ALASKA INLAND AREA COMMITTEE

September 21, 2021

WELCOME & INTRODUCTIONS

OSCs & Planners	FOSC, EPA: Ms. Torri Huelskoetter
	FOSC, EPA: Mr. Bob Whittier
	SOSC, ADEC Central Region: Ms. Anna Carey
	SOSC, ADEC Southeast Region: Mr. Curtis Keisel
	SOSC, ADEC Northern Region: Dr. Kimberly Maher
	Planner (Acting), ADEC: Ms. Allison Natcher
	Planner, EPA: Ms. Mary Goolie

AGENDA

- *In situ* Burning Checklist Work Group
- Geographic Response Strategies presentation from Cook Inlet Regional Citizens' Advisory Committee
- Discussion on Next Meeting of the Logistics Working Group

IN SITU BURNING CHECKLIST WORK GROUP

- Work initiated by EPA in 2020
- Initial work group meeting, July 7, 2021
- Comments received on early concept draft, August 2021
- EPA & Contractor working to revise checklist

IN SITU BURNING CHECKLIST
Concept & Structure

INLAND-FOCUSED

- ISB Dealbreaker Checklist
- ISB Plan Review Checklist
- ISB References *(especially Inland-specific references)*

Geographic Response Strategies

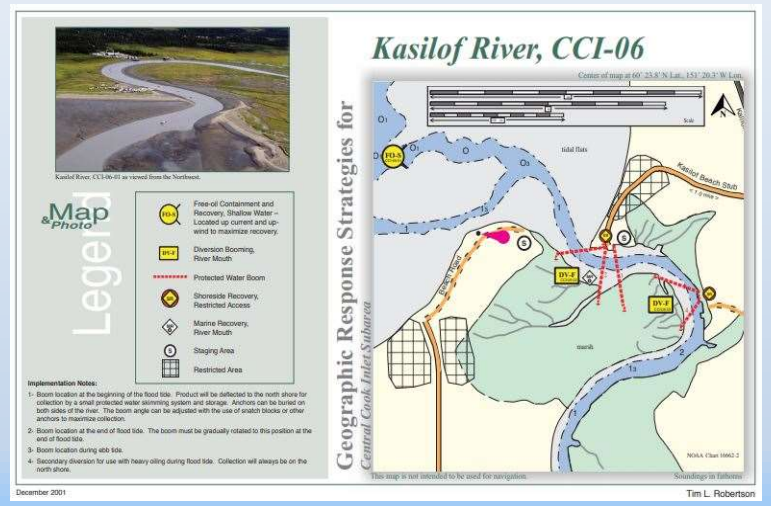
presentation from Cook Inlet Regional Citizens' Advisory Committee

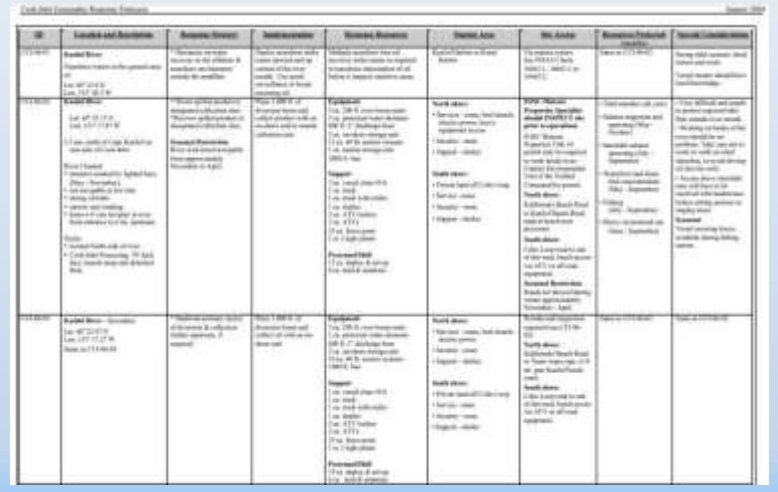
Inland Geographic Response Strategies

nuka Research & Planning Group, LLC.

Geographic Response Strategies:

- Geographic Response Strategies (GRS) are site specific response plans tailored to protect sensitive areas threatened by an oil spill. GRS are map-based strategies that can save time during the critical first few hours of an oil spill response. They show responders where sensitive areas are located and where to place oil spill protection resources.





Sensitive Area/ Areas of Public Concern

Definition

- Environmental
- Recreational
- Economic
- Cultural/Spiritual
- Public works

nuka Research & Planning Group, LLC.

Project Objectives and Goals

- Identify anadromous stream crossings along primary and secondary crude oil transfer routes.
- Develop basic site information.
- Identify potential response tactics.
- Identify potential staging areas.
- Identify potential landowners/stakeholders in areas of concern.
- Develop recommendations for small and large response trailer inventory.

- Create “E” friendly format for information storage, transfer and use.
- Clearly establish a definition of Sensitive Area and Areas of Concern.
- Identify areas of concern with current GRS development and management.
- Develop a process for updating site information.
- Develop items of discussion for potential future direction of the statewide GRS program.

Response Planning Gap

- State and federal regulations and statutes require a contingency plan holder to identify environmentally Sensitive Sites and Areas of Public Concern within their areas of operation.

- Current state statutes and regulations **do not** require motor vehicles transporting oil to have an approved C-Plan before or during operation.

