

OIL SPILL CONTINGENCY PLANNING:

Most Environmentally Sensitive Areas (MESAs) along the Coast of Alaska

Volume II

Prepared By

**Alaska Department of Fish and Game
Habitat and Restoration Division
Anchorage, Alaska**

Funded By

**Alaska Department of Environmental Conservation
Spill Prevention and Response
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Frances Inoue designed and prepared the MESA maps included in this volume; Carol Barnhill, Terrence Howland, and Charles Couvillion assisted with data entry. Mark Fink, Robin Willis, Jack Winters, and Claudia Slater originally identified the MESAs. ADF&G area biologists and technicians contributed sensitive resource information. Hydrography, preliminary annotation, Legislatively Designated Area (LDA), and Conservation System Unit coverages were provided by Dorothy Mortenson and Jean Tam, Alaska Department of Natural Resources. Matt Eagleton, National Marine Fisheries Service, reviewed marine mammal information. Seabird colony data was provided by Shawn Stephenson with the U.S. Fish and Wildlife Service. Resource coverages were also provided by Alyeska Pipeline Service Company's contractor, Emcon Alaska; Dames and Moore, contractor for the Kodiak Island Borough; and by the National Oceanic and Atmospheric Administration. Final draft maps were reviewed by Joe Sullivan, Tamara Olson, and Mark Fink.

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INTRODUCTION

As part of the Alaska Department of Fish and Game's participation in the review of oil spill contingency plans, the Habitat and Restoration Division (H&R) has identified 68 of the most environmentally sensitive areas (MESAs) along the Alaska coastline that could be impacted by a marine spill. This information was originally developed at the request of the Alaska Department of Environmental Conservation (DEC) to assist noncrude oil barge operators in determining whether additional protection strategies were to be included in their oil discharge prevention and contingency plans. Subsequently, state and federal spill responders agreed to incorporate this information in the government spill response contingency plans. During the state fiscal year 1997, DEC provided funding to H&R to prepare maps of 33 MESAs. The remaining 35 MESA maps, comprising this volume, were produced during fiscal year 1998. MESA maps in this volume were revised during fiscal year 2000.

It should be noted that the MESA sites were identified by H&R for spill response planning only, and were not developed in coordination with other state or federal resource agencies. While federal resource agencies had an opportunity to comment on the resource information identified on each map, these MESAs should not be considered a complete list of highly sensitive areas in Alaska.

MOST ENVIRONMENTALLY SENSITIVE AREAS (MESAs) ALONG THE COAST OF ALASKA

Southwest Region

Unimak Pass to Cape Douglas (including Kodiak and Barren Islands)

34. Amagat Island
 - seabird colonies (>451,000 birds)
 - harbor seal haulout
 - sea otter concentrations

35. Sandman Reefs
 - seabird colonies (>202,000 birds)
 - harbor seal concentrations
 - sea lion rookery
 - sea otter concentrations

36. Shumagin Islands
 - salmon concentrations
 - herring spawning
 - seabird colonies (>636,000 birds)
 - waterfowl spring and fall staging and winter concentrations
 - harbor seal concentrations
 - sea lion haulouts and rookeries (463 pups)
 - sea otter concentrations
 - Alaska Maritime National Wildlife Refuge

37. Semidi Islands
 - seabird colonies (>2.4 million birds)
 - waterfowl spring and fall staging and winter concentrations
 - harbor seal concentrations
 - sea lion haulout and rookery (344 pups)
 - Alaska Maritime National Wildlife Refuge

38. Kujulik Bay
 - salmon concentrations
 - herring spawning
 - shrimp egg hatch/rearing concentrations
 - harbor seal concentrations
 - sea lion haulout
 - sea otter concentrations

39. Tugidak Island
 - herring spawning
 - razor clam concentrations
 - seabird colonies
 - waterfowl spring and fall staging and winter concentrations
 - harbor seal concentrations
 - sea otter concentrations
 - Tugidak Island State Critical Habitat Area

