

# Lake Pickett

## Community Education Meeting

**May 14, 2013**





# Opening Remarks

**Commissioner Bob Dallari (Seminole Co)**  
**Commissioner Ted Edwards (Orange Co)**



# Introductions

- **Dan Homblette (Orange Co)**
- **Liz Johnson (Orange Co)**
- **Gloria Eby (Seminole Co)**
- **Kathy Moore (Seminole Co)**
- **CJ Greene (Florida Fish & Wildlife Conservation Commission- FWC)**
- **Lake Liaisons**





# Meeting Agenda

- **Aquatic Plant Biology & Lake Status**
- **County MSBU/TU Updates**
- **Educational Outreach Information**
- **FWC Presentation on Grass Carp Fish**
- **Community Liaison Updates**
- **Questions**



# Aquatic Plant Biology & Current Lake Status

Gloria Eby  
SC Lake Management Program Manager



# Aquatic Plant Biology

- ***Hydrilla verticillata***
  - Exotic
  - Grows quickly
  - Chokes native species
  - Impedes navigation
  - Can cause fish kills, odors





# Hydrilla Management Options

## ■ Hydrilla Control Methods

### ■ Mechanical (\$\$\$\$)

- Expensive
- Temporary
- Can make worse

### ■ Chemical (\$ - \$\$\$)

- EPA approved herbicides
- Greater species selective
- Good for large and small control needs

