# BEAR LAKE MEWS Preservation Association

The Newsletter of the Bear Lake Preservation Association, Inc. • April 2012

# Year-Long Nutrient Study and the Top Recommendations for Bear Lakes<sup>1</sup>

By Margaret Sullivan Bundy



20 years of Lakewatch data collected by volunteers sampling on the Bear Lakes was used in the recent Nutrient & Hydrologic Study; Margaret Bundy holds a phosphorous & nitrogen nutrient sample recently collected from Cub Lake.

The Bear Lakes (Big Bear, Little Bear, Cub, and Asher) are all part of the Wekiva (Wekiwa) Basin. The lakes discharge into the Little Wekiva and ultimately into the Wekiva River. Seminole County reports there is an active Basin Management Action Plan (BMAP) being developed by the State of Florida for the Wekiva River. Because of this and its priority, the county was able to justify funding for the year-long nutrient study to identify the sources of surface and groundwater impacts from the watershed. This important study was totally funded by Seminole County without any state or federal funds.

At the general Bear Lake Preservation Association (BLPA) meeting held on November 15, 2011, Dr. Harvey Harper presented the final analysis of the year-long nutrient study of the Bear Lakes. The study was conducted by Environmental Research and Design (ERD), for Seminole County, which included the water quality of the inflows, outflows, groundwater, rainfall, and evaporation. The study also shows us the specific levels and sources for all nutrients (nitrogen and phosphorous) entering each of the Bear Lakes. The following are the specific issues and recommendations from the year-long study.

### TREATMENT OF STORMWATER INPUTS:

- Construct treatment systems of Big Bear, if feasible, for subbasins 1, 6, and 10. Explanation of sub-basins in the report for Big Bear: Sub-basin 1 is the "Playa Way drainage ditch inlet" (76.9 acres of watershed); Sub-basin 6 is the inlet at the tip of Paradise Point off of Cecelia Dr. (12.66 acres of watershed), and sub-basin 10 is the Balmy Beach inlet by the PP Community Picnic Lot (75.62 acres of watershed);
- Correct deficient pond construction of Little Bear for subbasin 1. Explanation of sub-basin described in the report for Little Bear: Sub-basin 1 is the area south of Jessica Dr. to the RR right of way (51.31 acres of watershed and Bowles Pond);
- Connect sub-basin 1 of Asher to existing wet detention pond for treatment of sub-basin 2. Explanation of sub-basin 2 in the report for Asher: Sub Basin 2 is the subdivision to the west, Lynwood Ave. & Curtis Dr. to Martex Dr. (13.55 acres of watershed);
- Recommend use of curb inlet baskets and increase street sweeping (surrounding all Bear Lakes).

**REAR YARD BERMS AND SWALES:** Construct berms and swales along all developed shoreline areas.

**VEGETATED SHORELINES:** Establish natural shoreline vegetation in all non-exempt shoreline areas within 3-5 years.

**INTERNAL RECYCLING/GW SEEPAGE INPUTS:** Conduct alum treatment to control internal recycling and remove phosphorous from seepage inflows.

**LAWN MAINTENANCE ACTIVITIES:** Develop a strong ordinance which strictly prohibits discharge of yard waste or placement of fertilizers onto impervious surfaces.

**PUBLIC EDUCATION:** Establish a comprehensive public education program to inform residents of link between watershed activities and water quality.

**BOATING:** Restrict normal boating to areas greater than 10 feet and enhanced wake boating to areas greater than 15 ft deep; idle speed in all other areas.

# Congratulations to the 2012 Elected Officers

Dr. Jay Goebel Nancy Dunn Margaret Bundy Mark Leavitt

Officers serving their second term are: Bill Houston Bob Shields George Helm Corrie Hungerford Debbie Davenport Judy Ihrig Catherine Heideman

# **Calendar of Events**

April 17	Board of Directors Meeting
April 24	General Membership Meeting St. Andrews Presbyterian Church, 7:30 pm
August 21	Board of Directors Meeting
September 22	Annual BLPA Community Picnic
October 16	Board of Directors Meeting
September 13	Board of Directors Meeting
November 13	General Membership Meeting St. Andrews Presbyterian Church, 7:30 pm
December 8	

For committee meeting dates, please contact one of the Board members. The Ecology Committee meets the 3rd Thursday of each month at 7:00 p.m. For information, contact Bill Houston at 407-721-0219.

