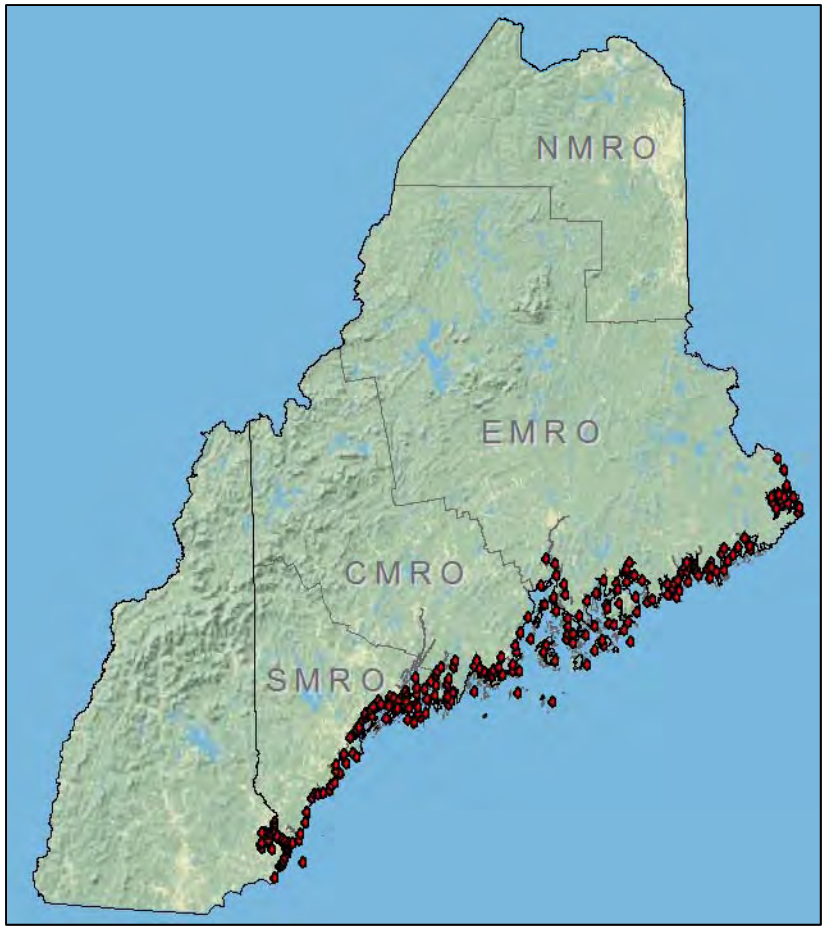
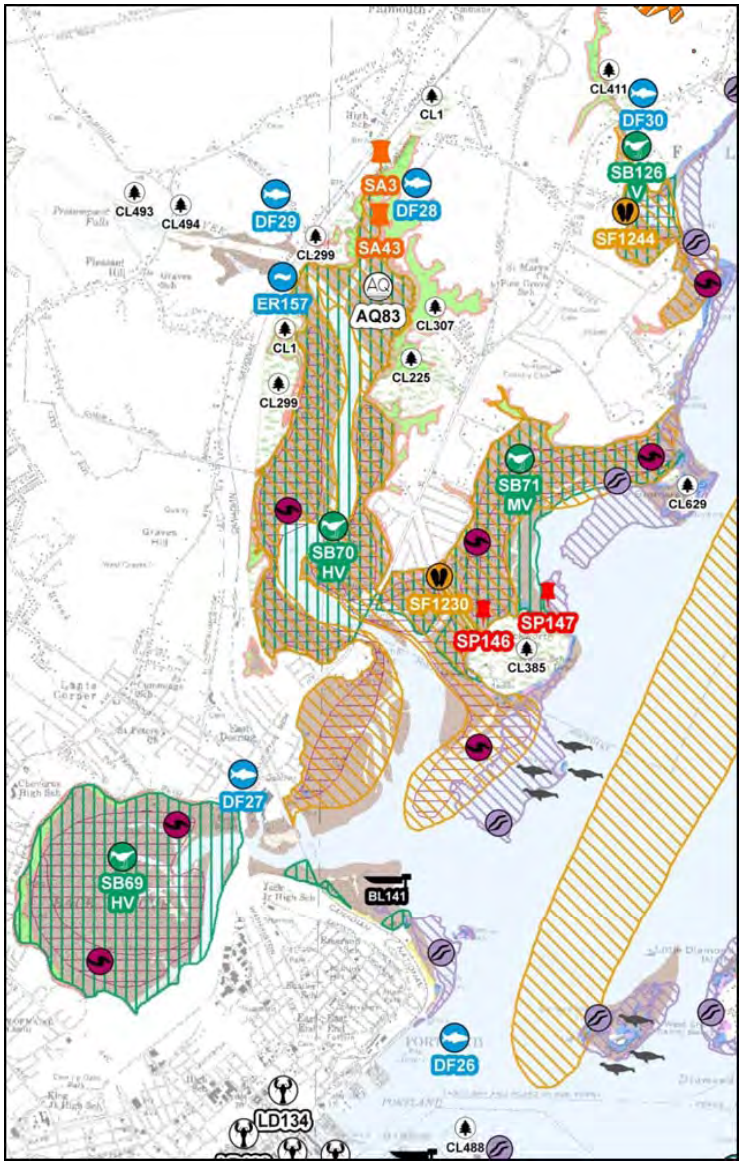
Transportation Routes & Resources at Risk

