[Shoreline evaluations, 1991].

Prince William Sound CU-04 to CU-15

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1991 MAYSAP EVALUATION

SEGMENT: CU 004  SUB: M  REGION: PWS  SURVEY DATE: 5/12/91

ENVIRONMENTAL SENSITIVITIES:
Work Window(s)  RESTRICTED 3/1 - 9/1

Ecological/Constraints (see page two for details)  Eagle nest

ARCHAEOLOGICAL CONSTRAINTS:
If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO Signature:  Date:  5/24/91

RECOMMENDATIONS:

TREATMENT REQUIRED (Y or N)  INITIAL  TAG  FOSC

Manual Pickup (Check as Req.)  N  Y  
Spot Washing  
Bio-Customblen Only  
Bio-Inopol/Customblen  
Other  
Other  

COMMENTS:

INITIAL: ____________________________ 

TAG:  ____________________________________________

FOSC:  ____________________________________________

TAG APPROVAL DATE:  MAY 24/91  FOSC APPROVAL DATE:  5/29/91

ADEC  E. E. Paull, CO., USCG  CHIEF OF STAFF, FOSC

EXXON  

USCG  

NOAA  

ECOLOGICAL CONSTRAINTS
1991 FIELD ACTIVITIES

Eagle Nest: Access restricted from 3/1 to 9/1. USFWS authorization required. Maintain 1000' vertical and 1/4 mile horizontal buffer.
TEAM NO. 1  SEGMENT CO-004  SUBDIVISION M  DATE 5/12/91

ADEC
NAME JEFF GINALIAS  SIGNATURE

X NTR  Only noted oil isolated to one beach on segment (site A, 06 May). This oil (small mouse clump amongst boulders) removed. No treatment necessary.

EXXON
NAME Randolph E. Boyer  SIGNATURE

X NTR  Only a 15cm x 15cm mouse patty was recovered. This was the only recoverable oil found on the subdivision. Very healthy intertidal zone with rich and diverse mussel beds. Pigeon Guillemots were seen nearby. Certainly no treatment or reassessment is warranted, a beautiful beach.

LANDMANAGER
NAME MARSHA HALL OF DNR  SIGNATURE

X NTR  Mouse recovered was located at base of boulders, upper end MITZ.

USCG/NOAA
NAME Schiltz /CHILDS  SIGNATURE

X NTR  Surface oil removed by Maysap Team. Nothing else located.

No subsurface oil located. Surface oil existed only as a small mouse patch cleaned up by Maysap Team.
MAYSAP SHORELINE OILING SUMMARY

TEAM NO. 1
OG: M. MACDONALD
ADEC: M. FINCH
Exxon: R. BOWE

BIO: M. FAWCETT
LANDMANAGER: M. HALL
USCG/NOAA: SCHULZ/CHILDS

SEGMENT: C - 4
SUBDIVISION: M
DATE: 5/12/91

TIME: 09:40 to 11:00
TIDE LEVEL: +5.0 ft. to +7.1 ft.
ENERGY LEVEL: H

SURVEYED FROM: FOOT BOAT HELO
WEATHER: SUN CLOUDS FOG RAIN SNOW

TOTAL LENGTH SHORELINE SURVEYED: 904 m
NEAR SHORE SHEEN: NO

EST. OIL CATEGORY LENGTH:
W - m M - m N - m V/L - m NO - m US - m

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<table>
<thead>
<tr>
<th>LO</th>
<th>SURFACE OIL CHARACTER</th>
<th>SURFACE SEDIMENT</th>
<th>SHORE TYPE</th>
<th>AREA</th>
<th>ZONE</th>
<th>NOTES</th>
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<tbody>
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DISTRIBUTION: C = 91-100%; B = 61-90%; P = 11-60%; S = 1-10%; T = <1%

SLOPE: V = VERTICAL; H = HIGH ANGLE; M = MEDIUM ANGLE; L = LOW ANGLE

PHOTO ROLL: MAYSAP - 1 - 20 FRAMES 8-11

<table>
<thead>
<tr>
<th>PIT</th>
<th>PIT NO.</th>
<th>DEPTH (cm)</th>
<th>OIL CHARACTER</th>
<th>OILED ZONE</th>
<th>CLEAN BELOW</th>
<th>H2O LEVEL</th>
<th>SHEEN COLOR</th>
<th>PIT ZONE</th>
<th>SURFACE-SUBSURFACE SEDIMENTS</th>
<th>NOTES</th>
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</table>

SHEEN COLOR: B = BROWN; R = RAINBOW; S = SILVER; N = NONE

OG COMMENTS:
Low relief, rocky shore w/ scalloped pockets between small rock outcrops.
Surface oil only, as small MS patch f thin band of CT at up. H17.
This subdivision contains rugged bedrock outcrops and pocket beaches of Pleistocene age, with smaller sediments toward the upper beach. The boulders and bedrock areas have dense rockweed, barnacles (very dense spot), patches of dense mussels, Pseudoceros, limpets, littorinids, and other organisms. Tidepools have typical diversity, including coralline algae, Scrupians (some pregnant), littorinids, limpets, chitons, anemones, tube worms (Sabella), etc. No oil was found except a very small patch of weathered mousse, which was picked up (see sketch map). Three small (non-anadromous) fish streams occur within the subdivision.

WILDLIFE OBSERVATIONS
TO BE COMPLETED IN ALL SUBDIVISIONS

<table>
<thead>
<tr>
<th>BIRDS</th>
<th># OF SPECIES</th>
<th>TOTAL BIRDS</th>
<th>FISH OBSERVED SPECIES PRESENT</th>
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</thead>
<tbody>
<tr>
<td>Eagles</td>
<td></td>
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<tr>
<td>Seabirds</td>
<td>2 (gull)</td>
<td>5</td>
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<tr>
<td>Waterfowl</td>
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<td>Gulls/Kiitiwakes</td>
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<td>Shorebirds</td>
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<tr>
<td>Corvids</td>
<td>2 (raven, stell, say)</td>
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<tr>
<td>Other Birds</td>
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<table>
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<tr>
<th>LAND MAMMALS</th>
<th># OBSERVED</th>
<th>SPECIES</th>
<th># OBSERVED</th>
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<tbody>
<tr>
<td>Sea Otters</td>
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<tr>
<td>Pinnipeds(specify)</td>
<td>1</td>
<td>harbor seal</td>
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<tr>
<td>Whales(specify)</td>
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</table>

Shoreline subdivision map showing important biological features attached.
0944 - C11-4
Fawcett
5/12/1 - South-facing wall
pocket beach w/pale - rubble
no bath in pebbles
- 2 pigeon violin
nugget on top of east wall
- dense moss, pokey needle, mold
- Older brown, dense spot
- Chrysobora, Viva, Scyto, Rhodo
- Spreads line
- Sub-surface includes sand
- Shale pebble, pocket beach, my large, rugged shell oracles
- No oil - dense fur, barnacles
- Lump ale - rich, peck kites
- Impala, Litha, Tintacci, fruglial
- Sculpins, dense littoral, average variety, algae

dep. 10/15 - 2 Jax
4 - 1 vanilla
102.5 - another pocket - brown
- 1 harbor seal (tiny hanging
- 1630 - another site - small non
- mammal; dry - no oil
- finish sublimate 11:40
- return to ship
- 2 Ankle T's (last mile)
Bio Sketch Map
CU-4 M
12 May 91
M. Fawcett

Overhanging R wall
NO OIL P
PSG
PG

P beach

Small mousse patch (recovered) in UTZ; sparse rockweed and barnacles nearby

P pocket
1991 MAYSAP EVALUATION

SEGMENT: CU 004  SUB: M  REGION: PWS  SURVEY DATE: 5/12/91

ENVIRONMENTAL SENSITIVITIES:
Work Window(s)  RESTRICTED 3/1 - 9/1

Ecological/Constraints (see page two for details)  Eagle nest

ARCHAEOLOGICAL CONSTRAINTS:
If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO Signature: ___________________________ Date: ___________________________

RECOMMENDATIONS:

TREATMENT REQUIRED (Y or N)  N  INITIAL  TAG  FOSC

Manual Pickup (Check as Req.)  ______  ______  ______
Spot Washing  ______  ______  ______
Bio-Customblen Only  ______  ______  ______
Bio-Inipol/Customslen  ______  ______  ______
Other_________________________  ______  ______  ______
Other_________________________  ______  ______  ______

COMMENTS:
INITIAL: ____________________________________________________________

TAG: ________________________________________________________________

FOSC: ______________________________________________________________

TAG APPROVAL DATE:__________  FOSC APPROVAL DATE:__________

ADEC________________________  FOSC __________________________

EXXON________________________

USCG________________________

NOAA________________________
ECOLOGICAL CONSTRAINTS
1991 FIELD ACTIVITIES

Eagle Nest: Access restricted from 3/1 to 9/1. USF&WS authorization required. Maintain 1000' vertical and 1/4 mile horizontal buffer.
MASSAP FIELD SHORELINE COMMENT SHEET

TEAM NO. 1  | SEGMENT CV-004  | SUBDIVISION M  | DATE 5/12/91

ADEC
NAME: JEFF CINNAMON  | SIGNATURE: [Signature]

NTR
Only noted oil isolated to one beach on segment (site A, CG-05).
This oil (small mouse clump amongst boulders) removed. No further treatment necessary.

EXXON
NAME: RANDALL K. BOYER  | SIGNATURE: Randall K. Boyer

NTR
Only a 15 cm x 15 cm mouse pat was recovered. This was the only recoverable oil found on the subdivision.
Very healthy intertidal zone with rich and prolific mussel beds. Pigeon Guillemots were seen nearby. Certainly no treatment or reassessment is warranted. Beautiful beach.

LANDMANAGER
NAME: MARSHA HALL  | SIGNATURE: Marsha Hall

NTR
Mouse recovered was located at base of boulders, upper end MITZ.

USCG/NOAA
NAME: SCHULTZ CHILD  | SIGNATURE: [Signature]

NTR
Surface oil removed by MASSAP team. Nothing else located.

No subsurface oil located. Surface oil existed only as a small patch cleaned up by MASSAP team.

REVISED 6/19
REvised CD 14 MAY
MAYSAP SHORELINE OILING SUMMARY

TEAM NO. 1

MAYSAP SHORELINE OIL SURVEY

TIME: 09:40 to 11:00

TIDE LEVEL: 5 ft. to +1 ft.

ENERGY LEVEL: "H"

SURVEYED FROM: "FOOT" "BOAT"

WEATHER: "SUN" "CLOUDS"

TOTAL LENGTH SHORELINE SURVEYED: 904 m

NEAR SHORE SHEEN: "BR" "RB" "SL" "NONE"

EST. OIL CATEGORY LENGTH:

<table>
<thead>
<tr>
<th>Pit No.</th>
<th>Pit Depth (cm)</th>
<th>Subsurface Oil Character</th>
<th>Clean Oil Zone</th>
<th>Clean Oil Below H2O Level</th>
<th>Clean Oil Sheen Color</th>
<th>Pit Zone</th>
<th>Subsurface Sediment</th>
<th>Subsurface Sediment Color</th>
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SHEEN COLOR: B = BROWN; R = RAINBOW; S = SILVER; N = NONE

OG COMMENTS:

Low relief, rocky shores with scalloped pockets between small rock outcrops.

Surface oil only, as small MS patch of thin band of CT e up. H17.
MAYSAP BIOLOGICAL SUMMARY FORM

TEAM 1
SEGMENT CU - 4
SUBDIVISION M

DATE 12 May 91
TIDAL HEIGHT (Range) 3.8 ft to 7.2 ft

STATE CALM
BIOLOGIST Michael Eauict
WIND SPEED/DIRECTION CALM

PHOTOGRAPHS: ROLL # FRAME #

COMMENTS/OBSERVATIONS (to be completed in oiled subdivisions only):

This subdivision contains rugged bedrock outcrops and pocket beaches of Pliocene with smaller sediments toward the upper beach. The headlands and bedrock areas have dense rockweed barnacles (very dense spot), patches of dense mussels, Phodolella limpets, littorinids, and other organisms. Tide pools have typical diversity, including coralline algae, Sculda (race pregnant), limpets, chitons, anemones, tube worms (Sabellidae), etc. No oil was found except a very small patch of weathered mousse, which was picked up (see shoreline map). Three small (non-anadromous) fish streams occur within the subdivision.

WILDLIFE OBSERVATIONS
TO BE COMPLETED IN ALL SUBDIVISIONS

BIRDS

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<th>SPECIES</th>
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<td>Corvids</td>
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<td>Other Birds</td>
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MARINE MAMMALS

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<tr>
<td>Sea Otters</td>
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<tr>
<td>Pinnipeds (specify)</td>
<td>1</td>
<td>harbor seal</td>
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<td>Whales (specify)</td>
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LAND MAMMALS

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<th>SPECIES</th>
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</table>

Shoreline subdivision map showing important biological features attached.
0941 C1-4  Faustet
5/12/81 - South facing beach
pocket beach w/p/c/B - unstable
no birds in pebbles
- 2 pigeon guillemot
-rugged outcrop on east side
dense Evergreen pasture, rock
- older barn, dust spot
- Cacti, Snake, Sea, Soot, Rhino
- Punka Line
- Subdivision includes several
shale pebble pocket beaches
with large, rugged, shale outcrops
- No oil - Dense Fir, barn, mussel
Impacts - Rich forest &
Imports, Litts, Torcello, pregnant
sculpins, dense littorines, aquatic,
variety of algae

dep. 10/15 - 2 days
- Heaven

10/25 - another pocket - 40 gal
1 harbor seal (living/unknown)

10/30 - another site - small, non
used stream - no oil

Finish Subdivision 1100,
return to 36A

2 Auklet? 1 P Guillemot
REGION: PRINCE WILLIAM SOUND

SEGMENT: ST/CU-05

SUBDIVISIONS: A (1 OF 1)
SHORELINE EVALUATION

SEGMENT ST/ CU-05 SUBDIVISION A (1 OF 1) DATE 4/24/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

- All bald eagle nests (3/1 to 6/1) - Active eagle nests (3/1 to 9/1)
- Biologist noted eagle nest at east end of segment.
- Recreation: Special use destination
- See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:
Avoid any unnecessary disturbance or damage to unoiled biota and substrate.

