The Unified Plan and the Southeast Alaska Subarea Contingency Plan

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Dept of Environmental Conservation
Spill Prevention and Response Division

Spill Response in Alaska

- **Roughly 2,000 spills per year on the average**
- **DEC staff perform field visits/phone follow-ups to roughly 750-800 of these spills**
- **25-30 spills are considered "significant" with Situation Reports generated**
- **36 primary spill responders in DEC**

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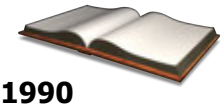
Vessel Spills in Southeast Alaska

Date	Spill Name/Location	Substance	Quantity
10/06/1987	Tanker Leak (Along West Coast)	ANS Crude Oil	600,000 gal
12/25/1979	M/V Lee Wang Zin (Revillagigedo Channel)	Bunker C Fuel	100,000+ gal
04/11/1986	Tank Barge Grounding (Wrangell Narrows)	Diesel	77,280 gal
04/08/1984	Tank Barge Grounding (Hydaburg)	Diesel	40,000 gal
11/15/1982	Tank Barge Grounding(Wrangell Narrows)	Diesel	32,631 gal
09/01/1988	Freight Ship Grounding (Dora Bay)	Diesel	30,000 gal
11/18/1982	Tank Barge Grounding(Frederick Sound)	Diesel	29,000 gal
09/15/1989	Fish Processor Vessel Sinking (Tongass Narrows)	Diesel	20,000 gal
11/05/2007	Samson Tug & Barge (Klawock)	Propane	17,800 lbs
10/27/1987	Tank Barge Grounding (Wrangell Narrows)	Diesel	16,597 gal
12/01/1995	Tugboat Tongass Sinking (Lynn Canal)	Diesel	15,000 gal
02/25/1987	Barge Callapooya Grounding (Hydaburg)	Diesel	9,000 gal
-4/18/1996	Cargo Barge Grounding (Hoonah)	Diesel	7,000 gal
07/26/2002	F/V Sinking (Prince of Wales Island)	Diesel	6,000 gal
04/17/1998	F/V Incident (Tenakee Inlet)	Diesel	5,000 gal
12/05/1973	Tank Barge Grounding (Sitka Sound)	Diesel	4,500 gal
01/26/1988	Tank Vessel Leak (Skagway)	Gasoline	3,000 gal
08/05/1979	Tank Barge Grounding (Sitka Sound)	Diesel	2,800 gal
08/24/2001	Fishing Vessel sinking (Sitka Area)	Diesel	2,500 gal

Other Notable Spills in Southeast Alaska

Date	Spill Name/Location	Substance	Quantity
04/09/1996	Ketchikan Pulp Company	Acid	125,000 gal
01/14/1994	Tank Farm Facility (Juneau)	Diesel	100,000 gal
12/24/2004	Greens Creek, Juneau	Process Water	72,000 gal
04/01/1983	Tank Farm Facility (Skagway)	Diesel	50,000 gal
01/26/1979	Ketchikan Pulp Co., Leaking Tank	Bunker C Fuel	38,000 gal
02/20/1995	Vehicle Accident, Juneau	Gasoline	13,125 gal
11/03/2002	Greens Creek, Juneau	Zinc Concentrate	8,000 lbs
04/23/2011	Greens Creek ,Juneau	Process Water	7,000 gal
02/05/1996	Petersburg Power Co., Valve Failure	Diesel	6,800 gal
09/25/2005	Greens Creek ,Juneau	Process Water	6,750 gal
05/01/1995	Douglas Residence, Home Heating Oil Tank	Diesel	5,000 gal
08/11/2005	Juneau, Tank Other	Asphalt	5,000 gal

Legal Mandates

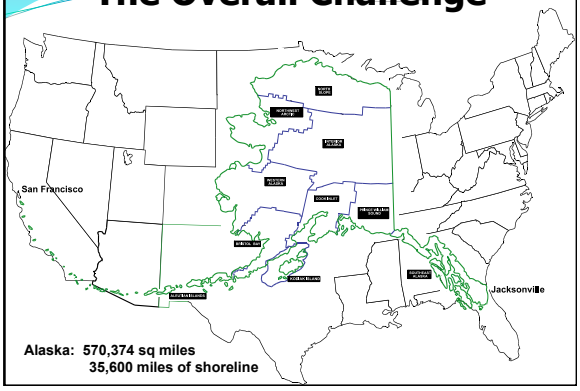


- **Oil Pollution Act of 1990**
- **Clean Water Act**
- **Alaska Statutes & Regulations**

