



**Mobile Bay National Estuary Program
Project Implementation Committee**
September 30, 2021, 1:00 pm – 3:00 pm
Virtual Meeting



Agenda

Meeting Objectives:

- a) Provide update on activities and techniques to combat invasive species.
- b) Other project status updates

1. Welcome and Introductions

PIC Co-Chairs:

- Judy Haner, The Nature Conservancy
- Patric Harper, U.S. Fish & Wildlife Service

2. Review and Approval of Minutes

3. Old Business

- a) Management Conference Committee Status Updates

4. New Business

- a) Coastal Alabama Invasive Species Initiatives
 - a. Dauphin Island Bird Sanctuaries – Walter Ernest, Pelican Coast Conservancy
 - b. Langan Lake Apple Snails – Shawn McNulty, American Sport Fish
 - c. Grand Bay, Cedar Point Marsh, and Lightning Point – Mary Kate Brown, The Nature Conservancy
 - d. Controlling Privet using Fire – Jimmy Stiles, Auburn School of Forestry and Wildfire Sciences
 - e. Alabama Forestry Commission Coastal Program – Ryan Peek, Alabama Forestry Commission
 - f. Gulf Corps MBNEP Coordination – Madison Blanchard, Mobile Bay National Estuary Program
- b) Watershed Planning and Project Implementation Update
- c) Off-cycle topical meeting – Round two, what, when, and where?
- d) Schedule next meeting

5. Adjourn



Welcome!

Please put your name, organization, and email in the chat box to sign in.

Please note: This meeting is being recorded!

This presentation provides minutes of the September 30, 2021, Project Implementation Committee. Additional notes are added as needed.

Attendees: Mark Berte, Don Bates, Don Blancher, Dan Bond, Mary Kate Brown, Herb Bullock, Dottie Byron, Ashley Campbell, John Curry, Barry Dees, Walter Ernest, Jay Estes, Mike Eubanks, Paige Felts, Carl Ferraro, Casey Fulford, Meg Geocker, Leslie, Gahagan, Rosemary Ginn, Judy Haner, Patric Harper, Amy Hunter, Andy James, Matt Jollit, Matthew Jones, Cade Kistler, Jeremiah Kolb, Nicole Love, Justin McDonald, Shannon McGlynn, Shawn McNulty, Romell Nandi, Autumn Nitz, Steve O’Hearn, Ryan Peek, Greg Pierce, Chris Plymale, Casey Rains, Ray Richardson, Justin Rigdon, Mike Sharp, Ryne Smith, Lance Slater, Jimmy Stiles, Mary Beth Sullivan, Will Underwood, Lee Walters, Chris Warn, Darrel Williams, Brad Young.

MBNEP Staff: Roberta Swann, Madison Blanchard, Christian Miller, Jason Kudulis, Missy Partyka.

Project Implementation Committee Agenda



Welcome and Call to Order:

Co-Chairs: Judy Haner, The Nature Conservancy,
& Patric Harper, U.S. Fish and Wildlife Service

Review and approval of May 2021 minutes

Old Business: Management Conference Committee
Updates

New Business:

- Coastal Alabama Invasive Species Initiatives
- Watershed Planning and Project Implementation Updates
- Off-cycle Topical Meetings



The meeting was called to order at 1:03pm

Minutes from the May 2021 meeting were distributed for review prior to the meeting. Mark Berte motioned to accept the minutes; Mike Eubanks seconded the motion.

Old Business: MBNEP staff provided updates regarding other Management Conference committee activities.

Science Advisory: Next meeting is October 8th. The committee is moving forward to complete a full stressor evaluation for comparison with 2012 results. Outcomes will help inform the next Comprehensive Conservation Management Plan.

Business Resource: Committee is moving forward on various oyster related projects. A marketing subcommittee has developed a website for marketing Alabama oysters. The committee assisted forming the Coastal Alabama Fisheries Fund and are aiming to have loans available before the end of the year.

Community Resource: The committee is now inactive due to a lack of interest by participating members.

Government Network: At the committee's request MBNEP updated the South Alabama Regulatory Review The update included a review of trash/litter/recycling-related.

Community Action: The committee last met July 12th. Volunteer monitoring continues to be a focus.

New Business:

- The bulk of the meeting agenda included presentations about coastal Alabama invasive species initiatives. Presenter presentations follow and supplemental notes are included as needed.

Project Implementation Committee Agenda



Coastal Alabama Invasive Species Initiatives

- Dauphin Island Bird Sanctuaries – Walter Ernest, Pelican Coast Conservancy
- Langan Lake Apple Snails – Shawn McNulty, American Sport Fish
- Grand Bay, Cedar Point Marsh, and Lightning Point – Mary Kate Brown, The Nature Conservancy
- Controlling Privet using Fire – Jimmy Stiles, Auburn School of Forestry and Wildfire Sciences
- Alabama Forestry Commission Coastal Program – Ryan Peek, Alabama Forestry Commission
- Gulf Corps MBNEP Coordination – Madison Blanchard, Mobile Bay National Estuary Program





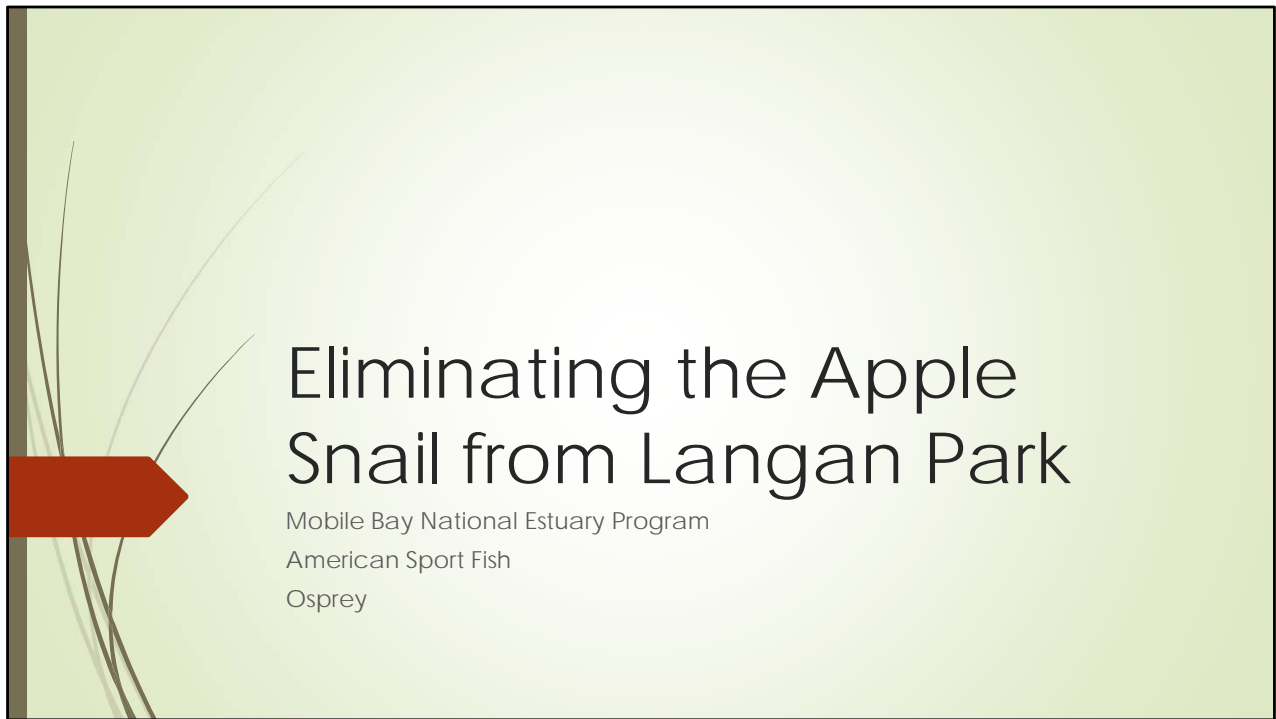
An objective of the Cornell Land Trust Bird Conservation Initiative is to provide funding to facilitate high priority, bird-focused conservation projects for land trusts.