ARCHAEOLOGICAL CONSTRAINTS:
If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO SIGNATURE: ______________________ DATE: ______________________

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 0 m: No Oil 984 m
Subsurface Oil Observed: Yes ☒ No ☒ X Maximum Depth ______

RECOMMENDATIONS:

- ☒ No Treatment Recommended
- ☒ Treatment Recommended
- ☒ Manual Pickup
- ☒ Bioremediation
- ☒ Tarmat Removal
- ☒ Snare/Absorbent Booms
- ☒ Oil Snares (pom poms)
- ☒ Absorbents (pads, rolls, etc)
- ☒ Spot Washing: Wands
- ☒ Beach Cleaner
- ☒ Other (see comments)

COMMENTS: __________________________________________________________

TAG COMMENTS: _____________________________________________________

TAG APPROVAL DATE: ______________________

ADEC  ______________________  FOSC: __________  DATE: __________

EXXON  ______________________

NOAA  ______________________

USCG  ______________________
Salmon stream mouth - fry outmig (3/1 to 5/15)

Salmon stream mouth - spawning (7/10 to 8/31)

No disturbance of stream bed or banks unless authorized by ADF&G. No beach flushing into stream drainage. No bioremediation or other chemical application within 100m of stream without authorization from ADF&G. No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, prior to at least July 1 unless authorized by ADF&G. Treatment which is not intrusive and which will not affect nearshore oil or toxicity levels, such as manual removal, can probably proceed without adherence to time constraints. In any case, contact ADF&G Habitat Division prior to treatment for consultation and/or permit application.

AGENCY CONTACT PERSON: ADF&G John Morris 267-2324

Salmon fry nursery area (5/21 to 7/31)

No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, prior to July 31 unless authorized by ADF&G. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G prior to treatment for confirmation and advice.

AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214

Esther Hatchery release (4/15 to 6/15)

Main Bay Hatchery release (4/20 to 6/15)

Sawmill Bay Hatchery release (4/15 to 6/1)

Cannery Creek Hatchery release (4/21 to 6/1)

Feral release sites

No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, prior to at least July 1 unless authorized by ADF&G and/or PWS Aquaculture Association. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G or PWS Aquaculture Association for confirmation and authorization.

AGENCY CONTACT PERSON: 1E ADF&G Larry Peltz 424-3214

Purse seine (7/20 to 9/30)

Purse seine hook-off (7/20 to 9/30)

Set net sites (8/11 to 7/25)

Contact ADF&G for specific dates, locations and constraints. Restrict boat and air traffic to essential minimum. When set net sites are present (1L) restrict beach operations to essential minimum as authorized by ADF&G. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.

AGENCY CONTACT PERSON: ADF&G James Brady 424-3212

Herring spawning (4/1 to 6/15)

Contact ADF&G for confirmation - dates and locations may vary. Restrict boat traffic to essential minimum. Avoid damage to unclogged intertidal and subtidal alage and seagrass. If plans for treatment include methods such as hot water wash or Inipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.

AGENCY CONTACT PERSON: ADF&G Evelyn Biggs 424-3235

Harbor seal and sea lion pupping (5/15 to 7/1)

Harbor seal and sea lion molting (6/15 to 9/15)

Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts. No application of Inipol within two weeks of arrival dates (work window at these sites is limited to 7/2 to 7/31). Contact ADF&G and USFWS prior to treatment for confirmation.

AGENCY CONTACT PERSON: US National Marine Fisheries Service Steve Zimmerman 586-7235

ADF&G Don Calkins 267-2403

Seabird colony (6/1 to 9/1)

Restrict air and boat traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m vertical distance from colony. Contact USFWS prior to treatment.

AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

Seabird/waterfowl concentration (4/1 to 5/15)

Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.

AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

ADF&G Tom Rothy 267-2206

All Bald Eagle nests (3/1 to 6/1)

Active Bald Eagle nests (3/1 to 6/1)

Restrict air traffic and all disturbance to essential minimum. No personnel within 400m 3/1 to 6/1. Air approach and takeoff from and to seaward only; maintain 800m horizontal, 300m vertical distance from nests. Contact USFWS prior to treatment for confirmation of dates.

AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

Recreation:

Tent sites (6/1 to 9/15)

Anchorage (6/1 to 9/15)

Forest Service cabins (6/1 to 9/15)

Lodge (6/1 to 9/15)

Special use destination

Subsistence areas:

Salmon harvesting (5/1 to 9/30)

Finfish harvesting

Deer harvesting (8/15 to 2/28)

Invertebrate harvesting

Contact ADF&G and appropriate Native Corporation for specific dates, locations, and constraints. Restrict boat and air traffic and beach disturbance to essential minimum. If plans for treatment include methods such as hot water wash or application of Inipol which might affect intertidal or nearshore oil or toxicity levels, contact ADF&G and appropriate Native Corporation for authorization - see Native Corporation Contact List for each Native Corporation's contact person.

AGENCY CONTACT PERSON: ADF&G Jim Fall 267-2359
FIELD SHORELINE COMMENT SHEET

SEGMENT ST / \cu: \s- SUBDIVISION: A DATE 4/24/90

NAME M.J. SHORTE SIGNATURE M.J. SHORTE

NO TREATMENT RECOMMENDED □ TREATMENT SUGGESTED

COMMENTS

NAME STEPHEN FERGUSON SIGNATURE STEPHEN FERGUSON

NO TREATMENT RECOMMENDED □ TREATMENT SUGGESTED

COMMENTS

□ OBSERVED SOME STAINS / NOT WORKABLE

NAME Leigh Carlson SIGNATURE Leigh Carlson ADNR

☑ NO TREATMENT RECOMMENDED □ TREATMENT SUGGESTED

COMMENTS

listed in FWS Area Plan as frequently used camping and anchorage spot. Listed as priority 1 by PWSA.
**SHORELINE OILING SUMMARY**

**OIL**

**UPLANDS DESCRIPTION:**
- Grass
- Forest
- Rock

**SURVEYED FROM:**
- Foot
- Boat
- Helo

**WORKING DIRECTION:**
- W to E

**SURFACE SEDIMENTS:**
- R: %
- B: %
- C: %
- P: %
- S: %
- M: %
- V: %
- D: %

**OIL CATEGORY LENGTH:**
- W: m
- M: m
- N: m
- V: m
- L: m

**SURFACE OIL**

**PAVEMENT H F S**

**NEAR SHORE SHEEN?**
- NO

**PATTERNS/TARBALLS**

**NEEDS**

**AMOUNT**

**DID YOU COLLECT DEBRIS?**
- YES
- NO

**OIL DEBRIS**
- Logs
- Vegetation
- Trash
- Debris

**DID YOU COLLECT DEBRIS?**
- YES
- NO

**PHOTOGRAPHS:**

**Roll No.**

**Frames**

**SUBSURFACE OIL**

**PIT NO.**

<table>
<thead>
<tr>
<th>PIT NO.</th>
<th>PIT DEPTH (cm)</th>
<th>SUBSURFACE OIL CHARACTER</th>
<th>OILED DEBRIS</th>
<th>OIL / FILM COLOR</th>
<th>PIT ZONE</th>
<th>ANA SHEEN (cm)</th>
<th>SURFACE-SUBSURFACE SEDIMENTS</th>
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**COMMENTS**

**REVIEWED**

**DATE**
SEARCH MAP

LEGEND
1 ▲
Pt - No Subsurface Oil
2 ▲
Pit - Subsurface Oil

CT/C
Continuous Distribution
CT/B
Broken Distribution
CT/P
Patchy Distribution
CT/S
Spotted Distribution

Ell
Ciliated Vegetation

1 •
Photo location, direction, and number

Oil Character Length (m): AP_0 PO_0 OV_0 CT_0 ST_0 MS_0 PT_0 TB_0 FL_0 NO_0 1027
**SHORELINE ECOLOGICAL SUMMARY**

Segment ST/ C 4-5 Subdivision A Date (mo/day/yr) 4-24-90

- (24 hr) 0854 Biologist PENN

(A) Substrate type and % of segments:
- Bedrock 3
- Boulder 2
- Cobble 4
- Pebble 5
- Sand 6
- Silt 0

(B) Overall % cover of biota (% of segment): Dense 12 Moderate 12 Low 20

(C) Density, substrate preference (by number from A, above), & vertical zonation of major taxa: (upper-U; mid-M; low tidal-L);

- Juveniles/adults (X), new settlement (3)

### Photographs:
- Roll No. ST-4-2
- Frames 17,18,19

#### BARNACLES

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**Wildlife Observations/General Comments:**
- 4 Harley 01/15, 20/29
- 2 Seals

Ecological Considerations:
- 150-300 spawners
- 1 seal haul out offshore rock
- 1 eagle nest (not on Ecology map) - see map
- Lipizate unusually dense in bite on cobble
ECCLESIAL MAP

CU-5

Af-6

Wide

Medium

Narrow

Very Light

No Oil

XXX

///

----

TTTT

0000

Map Key: FWS-83
Name: K. Ramsey
Date: 4/24/90
Data Entered: 15
CU-5

XXX Wide
/// Medium
--- Narrow
TTTT Very Light
0000 No Oil

ADEC Segment Length: 984m

Date: 9/24/90

Map Key: PWS-83
Name: K. RAMSEY

Data Entered: [Signature]
SHORELINE EVALUATION

SEGMENT ST/ CU-05 SUBDIVISION A (1 OF 1) DATE 4/24/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

5T All bald eagle nests (3/1 to 6/1) - Active eagle nests (3/1 to 9/1).
Biologist noted eagle nest at east end of segment.
6Y Recreation: Special use destination
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:
Avoid any unnecessary disturbance or damage to unoiled biota and substrate.

ARCHAEOLOGICAL CONSTRAINTS:
If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO SIGNATURE: DATE: 5/3/90

OILING CATEGORIZATION:

Wide 0_m: Medium 0_m: Narrow 0_m: V.Light 0_m: No Oil 984_m
Subsurface Oil Observed: Yes No Maximum Depth

RECOMMENDATIONS:

X No Treatment Recommended ___ Snare/Absorbent Booms
_____ Treatment Recommended ___ Oil Snares (pom poms)
_____ Manual Pickup ___ Absorbents (pads, rolls, etc)
_____ Bioremediation ___ Spot Washing: ___ Wands
_____ Tarmat Removal ___ Beach Cleaner

COMMENTS: ________________________________

TAG COMMENTS: ____________________________

TAG APPROVAL DATE: 5/3/90
ADEC ALEC
EXXON EXXON
NOAA NOAA
USCG USCG
CU-5

Wide
/// Medium
---- Narrow
TTTT Very Light
0000 No Oil

Eagles Nest

Map Key: PWS-83
Name: K. Ramsey
Date: 4/24/90
Data Entered: 15
1991 MAYSAP EVALUATION

SEGMENT: CU 006  SUB: A  REGION: PWS  SURVEY DATE: 5/21/91

ENVIRONMENTAL SENSITIVITIES:
Work Window(s) RESTRICTED 3/1 - 9/1

Ecological/Constraints (see page two for details) Eagle nest

ARCHEOLOGICAL CONSTRAINTS:
If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO Signature: ______________________ Date: ______________________

RECOMMENDATIONS:

TREATMENT REQUIRED (Y or N)  INITIAL  TAG  FOSC

Manual Pickup (Check as Req.)  N  
Spot Washing  
Bio-Customblen Only  
Bio-Inipol/Customblen  
Other  
Other  

COMMENTS:
INITIAL: ______________________

TAG: ______________________

FOSC: ______________________

TAG APPROVAL DATE: ___________  FOSC APPROVAL DATE: ___________

ADEC: ______________________  FOSC: ______________________

EXXON: ______________________

USCG: ______________________

NOAA: ______________________
ECOLOGICAL CONSTRAINTS
1991 FIELD ACTIVITIES

Eagle Nest: Access restricted from 3/1 to 9/1. USF&WS authorization required. Maintain 1000' vertical and 1/4 mile horizontal buffer.
TEAM NO. 1 SEGMENT CH 6 SUBDIVISION A DATE 5/21/91

ADEC NAME: JEFF GUNKEL SIGNATURE: [signature]

☑ NTR My main basis for recommending no further treatment is that it appears no further environmental harm is threatened by leaving the remaining oil. The mouse referenced at CG map site C2 is spottic, trapped in blockage devices, travel – work. When combined with the traps (well contains) at CG map site C4, I doubt whether two more bags would be filled. When considering the remaining oil from an environmental and cost effective standpoint, treatment does not seem necessary. However, from a treatment standpoint, the oil (mousse) matrix is readily apparent, visually unappealing, and easily accessible and recoverable. The only problem is there is not much oil. If treatment occurs, am advised, per USFWS, that no input to young egrets after fledging stage.

EXXON NAME: LARRY D. OLSON SIGNATURE: [signature]

☑ NTR Life C on sketch map should be left to weather and deteriorate. Naturally, remainder of segment surveyed indicated no retrievable oil.

LANDMANAGER NAME: MARSHA HALL OF DNR SIGNATURE: [signature]

☑ NTR ☑ TREATMENT

We picked up a good deal of the oil at area B. Area C2, C4 would require treatment only due to the number of people in the area. All is fairly weathered with the exception of the mouse. The mouse is fairly scarce, but could pose problems if someone stumbles across it.

USCG/NOAA NAME: SCHULTZ/LCON SIGNATURE: [signature]

☑ NTR No retrievable oil remains. No further intrusion is warranted.