Federal/State Planning Requirements

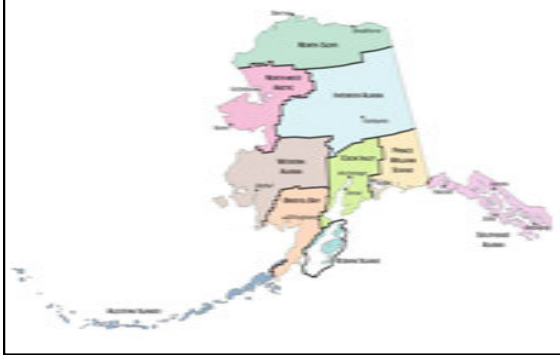
- **OPA 90 requires USCG and EPA to prepare the National Contingency Plan, plus develop Regional and Area Contingency Plans throughout the country**
- **The Alaska Statute requires ADEC to develop a State Master Plan and 10 Regional Master Plans for the ten "regions" of the state.**

The Overall Challenge

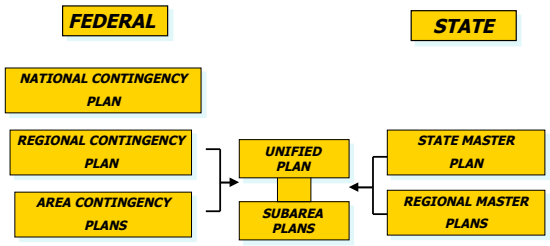


Alaska: 570,374 sq miles
35,600 miles of shoreline

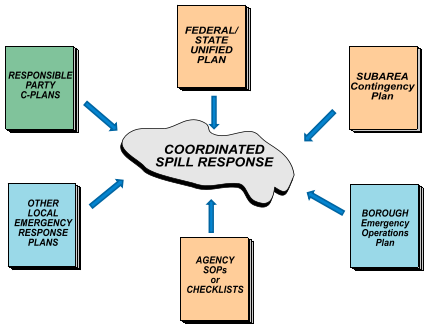
Unified Plan and 10 Subarea Plans



Joint Government Planning in Alaska



Integrated Response



The Alaska Federal/State Preparedness Plan for Response to Oil and Hazardous Substance

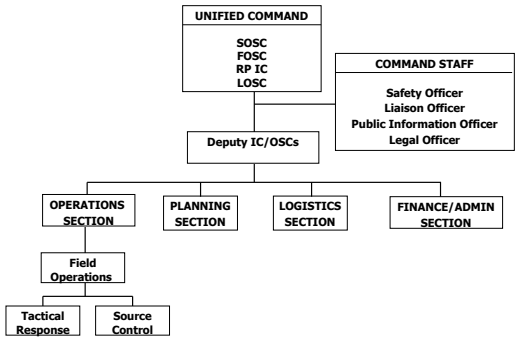
Discharges/Releases

The Unified Plan

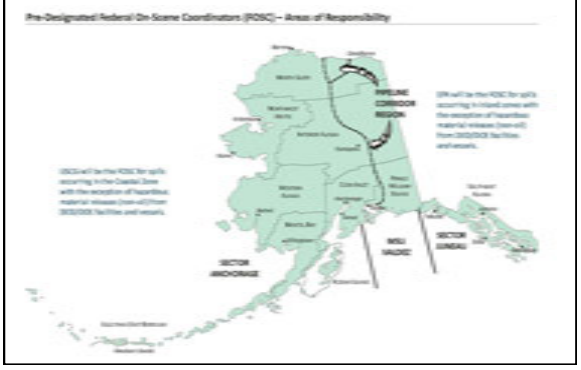
Unified Plan

- Describes the strategy for a coordinated Federal, State, and local response to a discharge, or substantial threat of a discharge of oil or hazardous substance within Alaska.
- Provides information and guidance applicable to pollution responses within the entire State of Alaska including:
  - Emergency notification information
  - General emergency response procedures
  - 18 Annexes, A-P, V and Z, by subject matter.

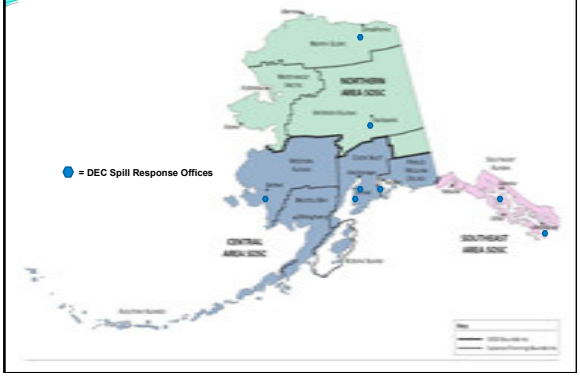
Typical Response Organization



The FOSC Areas of Responsibility



The SOSC Areas of Responsibility



The Southeast Alaska Subarea Contingency Plan

Southeast Alaska Region: that area of the state east of 142W longitude and south of a line just west of Icy Bay that connects the U.S.-Canadian border with the Gulf of Alaska, including adjacent shorelines and state waters, and having as its eastward boundary a line drawn in such manner that each point on it is 200 nautical miles from the baseline from which the territorial sea is measured.

