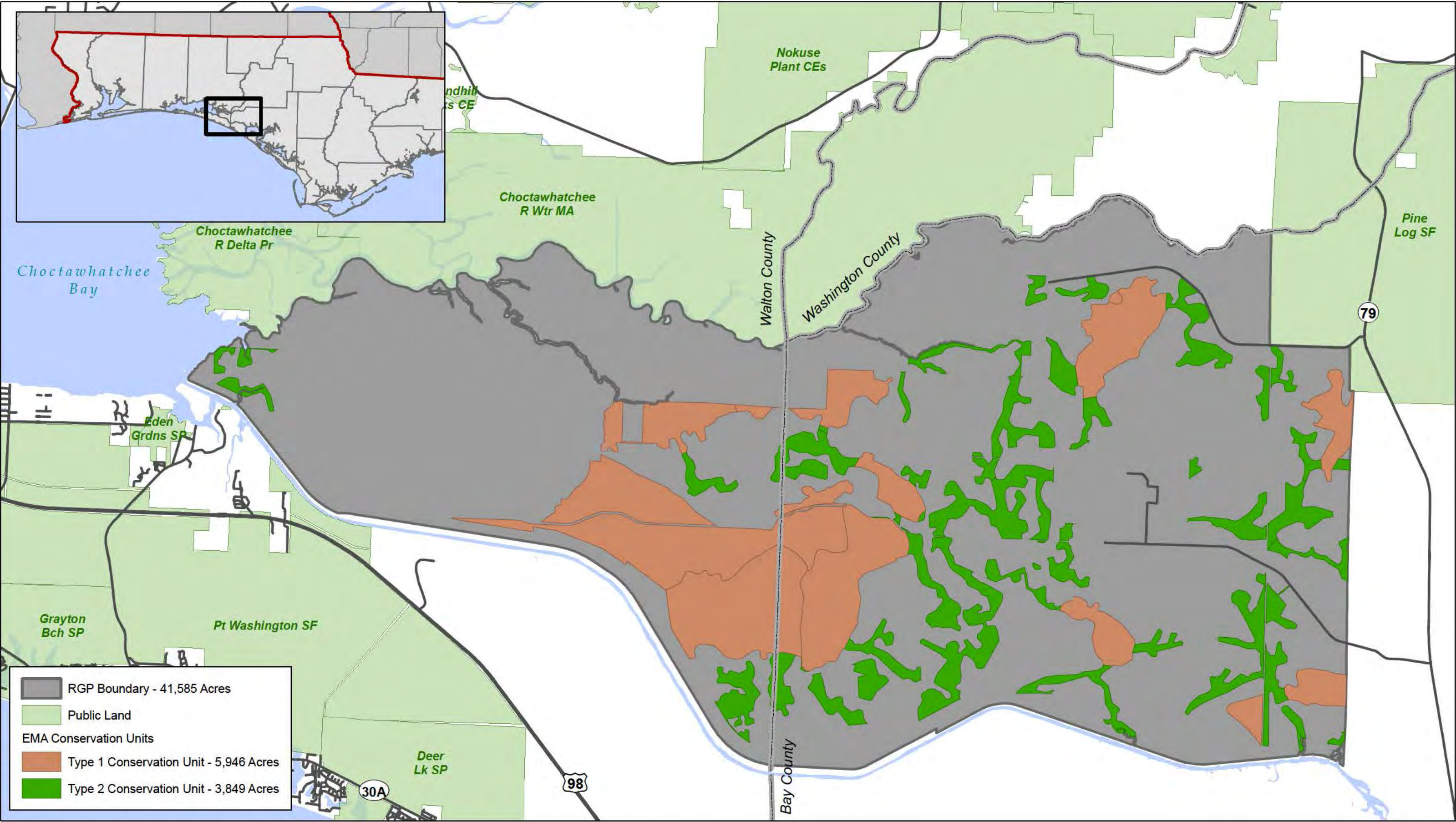


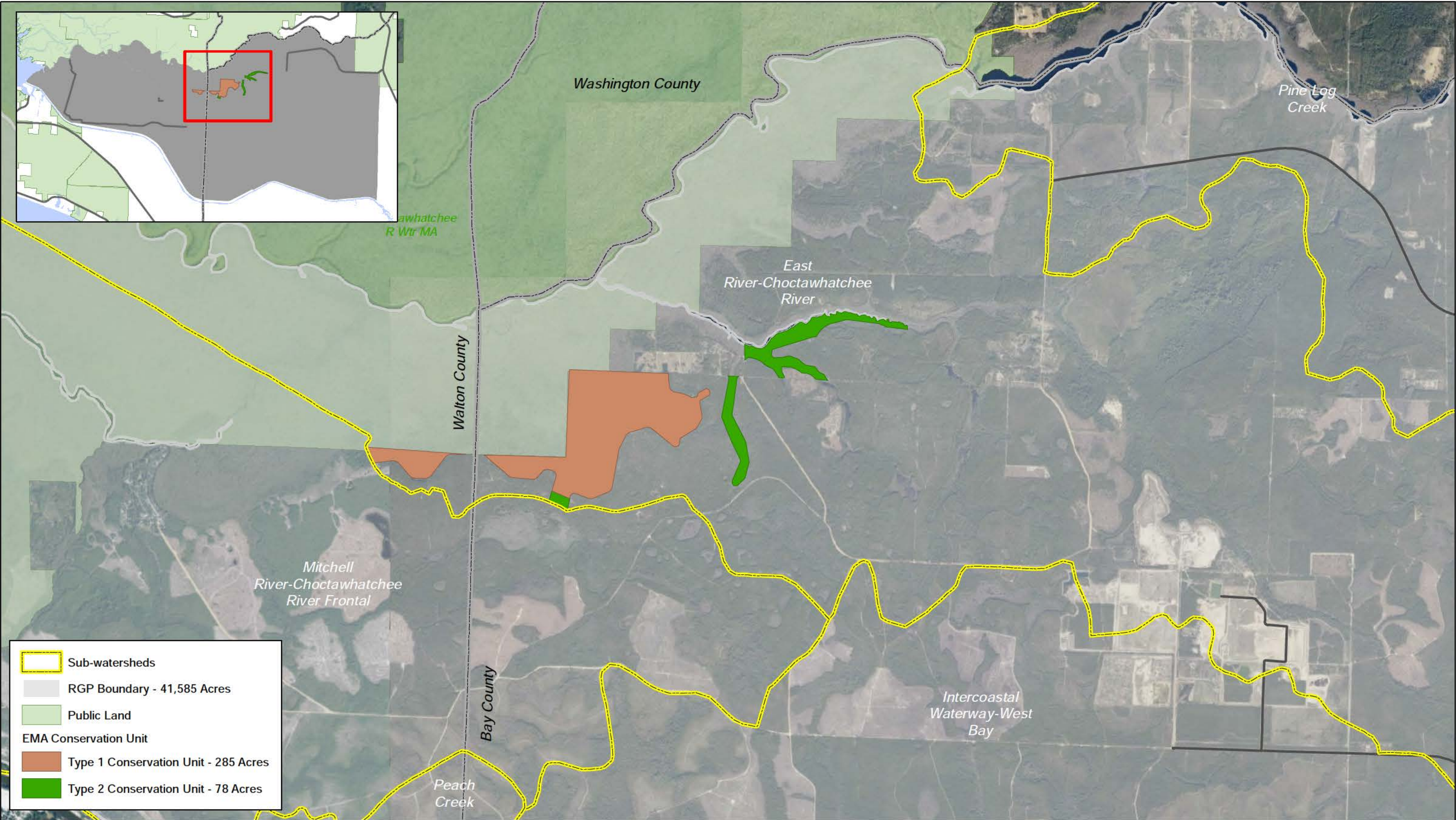


REGIONAL GENERAL PERMIT SAJ-114 - 41,585 ACRES CONSERVATION UNITS MAP

Exhibit 7
June 2016



0 1 2 Miles
1 in = 1 miles
1:68,574



REGIONAL GENERAL PERMIT SAJ-114
CONSERVATION UNIT MAP
BARRETT BRANCH - 363 ACRES
Exhibit 8 - June 2016



0 0.5 1 Miles
1 in = 0.5 miles
1:31,500



BARRETT BRANCH CONSERVATION UNIT

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1. BARRETT BRANCH CU POTENTIAL THREATENED AND ENDANGERED SPECIES OCCURRENCES

I. GENERAL DESCRIPTION OF CONSERVATION UNIT

The Barrett Branch Conservation Unit (CU) is a 347 (+/-) acre area divided into four adjacent sections. This CU borders the northern edge of the RGPEMA 3 boundary along the flood plain of the Choctawhatchee river in Sections 20, 21, 29, and 30 of Township 1 South, Range 17 West in Bay County, Florida (see Figure 1: General Location Map). The wetlands in this area are dominated by a mixed hardwood forested system which is the landward edge of the Choctawhatchee floodplain. The topography gradient from the upland scrub and Sand Pine silviculture areas to the wetland system is 1:10; this transition has one of the steepest grades on the site. The elevations range from 5 to 40 feet within this CU. This CU has approx. 2 mi along the border with Northwest Florida Water Management District (NFWFMD) property within the Choctawhatchee floodplain. The Choctawhatchee is the third largest river in Florida by volume and an important feature in NW Florida for wildlife habitat and water quality.

The FLUCCS land cover of the Barrett Branch CU is dominated by and hardwood-coniferous mixed forest (14%) along the wetland slope, Wetland Forest Mixed (41%), mixed wetland hardwoods (11%) and bottomland swamps (13%) all with similar vegetative structure and hydrology totaling (79%). The upland portion is dominated by coniferous plantations (21%). There are also small inclusions of freshwater marshes and treeless hydric savannah. The National Wetland Inventory (NWI) identifies 79% of the CU as palustrine wetlands and the remainder as uplands (21%), which is similar to the wetland coverage based on the soil types. All of these data types are estimations with scattered groundtruthing on a landscape scale.

Using soil survey data, NWI data, aerial photograph interpretation and additional groundtruthing a wetland estimation, specific to the site, has been done. Over 140 data point locations were groundtruthed within the EMA boundary. Based on the more detailed wetland estimation the CU is comprised of 93% wetland (Seepage Slope and Bottomland/ Floodplain Swamp) and 7% uplands (Scrub in Silviculture). The majority of the uplands are currently planted with Sand Pine (*Pinus clausena*).

The wetlands within the Barrett Branch CU are comprised of Bottomland/ Floodplain Swamp and Seepage Slopes that drain into the Choctawhatchee River. This CU also has upland areas that are classified as Sand Pine Scrub. Groundwater seeps from the sand pine scrub through the hardwood and wetland slope and into the floodplain. Due to the steepness of the slope the area has been left in a natural hardwood state. The upland scrub is used for silviculture for Sand Pine. These areas currently provide forestry resources and habitat for wildlife. Once these areas are placed into a conservation easement, they can potentially be restored to their historical plant communities.

These plant communities provide habitat appropriate for State and Federal listed flora and fauna. There are 3 documented listed species within the RGP/EMA 3 Boundary; the closest is 2.5 mile from this Conservation Unit (FLEO, 2009). Table 1 provides a list

of species that would be expected to use these areas if the habitats were in a natural state.

II. REGIONAL SIGNIFICANCE

The Barrett Branch CU protects both uplands and wetlands that are the landward extent of the Choctawhatchee River floodplain.

The Choctawhatchee River is the third largest river in Florida by volume. It flows from Alabama through Northwest Florida and discharges to the Gulf of Mexico through Choctawhatchee Bay at East Pass in Destin, FL. The Bay and tributaries are considered critical/ strategic habitat by FFWCC, USFWS, and FNAI for Gulf Sturgeon, 5 mussel species and other species. The Bay, River and its tributaries are classified as Class 2 shellfish harvesting approved waters and an Outstanding Florida Waterbody (OFW) by FDEP. The Choctawhatchee River basin is a priority area for the NFWFMD, FFWCC and other agencies for preservation of this pristine waterbody. A large portion of the floodplain is in public ownership and designated for conservation.

The Barret Branch CU is a subset of the overall Long-Term Conservation areas identified in the “Wildlife and Vegetation Resource Report” completed for the Bay-Walton Sector Plan, reviewed by the Florida Department of Environmental Protection, Florida Wildlife Conservation Commission, and the U.S. Fish and Wildlife Service, and subsequently approved by the Bay and Walton Board of County Commissions and the Florida Division of Community Development.

The Barrett Branch CU borders approximately 2 miles of lands owned by NFWFMD, thus increasing the conservation efforts for the Choctawhatchee river floodplain to the upland extent. When the CU is combined with the Sister River CU, to the west, over 4 miles of the southern Choctawhatchee floodplain will be preserved to its landward extent.

The Barrett Branch CU is identified as a priority Strategic Habitat Conservation Area (SHCA) by the Florida Fish and Wildlife Conservation Commission (FFWCC) (Endries et al., 2008). Further, this CU is ranked as a priority area by FFWCC based on their Integrated Habitat Ranking System (IHRS) (FFWCC, 2008) These rankings take into consideration the types of habitat and the species likely to use these habitats.

The Upland areas within this watershed basin are considered priority areas for aquifer recharge. The upland scrub is an Aquifer Recharge priority level 2 and 3 for FNAI (FNAI, 2009). These areas improve water quality for the entire region. The entire CU is a Green Links Priority 1, Level 1 area (Hector, UF, 2013), the highest of the high priority areas for regional ecological planning.

This CU is vital to water quality treatment and storage, habitat conservation, and species conservation. This CU is directly adjacent to the Choctawhatchee River

floodplain and expands the conservation efforts of the NFWFMD.

III. BIODIVERSITY

The habitats within the Barrett Branch CU are a landscape of planted Sand Pine Scrub uplands, Seepage Slope to Basin Swamp/ Floodplain Hardwood Swamp.

The planted Sand Pine Scrub upland diversity is in the ground cover layer, the Seepage slope diversity is within the shrub and canopy while the Basin Swamps contain the majority of their diversity in the canopy and subcanopy strata. Groundwater seeps through these systems from the surrounding Scrub upland. In the current condition, the existing sand pine plantations have altered the plant communities and wildlife composition. Although these landscapes are planted in pine, they have retained physical characteristics that would allow for restoration to their historical plant communities.

The areas within the Basin Swamp/ Floodplain are dominated wetland hardwood and cypress. These areas are currently very similar to the historical conditions. Due to the slope of the upland-wetland transition and the hydroperiod of the Basin Swamp/ Floodplain very little impact has occurred to the wetland areas due to the adjacent silviculture. This CU has also been ranked as a Strategic Habitat Conservation Area by FFWCC due to the potential to protect imperiled species (Endries et al., 2008).

Additionally, this CU has been ranked as a priority under the IHRS (FFWCC, 2008) due to an analysis of various factors affecting the ecological significance of land areas including species richness, listed species locations, and SHCA.

No threatened species have been documented within the CU. During site inspections USFWS noted that the CU has potential for threatened or endangered amphibian habitat and Gopher Tortoise (*Gopherus polyphemus*) burrows were noted in the adjacent uplands and therefore potential habitat for the indigo snake. The Choctawhatchee tributaries, and associated wetland sloughs are essential habitat for the Gulf Sturgeon, five Mussel species, Bluenose shiner and other listed vertebrates and invertebrates. Further, there are 41 plants and 18 animals identified in Bay and Walton Counties as Threatened or Endangered Species that could potentially occur in this CU. Conserving these areas will help to maintain habitat for listed species in the region. Table 1 provides a list of species that may benefit by the conservation of this habitat directly or secondarily.

IV. WATER QUALITY

The Barrett Branch CU is adjacent to large parcels of NFWFMD land within the Choctawhatchee Bay watershed. This CU is located in the East River – Choctawhatchee River Hydrologic Unit Code 12 drainage area within the GPEMA3 area. This area in addition to the other RGPEMA3 CUs and NFWFMD lands will preserve 3,986 Acres of the East River – Choctawhatchee River sub basin within the project boundary. 39% of the entire East River- Choctawhatchee sub basin within the RGP3 boundary will be in conservation. Therefore, the preservation of this CU will

provide significant protection compared to other watersheds that have experienced heightened development pressures. This large preservation area will provide an essential buffer to Choctawhatchee Bay.

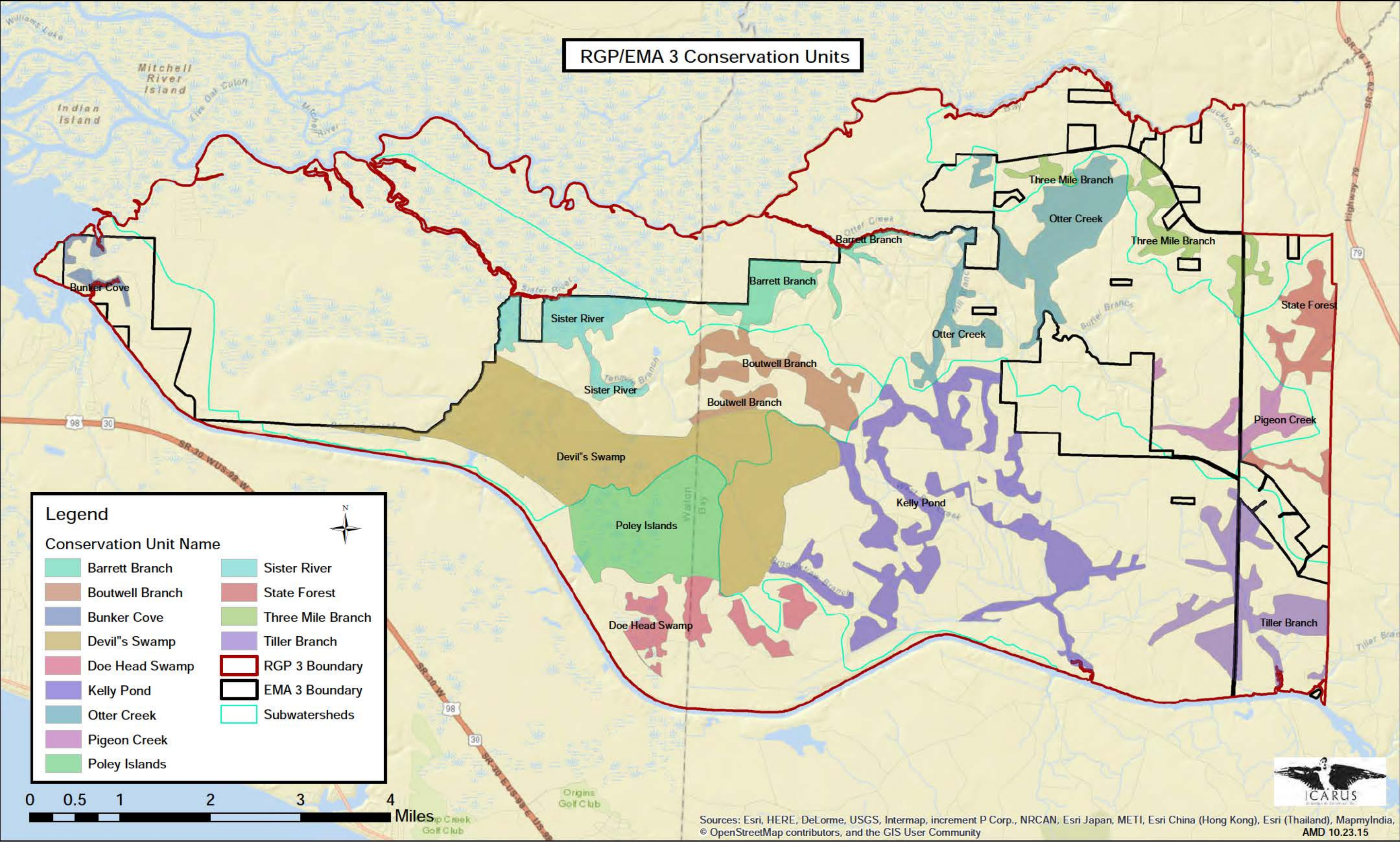
Choctawhatchee River is listed on the 305(b) or 303(d) list of impaired waters (FDEP, 2008) for mercury in fish tissue. There are currently no known point sources in the watershed and non-point sources are limited to forestry roads. Conserving lands within the CU will help to maintain a restored buffer around the Choctawhatchee River. The CU protects the river floodplain to the upland extent.

