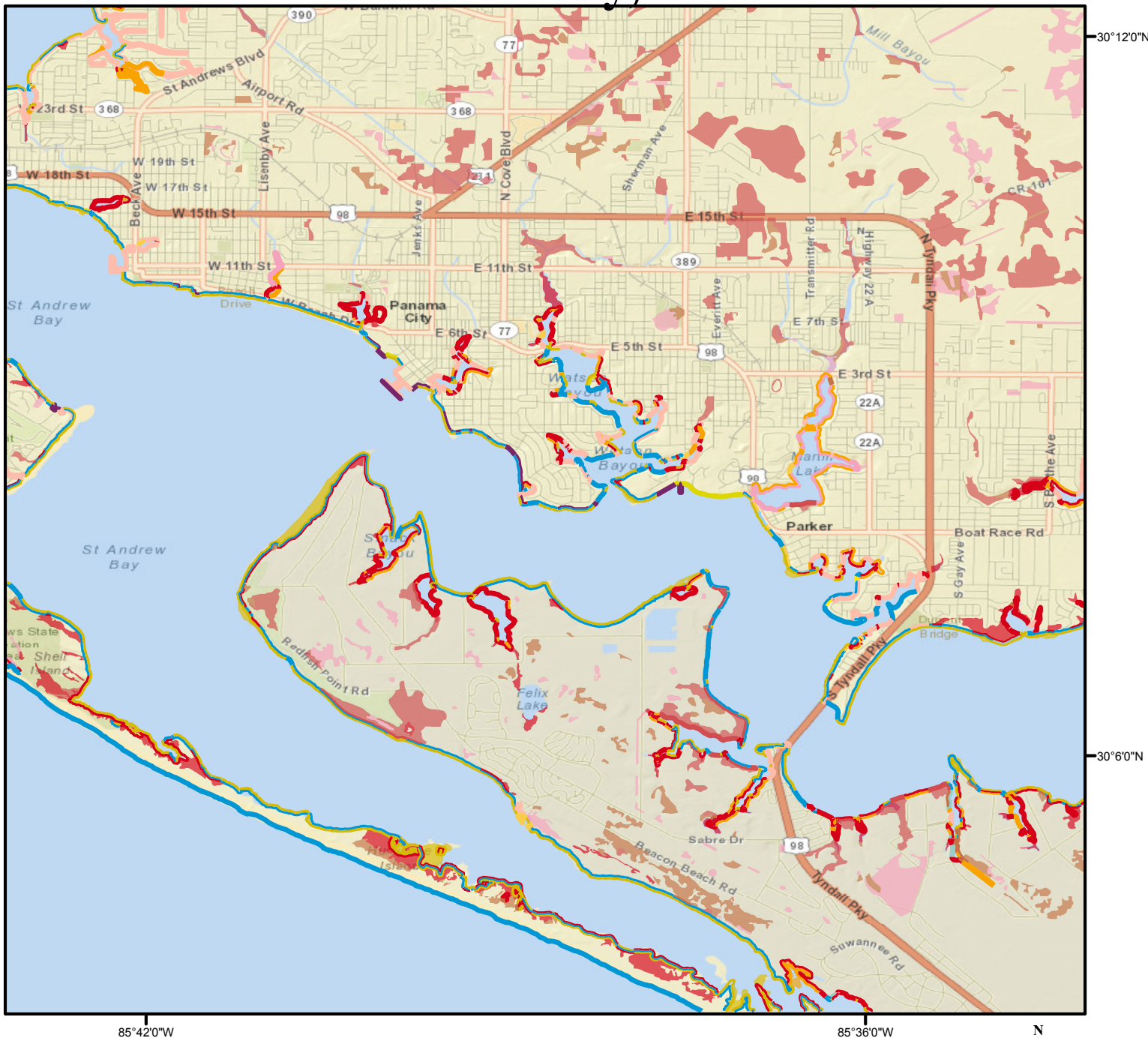


St. Andrew Bay, Florida

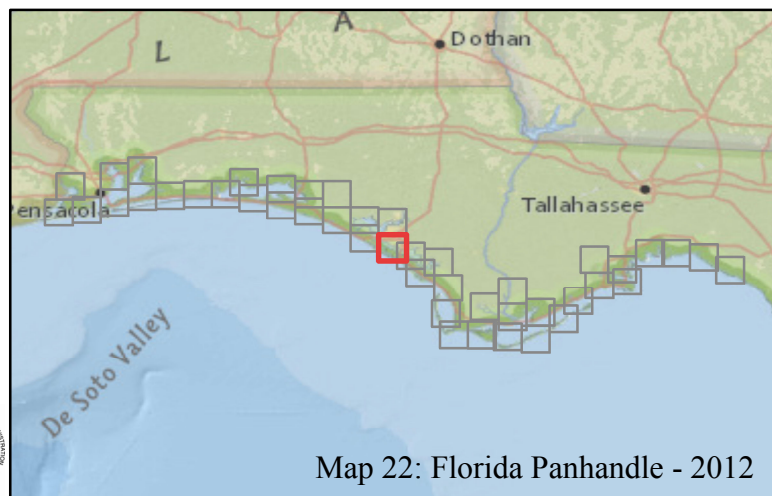


ESI Shoreline Habitats on Map

- 10A Salt- and brackish-water marshes
- 10B Freshwater marshes
- 10C Swamps
- 10D Scrub-shrub wetlands
- 9A Sheltered tidal flats
- 9B Vegetated low banks
- 8A Sheltered scarps in bedrock, mud or clay
- 8B Sheltered, solid man-made structures
- 8C Sheltered riprap
- 7 Exposed tidal flats
- 6B Riprap
- 5 Mixed sand and gravel beaches

Additional shoreline types are present - see back of map

Content from Florida Panhandle - 2012 ESI Atlas









Map 22: Florida Panhandle - 2012


St. Andrew Bay, Florida

BIOLOGICAL RESOURCES

Birds





Subelement	Species	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	NESTING	MIGRATING	MOLTING
 Diving	Brown pelican	C		-	X	X	X	X	X	X	X	X	X	X	X	X			
	Common loon			-	X	X	X	X							X	X			
 Gull/Tern	Black skimmer	C		-						X	X	X	X				May-Sep		
	Gull-billed tern			9-NESTS			X	X	X	X	X	X	X	X	X	X	May-Aug		
	Laughing gull			-	X	X	X	X	X	X	X	X	X	X	X	X			
	Least tern	T		-						X	X	X	X				Apr-Aug		
	Ring-billed gull			-	X	X	X	X	X	X	X	X	X	X	X	X			