Bed Rock outcrop Schist w/ Brecues composed of Peabody Cobble - Elly Enf of segment contains a Rock Bench w/ Overlying Rock Den of (G) MS & TB at this Rock Point (C1-C5) where in sheltered areas, Eagles reside MS & TB on this Rock Point (C1-C5) were found together by 1st Team. Pu by Schultz & C1-B. Final Rock (P1A) were found together by 1st Team in B, C1 & C5.
<table>
<thead>
<tr>
<th>SEGMENT</th>
<th>CU-G</th>
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<tr>
<td>TEAM NO.</td>
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<tr>
<td>BIO</td>
<td>M. FANCETT</td>
</tr>
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<td>LANDMANAGER</td>
<td>M. HALL</td>
</tr>
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<td>DATE</td>
<td>5/12/91</td>
</tr>
<tr>
<td>SUBDIVISION</td>
<td>A</td>
</tr>
<tr>
<td>TIME</td>
<td>11:00 to 11:30, 5/21</td>
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<tr>
<td>TIDE LEVELS</td>
<td>5.5 ft. to 4.8 ft.</td>
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<tr>
<td>ENERGY LEVEL</td>
<td>H X M</td>
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<tr>
<td>SURVEYED FROM</td>
<td>FOOT BOAT HELO</td>
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<tr>
<td>WEATHER</td>
<td>SUN CLOUDS RAIN SNOW</td>
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<tr>
<td>TOTAL LENGTH SHORELINE SURVEYED</td>
<td>1.170 m</td>
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<tr>
<td>NEAR SHORE SHEEN</td>
<td>NO</td>
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<tr>
<td>TOTAL OIL CATEGORY LENGTH</td>
<td>W 9.1 m M 14.2 m N 5.2 m V 93 m NO 975 m</td>
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<thead>
<tr>
<th>L</th>
<th>C</th>
<th>AP</th>
<th>MS</th>
<th>TB</th>
<th>SOR</th>
<th>CV</th>
<th>CT</th>
<th>ST</th>
<th>FL</th>
<th>DB</th>
<th>NO</th>
<th>S</th>
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<td>x</td>
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DISTRIBUTION: C = 61-100%; B = 51-90%; P = 11-50%; S = 1-10%; T = <1%
SLOPE: V = VERTICAL; H = HIGH ANGLE; M = MEDIUM ANGLE; L = LOW ANGLE
PHOTO ROLL # MAYSAP-1 - 28 FRAMES 17-2

<table>
<thead>
<tr>
<th>PIT NO.</th>
<th>DEPTH (cm)</th>
<th>OIL CHARACTER</th>
<th>OILED ZONE</th>
<th>CLEAN BELOW</th>
<th>H2O LEVEL</th>
<th>SHEEN COLOR</th>
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<td>1</td>
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<td>-</td>
<td>-</td>
<td>x</td>
<td>P-PGE</td>
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SHEEN COLOR: B = BROWN; R = RAINBOW; S = SILVER; N = NONE

OG COMMENTS: Rugged rocky shore w/ hi angle PC pockets for most of the segment; A broad rock headland w/ CB sewer has numerous nottie binding gravel at surf. The notties are part of an oiled band, including MS/1 in bedrock, leaching in surfact from a prominent outcrop to the ENE. The MS oil is easily accessible. There is no subsurface oil here.
Medium energy,
low beach

AP @ grassline

Grass & drowned tree
stumps

MS or R tract.

Overall oil dimensions - AP x MS |?
~ 5 x 60 1 < 10%]
AP patchy ~ 30 m x 30
at " below grassline e
SUTZ.

ST, CT, FL
2 x 2 m, 20%.
Oiled debris - wood debris,
custom blend.

CU - 6A
G MacDonald
5.12.91
TEAM: SEGMENT 1
SUBDIVISION A

DATE 5/12-5/21/91

TIDAL HEIGHT (Range) +1.9 ft MLLW

BIOLOGIST Michael Fawcett

SEA STATE 1/2 ft

WIND SPEED/DIRECTION NE 0-5

PHOTOGRAPHS: ROLL #

COMMENTS/OBSERVATIONS (to be completed in oiled subdivisions only):

This subdivision was surveyed on two days, because discovery of active eagle nest on May 12 resulted in aborted survey near north end of subdivision. Returned May 21 with US FWS rep. Doug Stine monitoring. The northern end of subdivision near the eagle nest has a series of low bedrock outcrops & platforms with intermittent pebble/cobble channels and pools. The residual oil in this area is concentrated in a UTZ 417a plug area in lee of an outcrop rising to about 4-6 ft MLLW. The southern half of the subdivision has some rugged, steep bedrock shoreline and several small beaches of mixed sediments, and some low bedrock reefs at various angles to the shore. See sketch map for descriptions of biota near oiled sites.

The May 21 survey was accomplished by a small shore party working quietly. One eagle sat in a tree near the nest watching us, and vocalized briefly as we were departing, but never flew.

WILDLIFE OBSERVATIONS
TO BE COMPLETED IN ALL SUBDIVISIONS

BIRDS

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<th># OF SPECIES</th>
<th>TOTAL BIRDS</th>
<th>FISH OBSERVED</th>
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<td>1</td>
<td>2 (at nest)</td>
<td>Salmon fry</td>
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<tr>
<td>Seabirds</td>
<td>1 (pigeon guillemot)</td>
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<td>tidepool sculpin</td>
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<td>Waterfowl</td>
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<td>black prickleshell</td>
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<td>Gulls/kittiwakes</td>
<td>1 (G-w gull)</td>
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<tr>
<td>Shorebirds</td>
<td>1 (black scoter)</td>
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<tr>
<td>Corvids</td>
<td>1 (crow)</td>
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<tr>
<td>Other Birds</td>
<td>1 (arctic tern)</td>
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MARINE MAMMALS

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<td>Pinnipeds(specify)</td>
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<tr>
<td>Whales(specify)</td>
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LAND MAMMALS

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<th>LAND MAMMALS</th>
<th># OBSERVED</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

Shoreline subdivision map showing important biological features attached.
12 May 71

*** Site E (Prevot Creek) ***

3/4 mile west of R-
5-6 yard feeling
3-4 May

- 12 May

Fawcett's
- fished deposit 1720

Arrive CB 6 1735 hr at
and near eagle nest - (marked)
- saw eagle pick up fish
- snapped in water and fly up
- to nest - 1st stiff already
- landed 1/2 m from nest, we
- skirted around it & had
- the crew ashore picked up from
- other side of spot - eagle
- sitting in nest, not disturbed
- for awhile, then left nest
- 10 minutes later flew out on
- water & picked something up
- then returned to nest, while fishing
- Site P2 - (500 yards)
- south of eagle nest - picked up muskie in SUV 2
- no blacks nearby except some big perch
- club on top of bedrock
- patchy dense brush on SR:

- about 5 m away from nest
- dense (also deep) brush & limbs
- full away of down slope w/ 15 m
- pair of snailshells feeding
- near soft nest
- Salmon fry in water - also Tonsorina

1825 - Rugged BR prefixes
- South of picked-up-muskie
- area - large tidepool in 2 m
- UTH - very dense mussels, corals -
- many spat of 2.3 cm mussel
- parts of upright & encrusting
- corallines, sculptured, livings
- Lithopore, anemones, etc.
- Bcansoria, Seriosipina
- Pneobolinus, "hants", "clavas"
- Katherine, Halosaccus, "hellectrona"
- Tenicella, muskell, nodella
- Small stream cuts through a
- channel in BR

1835 Finish segment
CU 6A - (return) 5/21/91 1100 hrs.

- Approached from north of
  Dawson Mountain

- Met eagles in tree during
  survey, watching as vocalizing
  as we left

- Eagle perched in tree during
  survey

1 eagle on tree at 742

CT/50R, in BC spot looking

put to chopper w/ full suit

N-T 10-12 ft

- down to 7 ft

- 20 miles on north

- many salmon fry

finished 11:30

1 + a.m

1 p.m.
Medium energy, low Z beach

grape + drowned tree stumps

At @ grassline

Traces CT on BR wall, no biota near or below (loose pebbles below)

M's in UTZ - SUTZ - no biota nearby except sparse limpets (Notochthrea petraea), patchy rockweed 5 M away, dense rockweed, barnacles, mussels 15 M downshore

SuTZ terrestrial grass, lichen, amphipods only biota near TB

CT/CU among or above Spumose barnacles

M's + STEM (tapparig) of rockweed, barnacles, Limpet, (larinidae), tidepools 3 M downshore

2 Oyster catchers

Cu - 6A
Bio Sketch Map
M. Fawcett
May 12, 21, 1991
1991 MAYSAP EVALUATION

SEGMENT: CU 006 SUB: A REGION: PWS SURVEY DATE: 5/21/91

ENVIRONMENTAL SENSITIVITIES:
Work Window(s)  RESTRICTED 3/1 - 9/1

Ecological/Constraints (see page two for details)  Eagle nest

ARCHAEOLOGICAL CONSTRAINTS:
If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO Signature:  Timothy A. Smith  Date: 5/21/91

RECOMMENDATIONS:

TREATMENT REQUIRED (Y or N)  N  N  P

Manual Pickup (Check as Req.)  
Spot Washing  
Bio-Customblen Only  
Bio-Inipol/Customblen  
Other  
Other  

COMMENTS:
INITIAL:

TAG:

FOSC:

TAG APPROVAL DATE: 3/31/91  FOSC APPROVAL DATE: 6/15/91

ADEC  EXXON  USCG  NOAA

FOSC  E. E. Page, CDR, USCG  CHIEF OF STAFF, FOSC
Eagle Nest: Access restricted from 3/1 to 9/1. USF&WS authorization required. Maintain 1000' vertical and 1/4 mile horizontal buffer.
MAYSAP FIELD SHORELINE COMMENT SHEET

TEAM NO. 1 SEGMENT CU 6 SUBDIVISION A DATE 5/12/91

ADEC

JEFF GUNKEL SIGNATURE

NTR My main basis for recommending no further treatment is that it appears no further environmental harm is threatened by leaving the remaining oil. The mouse referenced at OG map Site C2 is spastic, trapped in broken crevices, travel - work. When combined with the tarsals (well weathered) at OG map C4, I doubt whether two cret bars would be filled. When considering the remaining oil from an environmental and cost-effective standpoint, treatment does not seem necessary. However, from a treatment standpoint, the oil (crude/primary) is readily apparent, visually unacceptable, and easily accessible and retrievable. The only problem is there is not much oil. If treatment occurs, am advised, per USFWS, that no Indent 8 young seals after fledgling stage.

EXXON

NAME LARRY D. OLSON SIGNATURE LARRY W. OLSON

NTR Site C on sketch map should be left to weather and deteriorate naturally. Remainder of segment surveyed indicated no retrievable oil.

LANDMANAGER

NAME MARSHA HALL OF DNR SIGNATURE Marsh Hall

NTR Treatment we picked up a good deal of the oil at Area B. Area C2, C4 would require treatment only due to the number of people in the area. All is fairly weathered with the exception of the mouse. The mouse is fairly scarce, but could pose problems if someone stumbles across it.

USCG/NOAA

NAME SCHULTZ / Crews SIGNATURE D. SCHULTZ

NTR No retrievable oil remains. No further intrusion is warranted.

Bedrock outcrop Schütz w/Beaches composed of Pegmatite (cobble)

4 End of Segment contains a Rock Bench w/overlying Rough Debris (cobble)

4 Eyes on this Rock (Point C2-C5) were in sheltered cracks, remain behind the Line. Site C6. Prime Rock (Peg) were bound together by tuft Tar. Pu by Team in B, C1-C6.
**MAYSAP SHORELINE OILING SUMMARY**

**TEAM NO.**

**OG**  G. MACDONALD  **BIO** M. FANCEFT

**ADEC**  J. GINNAR  **LANDMANAGER** M. HALL for DNRC

**EXXON**  R. BOYEL  **USCG/NOAA SCHMITZ/CHILDs**

**SEGMENT**  CO-G

**SUBDIVISION**  A

**DATE**  5/21/91

**TIME**  00:11 to 11:30, 5/21 TIDE LEVEL T.5 m 10.48 ft. ENERGY LEVEL: □ H □ M □ L

**SURVEYED FROM:**  X FOOT □ BOAT □ HELO  WEATHER:  □ SUN □ CLOUDS □ FOG □ RAIN □ SNOW

**TOTAL LENGTH SHORELINE SURVEYED:** 1120 m  NEAR SHORE SHEEN:  □ BR □ RB □ SL □ NONE

**EST. OIL CATEGORY LENGTH:**

<table>
<thead>
<tr>
<th>L</th>
<th>OIL CHARACTER</th>
<th>OIL DISTRIBUTION</th>
<th>SUBSURFACE OIL CHARACTER</th>
<th>OILED SUBSURFACE</th>
<th>OILED ZONE</th>
<th>H2O</th>
<th>SHEEN ZONE</th>
<th>SUBSURFACE SEDIMENTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>AP</td>
<td>MS</td>
<td>TB</td>
<td>BOR</td>
<td>CV</td>
<td>CT</td>
<td>ST</td>
<td>FL</td>
</tr>
<tr>
<td>A</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
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<tr>
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</tr>
</tbody>
</table>

**DISTRIBUTION:**  C = 91-100%; B = 81-90%; P = 71-80%; S = 1-10%; T = <1%

**SLOPE:**  V = VERTICAL; H = HIGH ANGLE; M = MEDIUM ANGLE; L = LOW ANGLE

**PHOTO ROLL # MAYSAP-1**

**FRAMES**

**OG COMMENTS:**

Rugged rocky shore with hi angle PC pockets for most of the segment; A broad rock headland w/ CB reaver has remnant potlite binding groaner @ ewt2. The potter are part of an oiled road, including MS/II an bedrock, causing an impact from a prominent outcrop to the NE: The MS/II are easily accessible, there is no subsurface oil here.
Medium energy, low beach

Grass + dune trees - MS ou R traps.

Overall oil dimensions - AP to MS/I

At spot #1, <10%;

2 x 2m, 20%

Oil debris - usual debris - customised.

ST, CT, FL

CU-6A

G. MacDonald

5.12.21.91
**Maysap Biological Summary Form**

**Segment:** CU 006  
**Tidal Height (Range):** +1.9 to +5.8 ft MLW  
**Biolologist:** Michael Fawcett  
**Wind Speed/Direction:** NE 0-5

**Comments/Observations (to be completed in oiled subdivisions only):**
This subdivision was surveyed on two days, because discovery of active eagle nest on May 12, resulted in aborted survey near north end of subdivision. Returned May 21 with USFWS rep. Doug Stine monitoring. The northern end of subdivision near the eagle nest has a series of low bedrock outcrops & platforms with intermittent pebble/cobble channels and pools. The residual oil in this area is concentrated in a UTZ-SUTZ R-16 area in lee of an outcrop rising to about +16 ft MLW. The southern half of the subdivision has some rugged steep bedrock shoreline and several small beaches of mixed sediments, and some low bedrock reefs at various angles to the shore. See sketch map for descriptions of biota near oiled sites.

The May 21 survey was accomplished by a small shore party working quietly. One eagle sat in a tree near the nest watching us, and vocalized briefly as we were departing, but never flew.

**Wildlife Observations**

**To be completed in all subdivisions**

### Birds

<table>
<thead>
<tr>
<th>Species</th>
<th># of Species</th>
<th>Total Birds</th>
<th>Fish Observed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eagles</td>
<td>1</td>
<td>2 (at nest)</td>
<td>Salmon fry</td>
</tr>
<tr>
<td>Seabirds</td>
<td></td>
<td>1</td>
<td>Tide pool sculpin</td>
</tr>
<tr>
<td>Waterfowl</td>
<td>(pigeon guillemot)</td>
<td>5</td>
<td>Black prickleback</td>
</tr>
<tr>
<td>Gulls/Kittiwakes</td>
<td>(Gull)</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Shorebirds</td>
<td>(Gull)</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Corvids</td>
<td>(crow)</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Other Birds</td>
<td>(arctic tern)</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

### Marine Mammals

<table>
<thead>
<tr>
<th>Species</th>
<th># Observed</th>
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</thead>
<tbody>
<tr>
<td>Sea Otters</td>
<td></td>
</tr>
<tr>
<td>Pinnipeds(s)</td>
<td>2 harbor seals</td>
</tr>
</tbody>
</table>

### Land Mammals

<table>
<thead>
<tr>
<th>Species</th>
<th># Observed</th>
</tr>
</thead>
<tbody>
<tr>
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</tbody>
</table>

Shoreline subdivision map showing important biological features attached.
1715 Site E (model came 3/4 mile west of B - CPR Continued 12 May
5-6 yard feeding 3-4 m away
finally, depth 17.20, head for site C-6.