Local Government and Tribal Roles in Federal/State Planning

- Tribal & Local Government Input is Critically Important to Federal/ State Plans

- Input Process includes Government to Government consultation, EPA questionnaires, and the public review process.

Federal/State Spill Response Plans

Southeast SCP:

- A – Response
- B – Regional Resources
- C – HazMat
- D - Sensitive Areas
- E – Background
- F – Scenarios
- G - Geographic Response Strategies
- H – Specific PPORs

Unified Plan:

- Response Organization
- Administration
- Dispersants & ISB
- Wildlife Protection Guidelines
- Statewide Resources
- Hazmat, Radiological
- Health & Safety Guidelines
- Joint Information Center
- PPOR Guidelines
- Volunteer Guidelines

Potential Places of Refuge Section

- Two Critical Factors to Consider:
  - Sensitive Area Protection
  - Operational Needs

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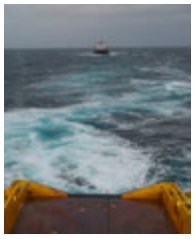
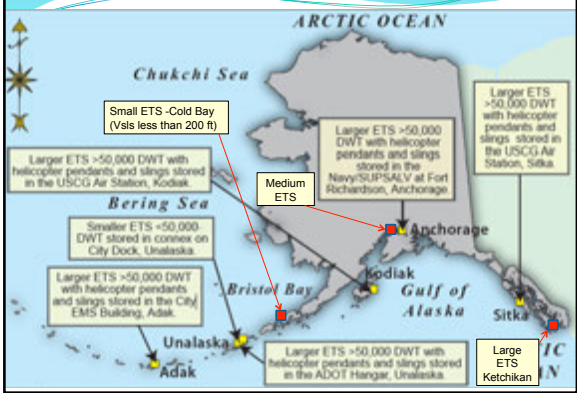
Potential Places of Refuge Section

Off Shore Prevention Initiative: Emergency Towing System

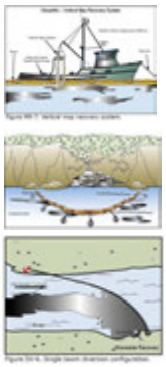
A Successful ETS Employment: M/V Golden Seas (December 2010)



Emergency Towing Systems



Response Strategies and Tactics



Nearshore Response Planning Initiative

- Goal: Protect State Resources from Impacts of Oil Spills (State Waters extend out to 3 miles from the shoreline)
- Objective: Develop Specific Nearshore Operations Response Strategy to supplement the STAR Manual

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Nearshore Operations Response Strategy

Complete System Approach:

- Support Barges and Tugs with crews
- Aerial Support
- Response Vessels with Equipment and Personnel
- Recovery Capacity (barge, (mini-barges, bladders)
- Re-Supply Issues for Fuel, Water, Food
- 24/7 Operation
- Shallow Water/Nearshore Considerations
- GRS Support from the Barge

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Nearshore Operations Response Strategy

- Incorporate final document into updated Spill Tactics for Alaska Responders (STAR) Manual
- Completion Date: Spring 2013
- Begin subarea-specific planning for Nearshore Response, possibly beginning with the Aleutians

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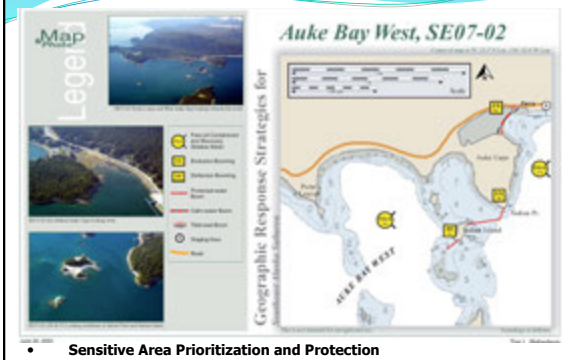
Geographic Response Strategies Section



- Sensitive Area Prioritization and Protection
- Pre-Identified Operational Tactics

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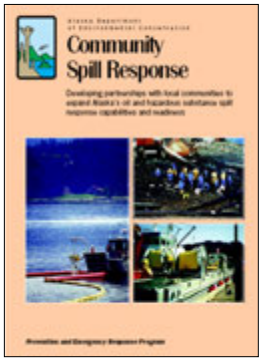
Local Response Agreements