Ginger McMullin
Response Planning Coordinator
Division of Response Services



GEOGRAPHIC RESPONSE STRATEGIES

- Specific strategies for sensitive areas
- 208 in Maine
- Active testing and review program



ENVIRONMENTAL VULNERABILITY INDEX MAPS

- Identify resources and habitats at risk from marine oil spills
- Atlas of 98 maps coastwide
- Strong partnership with IF&W, DMR and MGS

25 Data Sets

Threatened & Endangered Species

- Piping Plover / Least Tern Essential Habitat
- Roseate Tern Essential Habitat
- Bald Eagle Essential Habitat
- Harlequin Duck Wintering Habitat
- Atlantic Salmon Habitat (where endangered)
- Other Coastal Threatened or Endangered Species
- Species of Special Concern

SA = Sensitive Animal SP = Sensitive Plant

Birds

- Shorebird Areas
- Seabird Nesting Islands
  Red outline if threatened or endangered species present on island

EVI ID # RANKING

Rankings: C=Critical HV=Highly Vulnerable
MV= Moderately Vulnerable V=Vulnerable

Rafting Birds Areas with counts greater than 200 individuals 2000 - 2004 Aerial Survey Data

- Fall Rafting Bird Observations
- Summer Rafting Bird Observations
- Winter Rafting Bird Observations
- Spring Rafting Bird Observations

Fish

- Diadromous Fish Runs
- Elver Runs
- Herring Spawning Areas

Shellfish

- Lobster Pounds
- Shellfish Beds
- Mussel Seed Conservation Areas

Habitats

- Marine Worm Areas
- Eelgrass Beds
- Seal Haul-Outs

Human Resources

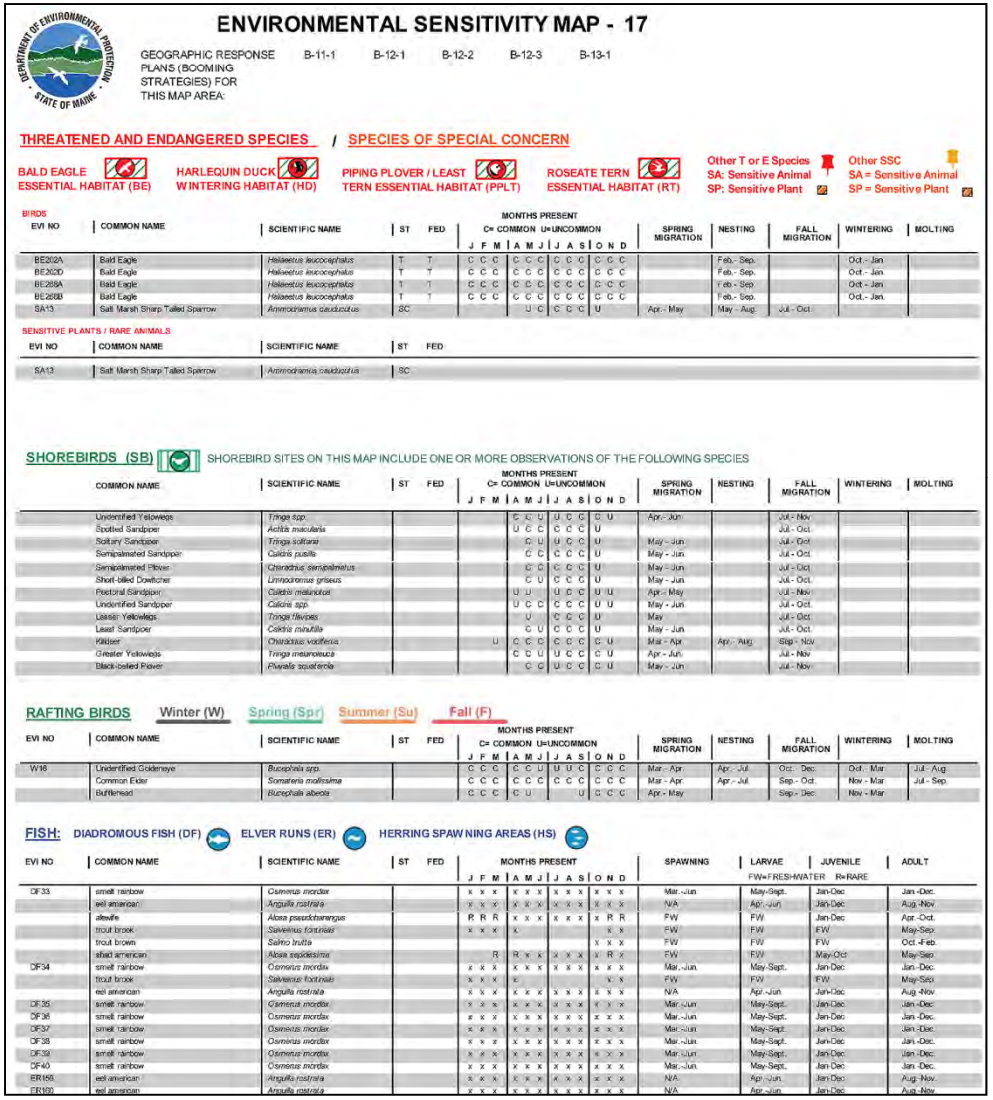
- Aquaculture Lease Sites
- Herring Weir Sites
- Lobster Dealers
- Conservation Lands
- Boat Launch State Sponsored or Assisted, Trailerable