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Strict Liability

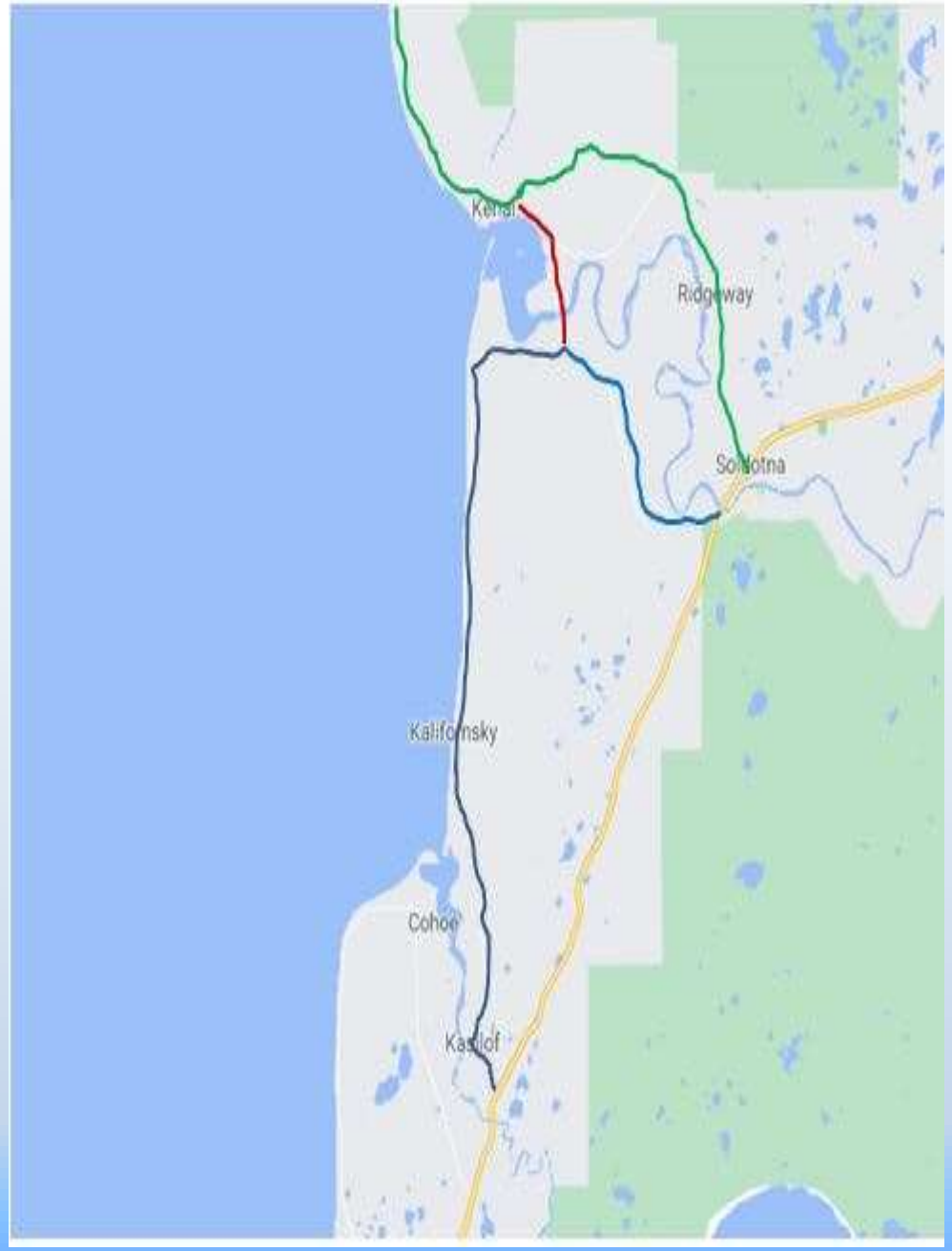
- AS 46.03.822

  (a)(1) The owner of, and the person having control over, the hazardous substance at the time of release or threatened release; this paragraph does not apply to a consumer product in consumer use;

  (a)(5) Any person who accepts or accepted any hazardous substance, other than refined oil for transport to disposal or treatment facilities, vessels or sites selected by the person, from which there is a release, or a threatened release that causes the incurrence of response costs of a hazardous substance.