- Formal Agreement between DEC and Local Community; nearly 50 agreements in place, several pending
- Activated by DEC's State On-Scene Coordinator for spills in local area
- Local Community Reimbursed by DEC for expenses incurred
- DEC-owned Spill Response Container located in Community



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State of Alaska Local Response Assets

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Local Community Response Enhancements

- Spill Response Containers
- DEC provides Training to Local Responders
- DEC provides maintenance and replacement costs for equipment and supplies

Key Roles for Local Responders

- Local On-Scene Coordinator
- Regional Stakeholder Committee
- Local Knowledge
- Augment the Response with Trained Workers

North Slope Borough Village Response Team – GC-2 Spill (March 2006)

Local-Hire Worker – Selendang Ayu Spill (April 2005)

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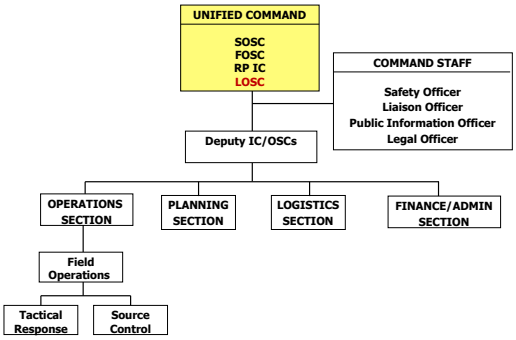
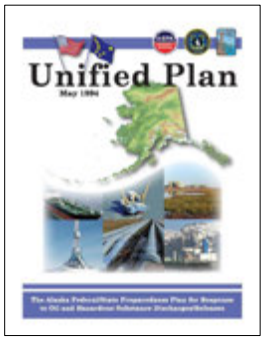
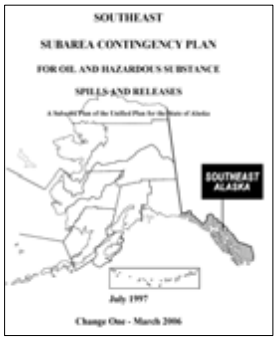
Typical Response Organization



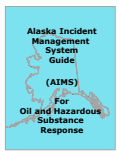
Key Federal/State Plans





Supporting Documents

Response Tactics



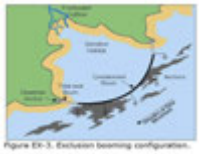
Fisheries/ Water Sampling

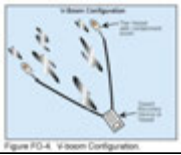
Geographic Response Strategies

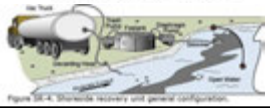
Tundra Treatment Manual

Permits Tool
GRIN Tool

Potential Places of Refuge

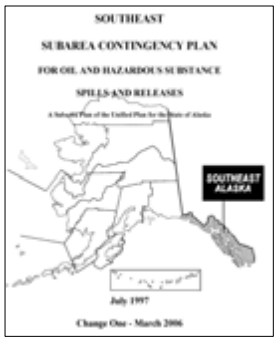






Southeast Subarea Plan Schedule

- Agency and Tribal Government Review – Summer 2012
- Public Review – Fall/Winter 2012
- June 2013: Additional GRS Completed
- Plan Finalized – Winter/ Spring 2013



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Questions/Discussion

http://dec.alaska.gov/spar/perp/index.htm

Geographic Response Strategies in Alaska

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Oil Spill Response

#1 -Stop and contain the oil at the source.

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Oil Spill Response

#2 -Collect the oil on the water.

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Oil Spill Response

#3 -Protect sensitive areas from impacts.

Geographic Response Strategies

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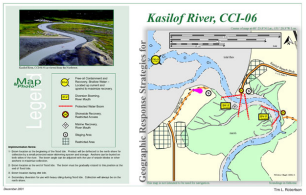

What is a GRS ?

- GRS are response tools that maybe utilized by an Incident Command or Responsible Party in the event of an oil spill.

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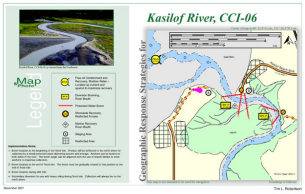

What is a GRS ?

- Shore-side and near shore response strategies for the protection of <u>pre-selected sensitive areas.</u>

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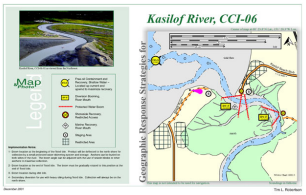

What is a GRS ?