Mr. Walter Ernest, a Dauphin Island Bird Sanctuaries Board Member, provided the update. DIBS is one of the largest landowners on Dauphin island, owning over 50 lots of various habitats. .

- Awarded a \$25k grant in August for invasive species removal. An overview of the project is presented on the next slide.

Land Trust Bird Conservation Initiative 2021 Small Grant

- \$25,000 Grant
- Utilize SCA Team to inventory and eradicate invasive species that are currently present on the DIBS properties. (\$15,000)
- Select two DIBS property locations for demonstrating outreach and education efforts of invasive species removal and improvement of island bird habitat.
- Purchase equipment and supplies to be utilized for grant completion and future DIBS stewardship activities.

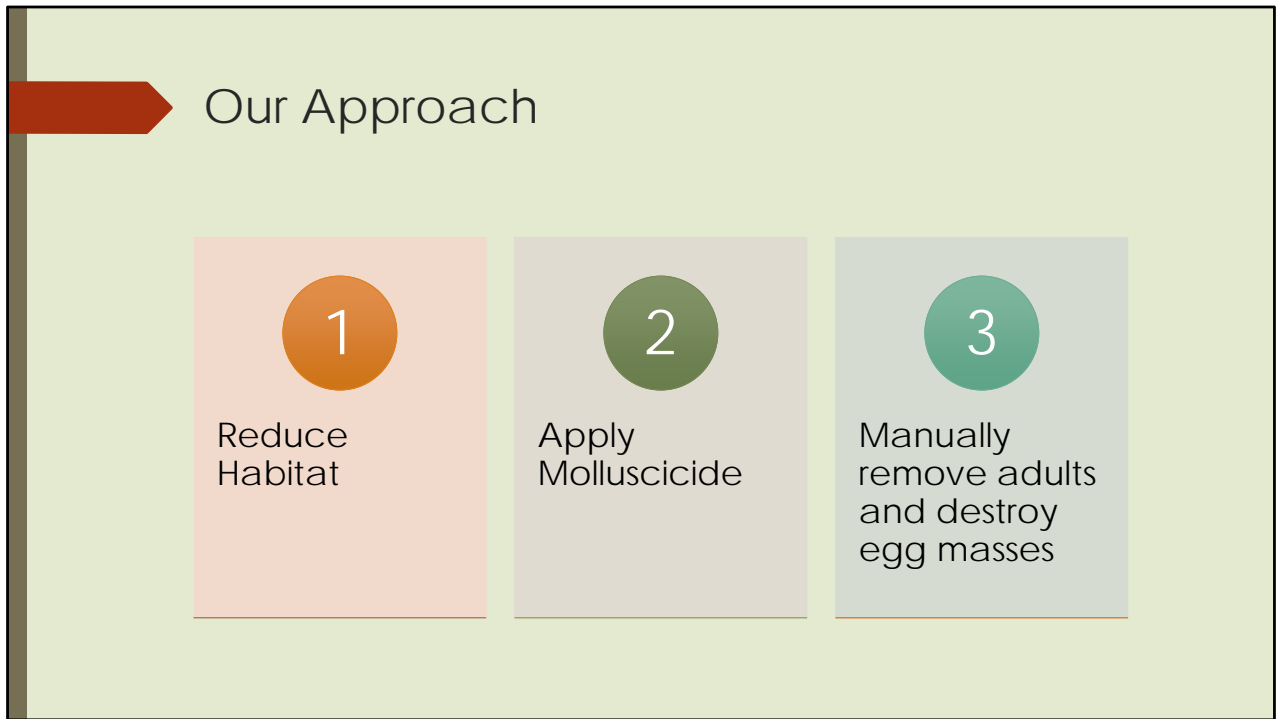


Mr. Shawn McNulty, an MBNEP contractor with American Sport Fish, provided an update on apple snail removal activities from Langan Lake.

Apple Snail

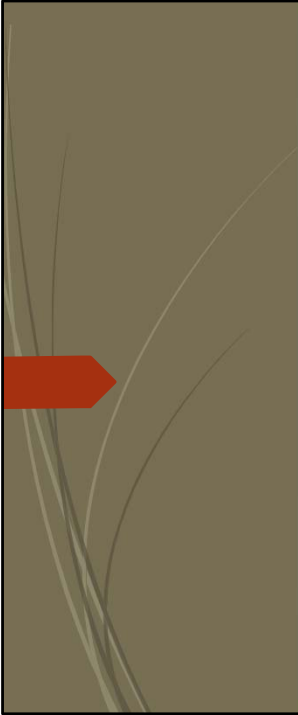
- Native to South America
- Probably introduced from the aquarium trade
- Feed on aquatic vegetation
- Can wipe out native vegetation if they reach a critical mass
- Reproduce once per month
- Carry lots of parasites that can be transmitted to other animals or humans





Three-pronged approach to tackle the snails. The lake at times of the year is nearly covered with invasive submerged vegetation.

Goal is to not only remove the snails but 1) reduce the habitat available to forage and hide in, 2) apply copper sulfate molluscicide, 3) and manually remove egg masses and adults.



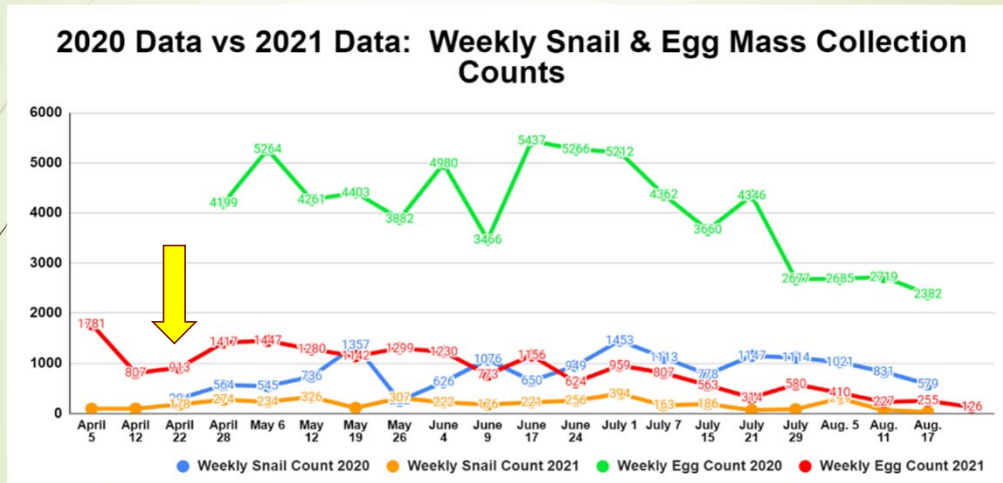
Habitat

- ▶ Snails thrived because there was an over abundance of submerged vegetation
 - ▶ All of it is considered a nuisance submerged vegetation
 - ▶ Created a plan to eliminate with herbicides
 - ▶ Reduces food
 - ▶ Reduces places for juveniles to hide
 - ▶ Makes it easier for shellcracker to find and eat them
 - ▶ Forces adults to travel further to lay eggs

Langan Lake had ample food source and reproduction opportunity for the snails. Stocked shell cracker offered a biological control if the invasive vegetation could be controlled.