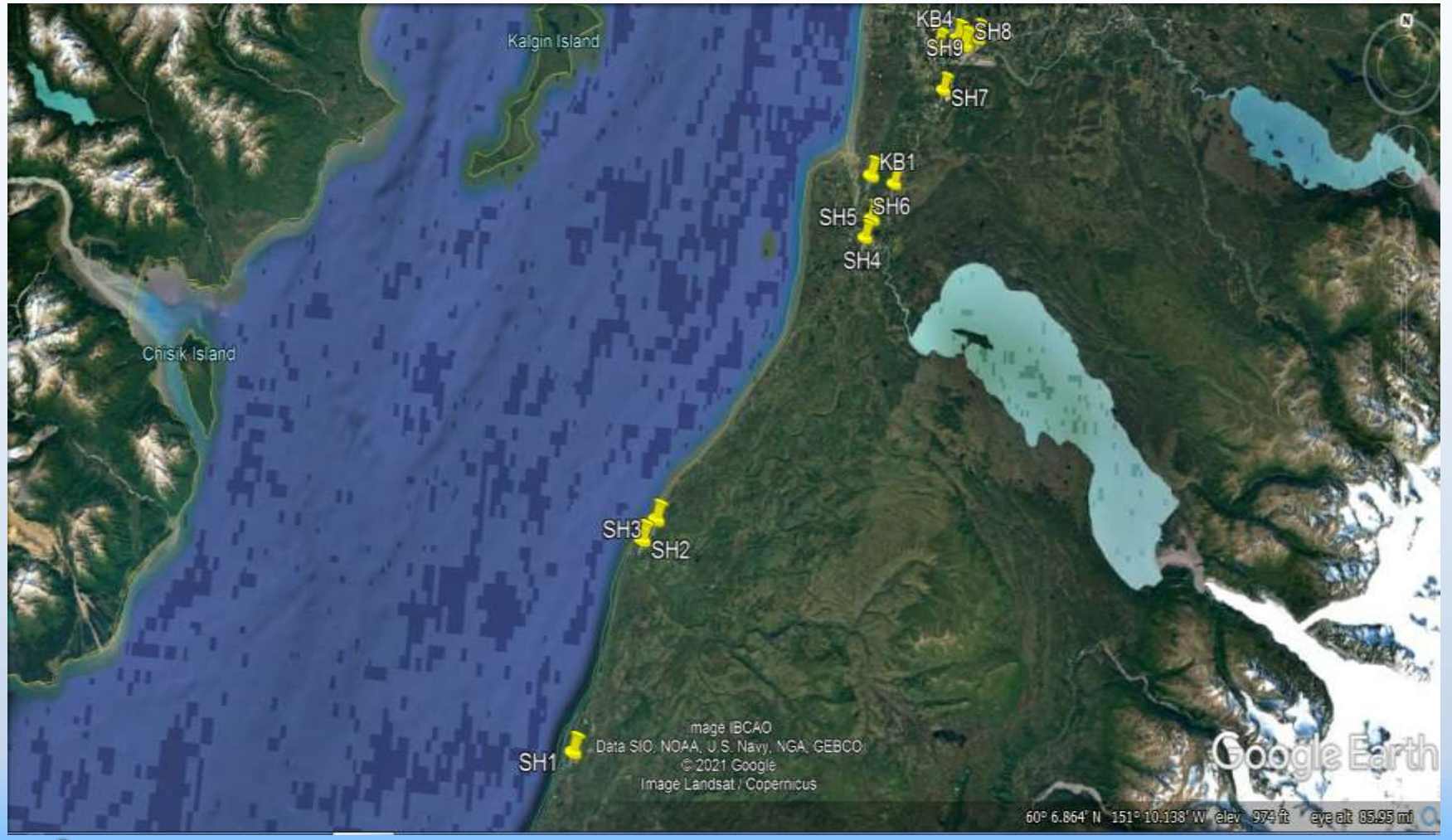
Accidents Happen

Mechanical Failure
Wandering Winnebago's
Moose
Weather
Human Factors


Ridgeway
Kalifornsky
Cohoe

The Catalog of Waters Important for the Spawning, Rearing or Migration of Anadromous Fishes
AK-DF&G Sport Fish

Site Locations
Lower Peninsula



Site Locations
Central Peninsula

Basic Site Information

- Stream Width
- Current Speed
- Depth
- Staging Areas
- Site Access
- Culvert Size
- Potential Response Tactics
- Updated Photos
- Vegetation
- Secondary Collection Sites
- Primary Stakeholders

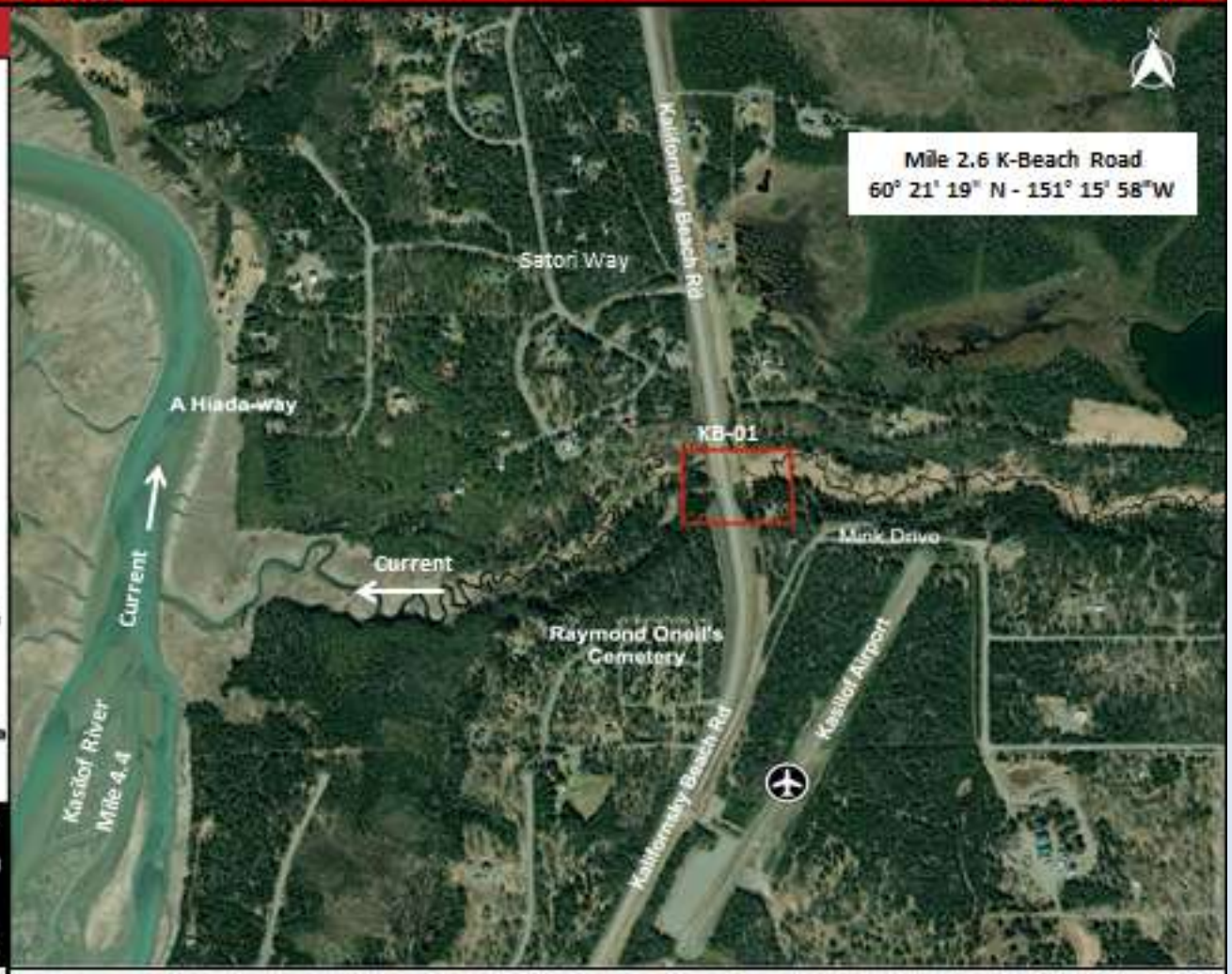
Geographic Response Strategy — Coal Creek KB01

Logistics Legend

- Airport
- Airstrip
- Helipad/Heliport
- Possible Heli Landing
- Boat Ramp
- Dock
- Harbour/ Marina
- ER depot
- ER cache
- Spill Kit (sorbents only)
- Primary Staging Area
- Secondary Staging Area
- GRS Site

Responders should always consider on-scene conditions before deploying GRP tactics.