 Pelagic	Northern gannet			-	X	X	X	X								X			
 Raptor	Bald eagle	C		-	X	X	X	X	X	X	X	X	X	X	X	X	Nov-Jun		
	Osprey	C		-	X	X	X	X	X	X	X	X	X	X	X	X			
 Shorebird	Piping plover	T	T	-	X	X	X	X	X			X	X	X	X	X			
	Snowy plover	T		45-70-NESTS		X	X	X	X	X	X	X					Mar-Aug		
	Willet			2	X	X	X	X	X	X	X	X	X	X	X	X	Apr-Jul		
	Wilson's plover			6-31-NESTS	X	X	X	X	X	X	X	X	X	X	X	X	Apr-Jul		
 Waterfowl	American black duck			-	X	X	X	X						X	X	X			
	American coot			100S	X	X							X	X	X	X			
	American wigeon			-	X	X	X	X						X	X	X			
	Bufflehead			100S	X	X										X			
	Canvasback			-	X	X	X									X	X		
	Common goldeneye			-	X	X	X										X		
	Gadwall			10S	X	X	X									X	X	X	
	Green-winged teal			-	X	X	X	X					X	X	X	X			
	Lesser scaup			10S	X	X	X	X						X	X	X			
	Long-tailed duck			-	X	X											X		
	Mallard			-	X	X	X						X	X	X	X			
	Mottled duck			-	X											X	X	X	
	Northern pintail			-	X	X	X									X	X	X	
	Red-breasted merganser			10S	X	X	X	X						X	X	X			
	Redhead			-	X	X	X									X	X		
	Ring-necked duck			-	X	X	X	X						X	X	X			
	Ruddy duck			10S	X	X	X	X						X	X	X			
	Wood duck			-	X	X	X	X	X	X	X	X	X	X	X	X			