12 May 71
Arrive C41-6 at 1735 Hrs. at and near eagle nest. (unnum.)

Saw eagle peek up - red;
snap and water; and fly up
to nest - 1st stuff already
landed in 150 m from nest; we
skirted around it & had
the crew inside peeked up from
other side of spit - eagle
sitting on nest, not disturbed
for awhile; then left nest
10 minutes later, flew out on
water & picked something for up
then returned to nest while radius

- Site B (500 yards too far)

- South of eagle nest - peaked
up mousie in SV72
no birds nearby except some

1825 - Rugged BR platform
South of peaked-up mousie
area - large tile pool W79
UTZ - very large mussel, dorado
many spot at 3.5 cm mussel

- Prob. 10 sight & animal:
smallfish, 3 claws, 1 bullet
Littorina, anemone, &
B. cantans, scuticopinae,
Polka... 

- Small stream cuts through a
channel in BR

1835 Finish Segment
CU 6A - 5/21/91 - Factory
- Approached from North W
- Dragonfly, Morning 1100 hrs
- 5 Herons - moderate easy
- 1 crow
- 1 eagle in tree at point
- CT/SOR in BC spot-landing
- put to seaplane, mostly SUTZ
- MT 10-12 ft. - amendments of area, lake in 800-600 ft.
- in lee side of BR, gone
- down 2 #12, 8 #2, up
- edge of bottom, fair fishing
- dense - rocks, 40-60 ft
- tidepools on downstream from BR - E Madawaska River
- limit, mussels, ling, scallops
- Scott's in pools
- downstream from ol in BC side
- are limit, ling, space been
- beginning of fair, good - limit
- mussels, 10 m salmon -
- suskind river (6-8 ft) dense
- soft, mud patches, few dense
- limit + eggs, puddles, left

CU 6A (cont)
- In CT in wall of BR when
- we landed they - no luck
- SUTZ was able to take in
- eagle perched in tree during
- survey, watching as vocalizing as line left
- 2 salmon shows
- 3 or 4 pods on walls
- many salmon fry
- finished 1130
- 1 + 3.5
- 1 P.G.
Medium energy, low wave beach

Grass + drowned tree stumps

MS on R side

SUTZ B/R typical

Traces CT on BR, wall, no biota near or below

CT/CU among or above sparse barnacles

MS + SP in upper CT, barnacles, Limpets, Steller's Eider

Clumps, barnacles, Mussels 15m downshore

No biota near ST/CT/FI in SUTZ

CU-6A
Bio Sketch Map
M. Fawcett
May 12-21, 1991
REGION: PRINCE WILLIAM SOUND

SEGMENT: ST/CU-06

SUBDIVISIONS: A (1 OF 1)
SHORELINE EVALUATION

SEGMENT ST/ CU-06 SUBDIVISION A (1 OF 1) DATE 4/24/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
● ST-1 All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)
   One eagle nest within 400M of segment.
● 6Y Recreation: Special use destination
   See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:
Avoid any unnecessary disturbance or damage to unoiled biota and substrate.

ARCHAEOLOGICAL CONSTRAINTS:
If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO SIGNATURE: __________________________ DATE: __________________________

OILING CATEGORIZATION:
Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 148 m: No Oil 973 m
Subsurface Oil Observed: Yes ___ No X ___ Maximum Depth ______

RECOMMENDATIONS:

X No Treatment Recommended _____ Snare/Absorbent Booms
_____ Treatment Recommended _____ Oil Snares (pom poms)
_____ Manual Pickup _____ Absorbents (pads, rolls, etc)
_____ Bioremediation _____ Spot Washing: _____ Wands
_____ Tarmat Removal _____ Beach Cleaner

COMMENTS: ___________________________________________________________

________________________________________________________

TAG COMMENTS: _____________________________________________________

_______________________________________________________________

TAG APPROVAL DATE: _____________
ADEC __________________________________ FOSC: _____________ DATE: _____________
EXXON ______________________________________
NOAA _______________________________________
USCG _____________________________________
PWS, SEWARD AND HOMER ECOLOGICAL CONSTRAINTS

1A Salmon stream mouth - fry outmigration (3/1 to 5/15)
1B Salmon stream mouth - spawning (7/10 to 8/31)

No disturbance of stream bed or banks unless authorized by ADF&G. No beach flushing into stream drainage. No bioremediation or other chemical application within 100m of stream without authorization from ADF&G. No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or lnlpol application, prior to at least July 1 unless authorized by ADF&G. Treatment which is not intrusive and which will not affect nearshore oil or toxicity levels, such as manual removal, can probably proceed without adherence to time constraints. In any case, contact ADF&G Habitat Division prior to treatment for consultation and/or permit application.

AGENCY CONTACT PERSON: ADF&G John Morison 267-2224

1C Salmon fry nursery area (4/31 to 7/31)

No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or lnlpol application, prior to July 31 unless authorized by ADF&G. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G prior to treatment for confirmation and advice.

AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214

1D Esther Hatchery release (4/15 to 6/15)
1E Main Bay Hatchery release (4/20 to 6/15)
1F Sawmill Bay Hatchery release (4/15 to 6/1)
1G Cannery Creek Hatchery release (4/21 to 6/1)
1H Resident release site

No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or lnlpol application, prior to at least July 1 unless authorized by ADF&G and/or PWS Aquaculture Association. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G or PWS Aquaculture Association for consultation and authorization.

AGENCY CONTACT PERSON: 1E ADF&G Larry Peltz 424-3214

2M Gill net area (6/7 to 8/31)
2J Purse seine area (7/20 to 9/30)
2K Purse seine hook-off (7/20 to 9/30)
2L Set net area (8/1 to 7/22)

Contact ADF&G for specific dates, locations and constraints. Restrict boat and air traffic to essential minimum. When set net sites are present (1L) restrict beach operations to essential minimum as authorized by ADF&G. If plans for treatment include methods such as hot water wash or lnlpol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.

AGENCY CONTACT PERSON: ADF&G James Brady 424-3212

3M Herring spawning (4/1 to 6/15)

Contact ADF&G for confirmation - dates and locations may vary. Restrict boat traffic to essential minimum. Avoid damage to unrolled intertidal and subtidal algal and seagrass. If plans for treatment include methods such as hot water wash or lnlpol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.

AGENCY CONTACT PERSON: ADF&G Evelyn Biggs 424-3235

5R Harbor seal and sea lion pupping (5/15 to 7/1)

Harbor seal and sea lion molting (6/15 to 9/15)

Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts. No application of lnlpol within two weeks of arrival dates (work window at these sites is limited to 7/2 to 7/31). Contact ADF&G and USFWS prior to treatment for confirmation.

AGENCY CONTACT PERSON: US National Marine Fisheries Service Steve Zimmerman 586-7235
ADF&G Don Calkins 267-2403

5S Shorebird/waterbird concentration (4/1 to 5/15)

Restrict activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.

AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
ADF&G Tom Rothe 267-2206

5T All Bald Eagle nests (3/1 to 6/1)
Active Bald Eagle nests (3/1 to 9/1)

Restrict air traffic and all disturbance to essential minimum. No personnel within 400m 3/1 to 6/1. Air approach and takeoff from and to seaway only; maintain 800m horizontal, 300m vertical distance from nests. Contact USFWS prior to treatment for confirmation of dates.

AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

6U Recreation: Tent sites 8/1 to 9/15
6V Anchorage 6/1 to 9/15
6W Forest Service cabins 6/1 to 9/15
6X Lodge 6/1 to 9/15
6Y Special use destination

7Z Subsistence area: Salmon harvesting (5/1 to 9/30)
7H Fish harvesting
7H Deer harvesting (6/15 to 2/25)
7H Invertebrate harvesting

Contact ADF&G and appropriate Native Corporation for specific dates, locations, and constraints. Restrict boat and air traffic and beach disturbance to essential minimum. If plans for treatment include methods such as hot water wash or application of lnlpol which might affect intertidal or nearshore oil or toxicity levels, contact ADF&G and appropriate Native Corporation for authorization - see Native Corporation Contact List for each Native Corporation's contact person.

AGENCY CONTACT PERSON: ADF&G Jim Fall 267-2359
FIELD SHORELINE COMMENT SHEET

SEGMENT ST: CO-06 SUBDIVISION: A DATE 4/24/90

NAME: SCOTT RAINSFORD SIGNATURE: Scott Rainsford 9:51

☐ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED

COMMENTS

ADEC

NAME: Lori J. Stratton SIGNATURE: Lori J. Stratton

☐ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED

COMMENTS

LAND MANAGER

NAME: Zee-Taylor SIGNATURE: (N/A) Zee-Taylor

☐ NO TREATMENT RECOMMENDED ☒ TREATMENT SUGGESTED

COMMENTS

Oil in location 3 is concern due to high recreation value to south and in Island. Biologic enhancement is recommended with treatment delayed until after potential egg hatch at nearby eagle nest.
**SHORELINE OILING SUMMARY**

**OG: G. MacDowell**  
**USCG: J. Rainford**  
**Bio: M. Scott**  
**Land Rep: L. Keeler**  
**SEGMENT: ST/ CU-6**  
**Exxon: J. Butler**  
**DEC: LORI J. STRATTON**  
**Time: 16:35 10/20/90**  

**Team No. 3**  
**Tide Level: 6.5 to 2.5**  
**Date: 10/20/90**

**ST. SUBDIVISION LENGTH:** 1310 m  
- Sun  
- Clouds  
- Fog  
- Rain  
- Snow

**SURVEYED FROM:**  
- Foot  
- Boat  
- Helo  
**WORKING DIRECTION:** W to E

**SURFACE SEDIMENTS:**  
- Grass  
- Forest  
- Rock

**LANDS DESCRIPTION:**  
- Sun  
- Clouds  
- Fog  
- Rain  
- Snow

**SLOPE:**  
- Lang  
- Hang  
- Vert

**WAVE EXPOSURE:**  
- Low  
- Mod  
- High

**OIL CATEGORY**

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<thead>
<tr>
<th>LENGTH W</th>
<th>M</th>
<th>D</th>
<th>N</th>
<th>D</th>
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<tr>
<td>10</td>
<td>10</td>
<td>10</td>
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</tbody>
</table>

**OIL CHARACTER**

- Asphalt Pavement
- Pooled
- Cover
- Coat
- Stain
- Mousse
- Patties
- Tarballs

**OIL / FILM COLOR**

- Asphalt pavement
- Pooled
- Cover
- Coat
- Stain
- Mousse
- Patties
- Tarballs

**IMPACTED ZONES**

- Surface Oil
- Subsurface Oil

**OILED OIL DEBRIS**

- Logs
- Vegetation
- Trash
- Debris

**AMOUNT**

- Small
- Medium
- Large

**OILED OIL DEBRIS**

**DID YOU COLLECT OILED OIL DEBRIS?**

- Yes  
- No

**PAVEMENT**

- Pavement
- Mosaic

**PATTIES / TARBALLS**

- Yes  
- No

**NEAR SHORE SHORE?**

- Yes  
- No

**DuR TO COLLECT OILED OIL DEBRIS?**

- Yes  
- No

**TYPE**

- Bag  
- Drum  
- Bucket

**BAGS C**

**OILED OIL DEBRIS**

**OILED OIL DEBRIS**

**OIL CHARACTER**

- Oil
- Mosaic
- Subsurface

**SAND**

- Subsurface
- Sediments

**SUBSURFACE OIL**

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<thead>
<tr>
<th>PIT NO.</th>
<th>PIT DEPTH (cm)</th>
<th>SUBSURFACE OIL CHARACTER</th>
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**COMMENTS**

- Exposed, scoured shore w/ pebble beaches. Surface oil only as cr/s @ AP/s @ MITZ, especially on rocky platform @ NE end of segment.

- Note: SW end of segment had fish oil spots @ MITZ, probably from herring processor vessel - may attract bears.

**REVIEWED**  
**DATE: 11/24/90**
# SHORELINE ECOLOGICAL SUMMARY

Segment ST / CU - G  Subdivision  A  Date (mo / day / yr)  4/27/94

Date (24 hr): 16:55-17:00  Biologist  M. Scott

(A) Substrate type and % of segments:
1. Bedrock -2- (2) Boulder - (3) Cobble -30- (4) Pebble -50- (5) Sand - (6) Silt -

(B) Overall % cover of biota (% of segment): Dense -10- Moderate -10- Low 90

(C) Density, substrate preference (by number from A, above), & vertical zonation of major taxa: (upper-U; mid-M; low tidal-L)

-juvenile / adults (X), new settlement (3)

## BARNACLES

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Wildlife Observations / General Comments: (observation that rained)
- 6 golden eyes
- rocky headlands separated by cobble coves (robbins = no biota)
- dear tracks in spg
- 5 eagles
- 3 crows
- eggs - 2 x 113

Ecological Considerations:

- Eagle nest - as shown on map, active - adult present
- rocky headlands - moderate diversity, moderate density - Fucus reproductive, barnacle
  gast common throughout, Mytilus-StG in crevices & edges of beds, patches of dense beds; small turpends on rocky headland areas (diversity - density lower than more no segments i.e. CU-BA, 44)
SHORELINE EVALUATION

SEGMENT ST/ CU-06 SUBDIVISION A (1 OF 1) DATE 4/24/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

ST-1 All bald eagle nests (3/1 to 6/1) - Active eagle nests (3/1 to 9/1)
One eagle nest within 400M of segment.

6Y Recreation: Special use destination
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:
Avoid any unnecessary disturbance or damage to unoiled biota and substrate.