Responder safety should always be the first priority.



Nearest Community

Kasilof 2.6 miles South

Kenai 16.8 miles North

Version Date

February, 2021

Special Considerations

The creek is a fast to moderate moving watercourse of shallow depth that is less than 12 feet wide and passes through a 20-foot culvert with wetlands, muskeg, and brush. Site access in the culvert area and immediately downstream is limited to hand carried response equipment. Potential west side of culvert can be accessed by an ATV trail alongside road. Low vegetated banks and shore line in the culvert area and immediately downstream may limit shoreline activities and response.

Equipment for All Tactics	
Boom (ft)	75
Marine anchors	6
Shore anchors	12
Responders	4
Boat operators	2
Boats	2

NOAA Chart
16662

Tidal Station:	Surveyed?	Yes	Survey Date:	September	2020
Cape Kasilof- 9455711	Deployed?	No	Deployment Date:		

Site Safety Information:	Site Description:	Cell Coverage
Response vehicles and equipment should be expected to be placed along roadside. Highway is this area in straight with moderate visibility in	Small creek at the bottom of a steep grass embankment. Heavy brush shoreline with birch, willow, and alder.	Yes
		VHF Radio
		Yes

Geographic Response Strategy					Coal Creek KB01
Tactic #	**Purpose**	**Response Equipment**	**Deployment Resources**	**Deployment Notes**	**Other Notes**
DV-01 DV	Redirect spilled oil from one location or direction of travel to a specific site for recovery.	3 25-foot sections 1 collection system 6 marine anchor system 12 shoreline anchor system	2 shore-based responders	Due to the large diameter of this culvert and water flow volume, culvert blocking will be impractable. Diversion with collection is suggested.	Culvert size is 20 ft Max Water Depth (ft): < 3
PR PR	To remove spilled pollutant by collecting it in a sorbent material.	100 ft sorbent boom 100 ft sorbent pom-poms 10 anchor stakes waste storage bags	2 shore-based responders ATVs truck or vehicle		
FO-04 FO	To conduct on-water free oil recovery.	On-water recovery task force consisting of Class 4, 5, or 6 vessels towing boom in U or J configuration, with skimming system and temporary storage for recovered oil and water.		Must be deployed by skilled responders trained in the use of on-water skimming systems. Location depicted on map is not fixed; Kasilof River is tidally influenced in this area. Potential boat luanch at mouth of Kasilof downstream (60° 23.194'N - 151° 17.869'W) Potential boat launch on Kasilof upstream (60° 19.011'N - 151° 15.484'W) (class 6 only)	

Deployment Considerations				
Max current velocity:	**Stream Width**	**River Miles to Outlet**	**Tidally Influenced?**	**Secondary Collection Site**
2-3 FPS	10 ft	1 to Kasilof River at RM 4.4	Yes, at the mouth	Kasilof River RM 4.40
Max water volume flow estimate during site visit:				Possibly on private property PARCEL ID 13329019. Located via driveway 300 ft south of creek (@ 60° 21.290'N - 151° 16.037'W)
500 gallons per second				

Navigational & Safety Hazards:	Access Restrictions:	
	Private property	Roadside staging should be expected at creek crossing, private driveway 300 ft. south of creek crossing may be possibly used temporarily (60° 21.291'N - 151° 15.930'W)

Geographic Response Strategy — Coal Creek KB01

Local contacts		
Alaska Dept. of Transportation		
Kenai Peninsula Borough Private Property ID #s		
PARCEL ID	13329019	Downstream
PARCEL ID	13329014	Downstream
PARCEI ID	13308147	Upstream

Resources Protected	
Marine Mammals at creek mouth	Limites human use
Anadromous stream	Commerical fishing
Waterfowl in mouth area	State and private land
Potenial Bald Eagle nesting in area	Significant watercourse vegetation, tidally influenced muskeg in mouth area
Cultural site	
Limited subsistence	

