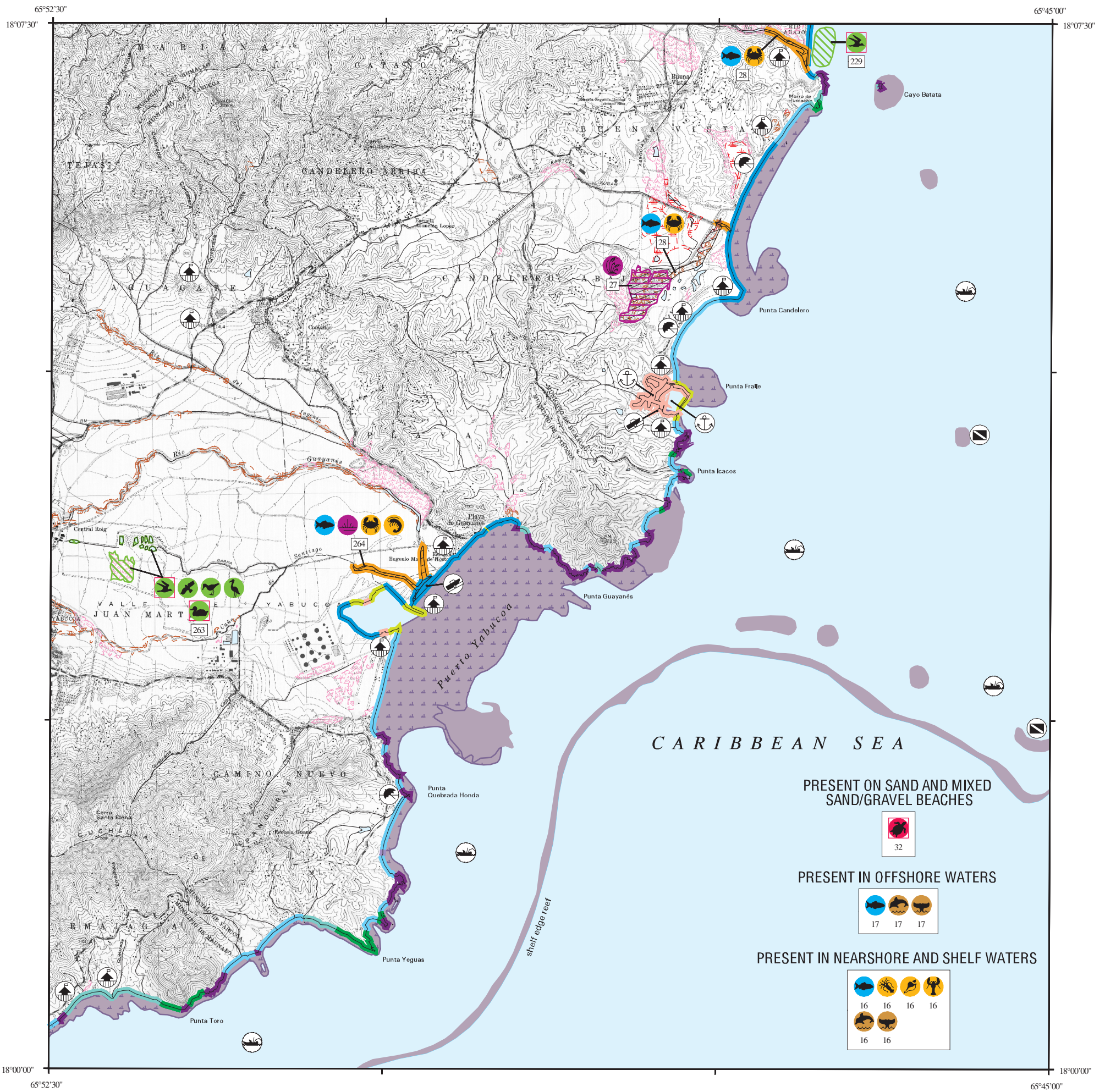


# ENVIRONMENTAL SENSITIVITY INDEX MAP



PRESENT ON SAND AND MIXED SAND/GRAVEL BEACHES



32

PRESENT IN OFFSHORE WATERS



17 17 17

PRESENT IN NEARSHORE AND SHELF WATERS



16 16 16 16  
16 16

## SHORELINE HABITATS (ESI)

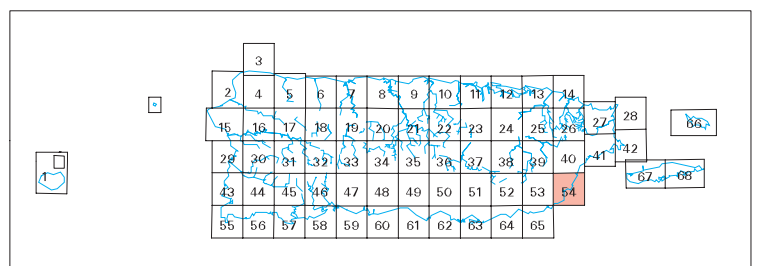
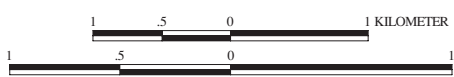
- 1A EXPOSED ROCKY CLIFFS
- 1B EXPOSED, SOLID MAN-MADE STRUCTURES
- 2A EXPOSED WAVE-CUT PLATFORMS IN BEDROCK
- 2B SCARPS AND STEEP SLOPES IN MUDDY SEDIMENTS
- 3A FINE- TO MEDIUM-GRAINED SAND BEACHES
- 4 COARSE-GRAINED SAND BEACHES
- 5 MIXED SAND AND GRAVEL BEACHES
- 6A GRAVEL BEACHES
- 6B RIPRAP
- 7 EXPOSED TIDAL FLATS
- 8A SHELTERED ROCKY SHORES
- 8B SHELTERED, SOLID MAN-MADE STRUCTURES
- 9A SHELTERED TIDAL FLATS
- 9B SHELTERED VEGETATED LOW BANKS
- 10D MANGROVES
- SALT- AND BRACKISH-WATER MARSHES
- FRESHWATER MARSHES
- FRESHWATER SWAMPS
- FRESHWATER SCRUB/SHRUB

## STREAM REACHES (RSI)

- 1 QUIET POOL; LOW-SENSITIVE BANKS
- 2 STRAIGHT CHANNEL WITH CURRENTS; LOW-SENSITIVE BANKS (MUD DOMINANT)
- 3 MEANDERING CHANNEL; SAND POINT BARS
- 4 MEANDERING CHANNEL; VEGETATED POINT BARS
- 5 RAPIDS OVER BEDROCK
- 6 MEANDERING CHANNEL; SAND AND GRAVEL POINT BARS
- 7 SPLIT CHANNEL WITH COARSE GRAVEL; SOME RAPIDS
- 8 SMALL FALLS; BOULDERS IN CHANNEL
- 9 LARGE FALLS; BOULDERS IN CHANNEL