Habitat



Yellow arrow represent when herbicide was first applied by American Sport Fish. Data collect prior to that was from Osprey Initiative, who has been working to manually remove snails and egg masses since last year. Egg mass count and snails plateaued and then begin to decrease from that point forward. The cold winter of 2020-2021 may have helped as well.

Copper Application

- ▶ Copper sulfate is a well know molluscicide and has been used for decades in the aquaculture industry.
- ▶ It is a safe chemical used for multiple purposes in drinking water
- ▶ Can be toxic to fish in low alkaline waters
 - ▶ Langan Lake
 - ▶ Alkalinity – 1 ppm.....



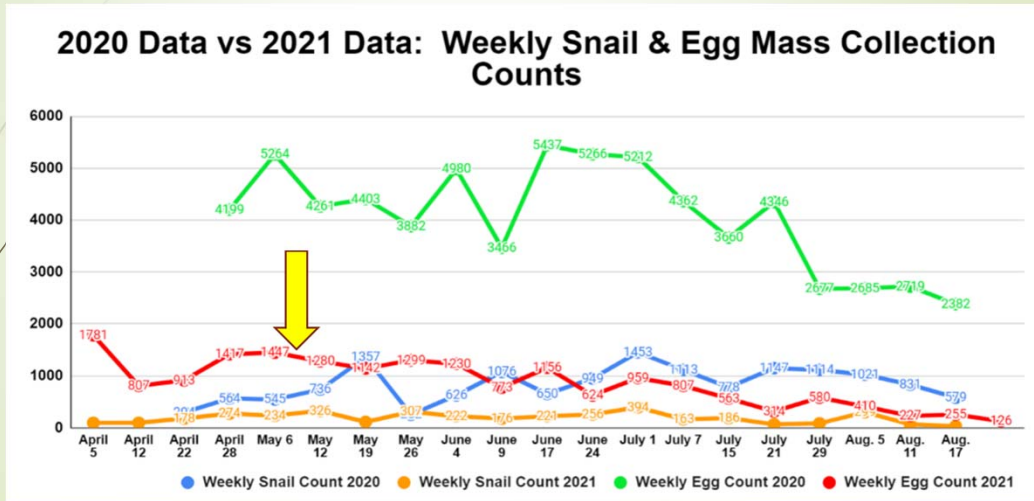
The team wanted to avoid any fish kills while applying the copper sulfate. Extreme low alkalinity in Langan Lake made this a challenge but no kills have been reported. This would not be an issue in lakes with good water quality.

Copper Treatment

- ▶ We started at very low doses to ensure we did not kill any fish during the process
 - ▶ We aimed for the targeted concentration and only did it in "hot spots"
- ▶ We placed snails in cages in these hot spots and monitored mortality.
 - ▶ Indicated that rates were sufficient to kill the snails
- ▶ The application was slowly expanded and increased
 - ▶ No fish mortality was observed



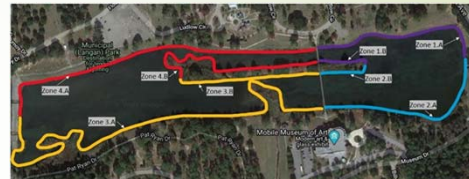
Copper Treatments



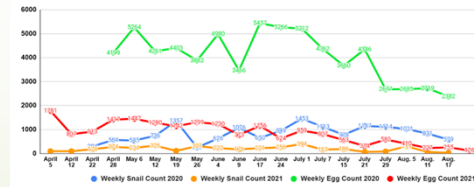
Yellow arrow represents when copper treatment began. Applications will continue several more times this year. Some concern there are snails upstream of lake that could be an issue.

Manual Removal and Data Collection

- Osprey was a critical partner
 - Collected data in 2020
 - This allowed for comparison related to our activities
- They collected adult snails, dead snails, and destroyed egg masses.
- Eliminating adults and destroying egg masses removed thousands from the population
- Helped us target copper treatments



2020 Data vs 2021 Data: Weekly Snail & Egg Mass Collection Counts



Conclusions

Three prong approach was essential

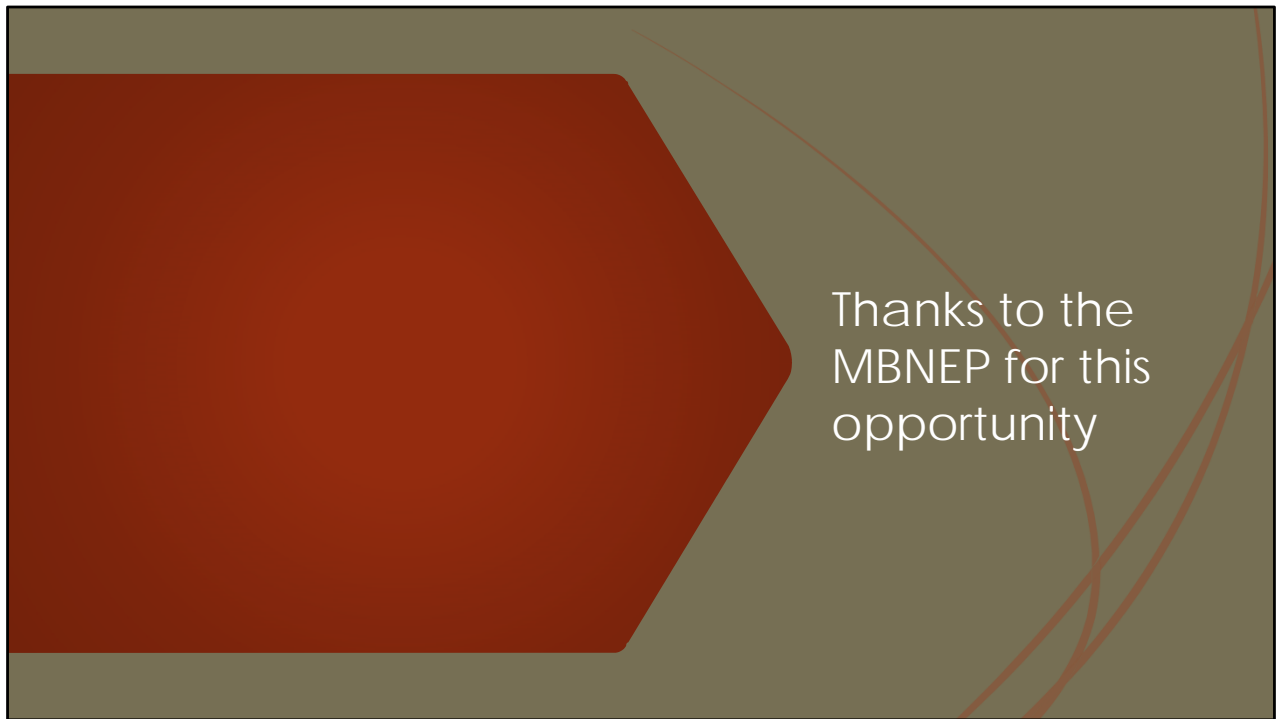
Over 99% reduction in the Apple Snail population

Will need to monitor next year

Rehabilitation and continued management of the lake will keep them in check



Used less copper than planned because application and multi-pronged approach has been successful. Planned dredging of the lake could assist control as well moving forward.