### ■ Biological (\$-\$\$)

- Triploid Grass Carp
- Used as part of maintenance, not control





# Integrated Lake Management Plan





# Hydrilla Management and Resistance



one square meter of  
hydrilla can produce  
**5,000** tubers



# Importance of Monitoring





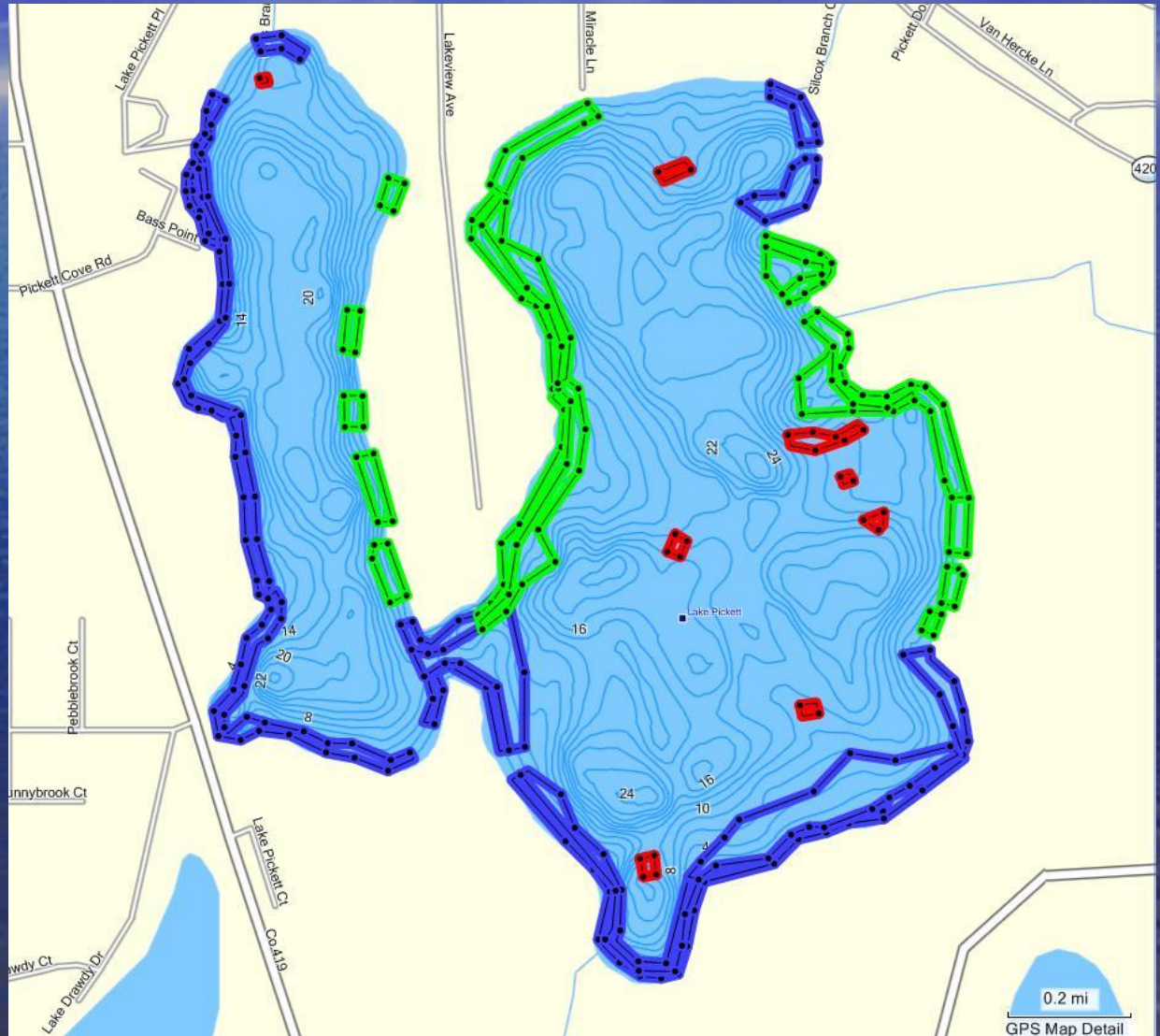
# Lake Management & Survey Update

- Surveyed every 8 to 12 weeks
- Past 5 years, primarily spot treatments
- In 2012: large-scale shoreline treatment with Aquathol K for hydrilla
  - Cost: \$150,000
- Most recent survey (May 6, 8 & 9):
  - Minimal hydrilla found in lake; several small locations totaling less than 1 acre



# Recent Treatments

**Red 8/7/12**  
**Blue 8/8/12**  
**Green 9/6/12**





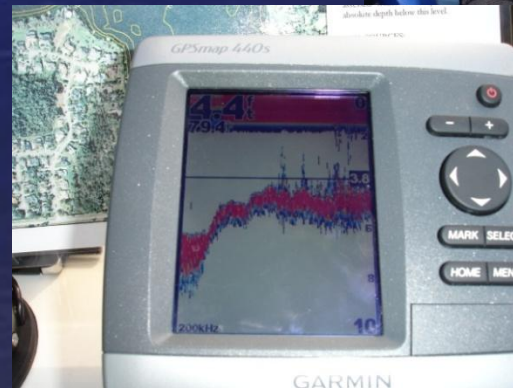
# Recent Survey

May, 6, 8, 9, 2013





# Lake Bioassessments





# Other SAVs Observed

Native Bog Moss

VS

Hydrilla





# Other Native SAVs Observed

## Southern Naiad



## Coontail





# Other Native SAVs Observed

Fanwort



fanwort  
*Cabomba caroliniana*  
Photo by Jeff Schardt  
© 2009 FWC Invasive Plant Management Section

