

January 15, 2015

**LAKE PICKETT
ANNUAL MEETING & LAKE MANAGEMENT PLAN**

Annual Meeting – 2015

- Agenda

Lake Management Plan

- General Provisions & Scope of Services
- Community-Based Activities & Events
- Current Fiscal Year: Planned Treatments, Funding & Recommendations
- Next Fiscal Year: Projected Treatments & Funding
- Exhibits – Agenda & Notes, Budget & Financial Summary, Historic Reports/Data

LAKE PICKETT: ANNUAL MEETING

Date, Time & Location	:	January 15, 2015 - 9:00 a.m., 200 W. County Home Rd – LMP office
Community Liaison	:	Jay Zembower
Liaison Present	:	
Seminole County	:	Thomas Calhoun, Gloria Eby, Kathy Moore, and Carol Watral

Topics carried forward from prior fiscal year activity

- Scheduled aquatic plant control of hydrilla and cattails continue in areas of Lake Pickett; such activities are based upon available funding and approved lake management plan.
- Bog moss and grass carp fish educational brochures created for distribution.
- Bog moss control methods and permitting.
- County encourages implementation of community shoreline restoration events.
- The potential of increasing hydrilla growth due to re-growth of tubers exists. Large-scale herbicide treatments for hydrilla may be required every two to three years. Product rotation required to reduce potential for resistant hydrilla.
- Whole lake hydrilla cost share with Orange County was not required for FY1213; thereby, increasing contingency reserves carrying forward into FY1314. Clarification letters on treatment notices, treatment posting, and addition of cattails were approved by both counties and will be incorporated in the next revision of the lake management plan.
- Lake management plan will be historically logged with document revision action and dates included.
- Property owners should be encouraged to communicate comments/concerns through the liaison group, who will provide consolidated request/comments to the MSBU Project Manager (Carol Watral).

General Topics & Updates

- Lakewatch sampling
- Nutrient study/feasibility
- Bog Moss
- Triploid Grass Carp (riparian form status, application status, barriers)
- Treatments
- Plans for current fiscal year
- Projections for next fiscal year
- General recommendations for community consideration

Meeting Notes:

- Development for 2 southern parcels was discussed.
 - i) Liaison said one parcel is 90 acres and will have up to 53 homes with 1 acre each and an association boat ramp.
 - ii) The other is 400 acres but only has entitlements in place at this time and is planned for 40-50 LF lots with minimum 1 acre.
- An existing canal in the Pickett Cove area that flows into the lake and its impact upon the lake and surrounding area was discussed.
- Another TGC letter will be sent by February 2 by MSBU to non-responsive County LF properties and will have a sentence stating that a non-response will be noted as not opposed
- Sport Fisheries survey was discussed; LMP only knows of one electrofishing boat that FWC has which is only used in FWC funded lakes but no vendor that performs this service; Liaison will check a source in Alabama
- LMP is checking on who performs snag removal in the canals
- Liaison will check on Lakewatch sampling

- Bog moss has possibility of being controlled for a slalom course only but there are no plans to treat bog moss at this time
- LMP reported completing a SAV plant intensity map and will continue to update this
- FWC and OC will be looking at the northwest canal and overall waterbody on January 30, 2015
- We have a new FWC regional biologist, Kris Campbell, at 6830 Shadowridge Dr., Suite 201, Orlando, FL 32812 407-858-6170
- Progress of County fertilizer ordinance was discussed
- ERD study was discussed, as well as inflow/outflow and seepage meters
- Liaison reported OC portion of the nutrient study is funded by 50% general revenue and 50% MSTU
- Mills inflow pipes/grates were discussed as well as the barrier that will be installed
- The LVI was discussed and LMP explained that it had decreased due to the hydrilla presence
- Liaison confirmed the community wants to participate in a 2016 joint (OC/SC) planting event; LMP said they would need to confirm a date no later than November 15, 2015
- Liaison concurred with the assessment rate of \$90.00 for FY1516

LAKE PICKETT

LAKE MANAGEMENT PLAN

GENERAL PROVISIONS

Scope of Public Aquatic Weed/Plant Control [AWC] Services

The scope of public aquatic weed control [AWC] services funded by non-ad-valorem assessment (Seminole County) and/or ad valorem (Orange County) includes those services associated with managing aquatic plant communities as deemed beneficial and/or critical to restoring, developing and/or maintaining conditions that enhance the water quality and over-all health of the waterbody; with emphasis on providing public services for public purposes which by definition of public are limited to the waterbody and respective shoreline when/where noxious and/or invasive exotic vegetation could/would threaten or impede the waterbody.

