



## Integrated Pest Management Program Final Report



### Shoreline Stewardship Program: Be a Lake Pan Pal

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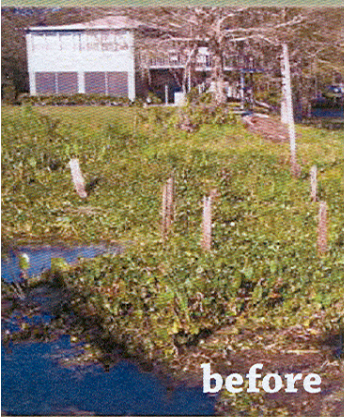
## Shoreline Stewardship- Be a Lake Pan Pal



before



after



before



after

### Background

Lake Panasoffkee is a 920 acre water body in Sumter County that has been designated as an "Outstanding Florida Water" by the Florida Department of Environmental Protection. It is also the third largest lake of 1,800 lakes in west central Florida. Historically Lake Panasoffkee has had a national reputation for its redear sunfish fishery making the lake an important contributor to the local and regional economy. Although fishing remains popular at Panasoffkee, the lake's future as an important recreation resource has been threatened as a result of the loss of fishing spawning areas and open waters. Since the mid-1950's when the lake's fishery was first being studied, the lake's fisheries have declined considerably. Fifteen fish camps were noted to be in existence in early studies while today only five remain in operation on the lake.

In an effort to restore and protect the environmental and economic importance of Lake Panasoffkee, the 1998 Florida Legislature created the Lake Panasoffkee Restoration Council. Through enabling legislation, the Legislature directed the Council to develop a restoration plan for the Lake Panasoffkee. Pursuant to its legislative directive, the Council reports to the Legislature annually the progress of restoration efforts. Lake Panasoffkee is currently undergoing a \$25 million dredging project to revitalize the lake. The main thrust of the restoration effort consisting of dredging approximately 8.3 million cubic yards of accumulated sediment and undesirable vegetation from the lake and residential canals.





## Shoreline Stewardship- Be a Lake Pan Pal

### Need for Extension Outreach Programs

In the eight years since project inception, efforts have been underway to reduce the encroachment of sediment and vegetation which has overcome 22% of the lake or 800 acres of the 3,700 acre preserve area. While the majority of the efforts and funding has been placed on the restoration, education and outreach relative to this project has been non existent. To address educational needs associated with the restoration of the lake, a *Shoreline Stewardship Program* was initiated by UF IFAS Extension in Sumter County to address "Florida-friendly" shoreline concerns as well as boating and fishing issues relative to focusing on habitat restoration.

### Shoreline Stewardship- Phase I

The first phase of the program was to create a steering and advisory committee of local citizens interested in the restoration of the lake. This committee was comprised of fishing lodge and marina owners, local restaurant owners, fishing tackle shop owners, Lake Panasoffkee Restoration Project members, and interested citizens. A \$5,000 Southwest Florida Water management District Community Education grant was obtained to host a project kickoff event known as the Lake Panasoffkee Celebration.

The Lake Panasoffkee Celebration was a family-oriented event designed to launch outreach and educational activities associated with Lake Panasoffkee restoration. The one-day event was hosted by the Sumter County Extension in conjunction with Sumter County Parks Department, SWFWMD, Sheriff Department, Fire and Rescue, University of Florida LakeWatch, Sumter Electric Company (SECO) and Florida Fish and Wildlife Conservation Commission.



**State Representative Ginny Brown-Waite addresses the Lake Panasoffkee**

A goal of the Lake Panasoffkee Celebration was to persuade the community to become a "Lake Pan Pal" with the objective of creating a lake stewardship mind set. This program promoted shoreline stewardship actions to sustain and enhance the restoration efforts on Lake Panasoffkee and neighboring waterways. To achieve this goal a variety of demonstrations, presentations and exhibits were available to engage participants on the following topics: Lake Pan - Now and Beyond, The Making of a Quality Lake, EZ Shoreline Landscaping the Florida- Friendly Way, Watershed Awareness, Water Conservation, Pollution Prevention, and Septic System Management.



