

Monthly Board of Directors Meeting September 15, 2009

The Bay Tree Property Owner's Association, Inc Board of Directors monthly meeting was held at the Club House on Tuesday September 15, 2009. The following Board Members were present: John Shaw, Charles Atkinson, Roy Dew, Charles Massey and Clark Valentiner. Others were Tish Herrmann, POA Clerk, Steve Lewis Property Manager and POA members, Jim Crayton, Dennis Ford, Steve Yarborough, Maurice Lane, Michael Dilello, Jr Ridour, Clark Wooten and Hilda Ingram.

President Charles Atkinson called the meeting to order at 7:04 pm at which time everyone was welcomed to the meeting. President Atkinson expressed his appreciation for everyone's attendance.

Roy Dew give the invocation.

President Atkinson distributed the agenda. (Attached as Exhibit A)

Approval of August 11, 2009 minutes (Attached as Exhibit B)

John Shaw presented the minutes. There were no corrections.

Approval of Financial Report (Attached as Exhibit C)

Treasure Valentiner presented the August financial report.

Property Manager's Report (Attached as Exhibit D)

Steve Lewis presented the monthly report.

Clerks Report (Attached as Exhibit E)

POA Clerk Tish Herrmann presented her monthly report.

Approval of Consent Items

In order to expedite the meeting, members reviewed all reports prior to the meeting. President Atkinson asks for any comments or questions regarding any of the reports. There being no other comments a motion was made by John Shaw seconded by Roy Dew to approve the reports as presented. The motion was unanimously approved.

POA Member's Concerns

1. Roger Wright had emailed the board about the lake level but could not be present because of work. President Atkinson asked POA members for comments several expressed their concerns. Charles Massey presented a Draft memorandum form the state. (Attached as Exhibit F)
2. Charles also presented a study done by an Environmental Group from Wilmington NC that was hired by Steve Jones to study the problem. (Attached as Exhibit G)
Both studies believe that the Lake has not recovered from the 07 drought.
One study referenced the lack of data for Bay Tree Lake and suggested some type of automatic rain data and lake level device. Clark Wooten ask the Board to look into some type of measuring devices.
3. There was no one to represent the group that was interested in the Board considering A swimming pool so this item was tabled till the next meeting.

Business

1. Lake and Canal Issues:

- Steve Lewis reported that 25 carp had been released in to the area affected by grass problems.

2. Road Issues:

- President Atkinson gave an up date on the culvert work on NC 41 and the discussion with the engineer that help with the roads in Bay Tree. (Attached Exhibit H)

3. Policies:

- Jim Crayton presented the first draft of the Architectural Review Committee for the Board to review and respond to the Committee.

4. Buildings and Grounds Issues:

- a. Charles Atkinson ask the Property Manager go back and get additional cost for the recreation and exercise room and bring it back the Board.
- b. President Atkinson stated that the engineer would give us a report of items that need to be addressed on the Bay Tree streets.

5. Security Issues:

- α. Dennis Ford stated that Four County was waiting for us to get the building in place before setting the polls for the lights and cameras. After discussion by the Board a motion was made by Roy Dew seconded by Clark Valentiner that a building be purchased and installed. The motion carried. The building will house equipment and provided much need storage.

6. Other Issues:

- Thanked The Fire Department for another successful Labor Day Meal.
- A motion was made by Roy Dew seconded by John Shaw that Steve Lesane be given \$200 for coordinating the gate security. The motion carried.

7. Executive Session:

There was no business to discuss.

8. Adjourn:

With there being no other business, a motion was made by Clark seconded by Charles Massey that we adjourn. Motion carried. Adjournment was at 9:02pm.

Respectfully submitted,
John Shaw
Secretary
Bay Tree POA

BAY TREE LAKES Exhibit A
PROPERTY OWNERS ASSOICATION

BOARD OF DIRECTORS MEETING
TUESDAY, September 15, 2009

Call to Order and Welcome

Charles Atkinson

Invocation

Roy Dew

Presentation of Consent Agenda Items:

1. Prior meeting's minutes (August 11, 2009)
2. Treasurer's Report (Month of August 2009)

3. Property Manager's Report
4. Clerk's Report

John Shaw
Clark Valentiner

Steve Lewis
Tish Herrmann

POA Member's Concerns

1. Roger Wright's email regarding lake levels

2. Petition regarding installation of swimming pool

Roger Wright
Charles Atkinson

Business

1.Lake and Canal Issues

- a. Report on conversations with State Park(Status)
- b. Status and future plans to address grass & floating debris in canals
- c. NC HWY 41 drainage pipe replacement (3)

Charles Massey

Charles Atkinson

2.Policies

- a. Architectural Committee Review (Committee Report)

Jim Crayton

3.Buildings and Grounds Issues

Steve Lewis

- a. Play ground sand
- b. Recreation Room Renovation Plan
- c. Hand Rail for Clubhouse front steps
- d. Review of roads and streets project

Steve Lewis
Steve Lewis
Charles Atkinson

4. Security Issues

- a. Status of security measurs for storage area

Dennis Ford
Steve Lewis

5. Other Issues:

- a. Labor Day Pig Pickin'

BTLVFD

Executive Session: Immediately following board meeting to discuss personnel issues and potential legal issues.

Adjournment

Bay Tree Lakes Property Owners Association
Profit & Loss
 August 2009

	<u>Total</u>
Income	
Non-Profit Income	
Dues	4,192.93
Gate Access	355.00
Misc. Income	1,180.00
Mowing Income	580.00
Rental	200.00
Roads	<u>1,656.00</u>
Total Non-Profit Income	8,163.93
Total Income	\$8,163.93
Expenses	
Building cleaning	<u>69.00</u>
Cost of Labor	
Clerk	500.00
Guard	1,120.00
Property Manager	<u>1,750.00</u>
Total Cost of Labor	3,370.00
Funds transfer	15,230.00
Grounds	
Mowing & cleaning	880.00
Total Grounds	880.00
Insurance	750.00
Office Expenses	676.79
Bank Charges	8.95
Telephone/Internet	214.15
Web site	<u>129.90</u>
Total Office Expenses	1,029.79
Repair & Maintenance	
Canals	<u>375.00</u>
Total Repair & Maintenance	375.00
Utilities	
Electricity	839.03
Total Utilities	<u>839.03</u>
Total Expenses	\$23,102.82
Net Operating Income	\$ -14,938.89
Net Income	\$ -14,938.89

PROPERTY MANAGER'S REPORT FOR AUGUST 2009
Exhibit D

Clubhouse:

1. Omega Soft Corporation checked the fire alarms and camera system – all is OK
2. Bids for rec room renovation pending

Mowing:

1. Completed the lot mowing survey

Canals:

1. Carp (25) were placed in the Spring Branch Canal
2. Lilies were removed in canal

Trailer Storage:

1. Received no information from Four County Power about placement of light poles
2. Bids on storage building received

Entrance Gate:

1. Southern Time and Equipment replaced belts, cleaned and serviced front gates
2. Gates installed behind office area and on Hwy 41
3. Yellow gate on Hwy 41 has been re-locked
4. New file cabinets have been delivered to the guard shack
5. Cleaned and washed entire outside of the guard shack

Clerk's Report for August

Exhibit E

From the Clerk September 15, 2009

Outstanding Balance August 31, 2009:	\$26,487.18
Credit Balance August 31, 2009:	\$7,256.22

No lots reported sold in August 2009

Water Levels at Bay Tree Lakes

Exhibit F

DRAFT MEMORANDUM

Date: August 17, 2009

To: James Sessoms

From: Jean Lynch

CC: Brian Strong, Angelia Allcox

Subject: Water Levels at Bay Tree Lake

This memo will serve to update you on what I have been able to find out about possible causes of the low lake levels at Bay Tree Lake, after our site visit to Bay Tree Lake on May 28 and subsequent discussions with Jeff Bruton and Nat Wilson of the Division of Water Resources. The short answer is that the site visit and the lake level data that you have collected gave us a starting point and some ideas about possible reasons for the lower levels, but we need more information to get a better idea of the extent to which different factors are contributing to the problem. Nat and Jeff are working on how to evaluate some of the possible hydrologic problems and will be working with us to gather and analyze additional information.