40. Perenosa Bay/Seal Bay (Afognak Island)
 - salmon concentrations
 - herring spawning
 - shrimp egg hatch/rearing concentrations
 - seabird colonies
 - waterfowl winter concentrations
 - harbor seal concentrations
 - sea lion haulout
 - sea otter concentrations
 - brown bear feeding concentrations
 - humpback whale feeding concentrations

41. Marmot Island
 - seabird colonies
 - harbor seal concentrations
 - sea lion haulout and rookery (804 pups)
 - sea otter concentrations
 - humpback whale feeding concentrations
 - Alaska Maritime National Wildlife Refuge

42. Barren Islands
 - seabird colonies (>480,000 birds)
 - harbor seal concentrations
 - sea lion haulouts and rookery (1,638 pups)
 - sea otter concentrations
 - humpback whale feeding concentrations
 - Alaska Maritime National Wildlife Refuge

Southcentral Region

Cape Douglas to Chugach Islands (Cook Inlet)

43. Chenik Head to Silver Beach (Kamishak Bay)
 - salmon concentrations
 - waterfowl spring concentrations
 - herring spawning
 - seabird colonies
 - harbor seal haulouts
 - sea otter established population
 - brown bear spring and summer concentrations
 - McNeil River State Wildlife Sanctuary and State Game Refuge

- 44a/b. Redoubt Bay
 - salmon concentrations
 - waterfowl and shorebird spring and fall staging and waterfowl molting
 - black bear spring concentrations
 - brown bear summer and fall concentrations
 - harbor seal concentrations
 - beluga whale feeding concentrations
 - Redoubt Bay State Critical Habitat Area

45. Kalgin Island
 - salmon concentrations
 - waterfowl and shorebird spring and fall staging
 - harbor seal concentrations
 - Kalgin Island State Critical Habitat Area

46. Trading Bay
 - salmon concentrations
 - waterfowl and shorebird spring and fall staging and waterfowl molting
 - black/brown bear spring, summer, and fall concentrations
 - harbor seal concentrations
 - beluga whale feeding concentrations
 - Trading Bay State Game Refuge

47. Susitna Flats
 - salmon concentrations
 - eulachon spawning
 - seabird colonies
 - waterfowl and shorebird spring and fall staging and waterfowl molting concentrations
 - harbor seal concentrations
 - beluga whale feeding concentrations
 - black bear spring concentrations
 - brown bear summer concentrations
 - Susitna Flats State Game Refuge

48. Anchorage Flats
 - salmon concentrations
 - seabird colonies
 - waterfowl and shorebird spring and fall staging and waterfowl molting and brood rearing
 - beluga whale feeding concentrations
 - Anchorage Coastal State Wildlife Refuge

49. Goose Bay
 - salmon concentrations
 - seabird colony
 - waterfowl and shorebird spring staging and waterfowl fall staging
 - beluga whale feeding concentrations
 - Goose Bay State Game Refuge

50. Palmer Hay Flats
 - salmon concentrations
 - waterfowl spring and fall staging and waterfowl rearing areas
 - Palmer Hay Flats State Game Refuge

51. Mouth of the Kenai River¹
 - salmon concentrations
 - seabird colony
 - waterfowl and shorebird spring staging and waterfowl fall staging
 - beluga whale feeding concentrations

52. Clam Gulch
 - salmon concentrations
 - razor clam concentrations
 - waterfowl spring staging
 - Clam Gulch State Critical Habitat Area

53a/b/c. Kachemak Bay

- salmon concentrations
- groundfish and Pacific halibut rearing concentrations
- herring spawning
- razor clam concentrations
- hardshell and softshell clam concentrations
- mussel concentrations
- crab rearing concentrations
- tanner crab concentrations
- seabird colonies (.18,000 birds)
- seabird summer, fall, and winter concentrations
- waterfowl and shorebird spring staging and waterfowl fall staging and winter concentrations
- harbor seal concentrations
- sea otter concentrations
- Kachemak Bay and Fox River Flats State Critical Habitat Areas

