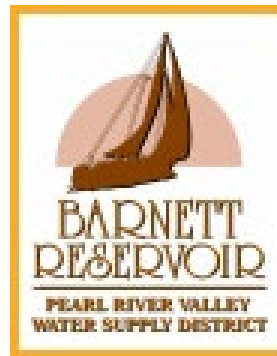
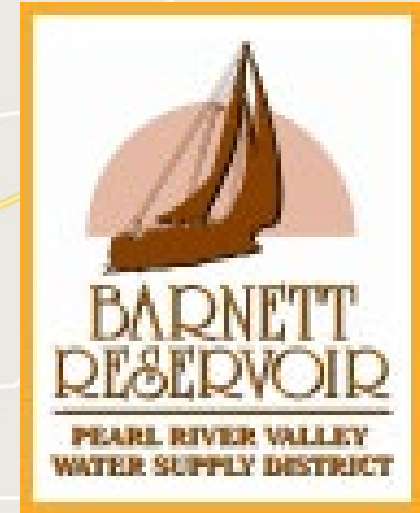


Collaborative Agency Efforts to Contain and Eradicate Giant Salvinia from Ross Barnett Reservoir



Presenter: Ryan Jones

Pearl River Valley (PRV) Water Supply District

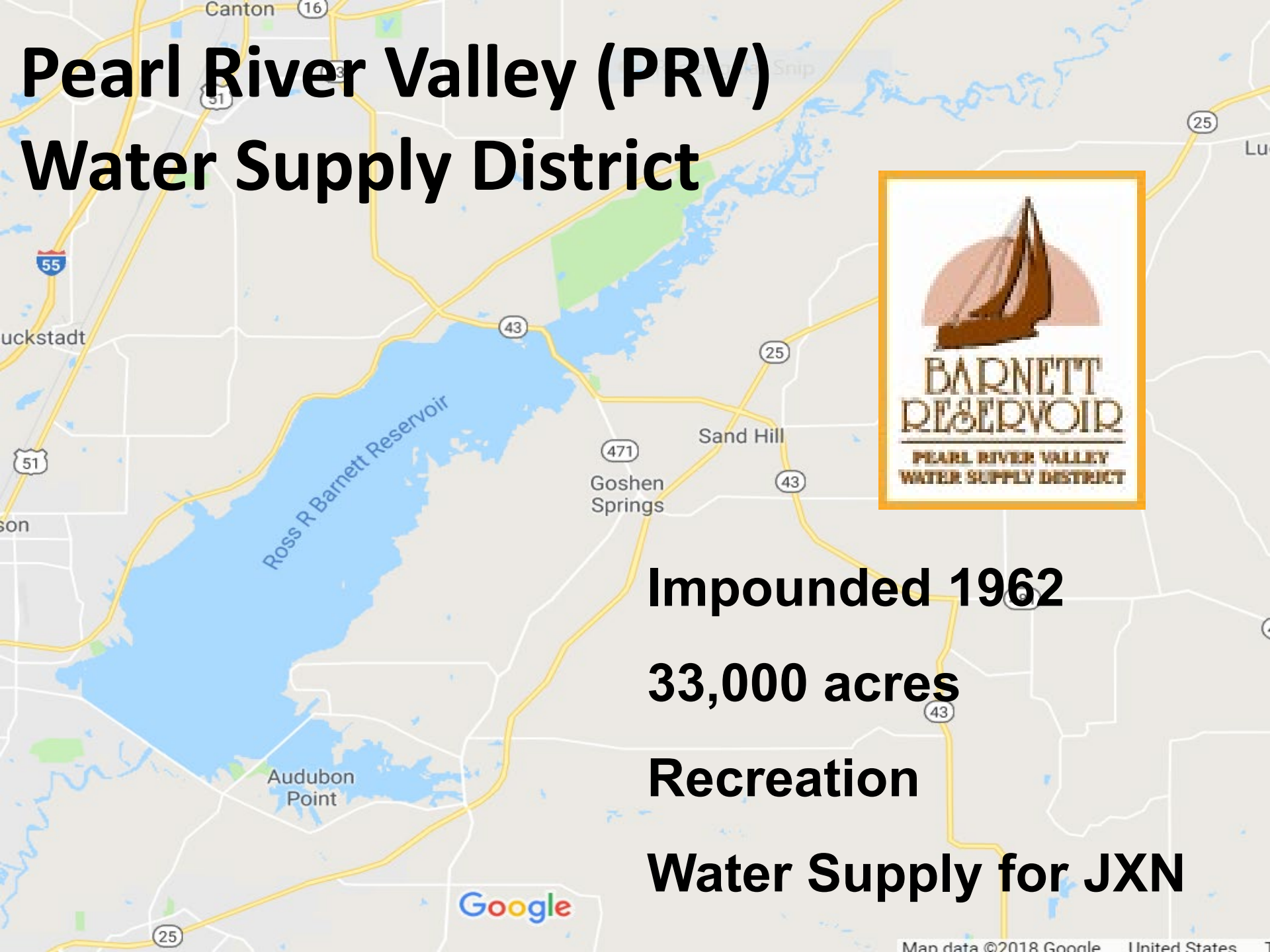


Impounded 1962

33,000 acres

Recreation

Water Supply for JXN



Ross Barnett Reservoir

Historical Plant Management

- **2005 (hydrilla)**
- **MSU (mgt. plan)**
- **Private contractor (treatment)**



Ross Barnett Reservoir

Historical Plant Management

- **2013 - present**



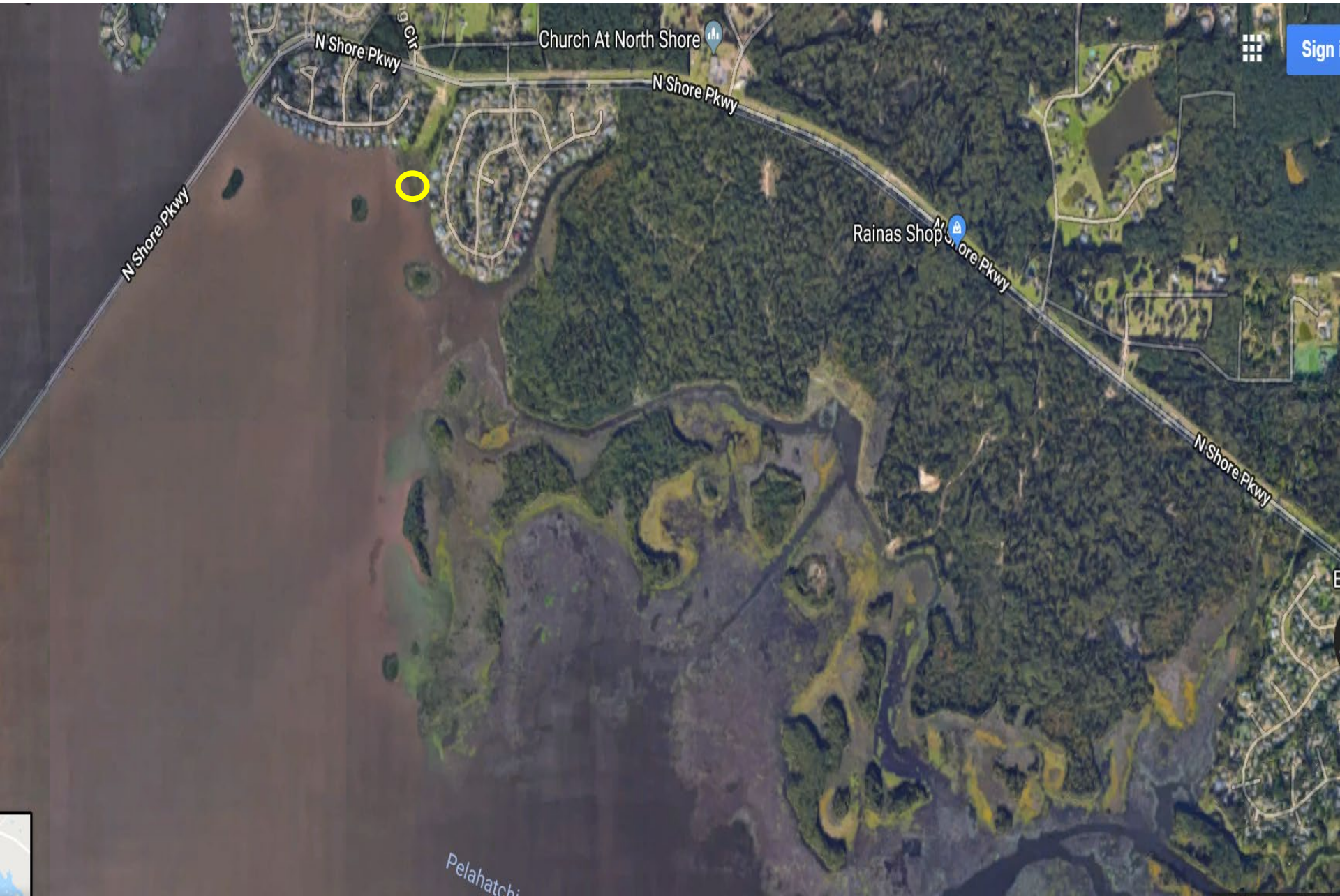
- **MDWFP plant management**

MDWFP plant management

- **Hydrilla**
- **Water Hyacinth**
- **Alligatorweed**
