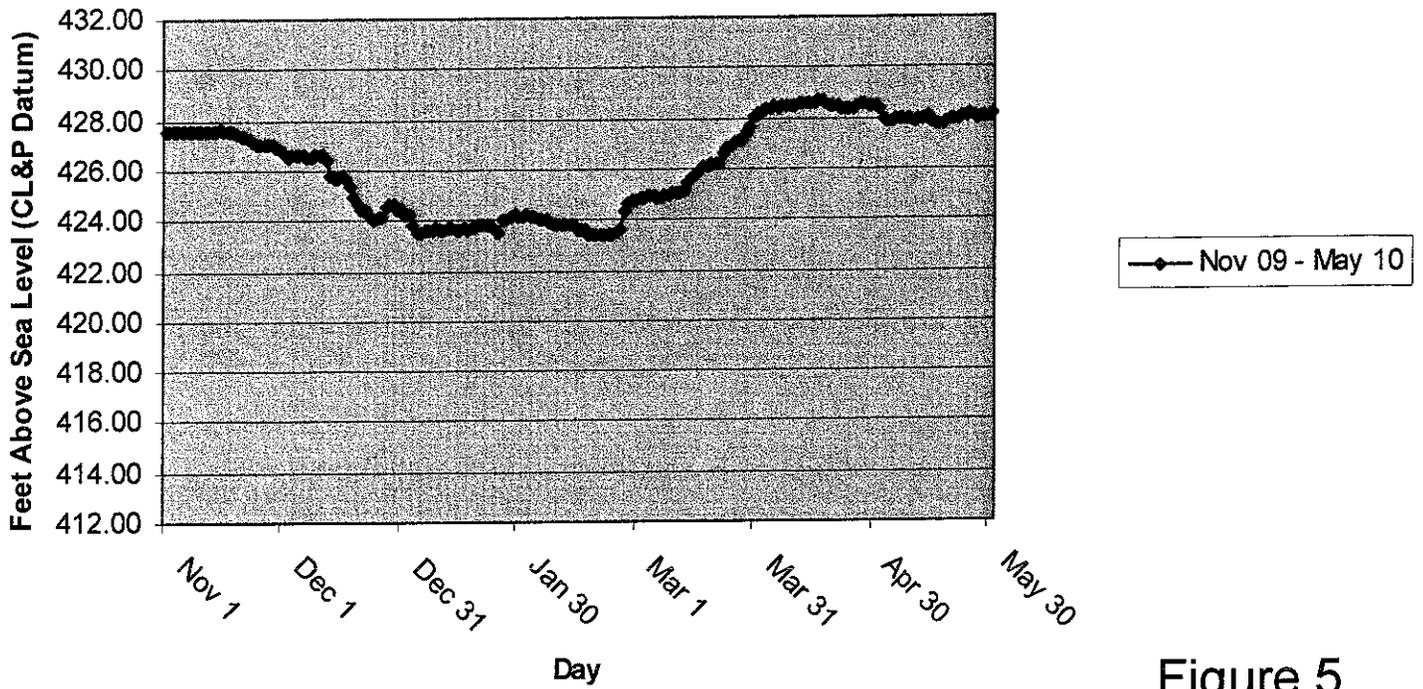
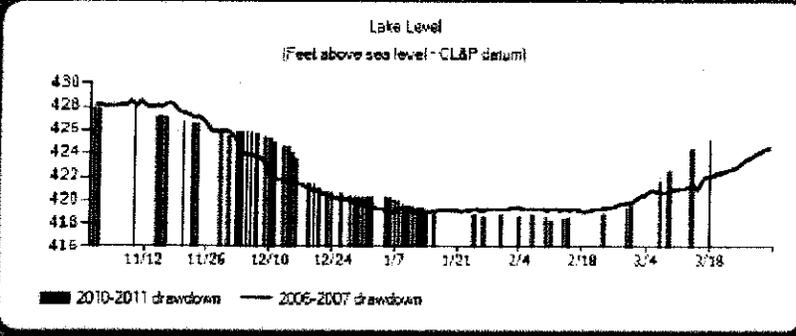


