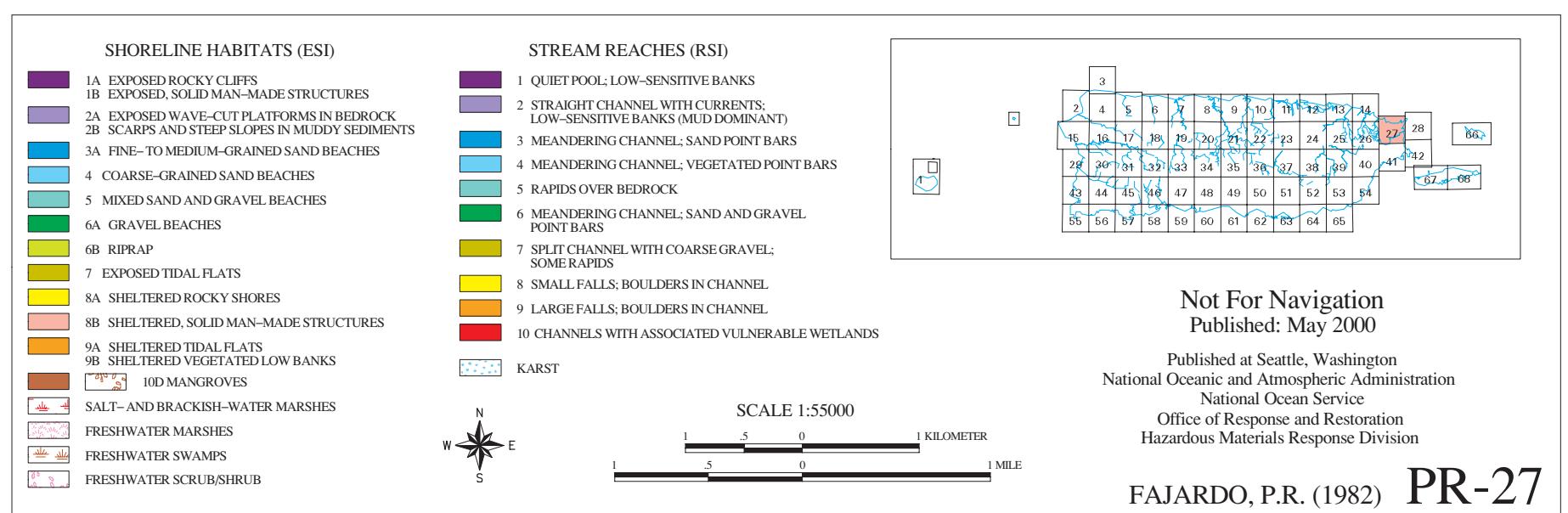