- 10 CHANNELS WITH ASSOCIATED VULNERABLE WETLANDS
- KARST



SCALE 1:55000



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**PUERTO RICO - ESIMAP 54**

**BIOLOGICAL RESOURCES:**

**BIRD:**

RAR#	Species	S/F	T/E	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting
229	Brown pelican	S/F	E/E		X	X	X	X	X	X	X	X	X	X	X	X	-
263	American coot			MEDIUM	X	X	X	X	X	X	X	X	X	X	X	X	-
	Blue-winged teal			MEDIUM	X	X	X	X					X	X	X		-
	Brown pelican	S/F	E/E	HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-
	Caribbean coot	S	T	MEDIUM	X	X	X	X	X	X	X	X	X	X	X	X	-
	Common moorhen			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-
	Common snipe			HIGH	X	X	X	X					X	X	X		-
	Glossy ibis			LOW	X	X	X	X	X	X	X	X	X	X	X	X	-
	Green-winged teal			LOW	X	X	X						X	X	X		-
	Least grebe	S	T	LOW	X	X	X	X	X	X	X	X	X	X	X	X	-
	Lesser scaup			LOW	X	X	X						X	X			-
	Masked duck	S	T	LOW	X	X	X	X	X	X	X	X	X	X	X	X	-
	Northern pintail			LOW	X	X	X						X	X	X		-
	Osprey			LOW	X	X	X	X					X	X	X		-
	Purple gallinule			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-
	Ruddy duck	S	T	HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-
	Wading birds			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-
	West Indian whistling-duck	S	T	MEDIUM	X	X	X	X	X	X	X	X	X	X	X	X	-
	White-cheeked pintail			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-