Governing documents:

- Seminole County Ordinance 96-03
- Interlocal Agreement [IA] with Orange County [March 2013]
- FWC Permit

Methods for Aquatic Weed Control as authorized via County Ordinance/Resolution

- Chemical (herbicides)
- Biological (sterile triploid grass carp fish [TGC])
- Mechanical (Harvesting)

Targeted Invasive/Exotic Aquatic Vegetation

- Hydrilla, cattail.

Frequency of AWC Treatment

AWC services are performed as per the Lake Pickett Management Plan developed at annual planning sessions and on an as merited basis consistent with the plan per changing hydrilla conditions (i.e. rapid on-set of hydrilla growth) at the direction of the Seminole County LMP as per the IA.

Herbicide Treatments - Service Provider

- Orange County staff; supplemented by *Aquatic Weed Control Inc.* as needed.

Funding

Assessment rate may vary annually based on financial demands of changing conditions, such as cost of herbicide treatments, frequency of treatments, and other factors impacting assessment calculations. The governing ordinance does not include assessment restrictions specific to annual adjustment amounts and/or assessment cap.

Lake Liaisons

Designated property owners (or their designated representative) provide community representation at annual planning sessions with the County and serve voluntarily as the key point of contact for community inquiries and concerns. The liaison for Lake Pickett is Jay Zembower (cardoctor1@hotmail.com).

LAKE PICKETT

COMMUNITY-BASED ACTIVITIES & EVENTS

LMP continues to recommend/encourage homeowners to coordinate a resident-based volunteer event involving native plantings along the shoreline of Lake Pickett. The intention of such an event is to plant beneficial native aquatic plants to key areas in need along the bank. It is especially important that as the aquatic invasive plants (such as torpedo grass) are being treated, native aquatic plants should be established within these areas. The presence of the recommended native plant species along the shoreline provides habitat for fish and wildlife, helps impede invasive exotics from re-establishing and reduces erosion of the shoreline. All of these best management practices are essential to providing the conditions that promote an environmentally stable habitat to be enjoyed by generations to come. The key to success is dependent on strong participation of the Lake Pickett community. Continued recommendations for community initiatives are as follows:

- 1) Work together with other lakefront owners. Have *at least* one annual lake association meeting, invite guest speakers (such as county or state biologists) and discuss lake specific issues, especially nutrients/lake management recommendations. Seminole County and Orange County staff would be glad to present our findings from our surveys and other surveys. Continue to increase native aquatic plantings along shoreline (such as pickerelweed, duck potato, and canna) and reduce exotic species such as torpedo grass.
- 2) Lake Pickett is in need of a LAKEWATCH or Adopt-a-Lake volunteer, who would assist in collecting valuable water quality data for your lake. Please contact Seminole County (Geby@seminolecountyfl.gov) or Orange County (Melissa.Lavigne@ocfl.net) to become a LAKEWATCH volunteer, or for more information.
- 3) Increase educational outreach programs, including Shoreline Restoration Projects (planting days), Florida Yards and Neighborhoods (FYN) Workshops, and Lake Management Video mail-outs. Most importantly, share the word about reducing personal pollution to your lake by decreasing total fertilizer usage and using **only phosphorous free and slow-releasing nitrogen based fertilizers**, properly maintaining/cleaning septic tanks, maintaining a healthy shoreline with beneficial native aquatic plants, constructing a berm and swale feature along your shoreline, and keeping grass clippings out of your lake and out of storm drains that lead to the lake. All of these activities help to protect and preserve your waterbody!