Coastal Marine Geologic Environments

Ranked from most to least vulnerable

- Marshes (1)
- Mud Flats, Sheltered (2)
- Coarse Flats & Bars, Exposed (3)
- Coarse Beaches & Riprap (4)
- Mixed & Low Energy Beaches (5)
- Sand Beaches (6)
- Rocky Shores (7)
- Sand Dunes (8)

Coastal Barrier Resources System Area



ENVIRONMENTAL SENSITIVITY MAP - 17

GEOGRAPHIC RESPONSE PLANS (BOOMING STRATEGIES) FOR THIS MAP AREA: B-11-1 B-12-1 B-12-2 B-12-3 B-13-1

THREATENED AND ENDANGERED SPECIES / SPECIES OF SPECIAL CONCERN

BALD EAGLE ESSENTIAL HABITAT (BE) — HARLEQUIN DUCK WINTERING HABITAT (HD) — PIPING PLOVER / LEAST TERN ESSENTIAL HABITAT (PPLT) — ROSEATE TERN ESSENTIAL HABITAT (RT)

Other T or E Species: SA: Sensitive Animal, SP: Sensitive Plant

Other SSC: SA = Sensitive Animal, SP = Sensitive Plant

BIRDS

EVI NO	COMMON NAME	SCIENTIFIC NAME	ST	FED	MONTHS PRESENT C= COMMON U=UNCOMMON J F M A M J J A S O N D	SPRING MIGRATION	NESTING	FALL MIGRATION	WINTERING	MOLTING
BE202A	Bald Eagle	*Haliaeetus leucocephalus*	T	T	C C C C C C C C C C C C		Feb. - Sep.		Oct. - Jan	
BE202D	Bald Eagle	*Haliaeetus leucocephalus*	T	T	C C C C C C C C C C C C		Feb. - Sep.		Oct. - Jan	
BE288A	Bald Eagle	*Haliaeetus leucocephalus*	T	T	C C C C C C C C C C C C		Feb. - Sep		Oct. - Jan	
BE288B	Bald Eagle	*Haliaeetus leucocephalus*	T	T	C C C C C C C C C C C C		Feb. - Sep.		Oct. - Jan.	
SA13	Salt Marsh Sharp Tailed Sparrow	*Ammodramus caudacutus*	SC		U C C C C C U	Apr. - May	May - Aug.	Jul. - Oct.		

SENSITIVE PLANTS / RARE ANIMALS

EVI NO	COMMON NAME	SCIENTIFIC NAME	ST	FED
SA13	Salt Marsh Sharp Tailed Sparrow	*Ammodramus caudacutus*	SC	

SHOREBIRDS (SB) SHOREBIRD SITES ON THIS MAP INCLUDE ONE OR MORE OBSERVATIONS OF THE FOLLOWING SPECIES

COMMON NAME	SCIENTIFIC NAME	ST	FED	MONTHS PRESENT C= COMMON U=UNCOMMON J F M A M J J A S O N D	SPRING MIGRATION	NESTING	FALL MIGRATION	WINTERING	MOLTING
Unidentified Yellowlegs	*Tringa spp.*			C C U U C C C U	Apr. - Jun		Jul. - Nov		
Spotted Sandpiper	*Actitis macularia*			U C C C C C U			Jul. - Oct.		
Solitary Sandpiper	*Tringa solitaria*			C U U C C U	May - Jun		Jul. - Oct		
Semipalmated Sandpiper	*Calidris pusilla*			C C C C C U	May - Jun		Jul. - Oct		
Semipalmated Plover	*Charadrius semipalmatus*			C C C C C U	May - Jun		Jul. - Oct		
Short-billed Dowitcher	*Limnodromus griseus*			C U C C C U	May - Jun		Jul. - Oct.		
Pectoral Sandpiper	*Calidris melanotos*			U U U C C U U	Apr. - May		Jul. - Nov		
Unidentified Sandpiper	*Calidris spp.*			U C C C C C U U	May - Jun		Jul. - Oct.		
Lesser Yellowlegs	*Tringa flavipes*			U C C C U	May		Jul. - Oct.		
Least Sandpiper	*Calidris minutilla*			C U C C C U	May - Jun		Jul. - Oct.		
Killdeer	*Charadrius vociferus*			U C C C C C C C U	Mar. - Apr.	Apr. - Aug.	Sep - Nov		
Greater Yellowlegs	*Tringa melanoleuca*			C C U U C C C U	Apr. - Jun.		Jul. - Nov		
Black-bellied Plover	*Pluvialis squatarola*			C C U C C C U	May - Jun		Jul. - Nov		

RAFTING BIRDS Winter (W) Spring (Spr) Summer (Su) Fall (F)