ARCHAEOLOGICAL CONSTRAINTS:
If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO SIGNATURE: DATE: 5/9/90

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 148 m: No Oil 973 m
Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:

X No Treatment Recommended

_____ Treatment Recommended

_____ Manual Pickup

_____ Bioremediation

_____ Tarmat Removal

Snare/Absorbent Booms

Oil Snares (pom poms)

Absorbents (pads, rolls, etc)

Spot Washing: Wands

Beach Cleaner

Other (see comments)

COMMENTS:

_____

TAG COMMENTS:

TAG APPROVAL DATE: 5/9/90

ADEC Art Weber _______ DATE: 5/15/90

EXXON Ann Testi _______ DATE: 5/15/90

NOAA Bud Weigert _______

USCG D.D. Rome _______
ECOLOGICAL MAP

CU-7

ANADROMOUS STREAM
224-20-1 3018

Bald Eagle Nests

CU-6

Map Key: PWS-84
Name: G.M
Date: 4/24/98
1991 MAYSAP EVALUATION

SEGMENT: CU 007  SUB: A  REGION: PWS  SURVEY DATE: 5/3/91

ENVIRONMENTAL SENSITIVITIES:
Work Window(s)  RESTRICTED 3/1 - 9/15

Ecological/Constraints (see page two for details)  Eagle nest, Anadromous stream

ARCHAEOLOGICAL CONSTRAINTS:
If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO Signature:  Date: 5/14/91

RECOMMENDATIONS:

TREATMENT REQUIRED (Y or N)  INITIAL  TAG  FOSC

N  N  N

Manual Pickup (Check as Req.)
Spot Washing
Bio-Customblen Only
Bio-Inipol/Customeblen
Other
Other

COMMENTS:

INITIAL: ________________________________

TAG: ________________________________

FOSC: ________________________________

TAG APPROVAL DATE: 5/14/91  FOSC APPROVAL DATE: 5/20/91

ADEC  EXXON  USCG  NOAA

E. E. PAGE, CDR, USCG
CHIEF OF STAFF, FOSC
ECOLOGICAL CONSTRAINTS
1991 FIELD ACTIVITIES

Eagle Nest: Access restricted from 3/1 to 9/30. USFWS authorization required. Maintain 1000' vertical and 1/4 mile horizontal buffer.

Anadromous Stream: Unlimited treatment up to stream bank between May 15 and July 10. ADF&G approval required for work after July 10. Fish Habitat Permit required for instream work. ADF&G approval required for bioremediation within 100 meters of anadromous stream after July 10.
MAYSAP FIELD SHORELINE COMMENT SHEET

TEAM NO. 1 SEGMENT CU-7 SUBDIVISION A DATE 5/3/91

ADEC
NAME JEFF GINASIAS SIGNATURE

☑ TREATMENT RECOMMENDED

Asphalt/mousse patch at Site A1 of C4 map. Area is rapidly accessible and oil easily recoatable from surface. Oil located near a low energy area on a beach protected. Does not appear that wave action will low energy area on beach protected. Does not appear that wave action will
breakdown oil soon. Treatment suggested manual - small crew (3-5 person) shovels,
beaters, a couple hours. Recommend treatment of mid tide or just before, as
troughs form from low tide mark. Highest tide reduces human impact and handling of sediments. Tidal will not remove oil as low energy beach, oil will settle back onto beach.

EXXON
NAME FRANKA BOX SIGNATURE

☒ NTR Small patch of mousse stripped in the back of the segment close to a stream runoff. Recommend no action due to further intrusion of sensitive area would give no net benefit.

LANDMANAGER
NAME MARSHA HALL OF DNR SIGNATURE

☒ NTR TREATMENT

Asphalt/mousse at area A1 needs to be manually removed. This is a recreational area. A seal was observed at the rocks on the south of the segment. Treatment methodology as suggested by DEC rep. is right on.

USCG/NOAA
NAME SEAN CHILDS SIGNATURE

☒ NTR Further removal operations would cause more environmental harm than the oil to be removed.

LOW ANGLE CP BEACH BOUNCED BOTH SIDES BY VERTICAL BREAK CE'S.
ROVEN POA DAMAGED UP BY STORM SNATCH - SURFACE OIL CLEFST ALOE.
PATERN MS FOUND IN ROCKS NE'ly & SW'ly - SHEEN OBSERVED IN LI N 8/9 DIR UP BEACH FACE - NUMEROUS PITS ALONG UP OIL AREA FAILED TO DISCLOSE SOURCE OF SHEEN.
**MAYSAP SHORELINE OILING SUMMARY**

**TEAM NO.**

- **ADEC NO.**
- **SONDICATION**
- **TIME** 10:30 to 11:30
- **TIDE LEVEL** +1/4 ft. to +1/4 ft.
- **WEATHER**:
  - SUN
  - CLOUDS
  - FOG
  - RAIN
  - SNOW

**TOTAL LENGTH SHORELINE SURVEYED:** ______________________ m

**NEAR SHORE SHEEN:**
- BR
- RB
- SL
- X: NONE

**EST. OIL CATEGORY LENGTH:**
- W: ______ m
- M: ______ m
- N: ______ m
- V: ______ m
- L: ______ m
- US: ______ m
- TOTAL: ______ m

---

**LOCATION**

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<tr>
<th>Pit No.</th>
<th>Pit Depth (cm)</th>
<th>Subsurface Oil Character</th>
<th>Surface Sediment Type</th>
<th>Shore Slope Width</th>
<th>Area Length</th>
<th>Zone</th>
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**SHEEN COLOR**
- B: BROWN
- R: RAINBOW
- S: SILVER
- N: NONE

**OG COMMENTS:**

Small bay w/ steep rocky shore enclosing broad, low beach. Series of CP snout ridges in litt & MLZ.
Remnant surface oil found e & s sides, as MS & CTP. Rare silver sheen noted flushing from springline @ MLZ; local flushing upslope.

**REQUESTED** 5/1/91 MC

**Enlisted** May 17
CU-7A
G. McDonald
5.3.91

KEY
-< steam
-< water flowing beachface
-< CT/S
-< AP, MS/S

tracks sheen
in water flushing two sources found.

broad rocky promontory

AP, MS/S, T < 10°C
2 x 15 m, < 40 m/s
A1 / + CT/T, 20%
1 x 2.5 m

frozen

CT/T
< 1/2 m x
20 m
< 10°

snow ridges

C&P

BC/R

BC

log beaver pond

60m

Z

Reviewed: 5/7/91 RC
Z

E. reviewed, May 7
**TIDAL HEIGHT (Range)**
+0.1 to +0.3 ft

**STATE**
Calm

**WIND SPEED/DIRECTION**
NE 0-5 knots

**BIOLOGIST**
Michael Fawcett

---

**TEAK**

**DATE**
3 May 91

**TEAM #**

**SEGMENT #**
CU 007

**SUBDIVISION**
A

**TOPOGRAPHIC ROLL**

**FRAME**

**COMMENTS/OBSERVATIONS** (to be completed in oiled subdivisions only):

This protected, low-energy cove has a small, deep lake in the backshore area feeding what appears to be a suitable, though small, stream for anadromous fish (Pink, Silver, possibly red salmon). Only traces of residual oil coat found in depauperate supra-tidal area near the stream. Patches of asphalt/mousse were found among boulders in the UTZ on the northeast side of the cove, among species, isopods (Bg. pallasii) and limpets (Notoacmaea personal). A wide, broad/double beach extends downshore from the oiled area. Barnacles and littorinids begin to occur 6-8 m downshore from the oil, and a dense mussel bed with scattered rockweed, barnacles, Rhodoma, and typical cryptic species (limpets, hermit crabs, isopods, etc.) occurs about 20 m downshore from the oil at about +2 to +7 ft MLLW. Poacher dominates the area below +5 ft.

---

**WILDLIFE OBSERVATIONS**

**TO BE COMPLETED IN ALL SUBDIVISIONS**

**BIRDS**

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<td>bones of two deer</td>
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<td>Whales (specify)</td>
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Shoreline subdivision map showing important biological features attached.
Sparre limpets and sksops beneath boulders near AP/MS. Sparse barnacles, isocrinids, amphipods, and limpets 6-8m downshore; dense mussel bed + rockweed. Rhodophyle 20m downshore. Range barnacle spat throughout area from waterline (-1.5ft) to +1ft.

Traces of sheen in water flushing MoZ

Dead eagle

Barnes's Goldeneye

Harbor sp

Shorebirds, Robins

Anadromous fish stream

Traces of K in supra-tidal zone. No biota except black lichen nearby.

broad rocky promontory

KEY

Stream

Water flowing beachface

** ct/s ☀ AP, MS/S
CU 007 A 3 May 91 Fawcett

Arr 1030

50' on west side, UTZ place
5/10 scattered N persons,
no other boats anywhere.

6-8 N downhill of 30 R bay
sparse barnacles; lift, amphipods,
good rock
About 20 m down there 1-7 ft
begin dense mussel bed, yellow
downstairs, yellow
- data from +5 down to wards of -12
- lawn spot/waves everywhere
up to ~ 1.5
- barnacles
- dead American eel in
- large, brown log at east
end of bay, blocking lake
- green crabs on barnacles,
- some greenish mussels
- small greenish mussels
- for pretty silver swimming
- fish
- Common or 24 (semipalmated skimmer)
- with white callus usually
- than billed
- 10 crabs
- 1, double crested cormorant
- 4 scavengers: Barrows, gull, eider

Left to head S

3 PM
ANADROMOUS FISH STREAM ASSESSMENT

REGION: PRINCE WILLIAM SOUND
SEGMENT: CU-07
STREAM NO: 224-20-13010
ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/ CU-07  STREAM NO: 224-20-13010  DATE  4/26/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
1A  Salmon stream mouth - fry outmigration (3/1 to 5/15)
1B  Salmon stream mouth - spawning (7/10 to 8/31)
5T  All bald eagle nests (3/1 to 6/1) - Active eagle nests (3/1 to 9/1)
  Eagle nest within 400 M of subject segment.
6Y  Recreation: Special use destination
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:
Avoid any unnecessary disturbance or damage to unoiled biota and substrate. Subject stream is located within Subdivision A (1 of 1).

ARCHAEOLOGICAL CONSTRAINTS:
If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO SIGNATURE:_________________________  DATE:_________________________

Subsurface Oil Observed:  Yes____  No_X  Maximum Depth________

RECOMMENDATIONS:
  _X  No Treatment Recommended  ____ Snare/Absorbent Booms
  _____ Treatment Recommended  ____ Oil Snares (pom poms)
  ____ Manual Pickup  ____ Absorbents (pads, rolls, etc)
  ____ Bioremediation  ____ Spot Washing: ______ Wands
  ____ Tarmat Removal  ____ Beach Cleaner
  ____ Other (see comments)

COMMENTS: ______________________________________________________________
_________________________________________________________________________
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TAG COMMENTS:________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________

TAG APPROVAL DATE:___________

ADEC  _________________________  FOSC:_________________ DATE:_________

EXXON  _________________________
NOAA  __________________________
USCG  __________________________
Salmon stream mouth - fry outmigration (3/1 to 5/15)

Salmon stream mouth - spawning (7/10 to 8/31)

No disturbance of stream bed or banks unless authorized by ADF&G. No beach flushing into stream drainage. No bio remediation or other chemical application within 100m of stream without authorization from ADF&G. No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or lnipol application, prior to at least July 1 unless authorized by ADF&G. Treatment which is not intrusive and which will not affect nearshore oil or toxicity levels, such as manual removal, can probably proceed without adherence to time constraints. In any case, contact ADF&G Habitat Division prior to treatment for consultation and/or permit application.

AGENCY CONTACT PERSON: ADF&G John Morison 267-2324

Salmon fry nursery area (4/31 to 7/31)

No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or lnipol application, prior to July 31 unless authorized by ADF&G. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G prior to treatment for confirmation and advice.

AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214

Easter Hatchery release (4/15 to 6/15)
Main Bay Hatchery release (4/20 to 6/15)
Sawmill Bay Hatchery release (4/15 to 6/1)
Cannery Creek Hatchery release (4/21 to 6/1)
Remote release site

No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or lnipol application, prior to at least July 1 unless authorized by ADF&G and/or PWS Aquaculture Association. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G or PWS Aquaculture Association for confirmation and authorization.

AGENCY CONTACT PERSON: 1E ADF&G Larry Peltz 424-3214 1D 1F 1G PWS Aquaculture Association John McMillian or Bruce Suzamoto 424-7511

Gill net area (6/7 to 8/31)
Purse seine area (7/20 to 9/30)
Purse seine hook-off (7/20 to 9/30)
Set net sites (6/11 to 7/25)

Contact ADF&G for specific dates, locations and constraints. Restrict boat and air traffic to essential minimum. When set net sites are present (1L) restrict beach operations to essential minimum as authorized by ADF&G. If plans for treatment include methods such as hot water wash or lnipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.

AGENCY CONTACT PERSON: ADF&G Evelyn Biggs 424-3235

Harbor seal and sea lion pupping (5/15 to 7/1)
Harbor seal and sea lion molting (8/15 to 9/15)

Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts. No application of lnipol within two weeks of arrival dates. No water wash or lnipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.

AGENCY CONTACT PERSON: ADF&G Evelyn Biggs 424-3235

Seabird colony (5/1 to 9/1)

Restrict air and boat traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m vertical distance from colony. Contact USFWS prior to treatment.

AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

Shorebird/waterfowl concentration (4/1 to 5/15)

Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.

AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

All Bald Eagle nests (3/1 to 6/1)
Active Bald Eagle nests (3/1 to 9/1)

Restrict air traffic and all disturbance to essential minimum. No personnel within 400m 3/1 to 6/1. Air approach and takeoff from and to seaward only; maintain 800m horizontal, 300m vertical distance from nests. Contact USFWS prior to treatment for confirmation of dates.

AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

Recreation: Tent sites (6/1 to 9/15)
Anchorage (6/1 to 9/15)
Forest Service cabins (6/1 to 9/15)
Lodge (6/1 to 9/15)
Special use destination

Subistence area: Salmon harvesting (5/1 to 6/30)
Finfish harvesting
Deer harvesting (8/15 to 2/28)
Invertebrate harvesting

Contact ADF&G and appropriate Native Corporation for specific dates, locations, and constraints. Restrict boat and air traffic and beach disturbance to essential minimum. If plans for treatment include methods such as hot water wash or lnipol which might affect intertidal or nearshore oil or toxicity levels, contact ADF&G and appropriate Native Corporation for authorization - see Native Corporation Contact List for each Native Corporation's contact person.