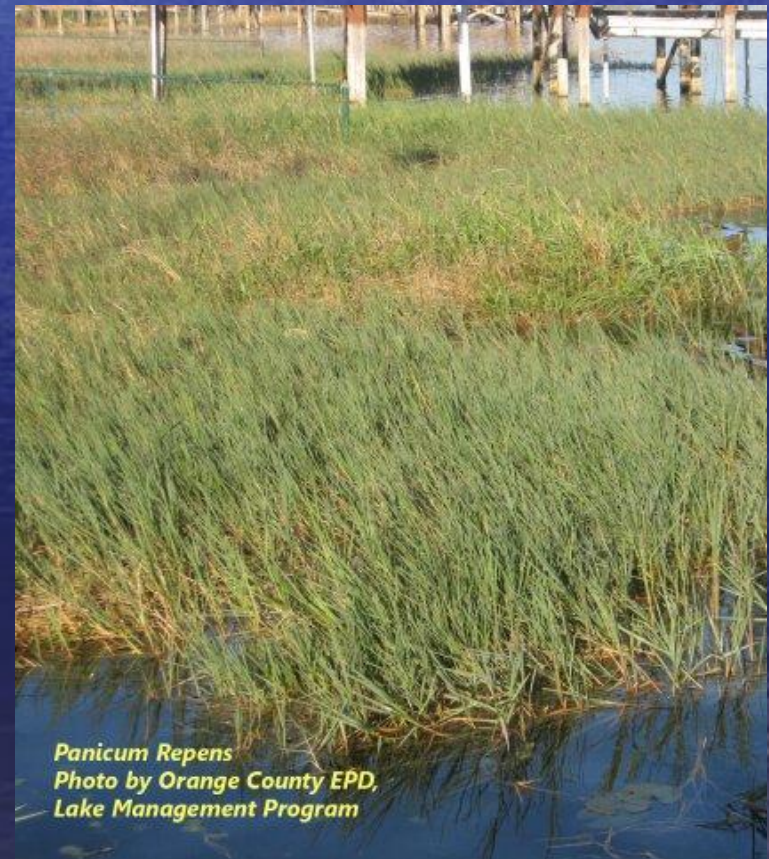


# Other Exotics Observed

## Limnophila



## Torpedo Grass





Please visit  
Touch Tanks

emersed limnophila

cabomba

submersed limnophila

limnophila

*Limnophila sessiflora*

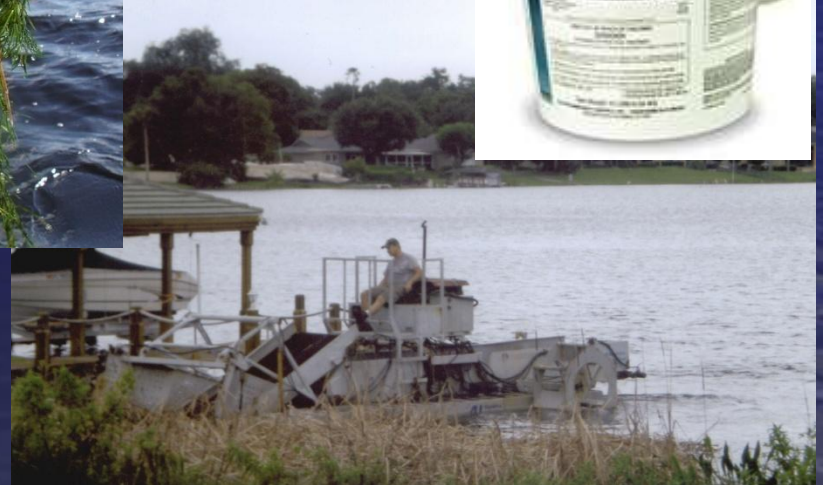
Photo by Jeff Schardt

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# CO-Operation!

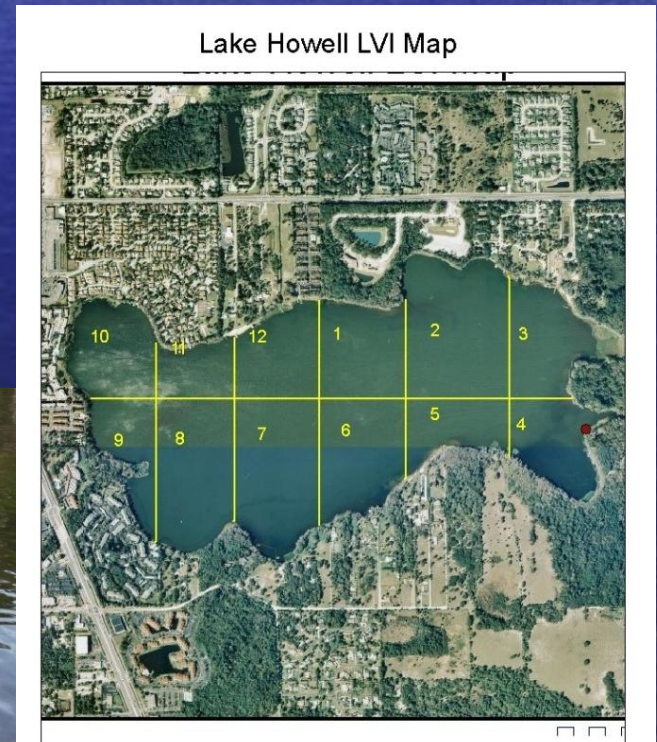
- Establish a Lake Management Plan
- Budget planning/Funding Resources
- Hydrilla Management