COUNTY SERVICES – Lake Management & Supplemental Programs

While the MSBU assessment includes a nominal charge for administering the MSBU, the amount charged does not cover all the expenses incurred by the County on behalf of the waterfront property owners. Lake Pickett is monitored by LMP to assess the aquatic plant growth. LMP provides continued evaluation of the aquatic plant species, such as hydrilla, and provides community updates on the status of all treatments and waterbody assessments. In addition, LMP offers free aquatic plant material (as available) for sponsored restoration events and local community volunteers coordinated through the county's Seminole Education and Restoration Volunteer (SERV) Program. Many of the services provided by the LMP are made available to support community riparian stewardship without additional charges being assigned to the MSBU budget.

LAKE PICKETT

Current Fiscal Year – Planned Treatment & Funding

Primary Aquatic Plant Management Expectations

Hydrilla growth in Lake Pickett has the likelihood to continue; however, the timing and extent of hydrilla re-growth is affected by multiple natural and environmental factors that cannot be controlled or predicted with certainty. While extensive growth of hydrilla is possible at any point in time; it is anticipated that routine spot treatments of hydrilla with herbicides and continuous biological control pressures from the triploid grass carp fish will be sufficient to manage hydrilla re-growth during the current fiscal year. The anticipation of spot treatments for the current fiscal year takes into consideration the historic trend of hydrilla management required at Lake Pickett, as well as current conditions observed at lake. As with any lake with a history of hydrilla infestation, long-term planning to include financial preparation for whole lake treatment is advised.

Funding Expectations

Refer to current fiscal year budget data provided in Exhibit B.

Next Fiscal Year – Projected Treatment & Funding

Primary Aquatic Plant Management Expectations

The projected treatment plans for the next fiscal year remain consistent with the plans and expectations noted for the current fiscal year. Primary expectations are as follows:

- 1) Continued aquatic herbicide maintenance for hydrilla and cattail treatments (as needed) within Seminole County jurisdiction,
- 2) Future grass carp stockings if deemed necessary, pending permit authorization,
- 3) Continued monitoring of hydrilla, other submersed aquatic plants, and emergent plant populations, and
- 4) Increase contingency reserve funds for extended herbicide management of hydrilla and/or other issues that may develop and require immediate treatment,

Funding Expectations

Refer to next fiscal year budget data provided in Exhibit B.

Exhibits

A – Agendas & Notes from Prior Year Planning Sessions

B – Budget/Financial Overview

C – Historic Reports/Data

Exhibit A1 - Notes from Prior Year SC Liaison Planning Session

LAKE PICKETT: ANNUAL SC LIAISON MEETING

Date, Time & Location	:	January 21, 2014, 2:30, 200 W. County Home Rd – LMP office
Community Liaison	:	Jay Zembower (present)
Seminole County Present	:	Thomas Calhoun, Gloria Eby, and Carol Watral

Topics carried forward from prior fiscal year activity

- Scheduled aquatic plant control of hydrilla and cattails continue in areas of Lake Pickett; such activities are based upon available funding and approved lake management plan.
- Bog moss and grass carp fish educational brochures created for distribution.
- Bog moss control methods and permitting.
- Species permitted by FWC for treatment are hydrilla and cattail.
- County encourages implementation of community shoreline restoration events.
- The potential of increasing hydrilla growth due to re-growth of tubers exists. Large-scale herbicide treatments for hydrilla may be required every two to three years. Product rotation required to reduce potential for resistant hydrilla.
- Whole lake hydrilla cost share with Orange County was not required for FY1213; thereby, increasing contingency reserves carrying forward into FY1314.
- Property owners should be encouraged to communicate comments/concerns through the liaison group, who will provide consolidated request/comments to the MSBU Project Manager (Carol Watral).
- Clarification letters on treatment notices, treatment posting, and addition of cattails were approved by both counties and will be incorporated in the next revision of the lake management plan.
- Lake management plan will be historically logged with document revision action and dates included.

