

Bristol Bay: ESIMAP 1

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating		Molting
1	White-winged scoter			HIGH				X	X		X	X	X	X			-	APR-MAY	JUL-OCT	JUL-SEP
2	Black scoter			100S				X	X		X	X	X				-	APR-MAY	AUG-OCT	-
	Brant			100S				X	X		X	X	X				-	APR-MAY	AUG-OCT	-
	King eider			1,000S				X	X		X	X	X				-	APR-MAY	AUG-OCT	JUL-OCT
	Long-tailed duck			100S				X	X								-	APR-MAY		-
	Steller's eider	C	T	1,000S				X	X		X	X	X				-	APR-MAY	AUG-OCT	-
3	Black scoter			100S				X	X		X	X	X				-	APR-MAY	AUG-OCT	-
	Brant			10,000S				X	X		X	X	X				-	APR-MAY	AUG-OCT	-
	Canada goose			1,000S				X	X		X	X	X				-	APR-MAY	AUG-OCT	-
	Common eider			100S				X	X		X	X	X				-	APR-MAY	AUG-OCT	-
	Emperor goose			1,000S				X	X		X	X	X				-	APR-MAY	AUG-OCT	-
	Northern pintail			1,000S				X	X		X	X	X				-	APR-MAY	AUG-OCT	-
	Scaup			1,000S				X	X		X	X	X				-	APR-MAY	AUG-OCT	-
	Steller's eider	C	T	10,000S				X	X		X	X	X				-	APR-MAY	AUG-OCT	JUL-AUG
	White-winged scoter			100S							X	X	X				-	AUG-OCT		-
4	Brant			1,000S				X	X		X	X	X				-	APR-MAY	AUG-OCT	-
	Canada goose			1,000S				X	X		X	X	X				-	APR-MAY	AUG-OCT	-
	Common eider			100S				X	X		X	X	X				-	APR-MAY	AUG-OCT	-
	Dunlin									X	X	X	X	X			-	JUN-OCT		-
	Emperor goose			100S				X	X		X	X	X				-	APR-MAY	AUG-OCT	-
	Least sandpiper			1,000S						X	X	X					MAY-JUL	MAY-JUL	-	
	Northern pintail			100S				X	X		X	X	X				-	APR-MAY	AUG-OCT	-
	Red-necked phalarope			1,000S					X	X	X	X	X	X			MAY-JUL	MAY-OCT	-	
	Rock sandpiper									X	X	X	X	X			-	JUN-OCT		-
	Sanderling									X	X	X	X				-	JUN-OCT		-
	Scaup			100S				X	X		X	X	X				-	APR-MAY	AUG-OCT	-
	Shorebirds			19,000				X	X	X	X	X	X	X			MAY-JUL	APR-OCT		-
	Steller's eider	C	T	100S				X	X		X	X	X	X			-	APR-MAY	AUG-OCT	JUL-AUG
	Western sandpiper			1,000S				X	X	X	X						-	APR-JUL		-
5	Waterfowl			HIGH			X	X			X	X					-	APR-MAY	SEP-OCT	-
6	Black turnstone								X	X	X						MAY-JUL	MAY-JUL		-
	Black-bellied plover								X	X	X						-	MAY-JUL		-
	Dunlin			1,000S				X	X	X	X	X	X	X			MAY-JUL	APR-OCT		-
	Least sandpiper			1,000S					X	X	X	X	X	X			MAY-JUL	MAY-OCT		-
	Rock sandpiper			1,000S				X	X	X	X	X	X	X			MAY-JUL	APR-OCT		-
	Ruddy turnstone								X	X	X						-	MAY-JUL		-
	Shorebirds			25,000				X	X	X	X	X	X	X			MAY-JUL	APR-OCT		-
	Waterfowl			HIGH			X	X		X	X	X	X				-	APR-MAY	SEP-OCT	JUL-AUG
	Western sandpiper			1,000S				X	X	X	X						-	APR-JUL		-
7	Black scoter			100S				X	X		X	X	X				-	APR-MAY	AUG-OCT	-
	Brant			100S				X	X		X	X	X				-	APR-MAY	AUG-OCT	-
	Canada goose			100S				X	X		X	X	X				-	APR-MAY	AUG-OCT	-
	Emperor goose			100S				X	X		X	X	X				-	APR-MAY	AUG-OCT	-
	Long-tailed duck			100S				X	X		X	X	X				-	APR-MAY	AUG-OCT	-
	Northern pintail			100S				X	X		X	X	X				-	APR-MAY	AUG-OCT	-
	Scaup			100S				X	X		X	X	X				-	APR-MAY	AUG-OCT	-
	Steller's eider	C	T	100S				X	X		X	X	X				-	APR-MAY	AUG-OCT	-
	White-winged scoter			100S				X	X		X	X	X				-	APR-MAY	AUG-OCT	-
14	Harlequin duck							X	X		X	X	X				-	APR-MAY	AUG-OCT	-
21	Red-throated loon											X	X	X			-	SEP-NOV		SEP-NOV
32	Harlequin duck			100S				X	X		X	X	X				-	APR-MAY	AUG-OCT	-
33	Common eider							X	X		X	X	X				-	APR-MAY	AUG-OCT	-
	King eider							X	X		X	X	X				-	APR-MAY	AUG-OCT	-
160	Bald eagle							X	X	X	X	X					APR-AUG	-		-
217	Glaucous-winged gull			10				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Pelagic cormorant			104				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Pigeon guillemot			UNKNOWN				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
218	Black-legged kittiwake			UNKNOWN				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Glaucous-winged gull			16				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Horned puffin			200				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Pelagic cormorant			18				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Pigeon guillemot			UNKNOWN				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
219	Horned puffin			4				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Pelagic cormorant			54				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Tufted puffin			10				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
220	Black-legged kittiwake			7,549				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Common murre			102,632				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Glaucous-winged gull			1,604				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Horned puffin			UNKNOWN				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Parakeet auklet			UNKNOWN				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Tufted puffin			5,000				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
221	Black-legged kittiwake			1,000S				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Cormorant			110				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Glaucous-winged gull			6				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Horned puffin			222				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Murre			30,300				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Parakeet auklet			UNKNOWN				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Pigeon guillemot			UNKNOWN				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
222	Black-legged kittiwake			35,237				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Common murre			42,646				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Horned puffin			30				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Pelagic cormorant			49				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
223	Black-legged kittiwake			9,689				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Common murre			14,093				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Glaucous-winged gull			13				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Pelagic cormorant			41				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
224	Black-legged kittiwake			13,990				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Common murre			12,623				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Pelagic cormorant			106				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
225	Black-legged kittiwake			1,792				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Common murre			614				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Glaucous-winged gull			102				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Horned puffin			32				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Pelagic cormorant			287				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Tufted puffin			35				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
226	Black-legged kittiwake			11,304				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Common eider			10				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Common murre			13,606				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Glaucous-winged gull			2				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Horned puffin			900				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Parakeet auklet			100				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Pelagic cormorant			81				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Pigeon guillemot			300				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Tufted puffin			100				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-

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.

Bristol Bay: ESIMAP 1 (cont.)

BIOLOGICAL RESOURCES: (cont.)

BIRD:																					
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating		Molting	
227	Black-legged kittiwake			11,482					X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-	
	Common eider			100					X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-	
	Common murre			102,368					X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-	
	Double-crested cormorant			600					X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-	
	Glaucous-winged gull			2,280					X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-	
	Horned puffin			UNKNOWN					X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-	
	Parakeet auklet			UNKNOWN					X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-	
	Pelagic cormorant			100					X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-	
	Pigeon guillemot			3					X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-	
	Tufted puffin			80,000					X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-	
228	Black-legged kittiwake			16					X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-	
	Common murre			1,000S					X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-	
	Pelagic cormorant			70					X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-	
246	Aleutian tern			UNKNOWN					X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-	
247	Glaucous-winged gull			2					X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-	
	Pelagic cormorant			18					X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-	
248	Glaucous-winged gull			11					X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-	
	Pelagic cormorant			20					X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-	
249	Glaucous-winged gull			6					X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-	
	Pelagic cormorant			UNKNOWN					X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-	
250	Pelagic cormorant			9					X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-	
FISH:																					
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
8	Pacific herring									X	X	X					MAY-JUN	MAY-JUL	MAY-JUL	JUN-JUL	MAY-JUN
9	Capelin									X	X	X	X				MAY-AUG	JUN-JUL	JUN-AUG	-	MAY-AUG
10	Pacific herring								X	X	X	X					APR-JUN	MAY-JUL	-	-	APR-JUL
11	Capelin									X	X	X	X				MAY-AUG	JUN-JUL	JUN-AUG	-	MAY-AUG
	Pacific herring			HIGH					X	X	X	X					APR-JUN	MAY-JUL	-	-	APR-JUL
15	Rainbow smelt			HIGH					X	X							-	-	-	APR-MAY	-
22	Chinook salmon									X	X	X	X				-	-	-	MAY-JUN	MAY-AUG
	Chum salmon (dog)									X	X	X	X				-	-	-	MAY-JUN	JUN-AUG
	Coho salmon (silver)									X	X	X	X	X	X		-	-	-	MAY-JUN	JUL-OCT
	Dolly varden									X	X	X	X	X			-	-	-	MAY-JUN	MAY-SEP
	Pink salmon (humpy)									X	X	X	X				-	-	-	MAY-JUN	JUN-AUG
	Saffron cod						X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Starry flounder									X	X	X					-	-	-	JUN-AUG	JUN-AUG
25	Chinook salmon									X	X	X	X				-	-	-	MAY-JUN	MAY-AUG
	Chum salmon (dog)									X	X	X	X				-	-	-	MAY-JUN	JUN-AUG
	Coho salmon (silver)									X	X	X	X	X	X		-	-	-	MAY-JUN	JUL-OCT
	Dolly varden									X	X	X	X	X			-	-	-	MAY-JUN	MAY-SEP
	Pink salmon (humpy)									X	X	X					-	-	-	MAY-JUN	JUN-JUL
	Sockeye salmon (red)			HIGH						X	X	X	X				-	-	-	MAY-JUN	MAY-AUG
26	Alaska plaice					X	X	X	X	X	X	X	X	X	X	X	MAR-MAY	MAY-JUN	MAY-JUN	JAN-DEC	JAN-DEC
	Pacific cod					X	X	X	X	X	X	X	X	X	X	X	JAN-MAY	-	-	JAN-DEC	JAN-DEC
	Pacific halibut									X	X	X	X				-	-	-	-	JUL-OCT
	Rainbow smelt					X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Rock sole					X	X	X	X	X	X	X	X	X	X	X	JAN-MAR	-	-	JAN-DEC	DEC-SEP
	Sculpin					X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Starry flounder					X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Walleye pollock					X	X	X	X	X	X	X	X	X	X	X	FEB-MAY	-	-	JAN-DEC	JAN-DEC
	Yellowfin sole					X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	JUN-AUG	JUN-NOV	JAN-DEC	MAY-AUG
139	Chum salmon (dog)					X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Dolly varden					X	X	X	X	X	X	X	X	X	X	X	AUG-OCT	AUG-DEC	DEC-JUN	JAN-DEC	JAN-DEC
143	Chum salmon (dog)					X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Dolly varden					X	X	X	X	X	X	X	X	X	X	X	AUG-OCT	AUG-DEC	DEC-JUN	JAN-DEC	JAN-DEC
	Sockeye salmon (red)					X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	JUN-SEP
144	Chum salmon (dog)					X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Coho salmon (silver)					X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	OCT-MAR	MAR-MAY	JAN-DEC	JUL-NOV
	Dolly varden					X	X	X	X	X	X	X	X	X	X	X	AUG-OCT	AUG-DEC	DEC-JUN	JAN-DEC	JAN-DEC
	Sockeye salmon (red)					X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	JUN-SEP
INVERTEBRATE:																					
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
26	Red king crab				X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUL	-	-	JAN-DEC	JAN-DEC
	Tanner crab				X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUN	-	-	JAN-DEC	JAN-DEC
MARINE MAMMAL:																					
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Mating	Calving	Molting	Pupping	
3	Steller (Northern) sea lion	C	E						X	X	X	X	X				-	-	-	-	
4	Beluga whale			>20					X	X	X	X	X	X			-	JUN-AUG	-	-	
5	Steller (Northern) sea lion	C	E						X	X	X	X	X				-	-	-	-	
16	Walrus			>200					X	X	X	X	X	X			-	-	-	-	
17	Walrus			4-5444					X	X	X	X	X	X			-	-	-	-	
18	Walrus			284-12,500					X	X	X	X	X	X			-	-	-	-	
23	Steller (Northern) sea lion	C	E	130-499					X	X	X	X	X				-	-	-	-	
24	Walrus			HIGH					X	X	X					X	DEC-MAR	-	-	-	
27	Bearded seal				X	X	X	X	X	X						X	-	-	-	MAR-MAY	
	Beluga whale								X	X	X	X	X	X	X		-	JUN-AUG	-	-	
	Harbor porpoise									X	X	X					-	-	-	-	
	Minke whale									X	X	X					-	-	-	-	
	Ringed seal					X	X	X	X	X	X			X	X	X	-	-	MAR-JUL	MAR-MAY	
	Spotted seal					X	X	X	X	X				X	X		-	-	-	-	
	Walrus								X	X	X			X	X	X	-	-	-	-	
28	Ringed seal					X	X	X	X							X	-	-	-	MAR-APR	
29	Bearded seal					X	X	X	X							X	-	-	-	MAR-APR	
30	Gray whale								X	X	X						-	-	-	-	
31	Harbor porpoise									X	X	X					-	-	-	-	
	Killer whale								X	X	X	X	X	X	X		-	SEP-OCT	-	-	
	Minke whale									X	X	X					-	-	-	-	
281	Seals			10S					X	X	X	X	X	X	X		-	-	-	MAY-JUL	
282	Seals			100S					X	X	X	X	X	X	X		-	-	-	MAY-JUL	
283	Seals			<10					X	X	X	X	X	X	X		-</				

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.

Bristol Bay: ESIMAP 1 (cont.)

HUMAN USE RESOURCES:

CRITICAL HABITAT:

HUN#	Name	Owner	Contact	Phone
16	STELLER SEA LION CRITICAL HABITAT	NMFS	NMFS	907/586-7858

WILDLIFE REFUGE:

HUN#	Name	Owner	Contact	Phone
27	TOGIAK NATIONAL WILDLIFE REFUGE	US FISH & WILDLIFE SERVICE	REFUGE MANAGER	907/842-1063

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.

Bristol Bay: ESIMAP 2

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating		Molting
6	Black turnstone									X	X	X					MAY-JUL	MAY-JUL		-
	Black-bellied plover									X	X	X					-	MAY-JUL		-
	Dunlin			1,000S				X	X	X	X	X	X	X			MAY-JUL	APR-OCT		-
	Least sandpiper			1,000S				X	X	X	X	X	X	X			MAY-JUL	MAY-OCT		-
	Rock sandpiper			1,000S				X	X	X	X	X	X	X			MAY-JUL	APR-OCT		-
	Ruddy turnstone									X	X	X					-	MAY-JUL		-
	Shorebirds			25,000				X	X	X	X	X	X	X			MAY-JUL	APR-OCT		-
	Waterfowl							X	X		X	X	X	X			-	APR-MAY	SEP-OCT	JUL-AUG
	Western sandpiper			1,000S				X	X	X	X						-	APR-JUL		-
7	Black scoter			100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Brant			100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Canada goose			100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Emperor goose			100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Long-tailed duck			100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Northern pintail			100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Scaup			100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Steller's eider	C	T	100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	White-winged scoter			100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
14	Harlequin duck							X	X			X	X	X			-	APR-MAY	AUG-OCT	-
34	Black scoter			100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Common eider			100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Long-tailed duck			1,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Scaup			100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Steller's eider	C	T	100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
160	Bald eagle							X	X	X	X	X					APR-AUG	-		-
229	Black-legged kittiwake			10,745				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Common murre			2,214				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Glaucous-winged gull			308				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Horned puffin			25				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Pelagic cormorant			203				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Red-faced cormorant			8				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Tufted puffin			10				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
230	Black-legged kittiwake			192				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Common murre			221				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Glaucous-winged gull			17				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Horned puffin			145				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Parakeet auklet			320				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Pelagic cormorant			1,000S				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Pigeon guillemot			44				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Red-faced cormorant			6				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Tufted puffin			12				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
231	Black-legged kittiwake			84				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Common murre			31				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Pelagic cormorant			272				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Pigeon guillemot			26				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
232	Black-legged kittiwake			11				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Glaucous-winged gull			37				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Pelagic cormorant			668				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Pigeon guillemot			4				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
233	Black-legged kittiwake			6				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Glaucous-winged gull			18				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Pelagic cormorant			83				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Red-faced cormorant			2				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
234	Glaucous-winged gull			16				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Pelagic cormorant			68				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Pigeon guillemot			14				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
235	Glaucous-winged gull			5				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Pelagic cormorant			519				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
236	Black-legged kittiwake			275				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Common murre			49				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Glaucous-winged gull			15				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Pelagic cormorant			210				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
237	Glaucous-winged gull			100				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
238	Black-legged kittiwake			15,173				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Common murre			20,576				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Double-crested cormorant			UNKNOWN				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Glaucous-winged gull			270				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Horned puffin			520				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Parakeet auklet			540				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Pelagic cormorant			2,181				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Pigeon guillemot			270				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Tufted puffin			260				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
245	Black-legged kittiwake			8				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Pigeon guillemot			26				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-

FISH:

RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
9	Capelin									X	X	X	X				MAY-AUG	JUN-JUL	JUN-AUG	-	MAY-AUG
10	Pacific herring							X	X	X	X						APR-JUN	MAY-JUL	-	-	APR-JUL
11	Capelin									X	X	X	X				MAY-AUG	JUN-JUL	JUN-AUG	-	MAY-AUG
	Pacific herring			HIGH				X	X	X	X						APR-JUN	MAY-JUL	-	-	APR-JUL
12	Pacific herring			HIGH				X	X	X	X						APR-JUN	MAY-JUL	-	-	APR-JUL
15	Rainbow smelt			HIGH				X	X								-	-	-	APR-MAY	-
25	Chinook salmon									X	X	X	X				-	-	-	MAY-JUN	MAY-AUG
	Chum salmon (dog)									X	X	X	X				-	-	-	MAY-JUN	JUN-AUG
	Coho salmon (silver)									X	X	X	X	X	X		-	-	-	MAY-JUN	JUL-OCT
	Dolly varden									X	X	X	X	X			-	-	-	MAY-JUN	MAY-SEP
	Pink salmon (humpy)									X	X	X					-	-	-	MAY-JUN	JUN-JUL
	Sockeye salmon (red)			HIGH						X	X	X	X				-	-	-	MAY-JUN	MAY-AUG
26	Alaska plaice							X	X	X	X	X	X	X	X	X	MAR-MAY	MAY-JUN	MAY-JUN	JAN-DEC	JAN-DEC
	Pacific cod							X	X	X	X	X	X	X	X	X	JAN-MAY	-	-	JAN-DEC	JAN-DEC
	Pacific halibut										X	X	X	X			-	-	-	-	JUL-OCT
	Rainbow smelt							X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Rock sole							X	X	X	X	X	X	X	X	X	JAN-MAR	-	-	JAN-DEC	DEC-SEP
	Sculpin							X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Starry flounder							X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Walleye pollock							X	X	X	X	X	X	X	X	X	FEB-MAY	-	-	JAN-DEC	JAN-DEC
	Yellowfin sole							X	X	X	X	X	X	X	X	X	MAY-JUN	JUN-AUG	JUN-NOV	JAN-DEC	MAY-AUG
108	Chinook salmon							X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	MAY-SEP
	Chum salmon (dog)							X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Coho salmon (silver)							X	X	X	X	X	X	X	X	X	SEP-NOV	OCT-MAR	MAR-MAY	JAN-DEC	JUL-NOV
	Dolly varden							X	X	X	X	X	X	X	X	X	AUG-OCT	AUG-DEC	DEC-JUN	JAN-DEC	JAN-DEC
	Sockeye salmon (red)							X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	JUN-SEP

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.

