

Managing Agency: <u>FWC-AHRES</u>

Cooperator: <u>AHRE</u>

Schedule for the Period of: <u>10/7/2019</u> through <u>11/1/2019</u>

| Waterbody | Regional Biologist | WorkArea | Target Plant | Treatment Acreage | Method Of Control | Herbicide Rate | Мар |
|----------------------------------|--------------------|---|----------------------|----------------------|-----------------------------------|----------------|-----|
| Pine Meadows Restoration Area | Nathalie Visscher | Treat invasive and exotic plants at Pine Meadows to keep these species under maintenance control within AHRES restoration sites and allow native vegetation the opportunity to re- colonize and expand. Native vegetation is more beneficial to fish and wildlife populations as it provides cover and food resources to meet fish and wildlife needs. Increasing the amount of native vegetation will improve overall habitat conditions for fish and wildlife. Treatments also help maintain navigation and water conveyance. FWC Project Manager is Dan Kolterman. | Oxycaryum cubense | | 2,4-D (liquid); Diquat | As per label | Yes |
| Pine Meadows Restoration Area | Nathalie Visscher | Treat invasive and exotic plants at Pine Meadows to keep these species under maintenance control within AHRES restoration sites and allow native vegetation the opportunity to re- colonize and expand. Native vegetation is more beneficial to fish and wildlife populations as it provides cover and food resources to meet fish and wildlife needs. Increasing the amount of native vegetation will improve overall habitat conditions for fish and wildlife. Treatments also help maintain navigation and water conveyance. FWC Project Manager is | Eichhornia crassipes | 1 | 2,4-D (liquid);Diquat | As per label | Yes |
| Pine Meadows Restoration Area | Nathalie Visscher | Dan Kolterman. Treat invasive and exotic plants at Pine Meadows to keep these species under maintenance control within AHRES restoration sites and allow native vegetation the opportunity to re- colonize and expand. Native vegetation is more beneficial to fish and wildlife populations as it provides cover and food resources to meet fish and wildlife needs. Increasing the amount of native vegetation will improve overall habitat conditions for fish and wildlife. Treatments also help maintain navigation and water conveyance. FWC Project Manager is Dan Kolterman. | Pistia stratiotes | 6 | 2,4-D (liquid);Diquat;Flumioxazin | As per label | Yes |
| | | Treat invasive and exotic plants at Pine Meadows to keep these species under maintenance control within AHRES restoration sites and allow native vegetation the opportunity to re- colonize and | | | | | |

