
The Newsletter for all the Friends of Lake Apopka

Making it **CLEAR**



The mission of FOLA is the restoration of Lake Apopka and surrounding wetlands

Winter 2007

Message from the President The 'Big Picture'

As many of you know, Governor Lawton Chiles signed the Apopka Restoration Act in June 1996 and since that time over 100 million dollars have been spent working toward the goal of restoring Lake Apopka and the North Shore. It has not been an easy mission - challenged with controversy, the negative economic impact of losing the farms, the unforeseen avian mortality, and human error. It is not uncommon in science to take the occasional step backward while still moving toward the goal, especially in a case like Lake Apopka. There is no set formula for the restoration of a heavily degraded 50,000-acre ecosystem. Every trial becomes a learning experience applying not only to Lake Apopka but to similar systems around the world. The key is to maintain our focus on the 'big picture'.

In the past, we moved forward, despite the challenges, toward the goal of restoring the Lake, finding it rational to believe that since the lake suffered years of abuse it will take years to recover. However, something very disturbing is happening. The buy-in to the 'big picture' appears to be breaking down and, if it continues, we won't have a clear picture to focus on at all. We'll be left scrambling around to see how all the puzzle pieces will fit, or even if they fit.

The cities of Apopka and Minneola want to withdraw water (a combined total of 25 million gallons a day). The Lake County Water Authority proposes destroying CC Ranch, a wet prairie site on the north shore, with an alum treatment plant. Expanding airports want to encroach their flight patterns into areas filled with migrating birds. FOLA board members are expending energy fighting distracting obstacles that undermine our one and only true mission: the restoration of Lake Apopka. Where does this lead us?

We are at a critical time. We need to stand firm, say no to all the proposals that chop the goal into self serving pieces, recommit to the intent and not lose sight of the goal! Yes, there are different ways of reaching this goal but we must maintain a cohesive mind-set.

SJRWMD, which has responsibility for the restoration, is working on a draft plan to restore surrounding wetlands on the North Shore. It is a perfect time to evaluate our direction and the best way to achieve set goals without detracting from the end results. The most important thing is to remember the original plan and not lose sight of what brought us all together in the first place - the 'big picture' of restoring Lake Apopka and adjacent North Shore areas.

The efforts of the past 10 years and our continuing efforts help define Lake Apopka's restoration. This example of citizen support and good public policy combined with sound scientific principles and an adaptive management approach is leading to the restoration of the Lake and the surrounding wetlands. This is something that should make us all feel proud.

Mona Phipps, President



FOLA and Oakland Nature Preserve, Inc. joined forces this fall to celebrate the 10-year anniversary of the Apopka Restoration Act and to award those individuals who provided vital support to get this act signed. Among those receiving an award is George Bailey, shown with his wife Ann and their son Andrew. The West Orange Times gave great publicity and public support to the often controversial efforts to restore the lake. Andrew served on the first FOLA Board of Directors.

Water Withdrawal From Lake Apopka

Recent requests for surface water withdrawals by the cities of Apopka and Minneola from Lake Apopka have caused great concerns by citizens familiar with the lake. Apopka's request for 5 million gallons per day would be taken from canals in the old Zellwood farm Unit 2 and via gravity from the lake under certain conditions and Minneola is requesting 20 million gallons per day from the Marsh Flow-way. Years of work by regulatory agents as well as citizen volunteers has resulted in a restoration plan that shows great promise for improving the lake. The Friends of Lake Apopka continues to oppose any plan for withdrawal from the lake for the following reasons:

1. Lake Apopka is a naturally shallow lake, averaging only about 6' or less in depth.
2. The lake experiences great seasonal fluctuations in water levels under natural conditions, partly because the drainage basin is small relative to the surface size.
3. Lake Apopka is and has been consistently below its scheduled surface level by over 0.5 feet. In seven out of 10 years it has also been below the minimum desirable level. According to the St. Johns River Water Management District website the minimum desired level for the lake is 66.5 feet. The Apopka CUP proposes a plan to accommodate the City of Apopka's request for the 5 mgd by allowing water withdrawals if lake levels are at or above 66.25 feet, which is below the current minimum desired level. At this time the lake level is 65.57 which is below the acceptable level and would not allow for withdrawal.
4. SJRWMD has not set an official minimum level based on science so it may be that the currently accepted "minimum desirable level" may, in fact, not be the best for ecologic restoration.
5. The huge amount of taxpayer dollars spent for the on going, long-term restoration process makes it very important to provide for recreational uses and eco-tourism possibilities. Anything, which decreases these possibilities, should never be considered.
6. Rapid development of the entire region has created the need for much more groundwater and the result has been documented decrease in spring flows to Lake Apopka, as well as other water bodies in Florida.
7. Lower water levels create a spike in phosphorous levels due to increased concentrations.
8. Current regulations designed to control phosphorous

discharges to the lake require greater and more extended retention which will probably further decrease seepage into the lake.

9. A major part of the long-term restoration plan calls for re-flooding of the north shore to create more marsh habitat. This will require more water from the lake.
10. Downstream lakes depend on flow from Lake Apopka since it is the headwaters.
11. Little has been done to control rampant growth or to encourage (or require) conservation of water. Vast subdivisions are currently under construction in the Apopka basin.
12. Current requests for water withdrawal include some usage outside the Apopka drainage basin, which will further exacerbate the problems in the lake.
13. Once withdrawal is permitted, it will be very difficult to monitor and control volumes withdrawn.
14. Allowing these cities to withdraw from Lake Apopka, the marsh flow-way or the north shore restoration area will set a precedent for other cities and towns to request water withdrawals. FOLA has real concerns that if Apopka is allowed to withdraw water there is no logical argument that will allow us to say no to future requests.



Fulvous Whistling Ducks taken at Clay Island

Because the water requested is needed for supplementing re-use water and the alternative option is using groundwater (which everyone should oppose), FOLA has suggested a compromise proposal which involves creation of a large reservoir on the north shore to store water for future use. The construction could include creation of shallow marsh habitat and the excavation could provide removal of the most contaminated soils.

FOLA has presented an official position paper and another concerned citizens group has begun a petition program asking for denial of all withdrawals. We have included an insert with this newsletter of our position and the petition. Please take the times to get friends and neighbors to sign the petition and mail it back to us as soon as possible and we will add them to the lists of names already collected. This issue is scheduled to go before the St. John's River Water Management District Governing board on March 13.

Conservation of Re-use water is a better solution than draining the waters of Lake Apopka. This approach is explained further in this newsletter.

Report on the NuRF Project

The proposal by Lake County Water Authority to construct an alum treatment facility to treat waters flowing from Lake Apopka through the Apopka Beauclair Canal continues to cause great concern by FOLA. This project, called NuRF, proposes to build infrastructure on the CC Ranch, a very important parcel to the ultimate restoration of the north shore.

CC Ranch was not purchased as a part of the farm buyout in the 1996 Apopka Restoration Act. It was purchased in 1992 with Preservation 2000 funds!



Whooping Cranes – Scientists with SJRWMD noticed the two pairing off last year on CC Ranch. If the two mate and breed, it would mark a “milestone” in the efforts to re-establish the endangered species in the wild (StreamLines Fall 2005). Sadly, last months tornadoes killed 18 of the 19 whooping cranes from the last group that were introduced to the Chassahowitzka National Wildlife Refuge for wintering.

The SJRWMD Board have signed an agreement to allow use of this land for a lease of \$1.00/year. The LCWA will undoubtedly approach the District as well as the legislature for funding to construct this expensive project.

The use of tax-payer dollars to destroy an ecologically valuable piece of land that was purchased with other tax-payer dollars for preservation should be a no-brainer!

Sandhill Cranes can be seen forging (and hopefully nesting) among blooming pickerelweed and other native aquatic species that occur in wet prairie habitat on CC Ranch. This 225-acre site in the North Shore Restoration Area is the only parcel not tilled by farming. CC Ranch was bought in 1991 with Preservation 2000 funds. Restoration of the adjacent lands for habitat value has always been a critical part of our mission advocating for the restoration of Lake Apopka.