Questions: What was the frequency of shell cracker stocking is? Believe it was a one-time deal in 2020. Once the vegetation was treated with herbicide beds were seen all over. Believe the population has increased and they are a good biological control.

Is there a native plant to control the milfoil? Dredging to a manageable depth could keep it down without treatment measures. The upper lakes however are also covered with it so long-term management may be necessary. Grass carp do eat it.

Have you looked downstream for apple snails? MBNEP is oversight on the project, and they are aware snails have been spotted both upstream and downstream of the lakes. Plans to address are being evaluated. Authorization from USFW to apply molluscicide is only for the lakes currently.



Invasive Species Treatment and Control

-Grand Bay
- Lightning Point and Surrounding
Areas

Mary Kate Brown, Coastal Projects Manager



Mary Kate Brown with The Nature Conservancy shared an updated on invasive control at three sites in south Mobile County.

Grand Bay Savanna



NOAA



- Completed invasive plants in Year 1, Year 2 is planned for Spring/Summer 2022
- Coming Soon...feral hog control in Fall/Winter 2021

Key species in Grand Bay is popcorn tree, cogon grass, and feral hog control is coming.

Working on behalf of the State. Contracted Wildlife Solution Inc.



Used access roads to target cogon grass and popcorn after prescribed burns. QAQC to ensure treatment is working. Two-year contract – year one was initial treatment, year two will be additional treatment as needed or focus on other areas.



Lightning Point & surrounding areas

-USDA contracted Fall 2019

NFWF GEBF funded project.

Diamond back terrapin, predator control and wildlife monitoring. Setup a contract with USDA to control raccoon predation on terrapin. Cedar Point Marsh is ideal habitat for terrapin. UAB staff have been tracking populations at the site.

Lightning Point – East Side



- Target species:
 - Raccoons
 - Foxes
 - Nutria:
 - Successful efforts

Reconnected tidal creeks to new tidal creek system in marsh at Lightning Point increased range of target species. Very successful at trapping nutria and raccoons. Evidence of foxes they want to protect nesting birds from on new marsh.

Lightning Point – West Side



- Target species:
 - Feral Hogs:
 - 14 captured to date
 - Alligators: TBD



Feral hogs were infiltrating the new marsh and tidal creek system on the west side of Lightning Point.



Prime habitat for terrapins on shoreline. After 2019 predator reduction efforts UAB researchers found no predation the following year.

Questions: Has QAQC of popcorn hack and squirt method shown effectiveness? Will have to confirm with contractor.

Will this extend to Coffee Island? UAB researchers do examine the island. Terrapin have been seen nesting there but no update on predator impact.



Efficacy of fire in restoring Chinese privet degraded bottomlands



James Stiles, Robert Gitzen, and Christopher Anderson

Auburn University School of Forestry and Wildlife Sciences



MBNEP PIC Meeting 9/30/2021

Jimmy Stiles, a PhD student at Auburn University, shared his work using fire to remove privet stands. Prescribed fire and direct torch methods were discussed.

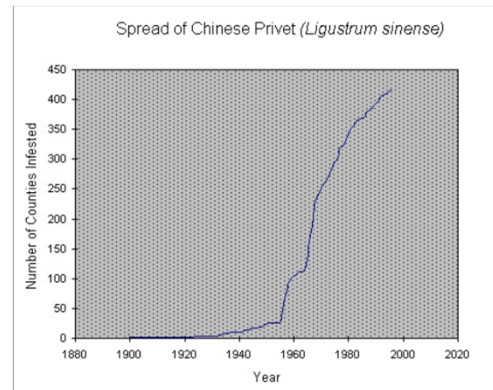
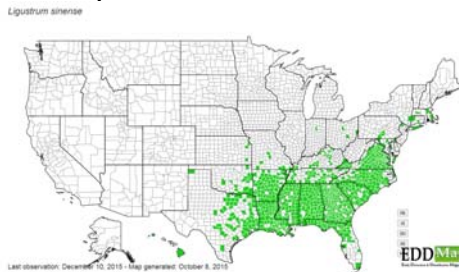
Chinese privet (*Ligustrum sinense*)

- Highly invasive exotic shrub
- Threat to biodiversity
- Reproduces and spreads rapidly especially in bottomland forests (even green sticks touching the ground can form entire new plants)
- Forms thick monotypic stands displacing native flora and fauna (Kittell 2001; Merriam & Feil 2002; Hanula et al 2009; Greene & Blossey 2012)



Chinese privet

- Escaped cultivation in 1932
- Spread throughout the southeast
- Now Occupies >1 million acres in AL



Chinese privet control

- All current control methods involve use of herbicides
- All of these herbicides have varying environmental and health concerns
- Some land managers are looking for alternatives



Why investigate fire as an alternative?

Can fire treatments restore bottomland hardwood stands infested with Chinese Privet?

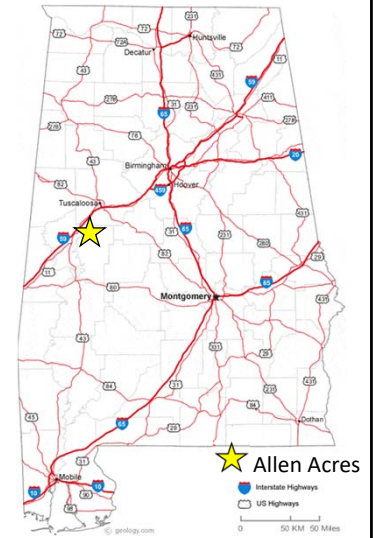
- There is some anecdotal evidence to suggest that fire could be used to control privet (Batcher 2000; Huebner 2006)
- However, there is some evidence to the contrary (Caspary & Affolter 2012; Faulkner et al. 1989)



Research question: Can fire treatments restore hardwood stands infested with Chinese Privet?

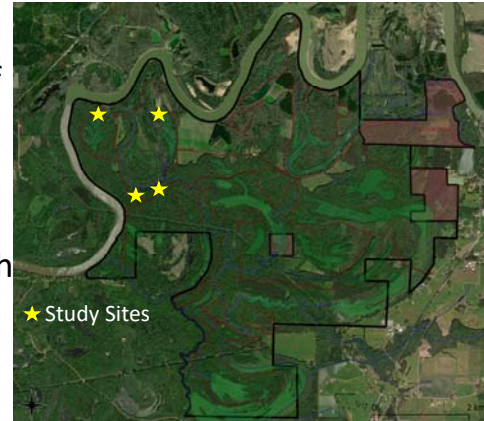
The study site (Allen Acres)

- Located near Moundville, Alabama
- Adjacent to the Black Warrior River
- Predominately bottomland hardwoods
- Frequently flooded



Methods

- Study consists of 4 sites (2 intermediate- and 2 high-density private)
- Sites consists of 20x20m plots in strings of 10
- Treatments were randomly assigned: prescribed fire, prescribed fire/torch, torch once annually and control



Methods

- Plots were cut with chainsaws
- Slash allowed to dry, stumps re-sprouted
- Prescribed fire and torch treatments were applied



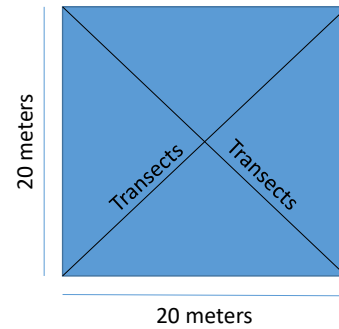
Methods

- Individual stumps were marked in each plot
- Two stumps in each of five size classes per plot
<10, 10-30, 30-50, 50-70, >70mm
- Stems were tracked to assess growth and mortality
- The total length of all resprouts per stump were measured just prior to torching



Methods

- Baseline & post-treatment vegetation cover data was collected every August
- Diagonal transects were surveyed with point-line intercept method
- Grasses, Forbs, Privet (understory and understory), Woody (overstory), and Canopy were recorded at 0.5m intervals. These were used to calculate percent coverages for each plot.