Fish

Subelement	Species	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	SPAWNING	EGGS	LARVAE	JUVENILE	ADULT
 Diadromous	Alabama shad	C		COMMON	X	X	X					X	X	X	X	X				Jan-Dec	Jan-Dec
	Gulf sturgeon	T	T	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X				Oct-Apr	Oct-Apr*
	Striped bass			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X					


St. Andrew Bay, Florida (continued)

Fish (continued)

Subelement	Species	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	SPAWNING	EGGS	LARVAE	JUVENILE	ADULT
 Estuarine Nursery	Atlantic croaker			ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	Sep-Apr	Sep-Apr	Sep-Apr	Jan-Dec	Jan-Dec
	Atlantic sharpnose shark			PRESENT				X	X	X	X	X	X	X			May-Jul		Apr-Oct	Apr-Oct	Apr-Oct
	Bay anchovy			ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	Mar-Nov	Mar-Nov	Mar-Nov	Jan-Dec	Jan-Dec
	Black drum			COMMON	X	X	X	X	X	X	X	X	X	X	X	X	Nov-Apr	Nov-Apr	Dec-May	Jan-Dec	Jan-Dec
	Black sea bass			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	Dec-Apr	Dec-Apr	Dec-May	Jan-Dec	Jan-Dec
	Bluefish			ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	Sep-Jan*	Sep-Jan*	Sep-Jan*	Jan-Dec	Jan-Dec
	Bonnethead shark			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	Oct-Nov		Aug-Sep	Oct-Jan*	Jul-May
	Bull shark			COMMON	X	X	X	X	X	X	X	X	X	X	X	X	Jun-Aug		Apr-Jun	Jan-Dec	Jan-Dec
	Gray snapper			COMMON						X	X	X	X	X	X	X	Jun-Nov	Jun-Nov	Jun-Dec	Jan-Dec	Jan-Dec
	Grunts			COMMON			X	X	X	X	X	X	X	X	X	X				Jun-Sep	
	Gulf flounder			ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	Nov-Feb	Nov-Feb	Nov-Mar	Jan-Dec	Jan-Dec
	Gulf menhaden			ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	Oct-Mar	Oct-Mar	Oct-May	Jan-Dec	Jan-Dec
	Hardhead catfish			HIGHLY-ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	May-Aug	May-Aug	May-Sep	Jan-Dec	Jan-Dec
	Kingfishes			COMMON						X	X	X	X	X	X	X				Jun-Dec	
	Ladyfish			ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	Jan-Nov	Jan-Nov	Jan-Dec	Jan-Dec	Jan-Dec
	Lane snapper			COMMON								X	X				Sep-Jan*	Sep-Jan*	Sep-Jan*	Sep-Jan*	Sep-Jan*
	Mojarras			ABUNDANT				X	X	X	X	X	X	X	X		Apr-Nov	Apr-Nov	Apr-Nov	Apr-Nov	Apr-Nov
	Pigfish			PRESENT	X	X	X	X	X								Jan-May	Jan-May	Jan-May		Jan-May
	Pinfish			HIGHLY-ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	Oct-Apr	Oct-Apr	Oct-Apr	Jan-Dec	Jan-Dec
	Porgy spp.			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	Jan-Aug	Jan-Aug	Jan-Sep	Jan-Dec	Apr-Dec
	Red drum			ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	Sep-Dec	Sep-Jan	Sep-Jan	Jan-Dec	Jan-Dec
	Sand seatrout			ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	Mar-Sep	Mar-Sep	Mar-Oct	Jan-Dec	Jan-Dec
	Sheepshead			COMMON		X	X	X									Feb-May	Feb-May	Feb-Jul	Jan-Dec	Jan-Dec
	Silver mullet			COMMON	X	X	X	X	X	X	X	X	X	X	X	X				May-Oct	Jan-Dec