Bristol Bay: ESIMAP 2 (cont.)

BIOLOGICAL RESOURCES: (cont.)

FISH:																					
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
109	Chinook salmon	-	-	-	X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	MAY-SEP
	Chum salmon (dog)	-	-	-	X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Coho salmon (silver)	-	-	-	X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	OCT-MAR	MAR-MAY	JAN-DEC	JUL-NOV
	Dolly varden	-	-	-	X	X	X	X	X	X	X	X	X	X	X	X	AUG-OCT	AUG-DEC	DEC-JUN	JAN-DEC	JAN-DEC
	Pink salmon (humpy)	-	-	-	X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-MAR	MAR-MAY	MAY-JUN	JUN-SEP
	Sockeye salmon (red)	-	-	-	X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	JUN-SEP
112	Chinook salmon	-	-	-	X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	MAY-SEP
	Chum salmon (dog)	-	-	-	X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Coho salmon (silver)	-	-	-	X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	OCT-MAR	MAR-MAY	JAN-DEC	JUL-NOV
	Dolly varden	-	-	-	X	X	X	X	X	X	X	X	X	X	X	X	AUG-OCT	AUG-DEC	DEC-JUN	JAN-DEC	JAN-DEC
	Pink salmon (humpy)	-	-	-	X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-MAR	MAR-MAY	MAY-JUN	JUN-SEP
	Sockeye salmon (red)	-	-	-	X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	JUN-SEP
123	Whitefish	-	-	-	X	X	X	X	X	X	X	X	X	X	X	X	SEP-OCT	SEP-DEC	DEC-JUN	JAN-DEC	JAN-DEC
	Chum salmon (dog)	-	-	-	X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
125	Chinook salmon	-	-	-	X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	MAY-SEP
	Chum salmon (dog)	-	-	-	X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
126	Coho salmon (silver)	-	-	-	X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	OCT-MAR	MAR-MAY	JAN-DEC	JUL-NOV
	Chinook salmon	-	-	-	X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	MAY-SEP
136	Sockeye salmon (red)	-	-	-	X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Chinook salmon	-	-	-	X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	MAY-SEP
139	Chum salmon (dog)	-	-	-	X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Chum salmon (dog)	-	-	-	X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Dolly varden	-	-	-	X	X	X	X	X	X	X	X	X	X	X	X	AUG-OCT	AUG-DEC	DEC-JUN	JAN-DEC	JAN-DEC

INVERTEBRATE:																						
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults	
26	Red king crab				X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUL	-	-	JAN-DEC	JAN-DEC	
	Tanner crab				X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUN	-	-	JAN-DEC	JAN-DEC	

MARINE MAMMAL:																				
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Mating	Calving	Molting	Pupping
24	Walrus			HIGH	X	X	X									X	DEC-MAR	-	-	-
28	Ringed seal				X	X	X	X								X	-	-	-	MAR-APR
29	Bearded seal				X	X	X	X								X	-	-	-	MAR-APR
30	Gray whale							X	X	X							-	-	-	-
31	Harbor porpoise									X	X	X					-	-	-	-
	Killer whale						X	X	X	X	X	X	X	X			-	SEP-OCT	-	-
	Minke whale									X	X	X					-	-	-	-
35	Walrus			INFREQUENT						X	X	X	X	X			-	-	-	-
36	Walrus			400-500						X	X	X	X	X			-	-	-	-
37	Walrus			HIGH						X	X	X	X	X			-	-	-	-
281	Seals			10S			X	X	X	X	X	X	X	X			-	-	-	MAY-JUL
282	Seals			100S			X	X	X	X	X	X	X	X			-	-	-	MAY-JUL
283	Seals			<10			X	X	X	X	X	X	X	X			-	-	-	MAY-JUL

HUMAN USE RESOURCES:

CRITICAL HABITAT:			
HUN#	Name	Owner	Phone
16	STELLER SEA LION CRITICAL HABITAT	NMFS	907/586-7858

WILDLIFE REFUGE:			
HUN#	Name	Owner	Phone
24	ALASKA MARITIME NWR	US FISH & WILDLIFE SERVICE	907/246-3339
27	TOGIAK NATIONAL WILDLIFE REFUGE	US FISH & WILDLIFE SERVICE	907/842-1063
28	WALRUS ISLANDS STATE GAME SANCTUARY	ALASKA DEPT. OF FISH & GAME	907/842-2334

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.

Bristol Bay: ESIMAP 3

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating		Molting
14	Harlequin duck							X	X			X	X	X			-	APR-MAY	AUG-OCT	-
34	Black scoter			100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Common eider			100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Long-tailed duck			1,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Scaup			100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Steller's eider	C	T	100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
44	Waterfowl			HIGH				X	X		X	X	X	X			-	APR-MAY	SEP-OCT	JUL-AUG
45	Waterfowl			HIGH				X	X			X	X				-	APR-MAY	SEP-OCT	-
48	Black scoter			100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Northern pintail			100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Scaup			100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Steller's eider	C	T	100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	White-winged scoter			100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
49	Black scoter			1,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Long-tailed duck			100S								X	X	X			-	AUG-OCT		-
	Northern pintail			100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Red-throated loon			100S								X	X	X			-	AUG-OCT		-
	White-winged scoter			100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
160	Bald eagle							X	X	X	X	X					APR-AUG	-		-
239	Black-legged kittiwake			1,058				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Common murre			18,646				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Glaucous-winged gull			589				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Horned puffin			4				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Pelagic cormorant			125				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Tufted puffin			4				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
240	Black-legged kittiwake			5,814				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Common murre			98,231				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Glaucous-winged gull			1,038				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Horned puffin			10				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Parakeet auklet			15				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Pelagic cormorant			320				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Pigeon guillemot			60				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Tufted puffin			1,500				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
241	Black-legged kittiwake			817				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Common murre			23,211				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Horned puffin			8				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Parakeet auklet			5				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Pelagic cormorant			155				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Pigeon guillemot			10				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Tufted puffin			10				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
242	Black-legged kittiwake			2				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Double-crested cormorant			12				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Glaucous-winged gull			87				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Horned puffin			55				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Pelagic cormorant			320				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Pigeon guillemot			330				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Tufted puffin			8				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
243	Black-legged kittiwake			4				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Glaucous-winged gull			76				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Pelagic cormorant			31				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
244	Glaucous-winged gull			12				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Horned puffin			122				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Parakeet auklet			14				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Pigeon guillemot			131				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Tufted puffin			37				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
251	Black oystercatcher			2				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Black-legged kittiwake			58,880				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Common murre			145,724				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Crested auklet			100				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Fork-tailed storm-petrel			UNKNOWN				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Glaucous-winged gull			UNKNOWN				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Horned puffin			1,750				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Least auklet			UNKNOWN				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Parakeet auklet			1,500				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Pelagic cormorant			901				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Pigeon guillemot			400				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Rhinoceros auklet			UNKNOWN				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Thick-billed murre			UNKNOWN				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Tufted puffin			400				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
252	Glaucous-winged gull			3				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Horned puffin			UNKNOWN				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Pelagic cormorant			7				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Pigeon guillemot			UNKNOWN				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
253	Glaucous-winged gull			214				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Pelagic cormorant			13				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
254	Pelagic cormorant			UNKNOWN				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
255	Glaucous-winged gull			13				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Pelagic cormorant			22				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Pigeon guillemot			UNKNOWN				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
256	Glaucous-winged gull			1,000S				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Pelagic cormorant			356				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Pigeon guillemot			UNKNOWN				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
257	Cormorant			100				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
260	Common murre			5				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Glaucous-winged gull			74				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Pelagic cormorant			626				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
261	Glaucous-winged gull			40				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Pelagic cormorant			27				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
284	Pacific loon			1-1.5 BIRDS/SQ.KM				X	X	X	X						MAY-JUN	MAY-MAY	JUL-SEP	-
289	Black scoter			3-7 BIRDS/SQ.KM				X	X	X	X	X	X				JUN-JUL	MAY-MAY	AUG-OCT	-
	Scaup			3-8 BIRDS/SQ.KM				X	X	X	X	X	X				JUN-JUL	MAY-MAY	AUG-OCT	-

FISH:

RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
9	Capelin								X	X	X	X					MAY-AUG	JUN-JUL	JUN-AUG	-	MAY-AUG
10	Pacific herring							X	X	X	X						APR-JUN	MAY-JUL	-	-	APR-JUL
12	Pacific herring			HIGH				X	X	X							APR-JUN	MAY-JUL	-	-	APR-JUL
15	Rainbow smelt			HIGH				X	X								-	-	-	APR-MAY	-
25	Chinook salmon								X	X	X	X					-	-	-	MAY-JUN	MAY-AUG
	Chum salmon (dog)								X	X	X	X					-	-	-	MAY-JUN	JUN-AUG
	Coho salmon (silver)								X	X	X	X	X				-	-	-	MAY-JUN	JUL-OCT
	Dolly varden								X	X	X	X					-	-	-	MAY-JUN	MAY-SEP
	Pink salmon (humpy)								X	X	X						-	-	-	MAY-JUN	JUN-JUL

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.

Bristol Bay: ESIMAP 3 (cont.)

BIOLOGICAL RESOURCES: (cont.)

FISH:																					
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
25	Sockeye salmon (red)			HIGH						X	X	X	X				-	-	-	MAY-JUN	MAY-AUG
26	Alaska plaice				X	X	X	X	X	X	X	X	X	X	X	X	MAR-MAY	MAY-JUN	MAY-JUN	JAN-DEC	JAN-DEC
	Pacific cod				X	X	X	X	X	X	X	X	X	X	X	X	JAN-MAY	-	-	JAN-DEC	JAN-DEC
	Pacific halibut									X	X	X	X				-	-	-	-	JUL-OCT
	Rainbow smelt				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Rock sole				X	X	X	X	X	X	X	X	X	X	X	X	JAN-MAR	-	-	JAN-DEC	DEC-SEP
	Sculpin				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Starry flounder				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Walleye pollock				X	X	X	X	X	X	X	X	X	X	X	X	FEB-MAY	-	-	JAN-DEC	JAN-DEC
	Yellowfin sole				X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	JUN-AUG	JUN-NOV	JAN-DEC	MAY-AUG
54	Pacific herring									X	X	X					-	-	-	-	MAY-JUL
109	Chinook salmon				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	MAY-SEP
	Chum salmon (dog)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Coho salmon (silver)				X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	OCT-MAR	MAR-MAY	JAN-DEC	JUL-NOV
	Dolly varden				X	X	X	X	X	X	X	X	X	X	X	X	AUG-OCT	AUG-DEC	DEC-JUN	JAN-DEC	JAN-DEC
	Pink salmon (humpy)				X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-MAR	MAR-MAY	MAY-JUN	JUN-SEP
	Sockeye salmon (red)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	JUN-SEP
111	Sockeye salmon (red)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	JUN-SEP
115	Coho salmon (silver)				X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	OCT-MAR	MAR-MAY	JAN-DEC	JUL-NOV
	Sockeye salmon (red)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	JUN-SEP
116	Coho salmon (silver)				X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	OCT-MAR	MAR-MAY	JAN-DEC	JUL-NOV
121	Chinook salmon				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	MAY-SEP
	Chum salmon (dog)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Coho salmon (silver)				X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	OCT-MAR	MAR-MAY	JAN-DEC	JUL-NOV
	Pink salmon (humpy)				X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-MAR	MAR-MAY	MAY-JUN	JUN-SEP
	Sockeye salmon (red)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	JUN-SEP
123	Chum salmon (dog)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
140	Chum salmon (dog)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Coho salmon (silver)				X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	OCT-MAR	MAR-MAY	JAN-DEC	JUL-NOV
	Dolly varden				X	X	X	X	X	X	X	X	X	X	X	X	AUG-OCT	AUG-DEC	DEC-JUN	JAN-DEC	JAN-DEC
	Pink salmon (humpy)				X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-MAR	MAR-MAY	MAY-JUN	JUN-SEP
	Sockeye salmon (red)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	JUN-SEP
141	Coho salmon (silver)				X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	OCT-MAR	MAR-MAY	JAN-DEC	JUL-NOV
	Dolly varden				X	X	X	X	X	X	X	X	X	X	X	X	AUG-OCT	AUG-DEC	DEC-JUN	JAN-DEC	JAN-DEC
142	Chum salmon (dog)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Coho salmon (silver)				X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	OCT-MAR	MAR-MAY	JAN-DEC	JUL-NOV

INVERTEBRATE:																						
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults	
26	Red king crab				X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUL	-	-	JAN-DEC	JAN-DEC	
	Tanner crab				X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUN	-	-	JAN-DEC	JAN-DEC	
59	Alaska razor clam				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC	
	Butter clam				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC	
	Nuttall cockle				X	X	X	X	X	X	X	X	X	X	X	X	APR-NOV	-	-	-	JAN-DEC	

MARINE MAMMAL:																				
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Mating	Calving	Molting	Pupping
24	Walrus			HIGH	X	X	X									X	DEC-MAR	-	-	-
28	Ringed seal				X	X	X	X								X	-	-	-	MAR-APR
29	Bearded seal				X	X	X	X								X	-	-	-	MAR-APR
30	Gray whale							X	X	X							-	-	-	-
31	Harbor porpoise									X	X	X					-	-	-	-
	Killer whale						X	X	X	X	X	X	X	X			-	SEP-OCT	-	-
	Minke whale									X	X	X					-	-	-	-
35	Walrus			INFREQUENT						X	X	X	X	X	X		-	-	-	-
37	Walrus			HIGH						X	X	X	X	X			-	-	-	-
58	Steller (Northern) sea lion	C	E	500			X	X	X	X	X						-	-	-	MAY-JUL
	Walrus			2,000-15,000						X	X	X	X	X	X		-	-	-	-
281	Seals			10S	X	X	X	X	X	X	X	X	X	X			-	-	-	MAY-JUL
282	Seals			100S	X	X	X	X	X	X	X	X	X	X			-	-	-	MAY-JUL
283	Seals			<10	X	X	X	X	X	X	X	X	X	X			-	-	-	MAY-JUL

HUMAN USE RESOURCES:

CRITICAL HABITAT:				
HUN#	Name	Owner	Contact	Phone
16	STELLER SEA LION CRITICAL HABITAT	NMFS	NMFS	907/586-7858

WILDLIFE REFUGE:				
HUN#	Name	Owner	Contact	Phone
24	ALASKA MARITIME NWR	US FISH & WILDLIFE SERVICE	REFUGE MANAGER	907/246-3339
27	TOGIAK NATIONAL WILDLIFE REFUGE	US FISH & WILDLIFE SERVICE	REFUGE MANAGER	907/842-1063
28	WALRUS ISLANDS STATE GAME SANCTUARY	ALASKA DEPT. OF FISH & GAME		907/842-2334

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.

