

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
Colin Lewis, Aquatic Biologist
Lee Martin, Aquatic Biologist
Kevin Watts, Deputy Director



Top Ten Plant Species Treated
In 2023
(acres treated)

- 1. Spatterdock 581
- 2. Water Hyacinth 36
- 3. Water Lettuce 25
- 4. Muskgrass 18
- 5. Tapegrass 15
- 6. Torpedograss 15
- 7. Cattail 10
- 8. Water Pennywort 10
- 9. Hydrilla 8
- 10. Southern Naiad 7



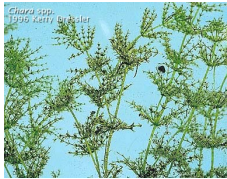
Spatterdock



Water Lettuce



Water Hyacinth



Muskgrass

Public Outreach

The Pond Watch Program is celebrating its 33rd anniversary of serving citizens of Lee County who have stormwater ponds. There are 128 sites in the program and many of the sites are communities with multiple interconnected waterways. One issue of concern for some communities was the impact of Hurricane Ian (2022) with the surge of marine water flooding Fort Myers coastal zones. Salinities are still high in many ponds making them unsuitable for freshwater littoral plantings and water use for irrigation. Pond Watch is monitoring and advising these communities with alternative salt tolerant plants and reduced irrigation practices.

In addition, Pond Watch has created a good reputation for the service it provides to Lee County residents. Indian River Lagoon National Estuary Program has requested Pond Watch guidance to establish a citizen water quality monitoring program which will increase public awareness and engagement reducing stormwater pollution and improve the health and resilience of the Indian River Lagoon.

The water quality laboratory has continued sampling the Calusa River from the Franklin Lock to the Moore Heaven Lock as part of the monitoring of nutrients and harmful algae blooms, in addition to sources of pollution to the river.

The District has continued to provide support to university students who seek additional practical experience in their education. One of our interns, Elizabeth Niles, was awarded best poster presentation at the 2023 Florida Lake Management Society annual symposium at Duck Key, Fl. (see picture). To this date, 28 students have participated in our laboratory and field internship program. Many of students have applied for jobs referencing this part of their education and have been hired by local companies and government agencies in the environmental field.



2023 ANNUAL REPORT

Lee County Hyacinth Control District

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Executive Director
Dr. David Hoel

2023 ANNUAL REPORT

Lee County Hyacinth Control District
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Lehigh Acres, FL 33971

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Lee County Hyacinth Control District staff attended the Florida Aquatic Plant Management Society's Annual Conference in St. Petersburg, Florida this year. This was a great opportunity for some technical training, aquatic plant identification, distinguished award recipients and to learn more about new products in our professional field.



Lee Martin took 1st place at this years FAPMS conference in the applicators papers presentation category titled "Invert Spray System: Renewing an Old Technology."



After 2 years of flights, LCHCD's drone program hit a roadblock in January of 2023 when Florida law prohibited the use of adversarially made drones. Over the past 11 months, our drone pilots (Colin and Lee) have worked together to get the District back in the air this year!

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 the use of triploid grass carp. 2023 summaries are as follows:

Chemical Control

Service Requests - 591
Acres Treated - 756

The geographical jurisdiction of LCHCD includes all of Lee County, the Caloosahatchee River and its tributaries up to the border of Lake Okeechobee in Glades County (28,418 acres managed). The District defines public waters as any waterbody accessible by the general public, or owned as a public resource. Uses of the water may include, but are not limited to, navigation, recreation, fishing, flood control and water supply.

This was an interesting year for all of us in Southwest Florida with unexpected regional rainfall deficits and high heat index warnings throughout the summer. These conditions made our jobs a bit more difficult in context to managing aquatic vegetation by impacting our efforts wrestling with low water canal systems and excessively warm temperatures. The culmination of these two factors created the perfect environment for aquatic plant species to establish and overpopulate limited volume waterways.