Methods

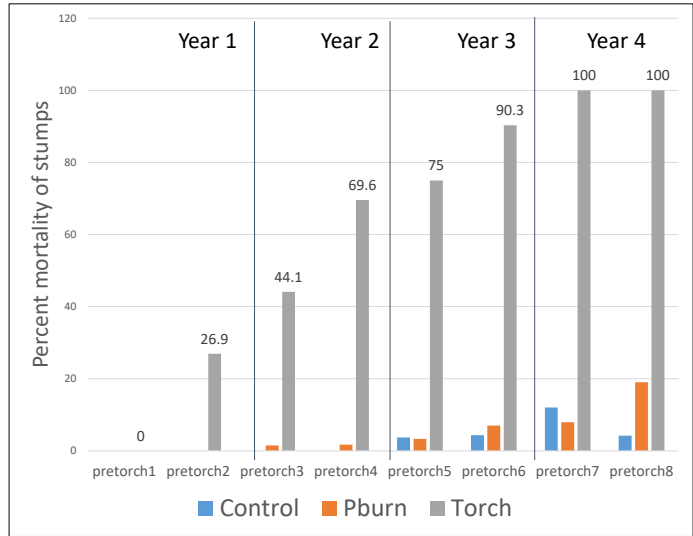
- All treatment plots were burned Jan-April 2018, March 2019, and January 2021 using prescribed fire
- Data were collected on fire conditions and percent of each plot that burned

Methods

- Annual torch treatments were conducted in June-July & September-October
- All stems within the plots were treated for 10 seconds (<50mm GLD) or 30 seconds (>50mmGLD)
- Propane used (kg) and time to treat each plot were recorded

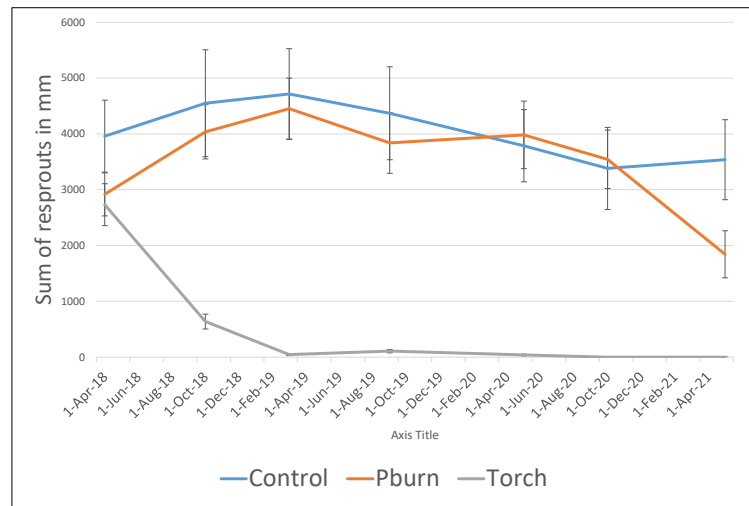
Preliminary Results

- No individually marked privet were killed by one prescribed fire. Three prescribed fires killed 19%.
- By the end of year 3 all torched stumps were killed



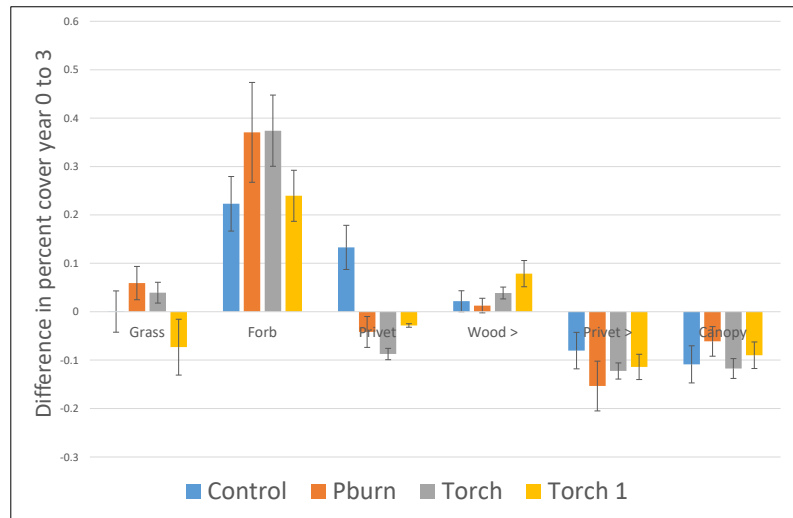
Preliminary Results

- Growth of stump resprouts was greatly reduced in torch plots the first year
- Growth started to significantly decline in Pburn plots after three prescribed fires



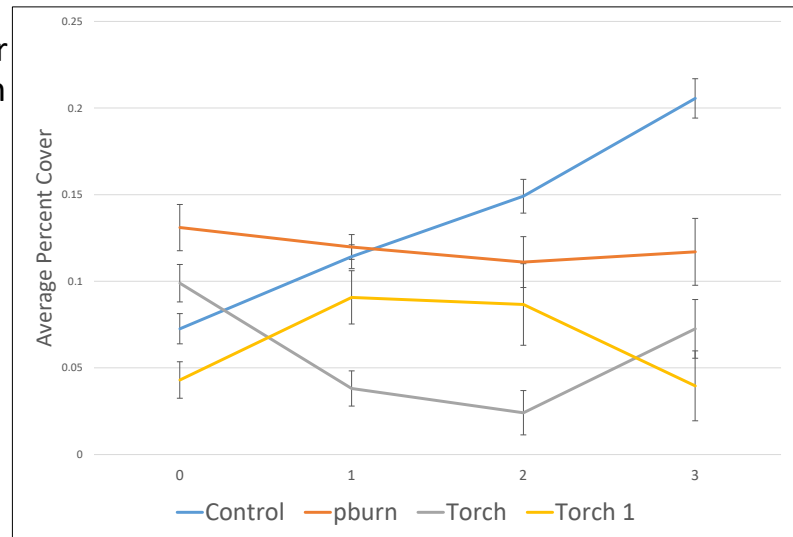
Preliminary Results

- Grass and Forb cover increased most in Torch and Pburn
- Understory privet cover decreased in all except control
- Overstory privet and canopy decreased across all treatment types



Preliminary Results

- Understory privet cover continually increased in controls
- Decreased in the treatment plots



Preliminary Results

- On average it took 23.3 man/hours and 62.5kg of propane for each one hectare treatment.