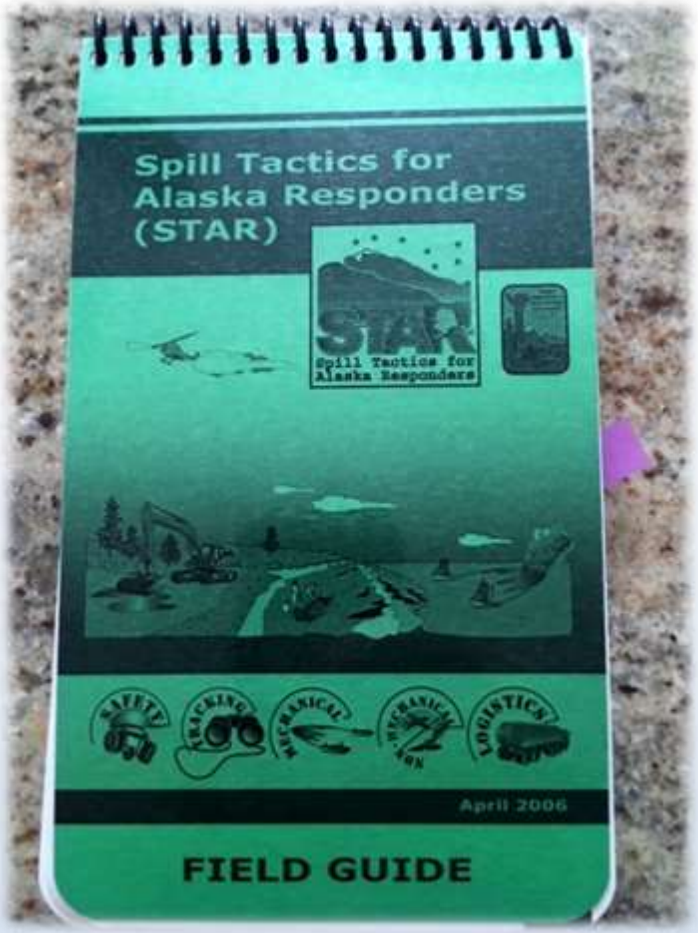
View of the embankment looking south

View of Culvert Upstream

East View Downstream

Possible Winter Information

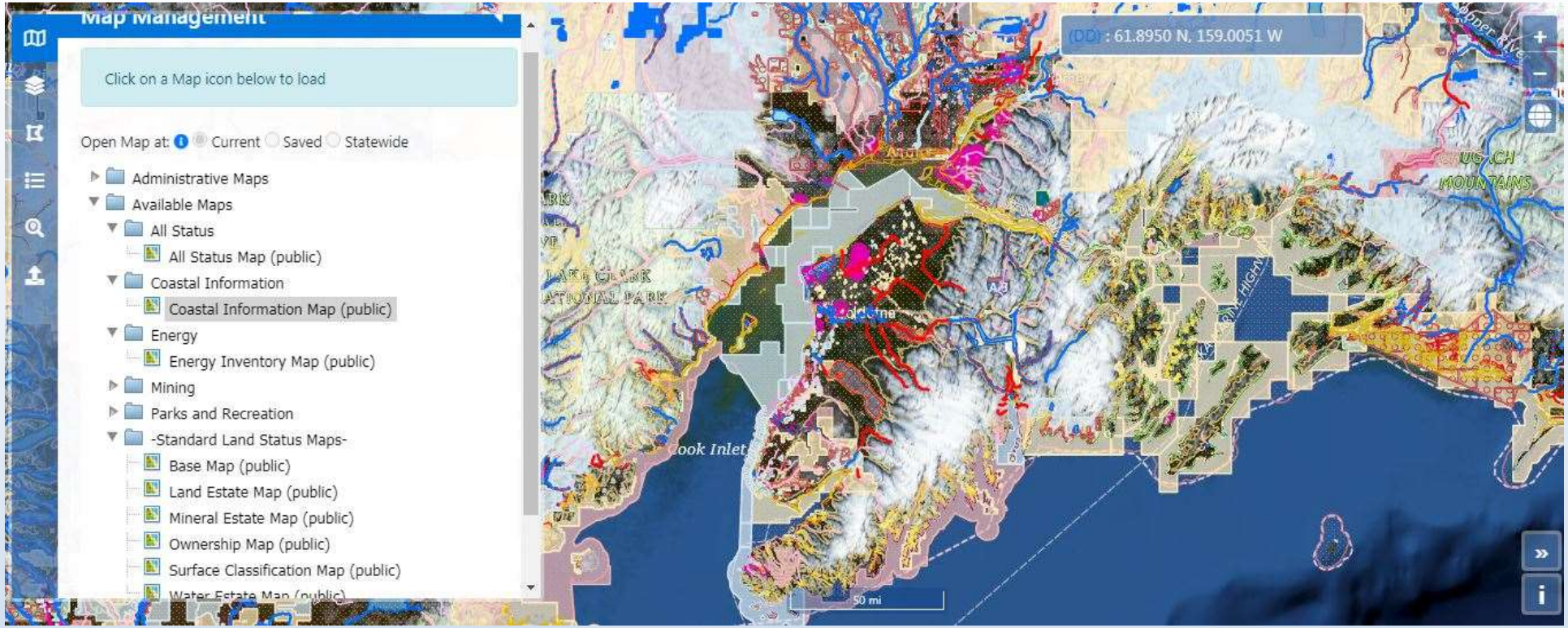
Response Tactics



http://dec.alaska.gov/spar/PPR/star/docs.htm.