Bristol Bay: ESIMAP 4

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating		Molting
45	Waterfowl	HIGH				X	X				X	X			-	APR-MAY	SEP-OCT	-
46	Waterfowl	HIGH							X	X					-	-		JUL-AUG
47	Black-bellied plover					X	X	X	X	X	X				MAY-JUL	MAY-OCT		-
	Dunlin	>1,000	X	X	X	X	X	X	X	X					MAY-JUL	APR-OCT		-
	Greater yellowlegs					X	X	X	X	X	X				MAY-JUL	MAY-OCT		-
	Least sandpiper					X	X	X							MAY-JUL	MAY-JUL		-
	Long-billed dowitcher						X	X	X	X	X				-	JUN-OCT		-
	Pacific golden-plover					X	X	X	X	X	X				-	APR-OCT		-
	Rock sandpiper					X	X	X	X	X	X				-	APR-OCT		-
	Sanderling						X	X	X	X	X				-	JUN-OCT		-
	Shorebirds	>20,000	X	X	X	X	X	X	X	X					MAY-JUL	APR-OCT		-
	Short-billed dowitcher					X	X	X							MAY-JUL	MAY-JUL		-
	Spotted sandpiper						X	X	X	X	X				-	JUN-OCT		-
	Western sandpiper					X	X	X	X	X	X				-	APR-OCT		-
	Whimbrel						X	X	X	X	X				-	MAY-OCT		-
49	Black scoter	1,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Long-tailed duck	100S								X	X	X			-	AUG-OCT		-
	Northern pintail	100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Red-throated loon	100S								X	X	X			-	AUG-OCT		-
	White-winged scoter	100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
50	Black scoter	100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Northern pintail	100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Scaup	1,000S				X	X								-	APR-MAY		-
51	Black scoter	1,000S				X	X			X	X	X	X		-	APR-MAY	AUG-OCT	JUL-OCT
	Long-tailed duck	1,000S				X	X			X	X	X	X		-	APR-MAY	AUG-OCT	JUL-OCT
	Northern pintail	100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Scaup	1,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	White-winged scoter	100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
52	Waterfowl	HIGH				X	X								-	APR-MAY		-
53	Waterfowl	HIGH										X	X		-	SEP-OCT		-
55	Bar-tailed godwit								X	X	X	X	X		-	JUN-OCT		-
	Black-bellied plover	100S					X	X	X	X	X	X			MAY-JUL	MAY-OCT		-
	Common snipe		X	X	X								X	X	-	-		-
	Dunlin	10,000S				X	X	X	X	X	X	X			MAY-JUL	APR-OCT		-
	Greater yellowlegs	100S					X	X	X	X	X	X			MAY-JUL	MAY-OCT		-
	Least sandpiper						X	X	X						MAY-JUL	MAY-JUL		-
	Pacific golden-plover	100S					X	X	X	X	X	X			-	MAY-OCT		-
	Red-necked phalarope						X	X	X						MAY-JUL	MAY-JUL		-
	Rock sandpiper					X	X	X							-	APR-JUN		-
	Sharp-tailed sandpiper							X	X	X	X	X	X		-	JUN-OCT		-
	Shorebirds	>40,000				X	X	X	X	X	X	X			MAY-JUL	APR-OCT		-
	Western sandpiper					X	X	X	X						-	APR-JUL		-
	Whimbrel						X	X	X						-	MAY-JUL		-
60	King eider	100,000S				X	X			X	X	X	X		-	APR-MAY	AUG-OCT	JUL-OCT
61	King eider	10,000S				X	X			X	X	X	X		-	APR-MAY	AUG-OCT	JUL-OCT
62	Bar-tailed godwit	10S								X	X				-	AUG-SEP		-
	Black turnstone	10S								X	X				-	AUG-SEP		-
	Black-bellied plover	10S								X	X				-	AUG-SEP		-
	Dunlin	100S								X	X				-	AUG-SEP		-
	Greater yellowlegs	100S								X	X				-	AUG-SEP		-
	Least sandpiper	10S								X	X				-	AUG-SEP		-
	Pacific golden-plover	10S								X	X				-	AUG-SEP		-
	Red-necked phalarope	10S								X	X				-	AUG-SEP		-
	Rock sandpiper	100S								X	X				-	AUG-SEP		-
	Ruddy turnstone	10S								X	X				-	AUG-SEP		-
	Semipalmated plover	10S								X	X				-	AUG-SEP		-
	Sharp-tailed sandpiper	10S								X	X				-	AUG-SEP		-
	Short-billed dowitcher	10S								X	X				-	AUG-SEP		-
	Western sandpiper	100S								X	X				-	AUG-SEP		-
	Whimbrel	10S								X	X				-	AUG-SEP		-
63	Black turnstone	10S								X	X				-	AUG-SEP		-
	Dunlin	10S								X	X				-	AUG-SEP		-
	Greater yellowlegs	10S								X	X				-	AUG-SEP		-
	Least sandpiper	10S								X	X				-	AUG-SEP		-
	Long-billed dowitcher	10S								X	X				-	AUG-SEP		-
	Rock sandpiper	10S								X	X				-	AUG-SEP		-
	Semipalmated plover	10S								X	X				-	AUG-SEP		-
	Short-billed dowitcher	10S								X	X				-	AUG-SEP		-
	Western sandpiper	100S								X	X				-	AUG-SEP		-
64	Bar-tailed godwit	10S								X	X				-	AUG-SEP		-
	Black turnstone	10S								X	X				-	AUG-SEP		-
	Black-bellied plover	10S								X	X				-	AUG-SEP		-
	Dunlin	100S								X	X				-	AUG-SEP		-
	Greater yellowlegs	10S								X	X				-	AUG-SEP		-
	Least sandpiper	10S								X	X				-	AUG-SEP		-
	Pacific golden-plover	10S								X	X				-	AUG-SEP		-
	Rock sandpiper	10S								X	X				-	AUG-SEP		-
	Ruddy turnstone	10S								X	X				-	AUG-SEP		-
	Semipalmated plover	10S								X	X				-	AUG-SEP		-
	Western sandpiper	100S								X	X				-	AUG-SEP		-
	Whimbrel	10S								X	X				-	AUG-SEP		-
65	Black-bellied plover	10S								X	X				-	AUG-SEP		-
	Dunlin	100S								X	X				-	AUG-SEP		-
	Red-necked phalarope	10S								X	X				-	AUG-SEP		-
	Western sandpiper	10S								X	X				-	AUG-SEP		-
66	Black turnstone	10S								X	X				-	AUG-SEP		-
	Black-bellied plover	10S								X	X				-	AUG-SEP		-
	Bristle-thighed curlew	100S								X	X				-	AUG-SEP		-
	Dunlin	100S								X	X				-	AUG-SEP		-
	Greater yellowlegs	10S								X	X				-	AUG-SEP		-
	Least sandpiper	10S								X	X				-	AUG-SEP		-
	Long-billed dowitcher	10S								X	X				-	AUG-SEP		-
	Pacific golden-plover	10S								X	X				-	AUG-SEP		-
	Red knot	10S								X	X				-	AUG-SEP		-
	Rock sandpiper	10S								X	X				-	AUG-SEP		-
	Ruddy turnstone	10S								X	X				-	AUG-SEP		-
	Sanderling	100S								X	X				-	AUG-SEP		-
	Semipalmated plover	10S								X	X				-	AUG-SEP		-
	Short-billed dowitcher	10S								X	X				-	AUG-SEP		-
	Western sandpiper	10S								X	X				-	AUG-SEP		-
	Whimbrel	10S								X	X				-	AUG-SEP		-
160	Bald eagle					X	X	X	X	X					APR-AUG	-		-
258	Double-crested cormorant	648				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-
	Glaucous-winged gull	2,000				X	X	X	X	X	X				JUN-JUL	APR-MAY	AUG-OCT	-

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.

Bristol Bay: ESIMAP 4 (cont.)

BIOLOGICAL RESOURCES: (cont.)

BIRD:																				
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating		Molting
259	Aleutian tern			3					X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
265	Aleutian tern			200					X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Glaucous-winged gull			176					X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Gulls			2					X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Herring gull			2					X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Mew gull			33					X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
266	Glaucous-winged gull			15					X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Gulls			40					X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Mew gull			1					X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
284	Pacific loon			1-1.5 BIRDS/SQ.KM					X	X	X	X	X				MAY-JUN	MAY-MAY	JUL-SEP	-
288	Scaup			3-8 BIRDS/SQ.KM					X	X	X	X	X	X			JUN-JUL	MAY-MAY	AUG-OCT	-
293	Black scoter			3-7 BIRDS/SQ.KM					X	X	X	X	X	X			JUN-JUL	MAY-MAY	AUG-OCT	-

FISH:																					
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
9	Capelin									X	X	X	X				MAY-AUG	JUN-JUL	JUN-AUG	-	MAY-AUG
15	Rainbow smelt			HIGH					X	X							-	-	-	APR-MAY	-
25	Chinook salmon									X	X	X	X				-	-	-	MAY-JUN	MAY-AUG
	Chum salmon (dog)									X	X	X	X				-	-	-	MAY-JUN	JUN-AUG
	Coho salmon (silver)									X	X	X	X	X	X		-	-	-	MAY-JUN	JUL-OCT
	Dolly varden									X	X	X	X	X			-	-	-	MAY-JUN	MAY-SEP
	Pink salmon (humpy)									X	X	X					-	-	-	MAY-JUN	JUN-JUL
	Sockeye salmon (red)			HIGH						X	X	X	X				-	-	-	MAY-JUN	MAY-AUG
26	Alaska plaice				X	X	X	X	X	X	X	X	X	X	X	X	MAR-MAY	MAY-JUN	MAY-JUN	JAN-DEC	JAN-DEC
	Pacific cod				X	X	X	X	X	X	X	X	X	X	X	X	JAN-MAY	-	-	JAN-DEC	JAN-DEC
	Pacific halibut									X	X	X	X				-	-	-	-	JUL-OCT
	Rainbow smelt				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Rock sole				X	X	X	X	X	X	X	X	X	X	X	X	JAN-MAR	-	-	JAN-DEC	DEC-SEP
	Sculpin				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Starry flounder				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Walleye pollock				X	X	X	X	X	X	X	X	X	X	X	X	FEB-MAY	-	-	JAN-DEC	JAN-DEC
	Yellowfin sole				X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	JUN-AUG	JUN-NOV	JAN-DEC	MAY-AUG
54	Pacific herring									X	X	X					-	-	-	-	MAY-JUL
109	Chinook salmon				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	MAY-SEP
	Chum salmon (dog)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Coho salmon (silver)				X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	OCT-MAR	MAR-MAY	JAN-DEC	JUL-NOV
	Dolly varden				X	X	X	X	X	X	X	X	X	X	X	X	AUG-OCT	AUG-DEC	DEC-JUN	JAN-DEC	JAN-DEC
	Pink salmon (humpy)				X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-MAR	MAR-MAY	MAY-JUN	JUN-SEP
	Sockeye salmon (red)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	JUN-SEP
112	Chinook salmon				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	MAY-SEP
	Chum salmon (dog)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Coho salmon (silver)				X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	OCT-MAR	MAR-MAY	JAN-DEC	JUL-NOV
	Dolly varden				X	X	X	X	X	X	X	X	X	X	X	X	AUG-OCT	AUG-DEC	DEC-JUN	JAN-DEC	JAN-DEC
	Pink salmon (humpy)				X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-MAR	MAR-MAY	MAY-JUN	JUN-SEP
	Sockeye salmon (red)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Whitefish				X	X	X	X	X	X	X	X	X	X	X	X	SEP-OCT	SEP-DEC	DEC-JUN	JAN-DEC	JAN-DEC
116	Coho salmon (silver)				X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	OCT-MAR	MAR-MAY	JAN-DEC	JUL-NOV
118	Chinook salmon				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	MAY-SEP
	Coho salmon (silver)				X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	OCT-MAR	MAR-MAY	JAN-DEC	JUL-NOV
141	Coho salmon (silver)				X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	OCT-MAR	MAR-MAY	JAN-DEC	JUL-NOV
	Dolly varden				X	X	X	X	X	X	X	X	X	X	X	X	AUG-OCT	AUG-DEC	DEC-JUN	JAN-DEC	JAN-DEC

INVERTEBRATE:																					
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
26	Red king crab				X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUL	-	-	JAN-DEC	JAN-DEC
	Tanner crab				X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUN	-	-	JAN-DEC	JAN-DEC

MARINE MAMMAL:																				
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Mating	Calving	Molting	Pupping
24	Walrus			HIGH	X	X	X									X	DEC-MAR	-	-	-
28	Ringed seal				X	X	X	X								X	-	-	-	MAR-APR
29	Bearded seal				X	X	X	X								X	-	-	-	MAR-APR
30	Gray whale							X	X	X							-	-	-	-
31	Harbor porpoise									X	X	X					-	-	-	-
	Killer whale						X	X	X	X	X	X	X	X			-	SEP-OCT	-	-
	Minke whale									X	X	X					-	-	-	-
56	Walrus			10S						X	X	X	X	X	X		-	-	-	-
57	Beluga whale			1,000S				X	X	X	X	X	X				-	JUN-AUG	-	-
67	Seals			HIGH			X	X	X	X	X	X	X	X			-	-	-	MAY-JUL

HUMAN USE RESOURCES:

HUN#	Name	Owner	Contact	Phone
16	STELLER SEA LION CRITICAL HABITAT	NMFS	NMFS	907/586-7858

MANAGEMENT AREA:				
HUN#	Name	Owner	Contact	Phone
18	NUSHAGAK & MULCHATNA REC. RIVERS MP			

WILDLIFE REFUGE:				
HUN#	Name	Owner	Contact	Phone
24	ALASKA MARITIME NWR	US FISH & WILDLIFE SERVICE	REFUGE MANAGER	907/246-3339
27	TOGIAK NATIONAL WILDLIFE REFUGE	US FISH & WILDLIFE SERVICE	REFUGE MANAGER	907/842-1063

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.

Bristol Bay: ESIMAP 5

BIOLOGICAL RESOURCES:

BIRD:																					
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating		Molting	
51	Black scoter			1,000S				X	X		X	X	X	X			-	APR-MAY	AUG-OCT	JUL-OCT	
	Long-tailed duck			1,000S				X	X		X	X	X	X			-	APR-MAY	AUG-OCT	JUL-OCT	
	Northern pintail			100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-	
	Scaup			1,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-	
	White-winged scoter			100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-	
52	Waterfowl			HIGH				X	X								-	APR-MAY		-	
53	Waterfowl			HIGH									X	X			-	SEP-OCT		-	
55	Bar-tailed godwit									X	X	X	X	X			-	JUN-OCT		-	
	Black-bellied plover			100S					X	X	X	X	X	X			MAY-JUL	MAY-OCT		-	
	Common snipe				X	X	X								X	X	-	-		-	
	Dunlin			10,000S				X	X	X	X	X	X	X			MAY-JUL	APR-OCT		-	
	Greater yellowlegs			100S					X	X	X	X	X	X			MAY-JUL	MAY-OCT		-	
	Least sandpiper								X	X	X						MAY-JUL	MAY-JUL		-	
	Pacific golden-plover			100S					X	X	X	X	X	X			-	MAY-OCT		-	
	Red-necked phalarope								X	X	X						MAY-JUL	MAY-JUL		-	
	Rock sandpiper							X	X	X							-	APR-JUN		-	
	Sharp-tailed sandpiper									X	X	X	X	X			-	JUN-OCT		-	
	Shorebirds			>40,000				X	X	X	X	X	X	X			MAY-JUL	APR-OCT		-	
	Western sandpiper							X	X	X	X						-	APR-JUL		-	
	Whimbrel								X	X	X						-	MAY-JUL		-	
61	King eider			10,000S				X	X		X	X	X	X			-	APR-MAY	AUG-OCT	JUL-OCT	
68	Bar-tailed godwit			10,000S					X	X	X	X	X	X			MAY-JUL	MAY-OCT		-	
	Dunlin			10,000S					X	X	X	X	X	X			MAY-JUL	MAY-OCT		-	
	Greater yellowlegs									X	X	X	X	X			-	JUN-OCT		-	
	Long-billed dowitcher									X	X	X	X	X			-	JUN-OCT		-	
	Rock sandpiper								X	X	X						MAY-JUL	MAY-JUL		-	
	Western sandpiper								X	X	X	X	X	X			-	MAY-OCT		-	
72	Geese			300-400				X	X				X	X			-	APR-MAY	SEP-OCT	-	
	Waterfowl			HIGH				X	X				X	X			-	APR-MAY	SEP-OCT	-	
73	Black scoter			1,000S				X	X				X	X	X		-	APR-MAY	AUG-OCT	-	
	Emperor goose			100S								X	X	X			-	AUG-OCT		-	
	Northern pintail			1,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-	
	Scaup			1,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-	
	White-winged scoter			1,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-	
267	Kittlitz's murrelet				X	X	X	X	X				X	X	X	X	-	-		-	
285	Black scoter			3-7 BIRDS/SQ.KM					X	X	X	X	X	X			JUN-JUL	MAY-MAY	AUG-OCT	-	
	Tundra swan			1-1.5 BIRDS/SQ.KM					X	X	X	X	X				MAY-JUN	MAY-MAY	JUL-SEP	-	
286	Black scoter			3-7 BIRDS/SQ.KM					X	X	X	X	X	X			JUN-JUL	MAY-MAY	AUG-OCT	-	
	Long-tailed duck			1-1.5 BIRDS/SQ.KM					X	X	X	X	X	X			JUN-JUL	MAY-MAY	AUG-OCT	-	
	Tundra swan			1-1.5 BIRDS/SQ.KM					X	X	X	X	X				MAY-JUN	MAY-MAY	JUL-SEP	-	
287	Long-tailed duck			1-1.5 BIRDS/SQ.KM					X	X	X	X	X	X			JUN-JUL	MAY-MAY	AUG-OCT	-	
288	Scaup			3-8 BIRDS/SQ.KM					X	X	X	X	X	X			JUN-JUL	MAY-MAY	AUG-OCT	-	
293	Black scoter			3-7 BIRDS/SQ.KM					X	X	X	X	X	X			JUN-JUL	MAY-MAY	AUG-OCT	-	
294	Black scoter			3-7 BIRDS/SQ.KM					X	X	X	X	X	X			JUN-JUL	MAY-MAY	AUG-OCT	-	
	Long-tailed duck			1-1.5 BIRDS/SQ.KM					X	X	X	X	X	X			JUN-JUL	MAY-MAY	AUG-OCT	-	
295	Tundra swan			1-1.5 BIRDS/SQ.KM					X	X	X	X	X				MAY-JUN	MAY-MAY	JUL-SEP	-	
FISH:																					
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
15	Rainbow smelt			HIGH				X	X								-	-	-	APR-MAY	-
25	Chinook salmon								X	X	X	X					-	-	-	MAY-JUN	MAY-AUG
	Chum salmon (dog)								X	X	X	X					-	-	-	MAY-JUN	JUN-AUG
	Coho salmon (silver)								X	X	X	X	X	X			-	-	-	MAY-JUN	JUL-OCT
	Dolly varden								X	X	X	X	X				-	-	-	MAY-JUN	MAY-SEP
	Pink salmon (humpy)								X	X	X						-	-	-	MAY-JUN	JUN-JUL
	Sockeye salmon (red)			HIGH					X	X	X	X					-	-	-	MAY-JUN	MAY-AUG
26	Alaska plaice				X	X	X	X	X	X	X	X	X	X	X	X	MAR-MAY	MAY-JUN	MAY-JUN	JAN-DEC	JAN-DEC
	Pacific cod				X	X	X	X	X	X	X	X	X	X	X	X	JAN-MAY	-	-	JAN-DEC	JAN-DEC
	Pacific halibut									X	X	X	X				-	-	-	-	JUL-OCT
	Rainbow smelt				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Rock sole				X	X	X	X	X	X	X	X	X	X	X	X	JAN-MAR	-	-	JAN-DEC	DEC-SEP
	Sculpin				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Starry flounder				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Walleye pollock				X	X	X	X	X	X	X	X	X	X	X	X	FEB-MAY	-	-	JAN-DEC	JAN-DEC
	Yellowfin sole				X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	JUN-AUG	JUN-NOV	JAN-DEC	MAY-AUG
109	Chinook salmon				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	MAY-SEP
	Chum salmon (dog)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Coho salmon (silver)				X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	OCT-MAR	MAR-MAY	JAN-DEC	JUL-NOV
	Dolly varden				X	X	X	X	X	X	X	X	X	X	X	X	AUG-OCT	AUG-DEC	DEC-JUN	JAN-DEC	JAN-DEC
	Pink salmon (humpy)				X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-MAR	MAR-MAY	MAY-JUN	JUN-SEP
	Sockeye salmon (red)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	JUN-SEP
112	Chinook salmon				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	MAY-SEP
	Chum salmon (dog)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Coho salmon (silver)				X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	OCT-MAR	MAR-MAY	JAN-DEC	JUL-NOV
	Dolly varden				X	X	X	X	X	X	X	X	X	X	X	X	AUG-OCT	AUG-DEC	DEC-JUN	JAN-DEC	JAN-DEC
	Pink salmon (humpy)				X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-MAR	MAR-MAY	MAY-JUN	JUN-SEP
	Sockeye salmon (red)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Whitefish				X	X	X	X	X	X	X	X	X	X	X	X	SEP-OCT	SEP-DEC	DEC-JUN	JAN-DEC	JAN-DEC
INVERTEBRATE:																					
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
26	Red king crab				X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUL	-	-	JAN-DEC	JAN-DEC
	Tanner crab				X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUN	-	-	JAN-DEC	JAN-DEC
MARINE MAMMAL:																					
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Mating	Calving	Molting	Pupping	
29	Bearded seal				X	X	X	X					</								

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.