- A consensus product a result of a planning effort involving trustee agencies, response agencies, spill responders and the public.

  The workgroup.

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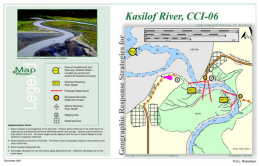

What is a GRS ?

- Public document that is Part G of the State/Federal Subarea Plan.

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Work Group Membership

Oversight Agencies
USCG EPA
ADEC

Natural Resource Agencies
ADFG ADNR
DOI FWS NPS
NOAA NMFS USFS
MMS

Response Organizations
Alaska Chadux
CISPRI
SERVS
SEAPRO

C-plan Holders
Local Governments
Tribal Org/Gov

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Guiding Principles

Primary

- **Responder-oriented strategies and techniques to protect sensitive areas.**
- **Strategies should be flexible and modifiable to fit the prevailing conditions.**
- **No unnecessary duplication of information in other plans.**

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Guiding Principles

Primary

- **Identifies resources at risk and set priorities for their protection.**
- **The documents specify required response resource, logistical information, and field instructions for deployment.**
- **Easy to use, test and update.**
- **Content more important than form.**

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Guiding Principles

Secondary

- **Increase public awareness of response plans prior to a spill**
- **Low maintenance cost and time**
- **Low unit cost**
- **Incident Command System friendly**

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Document Organization

Part 1 Introduction

Part 2 Geographic Response Strategies

Part 3 References

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Part 1 Introduction

- Purpose and Scope
- How to Use This Document
- STAR Manual- "Spill Tactics for Alaska Responders"
- Who to Contact for Input
- How the Document Was Developed
- Zone Map
- Site Selection Matrix

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Response Zone Map

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Part 2
Geographic Response Strategies

Index Map to Sites

Legend

Geographic Response Strategies

- Site Map, Picture, Notes
- Table - Location, Description, Implementation, Response Resources, Staging, Access, Resources Protected, Special Considerations

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Index Map

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Geographic Response Strategy

Map Page

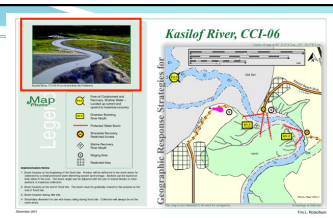

Table Page

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Map Page - Photo

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Geographic Response Strategy

Map Page

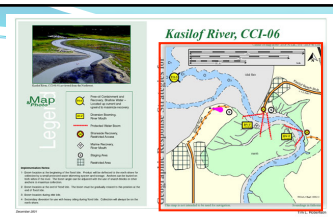

Table Page

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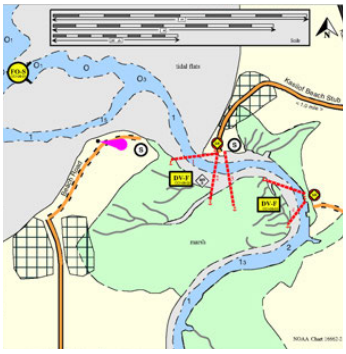
Map Page - Tactics Map



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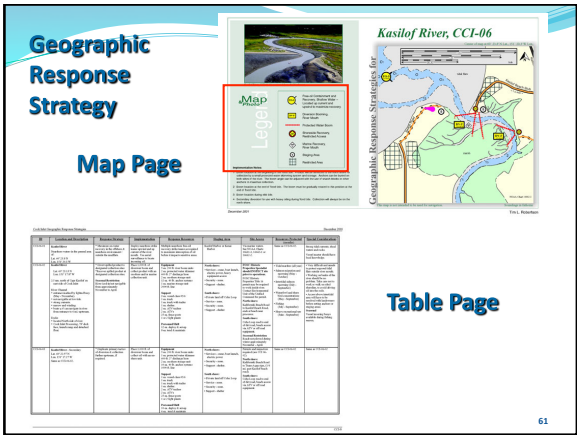