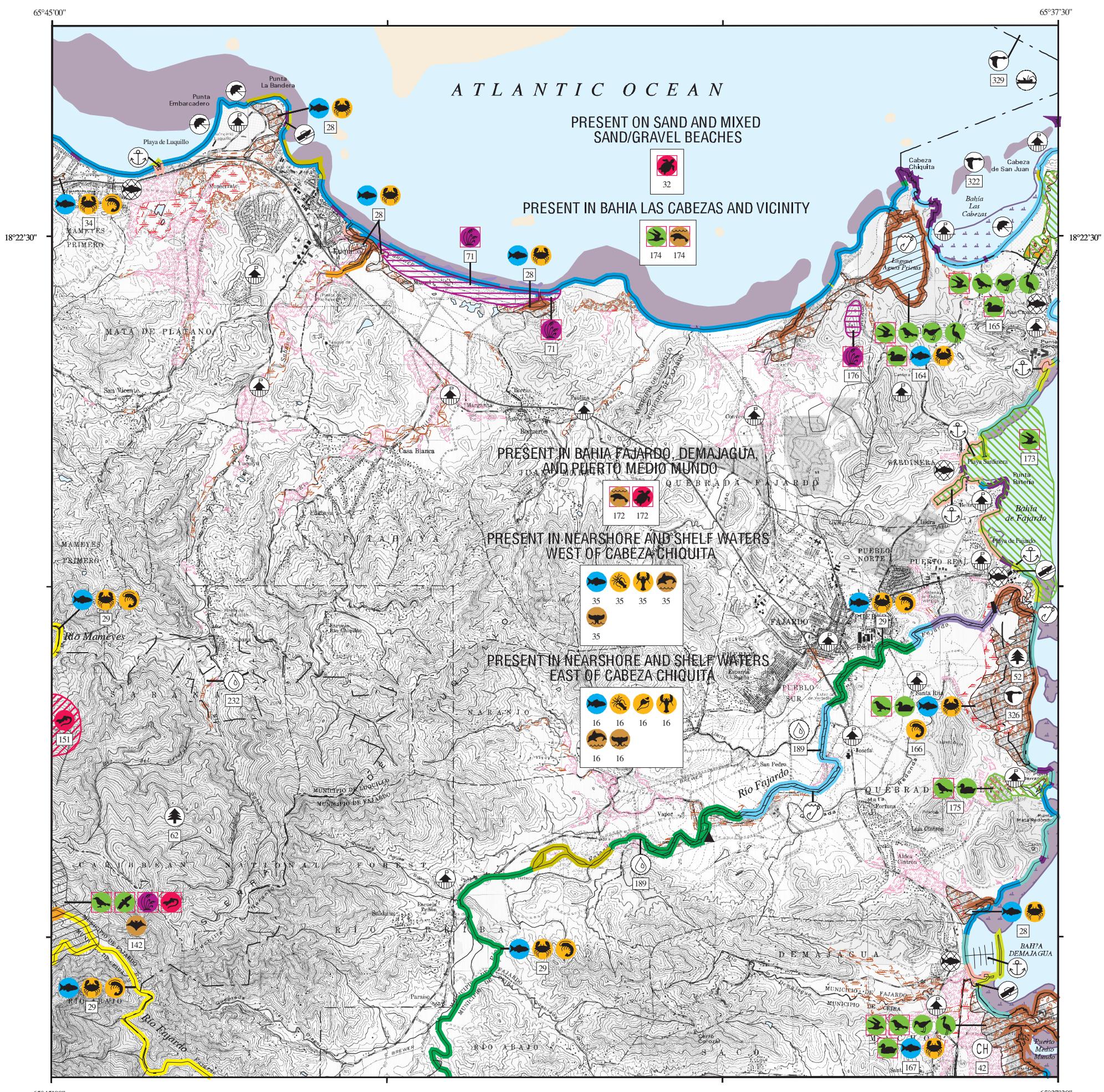


