Lake Okeechobee

Aquatic Plant Management Interagency Task Force

Meeting Proceedings

The following individuals attended the Lake Okeechobee Aquatic Plant Management Interagency Task Force meeting 13th July 2021 at the Lee County Hyacinth Control District office, Lehigh Acres, FL.

U.S Army Corps of Engineers (USACE)

Jessica Fair

Chelsea Bohaty

Jake Edwards

Kavin Carter

Ashley Gonzalez

Florida Fish and Wildlife Conservation Commission (FWC)

Brenden Hession

Danielle Kirkland

Matt Phillips

Beacham Furse

Alyssa Jordan

Alex Dew

Tyler Beck

Mason Smith

Christy Soldo

Lindsey Mann

South Florida Water Management District

Bobby Campbell

Lee County Hyacinth Control District

Kevin Watts

Lee Martin

Colin Lewis

Other Attendees

Keith Mangus, Applied Aquatics

Paul Gray, Audubon

James Boggs, Helena Agri

Scott Jackson, Syngenta

Other Attendees cont.

Ramon Iglesias, Roland Martin Marina

Melissa Smith, USDA IPRL

Linda_Defee , Aquatic Vegetation

Presentations:

Colin Lewis, Lee County Hyacinth Control District

The focus of this presentation was the utilization of drones to chemically treat aquatic vegetation, thus reducing mosquito habitat in the process. One hard to access plot was identified and aerially treated via drone. Aquatic vegetation such as cattail, water lettuce and water hyacinth are conducive as breeding habitat for many mosquito species. A mosquito sample conducted by the county indicated an area of interest for vegetation control. Twenty acres of isolated aquatic vegetation were treated via drone. By removing this vegetation, mosquito populations were discovered to have been reduced in that area. This project was further expanded with similar results. By utilizing a DJI done, workers were able to treat three to four acres of aquatic vegetation per flight. This apparatus is possible to launch from an airboat, and allows workers to penetrate vegetation not easily reachable.

One question inquired on battery life and treatment size. Lewis answered that they are able to dispense three tanks of herbicide a day, via three flights and three batteries. Each flight averages approximately 3 acres of treatment. A second question inquired about other entities utilizing this technology. The answer included an individual operating in the Seminole chain of lakes, and Dr. Leery of University of Florida. Another question sought information about mentioned mosquitoes being disease vectors. Lewis replied in the affirmative, indicating these species to be potential disease vectors and aggressive biters. Last question inquired about effects on bat populations. Lewis replied no immediate monitoring is in place, but did mention mosquito control was generally avoiding bat activity peaks.

Brenden Hession, Florida Fish and Wildlife Conservation Commission

FWC has focused treatments during this time on the western marsh in Lake Okeechobee. Difficulties were noted in obtaining winter estimates of invasive aquatic vegetation on the lake. July sees the presence of approximately 772 acres of invasive aquatic plants, which is an 8 acre increase. Much of the acreage is found in Zone 4 of the lake, with between 200 to 400 acres observed. The Indian Creek area encompassed approximately 200 acres of vegetation.

Jessica Fair noted the May flight observations may have been obscured by fog, which hindered the visibility of the monthly helicopter survey. Additionally, she noted the ground surveys typically have higher numbers than the helicopter notes, due to interior access advantages of ground surveys. She further contended that West Wall region possessed high

concentrations of hyacinth. This was confounded by snail kite activity, which excluded treatment operations in those areas.

Mason Smith, Florida Fish and Wildlife Conservation Commission

The portion of this discussion focused on goals and objectives developed for the Lake Okeechobee Management Plan. His intentions in providing these plans to the group was to encourage increased dialogue on proposed measures. He mentioned that stakeholder sessions have begun, and comments were being solicited on the goals and objectives presented. Further, he noted that stakeholders were interested in clearer objectives. Paul Grey commented on the difficulty in providing quantifiable objectives in meaningful ways to stakeholders.

Jessica Fair provided commentary that a 500-acre limit on invasive aquatic vegetation needs to be carefully worded. She contended that an acre per zone limit is more appropriate than a whole lake acreage limit. Another individual supported Jessica's comment, but wants to examine acreage per zone, and historical limits of the zone. A further question came in inquiring about appropriate zone size and composition. Jessica Fair noted the historical nature of Lake Okeechobee vegetation management zones and noted that Chelsea Bohaty maintains historical records of these zones.

Further comments were solicited on proposed Hydrilla comments and objectives, however no attendees provided comments.

Brenden Hession, Florida Fish and Wildlife Conservation Commission

Since April, over 800 acres of aquatic vegetation have been treated by FWC on Lake Okeechobee. Currently, contractors are conducting treatments in the Fisheating Bay area targeting Luziola and other floating plants. Treatments were also conducted in Eagle Bay area to Zone 7. Kings Bar locale was noted to have a significant buildup in hyacinth. Additionally, 20 acres of vegeation were treated in the Moore Haven canal.

