***Pre-Spill SCAT Arctic River Segment / Reach Survey Form***

**1 GENERAL INFORMATION**

Area: Location: Survey Date: Survey Time:

Segment:

Water Level: low / mean / bank full / overbank flow

Observer Name: Weather/Wind: Participants:

 Ice and Snow Conditions:

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **2 PHYSICAL CHARACTER**Segment Length: m Left – Right Bank (Circle)Channel Width (water): m Bank Width: \_\_\_\_\_ m (water line to top of UB)*POTENTIAL OIL BEHAVIOR:*natural alongshore movement barrier: yes / no man-made alongshore barrier: yes / noslough or embayment: yes / noshoals: yes / nomeander with point bar: yes /no  | **SUBSTRATE TYPE (from list below)**Bedrock Cliff/Ramp: Man-Made SolidSolid IceBedrock PlatformSand Bank/BeachCoarse-grained Sand Bank/BeachMixed Sand, Pebble, Cobble Bank/Beach Pebble, Cobble Bank/Beach Boulder/Riprap: Ice FloesMan-Made Impermeable (wharf: pilings)Mud or Sand FlatPeatWetland / Low-Lying Tundra | **\*LB** | **\*UB** | **\*OB** |
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| \* OB = overbank; UB = upper bank; LB = lower bank |
| meander with cut banks: yes / noflood-plain valley: yes / nopebble-cobble shoreline/penetration potential: yes / noriprap, boulder shoreline/penetration-remobilization potential: yes / no tundra potential for oiling during overbank flow: yes / noother: | **VALLEY - CHANNEL CHARACTER** cliff \_\_\_\_flood plain riffle canyon braided pool straight ox bow \_\_\_\_glide leveed cascade \_\_\_\_point bar meander rapids \_\_\_\_vegetated |

|  |  |
| --- | --- |
| **3** | **RESOURCE ISSUES:** |
|  | *Primary Resource(s) at Risk* | *Response Constraints* |
| Environmental |  |  |
| Cultural |  |  |
| Human Use/ Economic |  |  |

**4 OPERATIONAL CHARACTERISTICS**

Surrounding Human Use Activities (if any): Natural / Commercial / Residential / Recreational

Potential nearby access: fixed-wing\_ ; helo pad/landing ; boat landing\_ ; ATV Access constraints/limitations: Describe the amount of pre-impact debris pickup/relocation work? (light / moderate / heavy) No. of bags?

(estimate # of bags)

|  |  |  |
| --- | --- | --- |
| remote: yes / no | channel bars/shoals: yes / no / ? | narrow river bank: yes / no |
| staging areas: yes / no | deep water: yes / no / ? | river bank suitable for machinery: yes / no / ? |
| road access: yes / no / ? | strong currents: yes / no | backshore cliff: yes / no |
| alongshore access: yes / no / ? | Wetlands / low Tundra: yes / no | tundra cliff/backshore: yes / no |

 Comments:

**5 OPERATIONAL SAFETY CONSIDERATIONS**

*Note Safety Constraints beyond Normal — or N/A:*

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***Pre-Spill SCAT segment survey form (page 2)***

**GENERAL INFORMATION** Survey Date: Area: Location: Segment: \_

**6 RESPONSE GOALS**

*SEGMENT PROTECTION OBJECTIVES: SHORELINE CLEANUP/TREATMENT OBJECTIVES:*

 **Prevent contact with shore or resource(s) at risk Allow natural recovery**

 **Minimize contact**

 Prevent oil movement to adjacent segment(s)

 Contain stranded oil

 Prevent oil transport into inlet, estuary, or channel

 Other:

*SEGMENT PROTECTION STRATEGIES:*

 **Restore shore to pre-oiling condition**

 **Accelerate natural recovery**

 Restore with minimal removal of material

 Minimize oil remobilization

 Minimize damage to dune, marsh, or peat bog

 Other:

 Contain/recover oil on water *SHORELINE CLEANUP/TREATMENT STRATEGIES:*

 Alter direction of movement of oil on water

 Prevent oil movement (landward) on flooding tides

 Trap/contain and collect oil at the shoreline

 Prevent remobilization of stranded oil

 Prevent overwash into the backshore or a lagoon

 Pre-impact shoreline debris removal

 Other:

 Monitor

 Act quickly to remove stranded oil before burial

 Remove bulk oil only

 Minimize waste generation using *in-situ* treatment methods

 Manual techniques preferred

 Salt-marsh fringe/meadow treatment strategies

 Man-made backshore riprap treatment techniques

 Other:

**7 METHODS** *---------- (check all that are appropriate and feasible) -----------*

(mark “?” if possibly useful; mark “X” if not recommended or inappropriate)

*POTENTIAL CLEANUP/TREATMENT OPTIONS:*

*POTENTIAL PROTECTION OPTIONS:*

 \_1. Nearshore containment/recovery

 \_2. Nearshore redirection (away)

 \_3. Nearshore redirection (towards)

 \_4. Exclusion boom

 \_5. Shoreline (intertidal) protection boom

 \_6. Shoreline barrier/berm

 \_7. Contact barrier

 \_8. Channel boom/barrier

 1. Natural recovery

 2. Flooding

 3. Low-pressure, cold wash

 4. Low-pressure, hot/warm wash

 5. High-pressure, cold wash

 6. High-pressure, hot/warm wash

 7. Steam cleaning

 8. Sandblasting

 9. Manual removal

 10. Vacuums

 11. Mechanical removal

 12. Vegetation removal

 13. Passive sorbent

 14. Tilling/Aeration

 15. Surf washing/Sediment reworking

 16. Burning

 17. Dispersants

 18. Shoreline cleaners

 19. Solidifiers

 20. Bioremediation/Nutrient enrichment

|  |  |
| --- | --- |
| **8** | **OPERATIONAL ISSUES***SPILL SITE ACCESS: (Enter “No” or “Yes”)* |
| To/From: | Trucks | Heavy Equip. | 2X4 P/U | Backhoes | ATVs | > 50 ft. Vessel | < 15 ft. Runabouts |
| Staging Area/Backshore |  |  |  |  |  |  |  |
| Intertidal |  |  |  |  |  |  |  |
| Subtidal Water |  |  |  |  |  |  |  |
| *HEAVY EQUIPMENT USE FEASIBILITY: (Enter “Good”, “Fair”, “Poor”, or “No” based on ability to operate)* |
|  | Grader | Bulldozer | Front-endLoader | Backhoe | Bobcat | 4x4 P/U | ATVs |
| Access Alongshore |  |  |  |  |  |  |  |
| Bearing Capacity |  |  |  |  |  |  |  |
| Beach Slope/Width |  |  |  |  |  |  |  |
| Maximum Distance to Temporary Storage from Cleanup Site? (metres) |

**9 COMMENTS**

**10 VISUALS**

SKETCH Attached: yes / no PHOTOS Attached: yes / no

VIDEO: yes / no tape #

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