- **Cuban Bulrush**



June 26, 2018 - Pelahatchie Bay



June 26, 2018 - Pelahatchie Bay



August 2018









An aerial photograph of a coastal or wetland area. A large, irregularly shaped region is outlined in a thick green line. Within this outlined area, several smaller, solid green patches are visible, primarily along the left and top edges. The landscape consists of dark green, dense vegetation interspersed with lighter, brownish-grey areas that appear to be water or bare ground. In the upper left corner, a residential neighborhood with houses and streets is visible. A road runs horizontally across the upper portion of the image. The text "Full Range" is superimposed in a large, bold, green font in the upper right quadrant of the image.

Full Range

August 2018



- **Diquat/surfactant**
- **Sonar One**



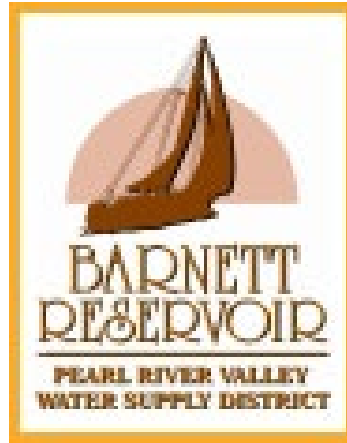
August 2018



Contact Daniel Hill – LDWF

- **Glyphosate\Diquat\Surfactant
96oz\32oz\32oz
(LA mix)**
- **Containment is priority**

August 2018



**Contact Greg Burgess
PRVWSD engineer**

- **Need containment boom!**







October 2018



- **Contact Bradley Sartain**
USACE - ERDC

Glyphosate\Flumioxazin\Surfactant
96oz\2oz\32oz
(flumi mix)

October 2018



Contact Gray Turnage
Geosystems Research Institute

- **Close boat ramps immediately!**

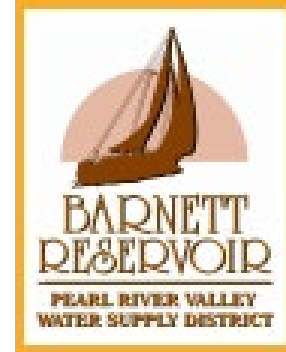
October 2018

- **PRVWSD declares state of emergency (10/17/18)**
- **Pelahatchie Bay closed to boating**