To review:

On May 28, 2009, staff from the North Carolina Division of Parks and Recreation (Brian Strong, Jean Lynch, and James Sessoms) and the North Carolina Division of Water Resources (Jeff Bruton) visited Bay Tree Lake to investigate complaints of low lake levels in the lake. On May 27 the level had been measured at 16 inches below normal. Residents of the Bay Tree Lakes housing development have expressed concern that the lake is taking longer than it should to recharge, and that water may be being diverted from the lake by a culvert that runs under a nearby road.

The area was assessed by an on-the-ground inspection of the area to look at potential causes of hydrologic disturbance; examination of topographic maps that would help explain drainage patterns; review of similar complaints made at White Lake in the 1980s; and looking at a small amount of lake level data that was available for Bay Tree Lake in recent years.

It is possible that the low lake level is due to the recent prolonged drought and a slow recovery from it. In 2007 and 2008 the Southeastern coastal plain experienced low rainfall and a severe drought. In July 2007 the lake level was recorded at 23 inches below normal. Lake level data is not available for 2008, but water levels were far below normal in bay lakes across the region. In May 2009 the lake level had risen to 16 inches below normal. Lake Levels fell again in June and were recorded at 22 inches below normal. According to Nat Wilson, although there has been more rain this year than in the past two years, rainfall has been lower in certain localized areas, and there is some evidence that the area near Bay Tree Lake may still be in a drought.

Residents of the area have expressed concern that White Lake and the canals have recovered from the drought but Bay Tree Lake has not. However, White Lake has a different contributing watershed than Bay Tree Lake, is 30 percent smaller in surface area than Bay Tree Lake, has a smaller basin to fill, and may experience less evaporative loss and different precipitation amounts than Bay Tree Lake. In addition, while Bay Tree Lake was 23 inches below the mean in July 2007, White Lake was not as low, with June 2007 lake levels recorded at 9 inches below the mean. Differences in local precipitation and evaporative loss may explain the differences in recovery time of the two lakes. As a report from hydrogeologist Richard Brockman of the Division of Water Resources stated in 1989, "Each lake [Bay Tree and White Lake] has a gradual recovery time after dry periods, which may require three or more years of normal-to-high rainfall before normal lake levels are reached."

While it's possible that the low lake levels are due to the drought, there are a number of hydrologic disruptions in the vicinity of Bay Tree Lake that may be negatively affecting hydrology and recharge. Some of the potential problems noted are:

1. The culvert under the road may be diverting the canal water from the Bay Tree watershed.
2. The dredging and conversion to open water of Horsepen Bay, which was once a vegetated Carolina Bay, may be serving to retain and evaporate water that once contributed to the water level in Bay Tree Lake.
3. The canals dug by the housing development on the lake may serve to retain recharge water, preventing it from reaching the lake and/or allowing it to evaporate before it can recharge the lake.
4. The historic draining and dredging of peat from the bottom of Bay Tree Lake could have affected the clay layer that is believed to separate surface water from groundwater in the lake.
5. There could be another, as yet unnoticed, water diversion affecting the lake levels.

Many of the potential culprits named above have been in place for some time, and it's not clear why impacts would just be showing up in recent years. The DWR staff have said that they will continue to work with us to try to determine which of the factors discussed above are contributing to the low lake levels. They are working out some methods for data collection and analysis. In the meantime, I recommend the following:

1. Keep in mind that it may take several years of normal rainfall for the lake level to recover from the recent drought.
2. The staff at Bay Tree Lake should continue to take water level readings at

least twice a month, and preferably on the same two days each month (for example, the 15th and 30th of each month), so we can see how the lake level changes over time.

- 3. I will continue to work with the Division of Water Resources to find out what the best approach would be to exploring the impacts of the hydrologic disturbances discussed above. One thing they have recommended is that we do a thorough examination of the lakeshore to see if there are any additional water diversions, canals, or pipes around the lake that we haven't been aware of.**
- 4. I understand that community members have discussed somehow adding water to the lake. This would, of course, be illegal.**

Please let me know if you have any other ideas about how we might approach the problem. I'll let you know what DWR and I come up with in terms of a plan for the study, and we will need you to help us gather additional information.

Bay Tree Lake Study

Exhibit G

August 28, 2009

Memorandum To: Steve Jones

From: Rob Moul, Environmental

Consultant Subject: Bay Tree Lake

Study Executive Summary

In follow up to your request for research and a report regarding the lake water level question at Bay Tree Lake, please see the enclosed report. This report summarizes the variables and reasons we were able to identify and examine for the lower lake levels experienced over the last 2 to 3 years.