ENVIRONMENTAL SENSITIVITY INDEX MAP



PUERTO RICO - ESIMAP 27

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S/F T/E Conc.	J F M A M J J A S O N D Nesting
142	Elfin woods warbler		X X X X X X X X X X X X X X MAR-AUG
	Merlin		X X X X X X X X X X X X X X -
	Peregrine falcon	S E	X X X X X X X X X X X X X X -
	Puerto Rican broad-winged hawk	S/F E/E	X X X X X X X X X X X X X X JAN-AUG
	Puerto Rican parrot	S/F E/E	X X X X X X X X X X X X X X FEB-AUG
	Puerto Rican sharp-shinned hawk	S/F E/E	X X X X X X X X X X X X X X MAR-AUG
	White-crowned pigeon		X X X X X X X X X X X X X X MAR-SEP
164	American coot	HIGH	X X X X X X X X X X X X X X -
	Blue-winged teal	HIGH	X X X X X X X X X X X X X X -
	Brown pelican	S/F E/E	X X X X X X X X X X X X X X -
	Caribbean coot	S T	HIGH X X X X X X X X X X X X X X -
	Gulls		HIGH X X X X X X X X X X X X X X -
	Pied-billed grebe		LOW X X 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 X X -
	Shorebirds		LOW X X X X X X X X X X X X X X -
	Terns		HIGH X X 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 X X APR-JUL
	West Indian whistling-duck	S T	LOW X X X X X X X X X X X X X X JAN-DEC
	White-cheeked pintail		HIGH X X X X X X X X X X X X X X FEB-JUN
	White-crowned pigeon		X X X X X X X X X X X X X X MAR-SEP
165	Brown pelican	S/F E/E	X X X X X X X X X X X X X X -
	Common moorhen		X X X X X X X X X X X X X X -
	Magnificent frigatebird		X X X X X X X X X X X X X X -
	Ruddy duck	S T	X X X X X X X X X X X X X X -
	Shorebirds		X X X X X X X X X X X X X X -
	Wading birds		X X X X X X X X X X X X X X -
	Waterfowl		X X 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 X X FEB-JUN
	White-crowned pigeon		X X X X X X X X X X X X X X MAR-SEP
166	White-cheeked pintail		X X X X X X X X X X X X X X FEB-JUN
	White-crowned pigeon		X X X X X X X X X X X X X X MAR-SEP
	Yellow-shouldered blackbird	S/F E/E	X X X X X X X X X X X X X X MAR-SEP
167	American coot	HIGH	X X X X X X X X X X X X X X -
	Black-necked stilt		X X X X X X X X X X -
	Blue-winged teal	HIGH	X X X X X X X X X X -
	Brown pelican	S/F E/E	X X X X X X X X X X X X X X -
	Caribbean coot	S T	HIGH X X 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 X X -
	Green-winged teal		LOW X X X X X X X X X X X X X X -
	Least grebe	S T	X X X X X X X X X X X X X X -
	Lesser scaup		LOW 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 -
	Ring-necked duck		LOW X X 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 X X -
	Shorebirds		HIGH X X 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 X X -
	West Indian whistling-duck	S T	X X X X X X X X X X X X X X JAN-DEC
	White-cheeked pintail		MEDIUM X X X X X X X X X X X X X X FEB-JUN
	White-crowned pigeon		X X X X X X X X X X X X X X MAR-SEP
	Yellow-shouldered blackbird	S/F E/E	X X X X X X X X X X X X X X MAR-SEP
173	Brown pelican	S/F E/E	X X X X X X X X X X X X X X -
	Laughing gull		X X X X X X X X -
	Magnificent frigatebird		X X X X X X X X X X X X X X -
	Royal tern		X X X X X X X X X X X X X X -
	Sandwich tern		X X X X X X X X X X X X X X -
174	Brown pelican	S/F E/E	X X X X X X X X X X X X X X -
	Gulls		X X X X X X X X X X X X X X -
	Terns		X X X X X X X X -
175	White-cheeked pintail		X X X X X X X X X X X X X X FEB-JUN
	White-crowned pigeon		X X X X X X X X X X X X X X MAR-SEP
	Yellow-shouldered blackbird	S/F E/E	X X X X X X X X X X X X X X MAR-SEP

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 X X JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Reef fish		X X X X X X X X X X X X X X JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
28	Nursery fish		X X 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 X X APR-FEB	APR-FEB	JAN-DEC	JAN-DEC
	Tarpon		X X X X X X X X X X X X X X -	-	MAY-DEC	JAN-DEC
29	Native stream fish		X X X X X X X X X X X X X X JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
			APR-MAY	APR-MAY	JAN-DEC	JAN-DEC
			AUG-NOV	AUG-NOV	AUG-NOV	-
34	Native stream fish		X X X X X X X X -	-	APR-MAY	-
					AUG-NOV	-
	Nursery fish		X X 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 X X APR-FEB	APR-FEB	JAN-DEC	JAN-DEC
	Tarpon		X X X X X X X X X X X X X X -	-	MAY-DEC	JAN-DEC
35	Pelagic fish		X X X X 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 X X X X JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
164	Nursery fish		X X 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 X X APR-FEB	APR-FEB	JAN-DEC	JAN-DEC
	Tarpon		X X X X X X X X X X X X X X -	-	MAY-DEC	JAN-DEC
166	Native stream fish		X X X X X X X X -	-	APR-MAY	-
					AUG-NOV	-
	Nursery fish		X X 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 X X APR-FEB	APR-FEB	JAN-DEC	JAN-DEC
	Tarpon		X X X X X X X X X X X X X X -	-	MAY-DEC	JAN-DEC
167	Nursery fish		X X 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 X X APR-FEB	APR-FEB	JAN-DEC	JAN-DEC
	Tarpon		X X X X X X X X X X X X X X -	-	MAY-DEC	JAN-DEC