Update Response Trailer Inventories

Format Goals



Convert to E- Format

Smooth transition to GIS

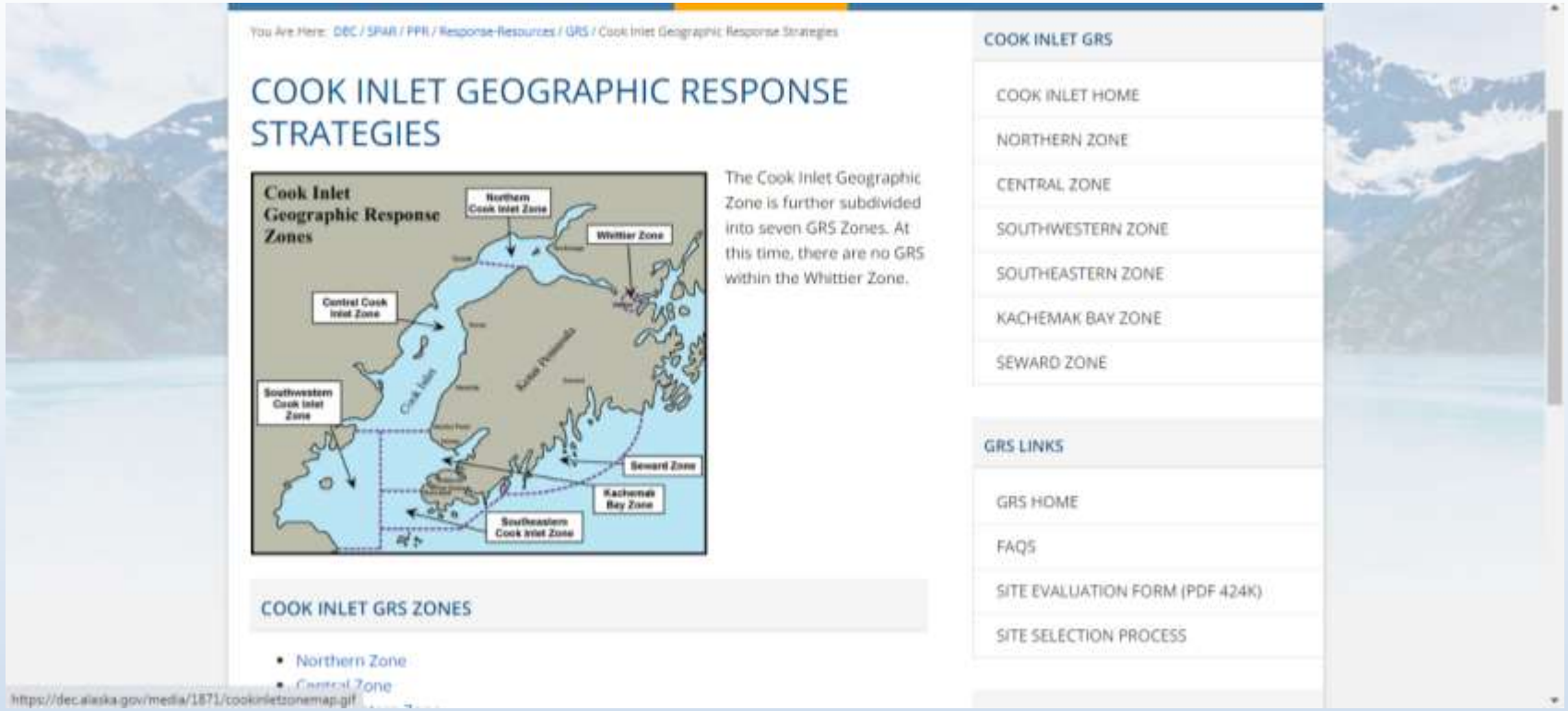
Standardized Format and Content

Response Based

Planning Based

https://statewide-geoportal-1-soa-dnr.hub.arcgis.com/

Current CI GRS Sites



https://dec.alaska.gov/spar/ppr/response-resources/grs/

Kasilof River, CCI-06

Geographic Response Strategies for Central Cook Inlet Subarea

Kasilof River, CCI-06-01 as viewed from the Northwest.

Map & Photo Legend

- FO-S — Free-oil Containment and Recovery, Shallow Water – Located up current and up-wind to maximize recovery.
- DV-F — Diversion Booming, River Mouth
- Protected Water Boom
- Shoreside Recovery, Restricted Access
- MR — Marine Recovery, River Mouth
- S — Staging Area
- Restricted Area

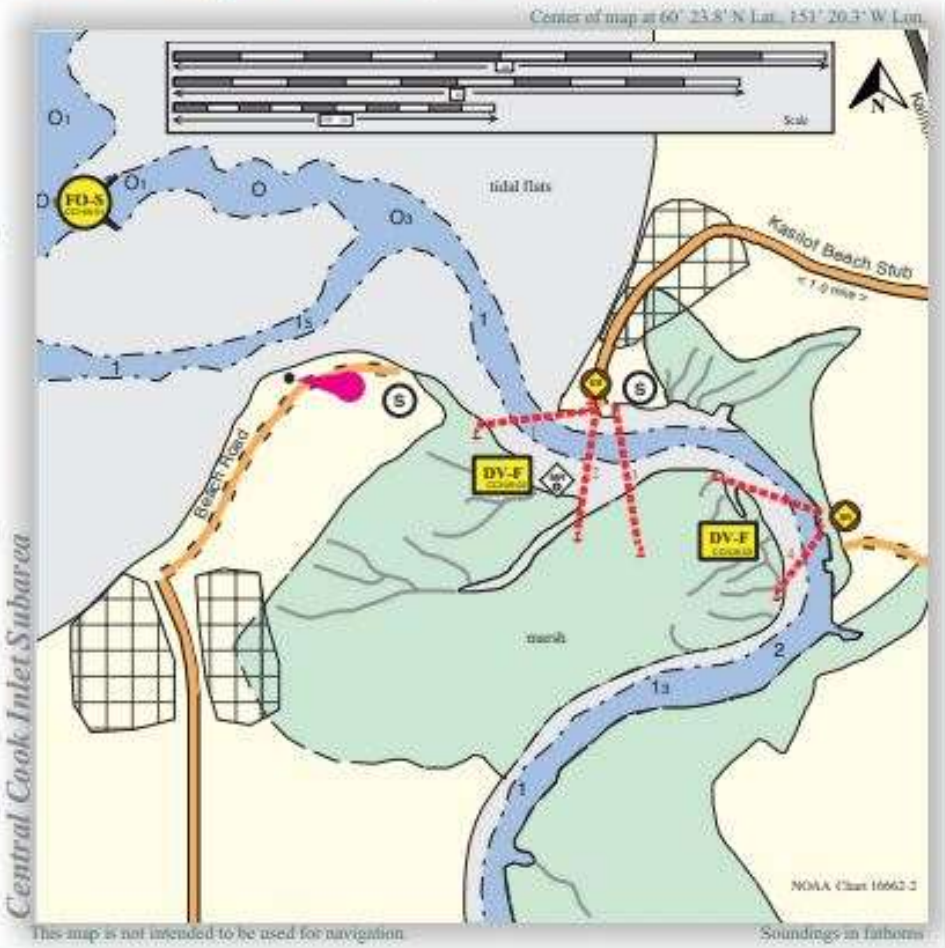
Implementation Notes:

1- Boom location at the beginning of the flood tide. Product will be deflected to the north shore for collection by a small protected water skimming system and storage. Anchors can be buried on both sides of the river. The boom angle can be adjusted with the use of snatch blocks or other anchors to maximize collection.

2- Boom location at the end of flood tide. The boom must be gradually rotated to this position at the end of flood tide.

3- Boom location during ebb tide.

4- Secondary diversion for use with heavy oiling during flood tide. Collection will always be on the north shore.



