

Staff Directory

Keith Andreu, Aquatic Technician
William Colon, Aquatic Technician
Jason Cull, Operations Manager
Jeremy Ford, Aquatic Technician
Dr. David Hoel, Executive Director
Dr. Ernesto Lasso de la Vega, Water Quality Laboratory Manager
Justin Lamb, Aquatic Biologist
Colin Lewis, Aquatic Biologist II
Aaron Lloyd, Assistant Director
Dr. Hannah Oswalt, Research & Water Quality Laboratory Manager
Kevin Watts, Deputy Director



Top Ten Plant Species
Treated
In 2025
(acres treated)

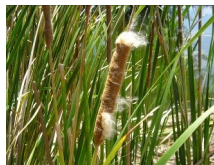
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|--------------------|-----|
| 1. Spatterdock | 899 |
| 2. Water Lettuce | 52 |
| 3. Water Hyacinth | 25 |
| 4. Muskgrass | 19 |
| 5. Torpedograss | 16 |
| 6. Cattails | 12 |
| 7. Water Pennywort | 8 |
| 8. Southern Naiad | 7 |
| 9. Phragmites | 5 |
| 10. Alligatorweed | 4 |



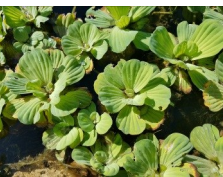
Spatterdock



Water Hyacinth



Cattails



Water Lettuce

Public Outreach

Pond Watch is a 32-year-old program that has continued giving support to residents of Lee County since 1993. The total number of sites has increased to 132, which represents more than 150 monthly samples analyzed by the Water Quality Laboratory. The information collected by the district is presented to each volunteer in the annual Pond Watch Workshop on the second Monday in March in annual reports that provide evidence and recommendations for best management practices to minimize adverse conditions in their ponds.

Pond Watch has been invited to participate in many public events including an NPR interview about the Fertilizer Ordinance in Lee County, Rotary Clubs, Kiwanis Club, a UF/IFAS Master Naturalist Class, and the Florida Lake Management Society Annual Symposium. The district conducted some research in Pond Watch volunteer ponds utilizing a native clam (*Rangia cuneata*) as a biological control for harmful algae blooms in storm-water ponds. The results were presented in several professional meetings including the Florida Fish and Wildlife Conservation Commission webinar series, the Aquatic Plant Management Society, and the Florida Aquatic Plant Management Society.

The district has continued providing support to universities students (FGCU and FSW) on their professional development with internship programs. In 2025, nine students worked in the laboratory conducting water quality analysis of samples in addition to collecting samples and field environmental measurements in the river and many bodies of water. Many students have applied for jobs referencing this part of their education as practical experience, rendering better possibilities to be hired in private and government jobs.

After 35 years of service, Dr. Ernesto Lasso de la Vega will retire in 2026 leaving a legacy of work that includes the work with the triploid grass carp production and monitoring, the Pond Watch program, research with littoral and submerged plants, pond aeration, the fertilizer ordinance, and biological control with clams.

In anticipation of Dr. Lasso de la Vega’s retirement, the district hired his replacement in September. Dr. Hannah Oswalt, a graduate from University of Alabama Birmingham, has been working with Ernesto in transition to assume all responsibilities for the Water Quality Laboratory, the Pond Watch Program, and the student internship program.

2025 ANNUAL REPORT

Lee County Hyacinth Control District

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Ed Brantley, Chairman
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William P. Burke,
Secretary - Treasurer
Stephen R. Bowen
W. Michael Ellis
Brian F. Farrar
Bruce Scott

Executive Director
Dr. David Hoel

2025 ANNUAL REPORT

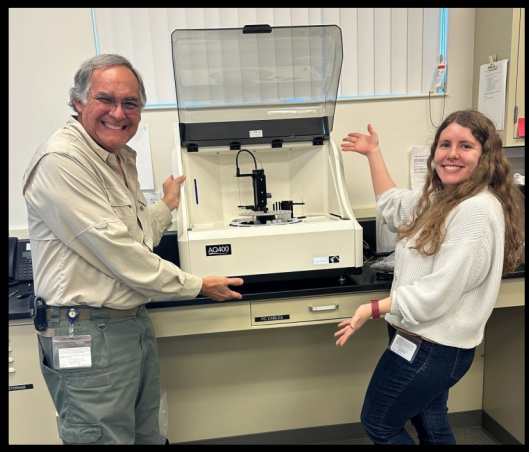
Lee County Hyacinth Control District
15191 Homestead Road
Lehigh Acres, FL 33971

Phone: 239-694-2174

<https://leecountyhcdfl.gov>



LCHCD staff attended the Florida Aquatic Plant Management Society’s (FAPMS) Annual Conference in St. Petersburg, Florida. This was a great opportunity for some technical training, aquatic plant identification and to learn more about new products in our professional field. The district has had a long-standing working relationship with FAPMS since its inception in 1976.