Figure 5

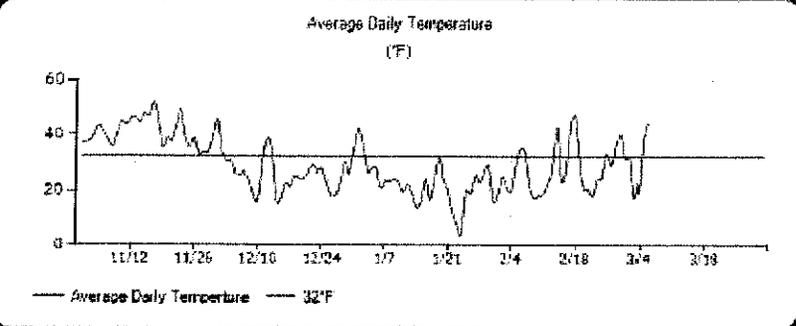
### Candlewood Lake Drawdown Dashboard



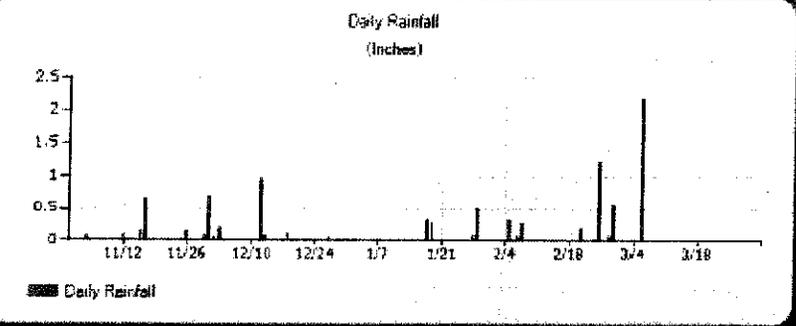
Lake level is determined by calling FirstLight Power Resources' automated Hydro Information phone at (74337). The 2006-2007 lake levels have been plotted as a reference and have also been provided by FirstLight Power.

Figure 6. Data collected from November of 2010 thru March of 2011 and tracked on the CLA website. Panels from top to bottom are:

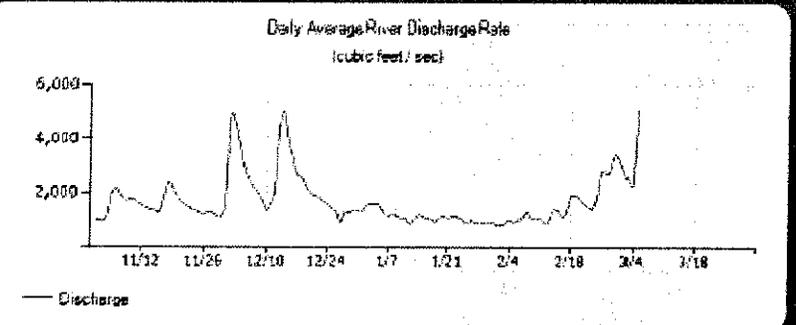
- a) Lake level
- b) Air temperature
- c) Rainfall
- d) Housatonic River discharge rate
- e) Snowfall



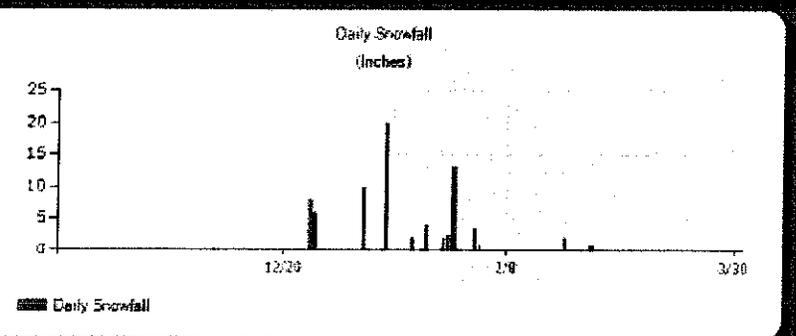
Daily average temperature is determined from data provided by The Weather Center at Western Connecticut State University.



