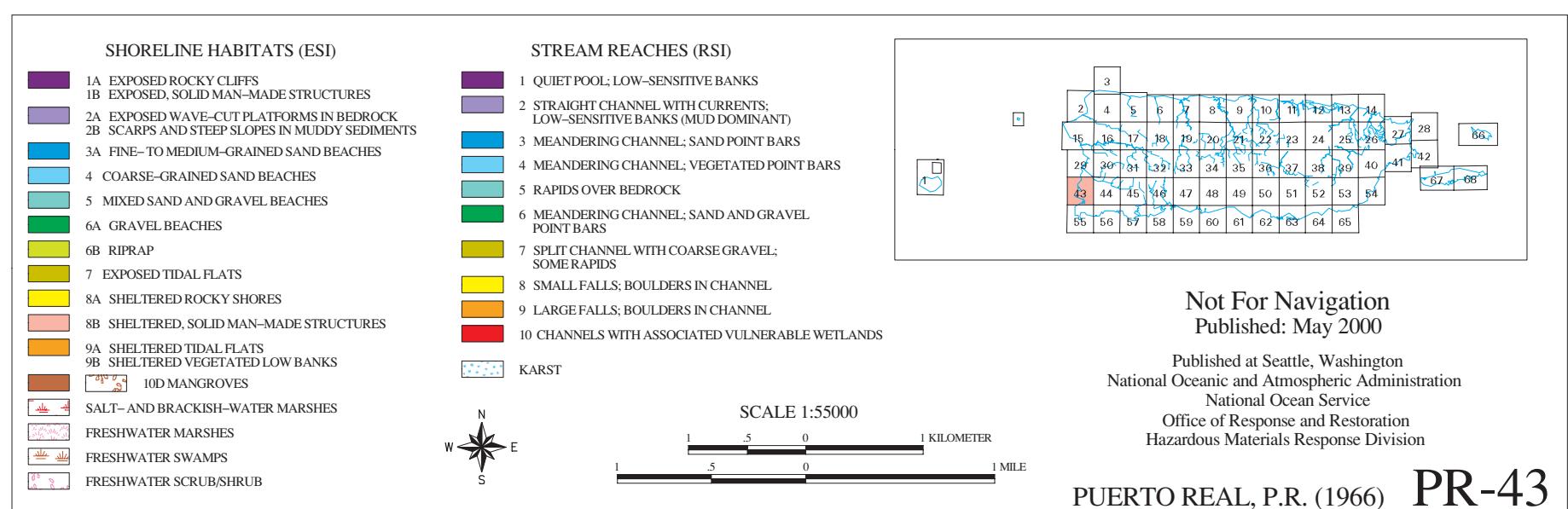
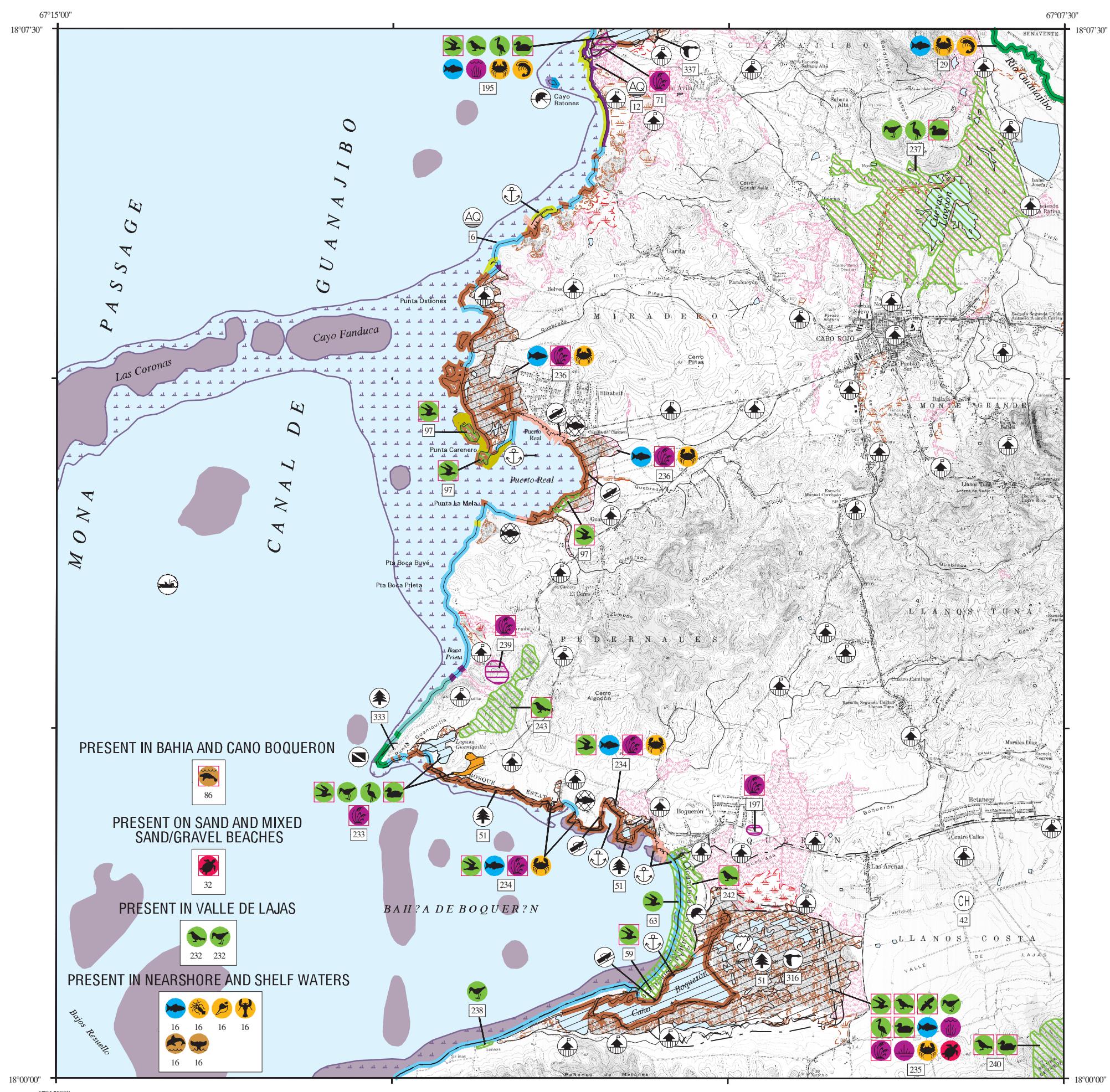