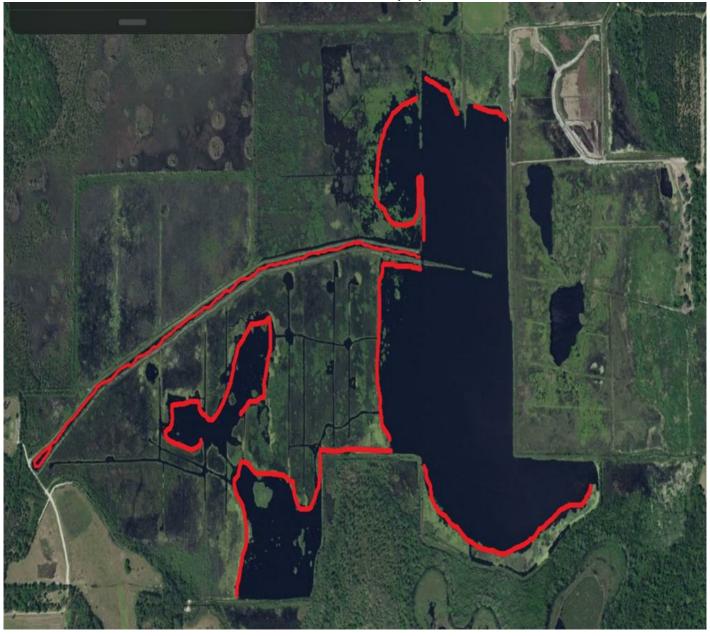
| Pine Meadows Restoration Area | Nathalie Visscher | expand. Native vegetation is more beneficial to fish and wildlife populations as it provides cover and food resources to meet fish and wildlife needs. Increasing the amount of native vegetation will improve overall habitat conditions for fish and wildlife. Treatments also help maintain navigation and water conveyance. FWC Project Manager is Day Kolterman | Limnobium spongia | 1 | 2,4-D (liquid):Diquat;Flumioxazin | As per label | Yes |
|-------------------------------------|-------------------|---|----------------------------------|----|-----------------------------------|---------------|-----|
| Pine Meadows Restoration Area | Nathalie Visscher | Dan Kolterman. Treat invasive and exotic plants at Pine Meadows to keep these species under maintenance control within AHRES restoration sites and allow native vegetation the opportunity to re- colonize and expand. Native vegetation is more beneficial to fish and wildlife populations as it provides cover and food resources to meet fish and wildlife needs. Increasing the amount of native vegetation will improve overall habitat conditions for fish and wildlife. Treatments also help maintain navigation and water conveyance. FWC Project Manager is | Ludwigia octovalvis/peruviana | 2 | 2,4-D (liquid);Diquat | As per label | Yes |
| Emeralda Marsh Conservation Area | Nathalie Visscher | Dan Kolterman. This project will control cattail and Cuban bulrush, both species that form monocultures and cause tussock formation. Treating exotic and invasive plant species will allow vegetation more beneficial to fish and wildlife to expand. | Oxycaryum cubense | 16 | Diquat | As per label | Yes |
| meralda Marsh Conservation Area | Nathalie Visscher | This project will control cattail and Cuban bulrush, both species that form monocultures and cause tussock formation. Treating exotic and invasive plant species will allow vegetation more beneficial to fish and wildlife to expand. | Typha spp | 4 | Imazamox | As per label | Yes |
| meralda Marsh Conservation Area | Nathalie Visscher | AHRES planted native trees on levees and habitat islands at EMCA 3. This herbicide project controls undesirable invasive plant species which compete with and damage recently planted trees. FWC Project Manager is Dan Kolterman. | AHRES Shrubs (native) | 5 | Glyphosate | As per label | Yes |
| Emeralda Marsh Conservation Area | Nathalie Visscher | AHRES planted native trees on levees and habitat islands at EMCA 3. This herbicide project controls undesirable invasive plant species which compete with and damage recently planted trees. FWC Project Manager is Dan Kolterman. | AHRES Shrubs (exotic) | 5 | Glyphosate | As per label | Yes |
| Dkeechobee, Lake | Brendon Hession | Paragrass, moonvine and balsaim apple will be treated on five FWC created islands in the northwest marsh. These treatments will protect recently planted shrubs, trees and wildflowers. Vines and paragrass will quickly grow, expand and take over if not treated. Clipper (flumioxazin) is selective and will kill vines, not trees or shrubs. Paragrass will be treated using sethoxydim (TIGR) which only kills grass species. All treatments will be over dry ground. FWC Project Manager is Alyssa Jordan. | lpomoea sp | 10 | Flumioxazin | As per label. | Yes |