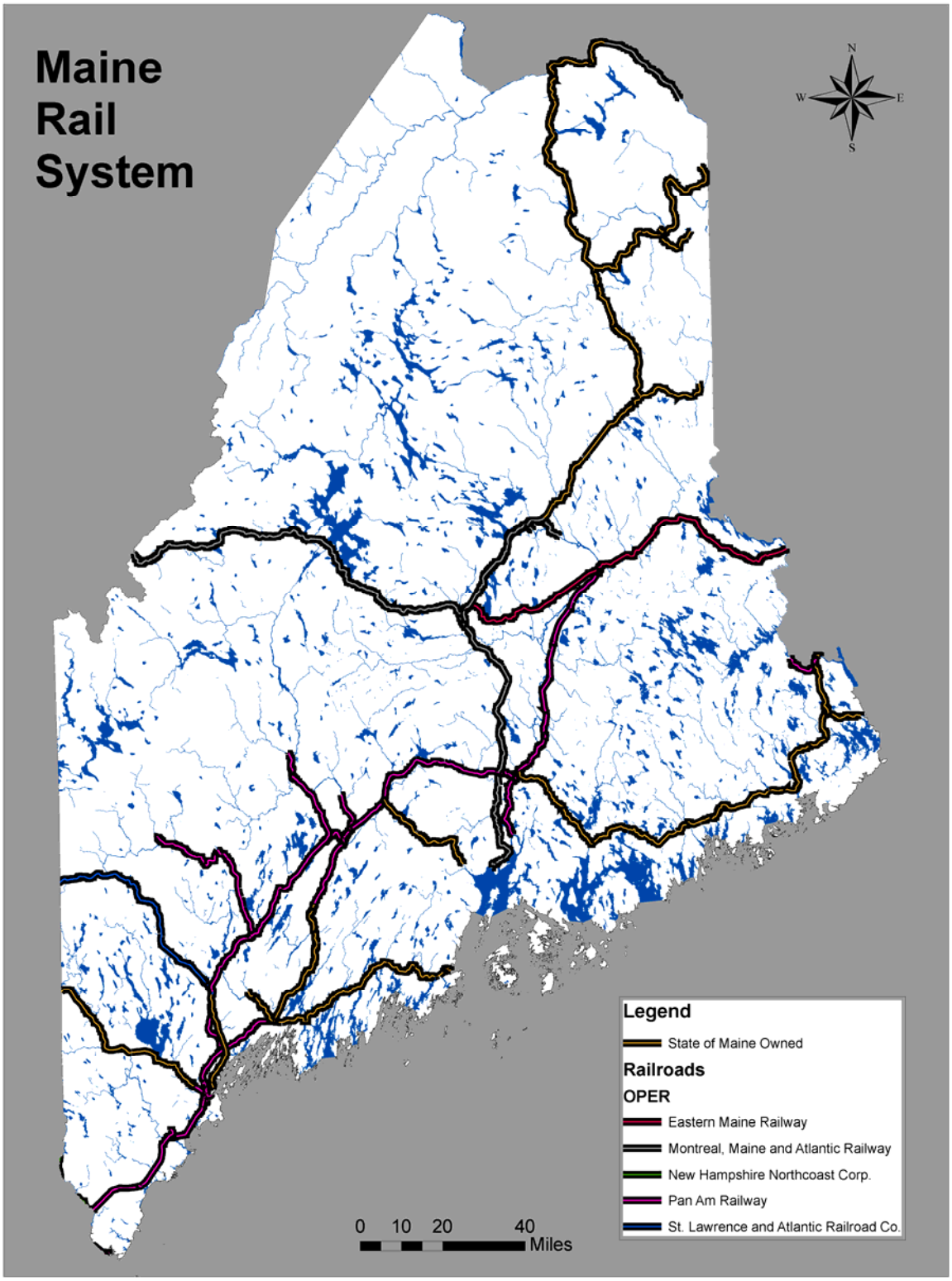
EVI NO	COMMON NAME	SCIENTIFIC NAME	ST	FED	MONTHS PRESENT C= COMMON U=UNCOMMON J F M A M J J A S O N D	SPRING MIGRATION	NESTING	FALL MIGRATION	WINTERING	MOLTING
W16	Unidentified Goldeneye	*Bucephala spp.*			C C C C C U U U C C C C	Mar. - Apr.	Apr. - Jul.	Oct. - Dec.	Oct. - Mar.	Jul. - Aug.
	Common Eider	*Somateria mollissima*			C C C C C C C C C C C C	Mar. - Apr.	Apr. - Jul.	Sep. - Oct.	Nov - Mar	Jul. - Sep.
	Bufflehead	*Bucephala albeola*			C C C C U U C C	Apr. - May		Sep. - Dec.	Nov - Mar	

FISH: DIADROMOUS FISH (DF) ELVER RUNS (ER) HERRING SPAWNING AREAS (HS)

EVI NO	COMMON NAME	SCIENTIFIC NAME	ST	FED	MONTHS PRESENT J F M A M J J A S O N D	SPAWNING	LARVAE (FW=FRESHWATER R=RARE)	JUVENILE	ADULT
DF33	smelt rainbow	*Osmerus mordax*			x x x x x x x x x x x x	Mar. -Jun	May-Sept.	Jan-Dec	Jan -Dec.
	eel american	*Anguilla rostrata*			x x x x x x x x x x x x	N/A	Apr. -Jun	Jan-Dec	Aug -Nov
	alewife	*Alosa pseudoharengus*			R R R x x x x x x x R R	FW	FW	Jan-Dec	Apr -Oct.
	trout brook	*Salvelinus fontinalis*			x x x x x x	FW	FW	FW	May-Sep
	trout brown	*Salmo trutta*			x x x	FW	FW	FW	Oct -Feb.
	shad american	*Alosa sapidissima*			R R x x x x x R x	FW	FW	May-Oct	May-Sep
DF34	smelt rainbow	*Osmerus mordax*			x x x x x x x x x x x x	Mar. -Jun.	May-Sept.	Jan-Dec	Jan. -Dec.
	trout brook	*Salvelinus fontinalis*			x x x x x x	FW	FW	FW	May-Sep
	eel american	*Anguilla rostrata*			x x x x x x x x x x x x	N/A	Apr. -Jun	Jan-Dec	Aug -Nov
DF35	smelt rainbow	*Osmerus mordax*			x x x x x x x x x x x x	Mar. -Jun	May-Sept.	Jan-Dec	Jan -Dec.
DF36	smelt rainbow	*Osmerus mordax*			x x x x x x x x x x x x	Mar. -Jun	May-Sept.	Jan-Dec	Jan -Dec.
DF37	smelt rainbow	*Osmerus mordax*			x x x x x x x x x x x x	Mar. -Jun	May-Sept.	Jan-Dec	Jan -Dec.
DF38	smelt rainbow	*Osmerus mordax*			x x x x x x x x x x x x	Mar. -Jun	May-Sept.	Jan-Dec	Jan -Dec.
DF39	smelt rainbow	*Osmerus mordax*			x x x x x x x x x x x x	Mar. -Jun	May-Sept.	Jan-Dec	Jan -Dec.
DF40	smelt rainbow	*Osmerus mordax*			x x x x x x x x x x x x	Mar. -Jun.	May-Sept.	Jan-Dec	Jan. -Dec.
ER155	eel american	*Anguilla rostrata*			x x x x x x x x x x x x	N/A	Apr. -Jun.	Jan-Dec	Aug -Nov
ER160	eel american	*Anguilla rostrata*			x x x x x x x x x x x x	N/A	Apr. -Jun	Jan-Dec	Aug -Nov