# ENVIRONMENTAL SENSITIVITY INDEX MAP



# PUERTO RICO - ESIMAP 43

## BIOLOGICAL RESOURCES:

### BIRD:

RAR# Species	S/F T/E Conc.	J F M A M J J A S O N D Nesting
59 Least tern	S T	X X X X X X APR-JUL
63 Seabirds		X X X X X X X X X X X X
97 Brown pelican	S/F E/E	X X X X X X X X X X X X
195 Belted kingfisher		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
Green heron		X X X X X X X X X X X X
Purple gallinule		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
232 Common snipe	HIGH	X X X X X X X X X X X X
Mourning dove	HIGH	X X X X X X X X X X X X MAR-AUG
White-winged dove	HIGH	X X X X X X X X X X X X JAN-DEC
Zenaida dove	HIGH	X X X X X X X X X X X X JAN-DEC
233 American coot		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 X X
Blue-winged teal		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
Caribbean coot	S T	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
Magnificent frigatebird		X X X X X X X X X X X X
Pied-billed grebe		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
Shorebirds		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
West Indian whistling-duck	S T	X X X X X X X X X X X X
White-cheeked pintail		X X X X X X X X X X X X
234 Brown pelican	S/F E/E	X X X X X X X X X X X X
235 American coot	HIGH	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
Brown pelican	S/F E/E HIGH	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
Common moorhen	HIGH	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
Magnificent frigatebird		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
Pied-billed grebe	LOW	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 JUN-AUG
Shorebirds	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
White-cheeked pintail		X X X X X X X X X X X X
Yellow-breasted crake	S T	X X X X X X X X X X X X
Yellow-shouldered blackbird	S/F E/E	X X X X X X X X X X X X MAR-SEP
237 Blue-winged teal	HIGH	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 X X X X X
Pied-billed grebe	HIGH	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
Ruddy duck	S T HIGH	X X X X X X X X X X X X JUN-AUG
Shorebirds		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	X X X X X X X X X X X X
White-cheeked pintail		X X X X X X X X X X X X
238 Shorebirds	HIGH	X X X X X X X X X X X X
240 Puerto Rican nightjar	S/F E/E	X X X X X X X X X X X X FEB-JUL
West Indian whistling-duck	S T POTENTIAL	X X X X X X X X X X X X JAN-DEC
242 Yellow-shouldered blackbird	S/F E/E	X X X X X X X X X X X X MAR-SEP
243 Puerto Rican nightjar	S/F E/E	X X X X X X X X X X X X FEB-JUL