November 2018

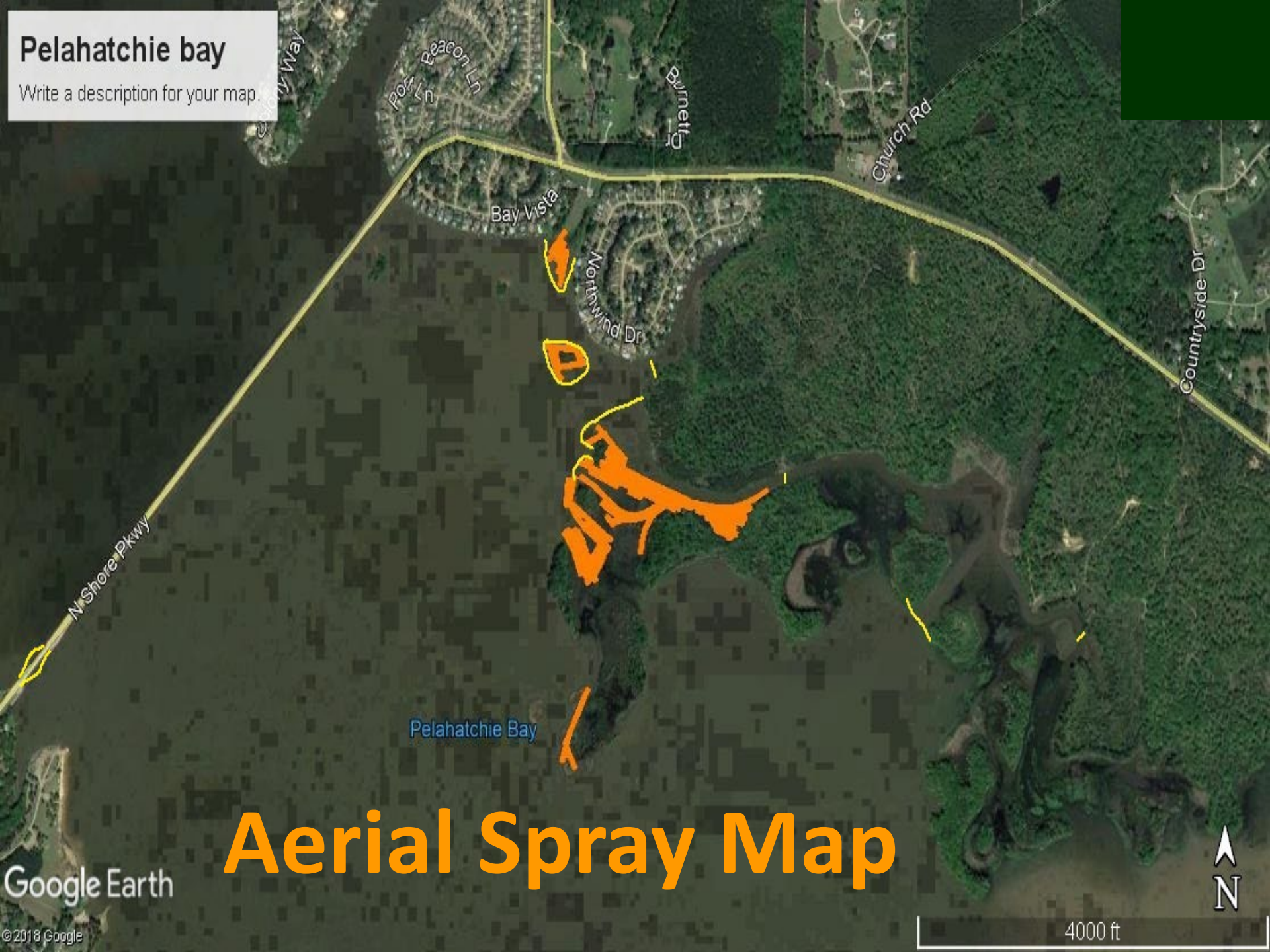
- **Drawdown (1.5 ft.)**
- **Aerial application**





Pelahatchie bay

Write a description for your map.