BOG MOSS: Seminole County has received some inquiries regarding bog moss impacting boating access. Bog moss is a beneficial native aquatic plant. Property owners with recreational access issues due to bog moss can apply for a free aquatic plant removal permit through the Florida Fish and Wildlife Conservation Commission (FWC) at <http://www.myfwc.com/license/aquatic-plants>. Some access corridors have been successfully treated by individual homeowners since their permit was issued. Additional information specific to managing bog moss and assistance with applying for a permit is available from your local FWC regional biologist, CJ Greene, at Carl.greene@myfwc.com or 407-858-6170. **Note:** The management of bog moss is not financed through the MSBU assessment nor listed on the county's aquatic weed control permit for Lake Pickett issued by FWC. Adding bog moss management to the current MSBU would yield a significant increase in the annual MSBU assessment. Property owners interested in adding bog moss management to the MSBU service scope are encouraged to contact their lake liaison to discuss financial implications and the process for adding this plant to the scope of funded services.

General Topics & Updates

- Lakewatch sampling
- Nutrient study/feasibility
- Plans for current fiscal year
- Projections for next fiscal year
- General recommendations for community consideration

Meeting Notes:

- A date in mid 2015 is targeted for a community shoreline restoration event. Orange County (OC) is suggested to spearhead the event and provide aquatic plant material. Seminole County (SC) will provide a consultant to work with the SC properties. Restoration sites should target bare shoreline areas, such as those where properties have installed beaches.
- Approximately 10 acres of hydrilla and 1 acre of cattails were treated on December 4, 2013. The next OC lake inspection is scheduled for mid-March.
- The permit for carp was discussed. OC is starting the process to obtain 100% participation from OC properties. SC will be advised when it is time to obtain the SC properties' participation. The liaisons are responsible for securing the required level of community support. Educational sessions/meetings may be required. After 100% of participation is obtained, a permit will be requested and will be held in case of required future carp stocking.
- Jay Zembower announced a March 15 community event to which OC and SC commissioners have been invited. He said he would have invitations issued to SC staff.
- The annual OC/SC meeting with liaisons from both counties has been confirmed for February 12.

Exhibit A2 - Notes from Prior Year OC-SC Liaison Annual Planning Session

LAKE PICKETT: ANNUAL OC-SC MEETING

Date, Time & Location	: February 12, 2014, 10:00AM, 200 W. County Home Rd
Orange County Advisory Board	: Debra Parrish (Chair)
Seminole County Community Liaisons	: Jay Zembower
Orange County	: Liz Johnson, Dan Homblette, Ryan Patrick, John Pierce & Geoffrey Shetka
Seminole County	: Gloria Eby, Kathy Moore, Kim Ornberg, & Carol Watral

Topics carried forward from prior fiscal year activity

- Triploid grass carp fish stocking and educational brochure (distributed)
 - CJ Greene/FWC indicated that a once a permit for a given quantity of fish is issued that it is good indefinitely. Per Orange County provisions, stocking is dependent on documentation substantiating 100% property owner support. County/liaisons to offer educational sessions/meetings; liaisons to promote/develop property owner support. Respective counties to track county support. Implementation is on hold, pending start date.
- Bog moss control methods, permitting, and educational brochure (distributed)
 - Bog moss is a beneficial native aquatic plant. Property owners with recreational access issues due to bog moss can apply for a free aquatic plant removal permit through the Florida Fish and Wildlife Conservation Commission (FWC) at <http://www.myfwc.com/license/aquatic-plants>. Some access corridors have been successfully treated by individual homeowners since their permit was issued. Additional information specific to managing bog moss and assistance with applying for a permit is available via your local FWC regional biologist, CJ Greene, at Carl.greene@myfwc.com or 407- 858-6170.
 - Per OC LAB Session Notes - Liaisons tasked with place to dump bog moss that is removed from lake.
- Community shoreline restoration events encouraged
- Adopt-A-Lake/Lakewatch sampling
- Hydrilla growth potential due to existing tubers

Summary: OC to propose process and format for documenting property owner support or opposition to TGC fish stocking. OC clarified that floating bog moss does not require herbicide treatment but may be manually removed. Consensus at meeting was to focus efforts on one initiative per year, with the current initiative identified as TGC fish stocking. County sponsored shoreline planting event on hold pending review after completion of current initiative.