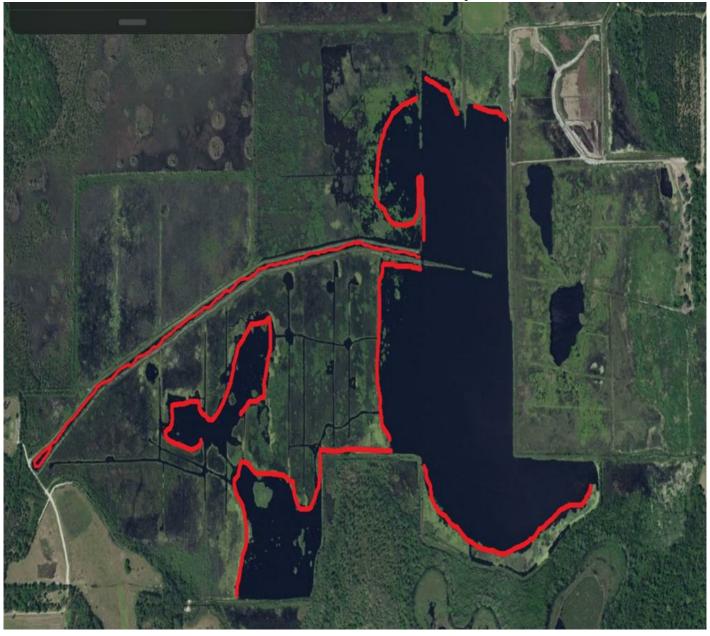
| Okeechobee, Lake | Brendon Hession | Paragrass, moonvine and balsalm apple will be treated on five FWC created islands in the northwest marsh. These treatments will protect recently planted shrubs, trees and wildflowers. Vines and paragrass will quickly grow, expand and take over if not treated. Clipper (flumioxazin) is selective and will kill vines, not treas or shrubs. Paragrass will be treated using sethoxydim (TIGR) which only kills grass species. All treatments will be over dry ground. FWC Project Manager is Alyssa Jordan. | Mormodica charantia | 10 | Flumioxazin | As per label. | Yes |
|------------------|-------------------|---|---------------------|----|-----------------------|---------------|-----|
| Okeechobee, Lake | Brendon Hession | Paragrass, moonvine and balsalm apple will be treated on five FWC created islands in the northwest marsh. These treatments will protect recently planted shrubs, trees and wildflowers. Vines and paragrass will quickly grow, expand and take over if not treated. Clipper (flumioxazin) is selective and will kill vines, not trees or shrubs. Paragrass will be treated using sethoxydim (TIGR) which only kills grass species. All treatments will be over dry ground. FWC Project Manager is Alyssa Jordan. | Urochloa mutica | 2 | Sethoxydim | As per label. | Yes |
| Yale, Lake | Nathalie Visscher | Over the last two years, FWC (AHRES) and Lake County Water Authority (LCWA) harvested floating tussocks in Lake Yale. Herbicide treatments will act as maintenance control to prevent tussock formation and address pop-up tussocks within these restoration sites. Treating these species will allow vegetation more beneficial to fish and wildlife to expand. FWC Project Manager is Dan Kolterman. | Oxycaryum cubense | 3 | 2,4-D (liquid);Diquat | As per label | Yes |
| Yale, Lake | Nathalie Visscher | Over the last two years, FWC (AHRES) and Lake County Water Authority (LCWA) harvested floating tussocks in Lake Yale. Herbicide treatments will act as maintenance control to prevent tussock formation and address pop-up tussocks within these restoration sites. Treating these species will allow vegetation more beneficial to fish and wildlife to expand. FWC Project Manager is Dan Kolterman. | Tussocks | 2 | 2,4-D (liquid);Diquat | As per label | Yes |
| Yale, Lake | Nathalie Visscher | Over the last two years, FWC (AHRES) and Lake County Water Authority (LCWA) harvested floating tussocks in Lake Yale. Herbicide treatments will act as maintenance control to prevent tussock formation and address pop-up tussocks within these restoration sites. Treating these species will allow vegetation more beneficial to fish and wildlife to expand. FWC Project Manager is Dan Kolterman. | Typha spp | 2 | Imazamox | As per label | Yes |
| | | AHRES conducted plant shredding activities within the historic river channel at Ocklawaha Prairie during FY1718 and FY1819. A rookery exists within the historic river channel that attracts | | | | | |