Aerial Spray Map

Google Earth

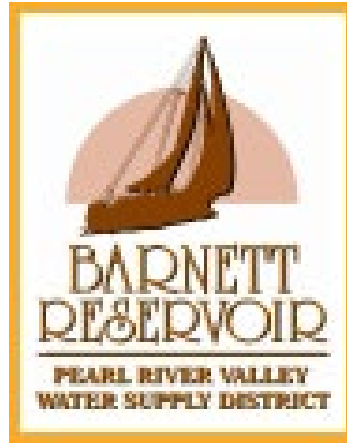
©2018 Google

4000 ft





Feb 2019



**Contact Rick Hollis
PRVWSD forester**

- **Can we burn these areas?**

Feb - Mar



Feb - Mar



Feb - Mar



Feb - Mar



April 2019

- **Max foliar rate Flumioxazin
(12oz/ac)**
- **Applied to the soil and root balls
of previously infested area**
- **Containment boom maintenance**

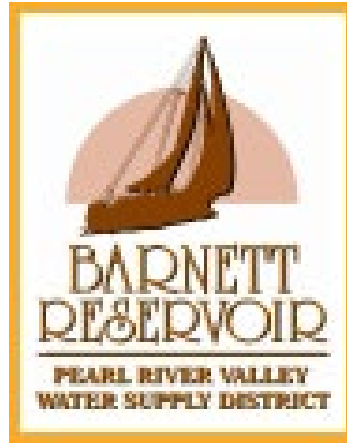
Buttonbush Slough







April 2019



**Contact John Sigmond
PRVWSD director**

- **Can we get manpower?**

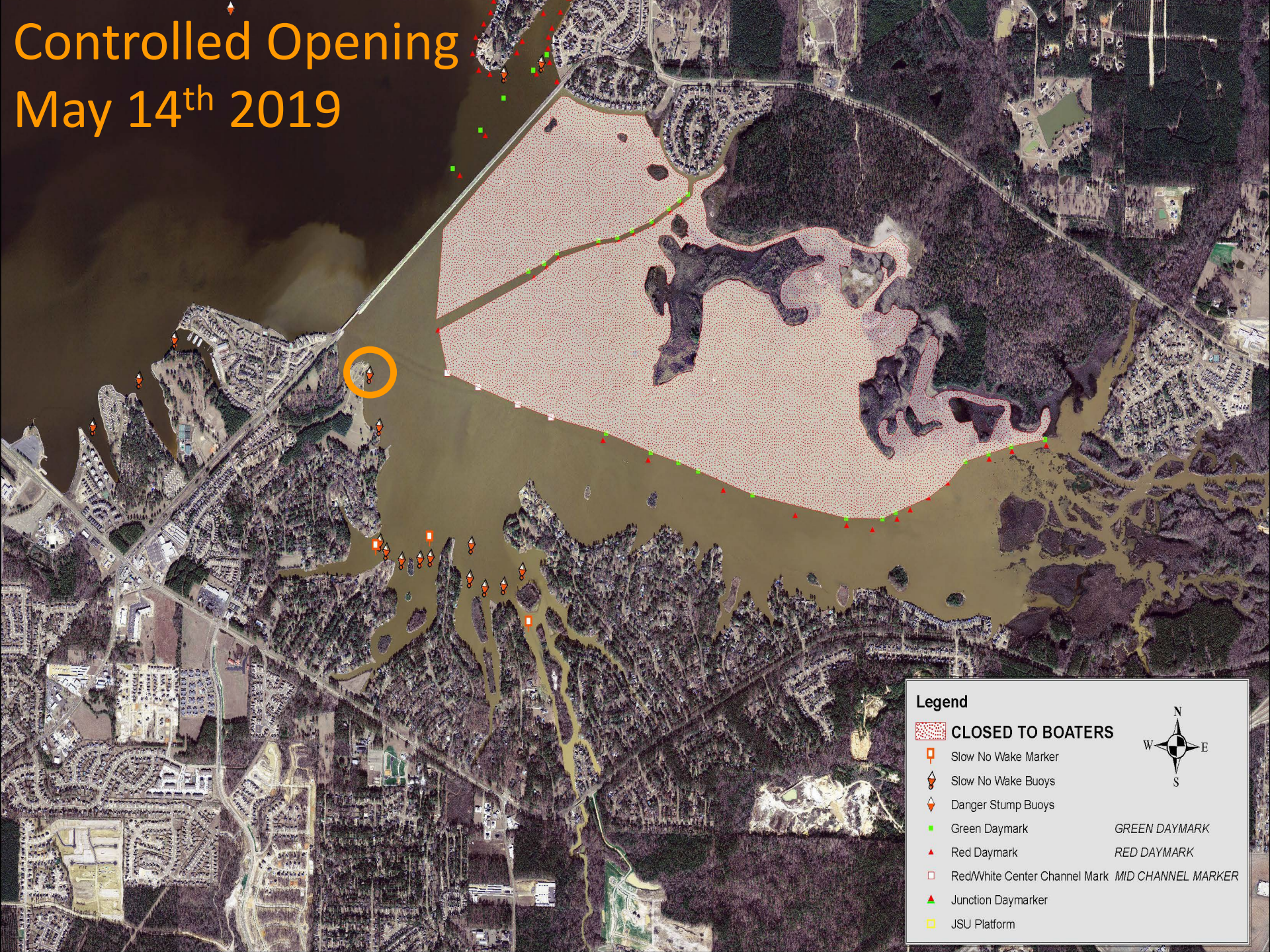
May 2019

Cut and Removal of buttonbush




Controlled Opening


May 14th 2019



Legend

 **CLOSED TO BOATERS**

 Slow No Wake Marker