Bristol Bay: ESIMAP 5 (cont.)

BIOLOGICAL RESOURCES: (cont.)

TERRESTRIAL MAMMAL:																
RAR#	Species	S F Conc.			J	F	M	A	M	J	J	A	S	O	N	D
76	Brown bear	HIGH							X	X	X					

HUMAN USE RESOURCES:

MANAGEMENT AREA:

HUN#	Name	Owner	Contact	Phone
18	NUSHAGAK & MULCHATNA REC. RIVERS MP			

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.

Bristol Bay: ESIMAP 6

BIOLOGICAL RESOURCES:

BIRD:																			
RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating		Molting	
45	Waterfowl	HIGH						X	X						-	APR-MAY	SEP-OCT		-
55	Bar-tailed godwit									X	X	X	X	X	-	JUN-OCT			-
	Black-bellied plover	100S						X	X	X	X	X	X		MAY-JUL	MAY-OCT			-
	Common snipe		X	X	X									X	X	-	-		-
	Dunlin	10,000S				X	X	X	X	X	X	X			MAY-JUL	APR-OCT			-
	Greater yellowlegs	100S				X	X	X	X	X	X				MAY-JUL	MAY-OCT			-
	Least sandpiper					X	X	X							MAY-JUL	MAY-JUL			-
	Pacific golden-plover	100S				X	X	X	X	X	X				-	MAY-OCT			-
	Red-necked phalarope					X	X	X							MAY-JUL	MAY-JUL			-
	Rock sandpiper					X	X	X							-	APR-JUN			-
	Sharp-tailed sandpiper							X	X	X	X	X			-	JUN-OCT			-
	Shorebirds	>40,000				X	X	X	X	X	X	X			MAY-JUL	APR-OCT			-
	Western sandpiper					X	X	X	X						-	APR-JUL			-
	Whimbrel					X	X	X							-	MAY-JUL			-
69	Bald eagle	50	X	X	X	X	X	X	X	X	X	X	X	X	-	-			-
	Black scoter	100S				X	X								-	MAR-APR			-
	Canada goose	100S				X	X	X							-	MAR-MAY			-
	Common goldeneye	100S	X	X	X	X	X								-	MAR-MAY			-
	Common merganser	1,000S	X	X	X	X	X						X	X	X	-	-		-
	Dabbling ducks	1,000S				X	X	X							-	MAR-MAY			-
	Greater white-fronted goose	100S				X	X	X							-	MAR-MAY			-
	King eider	1,000S				X	X								-	MAR-APR			-
	Long-tailed duck	1,000S				X	X								-	MAR-APR			-
	Northern pintail	10,000S				X	X	X							-	MAR-MAY			-
	Red-breasted merganser	100S				X	X				X	X	X		-	APR-MAY	SEP-NOV		-
	Scaup	100S				X	X	X			X	X	X		-	MAR-MAY	SEP-OCT		-
	Tundra swan	1,000S				X	X	X	X	X					-	MAR-MAY			-
70	Waterfowl	HIGH				X	X		X	X	X	X			-	APR-MAY	SEP-OCT	JUL-AUG	
71	Canada goose	HIGH				X	X			X	X	X			-	APR-MAY	AUG-OCT		-
	Ducks	HIGH				X	X				X	X			-	APR-MAY	SEP-OCT		-
	Greater white-fronted goose	HIGH							X	X					-	-		JUL-AUG	
73	Black scoter	1,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT		-
	Emperor goose	100S								X	X	X			-	AUG-OCT			-
	Northern pintail	1,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT		-
	Scaup	1,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT		-
	White-winged scoter	1,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT		-
80	Bald eagle	HIGH	X	X	X	X	X	X	X	X	X	X	X	X	APR-AUG	-			-
175	Arctic tern	80				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT		-
262	Glaucous-winged gull	50				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT		-
264	Glaucous-winged gull	42				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT		-
285	Black scoter	3-7 BIRDS/SQ.KM				X	X	X	X	X	X				JUN-JUL	MAY-MAY	AUG-OCT		-
	Tundra swan	1-1.5 BIRDS/SQ.KM				X	X	X	X	X					MAY-JUN	MAY-MAY	JUL-SEP		-
286	Black scoter	3-7 BIRDS/SQ.KM				X	X	X	X	X	X				JUN-JUL	MAY-MAY	AUG-OCT		-
	Long-tailed duck	1-1.5 BIRDS/SQ.KM				X	X	X	X	X	X				JUN-JUL	MAY-MAY	AUG-OCT		-
	Tundra swan	1-1.5 BIRDS/SQ.KM				X	X	X	X	X					MAY-JUN	MAY-MAY	JUL-SEP		-
287	Long-tailed duck	1-1.5 BIRDS/SQ.KM				X	X	X	X	X	X				JUN-JUL	MAY-MAY	AUG-OCT		-
288	Scaup	3-8 BIRDS/SQ.KM				X	X	X	X	X	X				JUN-JUL	MAY-MAY	AUG-OCT		-
289	Black scoter	3-7 BIRDS/SQ.KM				X	X	X	X	X	X				JUN-JUL	MAY-MAY	AUG-OCT		-
	Scaup	3-8 BIRDS/SQ.KM				X	X	X	X	X	X				JUN-JUL	MAY-MAY	AUG-OCT		-
291	Scaup	3-8 BIRDS/SQ.KM				X	X	X	X	X	X				JUN-JUL	MAY-MAY	AUG-OCT		-
	Tundra swan	1-1.5 BIRDS/SQ.KM				X	X	X	X						MAY-JUN	MAY-MAY	JUL-SEP		-
292	Tundra swan	1-1.5 BIRDS/SQ.KM				X	X	X	X	X					MAY-JUN	MAY-MAY	JUL-SEP		-
	Black scoter	3-7 BIRDS/SQ.KM				X	X	X	X	X	X				JUN-JUL	MAY-MAY	AUG-OCT		-
	Scaup	3-8 BIRDS/SQ.KM				X	X	X	X	X	X				JUN-JUL	MAY-MAY	AUG-OCT		-
293	Black scoter	3-7 BIRDS/SQ.KM				X	X	X	X	X	X				JUN-JUL	MAY-MAY	AUG-OCT		-
294	Black scoter	3-7 BIRDS/SQ.KM				X	X	X	X	X	X				JUN-JUL	MAY-MAY	AUG-OCT		-
	Long-tailed duck	1-1.5 BIRDS/SQ.KM				X	X	X	X	X	X				JUN-JUL	MAY-MAY	AUG-OCT		-
295	Tundra swan	1-1.5 BIRDS/SQ.KM				X	X	X	X	X					MAY-JUN	MAY-MAY	JUL-SEP		-
FISH:																			
RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
15	Rainbow smelt	HIGH				X	X								-	-	-	APR-MAY	-
25	Chinook salmon						X	X	X	X					-	-	-	MAY-JUN	MAY-AUG
	Chum salmon (dog)						X	X	X	X					-	-	-	MAY-JUN	JUN-AUG
	Coho salmon (silver)						X	X	X	X	X	X			-	-	-	MAY-JUN	JUL-OCT
	Dolly varden						X	X	X	X	X				-	-	-	MAY-JUN	MAY-SEP
	Pink salmon (humpy)						X	X	X						-	-	-	MAY-JUN	JUN-JUL
	Sockeye salmon (red)	HIGH					X	X	X	X					-	-	-	MAY-JUN	MAY-AUG
26	Alaska plaice		X	X	X	X	X	X	X	X	X	X	X	X	MAR-MAY	MAY-JUN	MAY-JUN	JAN-DEC	JAN-DEC
	Pacific cod		X	X	X	X	X	X	X	X	X	X	X	X	JAN-MAY	-	-	JAN-DEC	JAN-DEC
	Pacific halibut							X	X	X					-	-	-	-	JUL-OCT
	Rainbow smelt		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Rock sole		X	X	X	X	X	X	X	X	X	X	X	X	JAN-MAR	-	-	JAN-DEC	DEC-SEP
	Sculpin		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Starry flounder		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Walleye pollock		X	X	X	X	X	X	X	X	X	X	X	X	FEB-MAY	-	-	JAN-DEC	JAN-DEC
	Yellowfin sole		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	JUN-AUG	JUN-NOV	JAN-DEC	MAY-AUG
78	Rainbow trout (steelhead)		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
109	Chinook salmon		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	MAY-SEP
	Chum salmon (dog)		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Coho salmon (silver)		X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	OCT-MAR	MAR-MAY	JAN-DEC	JUL-NOV
	Dolly varden		X	X															

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.

Bristol Bay: ESIMAP 6 (cont.)

BIOLOGICAL RESOURCES: (cont.)

FISH:																					
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
-----		-	-	-----	-	-	-	-	-	-	-	-	-	-	-	-	-----	-----	-----	-----	-----
125	Chum salmon (dog)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Coho salmon (silver)				X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	OCT-MAR	MAR-MAY	JAN-DEC	JUL-NOV
145	Chinook salmon				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	MAY-SEP
	Chum salmon (dog)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Coho salmon (silver)				X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	OCT-MAR	MAR-MAY	JAN-DEC	JUL-NOV
	Pink salmon (humpy)				X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-MAR	MAR-MAY	MAY-JUN	JUN-SEP

INVERTEBRATE:																					
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
		-----			-----												-----				
26	Red king crab				X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUL	-	-	JAN-DEC	JAN-DEC
	Tanner crab				X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUN	-	-	JAN-DEC	JAN-DEC
77	Clams				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC

MARINE MAMMAL:																						
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Mating	Calving	Molting	Pupping		
-----					-----					-----					-----					-----		
29	Bearded seal				X	X	X	X								X	-	-	-	MAR-APR		
30	Gray whale							X	X	X							-	-	-	-		
31	Harbor porpoise									X	X	X					-	-	-	-		
	Killer whale						X	X	X	X	X	X	X	X			-	SEP-OCT	-	-		
	Minke whale								X	X	X						-	-	-	-		
57	Beluga whale		1,000S				X	X	X	X	X	X					-	JUN-AUG	-	-		
67	Seals		HIGH			X	X	X	X	X	X	X	X	X			-	-	-	MAY-JUL		
269	Seals		<10			X	X	X	X	X	X	X	X	X			-	-	-	MAY-JUL		
270	Seals		10S			X	X	X	X	X	X	X	X	X			-	-	-	MAY-JUL		

TERRESTRIAL MAMMAL:																
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D
-----		-----			-----		-----		-----		-----		-----		-----	
76	Brown bear			HIGH					X	X	X					

HUMAN USE RESOURCES:

MANAGEMENT AREA:

HUN#	Name	Owner	Contact	Phone

18	NUSHAGAK & MULCHATNA REC. RIVERS MP			

NATIONAL PARK:

HUN#	Name	Owner	Contact	Phone

19	ALAGNAK WILD RIVER	NATIONAL PARK SERVICE		907/246-3305
22	KATMAI NATIONAL PARK & PRESERVE	NATIONAL PARK SERVICE		907/246-3305
23	KATMAI WILDERNESS AREA	NATIONAL PARK SERVICE		907/271-3751

WILDLIFE REFUGE:

HUN#	Name	Owner	Contact	Phone

24	ALASKA MARITIME NWR	US FISH & WILDLIFE SERVICE	REFUGE MANAGER	907/246-3339
26	BECHAROF NATIONAL WILDLIFE REFUGE	US FISH & WILDLIFE SERVICE	REFUGE MANAGER	907/246-3339

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.

Bristol Bay: ESIMAP 7

BIOLOGICAL RESOURCES:

BIRD:																					
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating		Molting	
68	Bar-tailed godwit			10,000S						X	X	X	X	X			MAY-JUL	MAY-OCT		-	
	Dunlin			10,000S						X	X	X	X	X			MAY-JUL	MAY-OCT		-	
	Greater yellowlegs									X	X	X	X	X			-	JUN-OCT		-	
	Long-billed dowitcher									X	X	X	X	X			-	JUN-OCT		-	
	Rock sandpiper									X	X	X					MAY-JUL	MAY-JUL		-	
	Western sandpiper									X	X	X	X	X	X		-	MAY-OCT		-	
73	Black scoter			1,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-	
	Emperor goose			100S								X	X	X			-	AUG-OCT		-	
	Northern pintail			1,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-	
	Scaup			1,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-	
	White-winged scoter			1,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-	
74	Black scoter			1,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-	
	Canada goose			100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-	
	Emperor goose			1,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-	
	King eider			1,000S				X	X	X	X	X	X	X			-	APR-MAY	AUG-OCT	-	
	Long-tailed duck			100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-	
	Northern pintail			1,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-	
	Scaup			1,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-	
	Steller's eider	C	T	1,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-	
	White-winged scoter			100S								X	X	X			-	AUG-OCT		-	
75	Black scoter			1,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-	
	Canada goose			100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-	
	Emperor goose			1,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-	
	King eider			100S								X	X	X			-	-		-	
	Long-tailed duck			1,000S				X	X								-	APR-MAY		-	
	Northern pintail			1,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-	
	Scaup			100S				X	X								-	APR-MAY		-	
	Steller's eider	C	T	100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-	
	White-winged scoter			1,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-	
81	Bar-tailed godwit			10S				X	X	X	X	X	X	X			-	APR-OCT		-	
	Dunlin			1,000S						X	X	X	X	X			MAY-JUL	MAY-OCT		-	
	Greater yellowlegs			100S						X	X	X	X	X			-	JUN-OCT		-	
	Marbled godwit			100S				X	X	X	X	X	X	X			MAY-JUL	APR-OCT		-	
	Pectoral sandpiper									X	X	X	X	X			-	JUN-OCT		-	
	Sharp-tailed sandpiper									X	X	X	X	X			-	JUN-OCT		-	
	Short-billed dowitcher									X	X	X	X	X			-	JUN-OCT		-	
	Western sandpiper									X	X	X					-	MAY-JUL		-	
263	Double-crested cormorant			50				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-	
	Glaucous-winged gull			UNKNOWN				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-	
267	Kittlitz's murrelet				X	X	X	X	X			X	X	X	X		-	-		-	
285	Black scoter			3-7 BIRDS/SQ.KM				X	X	X	X	X	X	X			JUN-JUL	MAY-MAY	AUG-OCT	-	
	Tundra swan			1-1.5 BIRDS/SQ.KM				X	X	X	X	X					MAY-JUN	MAY-MAY	JUL-SEP	-	
288	Scaup			3-8 BIRDS/SQ.KM				X	X	X	X	X	X				JUN-JUL	MAY-MAY	AUG-OCT	-	
289	Black scoter			3-7 BIRDS/SQ.KM				X	X	X	X	X	X				JUN-JUL	MAY-MAY	AUG-OCT	-	
	Scaup			3-8 BIRDS/SQ.KM				X	X	X	X	X	X				JUN-JUL	MAY-MAY	AUG-OCT	-	
290	Black scoter			3-7 BIRDS/SQ.KM				X	X	X	X	X	X				JUN-JUL	MAY-MAY	AUG-OCT	-	
	Long-tailed duck			1-1.5 BIRDS/SQ.KM				X	X	X	X	X	X				JUN-JUL	MAY-MAY	AUG-OCT	-	
	Scaup			3-8 BIRDS/SQ.KM				X	X	X	X	X	X				JUN-JUL	MAY-MAY	AUG-OCT	-	
291	Scaup			3-8 BIRDS/SQ.KM				X	X	X	X	X	X				JUN-JUL	MAY-MAY	AUG-OCT	-	
	Tundra swan			1-1.5 BIRDS/SQ.KM				X	X	X	X	X					MAY-JUN	MAY-MAY	JUL-SEP	-	
292	Black scoter			3-7 BIRDS/SQ.KM				X	X	X	X	X	X				JUN-JUL	MAY-MAY	AUG-OCT	-	
	Scaup			3-8 BIRDS/SQ.KM				X	X	X	X	X	X				JUN-JUL	MAY-MAY	AUG-OCT	-	
	Tundra swan			1-1.5 BIRDS/SQ.KM				X	X	X	X	X					MAY-JUN	MAY-MAY	JUL-SEP	-	
293	Black scoter			3-7 BIRDS/SQ.KM				X	X	X	X	X	X				JUN-JUL	MAY-MAY	AUG-OCT	-	
294	Black scoter			3-7 BIRDS/SQ.KM				X	X	X	X	X	X				JUN-JUL	MAY-MAY	AUG-OCT	-	
	Long-tailed duck			1-1.5 BIRDS/SQ.KM				X	X	X	X	X	X				JUN-JUL	MAY-MAY	AUG-OCT	-	
295	Tundra swan			1-1.5 BIRDS/SQ.KM				X	X	X	X	X					MAY-JUN	MAY-MAY	JUL-SEP	-	
FISH:																					
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
15	Rainbow smelt			HIGH					X	X							-	-	-	APR-MAY	-
25	Chinook salmon								X	X	X	X					-	-	-	MAY-JUN	MAY-AUG
	Chum salmon (dog)								X	X	X	X					-	-	-	MAY-JUN	JUN-AUG
	Coho salmon (silver)								X	X	X	X	X	X			-	-	-	MAY-JUN	JUL-OCT
	Dolly varden								X	X	X	X	X				-	-	-	MAY-JUN	MAY-SEP
	Pink salmon (humpy)								X	X	X						-	-	-	MAY-JUN	JUN-JUL
	Sockeye salmon (red)			HIGH					X	X	X	X					-	-	-	MAY-JUN	MAY-AUG
26	Alaska plaice				X	X	X	X	X	X	X	X	X	X	X	X	MAR-MAY	MAY-JUN	MAY-JUN	JAN-DEC	JAN-DEC
	Pacific cod				X	X	X	X	X	X	X	X	X	X	X	X	JAN-MAY	-	-	JAN-DEC	JAN-DEC
	Pacific halibut									X	X	X	X				-	-	-	-	JUL-OCT
	Rainbow smelt				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Rock sole				X	X	X	X	X	X	X	X	X	X	X	X	JAN-MAR	-	-	JAN-DEC	DEC-SEP
	Sculpin				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Starry flounder				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Walleye pollock				X	X	X	X	X	X	X	X	X	X	X	X	FEB-MAY	-	-	JAN-DEC	JAN-DEC
	Yellowfin sole				X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	JUN-AUG	JUN-NOV	JAN-DEC	MAY-AUG
108	Chinook salmon				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	MAY-SEP
	Chum salmon (dog)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Coho salmon (silver)				X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	OCT-MAR	MAR-MAY	JAN-DEC	JUL-NOV
	Dolly varden				X	X	X	X	X	X	X	X	X	X	X	X	AUG-OCT	AUG-DEC	DEC-JUN	JAN-DEC	JAN-DEC
	Sockeye salmon (red)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	JUN-SEP
109	Chinook salmon				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	MAY-SEP
	Chum salmon (dog)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Coho salmon (silver)				X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	OCT-MAR	MAR-MAY	JAN-DEC	JUL-NOV
	Dolly varden				X	X	X	X	X	X	X	X	X	X	X	X	AUG-OCT	AUG-DEC	DEC-JUN	JAN-DEC	JAN-DEC
	Pink salmon (humpy)				X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-MAR	MAR-MAY	MAY-JUN	JUN-SEP
	Sockeye salmon (red)																				