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More than 500 residents attended the event and 165 residents took the Pledge to Keep Lake Panasoffkee Beautiful (Attachment 1). A youth poster contest was held to encourage students to use their artistic talents to creatively share ideas on how Lake Panasoffkee residents can preserve the waters of the lake. One hundred and eight students submitted posters at his event. Additionally a fishing derby was sponsored by Florida Fish and Wildlife Conservation Commission and was attended by 50 Sumter County youth.



### Shoreline Stewardship- Phase II



The second phase of the program was to continue the momentum created by the celebration and extend additional information at strategic lake front locations. It was recognized by the steering and advisory committee that a need existed for educating the public on the importance of removing nuisance weeds from boating and fishing equipment prior to and following launching areas around the lake. To address this concern, eight launching ramps informational stations were installed at the most frequently used boat ramps in Sumter County. Informational stations were installed with the launching ramping signage providing educational publications. Two trifold informational brochures were developed providing information on nuisance aquatic weeds and on monofilament recycling (Attachment 2 and Attachment 3) Additionally monofilament recycling bins were installed as a component of the launching ramp information station.

### Shoreline Stewardship- Phase III

A third phase of the programs has been to work with local cafes and restaurants to reinforce messaging related to preventing the spread of aquatic weeds and weed removal via the introduction of informational table mats (Attachment 4 ). It was recognized by the steering and advisory committee that boaters and anglers frequent cafes and restaurants bordering the lake following boating activities. To bring attention to the importance of removing nuisance weeds from boating equipment table mats with messaging were developed.

Ten-thousand "Prevent the Spread of Aquatic Weeds" table mats were designed and are being disseminated to eight local restaurants in Lake Panasoffkee. These mats are designed to provide one more avenue to present aquatic weed information to those who frequent local restaurant businesses.



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A month-to-month guide for 2007 (Attachment 5) was also developed highlighting principles of Florida-friendly living on the waterfront. Each month showcased a recommended practice encouraging a personal commitment to help prevent water pollution and keep Florida waters healthy and pristine. One thousand calendars were printed and distributed in waterfront communities in Sumter, Pasco, Hernando and Citrus Counties.

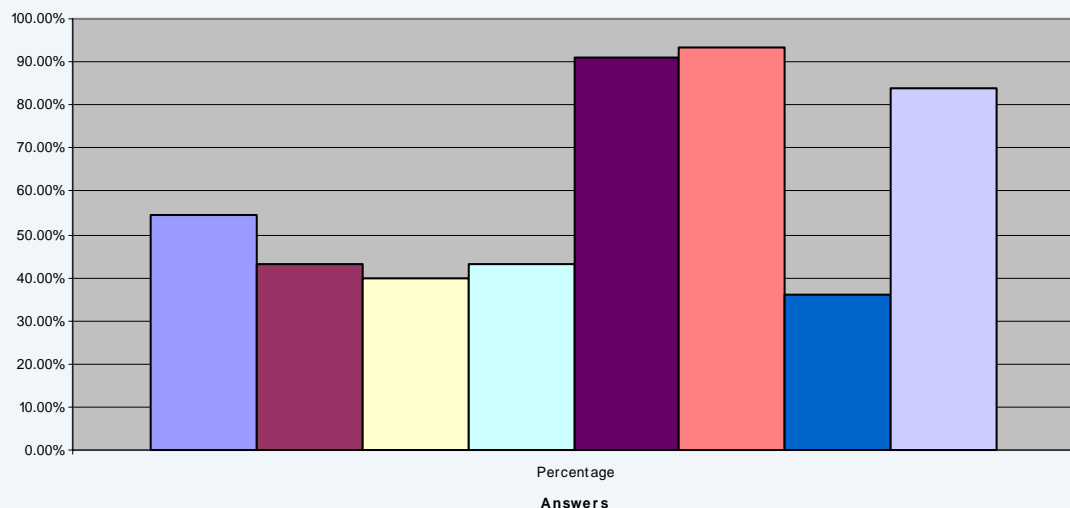
### Results and Findings

As a result of the event and publications disseminated at a number of other events, there was a heightened awareness of water quality issue specific to Lake Panasoffkee.