We performed the enclosed 30 year data set analysis of the rainfall data and its comparison to area-wide lake levels (Bay Tree Lake, White Lake and Singletary Lake, primarily). We concluded that the predominant reason lake levels are down is due to drought conditions occurring during the past 3 years. Essentially, it took 3 years of lower than normal rainfall to drop the lake to its current level.

This is certainly extreme in the context of 10 or 20 years. Nonetheless, our study and our experience would leads us to the conclusion that extended periods of well below normal rainfall is not especially unusual over a period of 30 years or

more. Combinations of rainfall and the migration of surface and sub-surface water tables can ebb and flow: and, in the context of shorter timeframes, can seem extreme.

This report also recognizes that no two Carolina Bays are alike and most contain only a fraction of their land mass as aquatic resources. Therefore, one must be measured in comparing one to another when looking at ordinary water levels and their distinct hydro-periods which are dependent on highly variable rainfall events.

In any inhabited area, extreme high water levels are generally controlled with some form of drainage. However, in natural bodies of water, the extreme lows are not as consistently managed as it requires some supplemental intervention. Generally, water levels such as those in the Bladen Lakes are restored only after extended heavy rainfall events such as tropical depressions and prolonged winter storms. Barring any restoration management, recovery of the lake levels is likely dependent on an increased rainfall. We have not seen extensive enough rainfall to offset the protracted periods of insufficient rainfall but at some point that would be the expectation.

Other potential lake lowering variables we discussed involving historic perimeter ditches, by-pass outlets, ground water wells, and adjacent farming operations were examined. Comparatively, in our estimation, the volume of water involved relative to perimeter activity and fluctuations in ground water wells, is having a relatively minor impact on the situation. And, we are comfortable in this assessment particularly since these past management actions were ongoing when lake levels were historically high. We cannot completely dismiss these past land use variables but they appear to play minor roles in creating the present lake levels.

Finally we made some recommendations regarding the potential for storm water redirection, existing canal water, and deep ground water pumping. Making these sources available to the lake directly and through adjacent wetlands in cooperation with the State Park staff could alleviate the issue now and as necessary in the future.

HWY 41 Culvert Project

Exhibit H

August 24, 2009

NC HWY 41 Culvert Project

Called the North Carolina Department of Transportation Office in Elizabethtown (White Lake) regarding the replacement piping project on NC 41 near Bay Tree Lakes. I spoke with Mr. Matthew Edwards (910-862-3396), who advised the construction project had actually begun today. I explained to him our concerns regarding the project as it potentially related to the water level in Bay Tree Lake.

Mr. Edwards informs the NCDOT had originally planned on replacing the existing culverts with 78" which would increase the potential flow area by additional 20 percent as mandated by Corp of Engineers. As a result of our conversations last March, the NCDOT redesigned the project Mr. Edwards referred me to District Engineer, Mr. Drew Cox in the Whiteville District Office. (910-642-3760)

Mr. Cox confirms the DOT in fact dramatically changed the design based on our concerns expressed in the spring of this year. First, diameter of the pipe was reduced from the original 78" to 64" secondly, the pipe was placed in the bottom of the existing stream bed, and a one foot weir was installed in the inlet end of the culvert. The Corps of Engineers reviewed the project and granted the permit for the project based on the changes made by NCDOT.

Mr. Cox explained they had to make the repair due to the deterioration of the existing pipe under the highway. He further stated two other small drainage pipes crossing NC 41 would be replaced in the days following. These are surface water drains to remove water from the ditches along NC 41 to prevent standing water on the highway. I believe he stated 15" piping.

August 31, 2009

Contacted Richie (young engineer who helped with the road project) to inspect the drainage culvert on NC 41 during the final phase of construction

and while he was at Bay Tree to look at the roads after one year and make any recommendations we should consider.

We should have a formal report of his findings in a few weeks, but basically he stated:

- NC 41 project was a good compromise; looks like elevations are very close to the original elevations (by sight) very little disturbed up or down stream of the culvert. Stated the DOT does not usually install weirs on the culverts.**
- We did a good job on the roads, some ponding in a few spots; few spots he recommends additional fill to widen the soil area adjacent to the street and or walking path. Safety as well as, prevent undermining of the structure.**