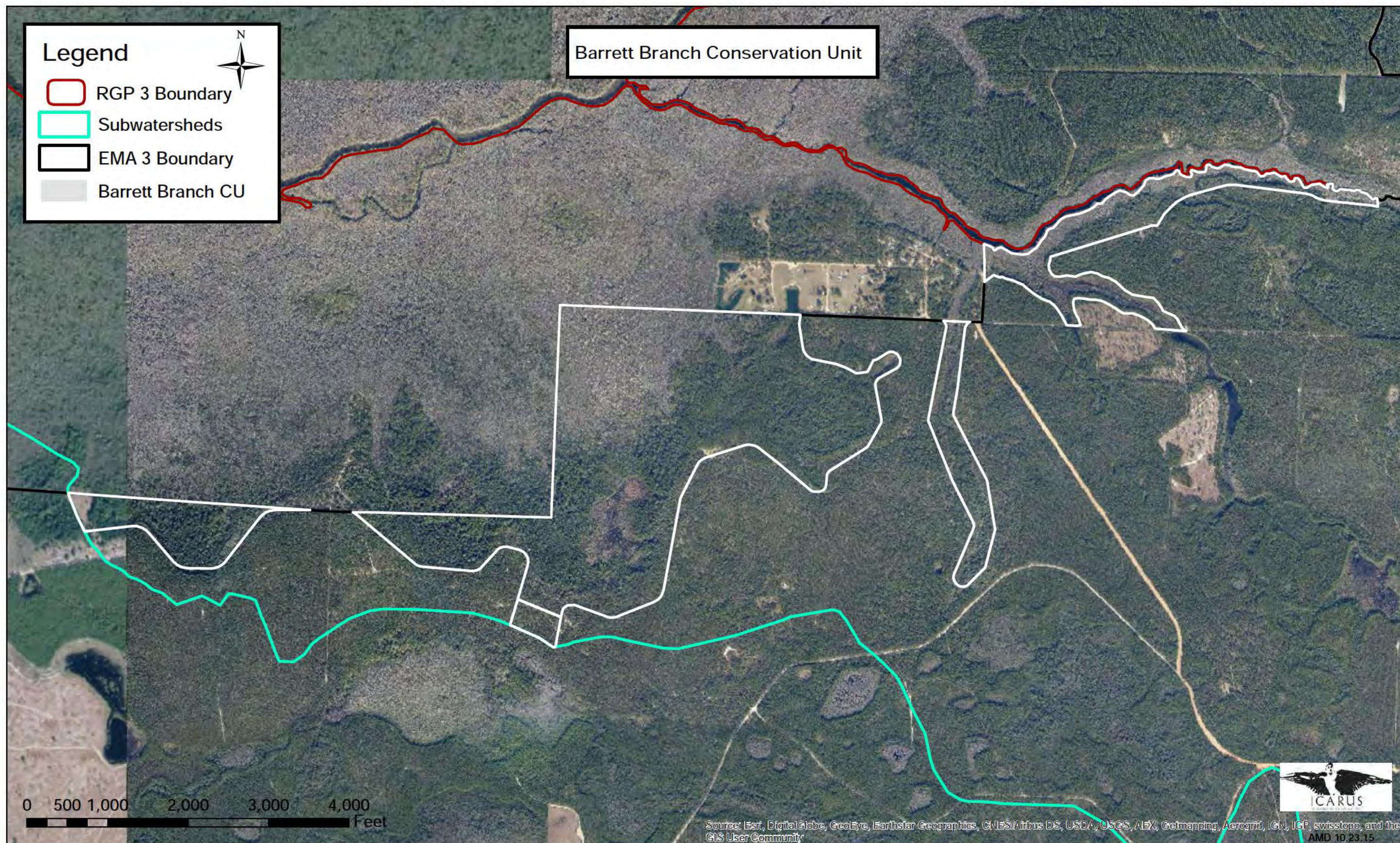
The habitats within the Barrett Branch CU are planted Sand Pine Scrub uplands, Seepage Slope grading to Basin Swamp/ Floodplain Hardwood Swamp. Seepage through these systems comes from the adjacent Sand Pine Scrub uplands and significantly contributes to surface water inflows to Choctawhatchee Bay. The upland habitats experienced alterations from being planted in pine; however, they still provide valuable water input, water filtration, and water storage function.

This CU has been identified by FNAI as a significant surface water priority level 2 and 4 (FNAI, 2009) primarily due to the support it provides to bay and coastal surface waters. Choctawhatchee Bay is a Class II Waterbody approved for shellfish harvesting that supports extensive Tidal Marsh and seagrass beds. Preserving the lands surrounding the Choctawhatchee River will help to maintain the brackish shallow water estuaries.

IV. ESSENTIAL FISH HABITAT AND MARINE RESOURCES

Land areas within East River – Choctawhatchee River subwatershed drain into Basin Swamp wetlands to Flood Plain Creeks associated with Choctawhatchee River and Choctawhatchee Bay. Choctawhatchee Bay is classified as Class II waters. The majority of Choctawhatchee Bay is approved for shellfish harvesting with some areas classified as prohibited for shellfish harvesting. Choctawhatchee Bay is classified as Essential Fish Habitat by NOAA and National Marine Fisheries Service for 5 species of Shark, Red Drum, 43 species of reef fish, 4 species of Shrimp and Coastal Migratory Pelagic fishes. Conservation of the Barnett Branch CU provides additional water quality protection to the landward extent of the Choctawhatchee River Floodplain, maintaining this Essential Fish Habitat.





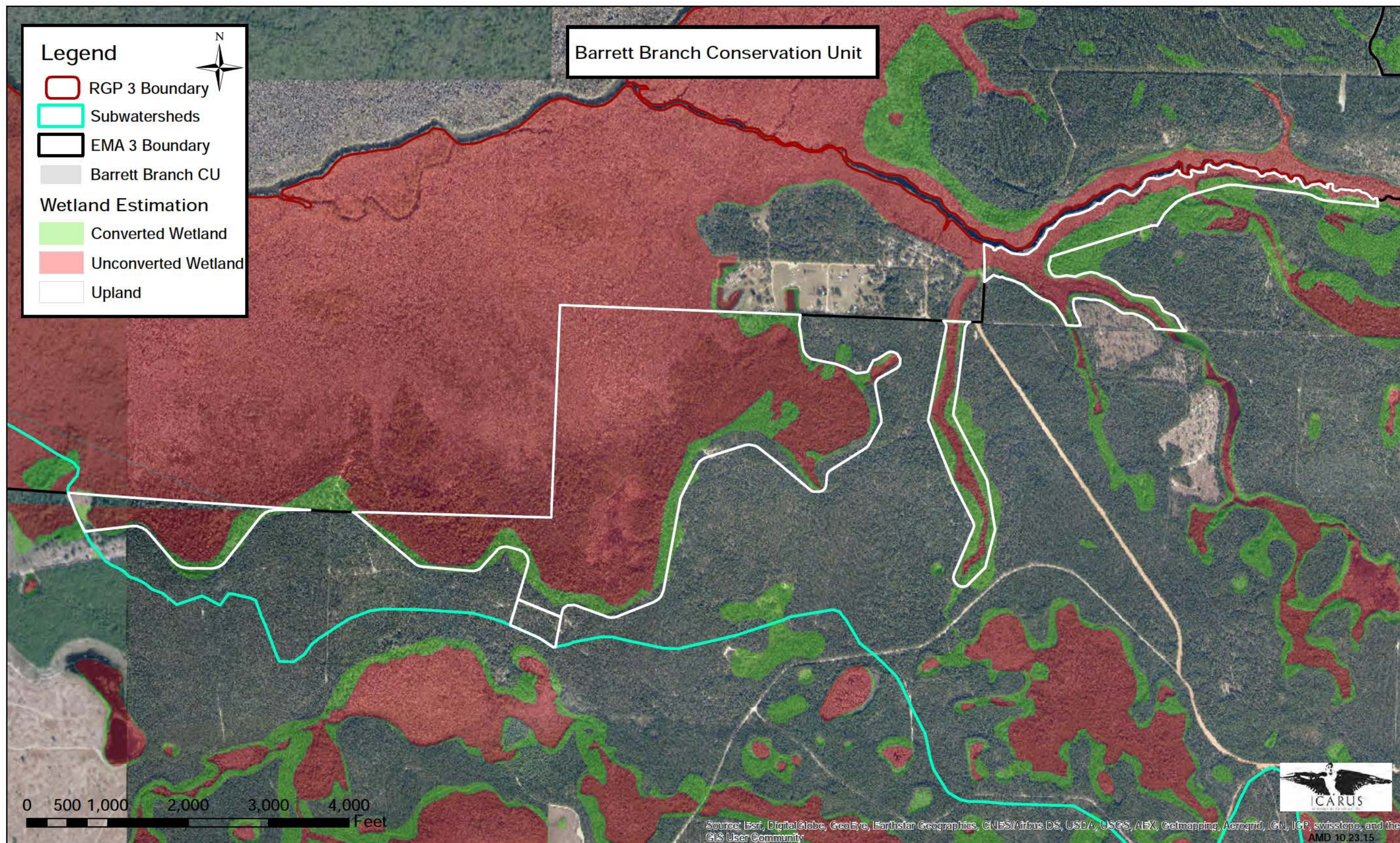


Table 1. Barrett Branch Conservation Unit Potential Threatened and Endangered Species Occurrences

ANIMALS	Scientific Name	Common Name	Status	
AMPHIBIAN	Ambystoma Bishopi	Reticulated Flatwoods Salamander	FE	
BIRD	Charadrius melodus	Piping Plover	FT	
BIRD	Calidris canutus rufa	Red Knot	FT	
BIRD	Picoides borealis	Red-cockaded woodpecker	FE	
BIRD	Mycteria americana	Wood Stork	FT	
CLAM	Villosa choctawensis	Choctaw Bean	FE	
CLAM	Pleurobema strodeanum	Fuzzy Pigtoe	FT	
CLAM	Medionidus penicillatus	Gulf Moccasins shell	FE	
CLAM	Pleurobema pyriforme	Oval Pigtoe	FE	
CLAM	Ptychobranhus jonesi	Southern Kindeyshell	FT	
CLAM	Hamiota australis	Southern Sandshell	FT	
CLAM	Fusconaia burkei	Tapered Pigtoe	FT	
FISH	Acipenser oxyrinchus desotoi	Atlantic Gulf Sturgeon	FT	
FISH	Pteronotropis welaka	Bluenose Shiner	SSC	
MAMMAL	Myotis grisescens	Gray Bat	FE	
REPTILE	Drymarchon couperi	Eastern indigo snake	FT	
REPTILE	Gopherus polyphemus	Gopher tortoise	ST	
PLANTS	Scientific Name	Common Name	Federal Status	State Status
	Andropogon arctatus	pine-woods bluestem		LT
	Arnoglossum album	white-flowered Plantain		LE
	Asclepias viridula	green milkweed		LT
	Aster spinulosus (now Eurybia spinulosa)	pinewoods aster		LE
	Calamovilfa curtissii	Curtiss Sandgrass		LT
	Carex baltzellii	Baltzell s sedge		LT
	Cleistes divaricata	spreading pogonia		LT
	Drosera filiformis	dew-thread		LE
	Drosera intermedia	water sundew		LT
	Gentiana pennelliana	wiregrass gentian		LE
	Hymenocallis henryae	Mrs Henry's spiderlily		LE
	Lachnocaulon digynum	Panhandle bogbuttons		LT
	Lilium catesbaei	Catesby lily		LT
	Linum macrocarpum	big-seed flax		LE
	Macbridea alba	white birds-in-a-nest	LT	LE
	Macranthera flammea	hummingbird-flower		LE
	Panicum nudicaule now Dichantherium nudicaule	naked-stemmed panic grass		LT
	Physostegia godfreyi	Apalachicola dragonhead		LT
	Pinckneya bracteata	fever-tree		LT
	Pinguicula ionantha	Godfrey s or panhandle butterwort	LT	LE
	Pinguicula lutea	yellow-flowered butterwort		LT
	Pinguicula planifolia	swamp butterwort		LT
	Pinguicula primuliflora	primrose-flowered butterwort		LE
	Platanthera ciliaris	yellow-fringed orchid		LT
	Platanthera integra	orange rein orchid		LE
	Pogonia ophioglossoides	rose pogonia		LT
	Rhexia parviflora	Apalachicola meadow-beauty		LE
	Rhexia salicifolia	Panhandle meadow beauty		LT
	Rhynchospora crinipes	hairy peduncled beakrush		LE
	Rhynchospora stenophylla	narrow-leaf beakrush		LT
	Rudbeckia nitida	St. John s-Susan		LE
	Sarracenia leucophylla	white-top pitcher plant		LE
	Sarracenia psittacina	parrot pitcher plant		LT
	Sarracenia purpurea	decumbent pitcher plant		LT
	Stachydeoma graveolens (now Hedeoma graveolens)	mock pennyroyal		LE
	Zigadenus leimanthoides (now Stenanthium densum)	coastal death camas		LE
	Stenanthium gramineum	eastern featherbells		LE
	Verbesina chapmanii	Chapman's crownbeard		LT
	Xyris isoetifolia	quillwort yellow-eyed-grass		LE
	Xyris longisepala	Karst pond yellow-eyed-grass		LE
	Xyris scabrifolia	Harper s yellow-eyed grass		LE

Abbreviations used herein are:

Plants:

T(SIA) =Threatened due to similarity of appearance

LE = Endangered

LT= Threatened

LS = Species of special concern

N = not currently listed

PT= proposed for listing as Threatened

Animals:

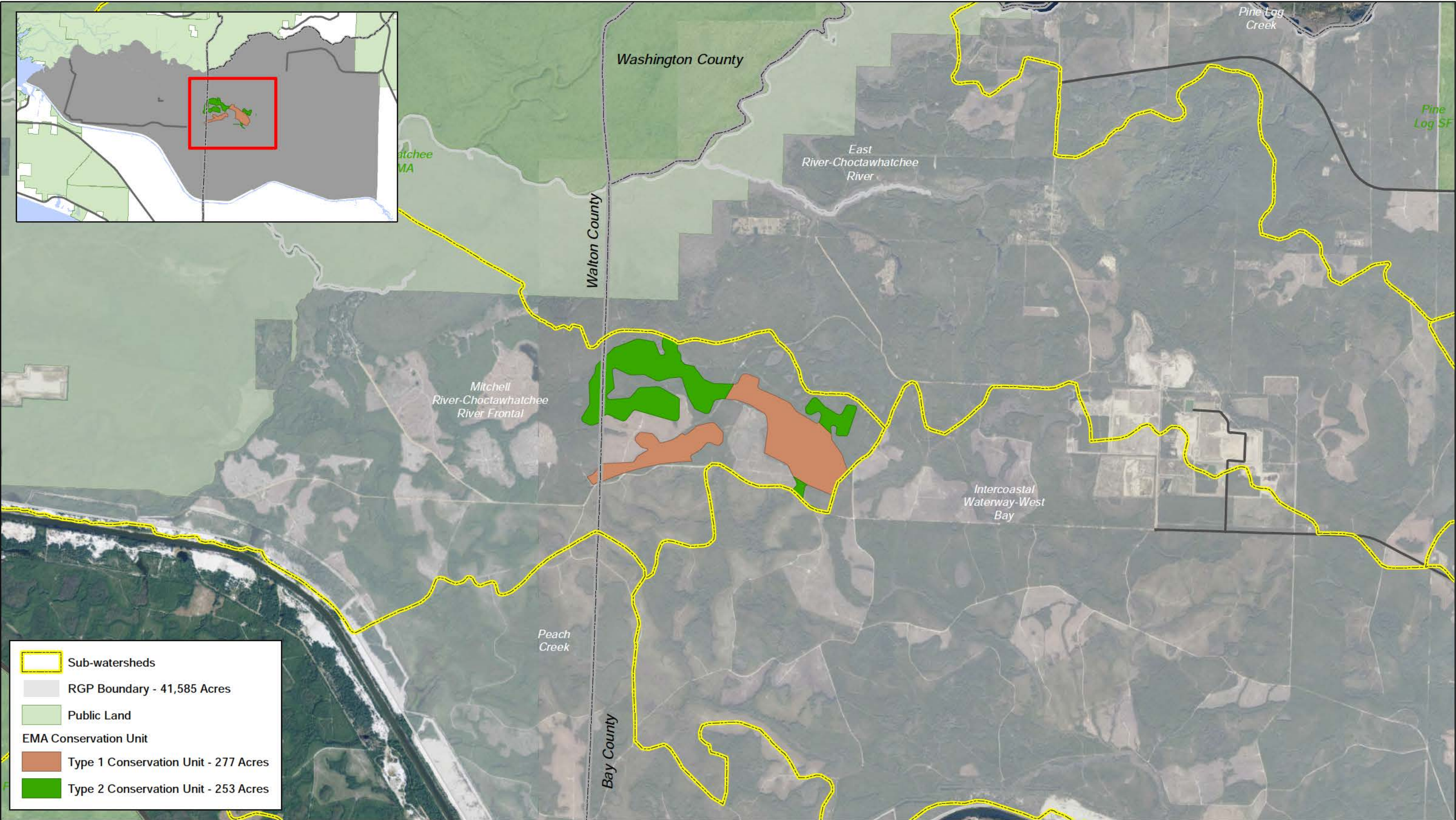
FE = Federal Endangered

FT = Federal Threatened

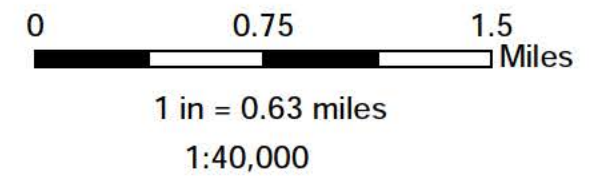
ST = State Threatened

SSC = **Species of Special Concern**

FT(SIA) = Federal Threatened due to similarity of appearance



REGIONAL GENERAL PERMIT SAJ-114
CONSERVATION UNIT MAP
BOUTWELL BRANCH - 530 ACRES
Exhibit 9 - June 2016





BOUTWELL BRANCH CONSERVATION UNIT

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TABLE

1. BOUTWELL BRANCH CU POTENTIAL THREATENED AND ENDANGERED SPECIES OCCURRENCES

I. GENERAL DESCRIPTION OF CONSERVATION UNIT

Boutwell Branch Conservation Unit (CU) is a 532 (+/-) acre area divided into two sections within the Mitchell River – Choctawhatchee River Subbasin North of Steelfield Road. This CU is located north of the Devil's Swamp Mitigation Bank area in the northern central portion of the RGPEMA 3 site. It consists of basin swamps draining into the Choctawhatchee river through the Devil's Swamp Conservation Unit in Sections 30, 31, 32 Township 1 South, Range 17 West and Sections 25, 36 Township 2 South, Range 17 West in Bay County, Florida (see Figure 1: General Location Map). The wetlands in this area are dominated by a Basin Swamp and Baygall systems which drain through the Devil's Swamp Conservation Unit to the Choctawhatchee River through Roaring Fork Creek.