All attendees of the Lake Panasoffkee Celebration who signed pledge cards were mailed a follow up survey and 27% responded to marketing questions, practice changes and suggestions for future programs. Data indicate that 54.5% of the respondent indicated they used organic or slow release fertilizers; 43.2% indicated they kept trash on board their boat; 40% indicate watch boat wake; 43% indicated they removed weeds from their boat propeller and gear, and 36% indicated they disposed of waste oil in special recycling oil tanks. When responding to questions specific to the celebration 90.9% found the exhibits useful, 84% indicated the workshops were beneficial and 93.2% would recommend that others attend future Lake Panasoffkee celebration.

In addition to the knowledge gained as a result of the one-day event, residents became aware of the new location of the University of Florida, Sumter

**Lake Pan Pledge Survey Responses**



- Use Fertilizer
- Keep Trash on Boat
- Watch Boat Wake
- Weeds Removed from Boat
- Exhibits Useful
- Recommend to Others
- Use Recycling Oil Tanks
- Workshops Beneficial



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### Conclusions and Recommendations

During the past six months, the water level within the Outlet River, Withlacoochee River, and Lake Panasoffkee has been steadily declining and is currently three-feet below its normal level. This dramatic reduction in water level has minimized boat accessibility into the lake and surrounding canals. Receding water levels have radically affected boat traffic and shoreline commerce making it difficult to assess the success of water's edge education and outreach efforts located at launching ramps and dockside cafes. Continued monitoring of these sites will occur with the understanding that with the advent of the rainy season and return of the lake level, a clearer vision of the programs success will become evident.



Low water level on canals bordering Lake Panasoffkee

# Shoreline Stewardship- Be a Lake Pan Pal

## Attachment 1

### Take the Pledge



*Be a "Lake Pan Pal"  
Keep Lake Panasoffkee Clean*

Over the past few years a lot of work has been done to improve the quality and appearance of Lake Panasoffkee. What you do in and around your home impacts Lake Panasoffkee. We urge all residents to make a personal commitment to help prevent water pollution and keeps our lake healthy and beautiful. Take the pledge to protect Lake Panasoffkee.

#### **I pledge to do my part in keeping Lake Panasoffkee beautify by:**

- Preventing the spread of exotic aquatic plants thoroughly clean the boats hull, propeller and trailer after pulling the boat from the lake.
- Keeping trash and garbage on board and make it a rule to take it back to shore. Dispose of it properly when you get home. Try recycling cans and plastic bottles.
- Recycling old fishing line at marinas or tackle shops. Fish and other animals often become tangled in discarded fishing line and can die.
- Watching boat wake...especially close to the shore. Waves cause shoreline erosion and can disrupt wildlife habitats.
- Avoiding the temptation to top off your gas tank when refueling. Gas spilled into the lake can pollute the waters of Lake Panasoffkee.
- Using phosphate-free detergents when washing your boat and never dump hazardous products into the lake.
- Disposing of waste oil in special oil recycling tank and never pour oil into the lake or on the ground.
- Setting an example for healthy waterfront living through Florida friendly landscape practices. Reduce or eliminate pesticides or herbicides. Use organic, slow-release fertilizers on your lawn—or none at all! Gardening chemicals end up in the lake in measurable amounts. Pesticides also kill good bugs; can poison birds and fish; and should be used sparingly around children and pets.
- Maintaining your septic system. Failed septic systems can cause significant water quality problems for lakes. Get regular inspections every three months or three years, depending on the type of system by an experienced professional.

Signature \_\_\_\_\_

Date \_\_\_\_\_

Name \_\_\_\_\_

Address \_\_\_\_\_

\_\_\_\_\_

Phone \_\_\_\_\_

Email \_\_\_\_\_





# Shoreline Stewardship- Be a Lake Pan Pal

## Attachment 2

### Monofilament Recycling Do your part!

**Question: How can I help?**  
Answer: There are many things that you can do to help keep line out of the environment.

- 1 - Recover Your Line - Whenever possible retrieve and properly dispose of any monofilament line that you encounter. It is particularly important to take the time to remove monofilament from the mangroves if it becomes tangled there after mis-casting.
- 2 - Volunteer - Participate in local beach and river cleanup events. Volunteer for agencies that are actively sponsoring cleanups. Volunteer to sponsor an outdoor monofilament recycling bin and empty it of line on a monthly basis.
- 3 - Be Line Conscious - Consider the age of your line and its strength and keep track of and store loose pieces of fishing line. Even tag ends cut from leaders can be stored easily for proper disposal. Cut an 'X' into the lid of a firm or tennis ball canister to make it easy to poke the pieces of line through.
- 4 - Recycle - Recycle monofilament fishing line at a local tackle shop or an outdoor PVC recycling bin posted at boat ramps and piers. If the tackle shop you visit does not have a recycling bin encourage them to participate in the program.