Action Items for Concerned Citizens

FOLA has presented an official position paper on the NuRF project and we have included it in this newsletter along with a petition form. Please help us fight this important issue by taking the times to get friends and neighbors to sign the petition and mail it back to us as soon as possible. We will add them to the lists of names already collected.

Write to:

Lake County Water Authority
107 N. Lake Avenue, Tavares, FL 32778-3119
and urge them to find another site.

SJRWMD

P.O. Box 1429, Palatka, FL 32178-1429
and ask them not to let this site be destroyed and not to allow this project or any other projects to detract any funding or priorities from the restoration of Lake Apopka. Until we restore the headwaters downstream will continue to have problems!

Thanks

FOLA thanks Castle and Cooke for sponsoring this newsletter. Funds were raised through the Johnnie Damon Golf Classic at Keene's Pointe. This year Castle and Cooke raised close to \$100,000, which was donated to charities and non-profit organizations in the Central Florida area. Oakland Nature Preserve, Inc., a 501 (c) (3), which was founded by FOLA also received funding.

Keeping You in the Loop

The goal of seeing the Lake Apopka Master Plan becoming a reality is still very much alive. Several good things are in the works around the lake.

The West Orange and South Lake Trails continue to inch toward each other with the plan to meet on the Lake/Orange County line on old Highway 50. The trail, which goes from Hancock Road to the Orange County line, is a long anticipated project as it completes a connection from the 5.5-mile Lake Minneola Scenic Trail/Clermont Trail to the 22-mile West Orange Trail. The majority of the trail will be constructed on an old railroad bed that lies between the cities of Clermont and Winter Garden. When completed, the South Lake Trail will be the largest in Lake County.

Sections of the trail in this area could be a real challenge with what appears to be an 8 – 10 foot grade as you head west toward the Minneola Trailhead. Construction of the 4-mile extension began in April of 2006 and the County expects to be open within 30-60 days.

Lake County has also been working hard on Ferndale Preserve. On January 16 the Lake County Board of County Commissioners voted to approve a conceptual master plan for the preserve. Located north of Ferndale on the Green Mountain Byway, Lake County purchased the 192-acre scenic preserve on the shores of Lake Apopka through a grant secured last year from the Florida Communities Trust, which funded 75 percent of the acquisition. A partnership between the Lake County Board of County Commissioners, Lake County Water Authority and the St. Johns River Water Management District funded the other 25 percent of the land purchase. The preserve is scheduled to have both equestrian and biking trails as well as offering opportunities for hiking and wildlife viewing. Plans also call for a canoe launch.

The Green Mountain Scenic Byway, which extends through Lake and Orange Counties, received a \$100,000 grant from Florida Department of Transportation to develop a master plan of the byway. The East Central Florida Regional Planning Council will be awarding the bid this week. “A master plan will create guidelines for subdivision entrances, look at ways to prevent walls and look at ways to protect the byway with the use of landscaping and buffering,” said Greg Gensheimer, vice president of the Green Mountain Scenic Byway, Inc.

Last year in Orange County the situation looked good but now it is a bit discouraging. They are working on their Parks and Recreation Master Plan. It is set to be reviewed by the county’s senior planners before heading to the Orange County Board of County Commissioners. Although, the Loop Trail hook-up is part of the long-term plan (along with a total of 200 miles of trails) issues of funding and development create hurdles as we strive to connect the trail to

the farms on the Orange County side. According to the Florida Department of Environmental Protection, Office of Greenways and Trails, this project would be likely to get funded because of its regional significance. We really need to lobby the Orange County Commission before opportunity for connecting is lost. So, if you know a Commissioner don’t be afraid to bend an ear!

As the District staff continues to work on the draft plan for the restoration on the north shore area FOLA is working with them to make sure options will be available for connection to the loop trail as well as exploring other opportunities for public access.

The Oakland Nature Preserve is ready to construct their environmental education building. The center is a reproduction log cabin with dogtrot and all. A scaled version of the building can be seen at the Winter Garden Heritage Museum in Winter Garden. ONP President Jim Thomas says they hope to be able to create the look and feel of a typical pioneer home site. The plan for their education program is to include both cultural and natural history. Spring is in the air and this is a good time to visit the preserve just to relax and to learn!