	Southern flounder			COMMON	X	X	X	X	X	X	X	X	X	X	X	X	Nov-Jan	Nov-Jan	Nov-Mar	Jan-Dec	Oct-Jan
	Spot			ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	Oct-Apr	Oct-Apr	Oct-Apr	Jan-Dec	Jan-Dec
	Spotted seatrout			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	Apr-Dec	Apr-Sep	Apr-Oct	Jan-Dec	Jan-Dec
	Striped mullet			HIGHLY-ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	Oct-Mar	Oct-Mar	Oct-Mar	Jan-Dec	Jan-Dec
	Tarpon			COMMON						X	X	X	X	X	X	X			Aug-Dec	May-Sep	Jun-Oct
 Estuarine Resident	Code goby			ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	Apr-Sep	Apr-Sep	Apr-Sep	Jan-Dec	Jan-Dec
	Gulf killifish			COMMON	X	X	X	X	X	X	X	X	X	X	X	X	Mar-Sep	Mar-Sep	Mar-Oct	May-Feb	Jan-Dec
	Sheepshead minnow			ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	Mar-Sep	Mar-Sep	Apr-Oct	May-Mar	Jan-Dec
	Silver perch			ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	Mar-Jul	Mar-Jul	Mar-Aug	Jan-Dec	Jan-Dec
	Silversides			ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	Mar-Sep	Mar-Sep	Mar-Oct	Jan-Dec	Jan-Dec
	Smalltooth sawfish	E		PRESENT	X	X	X	X	X	X	X	X	X	X	X	X				Jan-Dec	Jan-Dec
 Fish	Vermillion snapper			COMMON				X	X	X	X	X	X	X	X	X	Apr-Nov	Apr-Nov	Apr-Nov	Apr-Nov	Apr-Nov
 Marine Benthic	Atlantic spadefish			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	May-Sep	May-Sep	May-Oct	Jan-Dec	Jan-Dec
	Cusk eels			COMMON	X	X	X	X	X	X	X	X	X	X	X	X	Jan-Dec	Jan-Dec	Jan-Dec	Jan-Dec	Jan-Dec
	Flatfish			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	Jan-Dec	Jan-Dec	Jan-Dec	Jan-Dec	Jan-Dec
	Florida pompano			COMMON			X	X	X	X	X	X	X	X	X	X	Mar-Oct	Mar-Oct	Mar-Sep	Mar-Nov	Mar-Dec
	Gag grouper			COMMON	X	X	X	X	X	X	X	X	X	X	X	X				Jan-Dec	Jan-Dec
	Goatfishes			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	Mar-Jun	Mar-Jun	Mar-Jul	Jan-Dec	Jan-Dec
	Gray triggerfish			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	May-Sep	May-Sep	May-Oct	Apr-Nov	Apr-Nov
	Little tunny			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X					
	Lizardfishes			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	Apr-Aug	Apr-Aug	Apr-Oct	Jan-Dec	Jan-Dec
	Permit			PRESENT						X	X	X	X				Apr-Jun	Apr-Jun	Mar-Oct	Aug-Nov	Mar-Nov
	Rays			COMMON	X	X	X	X	X	X	X	X	X	X	X	X	Jan-Dec	Jan-Dec		Jan-Dec	Jan-Dec
	Red snapper			COMMON						X	X	X	X				May-Oct	May-Oct	May-Nov	Apr-Jan	Apr-Jan
	Rock sea bass			ABUNDANT				X	X	X	X	X	X	X	X	X	Mar-Jun	Mar-Jun	Mar-Jul	Jan-Dec	Jan-Dec
	Scamp grouper			ABUNDANT			X	X	X	X	X	X	X	X	X	X	Mar-May	Mar-May	Mar-Jun	Mar-Nov	Apr-Nov
	Searobins			ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	Jan-Dec	Jan-Dec	Jan-Dec	Jan-Dec	Jan-Dec
	Skates			COMMON	X	X	X	X	X	X	X	X	X	X	X	X	Jan-Dec	Jan-Dec		Jan-Dec	Jan-Dec
	Tonguefish			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	Jan-Dec	Jan-Dec	Jan-Dec	Jan-Dec	Jan-Dec