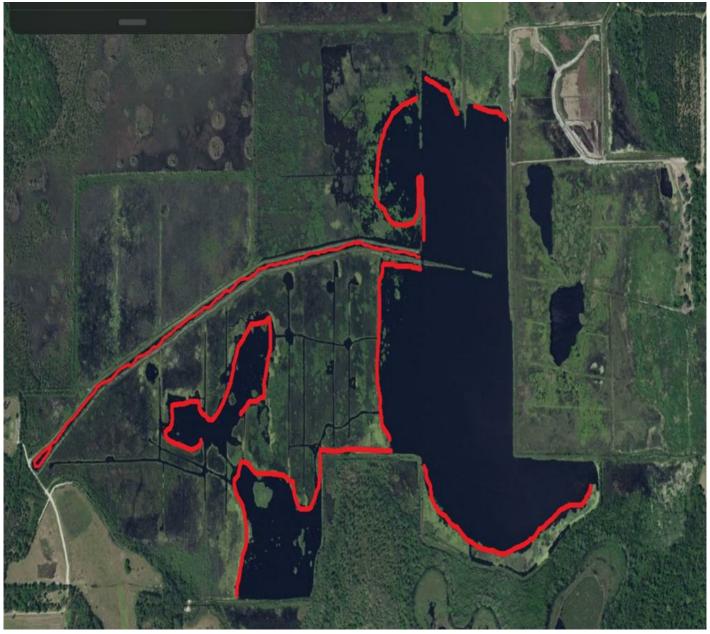
| Ocklawaha Prairie Restoration Area | Robert Lovestrand | hundreds of birds each year. Part of the river channel that supports this rookery has filled in with tussocks and may no longer be appealing to roosting birds. This herbicide project treats floating tussocks and tussock forming species (Cuban bulrush) as well as water hyacinth and water lettuce within the rookery and river channel that was opened up with shredder boats. Project Manager is Dan Kolterman. | Tussocks | 6 | 2,4-D (liquid);Diquat | As per label. | Yes |
|---------------------------------------|-------------------|---|----------------------|----|----------------------------|------------------------------------|-----|
| Ocklawaha Prairie Restoration Area | Robert Lovestrand | AHRES conducted plant shredding activities within the historic river channel at Ocklawaha Prairie during FY1718 and FY1819. A rookery exists within the historic river channel that attracts hundreds of birds each year. Part of the river channel that supports this rookery has filled in with tussocks and may no longer be appealing to roosting birds. This herbicide project treats floating tussocks and tussock forming species (Cuban bulrush) as well as water hyacinth and water lettuce within the rookery and river channel that was opened up with shredder boats. Project Manager is Dan Kolterman. | Eichhornia crassipes | 10 | 2,4-D (liquid);Diquat | As per label. | Yes |
| Ocklawaha Prairie Restoration Area | Robert Lovestrand | AHRES conducted plant shredding activities within the historic river channel at Ocklawaha Prairie during FY1718 and FY1819. A rookery exists within the historic river channel that attracts hundreds of birds each year. Part of the river channel that supports this rookery has filled in with tussocks and may no longer be appealing to roosting birds. This herbicide project treats floating tussocks and tussock forming species (Cuban bulrush) as well as water hyacinth and water lettuce within the rookery and river channel that was opened up with shredder boats. Project Manager is | Pistia stratiotes | 5 | 2,4-D (liquid);Flumioxazin | As per label. | Yes |
| Ocklawaha Prairie Restoration Area | Robert Lovestrand | Dan Kolterman. AHRES conducted plant shredding activities within the historic river channel at Ocklawaha Prairie during FY1718 and FY1819. A rookery exists within the historic river channel that attracts hundreds of birds each year. Part of the river channel that supports this rookery has filled in with tussocks and may no longer be appealing to roosting birds. This herbicide project treats floating tussocks and tussock forming species (Cuban bulrush) as well as water hyacimuland that net retucce within the rookery and river channel that was opened up with shredder boats. Project Manager is Dan Kolterman. | Oxycaryum cubense | 5 | 2,4-D (liquid); Diquat | As per label. | Yes |
| | | Dan Kolterman. This project is part of a Everglade Snall Kite Research Project University of Florida is conducting in cooperation with AHRES. A dense cattail monoculture (broken into three treatment polygons and three control polygons; "Snail Kite Treatment Area" [control polygons are not depicted on the figure) was selected | | | | Imazamox will be applied at the | |