### www.blpa.net

Welcome to the Bear Lakes Watershed where there is no prize for the greenest lawn. Fertilizers turn the lakes green too. Help keep our lakes swimmable! Be responsible, talk with your lawn service company about over fertilizing.





Officers

Committees	
Secretary	George Helm 407-808-2089
TreasurerCorr	ie Hungerford 407-947-2901
Vice President	Bob Shields 321-354-4449
President	Bill Houston 407-721-0219

#### Committees

Ecology	Bill Houston
	407-721-0219
Lakewatch	Nancy Dunn
	407-295-6335
	Jan Brown
	407-295-6739
	Margaret Bundy
	407-523-1064
Membership	Debbie Davenport
	407-294-8813
Newsletter	Judy Ihrig
	407-292-4632
	Margaret Bundy
	407-523-1064

### Directors

Dr. Jay Goebel	.407-295-9457
Nancy Dunn	.407-295-6335
Margaret Bundy	.407-523-1064
Mark Leavitt	.407-578-9993
Debbie Davenport	.407-294-8813
Catherine Heideman	.407-538-1097
Judy Ihrig	.407-292-4632

#### **Board Supporters**

Patsy Cumbie Susan Burton Erma Cardilli Anne & Walt Juergensen Ned Woolfolk Dick Dominica Jan & Sandy Brown Vicki & Marc Renner Sue Parker Michael Bundy Holly Gosney Buddy Hutson Anne Armistead Tealea Fortune Denise Fitzgerald Jim and Janice Maki Matt Rayl Brian Allen	407-521-8212 407-293-5227 407-299-7147 407-292-5128 407-522-4402 407-295-6739 407-295-6739 407-294-6026 407-294-6026 407-523-1064 407-298-3681 407-298-3681 407-293-1188 407-694-9297 407-683-3732 765-437-5118
	407-580-6979