St. Andrew Bay, Florida (continued)

Fish (continued)



Subelement	Species	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	SPAWNING	EGGS	LARVAE	JUVENILE	ADULT
 Marine Pelagic	Amberjacks			ABUNDANT				X	X	X	X	X	X	X	X	X	Apr-Nov	Apr-Nov	Apr-Dec	Apr-Dec	Apr-Dec
	Atlantic tripletail			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	May-Sep	May-Sep	May-Oct	Jan-Dec	Jan-Dec
	Ballyhoo			PRESENT						X	X	X									
	Bigeye scad			HIGHLY-ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	Jun-Nov	Jun-Nov	Jun-Dec	Jan-Dec	Jan-Dec
	Blackfin tuna			PRESENT				X	X	X	X	X	X	X	X	X	Apr-Dec	Apr-Dec	Apr-Dec	Apr-Dec	Oct
	Blacknose shark			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	May-Jul		May-Oct	May-Oct	Jan-Dec
	Blacktip shark			PRESENT			X	X	X	X	X	X	X	X	X		May-Jun		May-Sep	Mar-Nov	Apr-Nov
	Blue runner			ABUNDANT					X	X	X	X	X	X			Apr-Aug	Apr-Aug	Apr-Sep	Jan-Dec	Jan-Dec
	Bluefin tuna	C		PRESENT				X	X	X							Apr-Jun	Apr-Jun	Apr-Jun	Apr-Jun	Apr-Jun
	Cobia			COMMON			X	X	X	X	X	X	X	X	X		May-Sep	May-Sep	May-Sep	Mar-Nov	Mar-Nov
	Crevalle jack			COMMON					X	X	X	X	X	X	X		Apr-Aug	Apr-Aug	Apr-Sep	Jan-Dec	Jan-Dec
	Dolphin			ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	Jan-Dec	Jan-Dec	Jan-Dec	Jan-Dec	Jul-Aug
	Finetooth shark			-					X	X	X	X	X						May-Sep	May-Sep	May-Sep
	King mackerel			PRESENT					X	X	X	X	X				Jun-Oct	Jun-Oct	Jun-Oct	Jun-Nov	Jun-Nov
	Red grouper			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	Mar-Jul				Jan-Dec
	Round scad			HIGHLY-ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	Sep-Jan*	Sep-Jan*	Sep-Jan*	Jan-Dec	Jan-Dec
	Scalloped hammerhead			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	May-Jun		Apr-Oct	Jan-Dec	Apr-Nov
	Spanish mackerel			ABUNDANT				X	X	X	X	X	X	X	X		May-Oct	May-Oct	May-Oct	Feb-Dec	Feb-Dec
	Spanish sardine			ABUNDANT	X	X							X	X	X	X	Mar-Nov	Mar-Nov	Mar-Nov	Jan-Dec	Jan-Dec
	Spinner shark			-					X	X	X	X	X				May-Jun			Jun-Sep	May-Jun
	Thread herring			ABUNDANT	X	X				X	X	X	X	X	X	X	Mar-Sep	Mar-Sep	Mar-Sep	Apr-Feb	Jan-Dec
	Tiger shark			-							X	X								Jul-Aug	Jul-Aug
	Wahoo			ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	Apr-Sep	Apr-Sep	Apr-Sep	Jan-Dec	Jan-Dec

(*) = This life stage occurs during the months listed, but not continuously.


Habitats and Rare Plants

Subelement	Species	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D
 Plant	Apalachicola dragon-head	T		-	X	X	X	X	X	X	X	X	X	X	X	X
	Chapman's crownbeard	T		-	X	X	X	X	X	X	X	X	X	X	X	X
	Giant water-dropwort	E		-	X	X	X	X	X	X	X	X	X	X	X	X
	Godfrey's goldenaster	E		-	X	X	X	X	X	X	X	X	X	X	X	X
	Gulf Coast lupine	T		-	X	X	X	X	X	X	X	X	X	X	X	X
	Large-leaved jointweed	T		-	X	X	X	X	X	X	X	X	X	X	X	X
	Panhandle spiderlily	E		-	X	X	X	X	X	X	X	X	X	X	X	X
	Spoon-leaved sundew	T		-	X	X	X	X	X	X	X	X	X	X	X	X


Marine Mammals

Subelement	Species	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	MATING	CALVING	PUPPING	MOLTING
 Dolphin	Bottlenose dolphin			-	X	X	X	X	X	X	X	X	X	X	X	X				
 Manatee	West Indian manatee	E	E	LOW			X	X	X	X	X	X	X	X	X					