 Slow No Wake Buoys


 Danger Stump Buoys

 Green Daymark

 Red Daymark

 Red/White Center Channel Mark

 Junction Daymarker

 JSU Platform



GREEN DAYMARK

RED DAYMARK

MID CHANNEL MARKER



Lizard's tail
A. pondweed

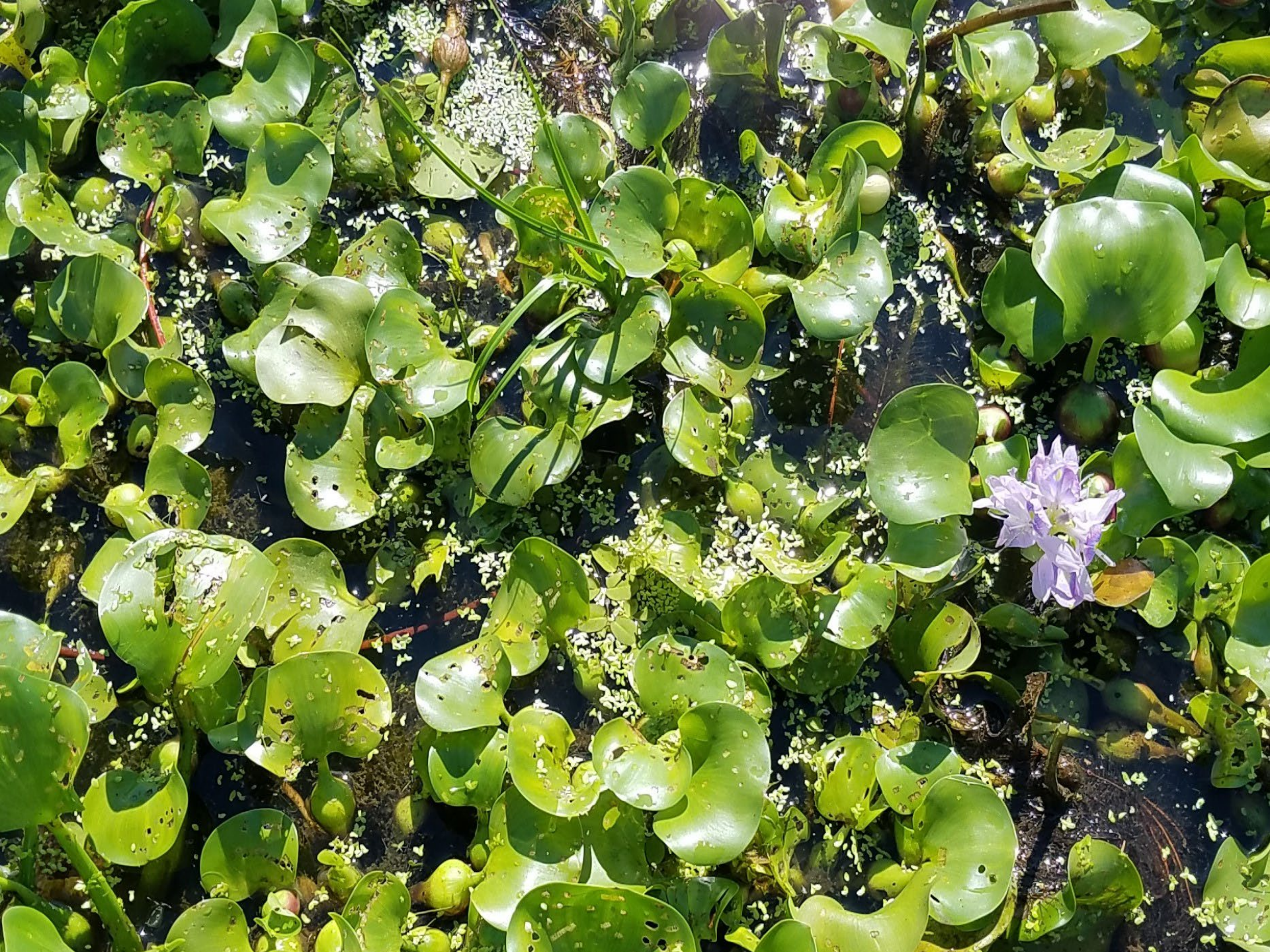


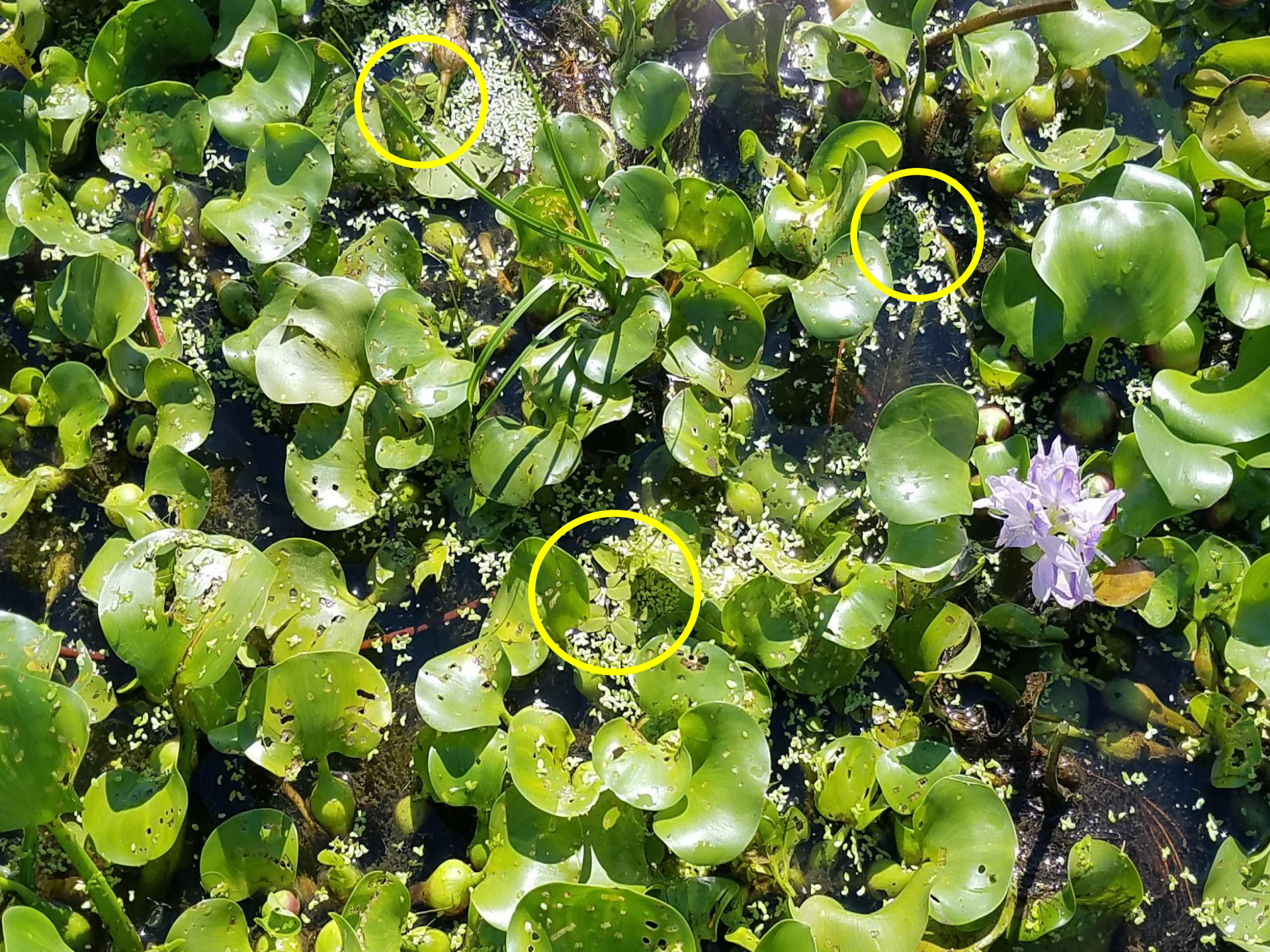
Summer 2019



October 2019

- **Return Ross Barnett Reservoir to full pool**
- **Begin intensive surveys**







New colonies found

Legend

new colonies

Pelahatchie Bay

Google Earth

©2019 Google

2000 ft



October 2019

- **Containment boom deployed (2,800')**
- **Aggressive herbicide treatments**
 - **Flumi injections**
- **Continued surveys at full pool**

Containment boom

Legend

10,800 ft

Pelahatchie Bay

Google Earth