### YEAR-LONG HYDROLOGIC / NUTRIENT STUDY AND THE WATER QUALITY MANAGEMENT PLAN'S TOP RECOMMENDATIONS FOR THE BEAR LAKES

BEAR LAKE(S)	ISSUE	EXPLANATION	RECOMMENDATION
Big Bear	Treatment of Stormwater Inputs	Treatment systems could be installed in the <i>existing</i> sub-basins to improve the water quality entering the lake.	Construct treatment systems for sub-basins 1, 6, and 10, if feasible.
Little Bear	Treatment of Stormwater Inputs	The existing settling pond is of no benefit at all and is a simple fix by the county to redirect proper treatment and flow of its current construction.	Correct deficient pond construction for sub-basin 1.
Asher	Treatment of Stormwater Inputs	Stormwater runoff can be redirected by the county for more efficient treatment by connecting it to collect a <i>larger area</i> of stormwater runoff from the surrounding streets and neighborhoods.	Connect Sub-basin 1 to existing wet detention pond for treatment of sub-basin 2.
Big Bear, Little Bear, Cub, and Asher	Additional Treatment of Stormwater Inputs	The county could install inlet baskets in existing drains and increase street sweeping, to prevent harmful pollutants and sediments such as grass clippings, pine needles, leaves, or trash from entering directly into the lakes. Note: Never put or blow grass clippings, pine needles, leaves, or trash into storm water drains, ditches, street, or in the lakes.	Recommend use of curb inlet baskets and increase street sweeping.
Big Bear, Little Bear, Cub, and Asher	Rear Yard Berms and Swales	Berms and swales or sea walls will help prevent pesticides and fertilizers, bacteria from animal wastes, top layer of soil from the ground or sediments from washing directly into the lakes. Note: If you must use fertilizers (w/o phosphorous) and insecticides on your property, make sure they are environmentally friendly and recommended for water front properties.	Construct berms and swales along all developed shoreline areas.
Big Bear, Little Bear, Cub, and Asher	Vegetated Shorelines	Aquatic plants along the banks and in the shallow areas will use the excess nutrients and prevent erosion. Note: Sea walls will also prevent erosion and help to filter top layer of soil from the ground or sediments from washing directly into the lakes.	Establish natural shoreline vegetation in all non-exempt shoreline areas within 3-5 years.
Big Bear, Little Bear, Cub, and Asher	Internal Recycling/GW Seepage Inputs	One unit of alum (which includes buffer) will eliminate 1 unit of accumulated phosphorous permanently! Note: Research has proven this type of treatment is not harmful to people, the lake, its vegetation, fish or wildlife.	Conduct alum treatment to control internal recycling and remove phosphorous from seepage inflows.
Big Bear, Little Bear, Cub, and Asher	Lawn Maintenance Activities	Fertilizer contributes much of the phosphorous found in our lakes. Note: If you must use a fertilizer, it is recommended you use a zero phosphorous blend. The middle number should be "0." Minimize your use of any fertilizer, weed killer, fungicide, and insecticide on your lawns.	Develop a strong ordinance which strictly prohibits discharge of yard waste or placement of fertilizers onto impervious surfaces.
Big Bear, Little Bear, Cub, and Asher	Public Education	We can minimize the impact on our lakes by being educated, vigilant, and getting involved! Want to get involved? If so, please contact one of the BLPA Board Members.	Establish a comprehensive public education program to inform residents of link between watershed activities and water quality.
Big Bear, Little Bear, and Cub	Boating	Boating in shallow areas will stir up the nutrients which have settled in the bottom of the lake. Note: refrain from boating activities in shallower areas. Note: Come to the general meetings or contact a Board Member and educate yourself on the shallow areas of the lake to avoid.	Restrict normal boating to areas greater than 10 feet and enhanced wake boating to areas greater than 15 ft deep; idle speed in all other areas.

## Be "Bear" Aware Around the Bear Lakes

### By Margaret Sullivan Bundy

There have been recent sightings of Florida Black Bear around some of the Bear Lakes (Big Bear, Little Bear, Cub, and Asher). One reason is because the Little Wekiva (Wekiwa) watershed is prime bear habitat and territory. The four primary habitat requirements of the bear are food, water, shelter and space. The development around the watershed, which includes the Bear Lakes, overlap in our neighborhoods. Another reason is because they do not hibernate. Although they will sometimes remain dormant during periods of cold weather, sightings of this bear are year round.

You should remember these animals are large and very powerful. As recently as March 2012, a 300-pound black bear bit a Longwood woman in the butt while she was taking out the trash and starting her morning walk with her dog. She noticed the bear near a trash bin and her dog confronted the bear. In the shadows, the woman also noticed a cub. While trying to control her dog, she fell back and as she was scrambling to her feet, the bear bit her. The woman later realized that the bear may have been defending its cub, which is their nature. Every two years during January or February, females give birth to 1 to 4 cubs. The cubs are dependent on their mother's protection for nearly 1-1/2years, during which she teaches them the lessons of survival.

"So what do I do if I run into a bear?" The best thing to do in most cases when you see a bear, is to simply leave the animal alone. The bear is known to be a timid creature and there is no need to fear it. As a matter of fact, it's probably more afraid of you than you are of it. These bears do most of their traveling at night and are usually never seen. As a matter of fact, the bear may wander in and out of your yard and you probably would never even know they had been there. Usually, when scared, the bear will head up a tree to stay safe from humans and dogs. It will stay through the night if need be and when the coast is clear, it will descend from the tree and wander away.

Again, Human and Florida Black Bear encounters are generally peaceful because the bears are not aggressive toward people. However, as peaceful as they may be, these encounters are rarely uneventful as most people get really excited when they arrive home to find a bear rummaging through their garbage cans. This is because they are opportunistic feeders (easiest path to their next meal). The black bear use a type of feeding behavior called foraging (meanders through their territory feeding on food it comes across). The bears are smart and know it is much easier to knock over a garbage can and eat the good stuff you've discarded in your trash. They will also eat pet food left outside which was intended for your dog or cat and will even raid a bird feeder. You can discourage bears from hanging around by making sure the lids on garbage cans are on tight or whenever possible, put your trash out the next morning, and uneaten food left outside for your pet is discarded after a reasonable amount of time.

