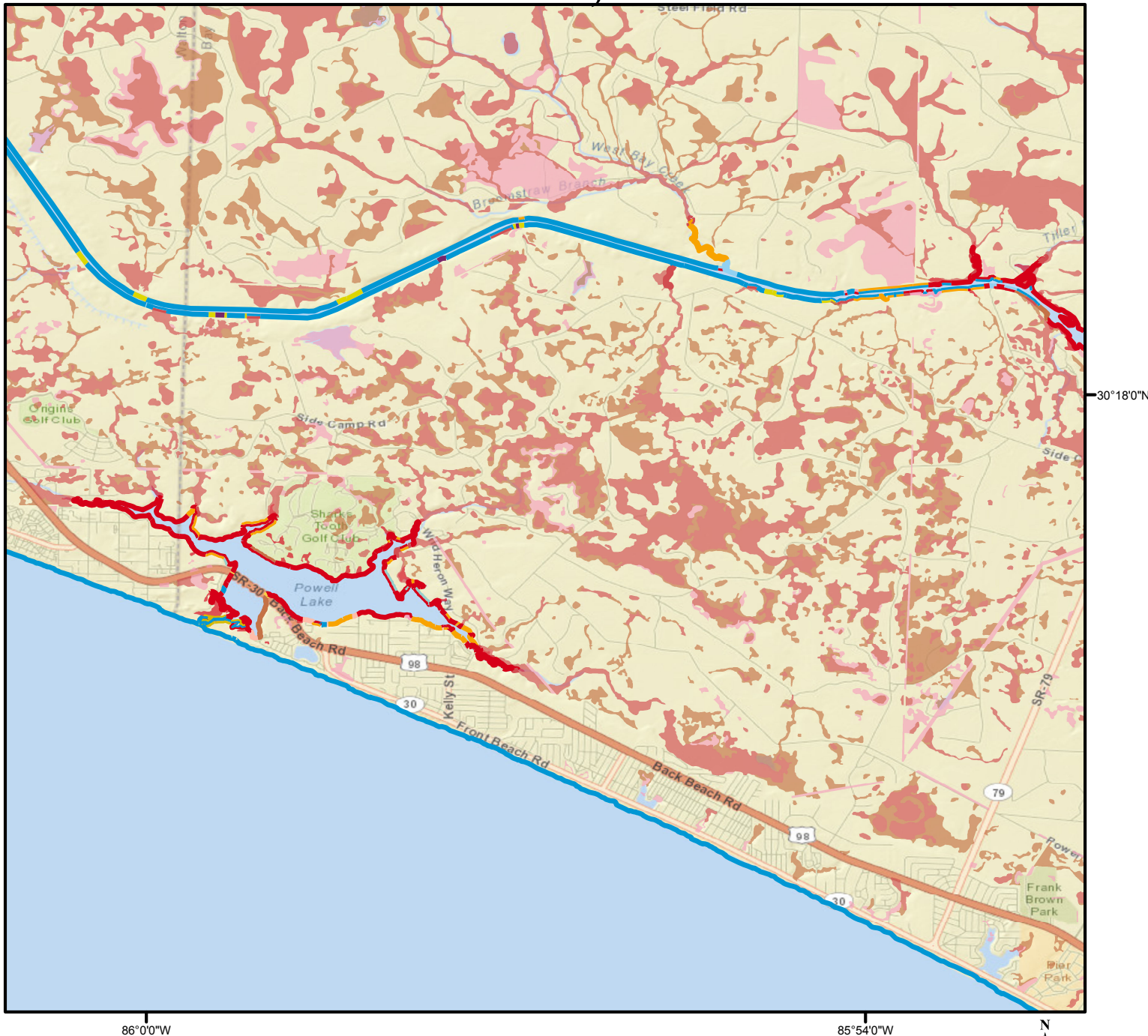


Powell Lake, Florida

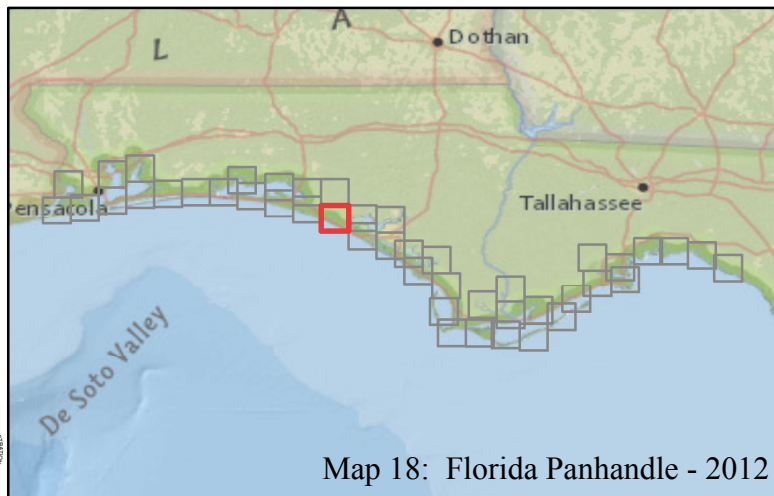


ESI Shoreline Habitats on Map

- 10A Salt- and brackish-water marshes
- 10B Freshwater marshes
- 10C Swamps
- 10D Scrub-shrub wetlands
- 9B Vegetated low banks
- 8B Sheltered, solid man-made structures
- 8C Sheltered riprap
- 7 Exposed tidal flats
- 6B Riprap
- 5 Mixed sand and gravel beaches
- 4 Coarse-grained sand beaches
- 3A Fine- to medium-grained sand beaches

Additional shoreline types are present - see back of map

Content from Florida Panhandle - 2012 ESI Atlas









Map 18: Florida Panhandle - 2012



Powell Lake, 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						
	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			-	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	Red knot			1	X	X	X	X	X	X	X	X	X	X	X	X			
	Snowy plover	T		6-16-NESTS		X	X	X	X	X	X	X					Mar-Aug		
 Waterfowl	Redhead			36000-131000	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		PRESENT	X	X	X	X	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					
 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			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		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-Jul		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			PRESENT						X	X	X	X							Jun-Sep	