© 2016 Google

3000 ft





January 2020

- **Drawdown 2.5 ft**
- **Limited success burning due to precipitation**
- **Continued surveys**

March – July 2020

- **Comprehensive shoreline surveys reveal no new colonies**







August 2020

- **Deployment of containment boom (700ft)**
- **Comprehensive boat/foot surveys**
- **Aggressive herbicide treatments**

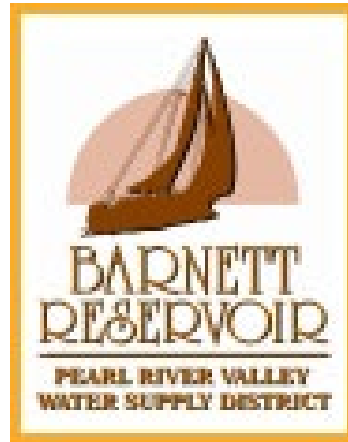
2021

- **Comprehensive monthly boat/foot surveys**
- **Containment boom maintenance**
- **No giant salvinia was found**

Current Status

- **All containment boom has been removed**
- **Full recreational access restored on December 1st 2021**
- **Continue intensive surveys**

Educational Component



Bobby Cleveland

PRVWSD public relations

Educational Component

- **Press releases and newsletters**
- **Coordinate with local news stations**
 - **Onsite interviews**
 - **Facebook live**
- **Clean Drain Dry Campaign**
 - **Signs/handouts at every ramp**
 - **Television air-time**
 - **Cleaning stations**
 - **Mandatory boat/trailer check for sportfish tournaments**

Keys to Success

- **Contain spreading**
- **Treat aggressively**
- **Monitor the range**

Acknowledgements

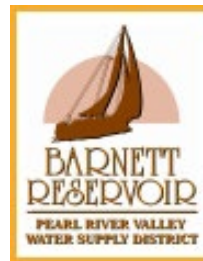
- Gray Turnage



- Bradley Sartain



- Bobby Cleveland
John Sigmond
Rick Hollis



- Daniel Hill



Acknowledgements

- Don Henke
- John Skains
- Terry Aycok
- Stephen Willis
- Jamaal Bankhead
- Charlie Welch
- Kevin Wyatt



QUESTIONS?