The following is a summary of information

from the Florida Fish and Wildlife Conservation Commission (FWC). Just like people, bears react differently to each situation. A bear's body language can help determine its mood. In general, bears show agitation by swaying their heads, huffing, and clacking their teeth. Lowered head and laid-back ears also indicate aggression. Bears may stand on their hind legs or approach to get a better view, but these actions are not necessarily signs of aggression. The bear may not have identified you as a person and is unable to smell or hear you from a distance. Therefore, if you see a black bear, you should never intentionally get close. A bear will usually move out of the way if they hear people approaching, so make noise. Calling out and clapping hands loudly at regular intervals are better ways to make your presence known. However, if you happen to surprise a bear, you should talk quietly or not at all; the time to make loud noise is before you encounter a bear. Try to detour around the bear if possible. Do not run! Back away slowly, but stop if it seems to agitate the bear. You should also assume a nonthreatening posture by turning sideways, or bend at the knees to appear smaller. In addition, never give the bear direct eye contact because it may interpret it as threatening. It's exciting to see bears up close, but we must act responsibly to keep them wild and healthy!

For more information on the Florida Black Bear, visit the Florida Fish and Wildlife Conservation Commission at http://myfwc.com/ wildlifehabitats/managed/bear/.



# Real Estate Watch

By Susan Burton, Realtor®

The following is the current information regarding real estate listings. Please don't hesitate to call me with any questions (407-222-3917).

¢500.000

### Active Listings

3050 Holliday Ave	
3206 Holliday Ave	
9200 Bear Lake Rd	
6083 Linneal Beach Dr	\$850,000
6003 Linneal Beach Dr	\$1,000,000
6259 Linneal Beach Dr	\$1,200,000
3524 Holliday Ave	\$1,300,000
2790 Neil Rd	

### Pending Sales

6197 Linneal Beach Dr	\$424.000
6007 Linneal Beach Dr	
6103 Linneal Beach Dr	

### Sold Properties

6051 Linneal Beach Dr\$559,000	3153 Cecelia Dr	\$500,000
	6051 Linneal Beach Dr	\$559,000

### CLASSIFIED

For sale: Beautiful 19.5' Little River Spring Rowing Shell - 39 Ibs. Garage kept, Piantedosi oars/frame with optional passenger seat, \$1,600 OBO. Call Mike at 407-399-5605.

### SB 820 Onsite Sewage and Treatment Systems

By Terry Gancarz

he 2012 Senate Bill 820 repealed the state wide septic tank inspections required in S.B. 550 of the previous year. The new bill requires mandatory inspections only in counties with1st magnitude springs. Importantly, it contains a provision that allow local governments to opt out if they choose. Neither Orange nor Seminole Counties contain 1st magnitude springs (Wekiva Springs is a 2nd magnitude spring) and are therefore not required to conduct any septic inspections.

The word "mandatory" has negative connotations in today's political climate and more local control is perceived as a positive thing, but provisions in S.B. 820 will actually result in less water quality protection than current law requires.

In 1983 the required separation from the drain field to the high water table was changed from 6 inches to 24 inches. The additional distance was deemed necessary in order for microorganisms in the soil to adequately treat the effluent. S.B.820 allows a septic that was permitted with the old 6 inch rule to be repaired or replaced with that same 6 inch standard, even though the standard was changed 29 years ago.

A 2010 St. Johns River Water Management District and Florida Department of Environmental Protection study of the Wekiva River Basin estimated that 26% of excess nutrients came from septic tanks, 12% from sewer lines, and 48% from fertilizers from all sources — the majority being agricultural and residential uses. It was thought that septic tank inspections and the replacement of failing systems could reduce nitrates in the Wekiva Springs by12-14%.