Daily rainfall is determined from data provided by The Weather Center at Western Connecticut State University.



Daily average discharge rate data is from the online database of the USGS from the Gaylordville, CT monitoring station on the Housatonic River.



Daily snowfall is determined from data provided by The Weather Center at Western Connecticut State University.



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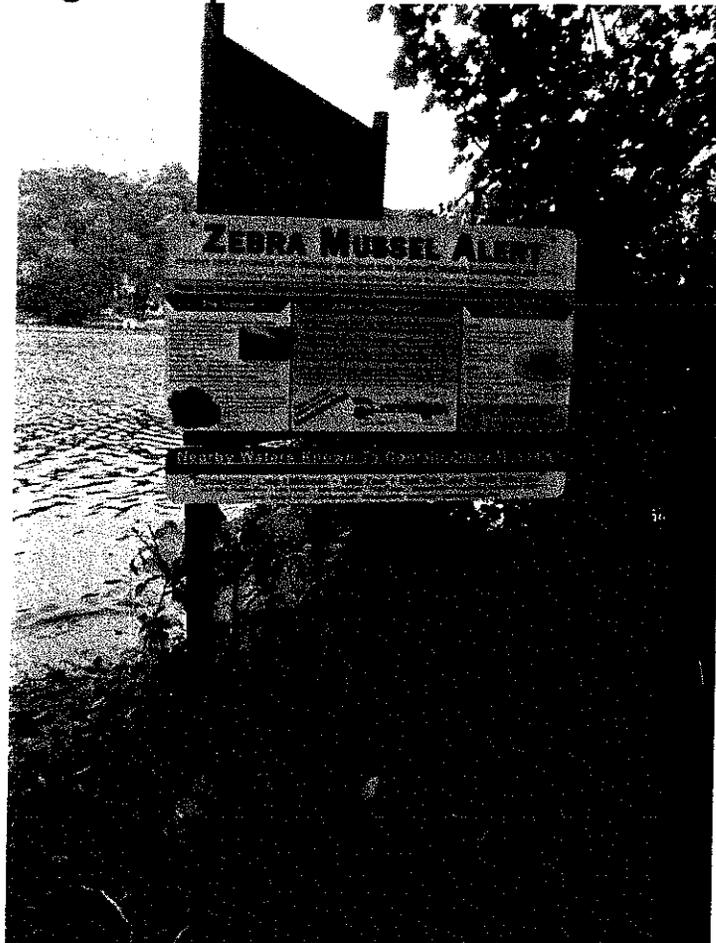
**August 10, 2011  
Public Education  
Mark Howarth**

## Zebra Mussels:

### **Zebra Mussel Task Force:**

We have installed two more of the large 48" x 30" zebra mussel signs at Candlewood's two State ramps. The installation of these larger signs, with permission from the CT DEEP, will bring much-needed awareness to users at our State ramps.

### **Sign at Squantz Cove Launch**



## Sign at Lattin's Cove Launch



### CT BASS Federation Nation

We visited a CT BASS Federation Nation tournament, held out of Squantz Cove, on Sunday July 17<sup>th</sup>, to see first-hand their zebra mussel self-certification process. Accompanying the CLA was George Linkletter, who wrote an article about their process.



### Dragon Boat Race:

2011 Dragon Boat Races are less than two weeks away. We have been doing a lot of planning and preparation for the event including hosting a number of practices already with many more to come in the next week and a half. The practice boat arrived

much earlier this year (late July) which allowed us to increase the number of practices we made available to the teams.