# Biological Monitoring Vegetation Sampling (LVI) (collected annually)

**2010: 71 Healthy**  
**2011: 79 Exceptional**  
**2012: 75 Healthy**





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[Overview/Current Conditions](#) [Water Quality](#) [Water Levels & Flows](#) [Habitats/Ecology](#) [Recreation](#) [Photos](#)


## Pickett, Lake

[Map It!](#)  
located within Big Econlockhatchee Watershed



Currently **86°F** and **Partly Cloudy** [view forecast »](#)

### Lake Management Program



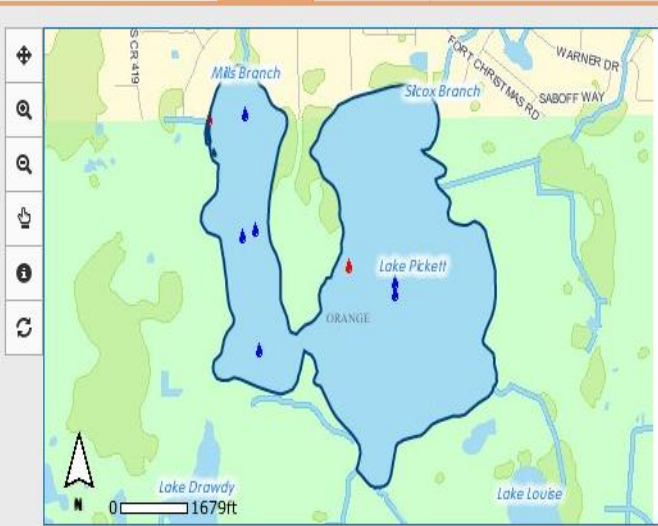
This water resource is part of our **Lake Management Program**.

The Lake Management Program helps citizens learn to maintain their neighborhood lakes by providing them with the resources and expertise they need to successfully do so.

[View the volunteer Lake Management page for Pickett, Lake »](#)

- [Learn more about the Lake Management Program](#)
- [Volunteer with the Lake Management](#)

[Map](#) [Aerials](#) [Water Resources Search](#)