Reptiles and Amphibians

Subelement	Species	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	NESTING	HATCHING	INTERNESTING	JUVENILE	ADULT
 Turtle	Gopher tortoise	T		-	X	X	X	X	X	X	X	X	X	X	X	X	Mar-Dec				
	Green sea turtle	E	E	RARE	X	X	X	X	X	X	X	X	X	X	X	X			May-Nov	Jan-Dec	Jan-Dec
	Hawksbill sea turtle	E	E	RARE	X	X	X	X	X	X	X	X	X	X	X	X				Jan-Dec	Jan-Dec
	Kemp's ridley sea turtle	E	E	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X				Jan-Dec	Jan-Dec
	Leatherback sea turtle	E	E	RARE	X	X	X	X	X	X	X	X	X	X	X	X	Jun-Jul	Aug-Sep		Jan-Dec	Jan-Dec
	Loggerhead sea turtle	T	T	PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	May-Aug	Jul-Nov	Apr-Sep	Jan-Dec	Jan-Dec

Terrestrial Mammals

Subelement	Species	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D
 Small Mammal	Choctawhatchee beach mouse	E	E	-	X	X	X	X	X	X	X	X	X	X	X	X

St. Andrew Bay, Florida (continued)

Human Use Resources

Icon	Type	Name	Contact	Phone
	Water Intake	Noaa Nmfs Panama City Laboratory	RESEARCH FISH BIOLOGIST	850/234-6541
	Recreational Fishing	Shellfish Harvesting Area		
	Port	Alfa Seafood Wharf	ALFA SEAFOOD INC	904/872-8546
	Port	Brannons' Seafood Dock	BRANNONS' SEAFOOD INC	904/769-0366
	Port	Cook Fish Co Pier	COOK FISH CO INC	904/763-7649
	Port	Dock	BAY FABRICATION/EASTERN SHIPBUILDING GR	904/763-1900
	Port	Dock 4, Fishing Vessel Piers	CITY OF PANAMA CITY	904/785-0161
	Port	Panama City Marina Wharf	CITY OF PANAMA CITY	904/785-0161
	Port	Panama City Marine Yard Piers	H G HARDERS SON INC	904/874-1500
	Port	Panama City Mooring Basin	NOAA	904/234-6541
	Port	Panama City Plant, No 1 Dock	STONE CONTAINER CORP	904/785-4311
	Port	Panama City Plant, No 2 Dock	STONE CONTAINER CORP	904/785-4311
	Port	Panama City Site Office, Wharf	US ARMY CORPS OF ENGINEERS	904/763-2881
	Port	Panama City Terminal Dock	CITGO PETROLEUM CORP	904/763-5436
	Port	Panama City Terminal Wharf	AMERIGAS INC	904/769-6860
	Port	Panama City Terminal, Mooring Dock	CITGO PETROLEUM CORP	904/763-5436
	Port	Panama City Terminals, Dock	WHITAKER OIL CO	
	Port	Sherman Yard Pier	BAY FABRICATION/EASTERN SHIPBUILDING GR	904/763-1900
	Port	Smiths Yacht Basin	SMITH ENTERPRISES	904/784-1788
	Port	St Andrews Marina Wharves	CITY OF PANAMA CITY	904/785-2506
	Port	Tibbetts Boat Works Piers	IRENE FLEMING AND PAUL L BENFIELD	904/785-9262
	Port	Whitaker Oil Co Dock	WHITAKER OIL CO	904/763-3042
	Park	St. Andrews State Recreation Area		
	Oil Facilities	Panama City Facility	ARIZONA CHEMICAL COMPANY	850/785-8521
	Oil Facilities	Panama City Marine And Rail Terminal	GULF TERMINAL CORPORATION	850/769-7513
	Oil Facilities	Panama City Mill	SMURFIT-STONE CONTAINER CORP.	850/785-4311
	Oil Facilities	Panama City Terminal	CHEVRON USA PRODUCTS COMPANY	850/785-7426
	Oil Facilities	Tyndall Air Force Base	U.S. AIR FORCE	
	Marina	Bowers Marine Svc & Supply	DOCKMASTER	850/769-1331
	Marina	Etheridge Marina	DOCKMASTER	850/763-6442
	Marina	Gulf Marina	DOCKMASTER	850/763-3291
	Marina	New Tarpon Dock Marina	DOCKMASTER	850/769-3434
	Marina	Panama City Marina	DOCKMASTER	850/785-0161
	Marina	Pier 98 Marina	DOCKMASTER	850/874-8723