The City of Cape Coral utilizes the water from the freshwater canals to supplement irrigation demands

for residential and commercial lawns, thus reducing water levels which adversely stimulates aquatic macrophyte growth and then becomes a navigation issue for recreational and work-related boating activities. The City of Cape Coral is currently working with the City of Fort Myers to acquire effluent water from the Caloosahatchee Connect Project. A pipeline connecting the two water plants from each city will be dug underneath the Caloosahatchee River supplying 12 million gallons of water a day. This should alleviate some concerns for low water volumes in the dry season and reduce extreme fluctuations in the freshwater basins. The following photos depict the late spring and early summer water levels.



LCHCD’s drone program has a new welcomed addition to our fleet. It’s a Leading Edge American made PV40X hexacopter (6 rotors) drone with the option to use a 5 gallon liquid tank or 40 pound granular hopper. The 5 gallon herbicide tank is double the size of our previous drone and has 4 adjustable spray nozzles. These new features will allow us to meet current label requirements, provide new chemical options and increase our ability to cover more acreage.

The District hosted the South Florida Aquatic Plant Management Society’s general meeting this summer. This venue provided aquatic plant managers and water quality scientists an opportunity to share their experiences and knowledge with others. Dr. Ernesto Lasso

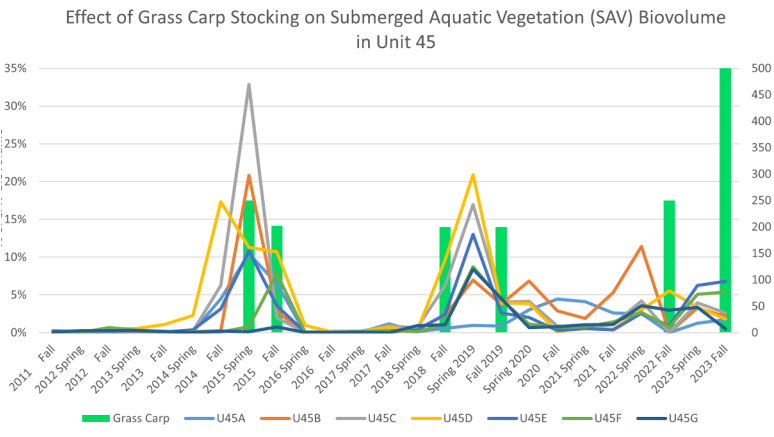
de la Vega led off with the following presentation: “Saltwater Impacts of Hurricane Ian in Storm Water Ponds” and wrapped things up with “What Happens to the Nutrients after an Herbicide Application”. These were very well received and folks asked a lot of questions with reference to the material shared by Ernesto. Eric Jackson gave an in depth and enlightening presentation on “The Broad-Spectrum Approach to Public Outreach”. The audience was very interested and engaged with Eric’s information of which he provided a unique perspective on working with the public and the media. Both District representative’s showcased dynamic presentational deliveries and stood out as true professionals with respect to their insight, enthusiasm and expertise. Overall, we had a great turnout with plenty of positive feedback and were asked again to host next year.



Biological Control

Acres stocked with TGC - 547
TGC stocked - 2,120

LCHCD manages the use of Triploid Grass Carp (TGC) (*Ctenopharyngodon idella*) for the purpose of maintaining optimal levels of submergent vegetation in conjunction with our integrated aquatic plant management program. Field data is collected and analyzed with a processed assessment program and depicted accordingly in the graph below.



Triploid grass carp are an intricate part of the District’s multifaceted aquatic plant stewardship program. This biological tool aids in managing certain species of aquatic macrophytes that inundate our local waterways. A balanced approach of low stocking rates integrated with our mechanical and chemical control measures provide desirable results on problematic aquatic vegetation. Predators are the largest concern for restocking triploid grass carp. Some of the following species can impact survivability of grass carp: ospreys, otters, alligators, bass and humans. Triploid grass carp are regulated by the Florida Fish & Wildlife Conservation Commission and a permit is required to capture or possess this species of fish.



Monthly Service Calls by Year