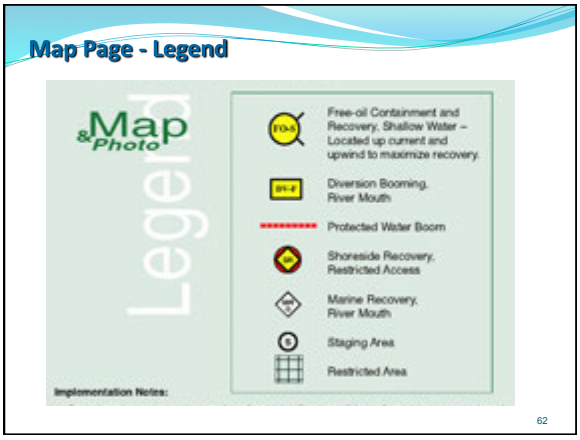

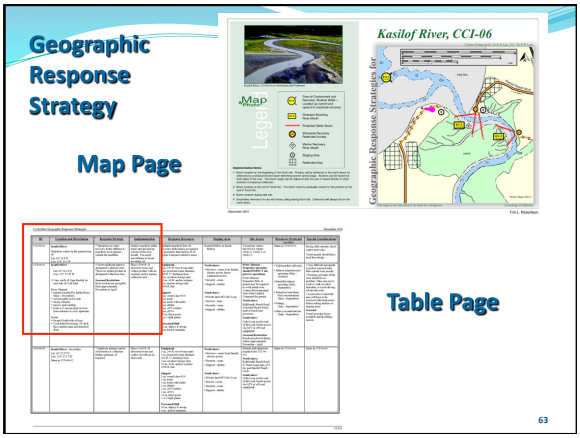

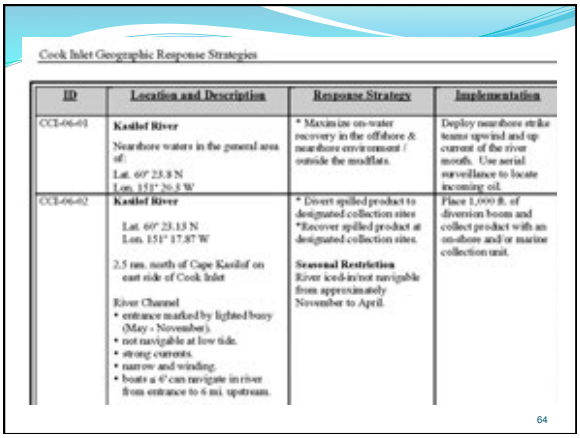

Cook Inlet Geographic Response Strategies

ID	Location and Description	Response Strategy	Implementation
CCI-06-01	**Kasilof River** Nearshore waters in the general area of: Lat. 60° 23.8 N Lon. 151° 26.3 W	* Maximize on-water recovery in the offshore & nearshore environment / outside the mudflats.	Deploy nearshore strike teams upwind and up current of the river mouth. Use aerial surveillance to locate incoming oil.
CCI-06-02	**Kasilof River** Lat. 60° 23.13 N Lon. 151° 17.87 W 2.5 nm. north of Cape Kasilof on east side of Cook Inlet River Channel • entrance marked by lighted buoy (May - November). • not navigable at low tide. • strong currents. • narrow and winding. • boats a 6' can navigate in river from entrance to 6 mi. upstream.	* Divert spilled product to designated collection sites *Recover spilled product at designated collection sites. **Seasonal Restriction** River iced-in/not navigable from approximately November to April.	Place 1,000 ft. of diversion boom and collect product with an on-shore and/or marine collection unit.

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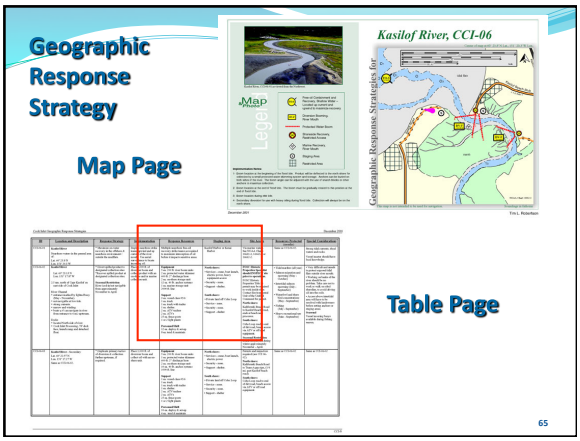