The topography within this CU is relatively flat the elevations range from 25 to 35 feet within this CU. The wetland systems are large Basin Swamp, Baygall systems over flow in rain events into Nine Mile and Ten Mile Creeks. These wetlands are basin attached by small slough systems. The creek systems flow north to the Choctawhatchee River. The Choctawhatchee is the third largest river in Florida by volume and an important feature in NW Florida for wildlife habitat and water quality.

The FLUCCS land cover of the Boutwell Branch CU is dominated by Wetland Forested Mixed (42%), Wet Prairies (5%) and Treeless Hydric Savanna (14%), totaling (61%). The upland portion is dominated by Forest Regeneration Areas (9%), Herbaceous (dry prairies) (3%) and Coniferous Plantations (26%), totaling (38%). The National Wetland Inventory (NWI) identifies 68% of the CU as palustrine wetlands and the remainder as uplands 32%, which is similar to the wetland coverage based on the soil types dominated by Rutlege, Pamlico and Pottsburg (76%).

Using soil survey data, FLUCCS, NWI data, aerial photograph interpretation and additional groundtruthing a wetland estimation, specific to the site, has been done. Over 140 data point locations were groundtruthed within the EMA boundary. Based on the more detailed wetland estimation the CU is comprised of 81% wetland (Basin Swamp and Baygall Systems) and 19% uplands (Pine Flatwoods in Silviculture). The majority of the uplands are currently planted with Slash Pine (*Pinus ellotti*) with smaller areas planted with Sand Pine (*Pinus clausa*).

The wetlands within the Boutwell Branch CU are comprised of Basin Swamps and Baygall systems that drain into Nine and Ten Mile Creeks and on to the Choctawhatchee River. This CU also has upland areas that are classified as Mesic Pine Flatwoods in Silviculture. The uplands in this area are mesic and allow for overland flow to the depressional Basin Swamp system and Baygall slough system contributing to the Choctawhatchee river tributaries, Nine and Ten Mile Creeks. The upland Mesic Pine Flatwoods are used for silviculture for Slash Pine and Sand Pine. These areas currently provide forestry resources and habitat for wildlife. Once these areas are placed into a conservation easement, they can potentially be restored to their

historical plant communities.

These plant communities provide habitat appropriate for State and Federal listed flora and fauna. There are 3 documented listed species within the RGP/EMA 3 Boundary; Conservation Unit (FLEO, 2009). Table 1 provides a list of species that would be expected to use these areas if the habitats were in a natural state.

II. REGIONAL SIGNIFICANCE

The Boutwell Branch CU protects both uplands (102 ac +/-) and expansive wetlands (430 ac +/-) that contribute to the tributaries of the Choctawhatchee River. The wetlands are Basin Swamp and Baygall systems attached by small sloughs holding large volumes for water for flood attenuation, water quality and contributing to the Choctawhatchee River.

The Choctawhatchee River is the third largest river in Florida by volume. It flows from Alabama through Northwest Florida and discharges to the Gulf of Mexico through Choctawhatchee Bay at East Pass in Destin, FL. The Bay and tributaries are considered critical/ strategic habitat by FFWCC, USFWS, and FNAI for Gulf Sturgeon, 5 mussel species and other species. The Bay, River and its tributaries are classified as Class 2 shellfish harvesting approved waters and an Outstanding Florida Waterbody (OFW) by FDEP. The Choctawhatchee River basin is a priority area for the NFWFMD, FFWCC and other agencies for preservation of this pristine waterbody. A large portion of the floodplain is in public ownership and designated for conservation.

The Boutwell Branch CU is identified as a level 2 priority Strategic Habitat Conservation Area (SHCA) by the Florida Fish and Wildlife Conservation Commission (FFWCC) (Endries et al., 2008). Further, this CU is ranked as a priority area by FFWCC based on their Integrated Habitat Ranking System (IHRS) (FFWCC, 2008) These rankings take into consideration the types of habitat and the species likely to use these habitats.

The majority of the Boutwell Branch CU is considered a priority area for aquifer recharge. The area is an Aquifer Recharge priority level 2-4 for FNAI (FNAI, 2009). These areas improve water quality for the entire region. The entire CU is a Green Links Priority 1, Level 1 and 2 (Hector, UF, 2013), the highest of the high priority areas for regional ecological planning.

This CU is vital to water quality treatment and storage, habitat conservation, and species conservation. The Boutwell Branch Conservation Unit contributes to the landward wetlands of the Choctawhatchee River floodplain, expanding the conservation efforts of the NFWFMD.

III. BIODIVERSITY

The habitats within the Boutwell Branch CU are a landscape of Coniferous Plantations and Basin Swamp and Baygall wetland systems. The planted Mesic Pine Flatwoods upland diversity is in the ground cover layer, the Baygall diversity is within the shrub and canopy while the Basin Swamps contain the majority of their diversity in the canopy and subcanopy strata. Overland flow and groundwater seeps through these systems from the surrounding uplands contributing to the hydrology of the Choctawhatchee floodplain. In the current condition, the existing silviculture in the Mesic Pine Flatwoods have altered the plant communities and wildlife composition. Although these landscapes are planted in pine, they have retained physical characteristics that would allow for restoration to their historical plant communities.

The areas within the Baygall and Basin Swamp systems are dominated wetland hardwood and cypress. These areas are currently very similar to the historical conditions. Due the hydroperiod of the Basin Swamp very little impact has occurred to the wetland areas from the adjacent silviculture. This CU has also been ranked as a Priority 2 Strategic Habitat Conservation Area by FFWCC due to the potential to protect imperiled species (Endries et al., 2008). Additionally, this CU has been ranked as a priority under the IHRS (FFWCC, 2008) due to an analysis of various factors affecting the ecological significance of land areas including species richness, listed species locations, and SHCA.

No threatened species have been documented within the CU. A documented occurrence of _____ is within 1.5 mi of the CU. Further, there are 41 plants and 9 animals identified in Bay and Walton Counties as Threatened or Endangered Species that could potentially occur in this CU. Conserving these areas will help to maintain habitat for listed species in the region. Table 1 provides a list of species that may benefit by the conservation of this habitat directly or secondarily.

IV. WATER QUALITY

The Boutwell Branch CU preserves over 100 acre of uplands contributing to the adjacent hydrology a 430 ac +/- wetland system flowing to nine and ten mile creeks and on to the Choctawhatchee River floodplain watershed. This CU is located in the Mitchell River – Choctawhatchee River Frontal Hydrologic Unit Code 12 drainage area within the GPEMA3 area. This area in addition to the other RGPEMA3 CUs and NFWFMD lands will preserve 8,634 Acres of the Mitchell River – Choctawhatchee River Frontal sub basin. With the addition of this CU, 74 % of the Mitchell River-Choctawhatchee Frontal sub basin within the SAJ 114 boundary will be in conservation. Therefore, the preservation of this CU will provide significant protection compared to other watersheds that have experienced heightened development pressures. This large

preservation area will provide an essential buffer to Choctawhatchee Bay, along with water quality treatment, and flood attenuation for the River.

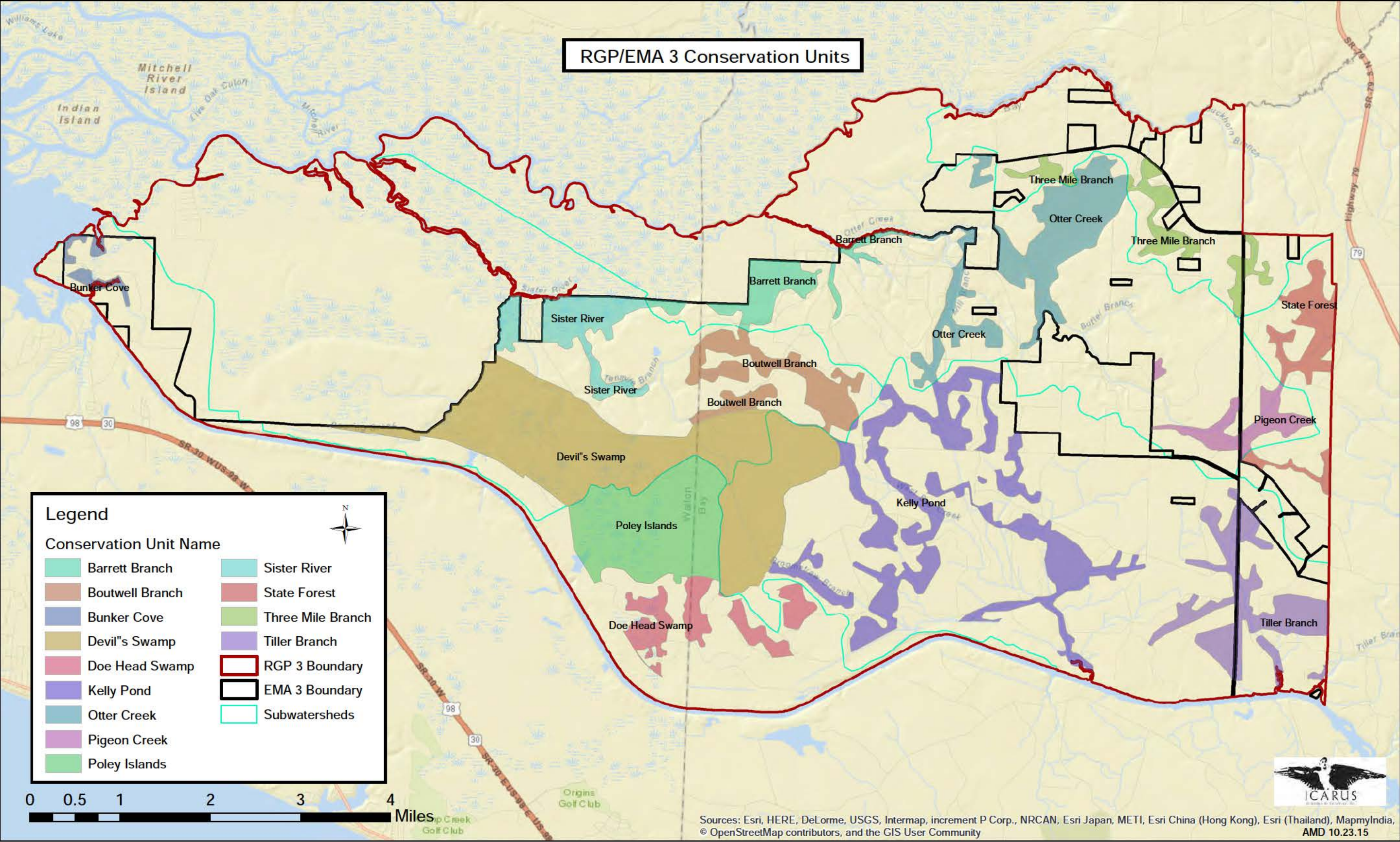
Choctawhatchee River is listed on the 305(b) or 303(d) list of impaired waters (FDEP, 2008) for mercury in fish tissue. There are currently no known point sources in the watershed and non-point sources are limited to forestry roads. Conserving lands within the CU will help to maintain a restored buffer around the Choctawhatchee River. The CU protects the river floodplain to the upland extent.

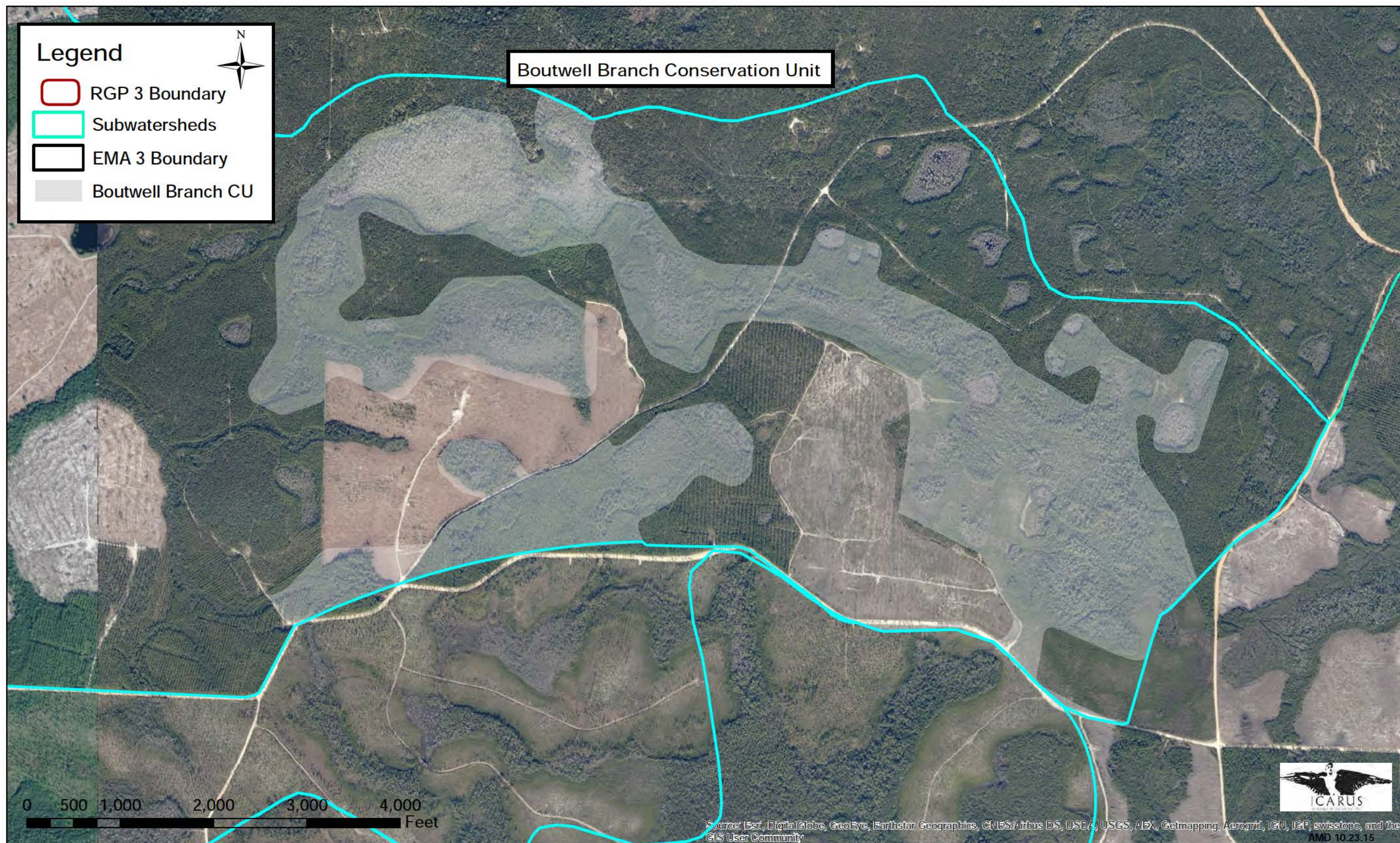
The habitats within the Boutwell Branch CU are planted Pine Flatwoods uplands, Baygall and Basin Swamps. Hydrology through these systems comes from surrounding Mesic and Hydric Pine Flatwoods and significantly contributes to surface water inflows to Choctawhatchee Bay. The upland habitats experienced alterations from being planted in pine; however, they still provide valuable water input, water filtration, and water storage function.

This CU has been identified by FNAI as a significant surface water priority level 2- 4 (FNAI, 2009) primarily due to the support it provides to bay and coastal surface waters. Choctawhatchee Bay is a Class II Waterbody approved for shellfish harvesting that supports extensive Tidal Marsh and seagrass beds. Preserving the lands surrounding the Choctawhatchee River will help to maintain the brackish shallow water estuaries.

IV. ESSENTIAL FISH HABITAT AND MARINE RESOURCES

Land areas within Mitchell River – Choctawhatchee River Frontal subwatershed drain into Baygall and Basin Swamp wetlands to floodplain creeks associated with Choctawhatchee River and Choctawhatchee Bay. Choctawhatchee Bay is classified as Class II waters. The majority of Choctawhatchee Bay is approved for shellfish harvesting with some areas classified as prohibited for shellfish harvesting. The Choctawhatchee tributaries, and associated wetland sloughs are essential habitat for the Gulf Sturgeon, five Mussel species, Bluenose shiner and other listed vertebrates and invertebrates. Choctawhatchee Bay is classified as Essential Fish Habitat by NOAA and National Marine Fisheries Service for 5 species of Shark, Red Drum, 43 species of reef fish, 4 species of Shrimp and Coastal Migratory Pelagic fishes. Conservation of the Boutwell Branch CU provides additional water quality protection to the landward extent of the Choctawhatchee River Floodplain, maintaining this Essential Fish Habitat.