**Map Legend**

- Water Quality Sampling Sites
- Hydrology Sampling Sites

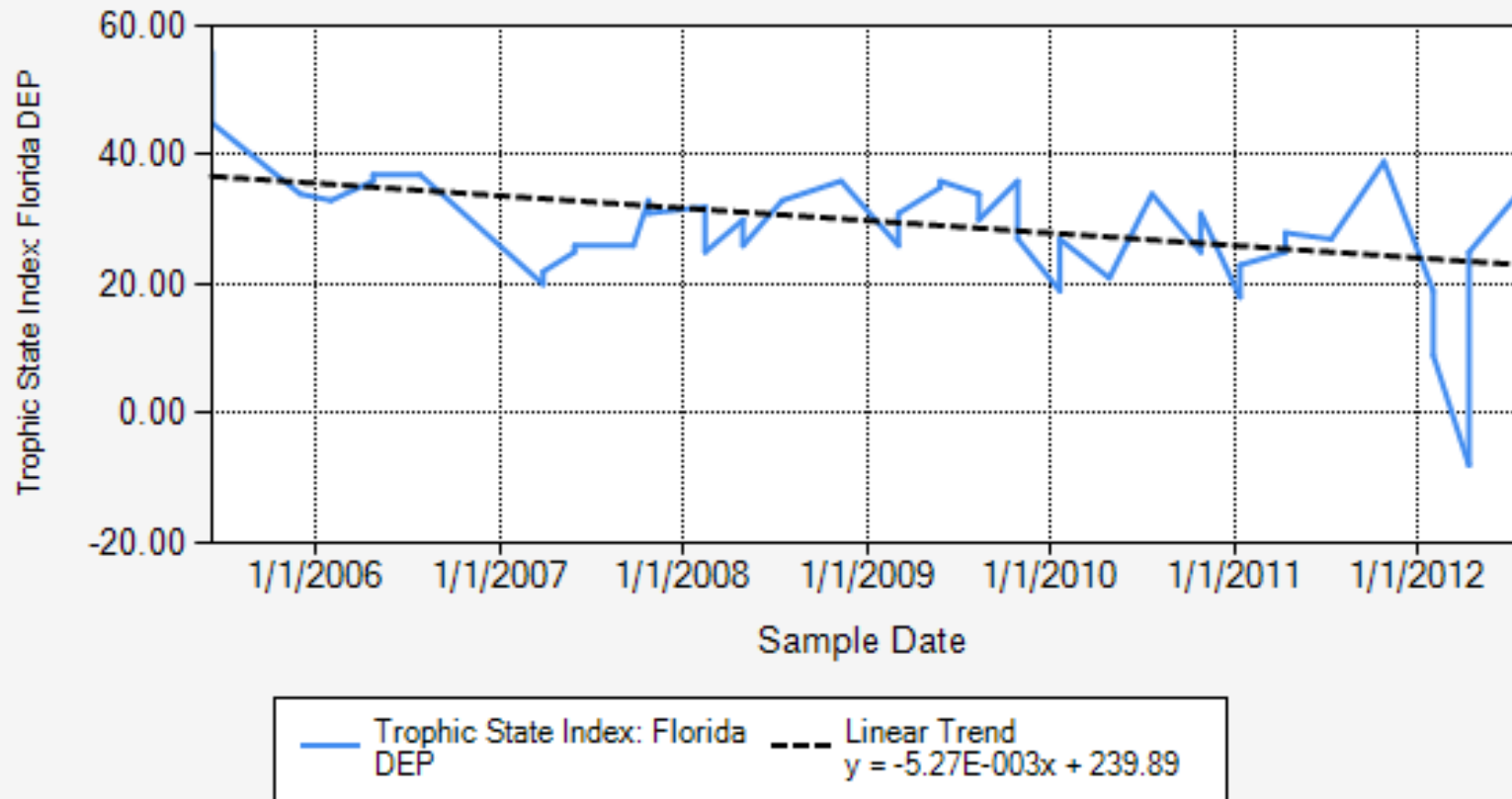
### Data Summary

This water resource is monitored by **10** sampling locations, which



# Lake Pickett TSI

**Trophic State Index: Florida DEP  
Pickett, Lake  
(55 measurements)**





# Status of Management Funding

- Seminole County MSBU
- Orange County MSTU





# Seminole County Lake Pickett AWC MSBU Update

Kathy Moore  
SC MSBU Program Manager



# Service Scope – *Review*

- **Lake Management Plan:**

Treatment/Management of Hydrilla by approved methodologies as authorized by State issued permit(s)

- **Approved Methodologies:**

- Chemical (*herbicide*)
- Biological (*TGC fish*)
- Integrated Approach\* (*herbicide + TGC fish*)

*\*Methodology recommended for Lake Pickett*

- **Current Plan/Permit: Chemical Methodology**

*Specific herbicides; specific conditions*



# Seminole County MSBU

## Balanced Budgeting

Revenue = Expenses

### ■ Revenue

- Beginning Fund Balance *(prior year ending balance)*
- Assessments *(rate determined and adjusted annually)*
- Fund Advance *(when applicable)*

### ■ Expenses

- Planned Expenditures  
*(Immediate needs/expectations per Lake Management Plan)*
  - Herbicide Product & Application Labor *(Interlocal Agreement)*
  - SC Administrative Fee *(\$1,075.00)*
- Contingency/Reserves  
*(Anticipating & preparing for long-term financial demands associated with hydrilla management)*



# MSBU Budget Overview (current year)

- Available Funding: ~\$170,000
  - Expenditures (per Lake Management Plan)  
\$ 40,000 - \$75,000
  - Contingency/Reserves:  
\$130,000 - \$95,000



Seminole County MSBU  
**Budget Planning for Next Year [FY13/14]**  
*(per Lake Management Plan)*

**Cost Estimate: Herbicide product/services ~\$40,000-75,000**  
**Need to maintain reserve/contingency level**  
**Assessment Revenue Targeted: ~\$40,000**