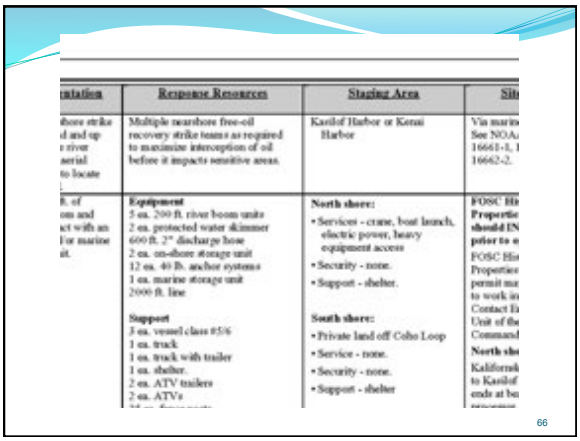

ntation	Response Resources	Staging Area	Site
shore strike d and up r river aerial to locate	Multiple nearshore free-oil recovery strike teams as required to maximize interception of oil before it impacts sensitive areas.	Kasilof Harbor or Kenai Harbor	Via marit See NOA 16661-1, 16662-2.
ft. of on and act with an for marine it.	**Equipment** 5 ea. 200 ft. river boom units 2 ea. protected water skimmer 600 ft. 2" discharge hose 2 ea. on-shore storage unit 12 ea. 40 lb. anchor systems 1 ea. marine storage unit 2000 ft. line **Support** 3 ea. vessel class #5/6 1 ea. truck 1 ea. truck with trailer 1 ea. shelter. 2 ea. ATV trailers 2 ea. ATVs	**North shore:** • Services - crane, boat launch, electric power, heavy equipment access • Security - none. • Support - shelter. **South shore:** • Private land off Coho Loop • Service - none. • Security - none. • Support - shelter	FOSC Hi Propertie should IN prior to e FOSC Hi Propertie permit ma to work in Contact Fi Unit of the Command North sh Kalifornsk to Kasilof ends at be

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Geographic Response Strategy

Map Page

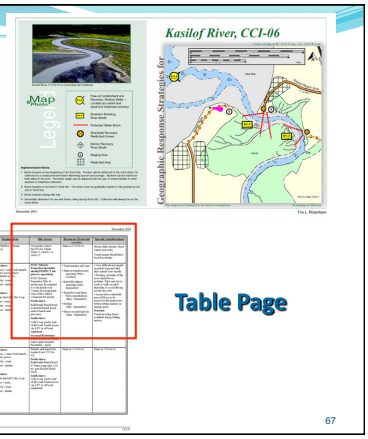


Table Page

December 2001

Site	Site Access	Resources Protected (months)	Special Considerations
Kenai	Via marine waters. See NOAA Charts 16661-1, 16662-1 or 16662-2.	Same as CCI-06-02.	Strong tidal currents, shoal waters and rocks. Vessel master should have local knowledge.
boat launch, easy e ahe Loop	**FOSC Historic Properties Specialist should INSPECT site prior to operations.** FOSC Historic Properties Title 36 permit may be required to work inside river. Contact Environmental Unit of the Unified Command for permit. **North shore:** Kalifornski Beach Road to Kasilof Beach Road,	• Tidal marshes (all year) • Salmon migration and spawning (May - October) • Intertidal salmon spawning (July - September) • Waterfowl and shore bird concentrations (May - September) • Fishing (July - September)	• Very difficult and unsafe to protect exposed tidal flats outside river mouth. • Working on banks of the river should be no problem. Take care not to work or walk on oiled shoreline, to avoid driving oil into the soils. • Access above intertidal area will have to be resolved with landowners before setting anchors or staging areas.

Section 3 References

- Sensitive Areas
- Land Ownership

Site Selection Process:
Criteria for Site Selection

Environmental Sensitivity

Criteria for Site Selection

Risk of Oil Spill Impact

Criteria for Site Selection

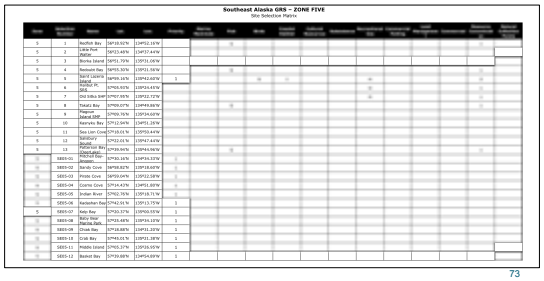
Ability to Protect the Site

Identify Candidates Sites:

Develop Site Selection Matrix (SSM)