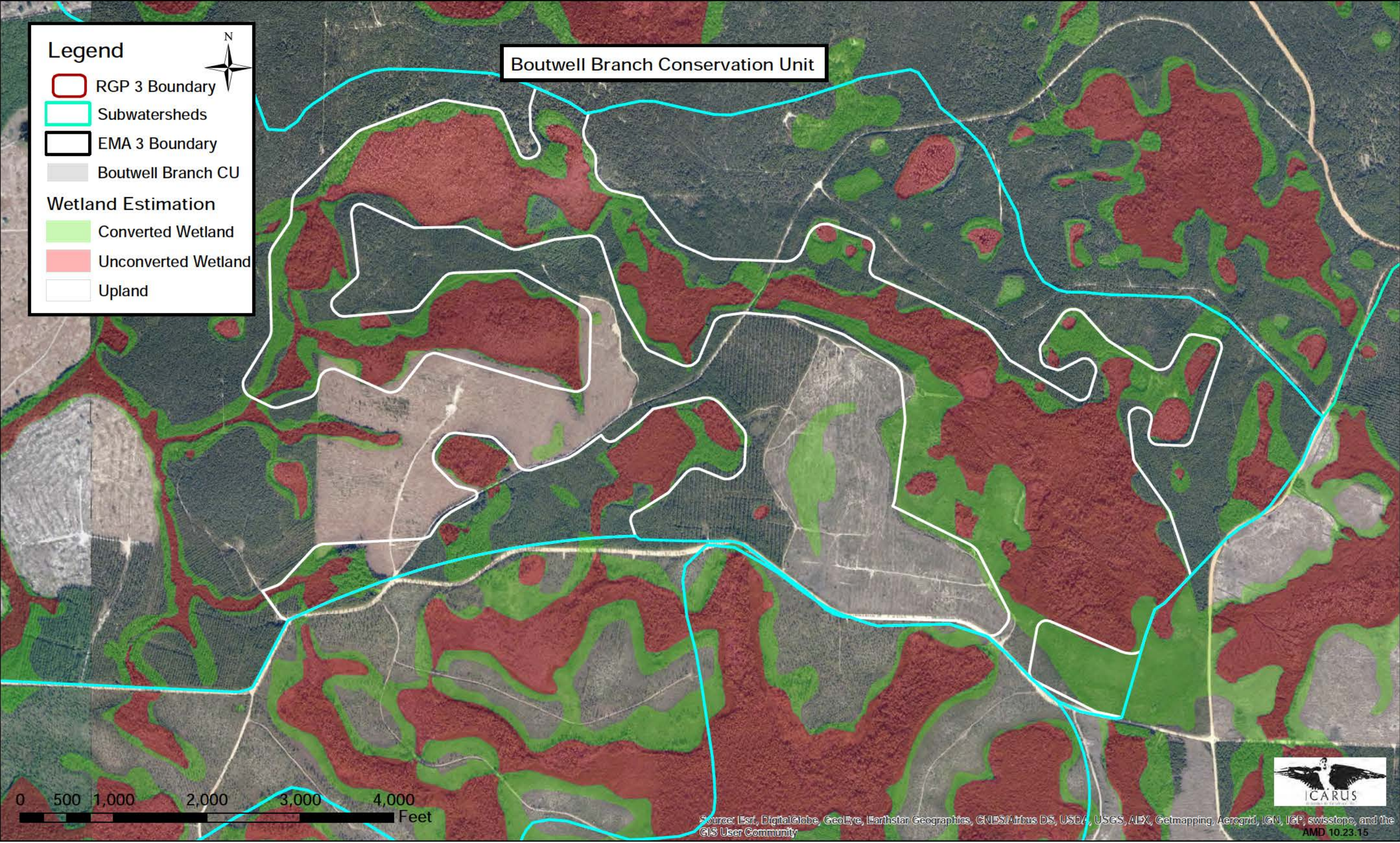
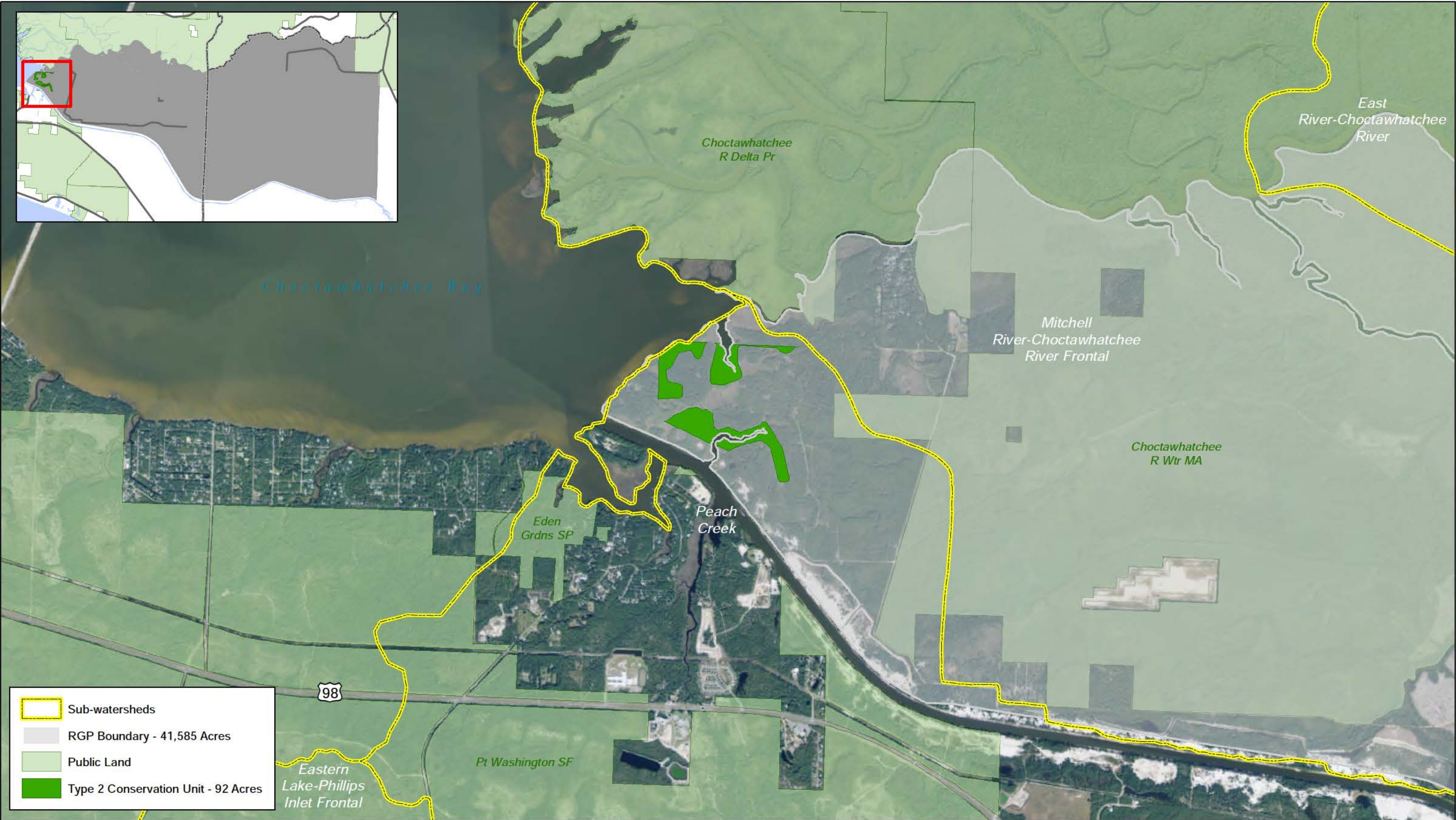


Table 1. Boutwell Branch Conservation Unit Potential Threatened and Endangered Species Occurrences

ANIMALS	Scientific Name	Common Name	Status	
AMPHIBIAN	Ambystoma Bishopi	Reticulated Flatwoods Salamander	FE	
BIRD	Charadrius melodus	Piping Plover	FT	
BIRD	Calidris canutus rufa	Red Knot	FT	
BIRD	Picoides borealis	Red-cockaded woodpecker	FE	
BIRD	Mycteria americana	Wood Stork	FT	
FISH	Pteronotropis welaka	Bluenose Shiner	SSC	
MAMMAL	Myotis grisescens	Gray Bat	FE	
REPTILE	Drymarchon couperi	Eastern indigo snake	FT	
REPTILE	Gopherus polyphemus	Gopher tortoise	ST	
PLANTS	Scientific Name	Common Name	Federal Status	State Status
	Andropogon arctatus	pine-woods bluestem		LT
	Arnogolssum album	white-flowered Plantain		LE
	Asclepias viridula	green mi kweed		LT
	Aster spinulosus (now Eurybia spinulosa)	pinewoods aster		LE
	Calamovilfa curtissii	Curtiss Sandgrass		LT
	Carex baltzellii	Baltzell's sedge		LT
	Cleistes divaricata	spreading pogonia		LT
	Drosera filiformis	dew-thread		LE
	Drosera intermedia	water sundew		LT
	Gentiana pennelliana	wiregrass gentian		LE
	Hymenocallis henryae	Mrs Henry's spiderlily		LE
	Lachnocaulon digynum	Panhandle bogbuttons		LT
	Lilium catesbaei	Catesby lily		LT
	Linum macrocarpum	big-seed flax		LE
	Macbridea alba	white birds-in-a-nest	LT	LE
	Macranthera flammea	hummingbird-flower		LE
	Panicum nudicaule now Dichantherium nudicaule	naked-stemmed panic grass		LT
	Physostegia godfreyi	Apalachicola dragonhead		LT
	Pinckneya bracteata	fever-tree		LT
	Pinguicula ionantha	Godfrey's or panhandle butterwort	LT	LE
	Pinguicula lutea	yellow-flowered butterwort		LT
	Pinguicula planifolia	swamp butterwort		LT
	Pinguicula primuliflora	primrose-flowered butterwort		LE
	Platanthera ciliaris	yellow-fringed orchid		LT
	Platanthera integra	orange rein orchid		LE
	Pogonia ophioglossoides	rose pogonia		LT
	Rhexia parviflora	Apalachicola meadow-beauty		LE
	Rhexia salicifolia	Panhandle meadow beauty		LT
	Rhynchospora crinipes	hairy peduncled beakrush		LE
	Rhynchospora stenophylla	narrow-leaf beakrush		LT
	Rudbeckia nitida	St. John s-Susan		LE
	Sarracenia leucophylla	white-top pitcher plant		LE
	Sarracenia psittacina	parrot pitcher plant		LT
	Sarracenia purpurea	decumbent pitcher plant		LT
	Stachydeoma graveolens (now Hedeoma graveolens)	mock pennyroyal		LE
	Zigadenus leimanthoides (now Stenanthium densum)	coastal death camas		LE
	Stenanthium gramineum	eastern featherbells		LE
	Verbesina chapmanii	Chapman's crownbeard		LT
	Xyris isoetifolia	quillwort yellow-eyed-grass		LE
	Xyris longisepala	Karst pond yellow-eyed-grass		LE
	Xyris scabrifolia	Harper's yellow-eyed grass		LE

Abbreviations used herein are:**Plants:****T(S/A)** =Threatened due to similarity of appearance**LE** = Endangered**LT**= Threatened**LS** = Species of special concern**N** = not currently listed**PT**= proposed for listing as Threatened**Animals:****FE** = Federal Endangered**FT** = Federal Threatened**ST** = State Threatened**SSC** = **Species of Special Concern****FT(S/A)** = Federal Threatened due to similarity of appearance



REGIONAL GENERAL PERMIT SAJ-114
CONSERVATION UNIT MAP
BUNKER COVE - 92 ACRES
Exhibit 10 - June 2016

0 0.5 1 Miles
 1 in = 0.5 miles
 1:31,500



BUNKER COVE CONSERVATION UNIT

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TABLE

1. BUNKER COVE CU POTENTIAL THREATENED AND ENDANGERED SPECIES OCCURRENCES

I. GENERAL DESCRIPTION OF CONSERVATION UNIT

Bunker Cove Conservation Unit (CU) is a 92 (+/-) acre area divided into two sections within the Peach Creek Subbasin in the far western edge of the project site. This CU is located on the North West corner of the Intercostal Waterway (ICW) and Choctawhatchee Bay at Bunker Cove. It consists of saltwater marsh swamps and surrounding uplands, draining into the ICW and Choctawhatchee Bay in Sections 25 Township 2 South, Range 19 West in Walton County, Florida (see Figure 1: General Location Map). The wetlands in this area are dominated by saltwater marshes which drain to the Choctawhatchee Bay.

The topography within this CU is relatively flat with elevations ranging from 5 to 10 feet. The wetlands are saltwater marshes adjacent to Choctawhatchee Bay and the ICW. They represent the landward extent of tidal influence in those areas. The adjacent uplands are Mesic Pine Flatwoods with areas of Oak Hammock. Choctawhatchee Bay is an important feature in NW Florida for wildlife habitat, listed species and water quality.

The FLUCCS land cover of the Bunker Cove CU is dominated by Saltwater Marshes (54%), Wetland Forested Mixed (5%) and Hydric Pine Flatwoods (2%), totaling (61%). The upland portion is dominated by Pine Flatwoods (21%) and Coniferous Plantations (12%), totaling (33%). There are also small inclusions of Upland Coniferous Forests (3%) and Hardwood- Coniferous Mixed (1%) making up the remaining area. The National Wetland Inventory (NWI) identifies 40% of the CU as palustrine and 28% as estuarine wetlands and the remainder as uplands 31%, which is similar to the wetland coverage based on the soil types dominated by Rutlege, Dirego and Duckston (83%)..

Using soil survey data, FLUCCS, NWI data, aerial photograph interpretation and additional groundtruthing a wetland estimation, specific to the site, has been done. Over 140 data point locations were groundtruthed within the EMA boundary. Based on the more detailed wetland estimation the CU is comprised of 78% wetland (saltwater marshes) and 22% uplands (Pine Flatwoods some in Silviculture). A portion of the uplands are currently planted with Slash Pine (*Pinus ellotti*).

The wetlands within the Bunker Cove CU are comprised of saltwater marshes flowing directly in to the ICW to the south and Choctawhatchee Bay to the West. This CU also has upland areas that are classified as Mesic Pine Flatwoods and small inclusions of Oak Hammock. The upland Mesic Pine Flatwoods portions of which are used for silviculture for Slash Pine. These areas currently provide forestry resources and habitat for wildlife. Once these areas are placed into a conservation easement, they can potentially be restored to their historical plant communities.

These plant communities provide habitat appropriate for State and Federal listed flora and fauna. There are 3 documented listed species within the RGP/EMA 3 Boundary; Conservation Unit (FLEO, 2009). Table 1 provides a list of species that would be expected to use these

areas if the habitats were in a natural state.

II. REGIONAL SIGNIFICANCE

The Bunker Cove CU protects both uplands and wetlands that contribute to Choctawhatchee Bay. This conservation unit preserves 92 acres adjacent to Choctawhatchee Bay. The Bay discharges to the Gulf of Mexico at East Pass near Destin, Florida and is vital to Northwest Florida.

The Bay and tributaries are considered critical/ strategic habitat by FFWCC, USFWS, and FNAI for Gulf Sturgeon, five Mussel species and other listed species. The Bay, River and its tributaries are classified as Class 2 shellfish harvesting approved waters and an Outstanding Florida Waterbody (OFW) by FDEP. The Choctawhatchee River basin is a priority area for the NFWFMD, FFWCC and other agencies for preservation of this pristine waterbody. A large portion of the floodplain is in public ownership and designated for conservation.

The Bunker Cove CU surrounds portions of the uplands and saltmarshes discharging to the Bay. This CU will allow for preservation of wetlands contributing to water quality, flood attenuation in Choctawhatchee Bay. The Bunker Cove CU is a subset of the overall Long-Term Conservation areas identified in the "Wildlife and Vegetation Resource Report" completed for the Bay-Walton Sector Plan, reviewed by the Florida Department of Environmental Protection, Florida Wildlife Conservation Commission, and the U.S. Fish and Wildlife Service, and subsequently approved by the Bay and Walton Board of County Commissions and the Florida Division of Community Development.

The Bunker Cove CU is identified as a priority Strategic Habitat Conservation Area (SHCA) by the Florida Fish and Wildlife Conservation Commission (FFWCC) (Endries et al., 2008). Further, this CU is ranked as a priority area by FFWCC based on their Integrated Habitat Ranking System (IHRS) (FFWCC, 2008) These rankings take into consideration the types of habitat and the species likely to use these habitats.

The majority of the Bunker Cove CU is considered a priority area for aquifer recharge. The area is an Aquifer Recharge priority level 2-5 for FNAI (FNAI, 2009). These areas improve water quality for the entire region. The entire CU is a Green Links Priority 1, Level 1 (Hector, UF, 2013), the highest of the high priority areas for regional ecological planning.

This CU is vital to water quality treatment and storage, habitat conservation, and species conservation. This CU contributes to the preservation of landward wetlands of Choctawhatchee Bay.

III. BIODIVERSITY

The habitats within the Bunker Cove CU are a landscape of Saltwater Marshes and Mesic Pine Flatwoods. The Mesic Pine Flatwoods upland diversity is in the shrub and groundcover layer, the Saltwater Marshes contain the majority of their diversity in the emergent vegetation. The overland flow from the Mesic Pine Flatwoods and tidal influence from Choctawhatchee Bay combine to contribute to the hydrology of the saltwater marsh systems. In the current condition, the existing Mesic Pine Flatwoods have altered the plant communities and wildlife composition. Although these landscapes are planted in pine, they have retained physical characteristics that would allow for restoration to their historical plant communities.

The areas within the Saltwater Marsh systems are dominated Needle Rush (*Juncus roemerianus*) and Sawgrass (*Cladium spp*). Some areas of Mesic Pine Flatwoods uplands were not used for silviculture. These areas are currently very similar to the historical conditions. Due the hydroperiod and tidal influence of the Saltwater Marsh has had very little impact from the adjacent silviculture. This CU has also been ranked as a Priority 2 and 5 Strategic Habitat Conservation Area by FFWCC due to the potential to protect imperiled species (Endries et al., 2008). Additionally, this CU has been ranked as a priority under the IHRS (FFWCC, 2008) due to an analysis of various factors affecting the ecological significance of land areas including species richness, listed species locations, and SHCA.

No threatened species have been documented within the CU. A documented occurrence of a Bald Eagle (*Haliaeetus leucocephalus*) is located within 100 ft of the CU. The Choctawhatchee tributaries, and associated wetland sloughs are essential habitat for the Gulf Sturgeon, five Mussel species, Bluenose shiner and other listed vertebrates and invertebrates. Further, there are 41 plants and 23 animals identified in Bay and Walton Counties as Threatened or Endangered Species that could potentially occur in this CU. Conserving these areas will help to maintain habitat for listed species in the region. Table 1 provides a list of species that may benefit by the conservation of this habitat directly or secondarily.