**Tax Year 2013      \$ 90.00**

Assessment History

- Tax Year 1996 (1<sup>st</sup> yr) → \$ 89.98
- Tax Year 1997-1999 → \$ 72.00
- Tax Year 2000 → \$ 35.00
- Tax Year 2001-2005 → \$ 25.00
- Tax Year 2006-2008 → \$ 50.00
- Tax Year 2009-2011 → \$ 45.00
- Tax Year 2012 → \$ 5.00\*

\*Rate set per cost history & contingency level. Set prior to significant outbreak of hydrilla in summer of 2012. Notification to property owners [letter mailed October 2012] to anticipate increase in TY2013 per new hydrilla conditions.



# Seminole County Lake Pickett AWC MSBU

Lake Pickett - Budget or Funding

Questions specific to Seminole County?





# Orange County MSTU Updates

**Dan Homblette**  
Environmental Program Supervisor



# Status of MSTU Budget

- 88 parcels included
- Millage: 1.7597
- Annual revenue: \$21,900
- Current budget: \$230,400
  - Working budget: \$134,700
  - Reserves: \$84,700



# Questions?



# Educational Outreach

Improving the health of your lakes

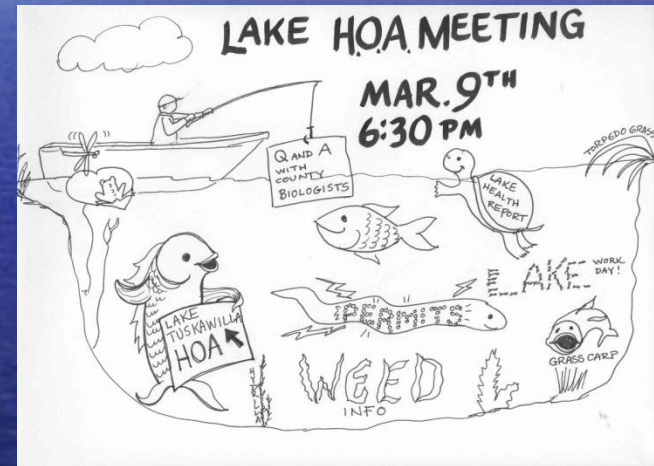




# Your Next Steps

## Be Active in Your Lake Community

- Hold and attend lake meetings on a regular basis to address the needs of your lake
- Have a step-wise action plan for management activities
- County LMP can provide technical assistance to your lake groups