Jim Thomas and Mona Phipps present a “Mike Brinkley” photo award to Pat Tjyeski, Land Design Innovations, for the firm’s work creating the Lake Apopka Greenways and Trails Master Plan. FOLA is grateful for their hard work and dedication to the ‘cause’ as we continue to strive to make the plan a reality. The plan has been adopted by the Parks and Recreation Master Plans in both Orange and Lake Counties and is part of the Metro Plan.

Photo by Mike Brinkley

Restoration Planning for the North Shore

The staff at St. John's River Water Management District (SJRWMD) has been planning for the restoration of the north shore area (NSRA). This effort has shifted to remediation planning because of the high estimated cost involved. The site which was used for muck farming is approximately 20,000 acres. Apopka Project Manager, David Walker will be presenting results of planning to the SJRWMD Projects and Land Committee on March 8 at Mission Inn in Howey in the Hills at 6:00 PM.

Mr. Walker presented information on the planning effort to the FOLA Board on February 1. The District staff has developed several options and cost analysis for restoring the NSRA.

Walker began by explaining the decision for weighing the pros and cons for whether to return the farms to lake bottom or reinforce the dike system and create marshes on the NSRA. He gave four valid arguments against breaching the dike and creating lake bottom, "There are several reasons that reconnection becomes problematic. First, in order to make it safe for fish and wildlife (and people), this would require a higher level of remediation than restoring a shallow marsh. We would need to reduce contaminant levels 2 to 6 time lower than we would if the area was to become shallow marsh. This cost would be substantial. Second, it is anticipated that with reconnection, we would increase nutrient loading to the lake. Reconnection limits our ability to treat water discharged to Apopka. The primary restoration goal has always been improving the water quality in Lake Apopka. Third, open water increases the risk from hydrilla, adding expense and area that would potentially need treatment for purposes of control. Fourth, reconnection reduces the area restored to wetland, and important component in the restoration efforts. It also reduces our ability to manage lake levels in a more lake friendly way, lowers water supply potential in the basin, creates no additional storage in the basin, and provides fewer recreational opportunities," explained Walker.

FOLA is in agreement with Walker's analysis especially since our goal has always been to see the lake and the surrounding wetland restored. The majority of the presentation dealt with the plan for moving forward with the restoration of the wetland and marshes.

A major decision that needs to be addressed deals with the process for remediation of the contaminated soils. Staff is looking at a variety of treatments for different units where levels of contaminant vary. Some fields will require some form of mechanical remediation before shallow controlled flooding is used to continue reductions in some of the contaminants. This remediation process will establish shallow marsh on much of the NSRA and will take 6-10 years to complete after flooding begins. Once remediation is com-

plete, the marsh ecosystem can be enhanced by allowing greater water level fluctuations.

Restoration of the NSRA for habitat value has always been a critical part of our mission as we supported the restoration of Lake Apopka. FOLA has the following comments and concerns as we evaluate the draft plan as presented:



This Anhinga takes flight after a morning of fishing and sunning to dry its feathers. ©Photo by Mike Brinkley.

FOLA does not support levee breaching - any breach of the dike will create deep - water areas that will only hamper the restoration process.

FOLA feels that deep-flooding of the fields will eliminate crucial foraging habitats for many birds. We propose that in order to maintain the diversity of species that use the marshes, there is a need to maintain a diversity of habitats. Habitats should include shallow-flooded fields, short-grass uplands, fallow fields and wet prairie.

As municipalities line up to request water withdrawal from Lake Apopka FOLA has serious concerns that the water needed for the restoration and flooding of the fields to create marshes will not be available. We believe no request for withdrawal should be approved.

One unique wetland site on the north shore is CC Ranch, 255 acres along the Apopka-Beauclair Canal. The only parcel not tilled by farming, this site can be restored to a wet prairie, making it an extremely valuable habitat. Lake County Water Authority is looking at leasing this site for their proposed NuRF project, which FOLA adamantly opposes.

Improving public access will be critical to realize the economic benefits of nature-based tourism.

The ultimate goal of the Lake Apopka Loop Trail proposed by FOLA, is connectivity across the north shore restoration area. FOLA ask that every effort be made through the restoration process to consider opportunities for reaching this goal.