INVERTEBRATE:																					
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
26	Red king crab				X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUL	-	-	JAN-DEC	JAN-DEC
	Tanner crab				X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUN	-	-	JAN-DEC	JAN-DEC

MARINE MAMMAL:																				
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Mating	Calving	Molting	Pupping
29	Bearded seal				X	X	X	X								X	-	-	-	MAR-APR

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.

Bristol Bay: ESIMAP 7 (cont.)

BIOLOGICAL RESOURCES: (cont.)

MARINE MAMMAL:																				
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Mating	Calving	Molting	Pupping
30	Gray whale							X	X	X							-	-	-	-
31	Harbor porpoise									X	X	X					-	-	-	-
	Killer whale						X	X	X	X	X	X	X	X			-	SEP-OCT	-	-
	Minke whale									X	X	X					-	-	-	-
37	Walrus			HIGH					X	X	X	X	X				-	-	-	-
57	Beluga whale			1,000S				X	X	X	X	X	X				-	JUN-AUG	-	-
67	Seals			HIGH			X	X	X	X	X	X	X	X			-	-	-	MAY-JUL
74	Sea otter			LOW	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC
79	Walrus								X	X	X	X	X	X			-	-	-	-
268	Seals			100S			X	X	X	X	X	X	X	X			-	-	-	MAY-JUL
269	Seals			<10			X	X	X	X	X	X	X	X			-	-	-	MAY-JUL
270	Seals			10S			X	X	X	X	X	X	X	X			-	-	-	MAY-JUL
TERRESTRIAL MAMMAL:																				
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D				
76	Brown bear			HIGH				X	X	X										

HUMAN USE RESOURCES:

CRITICAL HABITAT:

HUN#	Name	Owner	Contact	Phone
13	EGEGIK CRITICAL HABITAT AREA	ALASKA DEPT. OF FISH & GAME		

WILDLIFE REFUGE:

HUN#	Name	Owner	Contact	Phone
24	ALASKA MARITIME NWR	US FISH & WILDLIFE SERVICE	REFUGE MANAGER	907/246-3339
25	ALASKA PENINSULA NWR	US FISH & WILDLIFE SERVICE	REFUGE MANAGER	907/246-3339

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.

Bristol Bay: ESIMAP 8

BIOLOGICAL RESOURCES:

BIRD:																					
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating		Molting	
75	Black scoter			1,000S					X	X		X	X	X			-	APR-MAY	AUG-OCT	-	
	Canada goose			100S					X	X		X	X	X			-	APR-MAY	AUG-OCT	-	
	Emperor goose			1,000S					X	X		X	X	X			-	APR-MAY	AUG-OCT	-	
	King eider			100S								X	X	X			-	-		-	
	Long-tailed duck			1,000S					X	X							-	APR-MAY		-	
	Northern pintail			1,000S					X	X		X	X	X			-	APR-MAY	AUG-OCT	-	
	Scaup			100S					X	X							-	APR-MAY		-	
	Steller's eider	C	T	100S					X	X		X	X	X			-	APR-MAY	AUG-OCT	-	
	White-winged scoter			1,000S					X	X		X	X	X			-	APR-MAY	AUG-OCT	-	
81	Bar-tailed godwit			10S					X	X	X	X	X	X			-	APR-OCT		-	
	Dunlin			1,000S					X	X	X	X	X	X			MAY-JUL	MAY-OCT		-	
	Greater yellowlegs			100S							X	X	X	X			-	JUN-OCT		-	
	Marbled godwit			100S					X	X	X	X	X	X			MAY-JUL	APR-OCT		-	
	Pectoral sandpiper										X	X	X	X			-	JUN-OCT		-	
	Sharp-tailed sandpiper										X	X	X	X			-	JUN-OCT		-	
	Short-billed dowitcher										X	X	X	X			-	JUN-OCT		-	
	Western sandpiper										X	X	X				-	MAY-JUL		-	
82	Bald eagle					X	X	X	X	X	X	X	X	X	X	X	-	-		-	
	Black scoter			1,000S					X	X		X	X	X			-	APR-MAY	AUG-OCT	-	
	Canada goose			1,000S					X	X		X	X	X			-	APR-MAY	AUG-OCT	-	
	Emperor goose			1,000S					X	X		X	X	X			-	APR-MAY	AUG-OCT	-	
	King eider			1,000S					X	X	X	X	X	X			-	APR-MAY	AUG-OCT	-	
	Long-tailed duck			100S					X	X		X	X	X			-	APR-MAY	AUG-OCT	-	
	Northern pintail			1,000S					X	X		X	X	X			-	APR-MAY	AUG-OCT	-	
	Scaup			100S					X	X		X	X	X			-	APR-MAY	AUG-OCT	-	
	Steller's eider	C	T	100S					X	X		X	X	X			-	APR-MAY	AUG-OCT	-	
	White-winged scoter			100S					X	X		X	X	X			-	APR-MAY	AUG-OCT	-	
83	Black scoter			1,000S					X	X		X	X	X	X		-	APR-MAY	AUG-OCT	JUL-OCT	
	Long-tailed duck			100S					X	X							-	APR-MAY		-	
84	Greater white-fronted goose										X	X					-	-		JUL-AUG	
85	Marbled godwit			1,000-3,000							X	X					JUN-JUL	-		-	
88	Bar-tailed godwit			1,000S					X	X	X	X	X	X	X		MAY-JUL	APR-OCT		-	
	Dunlin			10,000S					X	X	X	X	X	X	X		MAY-JUL	APR-OCT		-	
	Greater yellowlegs			100S							X	X	X	X	X		-	JUN-OCT		-	
	Long-billed dowitcher										X	X	X	X	X		-	JUN-OCT		-	
	Marbled godwit			100S					X	X	X	X	X	X	X		-	APR-OCT		-	
	Pacific golden-plover								X	X	X	X	X	X			-	MAY-OCT		-	
	Pectoral sandpiper			100S							X	X	X	X	X		-	JUN-OCT		-	
	Rock sandpiper			1,000S					X	X	X	X	X	X	X		-	APR-OCT		-	
	Sharp-tailed sandpiper			1,000S							X	X	X	X	X		-	JUN-OCT		-	
	Short-billed dowitcher			100S					X	X	X						-	APR-JUN		-	
	Western sandpiper			100S					X	X	X	X	X	X	X		-	APR-OCT		-	
89	Black scoter			100S					X	X		X	X	X			-	APR-MAY	AUG-OCT	-	
	Canada goose			100S					X	X		X	X	X			-	APR-MAY	AUG-OCT	-	
	Emperor goose			10,000S					X	X		X	X	X			-	APR-MAY	AUG-OCT	-	
	King eider			1,000S					X	X	X	X	X	X			-	APR-MAY	AUG-OCT	-	
	Northern pintail			1,000S					X	X		X	X	X			-	APR-MAY	AUG-OCT	-	
	Steller's eider	C	T	1,000S					X	X		X	X	X			-	APR-MAY	AUG-OCT	JUL-AUG	
	White-winged scoter			100S					X	X		X	X	X			-	APR-MAY	AUG-OCT	-	
90	Canada goose			100S								X	X	X			-	AUG-OCT		-	
	Emperor goose			1,000S					X	X		X	X	X			-	APR-MAY	AUG-OCT	-	
	King eider			1,000S					X	X	X	X	X	X			-	APR-MAY	AUG-OCT	-	
	Northern pintail			1,000S					X	X		X	X	X			-	APR-MAY	AUG-OCT	-	
215	Glaucous-winged gull			310					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-	
216	Glaucous-winged gull			284					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-	
267	Kittlitz's murrelet					X	X	X	X	X			X	X	X	X	-	-		-	
284	Pacific loon			1-1.5 BIRDS/SQ.KM					X	X	X	X	X				MAY-JUN	MAY-MAY	JUL-SEP	-	
288	Scaup			3-8 BIRDS/SQ.KM					X	X	X	X	X	X			JUN-JUL	MAY-MAY	AUG-OCT	-	
291	Scaup			3-8 BIRDS/SQ.KM					X	X	X	X	X	X			JUN-JUL	MAY-MAY	AUG-OCT	-	
	Tundra swan			1-1.5 BIRDS/SQ.KM					X	X	X	X	X				MAY-JUN	MAY-MAY	JUL-SEP	-	
292	Black scoter			3-7 BIRDS/SQ.KM					X	X	X	X	X	X			JUN-JUL	MAY-MAY	AUG-OCT	-	
	Scaup			3-8 BIRDS/SQ.KM					X	X	X	X	X	X			JUN-JUL	MAY-MAY	AUG-OCT	-	
	Tundra swan			1-1.5 BIRDS/SQ.KM					X	X	X	X	X				MAY-JUN	MAY-MAY	JUL-SEP	-	
293	Black scoter			3-7 BIRDS/SQ.KM					X	X	X	X	X	X			JUN-JUL	MAY-MAY	AUG-OCT	-	
295	Tundra swan			1-1.5 BIRDS/SQ.KM					X	X	X	X	X				MAY-JUN	MAY-MAY	JUL-SEP	-	
FISH:																					
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
25	Chinook salmon									X	X	X	X				-	-	-	MAY-JUN	MAY-AUG
	Chum salmon (dog)									X	X	X	X				-	-	-	MAY-JUN	JUN-AUG
	Coho salmon (silver)									X	X	X	X	X	X		-	-	-	MAY-JUN	JUL-OCT
	Dolly varden									X	X	X	X	X			-	-	-	MAY-JUN	MAY-SEP
	Pink salmon (humpy)									X	X	X					-	-	-	MAY-JUN	JUN-JUL
	Sockeye salmon (red)			HIGH						X	X	X					-	-	-	MAY-JUN	MAY-AUG
26	Alaska plaice																				

Biological information shown on the maps represents known concentration

Bristol Bay: ESIMAP 8 (cont.)

BIOLOGICAL RESOURCES: (cont.)

FISH:																					
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
		-	-		-	-	-	-	-	-	-	-	-	-	-	-					
136	Chinook salmon				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	MAY-SEP
	Chum salmon (dog)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
142	Chum salmon (dog)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Coho salmon (silver)				X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	OCT-MAR	MAR-MAY	JAN-DEC	JUL-NOV
151	Chum salmon (dog)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Coho salmon (silver)				X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	OCT-MAR	MAR-MAY	JAN-DEC	JUL-NOV
153	Sockeye salmon (red)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Chinook salmon				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	MAY-SEP
	Chum salmon (dog)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Sockeye salmon (red)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	JUN-SEP

INVERTEBRATE:																					
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
26	Red king crab	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUL	-	-	JAN-DEC	JAN-DEC
	Tanner crab				X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUN	-	-	JAN-DEC	JAN-DEC
86	Red king crab			HIGH					X	X	X						-	-	-	MAY-JUL	-

MARINE MAMMAL:																				
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Mating	Calving	Molting	Pupping

30	Gray whale							X	X	X							-	-	-	-
31	Harbor porpoise									X	X	X					-	-	-	-
	Killer whale						X	X	X	X	X	X	X	X			-	SEP-OCT	-	-
	Minke whale									X	X	X					-	-	-	-
37	Walrus			HIGH						X	X	X	X	X			-	-	-	-
67	Seals			HIGH			X	X	X	X	X	X	X	X			-	-	-	MAY-JUL
82	Sea otter			LOW	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC
89	Sea otter			LOW	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC
90	Sea otter			LOW	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC
268	Seals			100S			X	X	X	X	X	X	X	X			-	-	-	MAY-JUL
269	Seals			<10			X	X	X	X	X	X	X	X			-	-	-	MAY-JUL
271	Seals			1,000S			X	X	X	X	X	X	X	X			-	-	-	MAY-JUL

TERRESTRIAL MAMMAL:																
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
76	Brown bear			HIGH						X	X	X				

HUMAN USE RESOURCES:

CRITICAL HABITAT:

HUN#	Name	Owner	Contact	Phone
12	CINDER RIVER CRITICAL HABITAT AREA	ALASKA DEPT. OF FISH & GAME	MARK FINK	907/267-2342
14	PILOT POINT CRITICAL HABITAT AREA	ALASKA DEPT. OF FISH & GAME		

NATIONAL PARK:

HUN#	Name	Owner	Contact	Phone
20	ANIAKCHAK NATIONAL MONUMENT	NATIONAL PARK SERVICE		907/246-3305
21	ANIAKCHAK NATIONAL MONUMENT & PRESERVE	NATIONAL PARK SERVICE		907/246-3305

WILDLIFE REFUGE:

HUN#	Name	Owner	Contact	Phone
24	ALASKA MARITIME NWR	US FISH & WILDLIFE SERVICE	REFUGE MANAGER	907/246-3339
25	ALASKA PENINSULA NWR	US FISH & WILDLIFE SERVICE	REFUGE MANAGER	907/246-3339

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.