# Your Next Steps

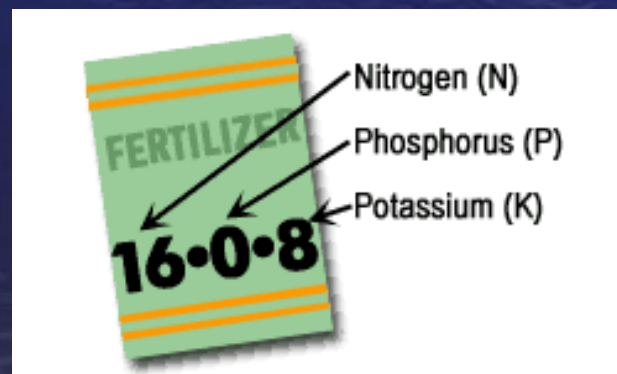
## Reduce Your Nutrient Loading to Lake



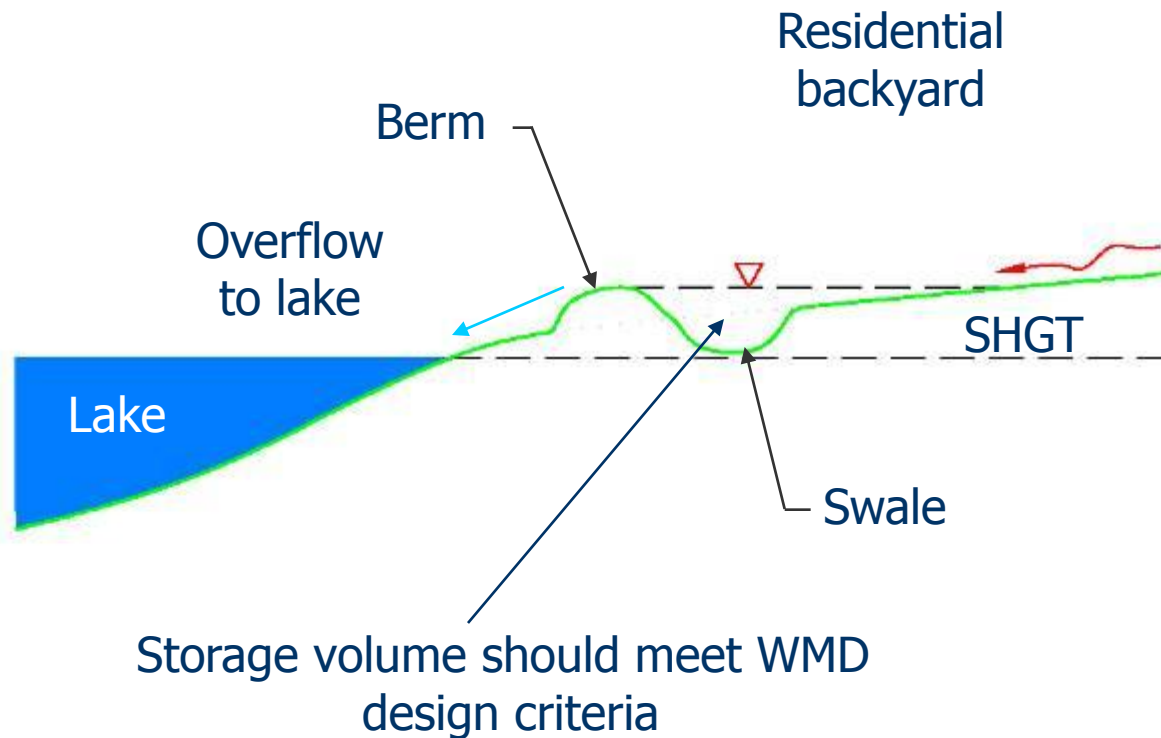
### Prevent:

- Improper and Excessive use of Fertilizers
- Landscape Activities- be careful with grass clippings & leaves
- **Stormwater** run-off
- Compliance with the Orange County Fertilizer Ordinance

**Phosphorus**



# Rear Yard Swales and Berms





# Stormdrain Marking

- Help reduce #1 form of pollution in waterways
  - Stormwater runoff / Nonpoint Source Pollution
- Increase public awareness / outreach
  - Preventative and proactive
- Improve and protect water quality
  - Local waterways ➡ SJR ➡ Atlantic Ocean



# Are your storm drains labeled?

If not, please contact:

Seminole Education, Restoration & Volunteer Program Coordinator

407-665-2457

[serv@seminolecountyfl.gov](mailto:serv@seminolecountyfl.gov)



Orange County EPD, Carrie Mohanna, Volunteer Coordinator

407-836-1430

[Carrie.Mohanna@ocfl.net](mailto:Carrie.Mohanna@ocfl.net)







# FYN Workshops



- Florida-Friendly Landscaping™ (FFL) means using low-maintenance plants and environmentally sustainable practices. Learn how you can have a beautiful landscape that could save you time, energy and money while protecting our water resources and the future.



## STOP AQUATIC HITCHHIKERS!™

Prevent the transport of nuisance species.

Clean all recreational equipment.

