Staff Directory

Keith Andreu, Aquatic Technician
John Cassani, Deputy Director
William Colon, Aquaculture Technician
Jeremy Ford, Aquatic Technician
T. Wayne Gale, Executive Director
Ernesto Lasso de la Vega, Pond Watch Coordinator
Kenneth Sonne, Aquatic Technician
Linda Walstrum, Administrative Assistant
Kevin Watts, Operations Manager

District staff participating at the Urban Pond Management and Aquatic Areas Seminar at Terry Park.

Top Ten Plant Species Treated In 2013

(acres treated)

1.	Nymphoides	88
2.	Spatterdock	66
3.	Torpedograss	37
4.	Cattail	30
5.	Muskgrass	26
6.	Southern naiad	23
7.	Muskgrass	52
8.	Duckweed	20
9.	Water lettuce	17
10	Water hyacinth	11

Nymphoides

Spatterdock

Cattail

Water hyacinth

Public Outreach

The LCHCD's Pond Watch Program is the outreach initiative that responds to inquiries from residents when they experience reoccurring problems in their stormwater ponds. In addition to educating the public with Best Management Practices that minimize weed problems in their ponds, this volunteer monitoring program analyzes water samples to determine the source of the nutrients in order to control the cause of the weed problems. Residents in Lee County benefit from the program by finding answers to problems related to the aquatic weed issues associated with their properties.

LCHCD staff are called upon to take a leadership role at annual aquatic workshops and regional short courses. Venues such as these help with the District's mission to promote sound aquatic plant management through operations, research and outreach education emphasizing integrated management techniques. Annual CEU's are offered at selective courses for license renewals, to provide current training, and compliance for our District personnel. The District's field staff are current as licensed aquatic applicators, with hazardous material spill response training/OSHA level II, and certified in First Aid from the American Red Cross

2013 ANNUAL REPORT

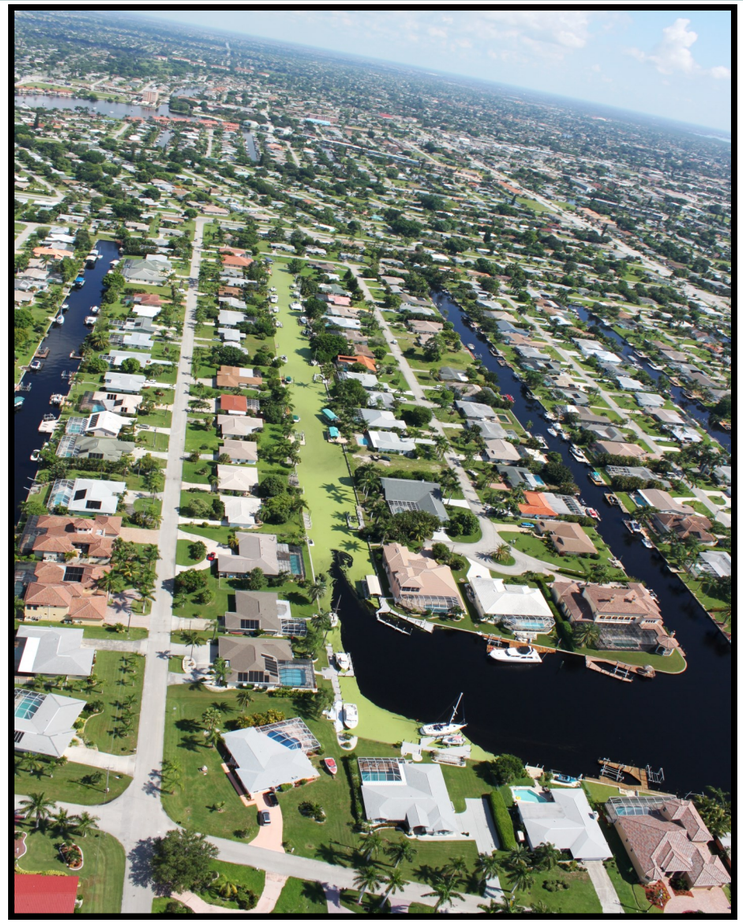
Lee County Hyacinth Control District

2013 ANNUAL REPORT

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

Phone: 239-694-2174

WWW. LCHCD.ORG



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 E.P.A. labeled herbicides and with the use of a herbivorous fish species known as grass carp. 2013 summaries are as follows:

Chemical Control

Service Requests 648
Acres Treated 412

On the forefront, the District continues to effectively manage aquatic plant growth throughout the District's jurisdiction. The extensive aquatic environments in which the District encompasses stretches beyond the delineated county borders; LCHCD's "maintenance control measures" extend 70 miles East from the mouth of the Caloosahatchee River to the Ortona Locks and Lee County public waters (31,000 acres managed). As criteria changes in water quality and policy throughout the State of Florida our mission remains consistent, focused on maintaining a balanced approach with the emphasis on education, experience, and constituent collaboration.