	Gulf flounder			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	Nov-Feb	Nov-Feb	Nov-Mar	Jan-Dec	Jan-Dec
	Gulf menhaden			COMMON	X	X	X	X	X	X	X	X	X	X	X	X	Oct-Mar	Oct-Mar	Oct-May	Jan-Dec	Jan-Dec
	Hardhead catfish			COMMON	X	X	X	X	X	X	X	X	X	X	X	X	May-Aug	May-Aug	May-Sep	Jan-Dec	Jan-Dec
	Hogchoker			ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	Apr-Oct	Apr-Oct	Apr-Oct	Jan-Dec	Jan-Dec
	Kingfishes			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X				Jun-Dec	
	Ladyfish			ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	Jan-Dec	Jan-Dec	Jan-Dec	Jan-Dec	Jan-Dec
	Lane snapper			COMMON									X	X			Sep-Jan*	Sep-Jan*	Sep-Jan*	Sep-Jan*	Sep-Jan*
	Mojarras			COMMON							X	X	X	X	X	X	Apr-Nov	Apr-Nov	Apr-Nov	Apr-Dec	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.			ABUNDANT	X	X	X	X	X	X	X	X	X	X	X	X	Jan-Aug	Jan-Aug	Jan-Sep	Jan-Dec	Apr-Dec
	Red drum			COMMON	X	X	X	X	X	X	X	X	X	X	X	X	Sep-Dec	Sep-Dec	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	X	X	X	X	X	X	X	X	X	Feb-Apr	Feb-Apr	Feb-Jul	Jan-Dec	Jan-Dec
	Silver mullet			ABUNDANT	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	Nov-Sep
	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			COMMON	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							May-Sep	Jun-Sep
	Yellowfin menhaden			PRESENT	X	X	X	X	X	X	X	X	X	X	X	X	Dec-Mar			Jan-Dec	Jan-Dec