### When you leave a body of water:

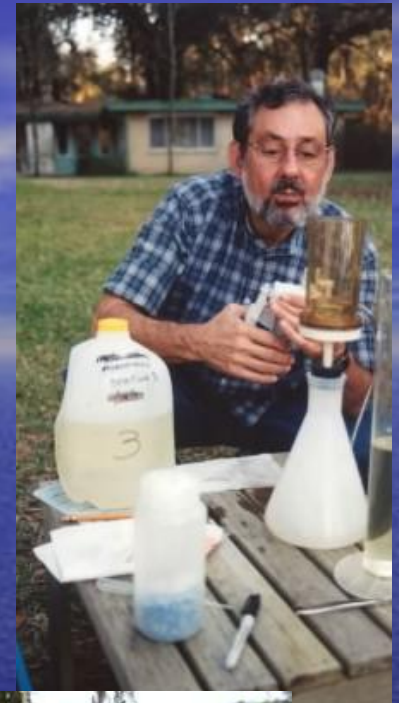
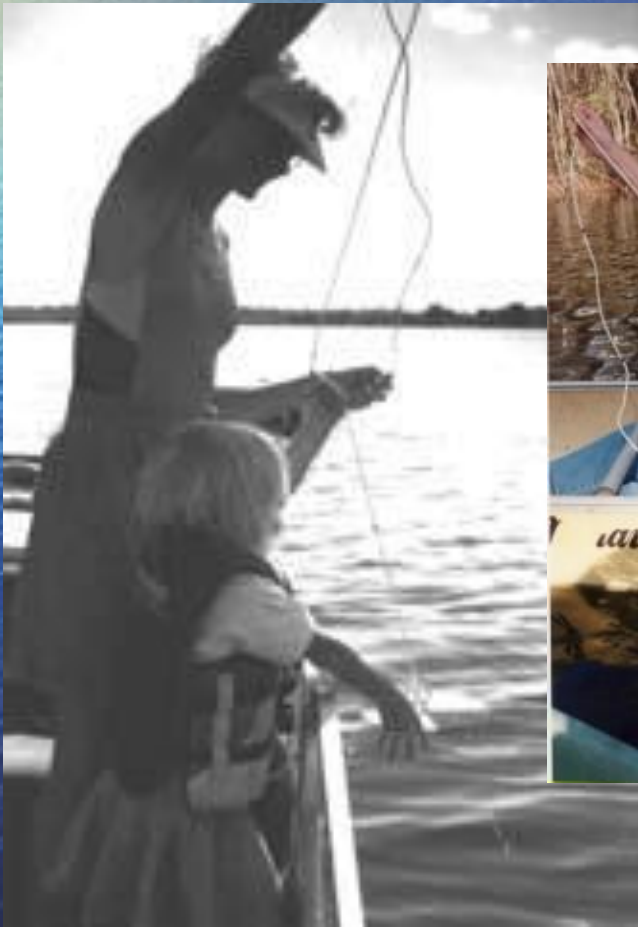
- Remove any visible mud, plants, fish or animals before transporting equipment.
- Eliminate water from equipment before transporting.
- Clean and dry anything that comes in contact with the water (boats, trailers, equipment, clothing, dogs, etc.).
- Never release plants, fish or animals into a body of water unless they came out of that body of water.





# Your Next Steps

Become a LAKEWATCH or a  
Adopt a Lake Volunteer





# Benefits of a Native Shoreline

- Filters pollution runoff BEFORE entering the lake
- Improves the overall ecosystem function of the lake and subsequent waterways it flows into
- Provides habitat for wildlife
- Reduces erosion
- Aids in stabilizing the shoreline
- Occupy space so invasive plants can't invade
- Aesthetics





# Native Aquatic Plants



Pickerelweed



Duckpotato



Yellow Cana

# Recommended Management Options for Lake Pickett

Issue	Recommendation
Be Active	Hold and attend lake meetings formulating a step-wise plan for your lake.
Rear Yard Berms and Swales	Construct berms and swales along all developed shoreline areas of Prairie and Pearl.
Vegetated Shorelines	Require establishment of natural shoreline vegetation in all non-exempt shoreline areas within 2 years.
Septic Tanks	Routinely clean out to ensure sludge does not enter into drain field. Use low P detergents if on septic.
Public Education	Establish a comprehensive public education program to inform residents of link between watershed activities and water quality. Utilize SERV & FYN Programs.
Fertilizer Use	Reduce use of P and keep leaves and lawn clippings out of your lake.



A wide-angle photograph of a calm, deep blue ocean stretching to the horizon. The sky is a clear, vibrant blue with wispy white clouds. On the left side, a bright rainbow is visible, its colors reflecting on the water's surface. The word "Questions?" is centered in the middle of the image in a bold, yellow, sans-serif font with a black outline.

**Questions?**



**FWC**

**Carl (CJ) Greene**

**Regional Biologist**

**Invasive Plant Management Section**

**Florida Fish and Wildlife Conservation Commission**