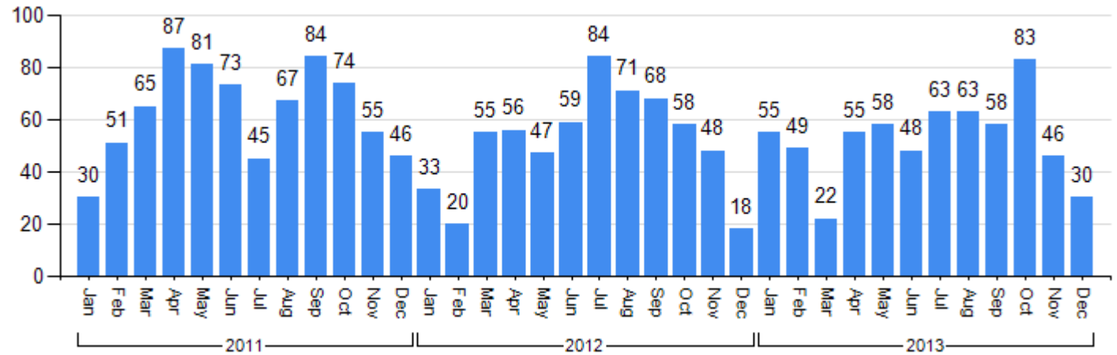
The Caloosahatchee River and Lee County Creeks aquatic plant control permits are approved for another three years. With annual inspections from a Florida Fish and Wildlife Conservation Commission regional biologist, LCHCD remains compliant in accordance with our permitted control methods. The District continues to evolve with our methodology of procedures in response to the introduction of new species each year in our local waterways.

Efforts for control are constantly being challenged by the complex nature of how each aquatic system reacts to non-native aquatic plant species. Developing a progressive response to the ever changing landscape requires a sustainable and systematic approach. Effective management is a challenge with only a handful of E.P.A. registered herbicides labeled for use in aquatic environments. Rotating aquatic herbicide applications reduces the tendency for plants to build a resistance to these specific products. A multitude of factors are involved when developing a practical and effective control strategy for targeted plant species. Variables include but are not limited to; water flow, turbidity, dissolved oxygen, nutrient levels, and plant susceptibility. These are only but a few of the hurdles to endure when assessing the complex matrix of water resource issues surrounding aquatic plant management.

Pre/Post Application Treatment

Water lettuce, alligatorweed, torpedo grass, and pennywort

Monthly Service Calls by Year



Biological Control / Grass Carp

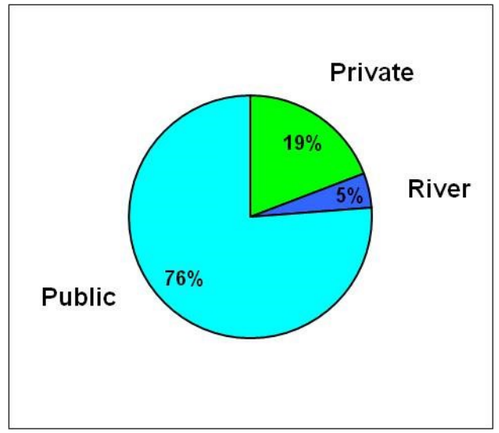
Acres Stocked 115.65
Grass Carp Stocked 834
Cumulative Acres Managed 2,209

Annual permit renewal with FFWCC for the District's triploid grass carp program remains in compliance. The District's integrated management approach focuses on the utilization of all useful components at our disposal, especially grass carp (*Ctenopharyngodon idella).* Triploid grass carp continue to work quite effectively throughout designated water bodies (2,209 acres currently managed with grass carp) in Lee County rendering positive results. Establishing this biological control agent as an important tool for long term management of urban stormwater systems remains a positive fixture as a cost effective measure. However, grass carp are not the so called "Silver Bullet" as a quick remedy or solution for submergent plant control. The primary focus is to promote long term management with studious site assessment, bathymetry measurement collection, and data analysis. Appropriating triploid grass carp as functional and feasible resource for sustainable aquatic vegetation management is of the upmost importance for an effective strategy. Triploid "sterile" grass carp are a primary method of control for aquatic plant growth in large contiguous urban reservoir systems, such as in the City of Cape Coral waterways. To date, roughly 1,236 acres of freshwater canals in the Cape are stocked and managed with grass carp.

Grass Carp Barriers

Invasive Plant Status in Lee County

The predominant non-native plant species for the last couple years has been the aggressively expanding Crested floating heart (*Nymphoides cristata*). This species was introduced through the aquarium industry and now has established itself as the top nuisance aquatic plant to control in Lee County public waters. It was identified roughly ten years ago in several local stormwater ponds and now has reached well beyond these contained water bodies. As of today the District has been able to make effective applications with positive progress on limiting its potential range Also, plants such as Water hyacinth (*Eichhornia crassipes*) and Water lettuce (*Pistia statiotes*) remain under maintenance control and continue to be effectively managed at acceptable levels.



Proportion of Areas Treated Chemically by Category