Columns - Priority Criteria From Area Plan

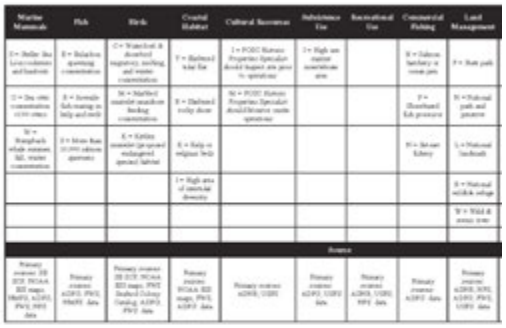
Rows – Potential Sites



Southeast Alaska GRS – ZONE FIVE
Site Selection Matrix

Zone	Identification Number	Name	Lat	Long	Priority	Marine Mammals	Fish	Birds	Coastal Habitat	Cultural Resources	Subsistence Use	Recreational Use	Commercial Fishing	Land Management	Economic Importance	Resource Protection Measures
5	1	Auke Bay	58°23.92'N	134°52.19'W												
5	2	Lake Port Walter	58°22.46'N	134°37.44'W			1									
5	3	Berths Island	58°51.75'N	135°31.06'W												
5	4	Rainbow Bay	58°55.30'N	135°21.06'W			1								1	
5	5	Sand Cove to Berths Island	58°55.16'N	135°42.60'W	1			1	1			1			1	
5	6	Taku Inlet	57°55.93'N	133°54.44'W								1			1	
5	7	Old Sitka SHP	57°47.93'N	135°21.72'W								1			1	
5	8	Takatz Bay	57°09.07'N	134°49.86'W			1								1	
5	9	Magnet Island SHP	57°05.76'N	135°14.60'W												
5	10	Kanalku Bay	57°12.94'N	134°51.26'W												
5	11	Sea Lion Cove	57°18.01'N	135°50.44'W												
5	12	Sandy Beach	57°12.01'N	135°47.44'W												
5	13	Middle Island Bay	57°26.94'N	135°44.96'W			1								1	
5	SE05-01	Chatham Strait Anchorages	57°55.16'N	134°54.32'W	1											
5	SE05-02	Neville Cove	58°08.87'N	135°13.60'W	1											
5	SE05-03	Pirate Cove	58°59.04'N	135°22.58'W	1											
5	SE05-04	Castle Cove	57°14.42'N	134°51.88'W	1											
5	SE05-05	Indian River	57°42.55'N	135°19.71'W	1											
5	SE05-06	Ketchen Bay	57°42.51'N	135°13.75'W	1											
5	SE05-07	Baby Bay	57°55.37'N	135°05.55'W	1											
5	SE05-08	Baby Bay/ Pacific Dale	57°55.48'N	135°05.13'W	1											
5	SE05-09	Chase Bay	57°18.88'N	134°51.20'W	1											
5	SE05-10	Crab Bay	57°45.01'N	135°11.38'W	1											
5	SE05-11	Middle Island	57°05.37'N	135°05.55'W	1											
5	SE05-12	Basket Bay	57°29.88'N	134°54.99'W	1											

Key to Site Selection Matrix



Marine Mammals	Fish	Birds	Coastal Habitat	Cultural Resources	Subsistence Use	Recreational Use	Commercial Fishing	Land Management
1 = Dalle Sea Lion rookeries and haulouts	1 = Relative spawning concentration	1 = Waterfowl & shorebird migratory, overlying and winter concentration	1 = Halibut wintering	1 = FOIC Human Properties Specialist should inspect site prior to operations	1 = High use marine subsistence area		1 = Salmon hatchery or rearing pen	1 = State park
2 = Dog rookeries concentration	2 = Juvenile fish rearing in bays and creeks	2 = Marbled murrelet nesting habitat concentration	2 = Halibut rearing area	2 = FOIC Human Properties Specialist should inspect site prior to operations			2 = Shorebird fish processor	2 = National park and preserve
3 = Steelhead refuge, estuary, fall, winter concentration	3 = Main bass 10,000 salmon spawners	3 = Kittlitz's murrelet (proposed endangered species) habitat	3 = Halibut nursery area				3 = Salmon fishery	3 = National landmark
			4 = High area of intertidal diversity					4 = National wildlife refuge
								5 = Wild & scenic river
				Rows				
Primary sources: DD ECS, NOAA ESI maps, MMPO, ADFG, PWS, NMFS data	Primary sources: ADFG, PWS, NMFS data	Primary sources: DD ECS, NOAA ESI maps, PWS Seabird Colony Catalog, ADFG PWS data	Primary sources: NOAA ESI maps, PWS, ADFG data	Primary sources: ADNR, USFS	Primary sources: ADFG, USFS data	Primary sources: ADNR, USFS, PPF data	Primary sources: ADFG data	Primary sources: ADNR, NPS, ADFG, PWS, USFS data

Index Map of Candidate Sites

Site Selection Process

Initial Selection by Workgroup

Public Input Process

- Resource Maps, SSM posted to the website and opened to the public and workgroup for input/comments.
- Outreach to organizations and resource agencies to confirm resource location.

Finalized Site Selection after Public Input

Tactics Group

Gather Additional Information on Sites

- **Maps, Charts**
- **Photos**
- **Sensitive Resources**
- **Local Knowledge**

Tactics Group

Survey team visits each site when possible

Larger tactics group reviews and edits tactics for each site

Draft GRS posted to the web page for WG review

http://dec.alaska.gov/spar/perp/grs/se/home.htm

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Questions ?

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