IV. WATER QUALITY

The Bunker Cove CU is the only CU adjacent to Choctawhatchee Bay, protecting both uplands and wetlands with direct access to the Bay. This CU is located in the Peach Creek Hydrologic Unit Code 12 drainage area within the GPEMA3 area. This area in addition to the other RGPEMA3 CUs and NFWFMD lands will preserve 1,860 Acres of the Peach Creek sub basin within the project boundary. With the addition of this CU, 37% of the Peach Creek sub basin within RGP3 boundary will be in conservation, the majority of which is located outside the RGPEMA 3 Site. Therefore, the preservation of this CU will provide significant protection compared to other watersheds that have experienced heightened development pressures. This large preservation area will provide an essential buffer to Choctawhatchee Bay, along with water quality treatment,

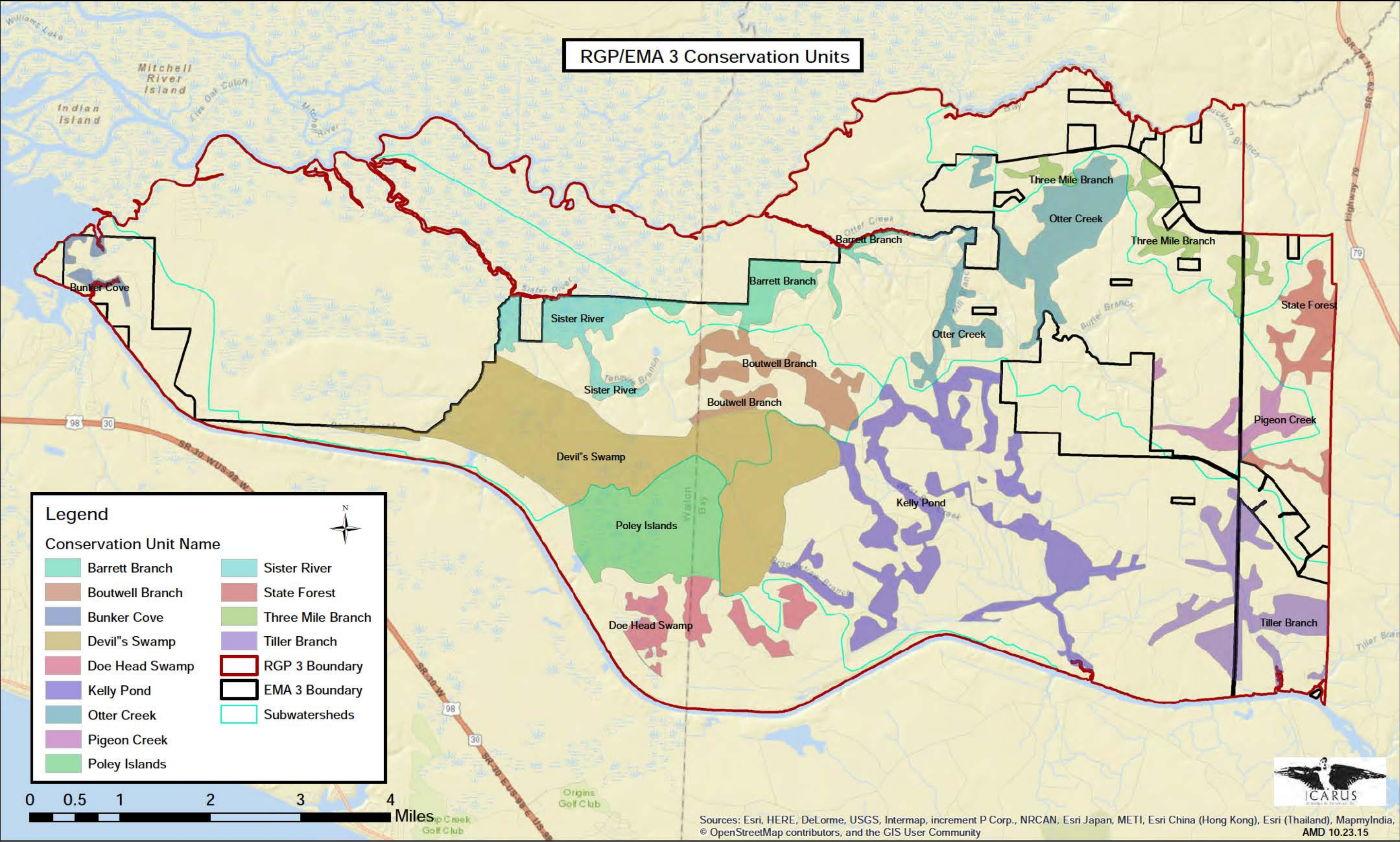
and storm surge attenuation for the surrounding shoreline.

The habitats within the Bunker Cove CU are Mesic Pine Flatwoods and Saltwater Marshes. Hydrology through these systems comes from the tidal influence of Choctawhatchee Bay and overland flow from surrounding uplands. A portion of the upland habitats experienced alterations from being planted in pine; however, they still provide valuable water input, water filtration, and water storage function.

This CU has been identified by FNAI as a significant surface water priority level 1 (FNAI, 2009) primarily due to the support it provides to bay and coastal surface waters. Choctawhatchee Bay is a Class II Waterbody approved for shellfish harvesting that supports extensive Tidal Marsh and seagrass beds. Preserving the lands surrounding the Choctawhatchee River will help to maintain the brackish shallow water estuaries vital to marine resources.

IV. ESSENTIAL FISH HABITAT AND MARINE RESOURCES

Land areas within Peach Creek watershed drain directly into Choctawhatchee Bay. This CU specifically is directly adjacent to the Bay and is tidally influenced. Choctawhatchee Bay is classified as Class II waters. The majority of Choctawhatchee Bay is approved for shellfish harvesting with some areas classified as prohibited for shellfish harvesting. Choctawhatchee Bay is classified as Essential Fish Habitat by NOAA and National Marine Fisheries Service for 5 species of Shark, Red Drum, 43 species of reef fish, 4 species of Shrimp and Coastal Migratory Pelagic fishes. Conservation of the Bunker Cove CU provides additional water quality protection to the landward extent of Choctawhatchee Bay, maintaining this Essential Fish Habitat.



Bunker Cove Conservation Unit

Legend

-  RGP 3 Boundary
-  Subwatersheds
-  EMA 3 Boundary
-  Bunker Cove CU



0 500 1,000 2,000 3,000 4,000 Feet

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



AMD 10.23.15

Bunker Cove Conservation Unit

Legend

 RGP 3 Boundary

 Subwatersheds

 EMA 3 Boundary

 Bunker Cove CU

Wetland Estimation

 Converted Wetland

 Unconverted Wetland

 Upland





Table 1. Bunker Cove Conservation Unit Potential Threatened and Endangered Species Occurrences

ANIMALS	Scientific Name	Common Name	Status	
AMPHIBIAN	Ambystoma Bishopi	Reticulated Flatwoods Salamander	FE	
BIRD	Charadrius melodus	Piping Plover	FT	
BIRD	Calidris canutus rufa	Red Knot	FT	
BIRD	Picoides borealis	Red-cockaded woodpecker	FE	
BIRD	Mycteria americana	Wood Stork	FT	
CLAM	Villosa choctawensis	Choctaw Bean	FE	
CLAM	Pleurobema strodeanum	Fuzzy Pigtoe	FT	
CLAM	Medionidus penicillatus	Gulf Moccasinshell	FE	
CLAM	Pleurobema pyriforme	Oval Pigtoe	FE	
CLAM	Ptychobranthus jonesi	Southern Kindeyshell	FT	
CLAM	Hamiota australis	Southern Sandshell	FT	
CLAM	Fusconaia burkei	Tapered Pigtoe	FT	
FISH	Acipenser oxyrinchus desotoi	Atlantic Gulf Sturgeon	FT	
FISH	Pteronotropis welaka	Bluenose Shiner	SSC	
MAMMAL	Trichechus manatus	West Indian Manatee	FE	
MAMMAL	Myotis grisescens	Gray Bat	FE	
REPTILE	Chelonia mydas	Green Sea Turtle	FE	
REPTILE	Eretmochelys imbricata	Hawksbill Sea Turtle	FE	
REPTILE	Lepidochelys kempii	Kemp's Ridley Sea Turtle	FE	
REPTILE	Dermochelys coriacea	Leatherback Sea Turtle	FE	
REPTILE	Drymarchon couperi	Eastern indigo snake	FT	
REPTILE	Gopherus polyphemus	Gopher tortoise	ST	
PLANTS	Scientific Name	Common Name	Federal Status	State Status
	Andropogon arctatus	pine-woods bluestem		LT
	Arnoglossum album	white-flowered Plantain		LE
	Asclepias viridula	green milkweed		LT
	Aster spinulosus (now Eurybia spinulosa)	pinewoods aster		LE
	Calamovilfa curtissii	Curly Sandgrass		LT
	Carex baltzellii	Baltzell's sedge		LT
	Cleistes divaricata	spreading pogonia		LT
	Drosera filiformis	dew-thread		LE
	Drosera intermedia	water sundew		LT
	Gentiana pennelliana	wiregrass gentian		LE
	Hymenocallis henryae	Mrs Henry's spiderlily		LE
	Lachnocaulon digynum	Panhandle bogbuttons		LT
	Lilium catesbaei	Catesby lily		LT
	Linum macrocarpum	big-seed flax		LE
	Macbridea alba	white birds-in-a-nest	LT	LE
	Macranthera flammea	hummingbird-flower		LE
	Panicum nudicaule now Dichanthelium nudicaule	naked-stemmed panic grass		LT
	Physostegia godfreyi	Apalachicola dragonhead		LT
	Pinckneya bracteata	fever-tree		LT
	Pinguicula ionantha	Godfrey's or panhandle butterwort	LT	LE
	Pinguicula lutea	yellow-flowered butterwort		LT
	Pinguicula planifolia	swamp butterwort		LT
	Pinguicula primuliflora	primrose-flowered butterwort		LE
	Platanus ciliaris	yellow-fringed orchid		LT
	Platanus integra	orange rein orchid		LE
	Pogonia ophioglossoides	rose pogonia		LT
	Rhexia parviflora	Apalachicola meadow-beauty		LE
	Rhexia salicifolia	Panhandle meadow beauty		LT
	Rhynchospora crinipes	hairy peduncled beakrush		LE
	Rhynchospora stenophylla	narrow-leaf beakrush		LT
	Rudbeckia hirta	St. John's-Susan		LE
	Sarracenia leucophylla	white-top pitcher plant		LE
	Sarracenia psittacina	parrot pitcher plant		LT
	Sarracenia purpurea	decumbent pitcher plant		LT
	Stachydeuma graveolens (now Hedeoma graveolens)	mock pennyroyal		LE
	Zigadenus leimanthoides (now Stenanthium densum)	coastal death camas		LE
	Stenanthium gramineum	eastern featherbells		LE
	Verbesina chapmanii	Chapman's crownbeard		LT
	Xyris isoetifolia	quillwort yellow-eyed-grass		LE
	Xyris longisepala	Karst pond yellow-eyed-grass		LE
	Xyris scabrifolia	Harper's yellow-eyed grass		LE

Abbreviations used herein are:

Plants:

T(S/A) = Threatened due to similarity of appearance

LE = Endangered

LT = Threatened

LS = Species of special concern

N = not currently listed

PT = proposed for listing as Threatened

Animals:

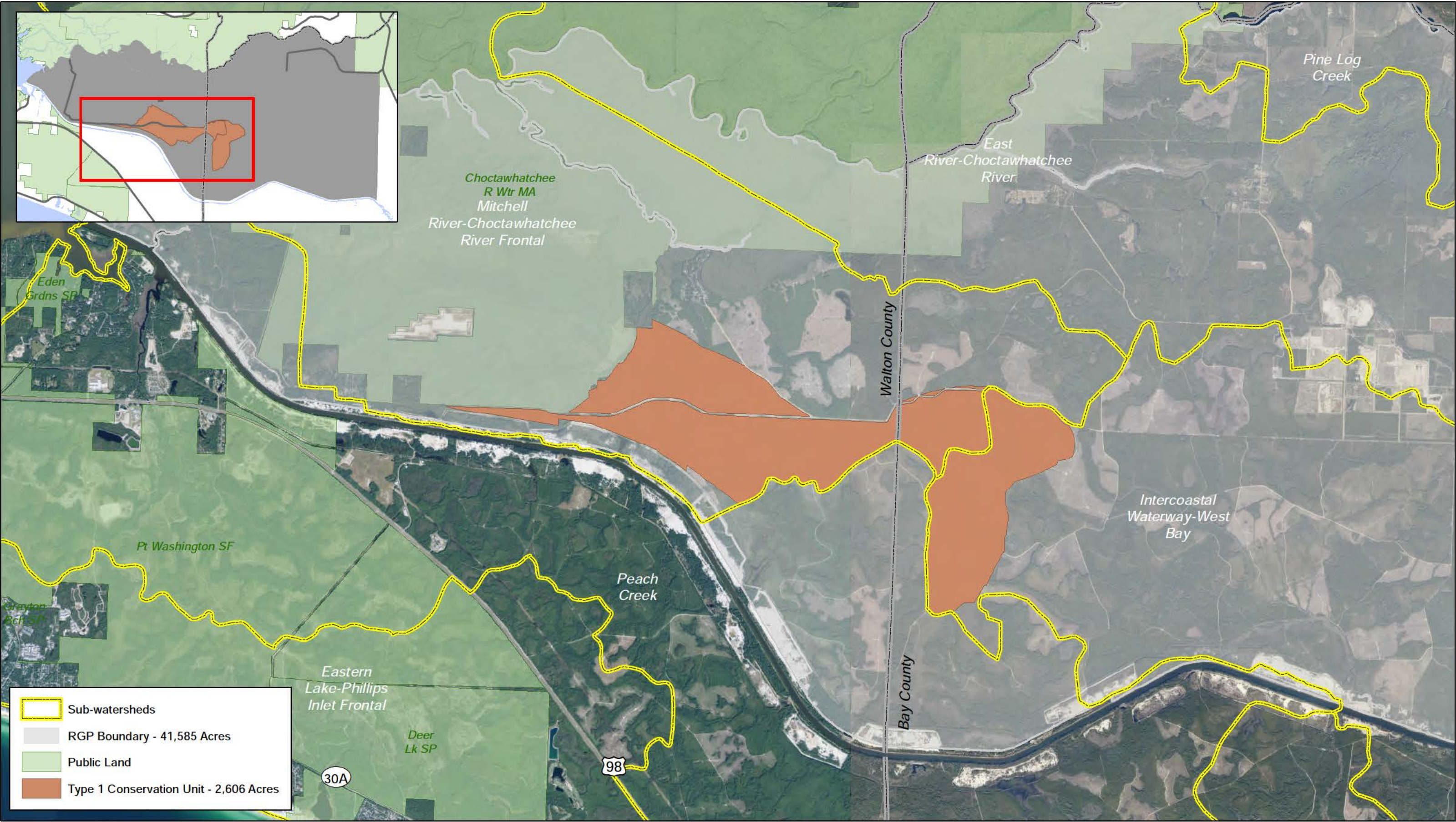
FE = Federal Endangered

FT = Federal Threatened

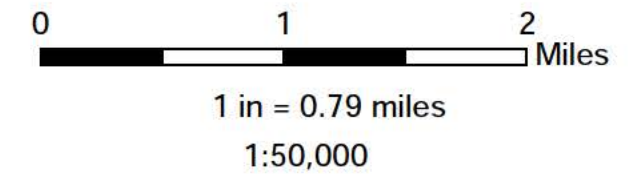
ST = State Threatened

SSC = Species of Special Concern

FT(S/A) = Federal Threatened due to similarity of appearance



REGIONAL GENERAL PERMIT SAJ-114
CONSERVATION UNIT MAP
DEVILS SWAMP - 2,606 ACRES
Exhibit 11 - June 2016





**DEVILS SWAMP
CONSERVATION UNIT**

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TABLE

1. DEVILS SWAMP CU POTENTIAL THREATENED AND ENDANGERED SPECIES OCCURRENCES

I. GENERAL DESCRIPTION OF CONSERVATION UNIT

Devils Swamp Conservation Unit (CU) is a 2,667 (+/-) acre area with in the Mitchell River- Choctawhatchee River Frontal and Intercostal Waterway (ICW) – West Bay Sub basin on Steelfield Road. This CU surrounds the Devil's Swamp Mitigation Bank in the central portion of the SAJ-114 and EMA 3 site. It consists of basin swamps and slough systems draining to the Choctawhatchee river and West Bay in Sections 5, 6, 7, 37, 32 Township 1 South, Range 17 West and Sections 1, 2, 3, 4, 34, 35, 36 Township 2 South, Range 18 West in Bay and Walton Counties, Florida (see Figure 1: General Location Map). The wetlands in this area are dominated by Coniferous Plantations and Mixed Hardwood Forested systems which drain to the Choctawhatchee River and West Bay.

The topography within this CU is relatively flat with the elevations between 30 – 40 feet. This CU is a matrix of Mesic Pine Flatwoods uplands and Basin Swamp wetlands. The restoration efforts within the Mitigation Bank are restoring wet prairie, seepage stream, dome swamp, bog, mesic flatwoods, and sandhill through the reduction of woody shrubs and planted pine density, decreasing bedding impacts, intensive restoration and management burn regimes, and installation of low water crossings . All systems accept drainage from adjacent lands and flow north to the Choctawhatchee River or South to the ICW and West Bay. The Choctawhatchee is the third largest river in Florida by volume and an important feature in NW Florida for wildlife habitat and water quality. West Bay is a Class II waterbody and also an important feature to NW Florida for wildlife habitat and water quality.

The FLUCCS land cover of the Devils Swamp CU is dominated by Wetland Forest Mixed (24%), Treeless Hydric Savanna (10%), and Forest Regeneration Areas (28%) totaling (62%). The upland portion is dominated by Coniferous Plantations (36%). There are also small inclusions of Hydric Pine Flatwoods, Wet Prairies and Freshwater Marshes making up the remaining area. The National Wetland Inventory (NWI) identifies 48% of the CU as palustrine wetlands and the remainder as uplands 52%, which is similar to the wetland coverage based on the soil types dominated by Hurricane, Rutlege, Pamlico, Dorovan and Pottsburg. All of these data types are estimations with scattered groundtruthing on a landscape scale.

Using soil survey data, FLUCCS, NWI data, aerial photograph interpretation and additional groundtruthing a wetland estimation, specific to the site, has been done. Over 140 data point locations were groundtruthed within the EMA boundary. Based on the more detailed wetland estimation the CU is comprised of 52% wetland (Basin Swamp and Baygall Systems) and 48% uplands (Pine Flatwoods previous in Silviculture). The mesic flatwoods and sandhill uplands are currently involved in restoration efforts.

The wetlands within the Devils Swamp CU are comprised of Basin Swamps and Baygall systems that drain Choctawhatchee River and West Bay. This CU also has upland areas that are classified as Mesic Pine Flatwoods. The uplands in this area are mesic

and allow for overland flow to the depressional Basin Swamp system and Baygall slough system contributing to the Choctawhatchee river and the ICW. The upland Mesic Pine Flatwoods were historically used for silviculture for Slash Pine, but are now within a restoration plan. These areas currently provide habitat for wildlife. These areas are in a conservation easement, and are being restored to their historical plant communities.

These plant communities provide habitat appropriate for State and Federal listed flora and fauna. There are 3 documented listed species within the RGP/EMA 3 Boundary;

polyphemus) (FLEO, 2009). Table 1 provides a list of additional species that would be expected to use these areas if the habitats were in a natural state.