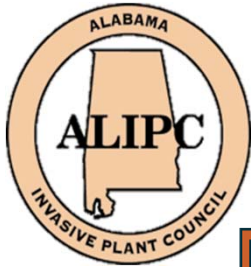
Discussion

- Prescribed fire can reduce privet cover. However, its ability to control privet in floodplains is limited.
- Addition of torch treatments increases efficacy and reduces time needed for restoration.
- Herbaceous native wildflowers responded positively post treatment



Acknowledgements

I'd like to thank the following people for their assistance: James Cash, Gabrielle Ripa, Jamie Andersen, Tara Durboraw, William Doonan and these organizations for providing financial and/or logistical support



THE CURTIS & EDITH MUNSON FOUNDATION

Literature Cited

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Wilcox, J., & Beck, C. W. (2007). Effects of *Ligustrum sinense* Lour. (Chinese privet) on abundance and diversity of songbirds and native plants in a southeastern nature preserve. *Southeastern Naturalist*, 6(3), 535-550.

Hanula, J. L., Horn, S., & Taylor, J. W. (2009). Chinese privet (*Ligustrum sinense*) removal and its effect on native plant communities of riparian forests.

Huebner, C. D. (2006). Fire and invasive exotic plant species in eastern oak communities: an assessment of current knowledge.

Merriam, R. W., & Feil, E. (2002). The potential impact of an introduced shrub on native plant diversity and forest regeneration. *Biological Invasions*, 4(4), 369-373.

Greene, B. T., & Blossey, B. (2012). Lost in the weeds: *Ligustrum sinense* reduces native plant growth and survival. *Biological Invasions*, 14(1), 139-150.

Batcher MS (2000) Elemental stewardship abstract for *Ligustrum* spp. Privet. The Nature Conservancy

Questions: Is the torch treatment directly applying flame to plant? Yes, individual stem treatment.

What size were treatment plots? 20x20m each and 40 plots in total. How do you scale that up to larger plots? Multiple people with equipment can tackle larger areas. Time to apply is not as consumptive as you think.

Forbes and grasses returned? Yes, the soil was not over-cooked and the torched areas had a higher response rate from baseline in treated areas. Groundcover response to prescribed fire is usually positive. Reduced cover and nutrient increase.

When you apply torch are you burning through the stem completely? No, torch is applied to privet stems and resprouts for a few seconds is enough – you do not have to “nuke it.”

Do you have to have a certification or red card to use a torch? No, there is no regulations but obvious fire protection and safety is key. High humidity, post rain, low winds. Drought conditions are not ideal.



Invasive Plant Management

Collaboration between SCA's Gulf Corps & MBNEP

Madison Blanchard – MBNEP, Project Coordinator
September 30, 2021
Project Implementation Committee Meeting

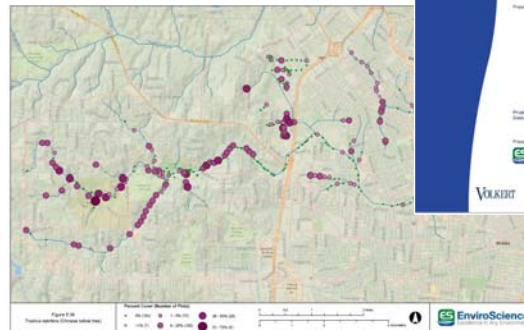


Before Madison Blanchard shared MBNEP's collaboration with the SCA's Gulf Corps, Ryan Peek with the Alabama Forestry Commission was on the phone to give an update on programs they have currently in coastal Alabama.

- AFC Coastal Program funding received through GOMESA. Reopened office in Loxley, have a forester on staff and looking to build capacity with additional staff. Compliment work County personnel have underway. Focused more on management side than fire suppression side – stewardship and forest management plans for landowners. A big component of the new program is an invasive species control cost share opportunity. Forestry mulching is a primary task – very effective means to knock down woody invasives. Loblolly pine thinning in Long Leaf tracts. Application portal will be available to landowners for the cost share (50%) tract size is 10 acre minimum – not looking to get into competition with vendors in the market for smaller acreage.
- In 18-24 months hope to expand cost share for cogon grass – herbicide application contracted out through vendors.
- AL, FL, and MS were awarded RESTORE funds for similar projects – working through award agreement currently.

TMC Invasive Species Control Plan

- Surveyed entire TMC watershed
- Invasive plants and animals
- Catalogued native plants
- Identifies primary and secondary options
- Provided a calendar for scheduling management activities
- Identified equipment and personnel needed
- Included a cost calculator for implementation
- Transferable across the state



THREE MILE CREEK WATERSHED Invasive Species Control Plan



Project No. 10017
Issue 01/2019

Prepared by
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MBNEP is utilizing the Three Mile Creek Invasive Species Control Plan (2019) to guide our activities. The document is comprehensive and prescriptive for other coastal Alabama needs and available on our website for anyone to apply the information.

SCA's Gulf Corps has been a great partner over the last few years providing crews to tackle invasives at the D'Olive restoration sites, Helen Wood Park, and in Three Mile Creek.

Invasive Plant Management: Three Mile Creek



Project Status:

- Began 2019
- Ongoing

Target Species:

- Chinese privet
- Camphor
- Coral Ardisia
- Chinese Tallow
- Japanese Climbing Fern

Schedule:

- Year 1: Hack and squirt
- Year 2: Foliar treatments
- Year 3: Foliar and replant
- Years 4 & 5: Replant

Worked at three different sites located in two priority areas. The main plant species being targeted at these three sites is Chinese Privet. There are a few other species sprinkled in as well like camphor, climbing fern, and Chinese tallow.

In Year two at these sites, COVID in 2020 delayed progress.

Invasive Plant Management: Three Mile Creek

Before



After



Project Metrics

- 13 total Acres managed
- 11,943 Chinese Privet plants pulled or sprayed

Site	Acres	Target species	2019	2021	% Change
USA Site	6.5	Chinese Privet	9959	795	92% decrease
Parklane Apt.	2	Chinese Privet	337	421	28% increase
Creekside Apt.	4.5	Chinese Privet	291	140	52% decrease

Invasive Plant Management: D'Olive Watershed



Project Status:

- Began 2019
- Currently Ongoing (Successful invasive management takes years of repeat treatment)

Target Species: Chinese Privet, Camphor, Coral Ardisia, Japanese Climbing Fern, Rattlebox, Chinese Tallow Tree

Timeline of Activities

- Upcoming treatment scheduled for October 4-15, 2021
- Spring treatment will follow in 2022

D'Olive focus is on stream restoration sites in the watershed.

Invasive Plant Management: D'Olive Watershed



Site	Acres	% Change
D4-D6	15	44% decrease
DA3	7	41.50% decrease
JB2	7.8	97% decrease
Montclair	3	54% decrease
JA	5	99% decrease
TC1 & TC2	7	88% decrease
Totals	44.8	71%

Project Metrics

- Total of 44.8 acres managed across 6 different sites
- Total of 71% reduction in invasive plant species across 6 different sites



Using tally method to count each plant individually. Each treatment, less are found, for a total reduction of percent change.

Invasive Plant Management: Helen Wood Park



Project Status:

- Began May 2021
- Currently Ongoing

Target Species: Phragmites

Timeline of Activities

- Upcoming treatment scheduled for October 4-5, 2021
- Summer treatment will follow in 2022

Located on Mobile Bay near the mouth of Dog River. Native stand of grassed to protect so caution is used when applying. Tidal stream within marsh.