**FISH:**

RAR#	Species	S/F	T/E	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning Eggs	Larvae	Juveniles	Adults	
16	Pelagic fish				X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Reef fish				X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
17	Pelagic fish				X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
28	Nursery fish				X	X	X	X	X	X	X	X	X	X	X	X	-	-	JAN-DEC	-	-
	Snook				X	X	X	X	X	X	X	X	X	X	X	X	APR-FEB	APR-FEB	JAN-DEC	JAN-DEC	JAN-DEC
	Tarpon				X	X	X	X	X	X	X	X	X	X	X	X	-	-	MAY-DEC	JAN-DEC	JAN-DEC
264	Native stream fish							X	X		X	X	X	X	X	X	-	-	APR-MAY	-	-
	Nursery fish				X	X	X	X	X	X	X	X	X	X	X	X	-	-	AUG-NOV	JAN-DEC	-
	Snook				X	X	X	X	X	X	X	X	X	X	X	X	APR-FEB	APR-FEB	JAN-DEC	JAN-DEC	JAN-DEC
	Tarpon				X	X	X	X	X	X	X	X	X	X	X	X	-	-	MAY-DEC	JAN-DEC	JAN-DEC

**PLANT:**

RAR#	Species	S/F	T/E	Conc.	J	F	M	A	M	J	J	A	S	O	N	D
27	Pterocarpus swamp				X	X	X	X	X	X	X	X	X	X	X	X
264	Floating aquatic vegetation				X	X	X	X	X	X	X	X	X	X	X	X

**INVERTEBRATE:**

RAR#	Species	S/F	T/E	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning Eggs	Larvae	Juveniles	Adults	
16	Caribbean spiny lobster				X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Octopus				X	X	X	X	X	X	X	X	X	X	X	X	DEC-MAR	DEC-APR	-	JAN-DEC	JAN-DEC
	Queen conch				X	X	X	X	X	X	X	X	X	X	X	X	APR-OCT	APR-OCT	APR-OCT	JAN-DEC	JAN-DEC
28	Blue land crab				X	X	X	X	X	X	X	X	X	X	X	X	JUL-AUG	JUL-AUG	JUL-SEP	JAN-DEC	JAN-DEC
264	Blue land crab				X	X	X	X	X	X	X	X	X	X	X	X	JUL-AUG	JUL-AUG	JUL-SEP	JAN-DEC	JAN-DEC
	Native stream shrimp						X	X		X	X	X	X	X	X	X	-	-	APR-MAY	-	-
																			AUG-NOV		

**MARINE MAMMAL:**

RAR#	Species	S/F	T/E	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Mating	Calving
16	Dolphins				X	X	X	X	X	X	X	X	X	X	X	X	-	-
	Whales				X	X	X	X	X	X	X	X	X	X	X	X	-	-
17	Dolphins				X	X	X	X	X	X	X	X	X	X	X	X	-	-
	Whales				X	X	X	X	X	X	X	X	X	X	X	X	-	-

**REPTILE:**

RAR#	Species	S/F	T/E	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Hatching	Interesting	Juveniles	Adults
32	Green sea turtle	S/F	E/T		X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	-	JAN-DEC	JAN-DEC
	Hawksbill sea turtle	S/F	E/E		X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	-	JAN-DEC	JAN-DEC
	Leatherback sea turtle	S/F	E/E		X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUN	APR-SEP	-	APR-SEP	FEB-JUN

Biological information shown on the maps represents known concentration areas or occurrences, but does not necessarily represent the full distribution or range of each species. This is particularly important to recognize when considering potential impacts to protected species.