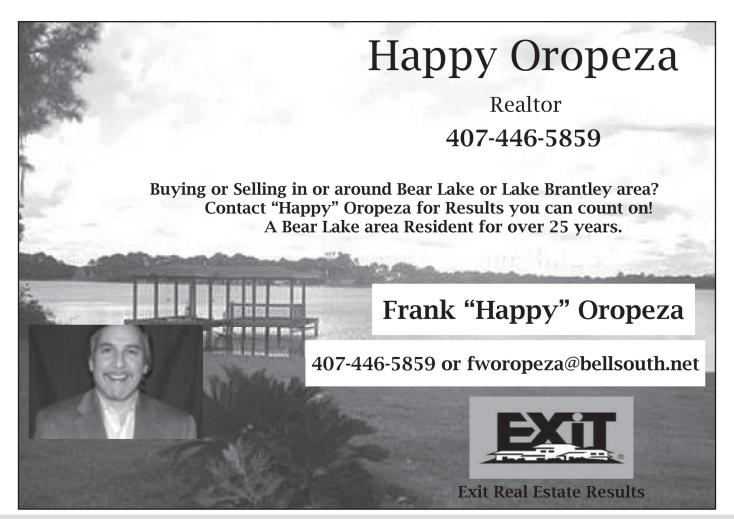
Septic tanks are regulated by the Florida Department of Health (DOH)

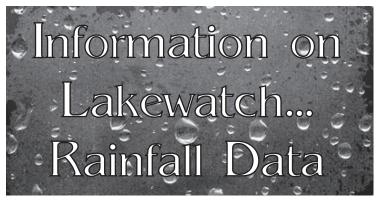
because failing systems are a health hazard. Impaired water has a negative on property values, tourism, fishing, recreation, and economic development.

Backers of S.B. 820 have claimed the government inspection of septic systems violates their property rights. This is a public health issue, not a rightto-pollute issue.

Contrary to claims that the DOH would require all property owners in the Wekiva River Basin on septic replace them with \$15,000 high performance septic systems, the fact is DOH reviewed many septic tank configurations but never mandated that any specific design be adopted county wide.

Please feel free to contact me with any questions or concerns (407-523-7499; mtgancarz@gmail.com).





It's time to get out on the water & look down to the bottom of your lake! This year we have had great water clarity in all the lakes! In February the readings were 14' water clarity on Bear Lake, 15' water clarity on Little Bear Lake and 13' clarity on Cub Lake. Check the chart below for recent readings. Surface water temperatures in winter & spring have ranges from 56 to 62 degrees reducing algae growth.

After the mud flushed into Little Bear Lake with heavy rains last July, you can see by the data in the chart, with little rain, boating and cooler temperatures, the lake had settled & reached 15' water clarity in February. Recently, clearing of shoreline weeds by water jetting and Spring Break boating stirred up Little Bear's muck reducing the clairity to 6 feet. All three lakes had pollen in January & February and an algae bloom was seen in November with hot & cold temperatures mixing.

Reduce boat wake in shallow areas to prevent stirring up the bottom nutrients, feeding algae & reducing water clarity.

The following Lakewatch data covers the last 9 months. Clarity levelis the average of four locations on Big Bear Lake and three locations each on Little Bear Lake and Cub Lake. Lake levels determined by surveyed elevation markers set on the lakes by Seminole County (elevation above sea level). To report activities in the watershed affecting a lake's water quality, contact Nancy Dunn for Bear Lake & Lake Asher 407-920-4975; Janet Brown for Little Bear Lake 407-295-6739; or Margaret Bundy for Cub Lake 407-523-1064.