Gore Point to Cape Suckling

54. Patton Bay (Montague Island)/Wooded Island

- salmon concentrations
- waterfowl and shorebird spring staging
- seabird colonies (>16,000 birds)
- sea lion haulout and rookery (305 pups)
- sea otter concentrations
- brown bear spring, summer, and fall concentrations
- deer feeding concentrations

55a/b. Sheep Bay

- salmon concentrations
- waterfowl spring and fall staging, and molting and winter concentrations
- seabird colony
- sea otter concentrations
- brown bear spring, summer, and fall concentrations
- deer feeding concentrations

56. Seal Rocks (southwest of Hinchinbrook Island)

- seabird colony
- sea lion haulout and rookery (598 pups)
- gray whale and humpback whale migration corridor

- 57a/b. Copper River Delta/Controller Bay
- salmon concentrations
 - razor clam concentrations
 - waterfowl and shorebird spring and fall staging and waterfowl molting
 - seabird colonies (>46,000 birds)
 - sea otter concentrations
 - harbor seal haulouts
 - gray whale and humpback whale migration corridor
 - brown bear summer and fall concentrations
 - Copper River Delta State Critical Habitat Area
 - Western Hemisphere Shorebird Preserve Network

Southeast Region

Cape Suckling to Dixon Entrance

58. Situk
- salmon concentrations
 - eulachon spawning
 - waterfowl and shorebird spring and fall staging
 - seabird colonies
 - harbor seal concentrations
 - gray whale migration corridor
 - brown bear spring and summer concentrations
59. Dry Bay
- salmon concentrations
 - eulachon spawning
 - waterfowl and shorebird spring and fall staging
 - seabird colonies
 - harbor seal concentrations
 - sea lion haulout/concentration
 - gray whale migration corridor
 - brown bear spring and summer concentrations
60. Chilkat River Flats
- salmon concentrations
 - eulachon spawning
 - waterfowl and shorebird spring and fall staging
 - bald eagle feeding concentrations
 - harbor seal concentrations
 - black bear spring and summer concentrations
 - brown bear summer concentrations

61. Mendenhall Wetlands
 - salmon concentrations
 - herring spawning and wintering concentrations
 - eulachon spawning
 - waterfowl and shorebird spring and fall staging and winter concentrations
 - seabird colonies
 - Mendenhall Wetlands State Game Refuge

62. St. Lazaria Island
 - seabird colony (>404,000 birds)
 - harbor seal concentration
 - Alaska Maritime National Wildlife Refuge

63. Stikine River Flats
 - salmon concentrations
 - eulachon spawning
 - waterfowl and shorebird spring and fall staging
 - seabird colonies
 - bald eagle spring concentrations
 - harbor seal concentrations
 - brown/black bear spring and summer concentrations

64. Mouth of Pack Creek (Seymour Canal)
 - salmon concentrations
 - herring rearing concentration
 - brown bear spring and summer concentrations
 - Stan Price State Wildlife Sanctuary

65. Burroughs Bay (east of Behm Canal)
 - salmon concentrations
 - eulachon spawning
 - herring wintering concentrations
 - waterfowl and shorebird spring and fall staging
 - harbor seal concentrations
 - brown/black bear spring and summer concentrations

66. Hazy Islands (west of Coronation Island)
 - seabird colony
 - sea lion haulout and rookery (1,157 pups)
 - Alaska Maritime National Wildlife Refuge

67. Coronation Island
 - seabird colony
 - sea lion haulout and rookery
 - sea otter concentrations

68. Forrester Island
 - seabird colonies (>1 million birds)
 - sea lion haulout and rookery (2,798 pups)
 - Alaska Maritime National Wildlife Refuge

¹Area heavily weighted by highly significant commercial and/or subsistence fisheries.

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