The Northwest Marsh saw treatment of Scelaria. Elsewhere, difficulties in access have made treating Scelaria difficult. Germination of Scelaria was noted approximately 2 months ago, with germination near Allapattah Ranch noted to occur 3 months ago.

He further mentioned that harvesting requires an increased water depth of over 13 ½ ft is needed for access.

Tyler Beck, Florida Fish and Wildlife Conservation Commission

On the topic of snail kites, 151 nests were observed on Lake Okeechobee. Of these observed, 34 were successful. This is a low rate of success. Further, in the Indian Prairie area, only 14 of 88 nests were successful. Tyler further reminded the panel to keep looking for nests on lake and elsewhere, as they are still possible.

Alyssa Jordan, Florida Fish and Wildlife Conservation Commission

This discussion focused on the proposed cattail management strategies on Lake Okeechobee. A handout was presented documenting proposed and historical zones of cattail treatments. Three sites in the western marsh were discussed as to be growing back quickly. It is thought this resurgence is related to high nutrients coming in through canal input. Past openings of cattail in area were well received by fisherman.

An area near Moonshine Bay was noted to be opened. This showed an increase in wading bird usage in the area, in addition to high utilization by snail kites. In the northwestern area, Eagle Bay is under proposal for treatment. Additionally, Tinhouse area is proposed to burn under the condition this will not affect snail kite nesting. This proposal would open up this area towards the Pierce Canal.

In the southern marsh, a small area is proposed for treatment in the Pelican Bay area. Additionally, treatment in South Bay is proposed. As this is a larger area, the treatment may need to be broken up into sections for manageability. This area good historical native plants, and this treatment aims to revitalize those species. Jessica Fair supported the idea for treatments, and further commented on the native plant potential for that area. She further stated that the small size of Pelican Bay cattail might not be need treatment. Alyssa also stressed the usage of fire must not cause peat fires on the lake. Further it was mentioned that FWC has the resources to pursue 1,200 acres in the treatment.

Paul Grey commented on long held questions about the lake levels and their contribution to the cattail communities. Paul Grey was further solicited for his opinion on bird nests in the August time frame, and he commented that many are gone at this time.

Last, Alyssa added that torpedo grass continues to be spot treated in the northwestern marsh. This area continues to show promising usage by wading birds. One survey noted 60% of lake wading bird usage occurred in this treatment area. Tyler Beck further reposted snail kites utilizing this area.

SFWMD, no update

Melissa Smith, USDA

The USDA has been awarded a new research grant to study the relationship between hyacinth biocontrols and herbicides, with the goal to identify best management strategy. This comes on the heels of a new release of a leafhopper biocontrol.

Jessica Fair is assisting the study in preparations and is asking for attendees to help identify plots for the treatment. The requirement is 20 sites on the lake, in 50x50m areas. It is proposed that these areas can be contained via boom, as these sites will need to be maintained for four years. Jessica Fair further identified an area in the Rim Canal as a possible site in a pond apple forest and solicited opinions on site usage.

A commentator recommended USDA conduct outreach to the angling community, with FWC adding they will contribute to help getting Melissa appropriate contact information.

Jessica Fair, U.S. Army Corps of Engineers

Jessica discussed current management operations of USACE on Lake Okeechobee. Much of these efforts since March 5th have focused on the southern half of the lake around Ritta and Pelican Bay areas. Of these, 1,318 acres have been treated, and a further incursion into Ritta is planned. All boats are now equipped with spray tracking modules which allow for increased accountability and tracking of herbicide applications.

At this time, there is a great deal of lettuce in South Bay area. In addition, the West Wall segment is under management due to 100 acres of mostly water hyacinth. Harvesting is not an option in this area due to intermixed native vegetation within the hyacinth blocks. Additionally, through interagency cooperative efforts, 65 acres of vegetation was treated to prevent inflow into the Caloosahatchee system.

A combined effort between the City of Belle Glade and USACE saw a harvesting project in Torry Island, removing lettuce from finger canals. This effort removed 2.5 acres of mostly water lettuce at a rate of 46 weedo buckets per hour over 12 working days. City of Belle Glade provided 18 bulk truck lifts with an estimate of 125 tons of vegetation removed. The cost for this project for USACE was approximately $63k.

Kavin Carter, U.S. Army Corps of Engineers

Kavin discussed desires to place reef ball habitats on the southern end of Lake Okeechobee. He mentioned past state-led efforts elsewhere and wants to build of those lessons learned. The idea is to provide fish habitat and wave breaks. These wave breaks would allow further vegetation to be planted, such as pond weed and eel grass.

A variety of shapes and sizes of reef balls exist, with the USACE looking to install anywhere from 100 to 200. USACE also possesses the ability to monitor these sites, and hopes to collaborate with local colleges for educational exchanges. FWC staff brought up two concerns, obstruction to navigation and mucking. Kavin was aware of these concerns and offered potential remedies to these issues.

No Public Comments Offered