Invasive Plant Management: Helen Wood Park



Pre-Treatment Percent Cover



Project Metrics

- 1.4 acres managed
- ~40% reduction in phragmites

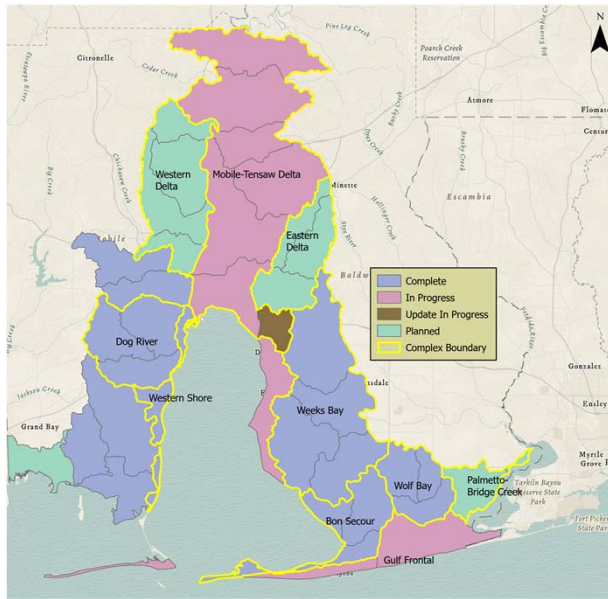
Post-Treatment Percent Cover



Has had one treatment so far, and we saw a ~40% reduction in total percent cover. This site will continue to get treated.

Many thanks again to Gulf Corps. The crews and coordination staff are all great to work with.

Watershed Planning Update



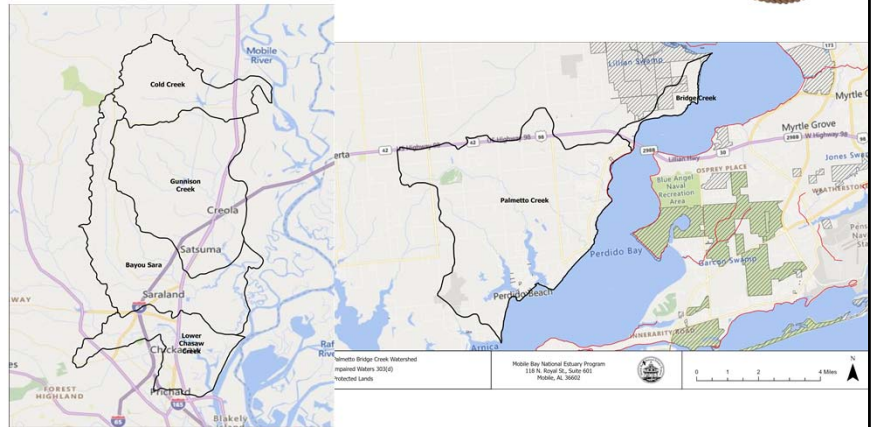
Watershed	Status
Western Shore	Out for comment/final Sept. '21
Gulf Frontal	Final Oct. '21
D'Olive Update	Final Oct. '21
MTA Delta	In progress – Final 1 st Qtr. '22
Eastern Shore	In progress – Final 2 nd Qtr. '22
Dauphin Island	In progress – Final 2 nd Qtr. '22
Perdido	RFQ released
Western Delta	RFQ released
Eastern Delta	RFQ release 1 st Qtr. '22
Grand Bay	RFQ release 1 st Qtr. '22

- Just finished up the Western Shore Plan – will be on website soon
- Gulf Frontal and the D'Olive update will be out for comment soon.
- Mobile Tensaw Appalachian held a large outreach event last month to assist management measure drafting. The Plan will likely be completed first of 2022.
- Eastern Shore and Dauphin Island expect to wrap in the next six months.
- MBNEP recently released RFQs for Perdido Complex (Palmetto & Bridge Creek) and the Western Delta (Lower Chasaw, Bayou Sara, Gunnison, and Cold Creek)

Watershed Planning Request for Qualifications



- Perdido
 - Palmetto & Bridge Creek
- Western Delta
 - Lower Chasaw, Bayou Sara, Gunnison Creek, Cold Creek
- Contractor Selection
 - RFQ Issued: 9/23
 - *Pre-bid Conf: 10/6
 - RFQ Closing: 10/22
 - Shortlist: 11/1
 - Interviews: 11/10



Recruiting selection committee for review process.

Pre-bid attendance is mandatory.

Twelve Mile Creek Headwaters Restoration



Project Lead:

- Mobile Bay National Estuary Program

Project Funding:

- RESTORE via EPA

Project Partners:

- City of Mobile, University of South Alabama, Stantec, Headwaters

TMC Watershed Plan Objectives

- Maintain design level of service for flood protection
- Achieve State water quality standards for warm water fisheries

Construction complete at the Twelve Mile project. 1,800 linear feet.

Twelve Mile Creek Restoration starting in the headwaters of 12 Mile Creek near the intersection of Cody Road and Airport Boulevard. This project is being funded through RESTORE by EPA. Project partners include the City of Mobile, Stantec engineering, Headwaters Construction, and Dr. Alex Beebe with the University of South Alabama who is leading monitoring.

Twelve Mile Creek Headwaters Restoration



Project Goals

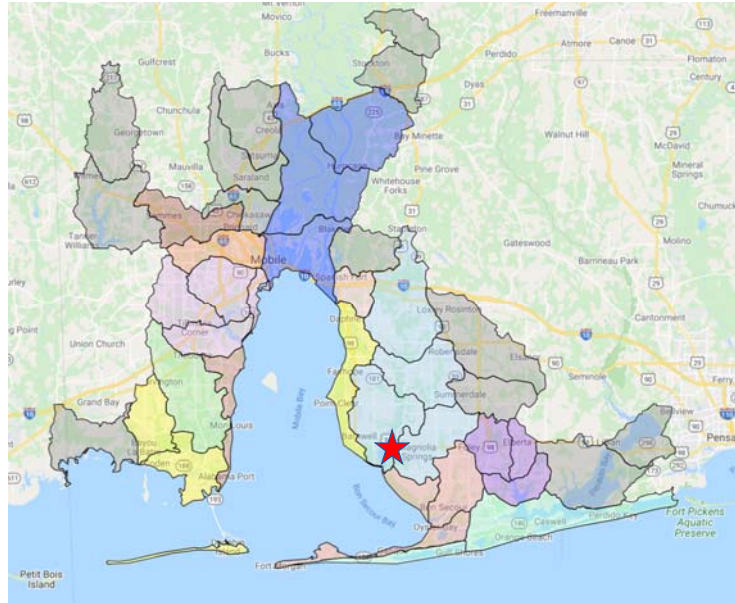
- Stabilize and restore 1,800 linear feet
- Reduce stream flow and velocity
- Reduce sediment loads
- Improve water quality
- Remove invasive plants and re-establish native vegetation in riparian areas

Project Status:

- Stream channel construction has reached substantial completion
- Planting to take place in fall/winter
- John Curry certifying no-rise
- Monitoring w/ USA



Lower Fish River Restoration



Stabilization of the unnamed tributary to Fish River in the Marlow community, a priority project in the WMP, continues (near intersection of Co Rd 9 and 32). 60% design is under review, and we are working with landowners for construction access. This project will be about 1,350 linear feet. Goal is to have permitted and ready for construction early 2022 during the planting window. This is task of the NFWF GEBF funding Lower Fish River Restoration award.