AGENCY CONTACT PERSON: ADF&G Jim Fall 267-2259
FIELD SHORELINE COMMENT SHEET

SEGMENT ST 1  CU-007  SUBDIVISION: 22D-20-13010  DATE 26 APR 90

USCG
NAME  Korwin L. Dresher  SIGNATURE  CWO K. L. Dresher

☒ NO TREATMENT RECOMMENDED  ☐ TREATMENT SUGGESTED

COMMMENTS

APCO
NAME  Nick Guslin  SIGNATURE  Nick Guslin

☒ NO TREATMENT RECOMMENDED  ☐ TREATMENT SUGGESTED

COMMMENTS

LAND MANAGER
NAME  ☐ NO TREATMENT RECOMMENDED  ☐ TREATMENT SUGGESTED

COMMMENTS
A few small splatters of oil were observed in the ULTZ along the left side of the beach distant from the stream. No subsurface oil was observed in a pit located in the face of a storm berm near and on the right side of the stream in the ULTZ.

No cleanup is required at this location.
**ADPAC MULTI-ASSESSMENT DATA FORM**

1. **SURVEY TYPE:** [ ] US [ ] VS [ ] AS [ ] OA [ ] MB [ ] PFA [ ] 2. **REGION:** [ ] 3. **METHOD:** Aerial [ ] Ground [ ] Socia

3. **DATE:** 04-26-90 [ ] 16. **HIGH TIDE TIMES:** [ ]
4. **START TIME:** [ ] 17. **HIGH TIDE HT:** [ ]
5. **STOP TIME:** [ ] 18. **LOW TIDE TIMES:** [ ]
6. **RECEIPT:** [ ] 19. **LOW TIDE HT:** [ ]
7. **STATION #:** [ ] 20. **TIDE HT AT SURVEY:** [ ]
8. **K-UNIT:** [ ] 21. **R.M. CHADS:** [ ]
9. **LAT.:** [ ] 22. **USCG CHADS:** [ ]
10. **LONG.:** [ ]
11. **SOURCES:** [ ]
12. **LOCATION:** SE Culver's [ ]
13. **DESCRIPTION:** Limited Approach Island

**EXTENT OF OIL**

<table>
<thead>
<tr>
<th>SHORELINE</th>
<th>STREAM</th>
</tr>
</thead>
<tbody>
<tr>
<td>L W N</td>
<td>L W N</td>
</tr>
</tbody>
</table>

27. **SURFACE COVERAGE:** [ ]
28. **SURFACE THICKNESS:** [ ]
29. **PENETRATION:** [ ]
30. **OVERALL OIL IMPACT:** [ ]
31. **OIL TYPES:** [ ]
32. **OILED DEBRIS:** [ ]
33. **SHORELINE TYPES:** [ ]
34. **WAVE EXPOSURE:** [ ]
35. **SUBSTRATE TYPES:** [ ]
36. **CATALOGED ANIMAL, FISH SIGHTING:** [ ]
37. **CATALOG F/ADH-20-18010 [ ]
38. **STREAM NACKELS:** [ ]
39. **OIL IN STREAM BED:** [ ]
40. **OIL ON STREAM BANK:** [ ]
41. **OIL ON BEACH ADJACENT TO NORTHERN:** [ ]
42. **OIL WITHIN 1 MILE OF STREAM:** [ ]
43. **AMMONIOUS FISH PRESENT:** [ ]
44. **AMMONIOUS FISH OBSERVATION:** [ ]

**COMMENTS:**

Oil appeared to have been broken up and self dispersed. Some small slicks off the beach were observed. Upper intertidal only.
43. PHOTOCAP

<table>
<thead>
<tr>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>pH: 7.2 mmol/l</td>
</tr>
<tr>
<td>Recommendation: No treatment advised</td>
</tr>
</tbody>
</table>

44. OIL DISTRIBUTION DIAGRAM
1991 MAYSAP EVALUATION

SEGMENT: CU 007  SUB:  A  REGION: FWS  SURVEY DATE: 5/3/91

ENVIRONMENTAL SENSITIVITIES:
Work Window(s) RESTRICTED 3/1 - 9/15

Ecological/Constraints (see page two for details) Eagle nest, Anadromous stream

ARCHAEOLOGICAL CONSTRAINTS:
If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO Signature: ______________________ Date: ______________________

RECOMMENDATIONS:

<table>
<thead>
<tr>
<th>TREATMENT REQUIRED (Y or N)</th>
<th>INITIAL</th>
<th>TAG</th>
<th>FOSC</th>
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</thead>
<tbody>
<tr>
<td>N</td>
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</tbody>
</table>

Manual Pickup (Check as Req.)
Spot Washing
Bio-Customblen Only
Bio-Inipol/Customblen
Other____________________
Other____________________

COMMENTS:
INITIAL:________________________________________

TAG:____________________________________________

FOSC:__________________________________________

TAG APPROVAL DATE:____________________ FOSC APPROVAL DATE:____________________

ADEC________________________________________ FOSC________________________________

EXXON________________________________________

USCG__________________________________________

NOAA__________________________________________
ECOLOGICAL CONSTRAINTS
1991 FIELD ACTIVITIES

Eagle Nest: Access restricted from 3/1 to 9/1. USF&WS authorization required. Maintain 1000' vertical and 1/4 mile horizontal buffer.

Anadromous Stream: Unlimited treatment up to stream bank between May 15 and July 10. ADF&G approval required for work after July 10. Fish Habitat Permit required for instream work. ADF&G approval required for bioremediation within 100 meters of anadromous stream after July 10.
**TEAM NO.**

**SEGMENT**  

**CU-7**

**SUBDIVISION**  

**A**

**DATE**  

**5/3/91**

---

**ADEC**

**NAME**  

JEFF GINNARIS

**SIGNATURE**

- **TREATMENT RECOMMENDED**

  - Asphalt/mousse patch at site #2 of OC map. Area is readily accessible and oil easily recoverable from surface. Oil located unit at low energy area on beach protected. Does not appear that wave action will affect area.

  - Treatment suggested manual - small crew (3-5 persons) shovels, brushes, oil to be removed. Recommend treatment at mid tide or just before, as lower tide reduces human impact and handling of equipment. Tilling will not remove oil at low energy beach.

---

**EXXON**

**NAME**  

EDNA B. BOUZAN

**SIGNATURE**

- Oil will settle back onto beach.

---

**LANDMANAGER**

**NAME**  

MARSHA HALL

**SIGNATURE**

- Recommended small patches of patches smeared in the back of the segment close to a stream run-off. Recommend no action due to future influence of sensitive area would gain no net benefit.

---

**USCG/NOAA**

**NAME**  

SEAN J. CHILDS

**SIGNATURE**

- Further removal operations would cause more environmental harm than the oil to be removed.

---

**LOW ANGLE CP BEACH**

- Pounded both sides by vertical beaers X's.

- Frozen pond dammed up by storm swell - surface oil can't get out.

- Patches as found in rooks NE'ly & SW'ly - sheen observed in Li & ½ Mi off up beach face - numerous pits along up oil is failed to disclose source of sheen.
MAYSAP SHORELINE OILING SUMMARY

TEAM NO. OG: A. MACDONALD  bio: M. FAWCETT
ADEC: J. GINNALS  LANDMANAGER: M. HALL  for INL
XON: F. BOX  USCG/NOAA: SENSEN/CHILD

TIME: 10:30 to 11:30  DATE: 5/3/91

X.FOOT  BOAT  HELO  SURVEYED FROM: 345
WEATHER: SUN  CLOUDS  FOG  RAIN  SNOW
ENERGY LEVEL:  X

TIDE LEVEL: 1/4 ft. to 3/4 ft.
TOTAL LENGTH SHORELINE SURVEYED: ___ m
NEAR SHORE SHEEN:  X
EST. OIL CATEGORY LENGTH: ___ m

<table>
<thead>
<tr>
<th>L</th>
<th>SURFACE OIL CHARACTER</th>
<th>SURFACE SEDIMENT</th>
<th>SHORE SLOPE</th>
<th>AREA LENGTH</th>
<th>ZONE</th>
<th>NOTES</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>AP MB TB SR CV CT ST FL DB NO</td>
<td>TYPE</td>
<td>V H M L</td>
<td>m</td>
<td>m</td>
<td>S</td>
</tr>
<tr>
<td>A1</td>
<td>S S</td>
<td>BE</td>
<td>M</td>
<td>2</td>
<td>15</td>
<td>X</td>
</tr>
<tr>
<td>A2</td>
<td>S</td>
<td>B</td>
<td>H</td>
<td>1</td>
<td>25</td>
<td>X</td>
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</table>

DISTRIBUTION: C = 91-100%; B = 51-90%; P = 11-50%; S = 1-10%; T = <1%

SLOPE: V = VERTICAL; H = HIGH ANGLE; M = MEDIUM ANGLE; L = LOW ANGLE
PHOTO ROLL: MAYSAP_1434
FRAMES: 8-12

<table>
<thead>
<tr>
<th>PIT NO.</th>
<th>SUBSURFACE OIL CHARACTER</th>
<th>OILED ZONE</th>
<th>OILED H2O LEVEL</th>
<th>SHEEN COLOR</th>
<th>PIT ZONE</th>
<th>SURFACE-SUBSURFACE SEDIMENTS</th>
<th>NOTES</th>
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<tbody>
<tr>
<td>1 30</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>CP-POM</td>
<td>trace of bit</td>
<td></td>
</tr>
<tr>
<td>2 20</td>
<td>X</td>
<td>-</td>
<td>B</td>
<td>N</td>
<td>CP-POM</td>
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<td></td>
</tr>
<tr>
<td>3 20</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>CP-POM</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SHEEN COLOR: B = BROWN; R = RAINBOW; S = SILVER; N = NONE

OG COMMENTS: Small bay w/ steep rocky shore enclosing broad, low c. beach. Series of CP were ridges in litt & MTZ. Remnant surface oil found e & s sides, as MS/LS, CT/PIT. Rare silver sheen noted flushing from springline @ MTZ. Local bitting upslp found no surface or subm. source.

REVIEWED: 5/3/91 MC
END REVIEW: 5/7/91 MC
DATE 3 May 91

TIDAL HEIGHT (Range) -1.0 to -0.3 ft

BIOLGIST Michael Fawcett

WIND SPEED/DIRECTION NE 0-5 knots

WILDLIFE OBSERVATIONS (to be completed in oiled subdivisions only):

This protected, low energy cove has a small, deep lake in the backshore area. Feeding what appears to be a suitable, though small, stream for anadromous fish (pink, silver, possibly red salmon). Only traces of residual oil coat found in depauperate supra-tidal area near the stream. Patches of asphalts/mosses were found among boulders in the UTZ on the northeast side of the cove. Among sparse isopods (Ligia pallasi), and limpets (Notoacena persona), a wide boulder/cobble beach extends downshore from the oiled area. Barnacles and limpets seem to occur 6-8 m downshore from the oil, and a dense mussel bed with scattered rockweed, barnacles, rhodomela, and typical cryptic species (limpets, hermit crabs, isopods, etc.) occurs about 20 m downshore from the oil at about -5 to +7 ft MLLW. Posidonia dominates the area below +5 ft.

WILDLIFE OBSERVATIONS
TO BE COMPLETED IN ALL SUBDIVISIONS

<table>
<thead>
<tr>
<th>BIRDS</th>
<th># OF SPECIES</th>
<th>TOTAL BIRDS</th>
<th>FISH OBSERVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eagles</td>
<td>(1) Jedd Inyen (1)</td>
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</tr>
<tr>
<td>Seabirds</td>
<td>(1) double-crested cormorant</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Waterfowl</td>
<td>(1) Barrows goldeneye</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Gulls/Kittiwakes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shorebirds</td>
<td>(1) semi-palmated plover</td>
<td>*20</td>
<td></td>
</tr>
<tr>
<td>Corvids</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Birds</td>
<td>(1) American robin</td>
<td>10</td>
<td></td>
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</table>

MARINE MAMMALS

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<thead>
<tr>
<th></th>
<th># OBSERVED</th>
<th>SPECIES</th>
<th># OBSERVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sea Otters</td>
<td></td>
<td>deer</td>
<td>bones of two deer</td>
</tr>
<tr>
<td>Pinnipeds(specify)</td>
<td>1</td>
<td>harbor seal</td>
<td>in backshore by lake</td>
</tr>
<tr>
<td>Whales(specify)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

LAND MAMMALS

Shoreline subdivision map showing important biological features attached.
Sparse limpets and isopods beneath boulders near AP/MS, sparse barnacles, limpets 6-8 m downshore, dense mussel bed + rockweed, Rhodoma, 20 m downshore, sparse barnacle spot throughout area from waterline (-1.3 ft) to +1 ft.

**Barefoot Goldeneye**

track's sheen in water flushing
MTZ

**Harbor's**

KEY

- Steam
- Water flowing
- Beach face

**CT S**

**AP, MS, S**

*Dead eagle*

* * * * *

* pond

partly frozen *

* * *

* * *

Traces of CT 14
Supra-tidal zone.
No biota except black lichen nearby

* * * *

Swash ridges

Anadromous fish stream

BC

Sleep R

CP

BC/R

Trails of CT 14
Supra-tidal zone.
No biota except black lichen nearby

broad rocky promontory
CU 007A 3 May 91: Fawcett

Apr 1830

- 50 m down slope of 30 R bank
- Sparse barnyard, little, amphibious, few more
- About 20m downstream 1.7 ft
- Begins dense natural belt - sedge
- Stream flows, falls
- Dead fish from +5 dam
- Tides at -17
- Tides at every everywhere
- Up to ~0 ft

1. Harbor
2. Dead ground
3. Snag.
4. Bokes
5. End of bents blocking
- 2 deer carcasses in bents
- Stream closer like a boat
- Small shred stream
- For many silvers

- Spermades x 24 (some spotted)
REGION: PRINCE WILLIAM SOUND

SEGMENT: CU-07

SUBDIVISIONS: A (1 OF 1)
SEGMENT ST/ CU-07  SUBDIVISION A (1 OF 1) DATE  4/4/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Salmon stream mouth (ADF&G catalogue 224-20-13010) - fry outmigration (1A) - 3/1 to 5/15 and spawning (1B) - 7/10 to 8/31; active bald eagle nest (5T) - 3/1 to 6/1; recreation special use designation (6Y) - 6/1 to 9/15.

SUBDIVISION ECOLOGICAL CONSTRAINTS: (1A, 1B) No disturbance of stream bed or banks unless authorized by ADF&G. Contact ADF&G Habitat Division prior to treatment for permits. (5T) Restrict air traffic to essential minimum. Air approach and takeoff from and to seaward only. Contact USFWS prior to treatment for confirmation of dates and avoidance minimums.

ARCHAEOLOGICAL CONSTRAINTS: If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact a member of Exxon's Cultural Resource Program immediately (564-3657; 564-3658 or 564-3276).

