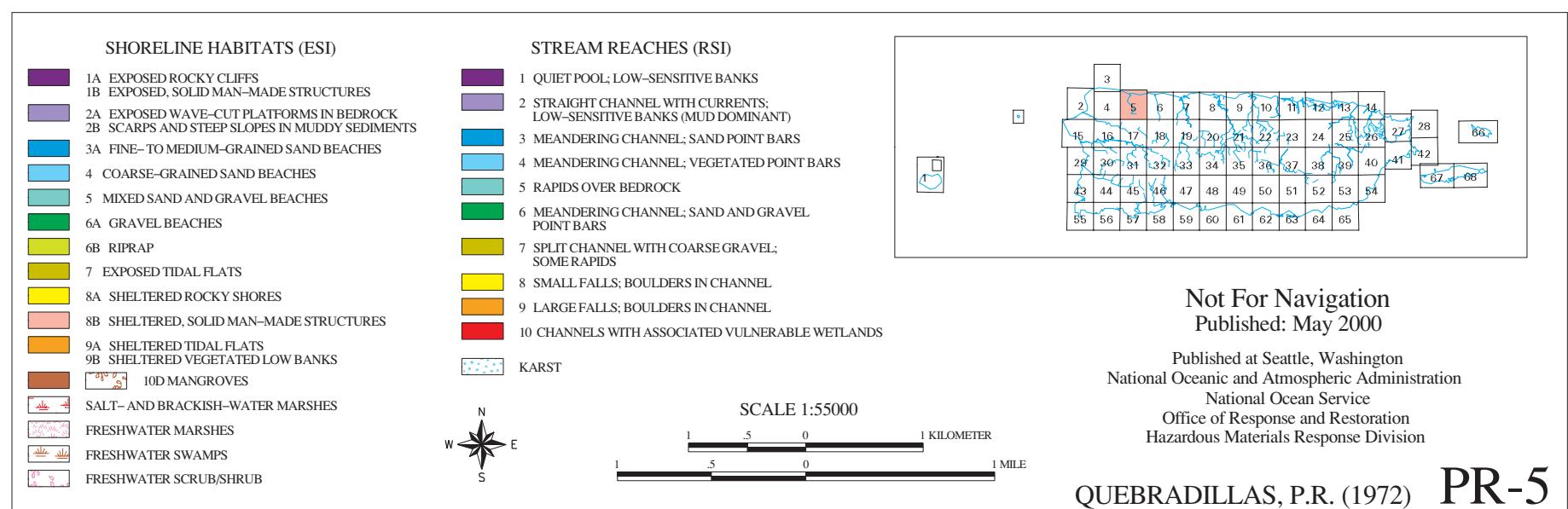
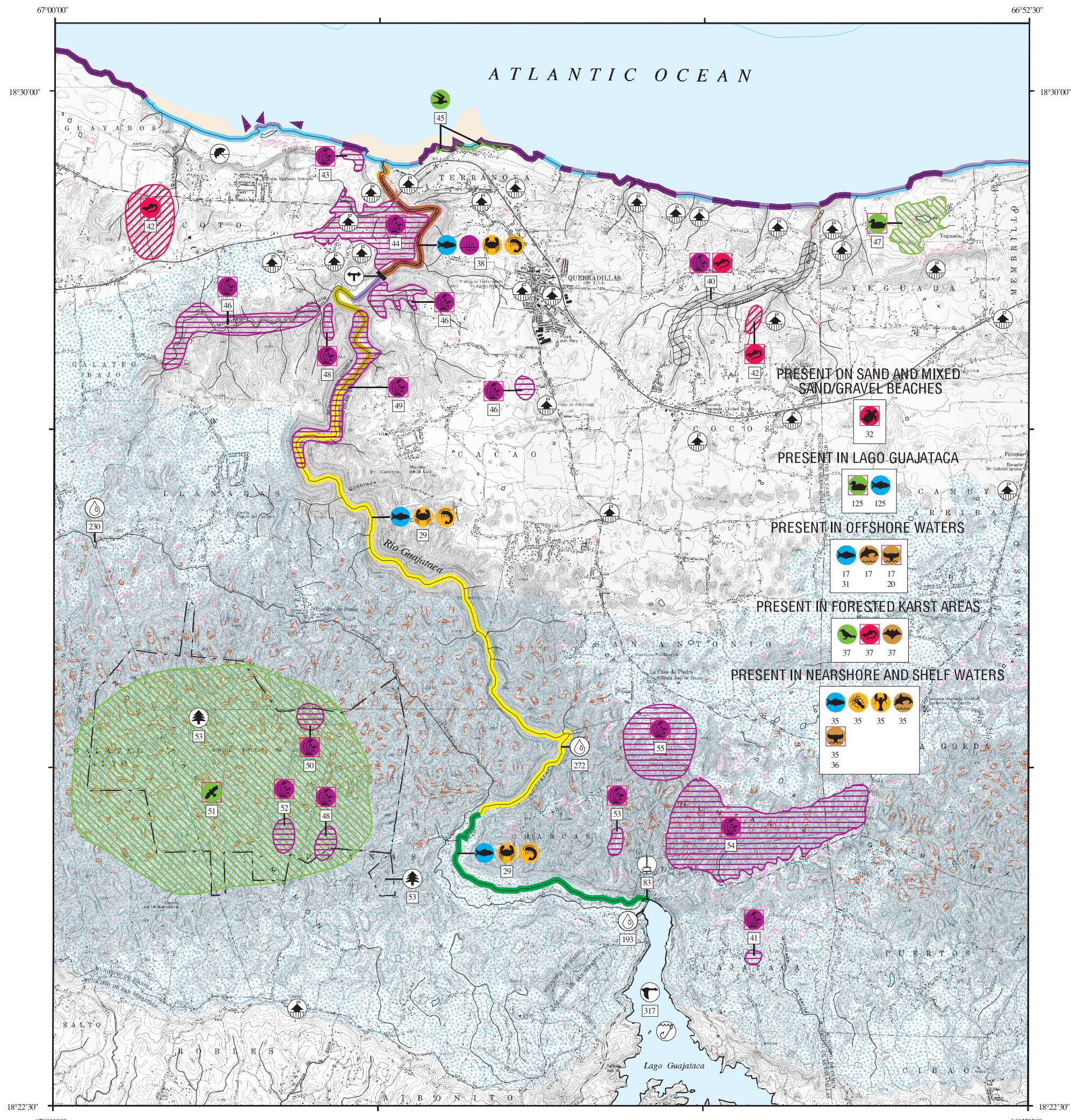