PLANT:

RAR#	Species	S/F T/E Conc.	J F M A M J J A S O N D
71	Stahlia monosperma	S/F T/T	X X X X X X X X X X X X X X
142	Ilex sintenisii	S/F E/E	X X X X X X X X X X X X X X
176	Goetzea elegans	S/F E/T	X X X X 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 X X X X

PUERTO RICO - ESIMAP 27 cont.

BIOLOGICAL RESOURCES: cont.

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	JAN-DEC
	Octopus		X X X X X X X X X X X X DEC-MAR	DEC-APR	-	JAN-DEC	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	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	JAN-DEC
29	Freshwater crab		X X X X X X X X X X X X APR-MAY	APR-MAY	-	JAN-DEC	JAN-DEC	JAN-DEC
	Native stream shrimp		X X X X X X X X X X X X AUG-NOV	AUG-NOV	APR-MAY	JAN-DEC	JAN-DEC	JAN-DEC
34	Blue land crab		X X X X X X X X X X X X AUG-NOV	AUG-NOV	JUL-SEP	JAN-DEC	JAN-DEC	JAN-DEC
	Native stream shrimp		X X X X X X X X X X X X -	-	APR-MAY	-	-	-
166	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	JAN-DEC
35	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	JAN-DEC
	Octopus		X X X X X X X X X X X X DEC-MAR	DEC-APR	-	JAN-DEC	JAN-DEC	JAN-DEC
164	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	JAN-DEC
	Native stream shrimp		X X X X X X X X X X X X -	-	APR-MAY	-	-	-
167	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	JAN-DEC

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	-	-
35	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	-	-
172	West Indian manatee	S/F E/E	X X X X X X X X X X X X	JAN-DEC	JAN-DEC
174	West Indian manatee	S/F E/E	X X X X X X X X X X X X	JAN-DEC	JAN-DEC

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 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
142	Mottled coqui	S T	X X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
	Puerto Rican boa	S/F E/E	X X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
151	Ground coqui		X X X X X X X X X X X X	-	-	-	JAN-DEC	JAN-DEC
172	Green sea turtle	S/F E/T	X X X X X X X X X X X X	-	-	-	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

TERRESTRIAL MAMMAL:

RAR#	Species	S/F T/E Conc.	J F M A M J J A S O N D
142	Red fruit bat		X X X X X X X X X X X X

HUMAN USE RESOURCES:

HUN#	Name	Owner/Manager	Contact	Phone
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CRITICAL HABITAT:

42	YELLOW-SHOULDERED BLACKBIRD DCH	USFWS	CARIBBEAN FIELD OFFICE	787/851-7297
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FOREST:

52	BOSQUE DE CEIBA	DRNA	DIVISION DE MANEJO BOSQUES ESTATALES	787/721-5495
62	CARIBBEAN NATIONAL FOREST	USFS	FOREST BIOLOGIST	787/888-5659

WILDLIFE REFUGE:

322	RESERVA NATURAL CABEZAS DE SAN JUAN	DRNA/PRCT	DIVISION DE RESERVAS NATURALES Y REFUGIOS DE VIDA SILVESTRE	787/724-2816
326	RESERVA NATURAL DE CEIBA	DRNA	DIVISION DE RESERVAS NATURALES Y REFUGIOS DE VIDA SILVESTRE	787/724-2816
329	RESERVA NATURAL DE LA CORDILLERA	DRNA	DIVISION DE RESERVAS NATURALES Y REFUGIOS DE VIDA SILVESTRE	787/724-2816

WATER INTAKE:

HUN#	Name	Owner/Manager	Location	Phone
189	FAJARDO FILTER PLANT	PRASA		
232	LUQUILLO FILTER PLANT	PRASA		

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.