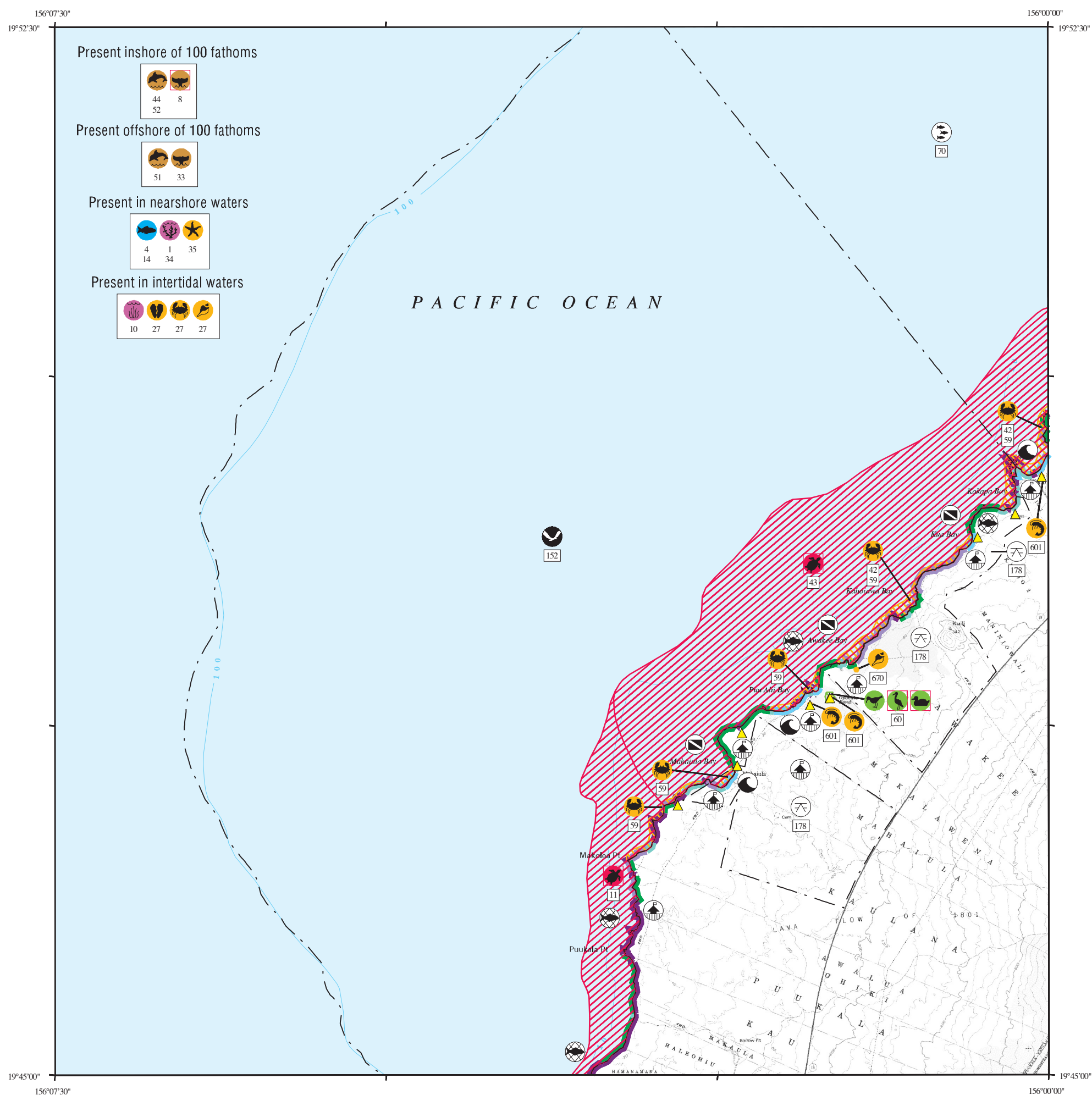


ENVIRONMENTAL SENSITIVITY INDEX MAP



SHORELINE HABITATS (ESI)

- 1A EXPOSED ROCKY CLIFFS
- 1B EXPOSED, SOLID MAN-MADE STRUCTURES
- 2A EXPOSED WAVE-CUT PLATFORMS IN BEDROCK
- 2B EXPOSED SCARPS AND STEEP SLOPES IN CLAY
- 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
- 8C SHELTERED RIPRAP
- 9A SHELTERED TIDAL FLATS
- 9B SHELTERED VEGETATED LOW BANKS
- 10A SALT- AND BRACKISH-WATER MARSHES
- 10B FRESHWATER MARSHES
- 10C FRESHWATER SWAMPS
- 10D MANGROVES
- FRESHWATER SCRUB/SHRUB WETLANDS