ENVIRONMENTAL SENSITIVITY INDEX MAP



PUERTO RICO - ESIMAP 5

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S/F T/E Conc.	J F M A M J J A S O N D Nesting
37	Passerine birds	HIGH	X X X X X X X X X X X X X X X X -
	Scaly-naped pigeon	HIGH	X X X X X X X X X X X X X X X X MAR-JUN
	White-crowned pigeon	HIGH	X X X X X X X X X X X X X X X X MAR-SEP
45	Bridled tern		X X X X X X APR-JUL
	White-tailed tropicbird		X X X X X X MAR-JUL
47	Least grebe	S T	X X X X X X X X X X X X X X X X -
51	Puerto Rican sharp-shinned hawk	S/F E/E	X X X X X X X X X X X X X X X X MAR-JUN
125	Common moorhen	HIGH	X X X X X X X X X X X X X X X X -
	Pied-billed grebe	HIGH	X X X X X X X X X X X X X X X X -
	Ruddy duck	S T LOW	X X X X 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
17	Pelagic fish		X X X X X X X X X X JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
29	Native stream fish		X X X X X X X X X X APR-MAY	APR-MAY	JAN-DEC	JAN-DEC
31	Blue marlin	HIGH	X X X X X X X X MAY-NOV	MAY-NOV	-	MAY-NOV
35	Pelagic fish		X X X X X X X X X X JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Reef fish		X X X X X X X X X X JAN-DEC	JAN-DRC	JAN-DEC	JAN-DEC
38	Native stream fish		X X X X X X X X X X APR-MAY	APR-MAY	JAN-DEC	JAN-DEC
	Nursery fish		X X X X X X X X X X AUG-NOV	AUG-NOV	JAN-DEC	-
	Sirajo goby (seti)		X X X X X X X X X X -	OCT-OCT	-	-
	Snook		X X X X X X X X X X APR-FEB	APR-FEB	JAN-DEC	JAN-DEC
	Tarpon		X X X X X X X X X X -	-	MAY-DEC	JAN-DEC
125	Channel catfish		X X X X X X X X X X FEB-AUG	FEB-AUG	JAN-DEC	JAN-DEC
	Largemouth bass		X X X X X X X X X X FEB-AUG	FEB-AUG	JAN-DEC	JAN-DEC
	Peacock bass		X X X X X X X X X X APR-NOV	APR-NOV	JAN-DEC	JAN-DEC
	Redear sunfish		X X X X X X X X X X FEB-AUG	FEB-AUG	JAN-DEC	JAN-DEC
	Tilapia		X X X X X X X X X X DEC-JUL	DEC-JUL	JAN-DEC	JAN-DEC
	White catfish		X X X X X X X X X X FEB-AUG	FEB-AUG	JAN-DEC	JAN-DEC