	Date	Rainfall	Clarity Level	Water Level (Above Sea Level)
	7/11	13"	11'	103.2
Lake	8/11	9-7/8"	12'	103.3
aŀ	9/11	13-7/8"	13'	103.95
	10/11	12-1/16"	12'	104.1
	11/11	1-7/8"	11-1/2'	103.75
้อเ	12/11	7/8"	11-1/2'	103.55
Bear	1/12	3/8"	14'	103.35
	2/12	5/8"	13'	103.25
	3/12	3-1/2"	13'	103.05
	0/12	5-1/2		
S S	Date	Rainfall	Clarity Level	Water Level (Above Sea Level)
Bear Lake	7/11	13"	2'	103.5
(Q)	8/11	9-7/8"	4'	103.74
	9/11	13-7/8"	3-1/2'	103.8
ar	10/11	12-1/16"	3'	103.9
õ	11/11	1-7/8"	4'	103.72
	12/11	7/8"	9'	103.7
۵	1/12	3/8"	15'	103.5
Little	2/12	5/8"	13-1/2'	103.43
,it	3/12	3-1/2"	6'	103.2
	0/12	0 1/2	0	100.2
	Date	Rainfall	Clarity Level	Water Level (Above Sea Level)
	7/11	13"	13'	99.8
e S	8/11	9-7/8"	10'	100.4
Ak	9/11	13-7/8"	11'	99.9
Lake	10/11	12-1/16"	12'	100.2
	11/11	1-7/8"	8'	100
ਰੂ	12/11	7/8"	10'	99.9
Cub	1/12	3/8"	13'	99.8
$\cup$	2/12	5/8"	8'	99.9
	3/12	3-1/2"	11'	99.8
	0/12	0-1/2		77.0
• C • L	Environmen Chemical Fr ake Weeds	KEWORK 407.927.2023 tally Conscious ee Removed by the Root	WOULD YC OUR NEXT E PLEASE CO BOARD MEN FULL PAGE	U HAVE A BUSINESS? DU LIKE TO ADVERTISE IN BLPA NEWSLETTER? IF SO, NTACT ONE OF THE BLPA MBERS LISTED ON PAGE 2. \$100 \$50
Ca	all for Bear	Lake References	BUSINESS CARD	\$30

HALF BUSINESS CARD ...... \$15

**FREE ESTIMATES** 





BLPA MEMBERSHIP APPLICATION PO Box 162605, Altamonte Springs, FL 32716 • www.blpa.net

Current Members: 87 Goal: 125

2012 BLPA dues.....\$85.00

Seniors 62+ .....\$50.00

Please make checks payable to: B.L.P.A. and mail to: P.O. Box 162605, Altamonte Springs, FL 32716. Thank you for your continuing support to help keep our lakes clean!

now tax deductible. BLPA will provide a receipt upon request for your donation.

Name:
Address:
Phone:
Cell:
Email:
**Effective June 13, 2009, BLPA is now a 501(c)(3) tax exempt organization. All financial contributions to BLPA are

### Bear Lake Boat Parade -A Beautiful Evening for Our Holiday Fun on the



BLPA was delighted to see such a great turnout for the annual boat parade! We had 13 beautifully decorated boats with festive lights and decorations. The horns were blowing to announce their arrival as the boats circled the lake. Many of you had planned parties to add to the entertainment. The shorelines were decorated and loaded with family and friends

cheering holiday wishes to the boat captains and their crew as they passed. What a festive celebration it was.

Your friendship and the memories we share as neighbors are gifts we all treasure. We appreciate you all being a part of those precious memories and we look forward to seeing you next year. It's hard to believe we can out do this year, but it's possible!

Thank you for making the annual boat parades such a great success! Congratulations to the following winners (prizes were awarded at the January 24th BLPA General Meeting):



PO Box 162605 Altamonte Springs, FL 32716

### \$50 PRIZE TO THE BEST DECORATED BOAT Lance & Friends of Catherine Heideman on the sailboat.

\$25 RUNNER UP BOAT

The Parker's beautiful loaded lights boat (loved the blue)

#### **\$50 PRIZE TO THE BEST BACKYARD/DOCK** The Vallancourt's water slide of

lights & great backyard decorations on Holliday Avenue





The mission of the Bear Lake Preservation Association is to provide environmental and civic stewardship for the Bear Lakes watershed. This is achieved through water quality monitoring, scientific understanding, public education, governmental intervention, and watershed improvements for the enhancement and preservation of the water quality and biological integrity of clean lakes.