Dr. Ernesto Lasso de la Vega and Dr. Hannah Oswalt welcomed the latest upgraded edition to the Water Quality Laboratory our new analyzer. The old analyzer, the AQ2, has been retired to greener pastures and has been replaced by the AQ400. This new addition will increase the lab’s efficiency when processing the numerous samples received each month through the Pond Watch program.



Lee County Hyacinth Control District wrapped up their annual filter marsh harvesting project at Lakes Park this Fall. An estimated 5.5 acres, 105 harvest loads, and 30,466 lbs. of aquatic vegetation were harvested from the flow way.

The Lee County Hyacinth Control District was formed by an act of the Florida Legislature on June 12, 1961.



Operations

Aquatic vegetation is managed by the application of Environmental Protection Agency (EPA) - approved herbicides, mechanical harvesting and biological control. 2025 summaries are as follows:

Chemical Control

Service Requests - 641
Acres Treated - 1,077

The geographical jurisdiction of the LCHCD covers all of Lee County, as well as the Caloosahatchee River and its tributaries extending to the Glades County boundary at Lake Okeechobee, encompassing 28,423 acres under management. The district defines public waters as any waterbody that is accessible to the general public or owned as a public resource. These waters may be used for purposes including, but not limited to, navigation, recreation, fishing, flood control, and water supply.

LCHCD had a busy spring this year, hosting visitors from all around Southwest Florida. This is a brand-new approach to facilitate aquatic weed management knowledge among local, state, and specialty groups. These meetings consisted of a variety of equipment demos, computer program reviews, and new and upcoming technological advances within the aquatic industry. By providing a private tour, we not only have the time to ask and discuss questions, but also build connections—so when future questions arise you know exactly who to contact.

Here are some comments we’ve received from these groups. “I want to express my gratitude to you and your team for taking the time to share the information you have. I genuinely admire the work you’re doing, and I’ve always appreciated your willingness to assist and pass on knowledge.” - **Chris Torres (Seminole Tribe of Florida)**

“I was genuinely impressed by the level of knowledge and commitment demonstrated by your staff. It’s clear that you have cultivated a team that is not only skilled but also passionate about their mission.” - **LeRoy Rodgers (South Florida Water Management District)**

“Thank you so much for taking the time out of your busy schedules to show our Natural Areas Coordinators around your facilities! They really enjoyed it and I think it gave them a great ideas on how we can continue to work together on future projects and maintain open communication.” - **Richard Bauer (Lee County 2020 Conservation)**



Jason Cull Dr. Ernesto Lasso de la Vega

Jason Cull gave an exceptional presidential address at the annual FAPMS conference, highlighting on how far we have come as an organization and where we are headed with the influence of artificial intelligence. There were many references made throughout the conference with respect to the impacts of Jason’s insightful address. Dr. Ernesto Lasso de la Vega gave a very exuberant presentation on the “Evaluation of *Rangia cuneata* as a biological control for algae in stormwater ponds in southwest Florida.” He had the folks engaged with his colorful high energy antics as usual. Also, Ed Foley with Lee County Mosquito Control District provided an in-depth approach to “Going for the source: Lee County Mosquito Control District’s efforts to control *Mansonia* mosquitoes by targeting aquatic vegetation.” Ed was

Colin Lewis LCHCD Aquatic Biologist II earned his Master’s degree in Interdisciplinary Ecology from the University of Florida’s School of Natural Resources and Environment this year. This milestone reflects Colin’s dedication and passion for advancing environmental stewardship and responsible aquatic plant management. Colin’s thesis, Evaluating Drone-Based Herbicide Applications for Emergent Plant Management in Aquatic Systems, represents a groundbreaking contribution to the field of aquatic vegetation management. His study explored the efficacy of drone-based herbicide applications for controlling cattails (*Typha spp.*) in Florida’s wetlands, focusing on optimizing herbicide concentrations and spray parameters. Colin’s research opens new horizons for aquatic plant management, offering a new treatment approach that could transform how we target invasive vegetation in wetland ecosystems.



asked plenty of questions and generated lots of interest from the attendees. Overall, this was an excellent event with important practical information and many educational training benefits.

The South Florida Aquatic Plant Management Society (SFAPMS) held a meeting on the southeast coast of Florida in October. Keith Andreu once again has cemented himself as the 2nd longest reigning SFAPMS president and will continue his commitment in the upcoming year of 2026. Colin Lewis provided an in-depth presentation titled “Innovation or Stagnation: Modernizing an aging industry”. The LCHCD prides themselves on being proactive and staying ahead of the ever-changing world of aquatic weed control. Sometimes it’s as simple as adding a blue dye dispenser or creating a brand-new way of treating using children’s squirt guns. Aquatic weed management doesn’t always have to be same old boring “stagnation” method. Rather, we can use “innovation” to keep us moving forward and in the forefront of this industry.



Biological Control

TGC stocked - 533
Acres stocked with TGC - 508

LCHCD manages the use of triploid grass carp (TGC; *Ctenopharyngodon idella*) to maintain optimal levels of submergent vegetation as part of an integrated aquatic plant management program. Field data is collected, analyzed, and processed to assess appropriate stocking rates. The results of triploid grass carp stocking are illustrated in the graph below.