SHPO SIGNATURE: __________________ DATE: ______________________

OILING CATEGORIZATION:

Wide 0 m; Medium 0 m; Narrow 0 m; V.Light 113 m; No Oil 696 m
Subsurface Oil Observed: Yes X No Maximum Depth

RECOMMENDATIONS:

____ No Treatment Recommended  ____ Snare/Absorbent Booms
X Treatment Recommended  ____ Oil Snares (pom poms)
X Manual Pickup  ____ Absorbents (pads, rolls, etc)
X Bioremediation  ____ Spot Washing: ____ Wands
____ Tarmat: ____ Breakup  ____ Beach Cleaner
____ Removal  ____ Other (see comments)

COMMENTS: Pick up sporadic tarballs. Bioremediation of areas shown on sketch map. Work between 6/1 and 7/10.

TAG COMMENTS: ________________________________________________________

TAG APPROVAL DATE: __________

ADEC __________  FOSC: __________ DATE: __________

EXXON __________

NOAA __________

USCG __________
FIELD SHORELINE COMMENT SHEET

SEGMENT: CU-07  SUBDIVISION: A-1 of 1  DATE: 04/04/9

USCG  NAME: David E. Thomas  SIGNATURE:  

[ ] NO TREATMENT RECOMMENDED  [X] TREATMENT SUGGESTED

COMMENTS:

[ ] NO TREATMENT RECOMMENDED  [X] TREATMENT SUGGESTED

COMMENTS:

ADEC  NAME: Clara J. Crosby  SIGNATURE:  Clara J. Crosby

COMMENTS:

[ ] NO TREATMENT RECOMMENDED  [X] TREATMENT SUGGESTED

COMMENTS:

LAND MANAGER  NAME: Marsha Martin/DNR  SIGNATURE:  Marsha Martin

COMMENTS:

[ ] NO TREATMENT RECOMMENDED  [X] TREATMENT SUGGESTED

COMMENTS:

For both areas marked on map.

For both areas marked on map.

Beware that the lake against the storm berm gets occasional inundation from storms. Snow covered still, many washed up logs in one section adjacent to berm.
SHORELINE OILING SUMMARY

OG: Rick Gillie  USCG  6M  Thomas  SEGMENT ST/    CU-07
BIO: Dave Lopez  LAND REP  Marshé Martin  SUBDIVISION A, 114
TEAM NO.:  13  TIDE LEVEL:  +1  16  +2  DATE  04/04/90
EST. SUBDIVISION LENGTH:  514 m  X  Sun  □  Clouds  □  Fog  □  Rain  □  Snow
UPLANDS DESCRIPTION:  □  Grass  □  Forest  □  Rock  □  Snow
SURVEYED FROM:  □  Foot  □  Boat  □  Helo  WORKING DIRECTION:  S  to  N
SURFACE SEDIMENTS:  R  30% B  20% C  20% P  30% G  0% S  0% M  0% V  0% SLOPE:  Lang  60% Hang  30% Vert  10%  WAVE EXPOSURE:  □  Low  □  Med  □  High
OIL CATEGORY LENGTH:  W  0 m M  0 m N  0 m VL 40 m NO 444 m

SURFACE OIL

<table>
<thead>
<tr>
<th>CHARACTER</th>
<th>DISTRIBUTION</th>
<th>OIL / FILM COLOR</th>
<th>IMPACTED ZONES</th>
</tr>
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<tbody>
<tr>
<td>ASPHALT</td>
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<tr>
<td>PAVEMENT</td>
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<td>POOLED</td>
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<tr>
<td>COVER</td>
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<td>STAIN</td>
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<td>MOUSSE</td>
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<td>PATTIES</td>
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<tr>
<td>TARBALLS</td>
<td>X</td>
<td>X</td>
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</tbody>
</table>

PAVEMENT:  H  F  S  N/A sq. m by ___ cm
PATTIES / TARBALLS:  O  I  BAGS
NEAR SHORE SHEEN?:  NO  BR  RW  SL  TL

OILED DEBRIS AMOUNT

Logs
Vegetation
Trash
Debris

Photographs:
Roll No.:  ST-13-2
Frames:  18-20

SUBSURFACE OIL

<table>
<thead>
<tr>
<th>PIT NO.</th>
<th>PIT DEPTH (cm)</th>
<th>SUBSURFACE OIL CHARACTER</th>
<th>OILED INTERVAL</th>
<th>OILED DEBRIS</th>
<th>AMOUNT</th>
<th>SUBSURFACE SEDIMENTS</th>
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</table>

COMMENTS (GENERAL)

OILING:  V. LIGHT CT/S ON NORTH AND SOUTH SIDES OF BAY NEAR BEACH ON COBBLE/BOULDER SUBSTRATE.

Page 1 of 1
REVIEWED  DATE  4-7-90
SHORELINE ECOLOGICAL SUMMARY

Segment ST / 1U 007 Subdivision  A  Date (mo / day / yr)  4-4-90

Time (24 hr)  16:50  Biologist  David Luna

(A) Substrate type and % of segments:
   (1) Bedrock  30 (2) Boulder  20 (3) Cobble  20 (4) Pebble  30 (5) Sand  60

(B) Overall % cover of biota (% of segment):
   Dense  10  Moderate  50  Low  40

(C) Density, substrate preference (by number from A, above), & vertical zonation of major taxa:
   (upper-U; mid-M; low tidal-L):
   - juveniles / adults (X)
   - new settlement (X)

BARNACLES

<table>
<thead>
<tr>
<th></th>
<th>Dense</th>
<th>Moderate</th>
<th>Sparse</th>
<th>Rare</th>
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MYTILUS

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GASTROPODS

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Wildlife Observations / General Comments:
1. present in low tidal - Eutéchomph, Anthopleura, Nucella, Nucella egg cases
2. high tidal - Eutéchoma, Nucella, beach hoppers under cobbles (Orchestoides?)

Ecological Considerations: 2. Ducks spotted in area

5T- no comment
5T - none observed
CU-7

XXX Wide

///// Medium

--- Narrow

TTTT Very Light

ADEC Segment Length: 445m

Map Key: PWS-85
Name: GILLIE
Date: 4-4-90
ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/ CU-07  STREAM NO: 224-20-13010  DATE 4/26/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
1A  Salmon stream mouth - fry outmigration (3/1 to 5/15)
1B  Salmon stream mouth - spawning (7/10 to 8/31)
5T  All bald eagle nests (3/1 to 6/1) - Active eagle nests (3/1 to 9/1)
   Eagle nest within 400 M of subject segment.
6Y  Recreation: Special use destination
   See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:
Avoid any unnecessary disturbance or damage to unoiled biota and substrate. Subject stream is located within Subdivision A (1 of 1).

ARCHAEOLOGICAL CONSTRAINTS:
If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO SIGNATURE: [Signature]  DATE: 5/9/90
Subsurface Oil Observed: Yes   No X  Maximum Depth____

RECOMMENDATIONS:
   X  No Treatment Recommended    Snare/Absorbent Booms
   ___ Treatment Recommended    Oil Snares (pom poms)
   ___ Manual Pickup    Absorbents (pads, rolls, etc)
   ___ Bioremediation    Spot Washing: Wands
   ___ Tarmat Removal    Beach Cleaner
   ___ Other (see comments)

COMMENTS: _________________________________
   _________________________________
   _________________________________
   _________________________________

TAG COMMENTS: _________________________________
   _________________________________
   _________________________________
   _________________________________

TAG APPROVAL DATE: 5/9/90
ADEC  ART WEINER  DATE: 5/9/90
EXXON  ANN TAYLOR  DATE: 5/9/90
NOAA  Bud Westcott  DATE: 5/9/90
USCG  D D Rome  DATE: 5/9/90
ECOLOGICAL MAP

CU-007-A
1c+F1
1A,1B
5F
6Y

PREHISTORIC ARTIFACTS
TIESAN
174 20 -13010
(23, 3190)
LIMITS IN SUBDIVISION A (S. OF T)

RAJ

(SEWARD C-4)
pH 7.38 w/m²/l

Recommendation: No treatment required

**Oil Distribution Diagram**

Sample taken
ADDENDUM: SUBDIVISION CONSTRAINTS

SEGMENT CU-7 SUBDIVISION A (1 of 1)

---

**WORK WINDOW**

| Manual Pickup Less Than 400m From Eagle Nest | CLOSED |
| Manual Pickup More Than 400m From Eagle Nest | OPEN |
| Bioremediation Less Than 400m From Eagle Nest | CLOSED |
| Bioremediation More Than 400m From Eagle Nest | OPEN |
| Bioremediation Less Than 100m From Stream | WORK PRIOR TO 7/10 |
| Bioremediation More Than 100m From Stream | OPEN |

---

**ARCHAEOLOGICAL STANDARD CONSTRAINT**

If cultural resources are uncovered, PHONE 564-3274.

---

**APPLICABLE ECOLOGICAL TIME CONSTRAINTS**

**1A,1B Salmon Stream**

ADF&G catalogued anadromous stream (224-20-13020) is present in the Subdivision. This subdivision is closed to bioremediation less than 100m from stream 7/10 to 8/31. Before 7/10, bioremediation is permitted less than 100m from stream with on-site ADF&G monitor or ADEC alternate present. No constraint to bioremediation more than 100m from stream.

**5T Bald Eagle Nests**

USFW 6/1/90 map indicates an active nest in Subdivision B. Closed to manual pickup and bioremediation within 400m of active nest. No constraints more than 400m from nest.

---

**OTHER ECOLOGICAL CONSIDERATIONS**

No disturbance to stream bed or banks. No flushing of pollutants or sediments into stream drainage; do not allow inpol to enter stream flow. On-site examination and consultation by ADF&G monitor is required prior to bioremediation in order to authorize a setback distance from the stream during chemical application; if ADF&G monitor's presence is impossible, authorization may be given by the ADEC monitor. Restrict air traffic and all disturbance to essential minimum. No personnel or boat traffic within 400m of active nests. Air approach and takeoff from and to seaward only; maintain 400m horizontal, 300m vertical distance from active nests. Avoid any unnecessary disturbance or damage to unrolled biota and substrate.

---

**SEE ANADROMOUS FISH STREAM EVALUATION ADDENDUM (STREAM NO. 224-20-13020) FOR ADDITIONAL CONSTRAINT INFORMATION**

---

FOSC [Signature] Date 6-10-90
SHORELINE EVALUATION

SEGMENT ST/CU-07 SUBDIVISION A (1 OF 1) DATE 4/4/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Salmon stream mouth (ADF&G catalogue 224-20-13010) - fry outmigration (1A) - 3/1 to 5/15 and spawning (1B) - 7/10 to 8/31; active bald eagle nest (5T) - 3/1 to 6/1; recreation special use designation (6Y) - 6/1 to 9/15.

SUBDIVISION ECOLOGICAL CONSTRAINTS: (1A, 1B) No disturbance of stream bed or banks unless authorized by ADF&G. Contact ADF&G Habitat Division prior to treatment for permits. (5T) Restrict air traffic to essential minimum. Air approach and takeoff from and to seaward only. Contact USFWS prior to treatment for confirmation of dates and avoidance minimums.

ARCHAEOLOGICAL CONSTRAINTS: If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact a member of Exxon's Cultural Resource Program immediately (564-3657; 564-3658 or 564-3276).

SHPO SIGNATURE: [Signature] DATE: April 14, 1990

OILING CATEGORIZATION:
Wide 0 m: Medium 0 m: Narrow 0 m: V. Light 113 m: No Oil 696 m
Subsurface Oil Observed: Yes____ No_X Maximum Depth____

RECOMMENDATIONS:
_____ No Treatment Recommended _____ Snare/Absorbent Booms
X Treatment Recommended _____ Oil Snares (pom poms)
X Manual Pickup _____ Absorbents (pads, rolls, etc)
X Bioremediation _____ Spot Washing: __ Wands
_____ Tarmat: ____ Breakup _____ Remoal
_____ Removal Beach Cleaner
Other (see comments) [Comment: Pick up sporadic tarballs, Bioremediation of areas shown on sketch map. Work between 6/1 and 7/10.]

COMMENTS: See Constraint Addendum dated 6/6/90

TAG COMMENTS: Monitors to assess seaward side of the lane indicated on the sketch map

TAG APPROVAL DATE: 4/13/90
ADEC [Signature] [Signature]
EXXON [Signature] [Signature] POSC: __________ DATE:________
NOAA [Signature] [Signature] [Signature]
USCG [Signature] [Signature] [Signature]
SHORELINE EVALUATION

SEGMENT ST/ CU-07    SUBDIVISION A (1 OF 1) DATE 4/4/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
Salmon stream mouth (ADF&G catalogue 224-20-13010) - fry outmigra-
tion (1A) - 3/1 to 5/15 and spawning (1B) - 7/10 to 8/31; active
bald eagle nest (5T) - 3/1 to 6/1; recreation special use designa-
tion (6Y) - 6/1 to 9/15.

SUBDIVISION ECOLOGICAL CONSTRAINTS: (1A, 1B) No disturbance of
stream bed or banks unless authorized by ADF&G. Contact ADF&G
Habitat Division prior to treatment for permits. (5T) Restrict air
traffic to essential minimum. Air approach and takeoff from and to
seaward only. Contact USFWS prior to treatment for confirmation of
dates and avoidance minimums.

ARCHAEOLOGICAL CONSTRAINTS: If cultural resources are uncovered
during shoreline treatment, stop work in the vicinity, mark the
location of the find and contact a member of Exxon's Cultural Re-
source Program immediately (564-3657; 564-3658 or 564-3276).

SHPO SIGNATURE: [Signature]   DATE: April 14, 1990

OILING CATEGORIZATION:
Wide 0_m: Medium 0_m: Narrow 0_m: V.Light 113 m: No Oil 696 m
Subsurface Oil Observed: Yes____ No_X  Maximum Depth____

RECOMMENDATIONS:
____ No Treatment Recommended       ___ Snare/Absorbent Booms
_X__ Treatment Recommended           ___ Oil Snare (pom poms)
_X__ Manual Pickup                    ___ Absorbents (pads, rolls, etc)
_X__ Bioremediation                   ___ Spot Washing: _Wands
____ Tarmat: ___ Breakup              ___ Wands:
____ Removal                          ___ Beach Cleaner
____ Other (see comments)

COMMENTS: Pick up sporadic tarballs. Bioremediation of areas
shown on sketch map. Work between 6/1 and 7/10.

TAG COMMENTS: _Monitors to assess seaward side of the lake
indicated on the sketch map.

