



Map 4A
Straits of Mackinac



SEE BACK OF MAP
for details about mapped species and
other species that occur in mapped area.
Data Published: October 2019

0 Not for Navigation 1 Miles
0 1 Kilometers

1:50,000



Straits of Mackinac: Map 4A

BIOLOGICAL RESOURCES:

BENTHIC:

RAR#	Species	S	F	Concentration	Mapping Qualifier	Monthly Presence (Jan-Dec)											
247	Submerged aquatic vegetation			-	General Distribution			M	A	M	J	J	A	S			

BIRD:

RAR#	Species	S	F	Concentration	Mapping Qualifier	Monthly Presence (Jan-Dec)												Nesting	Migrating		Molting
13	Common loon	T		-	Concentration Area			A	M				S	O	N	D	-	Apr-May	Sep-Dec	-	
73	Bald eagle	C		-	Vulnerable Occurrence	J	F	M	A	M	J	J	A	S	O	N	D	Feb-Jul	-	-	-
76	Sharp-tailed grouse	C		-	Vulnerable Occurrence	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
93	Common loon	T		-	Nesting			A	M	J	J	A	S				Apr-Sep	-	-	-	
118	Northern goshawk	C		-	Vulnerable Occurrence		F	M	A	M	J	J	A	S	O	N	D	Mar-Jul	Feb-Mar	Aug-Dec	-
119	Northern harrier	C		-	Vulnerable Occurrence			M	A	M	J	J	A	S	O	N		Apr-Jul	Mar-Apr	Aug-Nov	-
128	Red-shouldered hawk	T		-	Vulnerable Occurrence		F	M	A	M	J	J	A	S	O	N		Mar-Jun	-	-	-
230	American coot			-	General Distribution			M	A	M	J	J	A	S	O	N		-	-	-	-
	Black scoter			-	General Distribution			A	M					O	N		-	Apr-May	Oct-Nov	-	-
	Bufflehead			Common	General Distribution	J	F	M	A	M					O	N	D	-	Oct-May	-	-
	Canvasback			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
	Common goldeneye			Common	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
	Greater scaup			-	General Distribution	J	F	M	A						O	N	D	-	-	-	-
	Gulls			Common	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	Jan-Dec	-	-
	Lesser scaup			-	General Distribution	J	F	M	A						O	N	D	-	-	-	-
	Long-tailed duck			Abundant	General Distribution	J	F	M	A	M					O	N	D	-	Oct-Apr	-	-
	Loons			-	General Distribution			M	A	M	J	J	A	S	O			-	-	-	-
	Raptors			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
	Redhead			Abundant	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
	Ring-necked duck			-	General Distribution			M	A	M	J	J	A	S	O			-	-	-	-
	White-winged scoter			Common	General Distribution	J	F	M	A	M					O	N	D	-	Oct-May	-	-
231	American black duck			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
	Bufflehead			Common	General Distribution	J	F	M	A	M					O	N	D	-	Oct-May	-	-
	Canada goose			-	General Distribution			M	A	M	J	J	A	S				-	-	-	-
	Canvasback			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
	Common goldeneye			Common	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
	Double-crested cormorant			-	General Distribution			M	A	M	J	J	A	S	O	N		-	Mar-May	Jul-Nov	-
	Greater scaup			-	General Distribution	J	F	M	A						O	N	D	-	-	-	-
	Green-winged teal			-	General Distribution			M	A	M	J	J	A	S	O	N		-	Mar-May	Sep-Nov	-
	Gulls			Common	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	Jan-Dec	-	-
	Hérons			-	General Distribution			M	A	M	J	J	A	S	O			-	-	-	-
	Lesser scaup			-	General Distribution	J	F	M	A						O	N	D	-	-	-	-
	Long-tailed duck			-	General Distribution	J	F	M	A	M					O	N	D	-	Oct-Apr	-	-
	Loons			-	General Distribution			M	A	M	J	J	A	S	O			-	-	-	-
	Mallard			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
	Mergansers			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
	Redhead			Abundant	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
	Ring-necked duck			-	General Distribution			M	A	M	J	J	A	S	O			-	-	-	-
	Swans			-	General Distribution			M	A						O	N	D	-	-	-	-
	Terns			-	General Distribution			A	M		J	J	A	S	O			-	-	-	-
	Wood duck			-	General Distribution			M	A	M	J	J	A	S	O	N		-	-	-	-
269	Diving ducks			High	Concentration Area	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-
	Sea ducks			High	Concentration Area	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-

FISH:

RAR#	Species	S	F	Concentration	Mapping Qualifier	Monthly Presence (Jan-Dec)												Spawning	Eggs		Larvae	Juveniles	Adults
10	Atlantic salmon			-	Spawning Area	J	F	M	A	M	J			S	O	N	D	Sep-Oct	-	Sep-Jun	Sep-Jun	Sep-Jun	Sep-Oct
	Burbot			-	Spawning Area	J	F	M	A	M	J	J	A	S	O	N	D	Feb	-	-	-	-	Jan-Dec
	Chinook salmon			-	Spawning Area	J	F	M	A	M	J			S	O	N	D	Sep-Oct	-	Sep-Jun	Sep-Jun	Sep-Jun	Sep-Oct
	Coho salmon			-	Spawning Area	J	F	M	A	M	J			S	O	N	D	Sep-Oct	-	Sep-Jun	Sep-Jun	Sep-Jun	Sep-Oct
	Lake sturgeon	T		-	Spawning Area	J	F	M	A	M	J	J	A	S	O	N	D	Apr-May	-	Apr-Aug	Apr-Aug	Jan-Dec	Jan-Dec
	Rainbow smelt			-	Spawning Area			A	M	J	J	A	S					Apr-May	-	Apr-May	Apr-Sep	Apr-Sep	Apr-May
	Steelhead			-	Spawning Area	J	F	M	A	M	J			S	O	N	D	Sep-Oct	-	Sep-Jun	Sep-Jun	Sep-Jun	Sep-Oct
	Walleye			-	Spawning Area	J	F	M	A	M	J	J	A	S	O	N	D	Jan-Dec	-	-	-	-	Jan-Dec
233	Alewife			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	May	-	-	-	-	Jan-Dec
	Atlantic salmon			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	-	Jan-Dec
	Chinook salmon			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	Sep-Jul	Jan-Dec
	Cisco			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Nov-Dec	-	Nov-Apr	Mar-Apr	Jan-Dec	Jan-Dec
	Coho salmon			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	Sep-Jul	Jan-Dec
	Lake sturgeon	T		-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Apr-May	-	Apr-Aug	Apr-Aug	Jan-Dec	Jan-Dec
	Lake trout			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Nov	-	Nov-Apr	Mar-Apr	Jan-Dec	Jan-Dec
	Lake whitefish			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Nov-Dec	-	Nov-Apr	Mar-Apr	Jan-Dec	Jan-Dec
	Longnose sucker			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Apr-May	-	Apr-Aug	Apr-Aug	Jan-Dec	Jan-Dec
	Northern pike			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Apr	-	-	-	-	Jan-Dec
	Rainbow smelt			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Apr-May	-	-	Apr-Sep	-	Jan-Dec
	Round goby			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	-	Jan-Dec
	Smallmouth bass			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	May-Jun	-	May-Jul	-	-	Jan-Dec
	Steelhead			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	Sep-Jul	Jan-Dec
	Walleye			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Apr-May	-	-	Jan-Dec	Jan-Dec	Jan-Dec
	White sucker			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Apr-May	-	Apr-Aug	Apr-Aug	Jan-Dec	Jan-Dec
	Yellow perch			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Apr-May	-	-	-	-	Jan-Dec
235	Alewife			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	-	Jan-Dec
	Atlantic salmon			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	-	Jan-Dec
	Bloater			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Nov-Dec	-	Nov-Apr	Mar-Apr	Jan-Dec	Jan-Dec
	Burbot			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	-	Jan-Dec
	Chinook salmon			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	Jan-Dec	Jan-Dec
	Cisco			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	Jan-Dec	Jan-Dec
	Coho salmon			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	Jan-Dec	Jan-Dec
	Lake sturgeon	T		-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	Jan-Dec	Jan-Dec
	Lake trout			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Nov	-	Nov-Apr	Mar-Apr	Jan-Dec	Jan-Dec
	Lake whitefish			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Nov-Dec	-	Nov-Apr	Mar-Apr	Jan-Dec	Jan-Dec
	Longnose sucker			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	Jan-Dec	Jan-Dec
	Northern pike			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	-	Jan-Dec
	Rainbow smelt			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	-	Jan-Dec
	Round whitefish (menomonee)			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Oct-Nov	-	Oct-Apr	Mar-Apr	Jan-Dec	Jan-Dec
	Steelhead			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	Jan-Dec	Jan-Dec
	Walleye			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	-	Jan-Dec
	White sucker			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	Jan-Dec	Jan-Dec
	Yellow perch			-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	-	Jan-Dec

HABITAT:

RAR#	Species	S	F	Concentration	Mapping Qualifier	Monthly Presence (Jan-Dec)											
96	Federally threatened plant	T	T	-	Vulnerable Occurrence	J	F	M	A	M	J	J	A	S	O	N	D
111	Threatened plant	T		-	Vulnerable Occurrence	J	F	M	A	M	J	J	A	S	O	N	D

HERPETOFAUNA:

RAR#	Species	S	F	Concentration	Mapping Qualifier	Monthly Presence (Jan-Dec)												Nesting	Hatching	Interne	Juveniles	Adults
4	Blanding's turtle	C		-	Vulnerable Occurrence	J	F	M	A	M	J	J	A	S	O	N	D	May-Jun	Aug-Sep	-	-	-
234	Mudpuppy	C		-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	Mar-Jun	Apr-Jul	-	Jan-Dec	Jan-Dec
236	Mudpuppy	C		-	General Distribution	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	Jan-Dec	Jan-Dec
268	Sensitive herpetofauna			-	Vulnerable Occurrence	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	-

Straits of Mackinac: Map 4A (cont.)

BIOLOGICAL RESOURCES:

INVERTEBRATE:

RAR#	Species	S	F	Concentration	Mapping Qualifier	Monthly Presence (Jan-Dec)												Spawning	Eggs	Larvae	Juveniles	Adults
90	Endangered snail	E		-	Vulnerable Occurrence	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	-
99	Threatened snail	T		-	Vulnerable Occurrence	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	-
104	Hines's emerald dragonfly	E	E	-	Vulnerable Occurrence	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	-
232	Hines's emerald dragonfly	E	E	-	Vulnerable Occurrence	J	F	M	A	M	J	J	A	S	O	N	D	-	-	-	-	-