Bristol Bay: ESIMAP 9

BIOLOGICAL RESOURCES:

BIRD:																					
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating	Molting		
88	Bar-tailed godwit			1,000S				X	X	X	X	X	X	X			MAY-JUL	APR-OCT	-		
	Dunlin			10,000S				X	X	X	X	X	X	X			MAY-JUL	APR-OCT	-		
	Greater yellowlegs			100S						X	X	X	X	X			-	JUN-OCT	-		
	Long-billed dowitcher									X	X	X	X	X			-	JUN-OCT	-		
	Marbled godwit			100S				X	X	X	X	X	X	X			-	APR-OCT	-		
	Pacific golden-plover									X	X	X	X	X			-	MAY-OCT	-		
	Pectoral sandpiper			100S						X	X	X	X	X			-	JUN-OCT	-		
	Rock sandpiper			1,000S				X	X	X	X	X	X	X			-	APR-OCT	-		
	Sharp-tailed sandpiper			1,000S						X	X	X	X	X			-	JUN-OCT	-		
	Short-billed dowitcher			100S				X	X	X							-	APR-JUN	-		
	Western sandpiper			100S				X	X	X	X	X	X	X			-	APR-OCT	-		
90	Canada goose			100S								X	X	X			-	AUG-OCT	-		
	Emperor goose			1,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-	
	King eider			1,000S				X	X	X	X	X	X	X			-	APR-MAY	AUG-OCT	-	
	Northern pintail			1,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-	
267	Kittlitz's murrelet							X	X	X	X			X	X	X	-	-	-		
FISH:																					
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
25	Chinook salmon									X	X	X	X				-	-	-	MAY-JUN	MAY-AUG
	Chum salmon (dog)									X	X	X	X				-	-	-	MAY-JUN	JUN-AUG
	Coho salmon (silver)									X	X	X	X	X			-	-	-	MAY-JUN	JUL-OCT
	Dolly varden									X	X	X	X	X			-	-	-	MAY-JUN	MAY-SEP
	Pink salmon (humpy)									X	X	X					-	-	-	MAY-JUN	JUN-JUL
	Sockeye salmon (red)			HIGH						X	X	X	X				-	-	-	MAY-JUN	MAY-AUG
26	Alaska plaice				X	X	X	X	X	X	X	X	X	X	X	X	MAR-MAY	MAY-JUN	MAY-JUN	JAN-DEC	JAN-DEC
	Pacific cod				X	X	X	X	X	X	X	X	X	X	X	X	JAN-MAY	-	-	JAN-DEC	JAN-DEC
	Pacific halibut									X	X	X	X				-	-	-	-	JUL-OCT
	Rainbow smelt				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Rock sole				X	X	X	X	X	X	X	X	X	X	X	X	JAN-MAR	-	-	JAN-DEC	DEC-SEP
	Sculpin				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Starry flounder				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Walleye pollock				X	X	X	X	X	X	X	X	X	X	X	X	FEB-MAY	-	-	JAN-DEC	JAN-DEC
	Yellowfin sole				X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	JUN-AUG	JUN-NOV	JAN-DEC	MAY-AUG
111	Sockeye salmon (red)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	JUN-SEP
INVERTEBRATE:																					
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
26	Red king crab				X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUL	-	-	JAN-DEC	JAN-DEC
	Tanner crab				X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUN	-	-	JAN-DEC	JAN-DEC
MARINE MAMMAL:																					
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Mating	Calving	Molting	Pupping	
24	Walrus			HIGH	X	X	X									X	DEC-MAR	-	-	-	
30	Gray whale							X	X	X							-	-	-	-	
31	Harbor porpoise									X	X	X					-	-	-	-	
	Killer whale							X	X	X	X	X	X	X			-	SEP-OCT	-	-	
	Minke whale									X	X	X					-	-	-	-	
37	Walrus			HIGH						X	X	X	X				-	-	-	-	
90	Sea otter			LOW	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	
TERRESTRIAL MAMMAL:																					
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D					
76	Brown bear			HIGH				X	X	X											

HUMAN USE RESOURCES:

CRITICAL HABITAT:

HUN#	Name	Owner	Contact	Phone
12	CINDER RIVER CRITICAL HABITAT AREA	ALASKA DEPT. OF FISH & GAME	MARK FINK	907/267-2342

WILDLIFE REFUGE:

HUN#	Name	Owner	Contact	Phone
24	ALASKA MARITIME NWR	US FISH & WILDLIFE SERVICE	REFUGE MANAGER	907/246-3339

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.

Bristol Bay: ESIMAP 10

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating		Molting
91	Bar-tailed godwit			100S				X	X	X	X	X	X	X			MAY-JUL	APR-OCT		-
	Black scoter			10,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Canada goose			1,000S								X	X	X			-	AUG-OCT		-
	Common eider			100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Dunlin			10,000S				X	X	X	X	X	X	X			MAY-JUL	APR-OCT		-
	Emperor goose			10,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	King eider			1,000S			X	X									-	MAR-APR		-
	Long-tailed duck			100S				X	X								-	APR-MAY		-
	Northern pintail			10,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Red-necked phalarope			1,000S						X	X	X	X	X			-	JUN-OCT		-
	Rock sandpiper			1,000S				X	X	X	X	X	X	X			MAY-JUL	APR-OCT		-
	Scaup			100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Steller's eider	C	T	10,000S				X	X		X	X	X	X			-	APR-MAY	AUG-OCT	JUL-AUG
	Surf scoter			100S								X	X	X			-	AUG-OCT		-
	Western sandpiper			10,000S				X	X	X	X						-	APR-JUL		-
	White-winged scoter			1,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
92	Bar-tailed godwit									X	X	X	X	X			-	JUN-OCT		-
	Black scoter			1,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Black turnstone							X	X	X							-	APR-JUN		-
	Canada goose			100S								X	X	X			-	AUG-OCT		-
	Common eider			100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Dunlin			10,000S						X	X	X	X	X			MAY-JUL	MAY-OCT		-
	Emperor goose			10,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	King eider			1,000S				X	X	X	X	X	X	X			-	APR-MAY	AUG-OCT	-
	Least sandpiper							X	X	X							MAY-JUL	MAY-JUL		-
	Long-tailed duck			100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Northern pintail			1,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Red phalarope			1,000S						X	X	X	X	X			-	JUN-OCT		-
	Red-necked phalarope			1,000S						X	X	X	X	X			-	JUN-OCT		-
	Rock sandpiper			10,000S				X	X	X	X	X	X	X			MAY-JUL	APR-OCT		-
	Ruddy turnstone							X	X	X	X	X	X	X			-	APR-OCT		-
	Sanderling							X	X	X	X	X	X				-	JUN-OCT		-
	Short-billed dowitcher							X	X	X	X	X	X				MAY-JUL	MAY-OCT		-
	Steller's eider	C	T	10,000S				X	X		X	X	X	X			-	APR-MAY	AUG-OCT	JUL-AUG
	Western sandpiper							X	X	X	X	X	X				-	APR-OCT		-
	White-winged scoter			1,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
93	Black scoter			1,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Emperor goose			100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Harlequin duck			100S				X	X								-	APR-MAY		-
	King eider			100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Long-tailed duck			100S				X	X								-	APR-MAY		-
	Northern pintail			100S								X	X	X			-	AUG-OCT		-
	Steller's eider	C	T	1,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	White-winged scoter			1,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
100	Black scoter			1,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Canada goose			1,000S								X	X	X			-	AUG-OCT		-
	Common eider			100S				X	X								-	APR-MAY		-
	Emperor goose			1,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	King eider			100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Long-tailed duck			100S				X	X								-	APR-MAY		-
	Northern pintail			100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Steller's eider	C	T	1,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
182	Common eider			UNKNOWN				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Glaucous-winged gull			1,500				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
267	Kittlitz's murrelet					X	X	X	X				X	X	X	X	-	-		-
288	Scaup			3-8 BIRDS/SQ.KM				X	X	X	X	X	X				JUN-JUL	MAY-MAY	AUG-OCT	-
289	Scaup			3-8 BIRDS/SQ.KM				X	X	X	X	X					JUN-JUL	MAY-MAY	AUG-OCT	-
	Black scoter			3-7 BIRDS/SQ.KM				X	X	X	X	X	X				JUN-JUL	MAY-MAY	AUG-OCT	-

FISH:

RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
25	Chinook salmon									X	X	X	X				-	-	-	MAY-JUN	MAY-AUG
	Chum salmon (dog)									X	X	X	X				-	-	-	MAY-JUN	JUN-AUG
	Coho salmon (silver)									X	X	X	X	X	X		-	-	-	MAY-JUN	JUL-OCT
	Dolly varden									X	X	X	X	X			-	-	-	MAY-JUN	MAY-SEP
	Pink salmon (humpy)									X	X	X					-	-	-	MAY-JUN	JUN-JUL
	Sockeye salmon (red)			HIGH						X	X	X	X				-	-	-	MAY-JUN	MAY-AUG
26	Alaska plaice				X	X	X	X	X	X	X	X	X	X	X	X	MAR-MAY	MAY-JUN	MAY-JUN	JAN-DEC	JAN-DEC
	Pacific cod				X	X	X	X	X	X	X	X	X	X	X	X	JAN-MAY	-	-	JAN-DEC	JAN-DEC
	Pacific halibut									X	X	X	X				-	-	-	-	JUL-OCT
	Rainbow smelt				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Rock sole				X	X	X	X	X	X	X	X	X	X	X	X	JAN-MAR	-	-	JAN-DEC	DEC-SEP
	Sculpin				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Starry flounder				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Walleye pollock				X	X	X	X	X	X	X	X	X	X	X	X	FEB-MAY	-	-	JAN-DEC	JAN-DEC
	Yellowfin sole				X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	JUN-AUG	JUN-NOV	JAN-DEC	MAY-AUG
111	Sockeye salmon (red)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	JUN-SEP
115	Coho salmon (silver)				X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	OCT-MAR	MAR-MAY	JAN-DEC	JUL-NOV
	Sockeye salmon (red)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	JUN-SEP
116	Coho salmon (silver)				X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	OCT-MAR	MAR-MAY	JAN-DEC	JUL-NOV
119	Chinook salmon				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	MAY-SEP
	Coho salmon (silver)				X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	OCT-MAR	MAR-MAY	JAN-DEC	JUL-NOV
	Sockeye salmon (red)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	JUN-SEP
123	Chum salmon (dog)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
130	Chum salmon (dog)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Sockeye salmon (red)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	JUN-SEP
153	Chinook salmon				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	MAY-SEP
	Chum salmon (dog)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Sockeye salmon (red)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	JUN-SEP
156	Chinook salmon				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	MAY-SEP
	Chum salmon (dog)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Coho salmon (silver)				X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	OCT-MAR	MAR-MAY	JAN-DEC	JUL-NOV
	Dolly varden				X	X	X	X	X	X	X	X	X	X	X	X	AUG-OCT	AUG-DEC	DEC-JUN	JAN-DEC	JAN-DEC
	Pink salmon (humpy)				X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-MAR	MAR-MAY	MAY-JUN	JUN-SEP
	Rainbow trout (steelhead)				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Sockeye salmon (red)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	JUN-SEP

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.

Bristol Bay: ESIMAP 10 (cont.)

BIOLOGICAL RESOURCES: (cont.)

INVERTEBRATE:																					
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
26	Red king crab				X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUL	-	-	JAN-DEC	JAN-DEC
	Tanner crab				X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUN	-	-	JAN-DEC	JAN-DEC
91	Red king crab			HIGH						X	X	X					-	-	-	MAY-JUL	-
MARINE MAMMAL:																					
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Mating	Calving	Molting	Pupping	
24	Walrus			HIGH	X	X	X									X	DEC-MAR	-	-	-	
30	Gray whale							X	X	X							-	-	-	-	
31	Harbor porpoise									X	X	X					-	-	-	-	
	Killer whale						X	X	X	X	X	X	X	X			-	SEP-OCT	-	-	
	Minke whale									X	X	X					-	-	-	-	
37	Walrus			HIGH						X	X	X	X	X			-	-	-	-	
67	Seals			HIGH			X	X	X	X	X	X	X	X			-	-	-	-	MAY-JUL
91	Sea otter				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
268	Seals			100S			X	X	X	X	X	X	X	X			-	-	-	-	MAY-JUL
269	Seals			<10			X	X	X	X	X	X	X	X			-	-	-	-	MAY-JUL
270	Seals			10S			X	X	X	X	X	X	X	X			-	-	-	-	MAY-JUL
TERRESTRIAL MAMMAL:																					
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D					
76	Brown bear			HIGH						X	X	X									

HUMAN USE RESOURCES:

CRITICAL HABITAT:

HUN#	Name	Owner	Contact	Phone
15	PORT HEIDEN CRITICAL HABITAT AREA	ALASKA DEPT. OF FISH & GAME	MARK FINK	907/267-2338
17	STELLER'S EIDER CRITICAL HABITAT	US FISH & WILDLIFE SERVICE		907/271-2778
WILDLIFE REFUGE:				
HUN#	Name	Owner	Contact	Phone
24	ALASKA MARITIME NWR	US FISH & WILDLIFE SERVICE	REFUGE MANAGER	907/246-3339
25	ALASKA PENINSULA NWR	US FISH & WILDLIFE SERVICE	REFUGE MANAGER	907/246-3339

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.

Bristol Bay: ESIMAP 11

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating		Molting
91	Bar-tailed godwit	100S				X	X	X	X	X	X	X			MAY-JUL	APR-OCT		-
	Black scoter	10,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Canada goose	1,000S								X	X	X			-	AUG-OCT		-
	Common eider	100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Dunlin	10,000S				X	X	X	X	X	X	X			MAY-JUL	APR-OCT		-
	Emperor goose	10,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	King eider	1,000S			X	X									-	MAR-APR		-
	Long-tailed duck	100S				X	X								-	APR-MAY		-
	Northern pintail	10,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Red-necked phalarope	1,000S						X	X	X	X	X			-	JUN-OCT		-
	Rock sandpiper	1,000S				X	X	X	X	X	X	X			MAY-JUL	APR-OCT		-
	Scaup	100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Steller's eider	C T 10,000S				X	X		X	X	X	X			-	APR-MAY	AUG-OCT	JUL-AUG
	Surf scoter	100S								X	X	X			-	AUG-OCT		-
	Western sandpiper	10,000S				X	X	X	X						-	APR-JUL		-
	White-winged scoter	1,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
96	Black scoter	100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Brant	100S				X	X								-	APR-MAY		-
	Emperor goose	1,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Harlequin duck	100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
98	Black scoter	100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Brant	1,000S				X	X								-	APR-MAY		-
	Emperor goose	10,000S			X	X	X			X	X	X	X		-	APR-MAY	SEP-OCT	-
	Harlequin duck	1,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Northern pintail	100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Rock sandpiper					X	X	X	X	X	X	X			-	APR-OCT		-
	Scaup	1,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Shorebirds					X	X	X	X	X	X	X			-	APR-OCT		-
	Steller's eider	C T 100S			X	X	X	X		X	X	X	X		-	APR-MAY	SEP-OCT	-
	White-winged scoter				X	X	X	X		X	X	X	X		-	APR-MAY	SEP-OCT	-
99	Waterfowl	HIGH			X	X	X	X		X	X	X	X	X	-	APR-MAY	SEP-OCT	-
103	Black scoter	100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Brant	100S				X	X								-	APR-MAY		-
	Emperor goose	100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Harlequin duck	100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Northern pintail	100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	Scaup	100S				X	X								-	APR-MAY		-
	Surf scoter	1,000S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
	White-winged scoter	100S				X	X			X	X	X			-	APR-MAY	AUG-OCT	-
161	Bald eagle					X	X	X	X	X					APR-AUG	-		-
162	Bald eagle					X	X	X	X	X					APR-AUG	-		-
183	Common eider	UNKNOWN				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Double-crested cormorant	12				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Glaucous-winged gull	UNKNOWN				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
184	Common eider	UNKNOWN				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Cormorant	50				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Double-crested cormorant	UNKNOWN				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Glaucous-winged gull	5,500				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
186	Aleutian tern	130				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Arctic tern	30				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
187	Black oystercatcher	10				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Glaucous-winged gull	30				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Horned puffin	500				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
	Pigeon guillemot	6				X	X	X	X	X	X	X			JUN-JUL	APR-MAY	AUG-OCT	-
267	Kittlitz's murrelet				X	X	X	X	X		X	X	X	X	-	-		-
288	Scaup	3-8 BIRDS/SQ.KM						X	X	X	X	X	X		JUN-JUL	MAY-MAY	AUG-OCT	-
289	Black scoter	3-7 BIRDS/SQ.KM						X	X	X	X	X			JUN-JUL	MAY-MAY	AUG-OCT	-
	Scaup	3-8 BIRDS/SQ.KM						X	X	X	X	X	X		JUN-JUL	MAY-MAY	AUG-OCT	-
291	Scaup	3-8 BIRDS/SQ.KM						X	X	X	X	X	X		JUN-JUL	MAY-MAY	AUG-OCT	-
	Tundra swan	1-1.5 BIRDS/SQ.KM						X	X	X	X				MAY-JUN	MAY-MAY	JUL-SEP	-
295	Tundra swan	1-1.5 BIRDS/SQ.KM						X	X	X	X	X			MAY-JUN	MAY-MAY	JUL-SEP	-

FISH:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
25	Chinook salmon							X	X	X	X				-	-	-	MAY-JUN	MAY-AUG
	Chum salmon (dog)							X	X	X					-	-	-	MAY-JUN	JUN-AUG
	Coho salmon (silver)							X	X	X	X	X			-	-	-	MAY-JUN	JUL-OCT
	Dolly varden							X	X	X	X	X			-	-	-	MAY-JUN	MAY-SEP
	Pink salmon (humpy)							X	X	X					-	-	-	MAY-JUN	JUN-JUL
	Sockeye salmon (red)	HIGH						X	X	X	X				-	-	-	MAY-JUN	MAY-AUG
26	Alaska plaice		X	X	X	X	X	X	X	X	X	X	X	X	MAR-MAY	MAY-JUN	MAY-JUN	JAN-DEC	JAN-DEC
	Pacific cod		X	X	X	X	X	X	X	X	X	X	X	X	JAN-MAY	-	-	JAN-DEC	JAN-DEC
	Pacific halibut							X	X	X	X				-	-	-	-	JUL-OCT
	Rainbow smelt		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Rock sole		X	X	X	X	X	X	X	X	X	X	X	X	JAN-MAR	-	-	JAN-DEC	DEC-SEP
	Sculpin		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Starry flounder		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	JAN-DEC
	Walleye pollock		X	X	X	X	X	X	X	X	X	X	X	X	FEB-MAY	-	-	JAN-DEC	JAN-DEC
	Yellowfin sole		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	JUN-AUG	JUN-NOV	JAN-DEC	MAY-AUG
39	Arrowtooth flounder		X	X	X	X	X	X	X	X	X	X	X	X	NOV-MAR	DEC-MAY	MAR-AUG	JAN-DEC	JAN-DEC
	Atka mackerel		X	X	X	X	X	X	X	X	X	X	X	X	MAY-OCT	JUN-AUG	SEP-FEB	JAN-DEC	JAN-DEC
	Chinook salmon							X	X	X	X				-	-	-	MAY-JUN	MAY-AUG
	Chum salmon (dog)							X	X	X	X				-	-	-	MAY-JUN	JUN-AUG
	Coho salmon (silver)							X	X	X	X	X			-	-	-	MAY-JUN	JUL-OCT
	Dolly varden							X	X	X	X	X			-	-	-	MAY-JUN	MAY-SEP
	Dover sole		X	X	X	X	X	X	X	X	X	X	X	X	JAN-AUG	MAR-AUG	JAN-DEC	JAN-DEC	JAN-DEC
	Flathead sole		X	X	X	X	X	X	X	X	X	X	X	X	DEC-APR	DEC-MAR	APR-AUG	JAN-DEC	JAN-DEC
	Pacific cod		X	X	X	X	X	X	X	X	X	X	X	X	JAN-MAY	-	-	JAN-DEC	JAN-DEC
	Pacific halibut							X	X	X	X				-	-	-	-	JUL-OCT
	Pink salmon (humpy)							X	X	X					-	-	-	MAY-JUN	JUN-JUL
	Rex sole		X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	MAY-JUN	MAY-JUN	JAN-DEC	JAN-DEC
	Rock sole		X	X	X	X	X	X	X	X	X	X	X	X	JAN-MAR	-	-	JAN-DEC	DEC-SEP
	Rougheye rockfish		X	X	X	X	X	X	X	X	X	X	X	X	JUL-DEC	-	-	-	JAN-DEC
	Sablefish (blackcod)		X	X	X	X	X								JAN-MAY	-	-	-	JAN-MAY
	Sculpin		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Shortraker rockfish		X	X	X	X	X	X	X	X	X	X	X	X	JUL-DEC	-	-	-	JAN-DEC
	Sockeye salmon (red)							X	X	X	X				-	-	-	MAY-JUN	MAY-AUG
	Walleye pollock		X	X	X	X	X	X	X	X	X	X	X	X	FEB-APR	-	MAR-JUL	JAN-DEC	JAN-DEC
	Yellowfin sole		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	JUN-AUG	JUN-NOV	JAN-DEC	MAY-AUG
101	Pacific herring							X	X	X	X				APR-JUN	MAY-JUL	-	-	APR-JUL
111	Sockeye salmon (red)		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	JUN-SEP
115	Coho salmon (silver)		X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	OCT-MAR	MAR-MAY	JAN-DEC	JUL-NOV
	Sockeye salmon (red)		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	JUN-SEP

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.