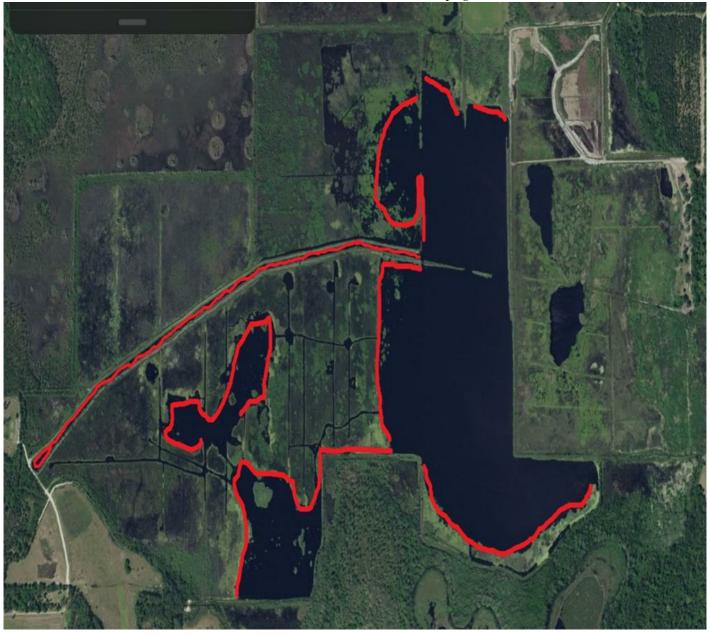
| Okeechobee, Lake | Brendon Hession | for the project area which receive two management treatments: 1) the herbicide treatment in middle October followed by 2) a prescribed burn in the late winter / early spring 2020. The project is trying to mimic a similar and very successful Snail Kite habitat enhancement project conducted in Moonshine Bay conducted in 2015. Project Manager is Dan Roberts. | Typha spp | 395 | Imazamox | recommended label rate of 2 pints/acre with MSO at 2 pints/acre at a "10- gallon-per-acre" mix rate | Yes |
|--------------------|-----------------|---|-----------------------|-----|----------------|--|-----|
| Okeechobee, Lake | Brendon Hession | To treat Phragmites (common reed) located on Kings Bar of Lake Okeechobee. The treatment site is located approximately 3.5 miles from the Herbert Hoover Dike Herbert Hoover Dike treatment site will be via the Herbert Hoover Dike. The project area is 396 acres. Phragmites is choking out the Kings Bar and severely limiting fish and wildlife usage. It doesn't allow native grasses to proliferate because it grows as a dense monoculture. The small amount of beneficial vegetation that is present is not readily accessible to fish and wildlife and, for most species, is not accessible at all. The dense Phragmites monoculture ("Kings Bar Treatment Area") will receive two management treatments: 1) a herbicide treatments in middle October followed by 2) a prescribed burn in the late winter / early spring 2020. Research has shown a combination of herbicide treatments, coupled with prescribed fire, should stress and kill back the Phragmites plants and increase our ability for control, while allowing other native emergent species to recolonize the area. FWC Project Manager is Alyssa Jordan. | Phragmites australis | 396 | Imazapyr | The imazapyr will be applied at the recommended label rate of 4 pints/acre with MSO at 2 pints/acre at a "20- gallon-per-acre" mix rate | No |
| Tohopekaliga, Lake | Ed Harris | Regal Bay Spoil Island Treatment. Control undesirable invasive species on spoil islands to improve fish and wildlife habitat. FWC Project Manager is Adriene Landrum. | AHRES Shrubs (native) | 1 | 2,4-D (liquid) | Hand and back pack spraying of shrub species as per herbicide label. | Yes |
| Tohopekaliga, Lake | Ed Harris | Regal Bay Spoil Island Treatment. Control undesirable invasive species on spoil islands to iimprove fish and wildlife habitat. FWC Project Manager is Adriene Landrum. | AHRES Shrubs (exotic) | 1 | 2,4-D (liquid) | Hand and Backpack treatment of shrub species as per herbicide label. | No |