- Access database with agency supplied data
- Custom GIS script tool selects all “EVI numbers” on screen
- Populates table linked to Access report
- Very fast reports “on the fly” of resources in the immediate area

LINK


Maine
Rail
System
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Railroads
OPER
Eastern Maine Railway
Montreal, Maine and Atlantic Railway
New Hampshire Northcoast Corp.
Pan Am Railway
St. Lawrence and Atlantic Railroad Co.
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Miles

Major Rivers
St. John R
Aroostook R
West Branch
Mattawamkeag R
Penobscot R
Kennebec R
Androscoggin R
Saco R
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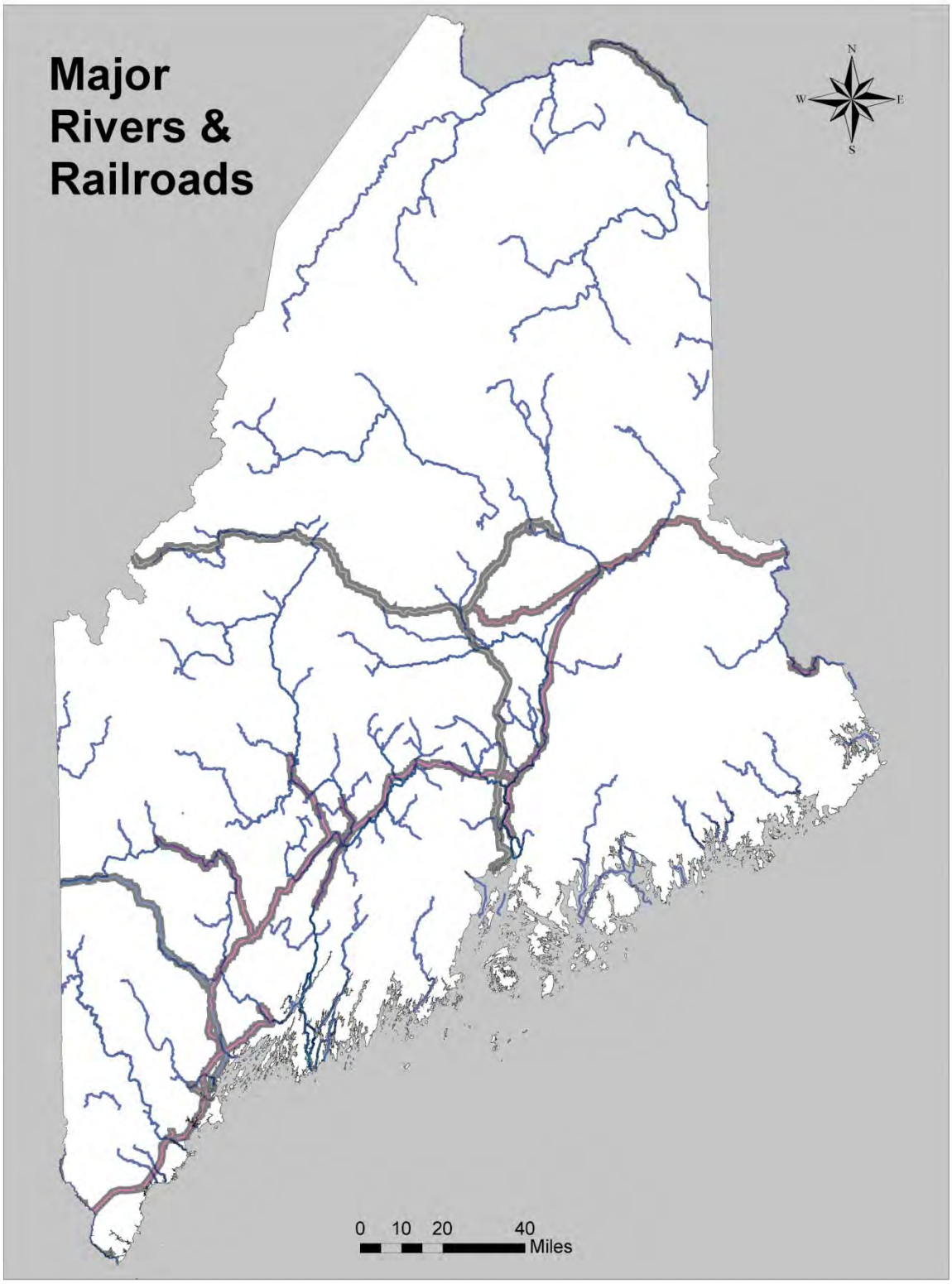
Miles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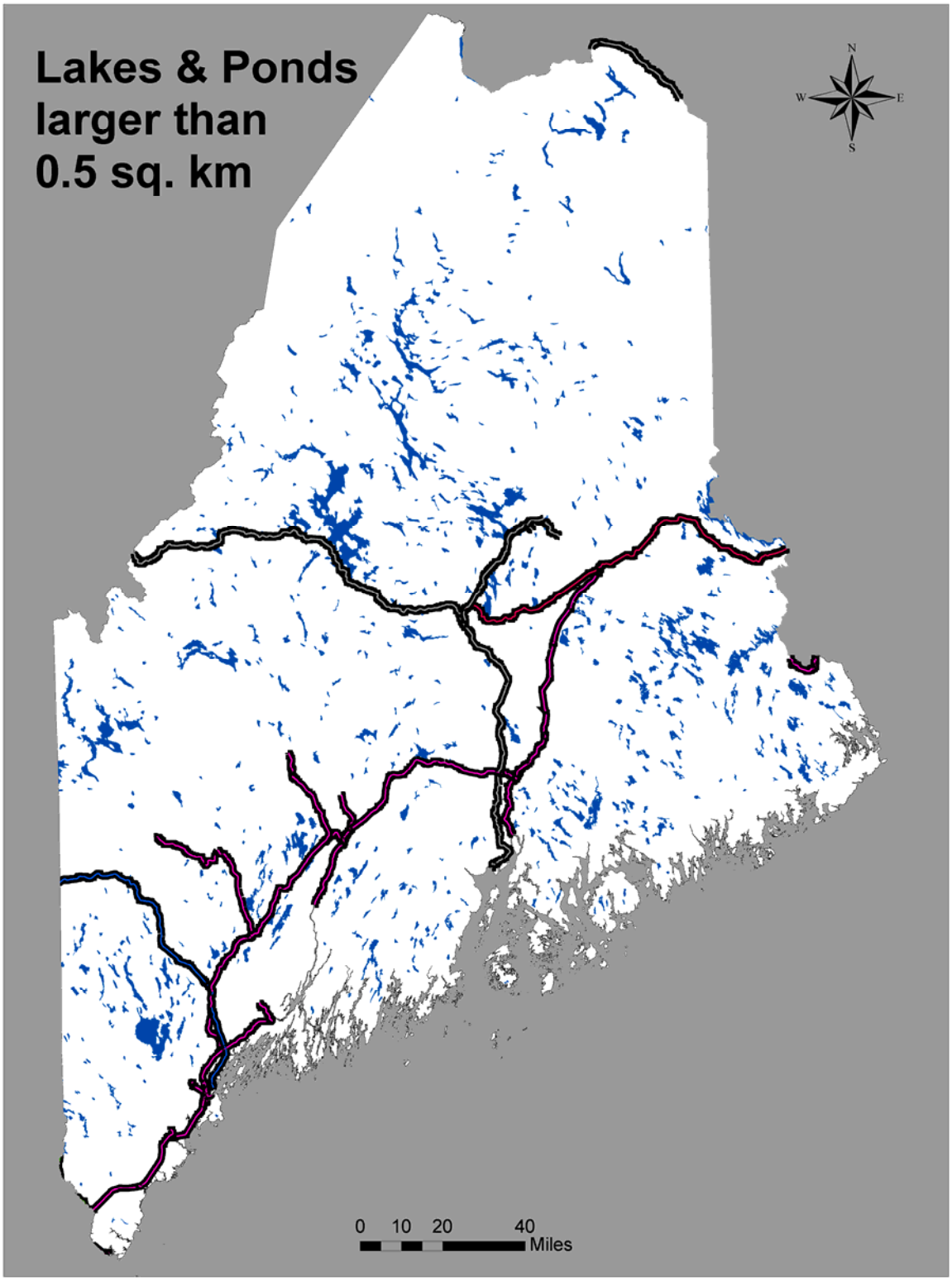
Lakes & Ponds
larger than
0.5 sq. km
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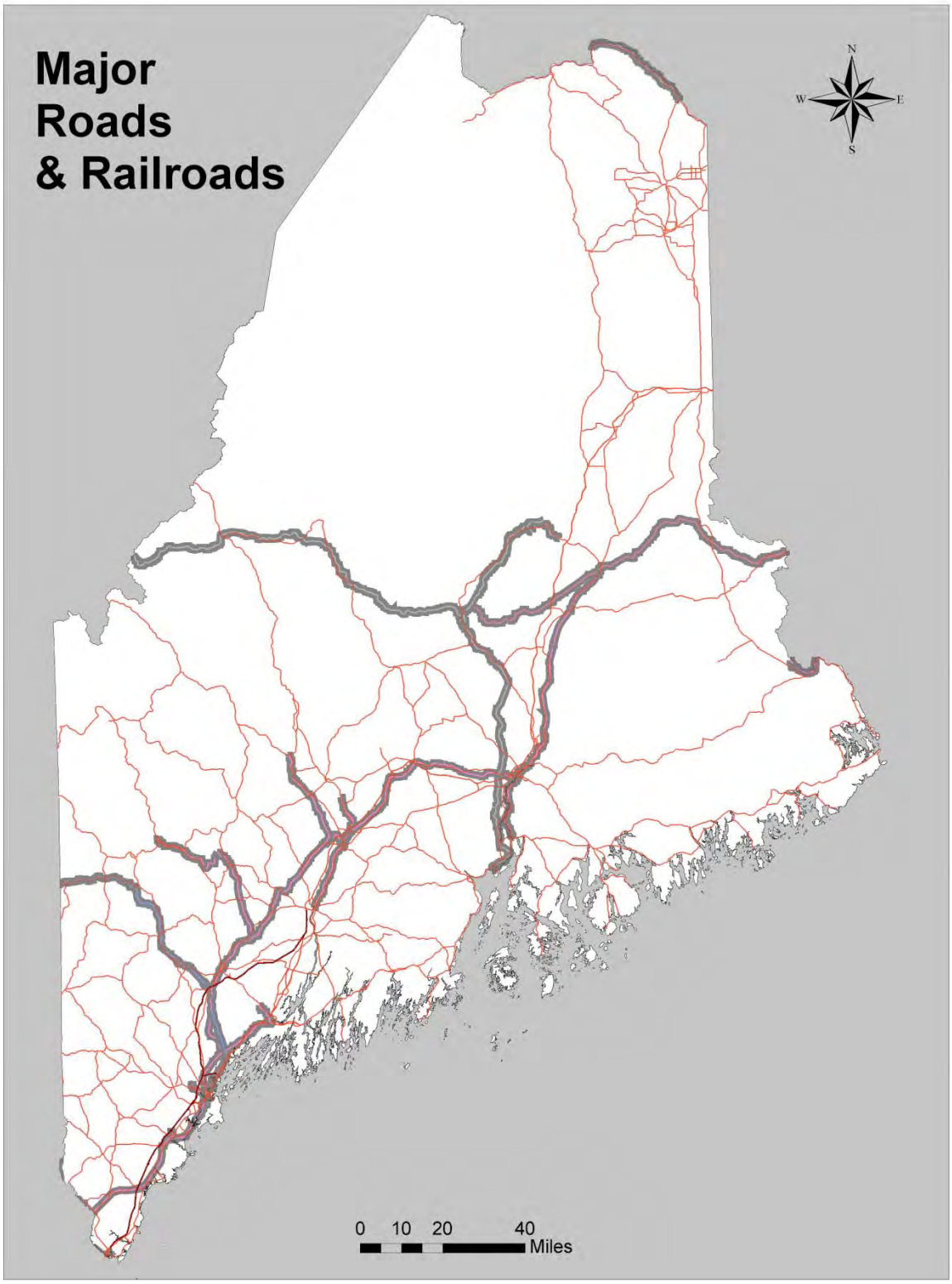