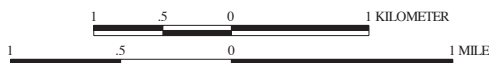
PRESENT IN AREA:

- Shorebirds
- Archaeological Sites

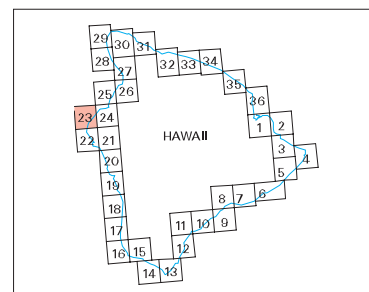
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SCALE 1:55000



Not For Navigation



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National Ocean Service
Office of Response and Restoration
Hazardous Materials Response Division

HAWAII - ESIMAP 23

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S/F	T/E	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Laying	Hatching	Fledging
60	Hawaiian coot	S/F	E/E		X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	-	-	-
	Hawaiian duck	S/F	E/E		X	X	X	X	X	X	X	X	X	X	X	X	MAR-SEP	-	-	-
	Hawaiian stilt	S/F	E/E		X	X	X	X	X	X	X	X	X	X	X	X	MAR-JUL	-	-	-
	Pacific golden plover				X	X	X					X	X	X	X		-	-	-	
	Shorebirds				X	X	X					X	X	X	X		-	-	-	
	Wandering tattler				X	X	X	X				X	X	X	X		-	-	-	
	Waterfowl				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
4	Angelfish				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Bigeyes				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Blennies				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Boxfish				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Butterflyfish				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Cardinalfish				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Cornetfish				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Damselfish				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Filefish				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Groupers				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Hawkfish				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Lizardfish				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Moray eels				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Parrotfish				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Puffers				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Rudderfish				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Scorpionfish				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Snappers				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Squirrelfish				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Surgeonfish				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Triggerfish				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Trumpetfish				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Wrasses				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
14	Bigeye scad				X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Bonfish				X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Goatfish				X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Hawaiian flagtail				X	X	X	X	X	X	X	X	X	X	X	X	DEC-FEB	-	-	JAN-DEC	JAN-DEC
	Hawaiian silverside				X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Jacks				X	X	X	X	X	X	X	X	X	X	X	X	JUN-AUG	-	-	JAN-DEC	JAN-DEC
	Mackerel scad				X	X	X	X	X	X	X	X	X	X	X	X	DEC-FEB	-	-	JAN-DEC	JAN-DEC
	Milkfish				X	X	X	X	X	X	X	X	X	X	X	X	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC	JAN-DEC
	Striped mullet				X	X	X	X	X	X	X	X	X	X	X	X	DEC-FEB	-	-	MAR-NOV	JAN-DEC
	Threadfin				X	X	X	X	X	X	X	X	X	X	X	X	JUN-AUG	JUN-AUG	JUN-AUG	JAN-DEC	JAN-DEC

HABITAT:

RAR#	Species	S/F	T/E	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning
1	Coral reef habitat				X	X	X	X	X	X	X	X	X	X	X	X	-
10	Algae				X	X	X	X	X	X	X	X	X	X	X	X	-
34	High live coral cover				X	X	X	X	X	X	X	X	X	X	X	X	JUN-AUG

INVERTEBRATE:

RAR#	Species	S/F	T/E	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawn/Mate	Eggs	Larvae	Juveniles	Adults
27	Limpets				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-
	Neretid snails				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-
	Rock oyster				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-
	Thin-shelled rock crab				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-
35	Echinoderms				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-
42	Tidepool invertebrates				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-
59	Intertidal invertebrates				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-
601	Anchialine pool shrimp				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-
670	Anchialine pool snail				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	-

MARINE MAMMAL:

RAR#	Species	S/F	T/E	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Mating	Calving	Pupping	Molting
8	Humpback whale	S/F	E/E	HIGH	X	X	X	X									-	JAN-APR	-	-
33	False killer whale				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
	Shortfin pilot whale				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
44	Spinner dolphin			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
51	Spotted dolphin			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
52	Bottlenose dolphin				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
11	Green sea turtle	S/F	T/T		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
43	Green sea turtle	S/F	T/T	VERY HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC

HUMAN USE RESOURCES:

MANAGEMENT AREA:

HUN#	Name	Owner	Contact	Phone
70	KA'UPULEHU FRA			

MARINE SANCTUARY:

HUN#	Name	Owner	Contact	Phone
152	HAWAIIAN ISLANDS HUMPBACK WHALE NMS	NOAA	HAWAIIAN ISLANDS HUMPBACK WHALE NMS	808/397-2651

PARK:

HUN#	Name	Owner	Contact	Phone
178	KEKAHA KAI STATE PARK			

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.