Bristol Bay: ESIMAP 11 (cont.)

BIOLOGICAL RESOURCES: (cont.)

FISH:																					
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
116	Coho salmon (silver)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	OCT-MAR	MAR-MAY	JAN-DEC	JUL-NOV
118	Chinook salmon	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	MAY-SEP
	Coho salmon (silver)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	OCT-MAR	MAR-MAY	JAN-DEC	JUL-NOV
123	Chum salmon (dog)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
124	Chinook salmon	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	MAY-SEP
	Chum salmon (dog)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Coho salmon (silver)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	OCT-MAR	MAR-MAY	JAN-DEC	JUL-NOV
	Sockeye salmon (red)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	JUN-SEP
126	Chinook salmon	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	MAY-SEP
	Sockeye salmon (red)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	JUN-SEP
130	Chum salmon (dog)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Sockeye salmon (red)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	JUN-SEP
131	Chum salmon (dog)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Coho salmon (silver)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	OCT-MAR	MAR-MAY	JAN-DEC	JUL-NOV
	Pink salmon (humpy)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-MAR	MAR-MAY	MAY-JUN	JUN-SEP
	Sockeye salmon (red)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	JUN-SEP
138	Pink salmon (humpy)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-MAR	MAR-MAY	MAY-JUN	JUN-SEP
142	Chum salmon (dog)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Coho salmon (silver)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	OCT-MAR	MAR-MAY	JAN-DEC	JUL-NOV
148	Chum salmon (dog)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Coho salmon (silver)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	OCT-MAR	MAR-MAY	JAN-DEC	JUL-NOV
	Pink salmon (humpy)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-MAR	MAR-MAY	MAY-JUN	JUN-SEP
149	Chum salmon (dog)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Pink salmon (humpy)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-MAR	MAR-MAY	MAY-JUN	JUN-SEP
150	Coho salmon (silver)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	OCT-MAR	MAR-MAY	JAN-DEC	JUL-NOV
	Pink salmon (humpy)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-MAR	MAR-MAY	MAY-JUN	JUN-SEP
151	Chum salmon (dog)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Coho salmon (silver)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	OCT-MAR	MAR-MAY	JAN-DEC	JUL-NOV
	Sockeye salmon (red)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	JUN-SEP
153	Chinook salmon	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	MAY-SEP
	Chum salmon (dog)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Sockeye salmon (red)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	JUN-SEP
156	Chinook salmon	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	MAY-SEP
	Chum salmon (dog)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Coho salmon (silver)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	OCT-MAR	MAR-MAY	JAN-DEC	JUL-NOV
	Dolly varden	-	-		X	X	X	X	X	X	X	X	X	X	X	X	AUG-OCT	AUG-DEC	DEC-JUN	JAN-DEC	JAN-DEC
	Pink salmon (humpy)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-MAR	MAR-MAY	MAY-JUN	JUN-SEP
	Rainbow trout (steelhead)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Sockeye salmon (red)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	JUN-SEP

INVERTEBRATE:																					
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
26	Red king crab	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUL	-	-	JAN-DEC	JAN-DEC
	Tanner crab	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUN	-	-	JAN-DEC	JAN-DEC
39	Red king crab	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUL	-	-	JAN-DEC	JAN-DEC
	Tanner crab	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUN	-	-	JAN-DEC	JAN-DEC
	Weatherwane scallop	-	-		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	MAY-JUL	MAY-AUG	JAN-DEC	JAN-DEC
91	Red king crab	-	-	HIGH						X	X	X					-	-	-	MAY-JUL	-
95	Pandalid shrimp	-	-	HIGH	X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	SEP-MAY	MAR-MAY	JAN-DEC	JAN-DEC

MARINE MAMMAL:																				
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Mating	Calving	Molting	Pupping
30	Gray whale	-	-					X	X	X							-	-	-	-
31	Harbor porpoise	-	-							X	X	X					-	-	-	-
	Killer whale	-	-				X	X	X	X	X	X	X	X			-	SEP-OCT	-	-
	Minke whale	-	-							X	X	X					-	-	-	-
40	Dall's porpoise	-	-		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
	Fin whale	-	-	E	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
	Gray whale	-	-					X	X	X							-	-	-	-
	Harbor porpoise	-	-		X	X	X	X	X	X	X	X	X	X	X	X	-	JUL-AUG	-	-
	Humpback whale	-	-	E E						X	X	X					-	-	-	-
	Killer whale	-	-		X	X	X	X	X	X	X	X	X	X	X	X	-	SEP-DEC	-	-
41	Sea otter	-	-		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC
67	Seals	-	-	HIGH				X	X	X	X	X	X	X			-	-	-	MAY-JUL
91	Sea otter	-	-		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC
97	Sea otter	-	-	HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC
268	Seals	-	-	100S				X	X	X	X	X	X	X			-	-	-	MAY-JUL
269	Seals	-	-	<10				X	X	X	X	X	X	X			-	-	-	MAY-JUL
270	Seals	-	-	10S				X	X	X	X	X	X	X			-	-	-	MAY-JUL
271	Seals	-	-	1,000S				X	X	X	X	X	X	X			-	-	-	MAY-JUL

TERRESTRIAL MAMMAL:																
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D
76	Brown bear			HIGH						X	X	X				

HUMAN USE RESOURCES:

HUN#	Name	Owner	Contact	Phone
15	PORT HEIDEN CRITICAL HABITAT AREA	ALASKA DEPT. OF FISH & GAME	MARK FINK	907/267-2338
16	STELLER SEA LION CRITICAL HABITAT	NMFS	NMFS	907/586-7858

HUN#	Name	Owner	Contact	Phone
20	ANIAKCHAK NATIONAL MONUMENT	NATIONAL PARK SERVICE		907/246-3305
21	ANIAKCHAK NATIONAL MONUMENT & PRESERVE	NATIONAL PARK SERVICE		907/246-3305

HUN#	Name	Owner	Contact	Phone
24	ALASKA MARITIME NWR	US FISH & WILDLIFE SERVICE	REFUGE MANAGER	907/246-3339
25	ALASKA PENINSULA NWR	US FISH & WILDLIFE SERVICE	REFUGE MANAGER	907/246-3339

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.

Bristol Bay: ESIMAP 12 (cont.)

BIOLOGICAL RESOURCES: (cont.)

FISH:																					
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
123	Chum salmon (dog)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
124	Chinook salmon	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	MAY-SEP
	Chum salmon (dog)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Coho salmon (silver)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	OCT-MAR	MAR-MAY	JAN-DEC	JUL-NOV
	Sockeye salmon (red)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	JUN-SEP
126	Chinook salmon	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	MAY-SEP
	Sockeye salmon (red)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	JUN-SEP
130	Chum salmon (dog)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Sockeye salmon (red)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	JUN-SEP
131	Chum salmon (dog)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Coho salmon (silver)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	OCT-MAR	MAR-MAY	JAN-DEC	JUL-NOV
	Pink salmon (humpy)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-MAR	MAR-MAY	MAY-JUN	JUN-SEP
	Sockeye salmon (red)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	JUN-SEP
133	Chum salmon (dog)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Pink salmon (humpy)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-MAR	MAR-MAY	MAY-JUN	JUN-SEP
	Sockeye salmon (red)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	JUN-SEP
136	Chinook salmon	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	MAY-SEP
	Chum salmon (dog)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
138	Pink salmon (humpy)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-MAR	MAR-MAY	MAY-JUN	JUN-SEP
148	Chum salmon (dog)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Coho salmon (silver)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	OCT-MAR	MAR-MAY	JAN-DEC	JUL-NOV
	Pink salmon (humpy)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-MAR	MAR-MAY	MAY-JUN	JUN-SEP
149	Chum salmon (dog)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Pink salmon (humpy)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-MAR	MAR-MAY	MAY-JUN	JUN-SEP
153	Chinook salmon	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	MAY-SEP
	Chum salmon (dog)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Sockeye salmon (red)	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	SEP-MAR	MAR-MAY	JAN-DEC	JUN-SEP

HABITAT:

RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D
106	Kelp	-	-	HIGH	X	X	X	X	X	X	X	X	X	X	X	X

INVERTEBRATE:

RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
39	Red king crab	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUL	-	-	JAN-DEC	JAN-DEC
	Tanner crab	-	-		X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUN	-	-	JAN-DEC	JAN-DEC
	Weathervane scallop	-	-		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	MAY-JUL	MAY-AUG	JAN-DEC	JAN-DEC
95	Pandalid shrimp	-	-	HIGH	X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	SEP-MAY	MAR-MAY	JAN-DEC	JAN-DEC

MARINE MAMMAL:

RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Mating	Calving	Molting	Pupping
40	Dall's porpoise	-	-		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
	Fin whale	-	-	E	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
	Gray whale	-	-					X	X	X							-	-	-	-
	Harbor porpoise	-	-		X	X	X	X	X	X	X	X	X	X	X	X	-	JUL-AUG	-	-
	Humpback whale	-	-	E E					X	X	X						-	-	-	-
	Killer whale	-	-		X	X	X	X	X	X	X	X	X	X	X	X	-	SEP-DEC	-	-
41	Sea otter	-	-		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC
97	Sea otter	-	-	HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC
107	Steller (Northern) sea lion	-	-	C E				X	X	X	X						-	-	-	-
269	Seals	-	-	<10				X	X	X	X	X	X				-	-	-	MAY-JUL
270	Seals	-	-	10S				X	X	X	X	X	X				-	-	-	MAY-JUL
274	Steller (Northern) sea lion	-	-	C E 135				X	X	X	X	X					-	-	-	-

TERRESTRIAL MAMMAL:

RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D
105	Brown bear	-	-	HIGH	-	-	-	-	-	-	-	X	X	X	-	-

HUMAN USE RESOURCES:

CRITICAL HABITAT:

HUN#	Name	Owner	Contact	Phone
16	STELLER SEA LION CRITICAL HABITAT	NMFS	NMFS	907/586-7858

NATIONAL PARK:

HUN#	Name	Owner	Contact	Phone
20	ANIAKCHAK NATIONAL MONUMENT	NATIONAL PARK SERVICE		907/246-3305
21	ANIAKCHAK NATIONAL MONUMENT & PRESERVE	NATIONAL PARK SERVICE		907/246-3305

WILDLIFE REFUGE:

HUN#	Name	Owner	Contact	Phone
24	ALASKA MARITIME NWR	US FISH & WILDLIFE SERVICE	REFUGE MANAGER	907/246-3339
25	ALASKA PENINSULA NWR	US FISH & WILDLIFE SERVICE	REFUGE MANAGER	907/246-3339

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Bristol Bay: ESIMAP 13

BIOLOGICAL RESOURCES:

BIRD:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating		Molting
162	Bald eagle						X	X	X	X	X				APR-AUG	-		-
191	Black-legged kittiwake	420					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Red-faced cormorant	240					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
199	Black oystercatcher	8					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Double-crested cormorant	2					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Glaucous-winged gull	150					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Horned puffin	200					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Parakeet auklet	30					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Pelagic cormorant	60					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Pigeon guillemot	200					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Red-faced cormorant	720					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Tufted puffin	6,000					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
200	Thick-billed murre	UNKNOWN					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Tufted puffin	14,000					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Ancient murrelet	UNKNOWN					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Black oystercatcher	52					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Black-legged kittiwake	9,000					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Common eider	27					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Common murre	UNKNOWN					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Double-crested cormorant	68					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Fork-tailed storm-petrel	3,000					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Glaucous-winged gull	1,600					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Horned puffin	18,200					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Leach's storm-petrel	100					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Murre	5,113					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Parakeet auklet	100					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Pelagic cormorant	114					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Pigeon guillemot	275					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Red-faced cormorant	346					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Rhinoceros auklet	30					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
201	Black oystercatcher	20					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Glaucous-winged gull	300					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Horned puffin	400					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Parakeet auklet	80					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Pigeon guillemot	100					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Tufted puffin	300					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
202	Ancient murrelet	UNKNOWN					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Black oystercatcher	6					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Fork-tailed storm-petrel	UNKNOWN					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Glaucous-winged gull	320					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Horned puffin	5,000					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Leach's storm-petrel	UNKNOWN					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Parakeet auklet	450					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Pelagic cormorant	10					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Pigeon guillemot	10					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Red-faced cormorant	350					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Tufted puffin	5,000					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
203	Black-legged kittiwake	UNKNOWN					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Cormorant	UNKNOWN					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Glaucous-winged gull	UNKNOWN					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
204	Black-legged kittiwake	14,050					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Common murre	560					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Glaucous-winged gull	30					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Horned puffin	100					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Murre	UNKNOWN					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Red-faced cormorant	15					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Thick-billed murre	240					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Tufted puffin	100					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
205	Cormorant	60					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Horned puffin	100					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Pigeon guillemot	UNKNOWN					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
206	Horned puffin	6					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Pigeon guillemot	13					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Tufted puffin	54					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
207	Black oystercatcher	4					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Horned puffin	100					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Pigeon guillemot	10					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Tufted puffin	40					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
208	Cormorant	30					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Fork-tailed storm-petrel	UNKNOWN					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Glaucous-winged gull	20					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Horned puffin	20					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Tufted puffin	200					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
209	Glaucous-winged gull	90					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Parakeet auklet	UNKNOWN					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Pelagic cormorant	4					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Pigeon guillemot	10					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
210	Cormorant	30					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Glaucous-winged gull	5					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-

FISH:

RAR#	Species	S F Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
39	Arrowtooth flounder		X	X	X	X	X	X	X	X	X	X	X	X	NOV-MAR	DEC-MAY	MAR-AUG	JAN-DEC	JAN-DEC
	Atka mackerel		X	X	X	X	X	X	X	X	X	X	X	X	MAY-OCT	JUN-AUG	SEP-FEB	JAN-DEC	JAN-DEC
	Chinook salmon						X	X	X	X					-	-	-	MAY-JUN	MAY-AUG
	Chum salmon (dog)						X	X	X	X					-	-	-	MAY-JUN	JUN-AUG
	Coho salmon (silver)						X	X	X	X	X				-	-	-	MAY-JUN	JUL-OCT
	Dolly varden						X	X	X	X	X				-	-	-	MAY-JUN	MAY-SEP
	Dover sole		X	X	X	X	X	X	X	X	X	X	X	X	JAN-AUG	MAR-AUG	JAN-DEC	JAN-DEC	JAN-DEC
	Flathead sole		X	X	X	X	X	X	X	X	X	X	X	X	DEC-APR	DEC-MAR	APR-AUG	JAN-DEC	JAN-DEC
	Pacific cod		X	X	X	X	X	X	X	X	X	X	X	X	JAN-MAY	-	-	JAN-DEC	JAN-DEC
	Pacific halibut									X	X	X	X		-	-	-	-	JUL-OCT
	Pink salmon (humpy)							X	X	X					-	-	-	MAY-JUN	JUN-JUL
	Rex sole		X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	MAY-JUN	MAY-JUN	JAN-DEC	JAN-DEC
	Rock sole		X	X	X	X	X	X	X	X	X	X	X	X	JAN-MAR	-	-	JAN-DEC	DEC-SEP
	Rougheye rockfish		X	X	X	X	X	X	X	X	X	X	X	X	JUL-DEC	-	-	-	JAN-DEC
	Sablefish (blackcod)		X	X	X	X									JAN-MAY	-	-	-	JAN-MAY
	Sculpin		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Shortraker rockfish		X	X	X	X	X	X	X	X	X	X	X	X	JUL-DEC	-	-	-	JAN-DEC
	Sockeye salmon (red)							X	X	X	X				-	-	-	MAY-JUN	MAY-AUG
	Walleye pollock		X	X	X	X	X	X	X	X	X	X	X	X	FEB-APR	-	MAR-JUL	JAN-DEC	JAN-DEC
	Yellowfin sole		X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	JUN-AUG	JUN-NOV	JAN-DEC	MAY-AUG
138	Pink salmon (humpy)		X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-MAR	MAR-MAY	MAY-JUN	JUN-SEP

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.