### CONTACT INFORMATION

For more information on monofilament recycling in your area, please contact:

**Citrus County Extension**  
3650 W Sovereign Path, Ste 1,  
Lecanto FL 34461  
Office: (352) 527-5700  
Fax: (352) 527-5749

**Sumter County Extension**  
7620 State Road 471, Suite 2  
Bushnell, FL 33513-8734  
PH: (352) 793-2728  
FAX: (352) 793-6376

**Hernando County**  
19490 Oliver Street, Brooksville,  
FL 34601  
Office: (352) 754 - 4433  
Fax: (352) 754 -4489

**Pasco County Extension**  
36702 State Road 52,  
Dade City, FL 33525  
Office: (352) 521-4288



### MONOFILAMENT RECYCLING

But it's just a  
piece of fishing  
line...



How harmful  
can it be?"



### FAQ - MONOFILAMENT RECYCLING

**Question: What is monofilament?**

**Answer:** Most fishing line that you can buy today is made of monofilament—a single-strand, strong, flexible plastic that is clear or tinted blue, pink or green.

**Question: Why is monofilament a problem in the environment?**

**Answer:** Most monofilament is non-biodegradable—it lasts about 600 years. Because it is thin and often clear, it is very difficult for birds and animals to see and they can easily brush up against it and become entangled in it. Once entangled, they may become injured, strangled, or may starve to death. Many animals also ingest fishing line. One ring-billed gull was found to have consumed 590 feet of heavy-duty fishing line.

**Question: Can all fishing line be recycled?**

**Answer:** No, only fishing line that is a single filament, nylon product, fishing line that is braided or contains wire can not be recycled. Fishing line that has a lot of growth on it or plant material mixed up with it may not be recyclable.

**Question: How does monofilament end up in the environment?**

**Answer:** Much of the fishing line that ends up in the water gets there when someone's hook gets snagged on something underwater and the line breaks when pulled. Sometimes a sharp shell will rub against a sharp shell (like an oyster shell) and will break. Large fish can sometimes pull hard enough to break lines. Sometimes fishing lines get caught in trees and break off there.

Even fishing line that is thrown in the garbage can end up in the environment—either by blowing out of the garbage can or by being taken out by birds or animals.

**Question: What should I do about a tangled animal I have seen?**

**Answer:** If a marine mammal or turtle is spotted, contact the Florida Fish and Wildlife Alert Program at 1-888-404-FWCC or 1-888-404-3922. Some birds can be untangled after first throwing a blanket over the bird's head to limit their eyesight. Just be careful not to tangle the bird in the blanket or towel!

**Question: How is monofilament recycled?**

**Answer:** The monofilament is collected from recycling bins and cleaned of hooks, leaders, weights, and trash by volunteers. It is then shipped to the Berkeley Pure Fishing Company in Iowa.

Berkeley melts the line down into raw plastic pellets that can be made into other plastic products including tackle boxes, spools for line, fish habitats, and toys. It is not made into more monofilament line.

**Question: I always throw my line in the trash, is that ok?**

**Answer:** If you throw out monofilament you are still keeping it out of the environment, but be sure to cut the line into short lengths (6" to 12"). Because once it goes to the landfill it can be scavenged there by animals trying to use it to build nests, or eat it. These animals will get entangled, their young, and will bring the line right back out into the environment.







# Shoreline Stewardship- Be a Lake Pan Pal

## Attachment 3





# Shoreline Stewardship- Be a Lake Pan Pal

## Attachment 4





# Shoreline Stewardship- Be a Lake Pan Pal

Attachment 5