Lower Fish River Restoration



Project Lead:

- Mobile Bay National Estuary Program

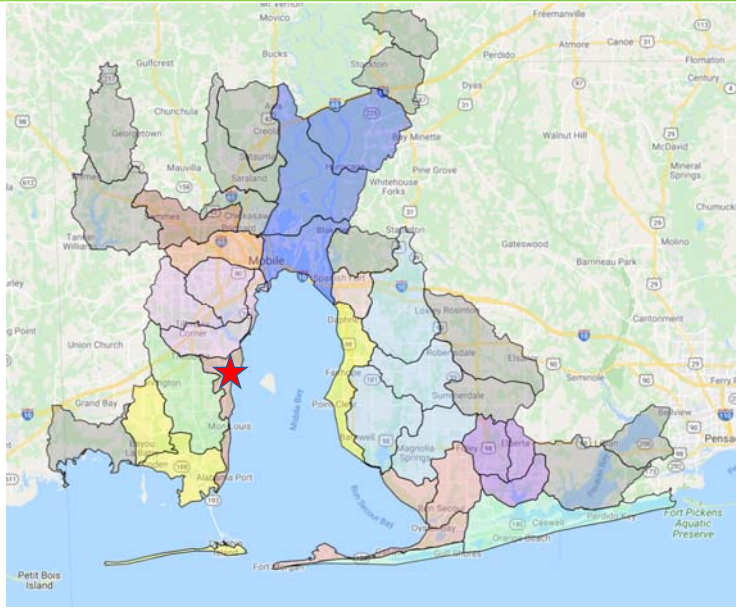
Project Funding:

- NFWF GEBF
- Completed field assessments
- Expanded area of interest to include Magnolia River Watershed
- Marlow project 60% E&D

Field assessments were undertaken in five subwatersheds (Barner Branch, Cowpen Creek, Green Branch, Turkey Branch, Waterhole Branch) of Lower Fish River to identify and prioritize candidates for engineering and design. We are working with three firms selected using an IDIQ process in 2020 (GMC, Thompson, and Volkert).

Field assessments identified some issues in those drainages but not of the scale and severity we were after. All parties agreed additional field assessments should be undertaken and the zone of interest expanded to include the Magnolia River Watershed. Data and potential projects from the initial field assessments were shared with partners to be considered for other funding opportunities. NFWF and State have been supportive and engaged in the process.

Deer River Marsh and Shoreline Stabilization



Project Lead:

- Mobile Bay National Estuary Program

Project Funding:

- NFWF GEBF
- Public Notice closed
- 60% design

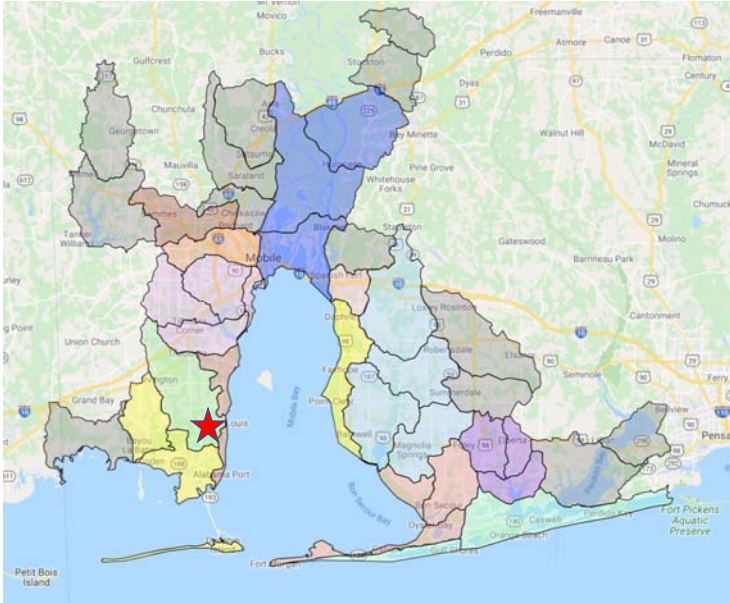
Project goals are to stabilize 5,600 linear feet on the bay fronting shoreline, restore water quality and quantity to the middle fork of Deer River, and create at least 30 acres of marsh.

Shoreline is receding an average of 12' per year including a large loss during Hurricane Sally last year. Aim to return to 1997 footprint while protecting over 275 acres of priority marsh and tidal creek habitat in the system.

Permit application has been submitted and the Public Notice recently closed. Design process continues and a request for funding to begin construction in 2022 was submitted to NFWF.

Marsh creation material will be beneficially sourced from the Corps of Engineers.

Fowl River Spits



Project Lead:

- Mobile Bay National Estuary Program

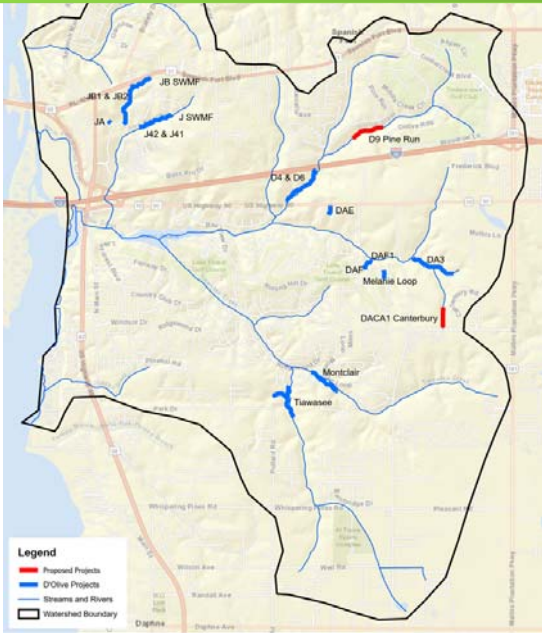
Project Funding:

- NFWF GEBF
- Permit submitted
- 60% design
- Landowners onboard

Goal of Fowl River Spits project is to stabilize and enhance priority marsh spits in the intertidal zone of the river. Will stabilize up to 12,600 of shoreline and raise the elevation of existing spits 18-24" totaling over 30 acres.

Permit has been submitted and is under review before a Public Notice is released. Landowner access has been secured. A request for construction funding was submitted to NFWF.

D'Olive Watershed Restoration



Project Lead:

- Mobile Bay National Estuary Program

Project Funding:

- NFWF GEBF/ADEM 319
- 30% design for both
- Working LOA and permitting
- Two projects (~1,500 LF & 219 LF)

To date MBNEP has stabilized over two miles of stream in the D'Olive Watershed. We anticipate the two projects currently under design to be our last for some time as we near a decade of service in the watershed starting in 2013 with Joes Branch (now delisted from the 303d impaired waters list!). ADEM and NFWF have been great partners throughout this undertaking.

Volkert and Mott McDonald are working with us to stabilize multiple headcuts on two segments of D'Olive Creek. If permits can be secured our goal is to go to construction in early 2022 during the planting window.

Following invasive presentations and project implementation updates discussion moved to a summary of the PIC off-cycle committee field trip in July and ideas for another in 2022. Many committee members have not seen the D'Olive restoration sites and MBNEP has a great tour fit into two hours. A poll will be sent to schedule a tour. A date for our regular committee meeting in January will be determined as well.

Dottie Byron thanked the committee for their assistance with the Center of Excellence Relevancy Review. Projects have been selected for that funding opportunity.

Carl Ferraro made a motion to adjourn the meeting at 2:56pm. Mary Kate Brown seconded.