II. REGIONAL SIGNIFICANCE

The Devils Swamp CU protects both uplands and expansive wetlands that contribute to the tributaries of the Choctawhatchee River and West Bay. This CU contains the Devil's Swamp Mitigation Bank, a 3,050 acre wetland and upland restoration project.

The Choctawhatchee River is the third largest river in Florida by volume. It flows from Alabama through Northwest Florida and discharges to the Gulf of Mexico through Choctawhatchee Bay at East Pass in Destin, FL. The Bay and tributaries are considered critical/ strategic habitat by FFWCC, USFWS, and FNAI for Gulf Sturgeon, 5 mussel species and other species. The Bay, River and its tributaries are classified as Class 2 shellfish harvesting approved waters and an Outstanding Florida Waterbody (OFW) by FDEP. The Choctawhatchee River basin is a priority area for the NFWFMD, FFWCC and other agencies for preservation of this pristine waterbody. A large portion of the floodplain is in public ownership and designated for conservation.

Since this CU is split between two subwatersheds it will also contribute to sustained water quality and water quantity treatment for West Bay, and ultimately, St. Andrews Bay. The Devil's Swamp CU is a subset of the overall West Bay Preservation Area (WBPA) as identified in the "Ecological assessment, Natural Resource Values and Regional Significance of the West Bay Preservation Area, Bay County, Florida" report prepared by The Nature Conservancy. This assessment was prepared during the Sector planning process which created a land use designation overlay known as the West Bay Preservation Area (WBPA). This CU will allow for the wetlands contributing to water quality, flood attenuation to be kept in a natural state.

The Devils Swamp CU is identified as a priority Strategic Habitat Conservation Area (SHCA) by the Florida Fish and Wildlife Conservation Commission (FFWCC) (Endries et al., 2008). Further, this CU is ranked as a priority area by FFWCC based on their Integrated Habitat Ranking System (IHRS) (FFWCC, 2008). These rankings take into consideration the types of habitat and the species likely to use these habitats.

The majority of the Devils Swamp CU is considered a priority area for aquifer recharge.

The area is an Aquifer Recharge priority level 2-5 for FNAI (FNAI, 2009). These areas improve water quality for the entire region. The entire CU is a Green Links Priority 1, Level 1 and 2 (Hector, UF, 2013), the highest of the high priority areas for regional ecological planning.

III. BIODIVERSITY

The habitats within the Devils Swamp CU are a landscape of wet prairie, seepage stream, dome swamp, bog, mesic flatwoods, and sandhill. The restoration of fire into the landscape is promoting a return of diversity in the groundcover layers of all onsite habitats. Groundwater seeps through these systems from the surrounding uplands. In the current condition, the existing habitats benefit plant communities and wildlife composition. Although these landscapes are planted in pine, they have retained physical characteristics that would allow for restoration to their historical plant communities.

The areas within the Baygall and Basin Swamp systems are dominated wetland hardwood and cypress. These areas are currently very similar to the historical conditions. Due the hydroperiod of the Basin Swamp very little impact has occurred to the wetland areas from the adjacent silviculture. This CU has also been ranked as a Priority 2 Strategic Habitat Conservation Area by FFWCC due to the potential to protect imperiled species (Endries et al., 2008). Additionally, this CU has been ranked as a priority under the IHRS (FFWCC, 2008) due to an analysis of various factors affecting the ecological significance of land areas including species richness, listed species locations, and SHCA.

The Gopher Tortoise (*Gopherus polyphemus*) (FLEO, 2009) has been documented within this CU. The Choctawhatchee tributaries, and associated wetland sloughs are essential habitat for the Gulf Sturgeon, Seven Mussel species, Bluenose shiner and other listed vertebrates and invertebrates. Further, there are 41 plants and 9 animals identified in Bay and Walton Counties as Threatened or Endangered Species that could potentially occur in this CU. Conserving these areas will help to maintain habitat for listed species in the region. Table 1 provides a list of species that may benefit by the conservation of this habitat directly or secondarily.

IV. WATER QUALITY

The Devils Swamp CU surrounds Devil's Swamp Mitigation Bank. This CU is located in the Mitchell River – Choctawhatchee River Frontal and ICW- West Bay Hydrologic Unit Code 12 drainage area within the SAJ-114 and EMA3 area. This area in addition to the other CUs and NFWMD lands will preserve 8,634 Acres of the Mitchell River – Choctawhatchee River Frontal sub basin and 3,101 Acres of ICW – West Bay sub basin. With the addition of this CU, 73% of the Mitchell River- Choctawhatchee Frontal sub basin and 29% of the ICW-West Bay sub basin within the SAJ 114 boundary will be

in conservation. Therefore, the preservation of this CU will provide significant protection compared to other watersheds that have experienced heightened development pressures. This large preservation area will provide an essential buffer to Choctawhatchee Bay and West Bay, along with water quality treatment.

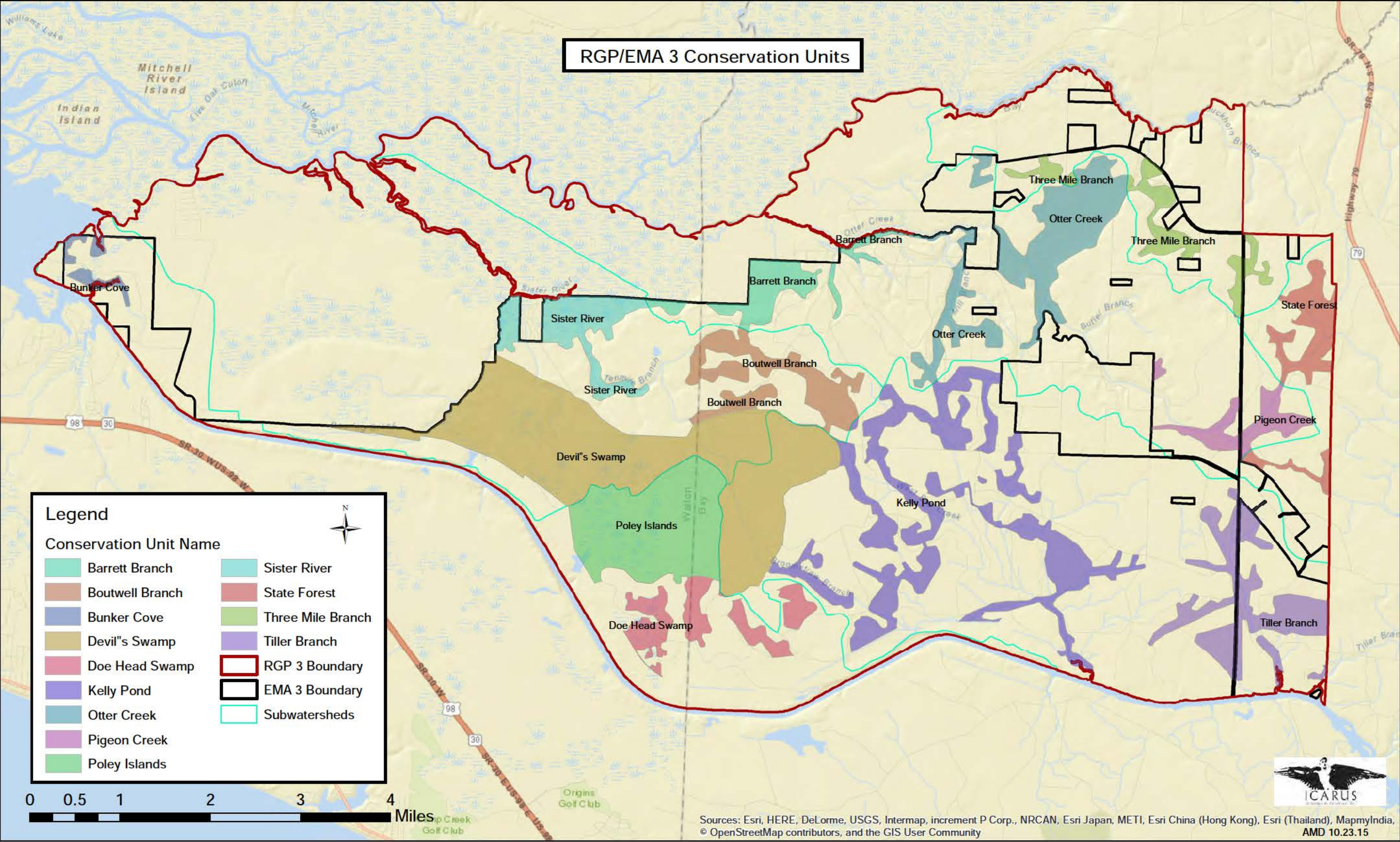
Choctawhatchee River and West Bay are listed on the 305(b) or 303(d) list of impaired waters (FDEP, 2008) for mercury in fish tissue. There are currently no known point sources in the watershed and non-point sources are limited to forestry roads. Conserving lands within the CU will help to maintain a restored buffer around the Choctawhatchee River and West Bay.

The habitats within the Devils Swamp CU are wet prairie, seepage stream, dome swamp, bog, mesic flatwoods, and sandhill. Hydrology through these systems comes from surrounding Mesic and Hydric Pine Flatwoods and significantly contributes to surface water inflows to Choctawhatchee Bay and the ICW. The upland habitats are being restored through intensive prescribed fire management and they provide valuable water input, water filtration, and water storage function.

This CU has been identified by FNAI as a significant surface water priority level 2-4 (FNAI, 2009) primarily due to the support it provides to bay and coastal surface waters. Choctawhatchee Bay is a Class II Waterbody approved for shellfish harvesting and West Bay is a Class II Waterbody conditionally approved for shellfish harvesting, both support extensive Tidal Marsh and seagrass beds. Preserving the lands surrounding the Choctawhatchee River and West Bay will help to maintain the brackish shallow water estuaries.

IV. ESSENTIAL FISH HABITAT AND MARINE RESOURCES

Land areas within Mitchell River – Choctawhatchee River Frontal and ICW- West Bay subwatersheds drain into very similar ecological systems on a landscape scale, Baygall and Basin Swamp wetlands to Flood Plain Creeks associated with Choctawhatchee River and the ICW then on to Bays. Choctawhatchee Bay and West Bay are classified as Class II waters. The majority of Choctawhatchee Bay is approved for shellfish harvesting with some areas classified as prohibited for shellfish harvesting. The majority of West Bay is conditionally approved for shellfish harvesting with some areas classified as prohibited for shellfish harvesting. Choctawhatchee Bay and West Bay are classified as Essential Fish Habitat by NOAA and National Marine Fisheries Service for 5 species of Shark, Red Drum, 43 species of reef fish, 4 species of Shrimp and Coastal Migratory Pelagic fishes. Conservation of the Devil's Swamp CU provides additional water quality protection to the Choctawhatchee River Floodplain, and West Bay drainage basin, maintaining this Essential Fish Habitat.



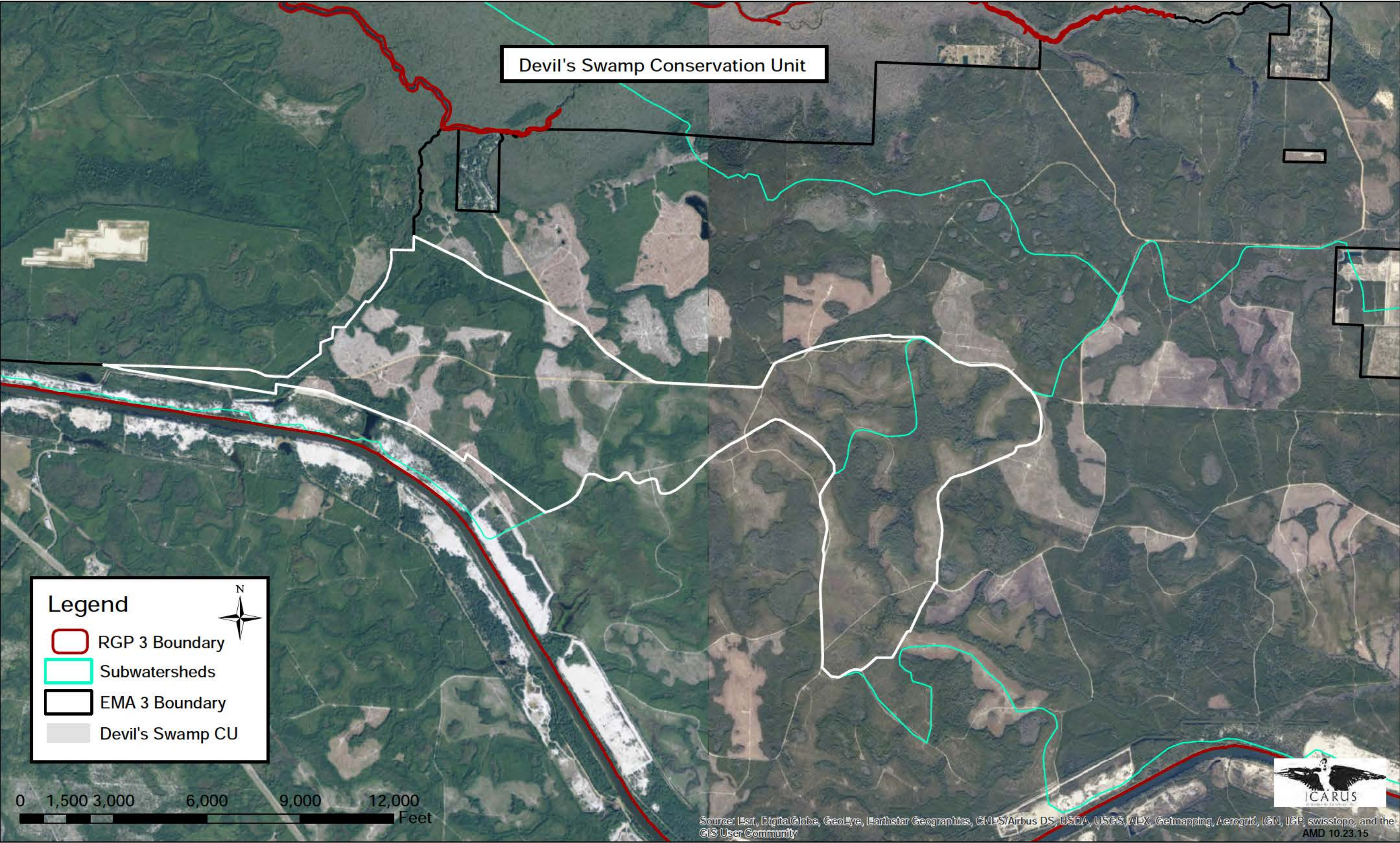




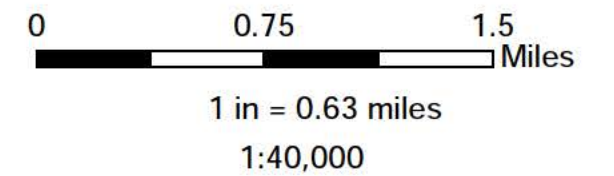
Table 1. Devils Swamp Conservation Unit Potential Threatened and Endangered Species Occurrences

ANIMALS	Scientific Name	Common Name	Status	
AMPHIBIAN	Ambystoma Bishopi	Reticulated Flatwoods Salamander	FE	
BIRD	Charadrius melodus	Piping Plover	FT	
BIRD	Calidris canutus rufa	Red Knot	FT	
BIRD	Picoides borealis	Red-cockaded woodpecker	FE	
BIRD	Mycteria americana	Wood Stork	FT	
FISH	Pteronotropis welaka	Bluenose Shiner	SSC	
MAMMAL	Myotis grisescens	Gray Bat	FE	
REPTILE	Drymarchon couperi	Eastern indigo snake	FT	
REPTILE	Gopherus polyphemus	Gopher tortoise	ST	
PLANTS	Scientific Name	Common Name	Federal Status	State Status
	Andropogon arctatus	pine-woods bluestem		LT
	Arnogolssum album	white-flowered Plantain		LE
	Asclepias viridula	green mi kweed		LT
	Aster spinulosus (now Eurybia spinulosa)	pinewoods aster		LE
	Calamovilfa curtissii	Curtiss Sandgrass		LT
	Carex baltzellii	Baltzell's sedge		LT
	Cleistes divaricata	spreading pogonia		LT
	Drosera filiformis	dew-thread		LE
	Drosera intermedia	water sundew		LT
	Gentiana pennelliana	wiregrass gentian		LE
	Hymenocallis henryae	Mrs Henry's spiderlily		LE
	Lachnocaulon digynum	Panhandle bogbuttons		LT
	Lilium catesbaei	Catesby lily		LT
	Linum macrocarpum	big-seed flax		LE
	Macbridea alba	white birds-in-a-nest	LT	LE
	Macranthera flammea	hummingbird-flower		LE
	Panicum nudicaule now Dichantherium nudicaule	naked-stemmed panic grass		LT
	Physostegia godfreyi	Apalachicola dragonhead		LT
	Pinckneya bracteata	fever-tree		LT
	Pinguicula ionantha	Godfrey's or panhandle butterwort	LT	LE
	Pinguicula lutea	yellow-flowered butterwort		LT
	Pinguicula planifolia	swamp butterwort		LT
	Pinguicula primuliflora	primrose-flowered butterwort		LE
	Platanthera ciliaris	yellow-fringed orchid		LT
	Platanthera integra	orange rein orchid		LE
	Pogonia ophioglossoides	rose pogonia		LT
	Rhexia parviflora	Apalachicola meadow-beauty		LE
	Rhexia salicifolia	Panhandle meadow beauty		LT
	Rhynchospora crinipes	hairy peduncled beakrush		LE
	Rhynchospora stenophylla	narrow-leaf beakrush		LT
	Rudbeckia nitida	St. John s-Susan		LE
	Sarracenia leucophylla	white-top pitcher plant		LE
	Sarracenia psittacina	parrot pitcher plant		LT
	Sarracenia purpurea	decumbent pitcher plant		LT
	Stachydeoma graveolens (now Hedeoma graveolens)	mock pennyroyal		LE
	Zigadenus leimanthoides (now Stenanthium densum)	coastal death camas		LE
	Stenanthium gramineum	eastern featherbells		LE
	Verbesina chapmanii	Chapman's crownbeard		LT
	Xyris isoetifolia	quillwort yellow-eyed-grass		LE
	Xyris longisepala	Karst pond yellow-eyed-grass		LE
	Xyris scabrifolia	Harper's yellow-eyed grass		LE

Abbreviations used herein are:**Plants:****T(S/A)** =Threatened due to similarity of appearance**LE** = Endangered**LT**= Threatened**LS** = Species of special concern**N** = not currently listed**PT**= proposed for listing as Threatened**Animals:****FE** = Federal Endangered**FT** = Federal Threatened**ST** = State Threatened**SSC** = **Species of Special Concern****FT(S/A)** = Federal Threatened due to similarity of appearance



REGIONAL GENERAL PERMIT SAJ-114
CONSERVATION UNIT MAP
DOE HEAD SWAMP - 446 ACRES
Exhibit 12 - June 2016





DOE HEAD SWAMP CONSERVATION UNIT

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1. DOE HEAD SWAMP CU POTENTIAL THREATENED AND ENDANGERED SPECIES OCCURRENCES

I. GENERAL DESCRIPTION OF CONSERVATION UNIT

Doe Head Swamp Conservation Unit (CU) is a 446 (+/-) acre area divided into four sections within the Peach Creek Subbasin South of Steelfield Road. This CU is South of the Devil's Swamp Mitigation Bank and North of the Intercoastal Waterway (ICW). It consists of mesic uplands and basin swamps draining into the ICW in Sections 7, 8, 17, 18 Township 2 South, Range 17 West in Bay County, and Section 12, 13 Township 3 South, Range 18 West, Walton County, Florida (see Figure 1: General Location Map). The wetlands in this area are dominated by a Basin Swamp and Mixed Hardwood Forested systems which drain to the ICW.