Miles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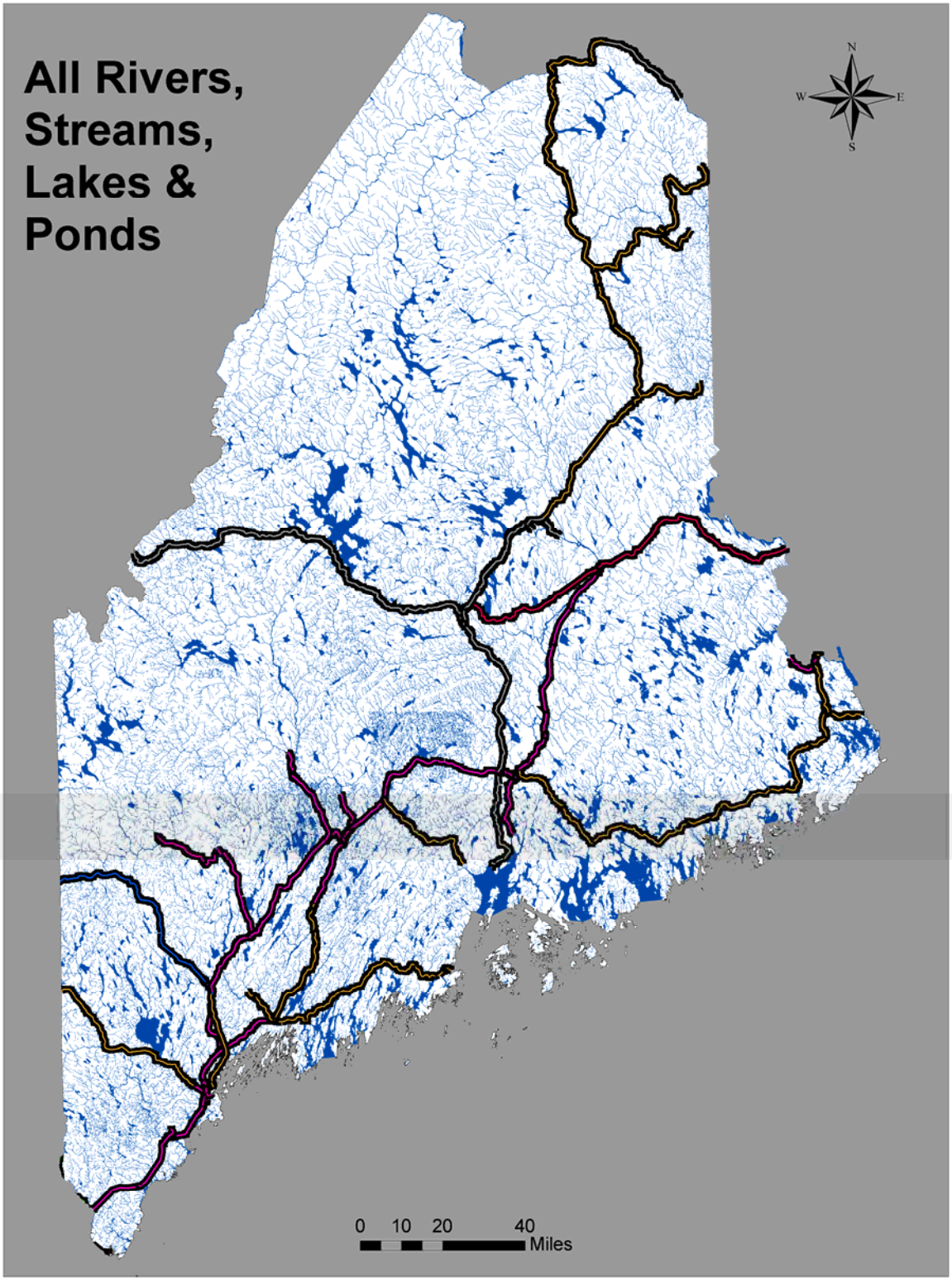
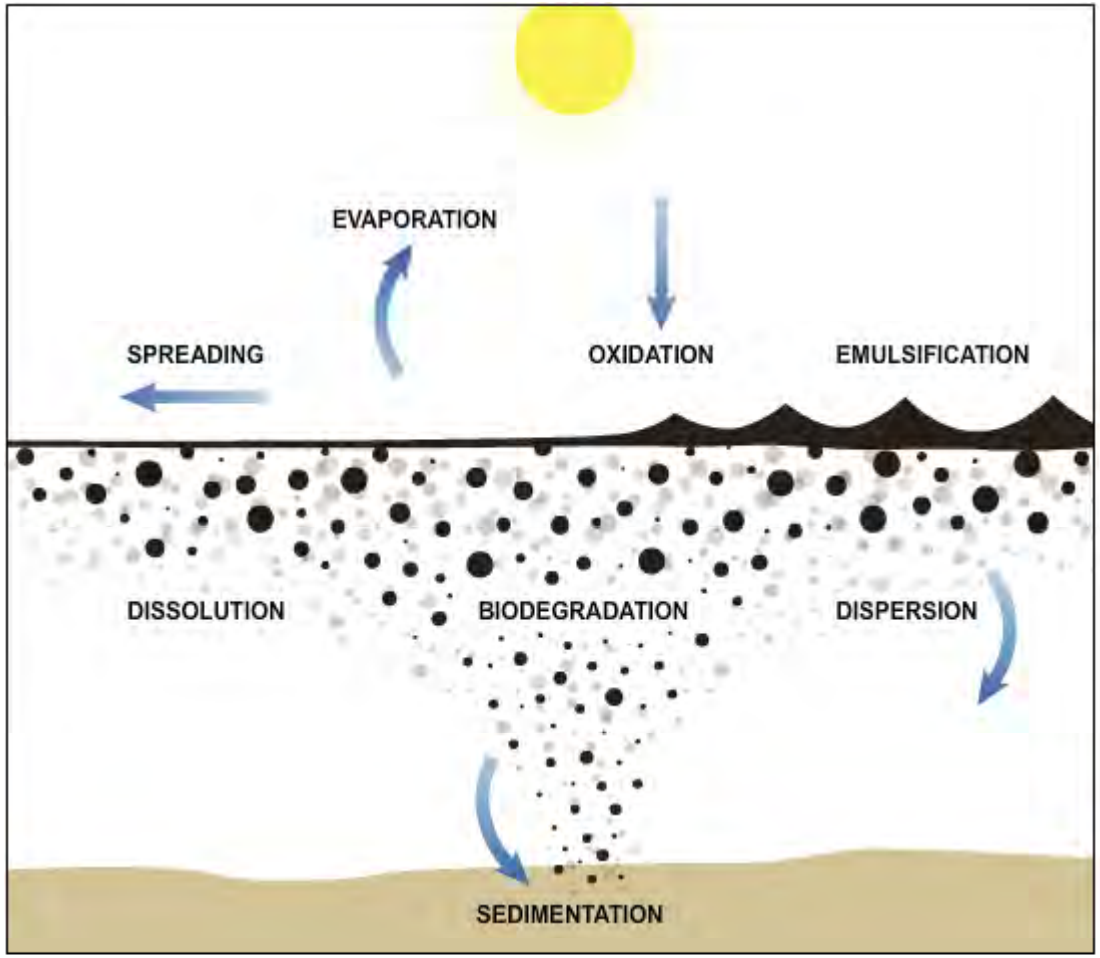


LINK

Resources at Risk



Resources at Risk

Public Drinking Water Supplies

- Community PWS
- Surface Water Intake PWS
- Transient PWS
- Non-transient, non-community PWS
- Non-public
- No details

Resources at Risk

Sand and Gravel Aquifers

10-50 gallons/min.

> 50 gallons/min.

Resources at Risk

Endangered, Threatened

Golden Eagle, Least Bittern, Northern Black Racer (E)

Upland Sandpiper, Blanding's Turtle, Northern Bog Lemming (T)

Species of Special Concern

Bald Eagle, Ribbon Snake, Spring Salamander

Atlantic Salmon Habitat

Resources at Risk

Deer Wintering Areas

Inland Waterfowl & Wading Bird Habitat

Significant Vernal Pools

Resources at Risk

Diadromous Fish Runs

National Wetlands Inventory

Conservation Lands

Boat Launches

www.maine.gov/dep