December 2001

Tim L. Robertson

ID	Location and Description	Response Strategy	Implementation	Response Resources	Staging Area	Site Access	Resources Protected (months)	Special Considerations
CCI-06-01	**Kasilof River** Nearshore waters in the general area of: Lat. 60° 23.8 N Lon. 151° 20.3 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.	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 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.
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 ≤ 6' can navigate in river from entrance to 6 mi. upstream. Docks • located North side of river. • Cook Inlet Processing, 78' dock face, launch ramp and detached float.	* 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.	**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 25 ea. fence posts 1 or 2 light plants **Personnel/Shift** 12 ea. deploy & set-up 8 ea. tend & maintain	**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 Historic Properties Specialist should INSPECT site prior to operations.** FOSC Historic Properties Title 16 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, ends at beach near processor. **South shore:** Coho Loop road to end of dirt road, beach access via ATV or off road equipment. **Seasonal Restriction** Roads not plowed during winter approximately November - April.	• 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) • Heavy recreational use (June - 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. **Seasonal** Vessel mooring buoys available during fishing season.
CCI-06-03	**Kasilof River** - Secondary Lat. 60° 22.97 N Lon. 151° 17.27 W Same as CCI-06-02.	* Duplicate primary tactics of diversion & collection further upstream, if required.	Place 1,000 ft. of diversion boom and collect oil with an on-shore unit.	**Equipment** 5 ea. 200 ft. river boom units 1 ea. protected water skimmer 600 ft. 2" discharge hose 2 ea. on-shore storage unit 10 ea. 40 lb. anchor systems 1000 ft. line **Support** 1 ea. vessel class #5/6 1 ea. truck 1 ea. truck with trailer 1 ea. shelter. 2 ea. ATV trailers 2 ea. ATVs 25 ea. fence posts 1 or 2 light plants **Personnel/Shift** 10 ea. deploy & set-up 6 ea. tend & maintain	**North shore:** • Services - crane, boat launch, electric power • Security - none. • Support - shelter. **South shore:** • Private land off Coho Loop • Service - none. • Security - none. • Support - shelter	Permits and inspection required (see CCI 06-02). **North shore:** Kalifornski Beach Road to Trans-Aqua sign, (1/4 mi. past Kasilof beach road). **South shore:** Coho Loop road to end of dirt road, beach access via ATV or off road equipment.	Same as CCI-06-02	Same as CCI-06-02

Kodiak GRS K-7

Akhiok

Currents, Tides & Winds: Winds variable with northwest winds prevailing. Evaluate wind speed/direction at time of response. Average tidal range is 12 ft. Consult local charts for tides.

Wildlife Considerations: This area supports seabird and duck concentrations. Steller's and king eiders, other sea duck, Bn perror geese, and bald eagles. Low densities of sea otters.

Risk Factors: Spill risks include vessel traffic through Gulf of Alaska.

Human Use: Subsistence salmon fishing, clam harvesting and crabbing.

Note: Tanks in photograph are not in use. Akhiok is currently using fuel tanks at Prior Point (not pictured).

October 2001

Produced by [illegible]

This GRS was funded in part by the Alaska Coastal Management Program from a NOAA grant [illegible] and administered by the Alaska Division of Governmental Coordination and the Department of Community and Economic Development. The views expressed herein are those of the author(s) [illegible] and do not necessarily reflect the views of NOAA or any of its subagencies.

EQUIPMENT RECOMMENDED		NEAREST EQUIPMENT (Akhiok) City Hall (907) 839-2238	
QUANTITY	DESCRIPTION	QUANTITY	DESCRIPTION
600'	8' x 18" Boom	2000	8' x 18" Containment boom
6	40 lbs anchors	600'	17" x 19" Sorbent pads (3M)
2	Tow bridles	20	Sorbent sweep bundles
1 (in in)	Class 2 vessels	100'	Painter attach on rope
		6	Tow bridles
		24 rolls	Heavy duty tape
		2	Wingsuits
		2	Overpack drums
			No anchors
Refer to Kodiak Subarea Contingency Plan for additional regional equipment lists.			

Latitude/Longitude: N 56° 58 20' / W 154° 10' 44"

Location: Akhiok, Kodiak Island. NOAA Chart No. 16591, USGS Trinity Island D-1 Quad.

Response Objective: To contain a worst case discharge in Akhiok.

Shoreline Characteristics: Sheltered rocky shores, scarps.

Site Access: Akhiok is accessible by fixed plane, fixed wing aircraft, vessel and helicopter. The spill location is accessible from Akhiok road system.

Staging Area: Akhiok

AS THE CIRCUMSTANCES OF THE EMERGENCY ALLOW:

A. Response Strategy:

1. Mechanical on-water recovery in the off shore/near shore environment.

2. Utilize nearaway vehicles to transport sections of boom, sorbent pads, sorbent sweep and heavy duty bags from the conex box to the spill location.

3. Beginning at the high tide line on the shore anchor each end of the boom, as shown, then use vessel of opportunity to tow out the midpoint of the boom to form half moon. Anchor midpoint and repeat process to form secondary containment.

4. Utilize available manpower to begin recovery. Use sorbent pads and sorbent sweep to recover product as it comes to shore. Seal boom to shore using sorbents. Ensure appropriate personnel protective equipment is used (refer to site safety plan).

5. Pumps and hoses can be used to low pressure flush stranded product off the shore and to direct the product in the water to a recovery location.

6. If time allows, construct an interception trench between the source and the shore to collect product.

B. Response Considerations:

Spilled fuel would be a combination of gasoline, diesel and heating fuel and therefore very flammable. Eliminate all ignition sources (no smoking, flares, sparks or flames in immediate area). During response, do not touch or walk through spilled material. Vapors may collect in low lying areas creating vapor explosion hazards. If available, use down non-sparking tools to collect recovered material.

C. Historic Properties Considerations:

REPORT any cultural resources found during operations to the FOSC Historic Properties Specialist.