St. Andrew Bay, Florida (continued)







Human Use Resources (continued)

Icon	Type	Name	Contact	Phone
	Marina	Sailor`s Supply	DOCKMASTER	850/769-5007
	Marina	Smith's Yacht Basin	DOCKMASTER	850/763-9492
	Marina	St Andrews Bay Yacht Club	DOCKMASTER	850/769-2453
	Marina	St Andrews Marina	DOCKMASTER	850/785-2605
	Marina	Tibbetts Boat Works Inc	DOCKMASTER	850/785-9262
	Marina	Tyndall Afb - Bonita Bay Recreation Area	DOCKMASTER	850/283-3199
	Marina	Tyndall Afb Yacht Club	DOCKMASTER	850/283-3059
	Marina	Watson Bayou Marina	DOCKMASTER	850/872-8617
	Management Area	St. Andrew Bay Watershed Swim	NWFWMD SWIM	850/539-5999
	Management Area	St. Andrews State Park Aquatic Preserve		850/983-5359
	Historical Site	Historic Property	FL SHPO	850/245-6440
	Diving	Diving		
	Critical Habitat	Choctawhatchee Beach Mouse	USFWS	
	Critical Habitat	Gulf Sturgeon Critical Habitat	FWRI	
	Critical Habitat	Piping Plover Critical Habitat	USFWS	
	Boat Ramp	Bayview Avenue Boat Ramp		850/872-7272
	Boat Ramp	Bob George Park Boat Ramp		850/872-7272
	Boat Ramp	Bonita Bay Tyndall Afb		
	Boat Ramp	Callaway Community Center		850/871-1033
	Boat Ramp	Cherry Street Landing		
	Boat Ramp	Danley Boat Ramp		
	Boat Ramp	Donaldson Point		
	Boat Ramp	Earl Gilbert Park		
	Boat Ramp	Gilman Marine		
	Boat Ramp	Mercury Marine		
	Boat Ramp	Panama City Marina		850/872-7272
	Boat Ramp	Shoreline Circle Boat Ramp		850/784-4065
	Boat Ramp	St Andrews Bay Yacht Club		
	Boat Ramp	Tyndall Air Force Base Pier		
	Artificial Reef	Artificial Reef		
	Aquaculture	Noaa Nmfs Panama City Laboratory	RESEARCH FISH BIOLOGIST	850/234-6541
	Airport	Tyndall Afb		
















St. Andrew Bay, Florida (continued)

SHORELINE RESOURCES:

ESI Polygon Habitats

Pattern	ESI Rank	Habitat	Area (meters ²)
	10A	Salt- and brackish-water marshes	1,951,764
	10B	Freshwater marshes	2,566,731
	10C	Swamps	6,236,579
	10D	Scrub-shrub wetlands	2,000,202
	9A	Sheltered tidal flats	90,083
	7	Exposed tidal flats	1,010,940

Shoreline Types (Length of ESI Shoreline on Map = 187,230 meters ; Length of Shoreline on Map = 184,218 meters)

Color	ESI Rank	Shoreline Habitat	Length (meters)	% of ESI Shoreline
	10A	Salt- and brackish-water marshes	66,909	35
	10B	Freshwater marshes	7,580	4
	10C	Swamps	7,501	4
	10D	Scrub-shrub wetlands	2,354	1
	9A	Sheltered tidal flats	6,046	3
	9B	Vegetated low banks	19,629	10
	8A	Sheltered scarps in bedrock, mud or clay	331	<1
	8B	Sheltered, solid man-made structures	32,101	17
	8C	Sheltered riprap	2,511	1
	7	Exposed tidal flats	75,898	40
	6B	Riprap	1,508	<1
	5	Mixed sand and gravel beaches	1,408	<1
	4	Coarse-grained sand beaches	245	<1
	3A	Fine- to medium-grained sand beaches	84,940	45
	1B	Exposed, solid man-made structures	4,681	2

Note: A shoreline segment may include multiple shoreline habitats. If any segments include multiple habitats, the combined length of all habitats will exceed the length of the mapped ESI shoreline, and the percent of ESI shoreline values will sum to greater than 100%.



Content from Florida Panhandle - 2012 ESI Atlas