### 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
Reef fish		X X 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 X X APR-MAY	APR-MAY	APR-MAY	JAN-DEC
		AUG-NOV	AUG-NOV	AUG-NOV	
195 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
Tarpon		X X X X X X X X X X X X	-	MAY-DEC	JAN-DEC
234 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
Tarpon		X X X X X X X X X X X X	-	MAY-DEC	JAN-DEC
235 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
Tarpon		X X X X X X X X X X X X	-	MAY-DEC	JAN-DEC
236 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
Tarpon		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
195 Submersed aquatic vegetation		X X X X X X X X X X X X
197 Stahlia monosperma	S/F T/T	X X X X X X X X X X X X
233 Stahlia monosperma	S/F T/T	X X X X X X X X X X X X
234 Stahlia monosperma	S/F T/T	X X X X X X X X X X X X
235 Floating aquatic vegetation		X X X X X X X X X X X X
Spiny naiad		X X X X X X X X X X X X
Stahlia monosperma	S/F T/T	X X X X X X X X X X X X
236 Stahlia monosperma	S/F T/T	X X X X X X X X X X X X
239 Trichilia triacantha	S/F E/E	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
Octopus		X X X X X X X X X X X X DEC-MAR	DEC-APR	-	JAN-DEC
Queen conch		X X X X X X X X X X X X APR-OCT	APR-OCT	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
		AUG-NOV	AUG-NOV	AUG-NOV	
Native stream shrimp		X X X X X X X X X X X X APR-MAY	APR-MAY	JAN-DEC	JAN-DEC
		AUG-NOV	AUG-NOV	AUG-NOV	
195 Blue crabs		X X X X X X X X X X X X	-	-	JAN-DEC
Blue land crab		X X X X X X X X X X X X JUL-AUG	JUL-AUG	JUL-SEP	JAN-DEC
Penaeid shrimp		X X X X X X X X X X X X	-	-	JAN-DEC
234 Blue land crab		X X X X X X X X X X X X JUL-AUG	JUL-AUG	JUL-SEP	JAN-DEC
235 Blue land crab		X X X X X X X X X X X X JUL-AUG	JUL-AUG	JUL-SEP	JAN-DEC
236 Blue land crab		X X X X X X X X X X X X JUL-AUG	JUL-AUG	JUL-SEP	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	-
86 West Indian manatee	S/F E/E	X X X X X X X X X X X X JAN-DEC	JAN-DEC

# PUERTO RICO - ESIMAP 43 cont.

## BIOLOGICAL RESOURCES: cont.

### 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 FEB-JUN	APR-SEP	-	APR-SEP	FEB-JUN
235	Jicotea		X X X X X X X X X X X X APR-JUL	JUN-OCT	-	JAN-DEC	JAN-DEC

## HUMAN USE RESOURCES:

HUN# Name	Owner/Manager	Contact	Phone
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### AQUACULTURE:

6 AQUACULTURE  
12 MARICULTURE FACILITY  
JOY BIO FARM  
LUIS MORALES

### CRITICAL HABITAT:

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

### FOREST:

51 BOSQUE DE BOQUERON  
DRNA  
DIVISION DE MANEJO BOSQUES  
ESTATALES  
787/721-5495

### WILDLIFE REFUGE:

316 REFUGIO DE BOQUERON	DRNA	DIVISION DE RESERVAS NATURALES 787/724-2816 Y REFUGIOS DE VIDA SILVESTRE
333 RESERVA NATURAL DE PUNTA GUANIQUELLA	DRNA/PRCT	DIVISION DE RESERVAS NATURALES 787/724-2816 Y REFUGIOS DE VIDA SILVESTRE
337 RESERVA NATURAL LAGUNA JOYUDA	DRNA	DIVISION DE RESERVAS NATURALES 787/724-2816 Y REFUGIOS DE VIDA SILVESTRE

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.