Powell Lake, 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 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
 Freshwater	Bluegill			COMMON	X	X	X	X	X	X	X	X	X	X	X	X	Apr-Sep	Apr-Sep	Apr-Sep	Jan-Dec	Jan-Dec
	Largemouth bass			COMMON	X	X	X	X	X	X	X	X	X	X	X	X	Mar-May	Mar-May	Mar-May	Jan-Dec	Jan-Dec
 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			HIGHLY-ABUNDANT			X	X	X	X	X	X	X	X	X		Mar-Oct	Mar-Oct	Mar-Sep	Mar-Nov	
	Gag grouper			COMMON	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			COMMON	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	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		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
 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			PRESENT	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	X	May-Jun		May-Sep	Mar-Nov	Apr-Nov
	Blue runner			ABUNDANT	X	X	X	X	X	X	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	X	May-Sep	May-Sep	May-Sep	Mar-Nov	Mar-Nov
	Crevalle jack			COMMON					X	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
	King mackerel			PRESENT						X	X	X	X	X			Jun-Oct	Jun-Oct	Jun-Oct	Jun-Nov	Jun-Nov
	Red grouper			COMMON	X	X	X	X	X	X	X	X	X	X	X	X	Mar-Jul				Jan-Dec
	Round scad			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
	Skipjack tuna			PRESENT				X	X	X	X	X	X	X			Apr-Oct	Apr-Oct	Apr-Oct	Apr-Oct	Apr-Oct
	Spanish mackerel			ABUNDANT				X	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	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			HIGHLY-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.

Powell Lake, Florida (continued)


Habitats and Rare Plants

Subelement	Species	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D
 Plant	Cruise's goldenaster	E		-	X	X	X	X	X	X	X	X	X	X	X	X
	Curtiss' sandgrass	T		-	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
	White-top pitcherplant	E		-	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	X				

Reptiles and Amphibians




Subelement	Species	S	F	Concentration	J	F	M	A	M	J	J	A	S	O	N	D	NESTING	HATCHING	INTERESTING	JUVENILE	ADULT
 Turtle	Green sea turtle	E	E	RARE	X	X	X	X	X	X	X	X	X	X	X	X	Jun-Aug	Aug-Nov	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-Aug	Aug-Oct		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

Human Use Resources

Icon	Type	Name	Contact	Phone
	Recreational Fishing	Dan Russell Municipal Pier		
	Recreational Fishing	Shellfish Harvesting Area		
	Park	Camp Helen State Park		
	Management Area	Choctawatchee Bay Swim	NWFWMD SWIM	850/539-5999
	Management Area	St. Andrew Bay Watershed Swim	NWFWMD SWIM	850/539-5999
	Historical Site	Historic Property	FL SHPO	850/245-6440
	Critical Habitat	Gulf Sturgeon Critical Habitat	FWRI	
	Boat Ramp	Lake Powell Boat Ramp		850/784-4065
	Beach	Hollywood Bch		
	Beach	Panama City Bch		
	Access	Access		




SHORELINE RESOURCES:

ESI Polygon Habitats

Pattern	ESI Rank	Habitat	Area (meters ²)
	10A	Salt- and brackish-water marshes	598,812
	10B	Freshwater marshes	5,661,412
	10C	Swamps	21,315,041
	10D	Scrub-shrub wetlands	15,356,550

Powell Lake, Florida (continued)

Shoreline Types (Length of ESI Shoreline on Map = 83,137 meters ; Length of Shoreline on Map = 82,863 meters)

Color	ESI Rank	Shoreline Habitat	Length (meters)	% of ESI Shoreline
	10A	Salt- and brackish-water marshes	28,978	34
	10B	Freshwater marshes	770	<1
	10C	Swamps	3,592	4
	10D	Scrub-shrub wetlands	1,711	2
	9B	Vegetated low banks	8,462	10
	8B	Sheltered, solid man-made structures	434	<1
	8C	Sheltered riprap	80	<1
	7	Exposed tidal flats	1,834	2
	6B	Riprap	1,510	1
	5	Mixed sand and gravel beaches	862	1
	4	Coarse-grained sand beaches	801	<1
	3A	Fine- to medium-grained sand beaches	46,101	55
	1B	Exposed, solid man-made structures	284	<1

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