The topography within this CU is relatively flat with the elevations ranging from 35 to 40 feet within this CU. The wetlands are Basin Swamps and Baygall sloughs surrounded by hydric and mesic pine plantations. The wetlands flow to the ICW and on to West Bay.

The FLUCCS land cover of the Doe Head Swamp CU is dominated by Wetland Forest Mixed (67%), Treeless Hydric Savanna (4%), totaling (71%). The upland portion is dominated by Coniferous Plantations (25%). The National Wetland Inventory (NWI) identifies 86% of the CU as palustrine wetlands and the remainder as uplands 14%, which is similar to the wetland coverage based on the soil types dominated by Rutlege, Pamlico and Pottsburg (87%). All of these data types are estimations with scattered groundtruthing on a landscape scale.

Using soil survey data, FLUCCS, NWI data, aerial photograph interpretation and additional groundtruthing a wetland estimation, specific to the site, has been done. Over 140 data point locations were groundtruthed within the EMA boundary. Based on the more detailed wetland estimation the CU is comprised of 91% wetland (Basin Swamp and Baygall Systems) and 9% uplands (Pine Flatwoods in Silviculture). The majority of the uplands are currently planted with Slash Pine (*Pinus ellotti*).

The wetlands within the Doe Head Swamp CU are comprised of Basin Swamps and Baygall systems that drain into ICW and on to West Bay. This CU also has upland areas that are classified as Mesic Pine Flatwoods. The uplands in this area allow for overland flow to the depressional Basin Swamp system and Baygall slough system contributing to the ICW and West Bay. The upland Mesic Pine Flatwoods are used for silviculture for Slash Pine. These areas currently provide forestry resources and habitat for wildlife. Once these areas are placed into a conservation easement, they can potentially be restored to their historical plant communities.

These plant communities provide habitat appropriate for State and Federal listed flora and fauna. There are 3 documented listed species within the RGP/EMA 3 Boundary; the closest is Twin Striped Clubtail (*Gomphus geminatus*) 3 miles from this Conservation Unit (FLEO, 2009). Table 1 provides a list of species that would be expected to use these areas if the habitats were in a natural state.

II. REGIONAL SIGNIFICANCE

The Doe Head Swamp CU protects both uplands and expansive wetlands that contribute to the tributaries of the ICW and West Bay. This CU provides for preservation of additional lands south of the Devil's Swamp Mitigation Bank. Combining this CU with Conservation Lands to the North provide a 1,568Ac conservation areas within the Peach Creek sub-basin. The Doe Head Swamp CU is a subset of the overall Long-Term Conservation areas identified in the "Wildlife and Vegetation Resource Report" completed for the Bay-Walton Sector Plan, reviewed by the Florida Department of Environmental Protection, Florida Wildlife Conservation Commission, and the U.S. Fish and Wildlife Service, and subsequently approved by the Bay and Walton Board of County Commissions and the Florida Division of Community Development.

Doe Head Swamp CU has an extensive matrix of upland, basin swamp and sloughs. This CU will allow for the wetlands contributing to water quality, flood attenuation to be kept in a natural state. The Doe Head Swamp CU is identified as a priority Strategic Habitat Conservation Area (SHCA) by the Florida Fish and Wildlife Conservation Commission (FFWCC) (Endries et al., 2008). Further, this CU is ranked as a priority area by FFWCC based on their Integrated Habitat Ranking System (IHRS) (FFWCC, 2008). These rankings take into consideration the types of habitat and the species likely to use these habitats.

The majority of the Doe Head Swamp CU is considered a priority area for aquifer recharge. The area is an Aquifer Recharge priority level 3-5 for FNAI (FNAI, 2009). These areas improve water quality for the entire region. The entire CU is a Green Links Priority 1, Level 2 (Hector, UF, 2013), the highest of the high priority areas for regional ecological planning.

This CU is vital to water quality treatment and storage, habitat conservation, and species conservation. This CU contributes to the landward wetlands of the ICW and West Bay, expanding the conservation efforts of the NFWFMD.

III. BIODIVERSITY

The habitats within the Doe Head Swamp CU are a landscape of Coniferous Plantations, Basin Swamps and Baygall sloughs. The planted Mesic Pine Flatwoods upland diversity is in the ground cover layer, the Baygall diversity is within the shrub and canopy while the Basin Swamps contain the majority of their diversity in the canopy and subcanopy strata. Groundwater seeps through these systems from the surrounding uplands. In the current condition, the existing Mesic Pine Flatwoods have altered the plant communities and wildlife composition. Although these landscapes are planted in pine, they have retained physical characteristics that would allow for restoration to their

historical plant communities.

The areas within the Baygall and Basin Swamp systems are dominated wetland hardwood and cypress. These areas are currently very similar to the historical conditions. Due the hydroperiod of the Basin Swamp very little impact has occurred to the wetland areas from the adjacent silviculture. This CU has also been ranked as a Priority 2 Strategic Habitat Conservation Area by FFWCC due to the potential to protect imperiled species (Endries et al., 2008). Additionally, this CU has been ranked as a priority under the IHRS (FFWCC, 2008) due to an analysis of various factors affecting the ecological significance of land areas including species richness, listed species locations, and SHCA.

No threatened species have been documented within the CU. A documented occurrence of Twin-Stripped Clubtail (*Gomphus geminatus*) is within 3 miles of the CU. Further, there are 41 plants and 9 animals identified in Bay and Walton Counties as Threatened or Endangered Species that could potentially occur in this CU. Conserving these areas will help to maintain habitat for listed species in the region. Table 1 provides a list of species that may benefit by the conservation of this habitat directly or secondarily.

IV. WATER QUALITY

The Doe Head Swamp CU protects both uplands and expansive wetlands that contribute to the tributaries of West Bay. This CU is located in the Peach Creek Hydrologic Unit Code 12 drainage area within the GPEMA3 area. This area in addition to the other RGPEMA3 CUs and NFWFMD lands will preserve 1,860 Acres of the ICW-West Bay sub basin. With the addition of this CU, 37% of the Peach Creek sub basin within RGP3 will be in conservation. Therefore, the preservation of this CU will provide significant protection compared to other watersheds that have experienced heightened development pressures. This large preservation area will provide an essential buffer to West Bay, along with water quality treatment, and flood attenuation for the ICW.

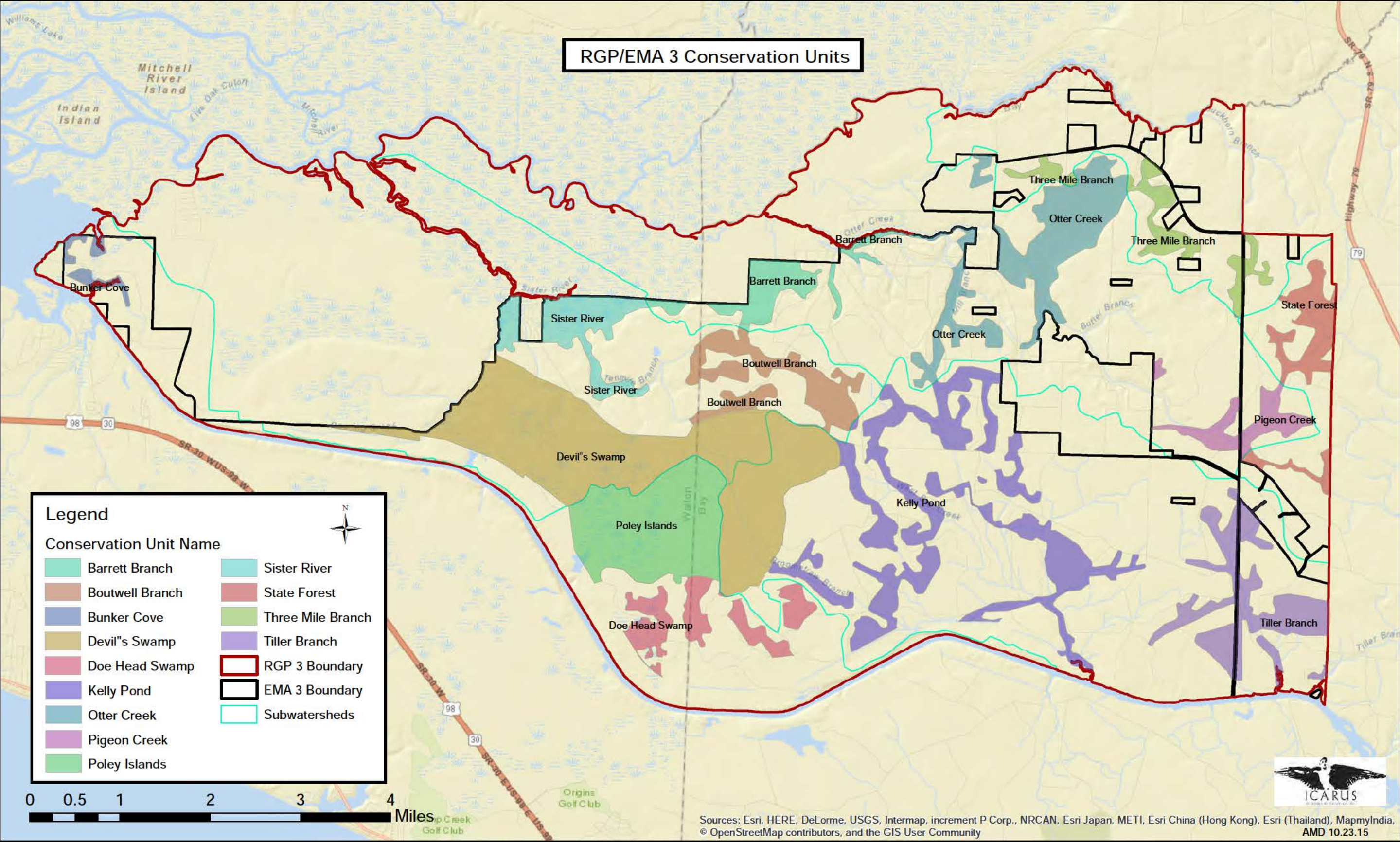
West Bay is listed on the 305(b) or 303(d) list of impaired waters (FDEP, 2008) for mercury in fish tissue. There are currently no known point sources in the watershed and non-point sources are limited to forestry roads. Conserving lands within the CU will help to maintain a restored buffer around the ICW.

The habitats within the Doe Head Swamp CU are planted Pine Flatwoods uplands, Baygall and Basin Swamps. Hydrology through these systems comes from surrounding Mesic and Hydric Pine Flatwoods and significantly contributes to surface water inflows to West Bay. The upland habitats experienced alterations from being planted in pine; however, they still provide valuable water input, water filtration, and water storage function.

This CU has been identified by FNAI as a significant surface water priority level 2 and 4 (FNAI, 2009) primarily due to the support it provides to bay and coastal surface waters. West Bay is a Class II Waterbody conditionally approved for shellfish harvesting that supports extensive Tidal Marsh and seagrass beds. Preserving the lands surrounding the ICW will help to maintain the brackish shallow water estuaries.

IV. ESSENTIAL FISH HABITAT AND MARINE RESOURCES

Land areas within the Peach Creek subwatershed drain into Baygall sloughs and Basin Swamps that flow into tidal creeks, the ICW and eventually West Bay. West Bay is classified as Class II waters. The majority of West Bay is conditionally approved for shellfish harvesting with some areas classified as prohibited for shellfish harvesting. West Bay is classified as Essential Fish Habitat by NOAA and National Marine Fisheries Service for 5 species of Shark, Red Drum, 43 species of reef fish, 4 species of Shrimp and Coastal Migratory Pelagic fishes. Conservation of the Doe Head Swamp CU provides additional water quality protection to West Bay, maintaining this Essential Fish Habitat. As mentioned above, preserving this CU will contribute to water quality protection and will help maintain the downstream aquatic resources.



Doe Head Swamp Conservation Unit

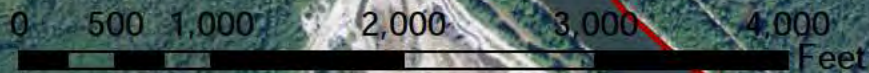
Legend

 RGP 3 Boundary

 Subwatersheds

 EMA 3 Boundary

 Doe Head Swamp CU



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community
AMD 10.23.15

Doe Head Swamp Conservation Unit

Legend

 RGP 3 Boundary

 Subwatersheds

 EMA 3 Boundary

 Doe Head Swamp

Wetland Estimation

 Converted Wetland

 Unconverted Wetland

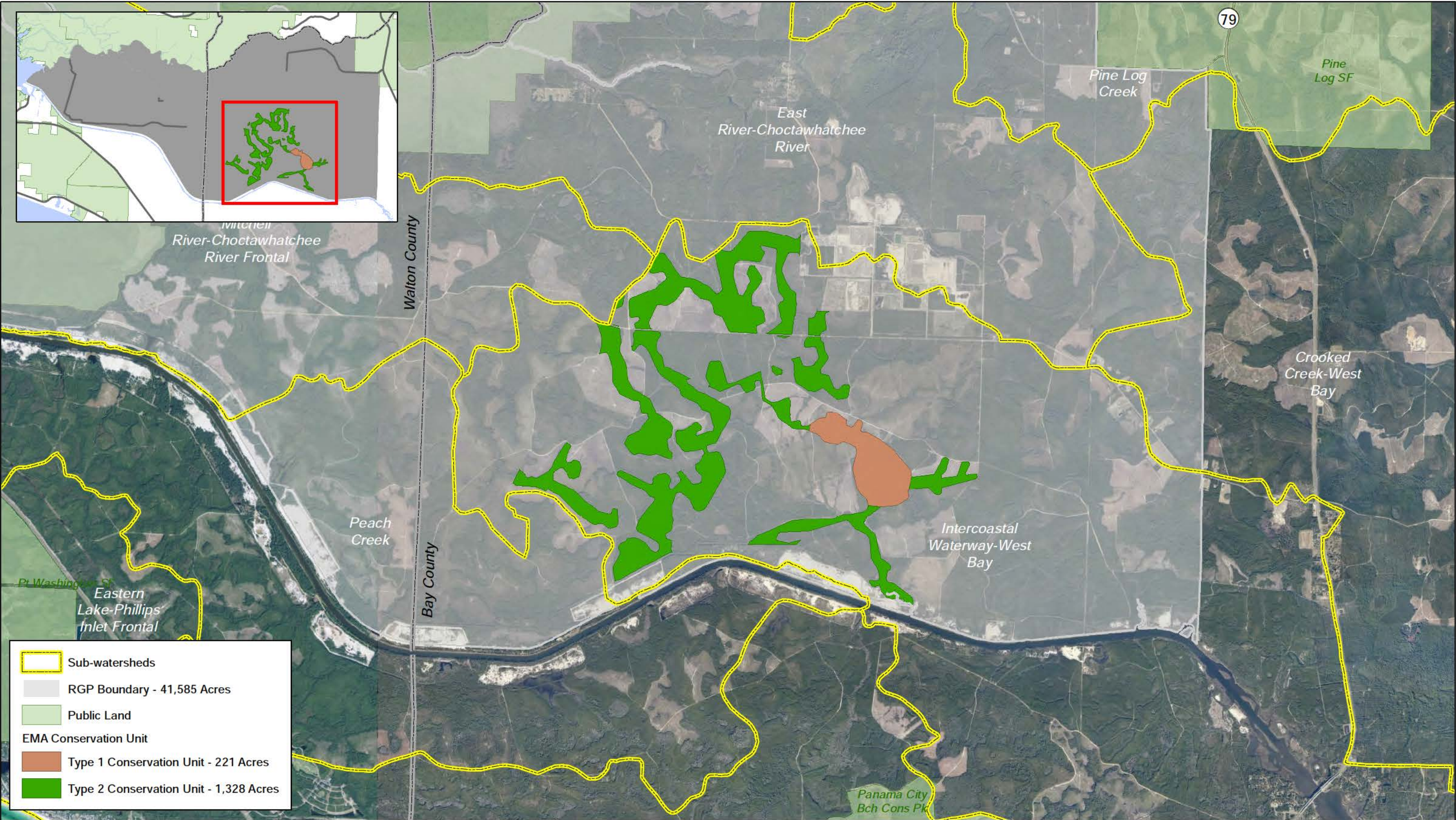
 Upland



Table 1. Doe Head Swamp Conservation Unit Potential Threatened and Endangered Species Occurrences

ANIMALS	Scientific Name	Common Name	Status	
AMPHIBIAN	Ambystoma Bishopi	Reticulated Flatwoods Salamander	FE	
BIRD	Charadrius melodus	Piping Plover	FT	
BIRD	Calidris canutus rufa	Red Knot	FT	
BIRD	Picoides borealis	Red-cockaded woodpecker	FE	
BIRD	Mycteria americana	Wood Stork	FT	
FISH	Pteronotropis welaka	Bluenose Shiner	SSC	
MAMMAL	Myotis grisescens	Gray Bat	FE	
REPTILE	Drymarchon couperi	Eastern indigo snake	FT	
REPTILE	Gopherus polyphemus	Gopher tortoise	ST	
PLANTS	Scientific Name	Common Name	Federal Status	State Status
	Andropogon arctatus	pine-woods bluestem		LT
	Arnogolssum album	white-flowered Plantain		LE
	Asclepias viridula	green mi kweed		LT
	Aster spinulosus (now Eurybia spinulosa)	pinewoods aster		LE
	Calamovilfa curtissii	Curtiss Sandgrass		LT
	Carex baltzellii	Baltzell's sedge		LT
	Cleistes divaricata	spreading pogonia		LT
	Drosera filiformis	dew-thread		LE
	Drosera intermedia	water sundew		LT
	Gentiana pennelliana	wiregrass gentian		LE
	Hymenocallis henryae	Mrs Henry's spiderlily		LE
	Lachnocaulon digynum	Panhandle bogbuttons		LT
	Lilium catesbaei	Catesby lily		LT
	Linum macrocarpum	big-seed flax		LE
	Macbridea alba	white birds-in-a-nest	LT	LE
	Macranthera flammea	hummingbird-flower		LE
	Panicum nudicaule now Dichantherium nudicaule	naked-stemmed panic grass		LT
	Physostegia godfreyi	Apalachicola dragonhead		LT
	Pinckneya bracteata	fever-tree		LT
	Pinguicula ionantha	Godfrey's or panhandle butterwort	LT	LE
	Pinguicula lutea	yellow-flowered butterwort		LT
	Pinguicula planifolia	swamp butterwort		LT
	Pinguicula primuliflora	primrose-flowered butterwort		LE
	Platanthera ciliaris	yellow-fringed orchid		LT
	Platanthera integra	orange rein orchid		LE
	Pogonia ophioglossoides	rose pogonia		LT
	Rhexia parviflora	Apalachicola meadow-beauty		LE
	Rhexia salicifolia	Panhandle meadow beauty		LT
	Rhynchospora crinipes	hairy peduncled beakrush		LE
	Rhynchospora stenophylla	narrow-leaf beakrush		LT
	Rudbeckia nitida	St. John s-Susan		LE
	Sarracenia leucophylla	white-top pitcher plant		LE
	Sarracenia psittacina	parrot pitcher plant		LT
	Sarracenia purpurea	decumbent pitcher plant		LT
	Stachydeoma graveolens (now Hedeoma graveolens)	mock pennyroyal		LE
	Zigadenus leimanthoides (now Stenanthium densum)	coastal death camas		LE
	Stenanthium gramineum	eastern featherbells		LE
	Verbesina chapmanii	Chapman's crownbeard		LT
	Xyris isoetifolia	quillwort yellow-eyed-grass		LE
	Xyris longisepala	Karst pond yellow-eyed-grass		LE
	Xyris scabrifolia	Harper's yellow-eyed grass		LE