PLANT:

RAR#	Species	S/F T/E Conc.	J F M A M J J A S O N D
38	Water hyacinth		X X X X X X X X X X
	Water lettuce		X X X X X X X X X X
40	Goetzea elegans	S/F E/T	X X X X X X X X X X
41	Myrcia paganii	S/F E/E	X X X X X X X X X X
43	Schoepfia arenaria	S/F T/T	X X X X X X X X X X
44	Auerodendron pauciflorum	S/F E/E	X X X X X X X X X X
	Daphnopsis hellerana	S/F E/E	X X X X X X X X X X
	Goetzea elegans	S/F E/T	X X X X X X X X X X
	Ottoschulzia rhodoxylon	S/F E/E	X X X X X X X X X X
	Schoepfia arenaria	S/F T/T	X X X X X X X X X X
	Zanthoxylum thomasianum	S/F E/E	X X X X X X X X X X
46	Goetzea elegans	S/F E/T	X X X X X X X X X X
48	Zanthoxylum thomasianum	S/F E/E	X X X X X X X X X X
49	Calyptromoma rivalis	S/F T/T	X X X X X X X X X X
50	Myrcia paganii	S/F E/E	X X X X X X X X X X
52	Buxus vahlii	S/F E/E	X X X X X X X X X X
	Daphnopsis hellerana	S/F E/E	X X X X X X X X X X
53	Daphnopsis hellerana	S/F E/E	X X X X X X X X X X
54	Adiantum vivesii	S/F E/E	X X X X X X X X X X
55	Thelypteris verecunda	S/F E/E	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
29	Freshwater crab		X X X X X X X X X X APR-MAY	APR-MAY	-	JAN-DEC
	Native stream shrimp		X X X X X X X X X X AUG-NOV	AUG-NOV	JAN-DEC	JAN-DEC
35	Caribbean spiny lobster		X X X X X X X X X X APR-MAY	APR-MAY	JAN-DEC	JAN-DEC
	Octopus		X X X X X X X X X X AUG-NOV	AUG-NOV	JAN-DEC	JAN-DEC
38	Blue land crab		X X X X X X X X X X JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Native stream shrimp		X X X X X X X X X X DEC-MAR	DEC-APR	-	JAN-DEC
			X X X X X X X X X X JUL-AUG	JUL-AUG	JAN-DEC	JAN-DEC
			X X X X X X X X X X -	-	APR-MAY	-
			X X X X X X X X X X 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
17	Dolphins		X X X X X X X X X X -	-
	Whales		X X X X X X X X X X -	-
20	Sperm whale	S/F E/E HIGH	X X X X X X X X X X -	-
35	Dolphins		X X X X X X X X X X -	-
	Whales		X X X X X X X X X X -	-
36	Humpback whale	S/F E/E VERY HIGH	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	Internesting	Juveniles	Adults
32	Green sea turtle	S/F E/T	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 JAN-DEC	JAN-DEC	-	JAN-DEC	JAN-DEC
	Leatherback sea turtle	S/F E/E	X X X X X X X X X FEB-JUN	APR-SEP	-	APR-SEP	FEB-JUN
37	Puerto Rican boa	S/F E/E HIGH	X X X X X X X X X X -	-	-	JAN-DEC	JAN-DEC
40	Puerto Rican crested toad	S/F T/T	X X X X X X X X X X MAY-DEC	MAY-DEC	-	MAY-JAN	JAN-DEC
42	Puerto Rican crested toad	S/F T/T	X X X X X X X X X X MAY-DEC	MAY-DEC	-	MAY-JAN	JAN-DEC

TERRESTRIAL MAMMAL:

RAR#	Species	S/F T/E Conc.	J F M A M J J A S O N D
37	Bats	HIGH	X X X X X X X X X X

HUMAN USE RESOURCES:

HUN#	Name	Owner/Manager	Contact	Phone
FOREST				
53	BOSQUE GUAJATACA	DRNA	DIVISION DE MANEJO BOSQUES ESTATALES	787/721-5495
LOCK AND DAM:				
83	LAGO GUAJATACA DAM	PREPA	JOSE LIZASOAIN	787/895-2410
WILDLIFE REFUGE:				
317	REFUGIO LAGO GUAJATACA	DRNA	DIVISION DE RESERVAS NATURALES Y REFUGIOS DE VIDA SILVESTRE	787/724-2816
WATER INTAKE:				
193	GUAJATACA INTAKE	PRASA	PR 446, KM 5.6	787/872-6375
230	LLANADAS PARTIAL PLANT	PRASA	PR 437, KM 0.4	787/895-3896
272	QUEBRADILLAS FILTER PLANT			

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.