Bristol Bay: ESIMAP 13 (cont.)

BIOLOGICAL RESOURCES: (cont.)

FISH:																					
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
148	Chum salmon (dog)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Coho salmon (silver)				X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	OCT-MAR	MAR-MAY	JAN-DEC	JUL-NOV
	Pink salmon (humpy)				X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-MAR	MAR-MAY	MAY-JUN	JUN-SEP
149	Chum salmon (dog)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Pink salmon (humpy)				X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-MAR	MAR-MAY	MAY-JUN	JUN-SEP

INVERTEBRATE:																					
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
39	Red king crab				X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUL	-	-	JAN-DEC	JAN-DEC
	Tanner crab				X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUN	-	-	JAN-DEC	JAN-DEC
	Weathervane scallop				X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	MAY-JUL	MAY-AUG	JAN-DEC	JAN-DEC

MARINE MAMMAL:																				
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Mating	Calving	Molting	Pupping
40	Dall's porpoise				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
	Fin whale		E		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
	Gray whale							X	X	X							-	-	-	-
	Harbor porpoise				X	X	X	X	X	X	X	X	X	X	X	X	-	JUL-AUG	-	-
	Humpback whale		E	E						X	X	X					-	-	-	-
	Killer whale				X	X	X	X	X	X	X	X	X	X	X	X	-	SEP-DEC	-	-
41	Sea otter				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC
97	Sea otter			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC
268	Seals			100S				X	X	X	X	X	X	X			-	-	-	MAY-JUL
269	Seals			<10				X	X	X	X	X	X	X			-	-	-	MAY-JUL
270	Seals			10S				X	X	X	X	X	X	X			-	-	-	MAY-JUL
272	Steller (Northern) sea lion	C	E	46						X	X	X	X				-	-	-	-
273	Steller (Northern) sea lion	C	E	13						X	X	X	X	X			-	-	-	-

HUMAN USE RESOURCES:

CRITICAL HABITAT:														
HUN#	Name	Owner					Contact					Phone		
16	STELLER SEA LION CRITICAL HABITAT	NMFS					NMFS					907/586-7858		

WILDLIFE REFUGE:														
HUN#	Name	Owner					Contact					Phone		
24	ALASKA MARITIME NWR	US FISH & WILDLIFE SERVICE					REFUGE MANAGER					907/246-3339		
25	ALASKA PENINSULA NWR	US FISH & WILDLIFE SERVICE					REFUGE MANAGER					907/246-3339		

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.

Bristol Bay: ESIMAP 14

BIOLOGICAL RESOURCES:

BIRD:																					
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating		Molting	
98	Black scoter			100S					X	X			X	X	X		-	APR-MAY	AUG-OCT	-	
	Brant			1,000S					X	X							-	APR-MAY		-	
	Emperor goose			10,000S	X	X	X	X	X				X	X	X	X	-	APR-MAY	SEP-OCT	-	
	Harlequin duck			1,000S					X	X		X	X	X			-	APR-MAY	AUG-OCT	-	
	Northern pintail			100S					X	X		X	X	X			-	APR-MAY	AUG-OCT	-	
	Rock sandpiper								X	X	X	X	X	X	X		-	APR-OCT		-	
	Scaup			1,000S					X	X		X	X	X			-	APR-MAY	AUG-OCT	-	
	Shorebirds								X	X	X	X	X	X			-	APR-OCT		-	
	Steller's eider	C	T	100S	X	X	X	X	X				X	X	X	X	-	APR-MAY	SEP-OCT	-	
	White-winged scoter				X	X	X	X	X				X	X	X	X	-	APR-MAY	SEP-OCT	-	
99	Waterfowl			HIGH	X	X	X	X	X				X	X	X	X	-	APR-MAY	SEP-OCT	-	
161	Bald eagle								X	X	X	X					APR-AUG	-		-	
162	Bald eagle								X	X	X	X					APR-AUG	-		-	
171	Black oystercatcher			UNKNOWN					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-	
	Black-legged kittiwake			180					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-	
	Glaucous-winged gull			60					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-	
	Pigeon guillemot			UNKNOWN					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-	
180	Glaucous-winged gull			60					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-	
	Pelagic cormorant			30					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-	
	Red-faced cormorant			30					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-	
181	Black oystercatcher			30					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-	
	Black-legged kittiwake			160					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-	
	Common murre			40					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-	
	Glaucous-winged gull			150					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-	
	Horned puffin			40					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-	
	Pelagic cormorant			10					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-	
	Pigeon guillemot			400					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-	
	Red-faced cormorant			120					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-	
	Tufted puffin			UNKNOWN					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-	
185	Black-legged kittiwake			60					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-	
	Horned puffin			60					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-	
	Pelagic cormorant			10					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-	
	Pigeon guillemot			70					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-	
	Tufted puffin			20					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-	
188	Ancient murrelet			UNKNOWN					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-	
	Black oystercatcher			12					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-	
	Black-legged kittiwake			15,000					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-	
	Common murre			12,600					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-	
	Double-crested cormorant			2					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-	
	Fork-tailed storm-petrel			UNKNOWN					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-	
	Glaucous-winged gull			300					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-	
	Horned puffin			500					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-	
	Leach's storm-petrel			UNKNOWN					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-	
	Parakeet auklet			50					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-	
	Pelagic cormorant			4					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-	
	Pigeon guillemot			UNKNOWN					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-	
	Red-faced cormorant			40					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-	
	Thick-billed murre			1,400					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-	
	Tufted puffin			8,000					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-	
189	Ancient murrelet			UNKNOWN					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-	
	Horned puffin			30					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-	
	Pelagic cormorant			2					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-	
	Pigeon guillemot			40					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-	
	Tufted puffin			200					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-	
FISH:																					
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
39	Arrowtooth flounder				X	X	X	X	X	X	X	X	X	X	X	X	NOV-MAR	DEC-MAY	MAR-AUG	JAN-DEC	JAN-DEC
	Atka mackerel				X	X	X	X	X	X	X	X	X	X	X	X	MAY-OCT	JUN-AUG	SEP-FEB	JAN-DEC	JAN-DEC
	Chinook salmon								X	X	X	X					-	-	-	MAY-JUN	MAY-AUG
	Chum salmon (dog)								X	X	X	X					-	-	-	MAY-JUN	JUN-AUG
	Coho salmon (silver)								X	X	X	X	X	X			-	-	-	MAY-JUN	JUL-OCT
	Dolly varden								X	X	X	X	X				-	-	-	MAY-JUN	MAY-SEP
	Dover sole				X	X	X	X	X	X	X	X	X	X	X	X	JAN-AUG	MAR-AUG	JAN-DEC	JAN-DEC	JAN-DEC
	Flathead sole				X	X	X	X	X	X	X	X	X	X	X	X	DEC-APR	DEC-MAR	APR-AUG	JAN-DEC	JAN-DEC
	Pacific cod				X	X	X	X	X	X	X	X	X	X	X	X	JAN-MAY	-	-	JAN-DEC	JAN-DEC
	Pacific halibut									X	X	X	X				-	-	-	-	JUL-OCT
	Pink salmon (humpy)								X	X	X						-	-	-	MAY-JUN	JUN-JUL
	Rex sole				X	X	X	X	X	X	X	X	X	X	X	X	FEB-JUL	MAY-JUN	MAY-JUN	JAN-DEC	JAN-DEC
	Rock sole				X	X	X	X	X	X	X	X	X	X	X	X	JAN-MAR	-	-	JAN-DEC	DEC-SEP
	Rougheye rockfish				X	X	X	X	X	X	X	X	X	X	X	X	JUL-DEC	-	-	-	JAN-DEC
	Sablefish (blackcod)				X	X	X	X	X								JAN-MAY	-	-	-	JAN-MAY
	Sculpin				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Shortraker rockfish				X	X	X	X	X	X	X	X	X	X	X	X	JUL-DEC	-	-	-	JAN-DEC
	Sockeye salmon (red)								X	X	X	X					-	-	-		

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.

Bristol Bay: ESIMAP 14 (cont.)

BIOLOGICAL RESOURCES: (cont.)

INVERTEBRATE:																					
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
39	Red king crab				X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUL	-	-	JAN-DEC	JAN-DEC
	Tanner crab				X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUN	-	-	JAN-DEC	JAN-DEC
	Weathervane scallop				X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	MAY-JUL	MAY-AUG	JAN-DEC	JAN-DEC
MARINE MAMMAL:																					
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Mating	Calving	Molting	Pupping	
40	Dall's porpoise				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	
	Fin whale		E		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-	
	Gray whale							X	X	X							-	-	-	-	
	Harbor porpoise				X	X	X	X	X	X	X	X	X	X	X	X	-	JUL-AUG	-	-	
	Humpback whale		E	E						X	X	X					-	-	-	-	
	Killer whale				X	X	X	X	X	X	X	X	X	X	X	X	-	SEP-DEC	-	-	
41	Sea otter				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	
97	Sea otter			HIGH	X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	
269	Seals			<10		X	X	X	X	X	X	X	X	X			-	-	-	MAY-JUL	
270	Seals			10S		X	X	X	X	X	X	X	X	X			-	-	-	MAY-JUL	
275	Steller (Northern) sea lion		C	E				X	X	X	X	X					-	-	-	-	
276	Steller (Northern) sea lion		C	E	174			X	X	X	X	X					-	-	-	-	
277	Steller (Northern) sea lion		C	E	4			X	X	X	X	X					-	-	-	-	
TERRESTRIAL MAMMAL:																					
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D					
76	Brown bear			HIGH				X	X	X											

HUMAN USE RESOURCES:

CRITICAL HABITAT:

HUN#	Name	Owner	Contact	Phone
16	STELLER SEA LION CRITICAL HABITAT	NMFS	NMFS	907/586-7858

WILDLIFE REFUGE:

HUN#	Name	Owner	Contact	Phone
24	ALASKA MARITIME NWR	US FISH & WILDLIFE SERVICE	REFUGE MANAGER	907/246-3339
25	ALASKA PENINSULA NWR	US FISH & WILDLIFE SERVICE	REFUGE MANAGER	907/246-3339

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.

Bristol Bay: ESIMAP 15

BIOLOGICAL RESOURCES:

BIRD:																				
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Nesting	Migrating		Molting
38	Black scoter			100S					X	X			X	X	X		-	APR-MAY	AUG-OCT	-
	Emperor goose			1,000S					X	X			X	X	X		-	APR-MAY	AUG-OCT	-
	Northern pintail			100S					X	X			X	X	X		-	APR-MAY	AUG-OCT	-
	Sea ducks								X	X			X	X			-	APR-MAY	SEP-OCT	-
161	Bald eagle								X	X	X	X	X				APR-AUG	-		-
162	Bald eagle								X	X	X	X	X				APR-AUG	-		-
163	Black oystercatcher			UNKNOWN					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Black-legged kittiwake			160					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Glaucous-winged gull			300					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Horned puffin			200					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Pelagic cormorant			12					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Pigeon guillemot			UNKNOWN					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Red-faced cormorant			100					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Tufted puffin			1,500					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
164	Glaucous-winged gull			1,200					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Tufted puffin			4,000					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
165	Black oystercatcher			UNKNOWN					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Glaucous-winged gull			200					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Horned puffin			100					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Tufted puffin			1,000					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
166	Glaucous-winged gull			250					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Tufted puffin			200					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
167	Ancient murrelet			UNKNOWN					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Black oystercatcher			2					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Black-legged kittiwake			30,000					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Common murre			UNKNOWN					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Fork-tailed storm-petrel			UNKNOWN					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Glaucous-winged gull			200					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Horned puffin			4,000					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Leach's storm-petrel			200					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Murre			4,000					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Pigeon guillemot			4					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Thick-billed murre			UNKNOWN					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Tufted puffin			2,000					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
168	Black oystercatcher			UNKNOWN					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Glaucous-winged gull			500					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Horned puffin			200					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Pigeon guillemot			UNKNOWN					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Red-faced cormorant			36					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Tufted puffin			2,000					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
169	Black oystercatcher			UNKNOWN					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Black-legged kittiwake			120					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Glaucous-winged gull			100					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Horned puffin			40					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Tufted puffin			600					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
170	Black oystercatcher			20					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Glaucous-winged gull			300					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Horned puffin			50					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Pigeon guillemot			400					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Tufted puffin			200					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
172	Glaucous-winged gull			20					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Horned puffin			200					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Pigeon guillemot			UNKNOWN					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
173	Black oystercatcher			2					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Horned puffin			UNKNOWN					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Pigeon guillemot			UNKNOWN					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
174	Cormorant			10					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Glaucous-winged gull			10					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Horned puffin			400					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Pigeon guillemot			25					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Red-faced cormorant			10					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
175	Arctic tern			80					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
176	Glaucous-winged gull			300					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Pigeon guillemot			UNKNOWN					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Red-faced cormorant			20					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Tufted puffin			30					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
177	Black oystercatcher			UNKNOWN					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Horned puffin			10					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Pelagic cormorant			30					X	X	X	X	X	X	X		JUN-JUL	APR-MAY	AUG-OCT	-
	Pigeon																			

Bristol Bay: ESIMAP 15 (cont.)

BIOLOGICAL RESOURCES: (cont.)

FISH:																					
RAR#	Species	S F Conc.			J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
39	Rock sole				X	X	X	X	X	X	X	X	X	X	X	X	JAN-MAR	-	-	JAN-DEC	DEC-SEP
	Rougheye rockfish				X	X	X	X	X	X	X	X	X	X	X	X	JUL-DEC	-	-	-	JAN-DEC
	Sablefish (blackcod)				X	X	X	X	X								JAN-MAY	-	-	-	JAN-MAY
	Sculpin				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC
	Shortraker rockfish				X	X	X	X	X	X	X	X	X	X	X	X	JUL-DEC	-	-	-	JAN-DEC
	Sockeye salmon (red)									X	X	X	X				-	-	-	MAY-JUN	MAY-AUG
	Walleye pollock				X	X	X	X	X	X	X	X	X	X	X	X	FEB-APR	-	MAR-JUL	JAN-DEC	JAN-DEC
	Yellowfin sole				X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUN	JUN-AUG	JUN-NOV	JAN-DEC	MAY-AUG
42	Pacific herring							X	X	X	X						APR-JUN	MAY-JUL	-	-	APR-JUL
	Coho salmon (silver)				X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	OCT-MAR	MAR-MAY	JAN-DEC	JUL-NOV
116	Chum salmon (dog)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
123	Pink salmon (humpy)				X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-MAR	MAR-MAY	MAY-JUN	JUN-SEP
138	Chum salmon (dog)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
148	Coho salmon (silver)				X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	OCT-MAR	MAR-MAY	JAN-DEC	JUL-NOV
	Pink salmon (humpy)				X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-MAR	MAR-MAY	MAY-JUN	JUN-SEP
	Chum salmon (dog)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
149	Pink salmon (humpy)				X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-MAR	MAR-MAY	MAY-JUN	JUN-SEP
	Coho salmon (silver)				X	X	X	X	X	X	X	X	X	X	X	X	SEP-NOV	OCT-MAR	MAR-MAY	JAN-DEC	JUL-NOV
	Pink salmon (humpy)				X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-MAR	MAR-MAY	MAY-JUN	JUN-SEP
150	Chum salmon (dog)				X	X	X	X	X	X	X	X	X	X	X	X	JUL-SEP	AUG-MAR	MAR-MAY	JAN-DEC	JUN-SEP
	Pink salmon (humpy)				X	X	X	X	X	X	X	X	X	X	X	X	AUG-SEP	SEP-MAR	MAR-MAY	MAY-JUN	JUN-SEP
	Rainbow trout (steelhead)				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC	JAN-DEC

INVERTEBRATE:																					
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Spawning	Eggs	Larvae	Juveniles	Adults
		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-					
39	Red king crab				X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUL	-	-	JAN-DEC	JAN-DEC
	Tanner crab				X	X	X	X	X	X	X	X	X	X	X	X	JAN-JUN	-	-	JAN-DEC	JAN-DEC
	Weathervane scallop				X	X	X	X	X	X	X	X	X	X	X	X	MAY-JUL	MAY-JUL	MAY-AUG	JAN-DEC	JAN-DEC

MARINE MAMMAL:																				
RAR#	Species	S	F	Conc.	J	F	M	A	M	J	J	A	S	O	N	D	Mating	Calving	Molting	Pupping
40	Dall's porpoise	-	-		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
	Fin whale		E		X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	-
	Gray whale							X	X	X							-	-	-	-
	Harbor porpoise				X	X	X	X	X	X	X	X	X	X	X	X	-	JUL-AUG	-	-
	Humpback whale	E	E							X	X	X					-	-	-	-
	Killer whale				X	X	X	X	X	X	X	X	X	X	X	X	-	SEP-DEC	-	-
41	Sea otter				X	X	X	X	X	X	X	X	X	X	X	X	-	-	-	JAN-DEC
269	Seals			<10			X	X	X	X	X	X	X	X			-	-	-	MAY-JUL
278	Steller (Northern) sea lion	C	E	195				X	X	X	X	X					-	-	-	-
279	Steller (Northern) sea lion	C	E	27				X	X	X	X	X					-	-	-	-
280	Steller (Northern) sea lion	C	E	35				X	X	X	X	X					-	-	-	-

TERRESTRIAL MAMMAL:															
RAR#	Species	S F Conc.			J	F	M	A	M	J	J	A	S	O	N D
76	Brown bear			HIGH					X	X	X				

HUMAN USE RESOURCES:

CRITICAL HABITAT:

HUN#	Name	Owner	Contact	Phone
16	STELLER SEA LION CRITICAL HABITAT	NMFS	NMFS	907/586-7858

WILDLIFE REFUGE:				
HUN#	Name	Owner	Contact	Phone
24	ALASKA MARITIME NWR	US FISH & WILDLIFE SERVICE	REFUGE MANAGER	907/246-3339
25	ALASKA PENINSULA NWR	US FISH & WILDLIFE SERVICE	REFUGE MANAGER	907/246-3339

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.