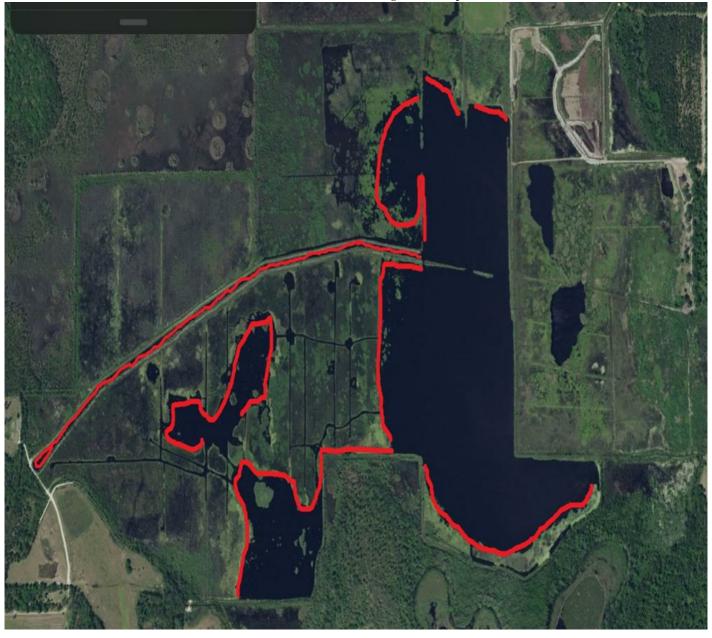
(R) = Rescheduled from previous



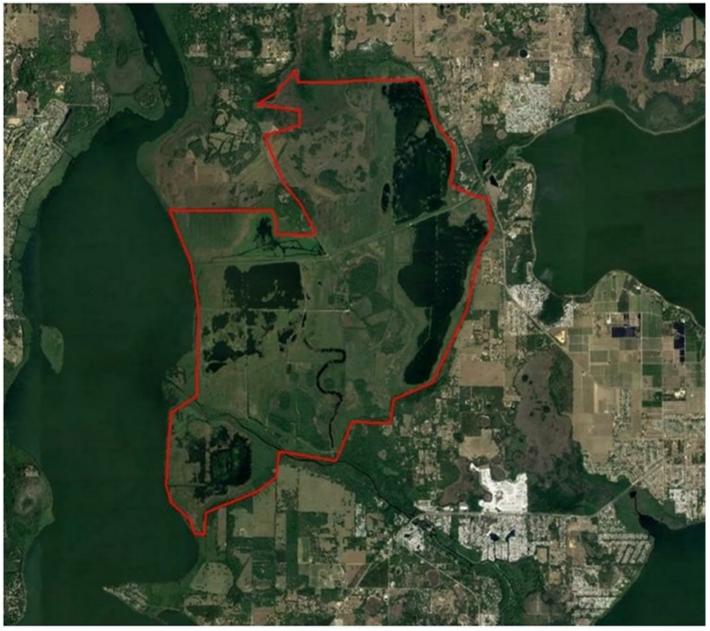




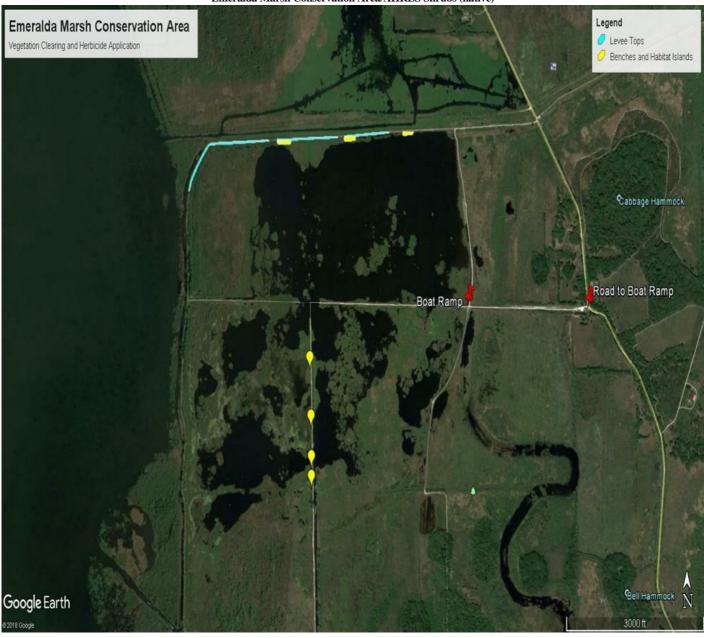




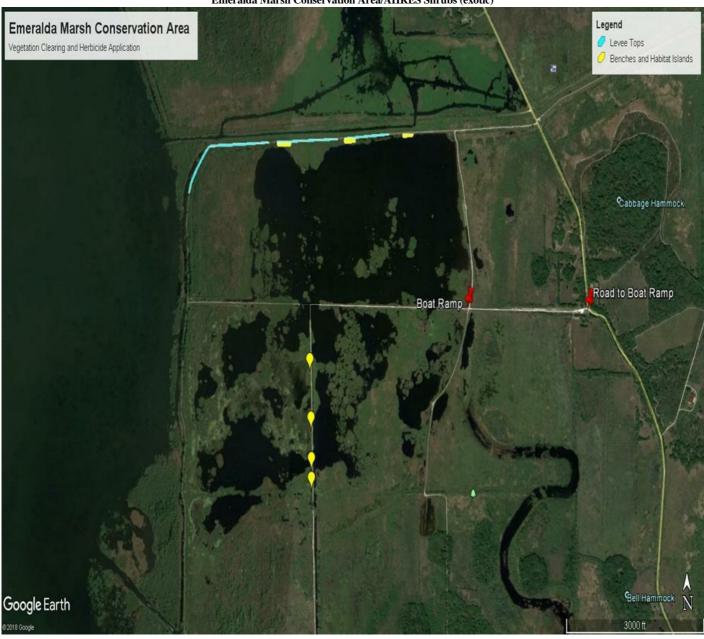












Okeechobee, Lake/Ipomoea sp



Okeechobee, Lake/Mormodica charantia



Okeechobee, Lake/Urochloa mutica



Yale, Lake/Oxycaryum cubense



Yale, Lake/Tussocks



Yale, Lake/Typha spp