FOLA requested that if the District surpluses any land on the fringe of the restoration area they maintain access easements in case the loop trail should need it.

Development Around Lake Apopka

One of the great concerns of FOLA as restoration plans show promise of great improvement to the lake, was the development pressures in the basin that would inevitably occur. Addressing this issue, the group raised funds to hire professional planners, held public meetings and eventually generated a set of Development Design Guidelines aimed at decreasing impacts to the lake as development occurred. These guidelines were considered radical by some, calling for such things as common property on the lake with no lakefront lots, a single community access with no individual docks, an upland buffer that is restored to native condition and others, all aimed at preventing development impacts from replacing the farm impacts, stopped in 1998.

The first development built using these guidelines was Westyn Bay, in Ocoee. FOLA was very happy with the decision because the developer was an experienced and successful one and, even though they chose not to clear out the buffer area to provide a better view of the lake, sales were apparently good.

The most recent proposal to build according to the guidelines is the Castle and Cooke development called Oakland Park. This 258-acre project will eventually have 750 homes ultimately stretching through Winter Garden and Oakland. No lakefront homes are planned for over a third of a mile along the Apopka shoreline. A park is also proposed on the lake where the restoration can be interpreted.



Bald eagles, both adult and juveniles are commonly seen around Clay Island. Many times you will see them chasing Osprey around to scavenge their freshly caught fish, depriving the Osprey of their meal.

© Photo by Mike Brinkley

It will feature a park and mooring which will eliminate the need for more docks. The upland buffer will be restored with all native plants endemic to the Apopka basin. Basic planning and architecture will feature historic plans and patterns and this traditional approach should blend in well with the two municipalities. It is hoped the community will be a model and set standards for lakefront development all over the state!



Many ducks use the marsh flow way at Clay Island, some of them year around and some of them just for the winter. These blue Winged Teal are winter visitors, and now is a good time to see them.

© Photo by Mike Brinkley

Clay Island – A Great place to Play!

According to the St. Johns River Water Management District, their main goal in buying land is to protect the water resources within, adjoining or beneath the land's boundaries. Beyond meeting that goal, District land purchases preserve part of "natural" Florida for the state's future generations. Putting land into public ownership also protects wildlife and plant habitat, which is critical in Central Florida as development continues to eliminate large plant and animal communities. Ninety-eight percent of the lands bought by the District are open to the public for activities compatible with conservation, making it possible to get out and enjoy nature.

As the restoration of Lake Apopka progresses, the District continues to examine possibilities for public access. Clay Island is a perfect example of the many recreational benefits the area has to offer.

Now open to the public, Clay Island offers hiking, bicycling, horseback riding and wildlife viewing (birding is great). It really is an excellent way to spend the day. Maps of the area are available on the St. Johns River Water Management District website: sjrwmd.com. At this time access is limited to Carolyn Road in Lake County.

FOLA is working with staff for an entrance into Clay Island off of CR 455, now a designated Scenic Byway. There is also potential for wildlife viewing-opportunities on the Duda farms where flooded marshes have created habitat for vast numbers of birds.

Numerous opportunities for educating children (or adults) on the importance of the environment are all around the Lake Apopka basin. As we move into the wonderful spring weather get out and explore this great gift we have been given.

Membership Application for Friends of Lake Apopka

Name _____
Business/Organization _____
Address _____
City/State/Zip _____
Phone / Fax / email _____
Volunteer / Interests _____

- _____ Student or Youth—\$3.00
_____ Individual—\$10.00
_____ Family—\$15.00
_____ Sponsor, Corporation or Organization—\$25.00
_____ Patron—\$100.00

Please mail this form with your check. Your interest in **Friends of Lake Apopka** is vital to the ongoing restoration effort.

Make check payable to: FOLA

Mail to: Friends of Lake Apopka
PO Box 770355
Winter Garden, FL 34777

Conservation of Re-use Water

The issue of water in the State of Florida is only going to grow more and more controversial, especially if we continue to develop at today's rate. Re-use water is playing an important role in helping to minimize the amount of water pulled by municipalities and homeowners from the aquifer.