General Topics & Updates

- General recommendations for community consideration
- Plans for current fiscal year
 - OC inspection completed February 10/11
 - Hydrilla spot treatments to be provided as recommended per inspection results.
 - OC will continue to monitor and control the cattails established on west bank of the east lobe
- Asian marshweed (*Limnophila sessiliflora*) present in several areas of the lake
- Projections for next fiscal year (same as current)
- Nutrient Study - request, evaluation/factors, funding, recommendation

Summary: Asian marshweed is being added to the 2014 LMP as a monitored species, noting that this species was recently added to the OC permit and it is anticipated to be managed along with the required hydrilla treatment as both species are cohabitating and responsive to same herbicide. No additional cost is anticipated at this time for management of Asian marshweed. Nutrient Study was discussed briefly with funding noted to be a significant factor limiting implementation at this time.

No shoreline restoration event will likely be held until FY 2015/2016

Exhibit B - Budget/Financial Overview

MSBU:

PICKETT LAKE (Aquatic Weed Control)

Date:

January 15, 2015

Tax Year	2012	2013	2014	2015
Assessment	\$5.00	\$90.00	\$90.00	\$90.00
Fiscal Year	FY1213	FY1314	FY1415	FY1516
REVENUE	Actual	Actual	Working Budget	Projected Budget
Beginning Fund Balance	\$ 166,938	\$ 165,940	\$ 187,392	\$ 187,192
Assessment	\$ 2,297	\$ 41,298	\$ 41,299	\$ 41,299
Other	\$ 67	\$ 420	\$ -	
MSBU Program Fund Advance	\$ -	\$ -	\$ -	
TOTAL	\$ 169,302	\$ 207,658	\$ 228,692	\$ 228,491
Cost Sharing				
TOTAL	\$ 169,302	\$ 207,658	\$ 228,692	\$ 228,491
Lake Management Program				
TOTAL	\$ 169,302	\$ 207,658	\$ 228,692	\$ 228,491
EXPENDITURE	Actual	Actual	Working Budget	Projected Budget
County Administrative Fee	\$ 875	\$ 1,075	\$ 1,500	\$ 1,500
Fund Advance Repayment	\$ -	\$ -		\$ -
Contracted Services	\$ 2,487	\$ 19,191	\$ 40,000	\$ 167,190
<i>Routine Services</i>	\$ -	\$ -	\$ -	\$ -
<i>Cost Share - Hydrilla/Cattails</i>	\$ 2,487	\$ 19,191	\$ 40,000	\$ 159,570
<i>Barriers</i>	\$ -	\$ -	\$ -	\$ -
<i>Cost Share - Carp</i>	\$ -	\$ -	\$ -	\$ 7,620
Contingency Reserve	\$ 165,940	\$ 187,392	\$ 187,192	\$ 59,801
TOTAL	\$ 169,302	\$ 207,658	\$ 228,692	\$ 228,491
Cost Sharing	\$ -	\$ -	\$ -	\$ -
TOTAL	\$ 169,302	\$ 207,658	\$ 228,692	\$ 228,491
Lake Management Program	\$ -	\$ -	\$ -	\$ -
TOTAL	\$ 169,302	\$ 207,658	\$ 228,692	\$ 228,491
Fund Advance BB Payment	\$ -	\$ -	\$ -	\$ -
Fund Advance EB	\$ -	\$ -	\$ -	\$ -

Exhibit C - Historic Reports/Data

Additional information for Lake Pickett can be found on the Seminole County Water Atlas website at:

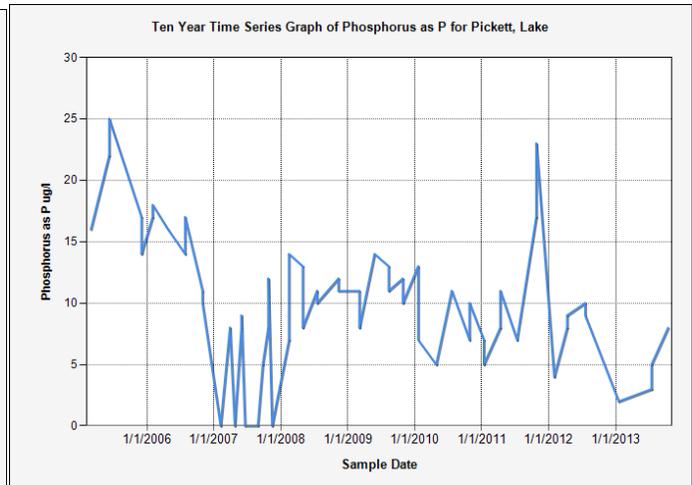
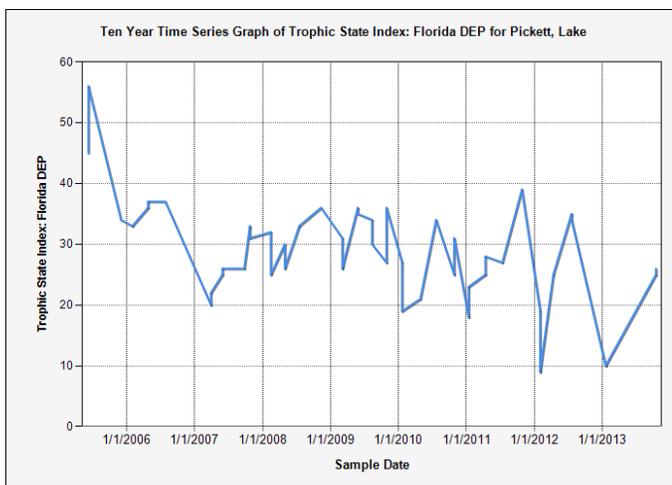
<http://www.seminole.wateratlas.usf.edu/lake/waterquality.asp?wbodyid=7636&wbodyatlas=lake>

<http://www.seminole.wateratlas.usf.edu/resourceprogram.aspx?aid=15&wbodyid=7636>

Lake Pickett 2014 Water Quality Report: How Does My Lake Rank? **TSI SCORE: 25 GOOD**

The Trophic State Index (TSI) is a classification system designed to "rate" individual lakes, ponds and reservoirs based on the amount of biological productivity occurring in the water. Using the index, one can gain a quick idea about how productive a lake is by its assigned TSI number. A "Good" quality lake is one that meets all lake use criteria (swimmable, fishable, and supports healthy habitat).

The two graphs below indicates nutrient levels (measured by TSI and/or Total Phosphorous [TP]) for your lake. A TSI score of 60 or above is considered impaired (or polluted) lake. Continued reduction of TP sources (personal pollution, run-off, landscaping practices, shoreline erosion) can help reduce phosphorous in your lake that is abundantly available, potentially creating algae blooms.



Lake Vegetation Index Bioassessment (LVI): How Does My Lake Rank? **68 Healthy**

The Lake Vegetation Index is a rapid bioassessment tool created by the Florida Department of Environmental Protection (FDEP) to assess the biological condition of aquatic plant communities in Florida lakes. The most recent LVI bioassessment for Lake Pickett (sampled on August 13, 2014) scored a **68** which is in the **Healthy** category.

Aquatic life use category	LVI Range	Description
Category 1 "exceptional"	78–100	Nearly every macrophyte present is a species native to Florida, invasive taxa typically not found. About 30% of taxa present are identified as sensitive to disturbance and most taxa have C of C values >5.
Category 2 "healthy"	43–77	About 85% of macrophyte taxa are native to Florida; invasive taxa present. Sensitive taxa have declined to about 15% and C of C values average about 5.
Category 3 "impaired"	0–42	About 70% of macrophyte taxa are native to Florida. Invasive taxa may represent up to 1/3 of total taxa. Less than 10% of the taxa are sensitive and C of C values of most taxa are <4.