Abbreviations used herein are:**Plants:****T(S/A)** =Threatened due to similarity of appearance**LE** = Endangered**LT**= Threatened**LS** = Species of special concern**N** = not currently listed**PT**= proposed for listing as Threatened**Animals:****FE** = Federal Endangered**FT** = Federal Threatened**ST** = State Threatened**SSC** = **Species of Special Concern****FT(S/A)** = Federal Threatened due to similarity of appearance



REGIONAL GENERAL PERMIT SAJ-114
CONSERVATION UNIT MAP
KELLY POND - 1,549 ACRES
Exhibit 13 - June 2016



0 1 2 Miles
 1 in = 0.79 miles
 1:50,000



KELLY POND CONSERVATION UNIT

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TABLE

1. KELLY POND CU POTENTIAL THREATENED AND ENDANGERED SPECIES OCCURRENCES

I. GENERAL DESCRIPTION OF CONSERVATION UNIT

Kelly Pond Conservation Unit (CU) is a 1,556 (+/-) acre area divided into five sections within the Intercoastal Waterway (ICW) – West Bay Subbasin North and South of Steelfield Road. This CU is centrally located within the boundary and is the largest CU located in one basin on the RGPEMA 3 Site. It consists of sloughs, basin swamps and a tributary draining into the ICW and on to West Bay in Sections 32, 33, 34, Township 1 South, Range 17 West and Sections 2, 3, 4, 5, 8, 10, 11, 14, 17 Township 2 South, Range 17 West in Bay County, Florida (see Figure 1: General Location Map).

The topography within this CU is relatively flat with elevations ranging from 25 to 30 feet. This CU consists of planted pine uplands, Baygall sloughs and Basin Swamps flowing south to the ditches, ICW and a small tributary, Broomstraw Branch.

The FLUCCS land cover of the Kelly Pond CU is dominated by Wetland Forest Mixed (26%), Treeless Hydric Savanna (24%), and Hydric Pine Flatwoods (6%), and Forest Regeneration Areas (10%) totaling (66%). The upland portion is dominated by Coniferous Plantations (29%). The National Wetland Inventory (NWI) identifies 81% of the CU as palustrine wetlands and the remainder as uplands 19%, which is similar to the wetland coverage based on the soil types dominated by Rutlege and Pottsburg (83%). All of these data types are estimations with scattered groundtruthing on a landscape scale.

Using soil survey data, FLUCCS, NWI data, aerial photograph interpretation and additional groundtruthing a wetland estimation, specific to the site, has been done. Over 140 data point locations were groundtruthed within the EMA boundary. Based on the more detailed wetland estimation the CU is comprised of 91% wetland (Basin Swamp and Baygall Systems) and 9% uplands (Pine Flatwoods in Silviculture). The majority of the uplands are currently planted with Slash Pine (*Pinus ellotti*).

The wetlands within the Kelly Pond CU are comprised of Basin Swamps and Baygall systems that drain South to the ICW and on to West Bay. This CU also has upland areas that are classified as Mesic Pine Flatwoods. The uplands in this area are mesic and allow for overland flow to the depressional Basin Swamp system and Baygall slough system contributing to the Choctawhatchee river tributary, Otter Creek. The upland Mesic Pine Flatwoods are used for silviculture for Slash Pine. These areas currently provide forestry resources and habitat for wildlife. Once these areas are placed into a conservation easement, they can potentially be restored to their historical plant communities.

These plant communities provide habitat appropriate for State and Federal listed flora and fauna. There are 3 documented listed species within the RGP/EMA 3 Boundary; Conservation

Unit (FLEO, 2009). Table 1 provides a list of species that would be expected to use these areas if the habitats were in a natural state.

II. REGIONAL SIGNIFICANCE

The Kelly Pond CU protects both uplands and expansive wetlands that contribute to the tributaries of West Bay. This expansive CU is the second largest on the RGPEMA3 site at 1,556 Ac and is the largest located entirely in on sub basin. The Kelly Pond CU is a subset of the overall Long-Term Conservation areas identified in the “Wildlife and Vegetation Resource Report” completed for the Bay-Walton Sector Plan, reviewed by the Florida Department of Environmental Protection, Florida Wildlife Conservation Commission, and the U.S. Fish and Wildlife Service, and subsequently approved by the Bay and Walton Board of County Commissions and the Florida Division of Community Development.

The Kelly Pond CU is identified as a Priority 2 for Strategic Habitat Conservation Area (SHCA) by the Florida Fish and Wildlife Conservation Commission (FFWCC) (Endries et al., 2008). Further, this CU is ranked as a priority area by FFWCC based on their Integrated Habitat Ranking System (IHRS) (FFWCC, 2008). These rankings take into consideration the types of habitat and the species likely to use these habitats.

The entire CU is a Green Links Priority 1, Level 1 and 2 (Hector, UF, 2013), the highest of the high priority areas for regional ecological planning. This CU is vital to water quality treatment and storage, habitat conservation, and species conservation. This CU contributes to the landward wetlands of the Choctawhatchee River floodplain, expanding the conservation efforts of the NFWFMD.

III. BIODIVERSITY

The habitats within the Kelly Pond CU are a landscape of Coniferous Plantations and Wetland Forested Mixed. The planted Mesic Pine Flatwoods upland diversity is in the ground cover layer, the Baygall slough diversity is within the shrub and canopy while the Basin Swamps contain the majority of their diversity in the canopy and subcanopy strata. Overland flow and groundwater seeps through these systems from the surrounding uplands. In the current condition, the existing Mesic Pine Flatwoods have altered the plant communities and wildlife composition. Although these landscapes are planted in pine, they have retained physical characteristics that would allow for restoration to their historical plant communities.

The areas within the Baygall and Basin Swamp systems are dominated wetland hardwood and cypress. These areas are currently very similar to the historical conditions. Due the hydroperiod of the Basin Swamp very little impact has occurred to the wetland areas from the adjacent silviculture. This CU has also been ranked as a Priority 2 Strategic Habitat Conservation Area by FFWCC due to the potential to protect imperiled species (Endries et al., 2008). Additionally, this CU has been ranked as a

priority under the IHRS (FFWCC, 2008) due to an analysis of various factors affecting the ecological significance of land areas including species richness, listed species locations, and SHCA.

No threatened species have been documented within the CU. A documented occurrence of Twin-Stripped Clubtail (*Gomphus geminatus*) is within 3 miles of the CU. Further, there are 41 plants and 9 animals identified in Bay and Walton Counties as Threatened or Endangered Species that could potentially occur in this CU. Conserving these areas will help to maintain habitat for listed species in the region. Table 1 provides a list of species that may benefit by the conservation of this habitat directly or secondarily.

IV. WATER QUALITY

The Kelly Pond CU protects both uplands and expansive wetlands that contribute to the tributaries of West Bay. This CU is located in the ICW- West Bay Hydrologic Unit Code 12 drainage area within the GPEMA3 area. This area in addition to the other RGPEMA3 CUs and NFWFMD lands will preserve 3,101 Acres of the ICW- West Bay sub basin. With the addition of this CU, 29% of the CW- West Bay sub basin within the RGP3 boundary will be in conservation. Therefore, the preservation of this CU will provide significant protection compared to other watersheds that have experienced heightened development pressures. This large preservation area will provide an essential buffer to West Bay, along with water quality treatment, and flood attenuation for the ICW.

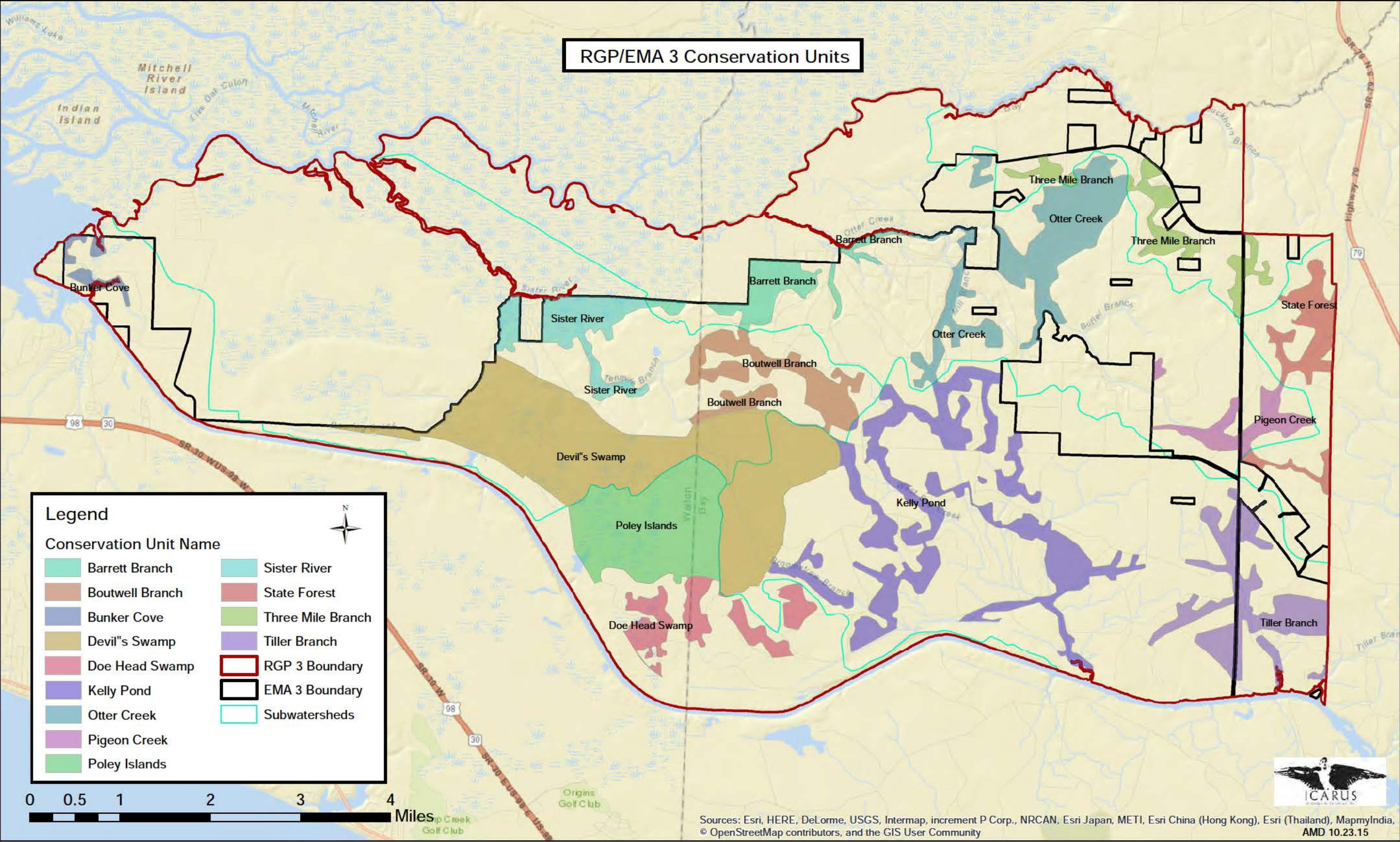
West Bay is listed on the 305(b) or 303(d) list of impaired waters (FDEP, 2008) for mercury in fish tissue. There are currently no known point sources in the watershed and non-point sources are limited to forestry roads. Conserving lands within the CU will help to maintain a restored buffer around West Bay.

The habitats within the Kelly Pond CU are planted Pine Flatwoods uplands, Baygall and Basin Swamps. Hydrology through these systems comes from surrounding Mesic and Hydric Pine Flatwoods and significantly contributes to surface water inflows to the ICW and on to West Bay. The upland habitats experienced alterations from being planted in pine; however, they still provide valuable water input, water filtration, and water storage function.

This CU has been identified by FNAI as a significant surface water priority level 2 and 4 (FNAI, 2009) primarily due to the support it provides to bay and coastal surface waters. West Bay is a Class II Waterbody conditionally approved for shellfish harvesting that supports extensive Tidal Marsh and seagrass beds. Preserving the lands surrounding the West Bay will help to maintain the brackish shallow water estuaries.

IV. ESSENTIAL FISH HABITAT AND MARINE RESOURCES

Land areas within the ICW – West Bay subwatershed drain into Baygall sloughs and Basin Swamps that flow into tidal creeks, such as, Broomstraw Branch and eventually West Bay. West Bay is classified as Class II waters. The majority of West Bay is conditionally approved for shellfish harvesting with some areas classified as prohibited for shellfish harvesting. West Bay is classified as Essential Fish Habitat by NOAA and National Marine Fisheries Service for 5 species of Shark, Red Drum, 43 species of reef fish, 4 species of Shrimp and Coastal Migratory Pelagic fishes. Conservation of the State Forest CU provides additional water quality protection to West Bay, maintaining this Essential Fish Habitat. As mentioned above, preserving this CU will contribute to water quality protection and will help maintain the downstream aquatic resources.



Kelly Pond Conservation Unit

Legend

-  RGP 3 Boundary
-  Subwatersheds
-  EMA 3 Boundary
-  Kelly Pond CU



0 1,000 2,000 4,000 6,000 8,000 Feet

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



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Kelly Pond Conservation Unit

Legend

-  RGP 3 Boundary
-  Subwatersheds
-  EMA 3 Boundary
-  Kelly Pond CU
- Wetland Estimation**
 -  Converted Wetland
 -  Unconverted Wetland
 -  Upland



0 1,000 2,000 4,000 6,000 8,000 Feet

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and the GIS User Community



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Table 1. Kelly Pond Conservation Unit Potential Threatened and Endangered Species Occurrences

ANIMALS	Scientific Name	Common Name	Status	
AMPHIBIAN	Ambystoma Bishopi	Reticulated Flatwoods Salamander	FE	
BIRD	Charadrius melodus	Piping Plover	FT	
BIRD	Calidris canutus rufa	Red Knot	FT	
BIRD	Picoides borealis	Red-cockaded woodpecker	FE	
BIRD	Mycteria americana	Wood Stork	FT	
FISH	Pteronotropis welaka	Bluenose Shiner	SSC	
MAMMAL	Myotis grisescens	Gray Bat	FE	
REPTILE	Drymarchon couperi	Eastern indigo snake	FT	
REPTILE	Gopherus polyphemus	Gopher tortoise	ST	
PLANTS	Scientific Name	Common Name	Federal Status	State Status
	Andropogon arctatus	pine-woods bluestem		LT
	Arnogolssum album	white-flowered Plantain		LE
	Asclepias viridula	green mi kweed		LT
	Aster spinulosus (now Eurybia spinulosa)	pinewoods aster		LE
	Calamovilfa curtissii	Curtiss' Sandgrass		LT
	Carex baltzellii	Baltzell's sedge		LT
	Cleistes divaricata	spreading pogonia		LT
	Drosera filiformis	dew-thread		LE
	Drosera intermedia	water sundew		LT
	Gentiana pennelliana	wiregrass gentian		LE
	Hymenocallis henryae	Mrs Henry's spiderlily		LE
	Lachnocaulon digynum	Panhandle bogbuttons		LT
	Lilium catesbaei	Catesby lily		LT
	Linum macrocarpum	big-seed flax		LE
	Macbridea alba	white birds-in-a-nest	LT	LE
	Macranthera flammea	hummingbird-flower		LE
	Panicum nudicaule now Dichantherium nudicaule	naked-stemmed panic grass		LT
	Physostegia godfreyi	Apalachicola dragonhead		LT
	Pinckneya bracteata	fever-tree		LT
	Pinguicula ionantha	Godfrey's or panhandle butterwort	LT	LE
	Pinguicula lutea	yellow-flowered butterwort		LT
	Pinguicula planifolia	swamp butterwort		LT
	Pinguicula primuliflora	primrose-flowered butterwort		LE
	Platanthera ciliaris	yellow-fringed orchid		LT
	Platanthera integra	orange rein orchid		LE
	Pogonia ophioglossoides	rose pogonia		LT
	Rhexia parviflora	Apalachicola meadow-beauty		LE
	Rhexia salicifolia	Panhandle meadow beauty		LT
	Rhynchospora crinipes	hairy peduncled beakrush		LE
	Rhynchospora stenophylla	narrow-leaf beakrush		LT
	Rudbeckia nitida	St. John's-Susan		LE
	Sarracenia leucophylla	white-top pitcher plant		LE
	Sarracenia psittacina	parrot pitcher plant		LT
	Sarracenia purpurea	decumbent pitcher plant		LT
	Stachydeoma graveolens (now Hedeoma graveolens)	mock pennyroyal		LE
	Zigadenus leimanthoides (now Stenanthium densum)	coastal death camas		LE
	Stenanthium gramineum	eastern featherbells		LE
	Verbesina chapmanii	Chapman's crownbeard		LT
	Xyris isoetifolia	quillwort yellow-eyed-grass		LE
	Xyris longisepala	Karst pond yellow-eyed-grass		LE
	Xyris scabrifolia	Harper's yellow-eyed grass		LE

Abbreviations used herein are:

Plants:**T(S/A)** =Threatened due to similarity of appearance**LE** = Endangered**LT**= Threatened**LS** = Species of special concern**N** = not currently listed**PT**= proposed for listing as Threatened**Animals:****FE** = Federal Endangered**FT** = Federal Threatened**ST** = State Threatened**SSC** = **Species of Special Concern****FT(S/A)** = Federal Threatened due to similarity of appearance