Conservation of re-use water is a valuable step to further reduce the need for ground water wells. Now is the time to take a very serious look at our attitudes about using this precious resource. It is going to take a strong stand on every level and the willingness of the public to buy into the growing need to be 'water wise'.

There is already a great deal of research on the topic. For instance, we know that two-thirds of the water used by homeowners goes onto lawns, we know few municipalities in Central Florida have taken steps to strengthen landscape ordinances, and we know that incentives from state and local governments could make a big difference. These are steps in the right direction: kudos to Montverde for axing St. Augustine grass, to Clermont for limiting the amount of landscape that can have sod, to Oakland for requiring a new development to have 75% native, drought resistant plants, and to Lake County for requiring Plaza Collina to do the same. People who get on board make a difference.

The University of Florida recently completed a study of homes located in Central Florida that had 35% turf (St. Augustine) and 65% landscape and hardscape showed irrigation could be reduced to 46% of the total household water use. U of F personnel set the irrigation system for efficient operation but the homeowners in most cases used more water than necessary by changing the irrigation settings.

Another significant study by U of F was made using soil moisture sensors (SMS), which prevent irrigation when soil moisture at the turf roots is sufficient. The average per-

formance of three types of SMS reduced the irrigation needed by 55% below the control plot which was set up for twice weekly irrigation with the rain sensors shut off. This practice could be required for new homes where usage is as high as 79% for lawns and landscaping.

The City of Apopka's CUP, plans to use reclaimed effluent, Lake Apopka withdrawal and other reclaimed water. Even with the withdrawal from Lake Apopka they will continue to need more water each year.

Our conservation evaluation for Apopka uses reclaimed effluent but no water from the Lake. After the year 2010 it requires much less supplemental water than the City plan. This would eliminate the need for water withdrawal from Lake Apopka. Conservation is a more effective way to reduce additional water for re-use.

SJRWMD has an education program for Xeriscaping. They also have a free booklet on being water wise. The District also has grants available for municipalities for the use of stormwater ponds for re-use. They are working on a 'Water Star House' to show the difference the right changes can make in the way we are using water. Check out their website at: sjrwmd.com.

There is also a new move in Florida development called Green Architecture. It looks at long-term sustainability across the disciplines using conservation measures. This is already a practice across the nation where we see a trend back to smaller, more efficient, homes.

When the Army Corps of Engineers came to Florida in the 1800's, the war between man and water began. Natural water flows were altered so that water could do man's bidding. In trying to control things a lot of damage has been done. Water gives life to Florida -- when we alter it we alter the natural ecosystem and life that depends on it. Knowing this and not stopping and doing something about it is just not morally right.

David Walker Appointed by SJRWMD

In mid-2006, Dave Walker took over as Senior Project Manager for the Lake Apopka Restoration Program, and he is well qualified for the position. He began his career with the District in 1986, working in the regulatory program. In 1989, he started working in Upper Ocklawaha River Basin (UORB) from the Sunnyhill Office for a period of nine years. In 2002 he returned to the Upper Ocklawaha River Basin as the Senior Project Manager. Projects include the Sunnyhill and Ocklawaha Prairie Restoration Projects, the Lake Griffin Flow-way, the Harris Bayou Connection, Lake-level Fluctuations, and Emerald Marsh Restoration. Besides being an avid birder and photographer, Dave is also a master sandsculptor and makes the worlds best carrot cake.

He is originally from Indiana and received both his B.A. in Economics and Environmental Science and M.S. in Environmental Science from Indiana University in Bloomington, Indiana. In 1983, he began research work with the National Park Service at Everglades National Park. His work included study of nutrient impacts to freshwater marshes in the park and then focused on the Everglades food web, especially the micro-invertebrates. Part of his time with the NPS included work at the NPS Water Resources Laboratory in Fort Collins, Colorado.

FOLA welcomes David and we are happy to be working with him.



Lake Apopka project manager, David Walker, presents planning options for the restoration of the North Shore to the

© Photo by Mike Brinkley

David will make this presentation to SJRWMD Projects and Lands Committee on March 8th at Mission Inn in Howey-in-the-Hills. The meeting is at 6:00 PM and the public is welcome to attend.