Kodiak GRS K-7

Crooked Creek (Kasilof, AK)

Location	Mile 110.5 Sterling Highway 60.263 North, 151.332 West
Vulnerability Assessment Atlas Page	5
Watershed Description	Crooked Creek is a tributary of the Kasilof River. Tidal mudflats extend to approximately Mile 5 of the Kasilof River, two miles downstream of the Crooked Creek confluence.
Velocity	2.5 fps; 1.6 mph
Distance to Main River or Outlet	2.5 miles from the Sterling Highway to the Kasilof River 7 miles from the Kasilof River confluence to Cook Inlet
Time to Main River or Outlet	1.5 hours to the Kasilof River; additional 1 hour to Cook Inlet
Sensitive Areas	Anadromous Waters Catalog # 244-30-10050-2024, Anadromous Fish Species: coho salmon, Chinook salmon, pink salmon, sockeye salmon, Dolly Varden, Pacific lamprey, steelhead. (Kasilof River Anadromous Waters Catalog # 244-30-10050) **Note: A Title 16 ADF&G permit is required for boom deployment in all anadromous streams and lakes.* Saltwater mudflats, located at mouth of Kasilof River, are identified as Important Bird Areas and provide critical habitat for the Rock Sandpiper. Crooked Creek State Recreation Area, managed by Alaska State Parks is located near the Kasilof River confluence. The Clam Gulch Critical Habitat Area extends south from Point Kasilof at the mouth of the Kasilof River to Happy Valley.
Description of Stream and Streambank	Meandering stream with grassy banks. Banks are shallow and slopes nearly vertical. Shoreline may be marshy in locations. Fast current in the Sterling Highway culvert has resulted in the formation of a natural settling pond downstream of the culvert. Compared to designed and constructed settling ponds, this pond does not appear to have shorelines hardened with rock or other material which may affect oil collection and recovery tactics as well as shoreline sensitivity.

Crooked Creek at MP 110.5 Sterling Highway, facing upstream.

Crooked Creek at MP 110.5 Sterling Highway, culvert and settling pond, downstream side of the highway

Potential staging area at Mile 110.5 Sterling Highway (Crooked Creek crossing)

Wetland/ Crooked Creek Tributary at 114.5 Sterling Highway, facing downstream.

Note: These wetlands are typical of many minor creeks (named and unnamed creeks) between Kasilof and Anchor Point.

Crooked Creek at the confluence with Kasilof River (Kasilof River is visible in distance), located in the Crooked Creek State Recreation Site. Stairs to shoreline are visible in the foreground.

Kasilof River at Crooked Creek confluence, facing east.

Geographic Response Strategies – Crooked Creek

ID	Location and Description	Response Strategy	Implementation	Staging Area and Site Access	Field Notes	Additional Considerations	Site Safety
GRS-CC1	Crooked Creek State Recreation Area; Confluence of Crooked Creek with Kasilof River	• Diversion Boom: Collect and Recover Oil • Staging Area • Shoreline Access	Fast-water boom anchored shoreline-to-shoreline or deployed via BoomVane™ and anchored to shoreline with shoreside recovery	Staging area within parking and camping areas of State Recreation Site. Foot paths provide access to river.	Kasilof River current is very high (7-15 mph).	Managed by Alaska State Parks During peak salmon runs, high vessel traffic by sport fishermen fishers and guides.	Fast river current Debris floating downstream in river Sweepers or strainers in river course
GRS-CC2	Crooked Creek/Sterling Highway crossing, culvert and settling pond/ settling pond at Mile 110.5 Sterling Highway. 60.263 North, 151.332 West	• Diversion Boom: Collect and Recover Oil • Staging Area • Shoreline Access	Fast-water boom anchored shoreline-to-shoreline with shoreside recovery Shoreseal boom on either side of settling pond outlet connected to/anchoring fast-water boom across outlet with shoreside recovery	Gravel ATV trail down to culvert and settling pond.	Boom selection will be highly variable based on water conditions, and may include shoreseal boom or underflow dam.	--	Steep access to settling pond from Sterling Highway High volume and high speed traffic (50-60 mph) on Sterling Highway
GRS-CC3	114.5 Sterling Highway at crossing of tributary stream and wetlands 60.263 North, 151.333 West	• Diversion Boom or Dam: Collect and Recover Oil	Fast-water boom anchored shoreline-to-shoreline; Underflow dam; or Pits, Trenches and Slots for containment Cold Water Deluge Passive Recovery and/or Shoreside Recovery	Access to and travel within marshy areas is expected to be difficult.	Boom selection will be highly variable based on water conditions, and may include shoreseal boom or underflow dam.	This strategy is applicable for similar wetlands located along the Sterling Highway.	High volume and high speed traffic (50-60 mph) on Sterling Highway
GRS-CC4	Kasilof River State Recreation Site; at Mile 109.5 Sterling Highway. 60.516 North, 151.230 West	• Boat Launch • Staging Area	--	Staging area in State Recreation Area parking lots. Boat launch is paved.	--	Managed by Alaska State Parks	Fast river current Debris floating downstream in river Sweepers or strainers in river course
GRS-CC5	Mile 111 Sterling Highway at North Cohoe Loop Road	• Staging Area	--	Large gravel pad located on southwest corner of intersection	--	Property ownership is undetermined	--
Not specified	Coho Cove Campground (private)	• Boat Launch	--		--	*Commercial facility name may change with ownership changes; access may be limited during seasonal or business closures.*	--
Not specified	Kasilof River Lodge and Cabins (private)	• Boat Launch	--		--	*Commercial facility name may change with ownership changes; access may be limited during seasonal or business closures.*	--

- **Lack of Funding.**
- **Lack of Dedicated Management.**
- **Low Priority of Approval Process of Pending Sites.**
- **Lack of Process and Procedures for Stakeholder Updates.**
- **Site or Tactic Confirmation left to OSRO's or PRAC's.**
- **Consistent and Familiar Tactic Use.**
- **Little Control over Development of New Sites** (currently estimated to be >900 statewide)

Current Status of GRS Program Statewide

nuka Research & Planning Group, LLC.

Comments/Discussion

Logistics Working Group

Next Steps

Review of Parking Lot Items

Alaska Inland Area Committee Contacts:

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