TAG APPROVAL DATE: 4/13/90
ADEC [Signature]   DATE: 4-10-90
EXXON [Signature]   FOSC: [Signature]   DATE: 4-10-90
NOAA [Signature]   USCG [Signature]
REGION: PRINCE WILLIAM SOUND

SEGMENT: ST/CU-08

SUBDIVISIONS: A (1 OF 1)
SHORELINE EVALUATION

SEGMENT ST/___CU-08____ SUBDIVISION A (1 OF 1) DATE __4/24/90____

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

- ADF&G anadromous stream no. 224-20-13014 (Ps, 2/90)
- 1A Salmon stream mouth - fry outmigration (3/1 to 5/15)
- 1B Salmon stream mouth - spawning (7/10 to 8/31)
- 5T-1 All bald eagle nests (3/1 to 6/1) - Active eagle nests (3/1 to 9/1)
- and an eagle nest within 400M in adjacent segment to north.
- 6Y Recreation: Special use destination

See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:
Avoid any unnecessary disturbance or damage to unoiled biota and substrate.

ARCHAEOLOGICAL CONSTRAINTS:
If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO SIGNATURE:_________________________ DATE:________________________

OILING CATEGORIZATION:

- Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 0 m: No Oil 625 m
- Subsurface Oil Observed: Yes____ No X____ Maximum Depth_______

RECOMMENDATIONS:

- X No Treatment Recommended
- ____Treatment Recommended
- ____Manual Pickup
- ____Bioremediation
- ____Tarmat Removal
- ____Snare/Absorbent Booms
- _____Oil Snares (pom poms)
- ____Absorbents (pads, rolls, etc)
- ____Spot Washing:____ Wands
- ____Beach Cleaner
- ____Other (see comments)

COMMENTS:______________________________________________________________

________________________________________________________________________

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TAG COMMENTS:__________________________________________________________

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________________________________________________________________________

TAG APPROVAL DATE:____________________

ADEC _____________________________ EXXON ___________________________

NOAA _____________________________ USCG _____________________________

FOSC:____________________ DATE:____________________
Salmon stream mouth - fry outmigrating (3/1 to 6/15)

Salmon stream mouth - spawning (7/10 to 6/31)

No disturbance of stream bed or banks unless authorized by ADF&G. No beach flushing into stream drainage. No bioremediation or other chemical application within 100m of stream without authorization from ADF&G. No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or in-situ application, prior to at least July 1 unless authorized by ADF&G. Treatment which is not intrusive and which will not affect nearshore oil or toxicity levels, such as manual removal, can probably proceed without adherence to time constraints. In any case, contact ADF&G Habitat Division prior to treatment for consultation and/or permit application.

AGENCY CONTACT PERSON: ADF&G John Morison 267-2324

Salmon fry nursery area (7/31 to 7/31)

No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or in-situ application, prior to July 31 unless authorized by ADF&G. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G prior to treatment for confirmation and advice.

AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214

Esther Hatchery release (4/15 to 6/15)

Main Bay Hatchery release (4/20 to 6/15)

Sawmill Bay Hatchery release (4/15 to 6/1)

Cannery Creek Hatchery release (4/21 to 6/1)

Remote release site

No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or in-situ application, prior to at least July 1 unless authorized by ADF&G and/or PWS Aquaculture Association. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G or PWS Aquaculture Association for confirmation and authorization.

AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214

Gill net area (8/7 to 8/31)

Purse seine area (7/20 to 9/30)

Purse seine hook-off (7/20 to 9/30)

Set net sites (6/11 to 7/25)

Contact ADF&G for specific dates, locations and constraints. Restrict boat and air traffic to essential minimum. When set net sites are present (1L) restrict beach operations to essential minimum as authorized by ADF&G. If plans for treatment include methods such as hot water wash or in-situ application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.

AGENCY CONTACT PERSON: ADF&G James Brady 242-3212

Herling spawning (4/1 to 6/15)

Contact ADF&G for confirmation - dates and locations may vary. Restrict boat traffic to essential minimum. Avoid damage to unseeded intertidal and subtidal algae and seaweed. If plans for treatment include methods such as hot water wash or in-situ application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.

AGENCY CONTACT PERSON: ADF&G Evelyn Biggs 424-3235

Harbor seal and sea lion pupping (5/15 to 7/1)

Harbor seal and sea lion molting (6/15 to 9/15)

Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts. No application of in-situ wash within two weeks of arrival dates. All treatment is limited to 1/2 to 7/31. Contact ADF&G and USFWS prior to treatment for confirmation.

AGENCY CONTACT PERSON: USFWS Steve Zimmerman 566-7235

Seabird colony (5/1 to 9/1)

Restrict air and boat traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m vertical distance from colony. Contact USFWS prior to treatment.

AGENCY CONTACT PERSON: USFWS Jill Parker 788-3377

Shorebird/waterbird concentrations (4/1 to 5/15)

Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.

AGENCY CONTACT PERSON: USFWS Jill Parker 788-3377

All Bald Eagle nests (3/1 to 6/1)

Active Bald Eagle nests (3/1 to 9/1)

Restrict air traffic and all disturbance to essential minimum. No personnel within 400m 3/1 to 6/1. Air approach and takeoff from and to seaward only; maintain 800m horizontal, 300m vertical distance from nests. Contact USFWS prior to treatment for confirmation of dates.

AGENCY CONTACT PERSON: USFWS Jill Parker 788-3377

Recreation:

Tent sites (6/1 to 6/15)

Anchorage (6/1 to 9/15)

Forest Service cabins (6/1 to 9/15)

Lodge (6/1 to 9/15)

Special use destination

Subsistence area: Salmon harvesting (5/1 to 9/30)

Finfish harvesting

Deer harvesting (6/15 to 2/25)

Invertebrate harvesting

Contact ADF&G and appropriate Native Corporation for specific dates, locations, and constraints. Restrict boat and air traffic and beach disturbance to essential minimum. If plans for treatment include methods such as hot water wash or application of in-situ wash which might affect intertidal or nearshore oil or toxicity levels, contact ADF&G and appropriate Native Corporation for authorization - see Native Corporation Contact List for each Native Corporation's contact person.

AGENCY CONTACT PERSON: ADF&G Jim Fell 267-2359
FIELD SHORELINE COMMENT SHEET

SEGMENT ST / CU-08 SUBDIVISION: A DATE 4/24/90

NAME: Scott Ramishord SIGNATURE: Scott Ramishord

NO TREATMENT RECOMMENDED  TREATMENT SUGGESTED

COMMENTS

ADEQ NAME: Lori J. Stratton SIGNATURE: Lori J. Stratton

NO TREATMENT RECOMMENDED  TREATMENT SUGGESTED

COMMENTS: Cobble and pebble beaches with boulder and bedrock borders. Eliminate this segment. No oil was observed except one dull black coat splashed on a boulder at UI.

No treatment is recommended due to lack of sig. oil.

LAND MANAGER

NAME: U.S. Forest Service SIGNATURE: Forest Service

NO TREATMENT RECOMMENDED  TREATMENT SUGGESTED

COMMENTS:

Only oil found was one small splatter. No Treatment Recommended.
SHORELINE OILING SUMMARY

OIL CATEGORY | LENGTH (m) | M | N | W | VI.
---|---|---|---|---|---

SURFACE OIL

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PAVEMENT

- P | S | F | H | S

PATTIES / TARBALLS

- BAGS

NEAR SHORE SHEEN?

- No

OILED DEBRIS

- Log
- Vegetation
- Trash
- Debris

AMOUNT

- DMT

Did you collect debris?

- Yes
- No

Photographs:

- Roll No.
- Frames

SUBSURFACE OIL

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SURFACE-OILS

- 28 PGP C
- 31 PSC

COMMENTS

Exposed rocky shore w/ mod. c. cpg beach. Single splash of tar was observed @ NE end of segment.

No oil.

REVIEWED DATE 4/26/90
SHORELINE ECOLOGICAL SUMMARY

Segment ST/CN-B Subdivision A ____________________________ Date (mo/day/yr) 4/24/90

(24 hr) 1915-1955 Biologist MAAScott

(A) Substrate type and % of segments:
   (1) Bedrock (2) Boulder (3) Cobble (4) Pebble (5) Sand (6) Silt

(B) Overall % cover of biota (% of segment): Dense 70 Moderate 35 Low 5

(C) Density, substrate preference (by number from A, above), & vertical zonation of major taxa: (upper-U; mid-M; low tidal-L):

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Wildlife Observations/General Comments: (observation = count in shad)
6 eagles - rock/bld headlands separated by cobble cuts (cobble = no brain)
2 gulls - eagle nest on eco-map not observed
1 seal

Ecological Considerations:

- Anomalous stream - extensive cobble/pebble area at mouth
- Eagle nest on eco-map not observed; suspect additional nests at mouth and of segment (behavior of pair of eagles)
- Rock/bld - moderate density and diversity; Fucus reproductive, barnacles flat throughout
- Mytilus, dense patches with 3 & 6 in crevices/edge of bed; small tide pools on mudflats (density = diversity slightly greater than CN-B4)
ECOLOGICAL MAP

BALD EAGLE NESTS

AMPHIBIOUS STREAM + 224-20-13014

CU-8

XXX Wide
/// Medium
---- Narrow
TTTT Very Light
0000 No Oil

Map Key: PWS-86
Name: GM
Date: 1-24-90
Date Entered:
SHORELINE EVALUATION

SEGMENT ST/ CU-08 SUBDIVISION A (1 OF 1) DATE 4/24/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

ADF&G anadromous stream no. 224-20-13014 (Ps, 2/90)
1A Salmon stream mouth - fry outmigration (3/1 to 5/15)
1B Salmon stream mouth - spawning (7/10 to 8/31)
5T-1 All bald eagle nests (3/1 to 6/1) - Active eagle nests (3/1 to 9/1)
and an eagle nest within 400M in adjacent segment to north.
6Y Recreation: Special use destination
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:
Avoid any unnecessary disturbance or damage to uncoiled biota and substrate.

ARCHAEOLOGICAL CONSTRAINTS:
If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO SIGNATURE: ___________________________ DATE: 5/3/90

OILING CATEGORIZATION:

Wide 0_ m: Medium_ 0_ m: Narrow_ 0_ m: V.Light_ 0_ m: No Oil_ 625_ m
Subsurface Oil Observed: Yes ___ No _X__ Maximum Depth __________

RECOMMENDATIONS:

_X__ No Treatment Recommended
___ Treatment Recommended
___ Manual Pickup
___ Bioremediation
___ Tarmat Removal

Snare/Absorbent Booms
Oil Snare (pom poms)
Absorbents (pads, rolls, etc)
Spot Washing: Wands
Beach Cleaner
Other (see comments)

COMMENTS: _____________________________________________________________

_____________________________________________________________________

_____________________________________________________________________

TAG COMMENTS: ____________________________________________________

_____________________________________________________________________

TAG APPROVAL DATE: 5/3/90
ADEC ___________ EXXON ___________ NOAA ___________ USCG ___________

FOSC: ___________ DATE: 5-8-90
**Checklist**
- N Area
- Appx. Scale
- Bog/Sea Sandy
- Oil Dist.
- Width
- Length
- % Cover
- Substrate Character

**Legend**
1. At
   - No Subsurface Oil
2. 2 At
   - Subsurface Oil

**CT/C**
- Continuous Distribution

**CT/B**
- Broad Distribution

**CT/P**
- Patchy Distribution

**CT/S**
- Splashed Distribution

**Oil Vegetation**
- Oil Location, direction, and numbers

- Submerged rocks

**Sketch Map**
- Wave action
- Beach
- Mod. L., Hi. Exposure
- HWL approx
- Mod. Shee rocky shore
- 1840 HRS
- 1855 HRS
- Dene DBL dip (1)
- 1/2 M rock wall
- RB, polished
- Rounded

**Scale**
- 0 100 200 m

**Oil Character Length (m)**: AP — PO — CV — CT — BT — VS — PT — TB — FL — NO — CSO
REGION: PRINCE WILLIAM SOUND

SEGMENT: ST/CU-09

SUBDIVISIONS: A (1 OF 1)
SEGMENT ST/ CU-09 SUBDIVISION A (1 OF 1) DATE 4/24/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
- 5T-1 All bald eagle nests (3/1 to 6/1) - Active eagle nests (3/1 to 9/1)
- 6Y Recreation: Special use destination

See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECological CONSTRAINTS:
Avoid any unnecessary disturbance or damage to unoiled biota and substrate.

ARCHAEOLOGICAL CONSTRAINTS:
If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO SIGNATURE: ______________________ DATE: ______________________

OILING CATEGORIZATION:
Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 39 m: No Oil 1264 m

Subsurface Oil Observed: Yes No X

Maximum Depth

RECOMMENDATIONS:
- X No Treatment Recommended
- _____ Treatment Recommended
- _____ Manual Pickup
- _____ Bioremediation
- _____ Tarmat Removal
- _____ Snare/Absorbent Booms
- _____ Oil Snares (pom poms)
- _____ Absorbents (pads, rolls, etc)
- _____ Spot Washing: Wands
- _____ Beach Cleaner
- _____ Other (see comments)

COMMENTS: ______________________

TAG COMMENTS: ______________________

TAG APPROVAL DATE: ______________________

ADEC
EXXON
NOAA
USCG

FOSC: __________ DATE: ______

NOAA
USCG
Salmon stream mouth - fry outmigration (3/1 to 5/15)
Salmon stream mouth - spawning (7/10 to 8/31)
No disturbance of stream bed or banks unless authorized by ADF&G. No beach flushing into stream drainage. No bioremediation or other chemical application within 100m of stream without authorization from ADF&G. No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inpol application, prior to at least July 1 unless authorized by ADF&G. Treatment which is not intrusive and which will not affect nearshore oil or toxicity levels, such as manual removal, can probably proceed without adherence to time constraints. In any case, contact ADF&G Habitat Division prior to treatment for consultation and/or permit application.

AGENCY CONTACT PERSON: ADF&G John Morison 267-2324

Salmon fry nursery area (7/31 to 7/31)
No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inpol application, prior to July 31 unless authorized by ADF&G. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G prior to treatment for confirmation and advice.

AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214

1D Esther Hatchery release (4/15 to 6/15)
1E Main Bay Hatchery release (4/20 to 6/15)
1F Seawall Bay Hatchery release (4/15 to 6/1)
1G Cannery Creek Hatchery release (4/21 to 6/1)
Remote release site
No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inpol application, prior to at least July 1 unless authorized by ADF&G and/or PWS Aquaculture Association. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G or PWS Aquaculture Association for confirmation and authorization.

AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214

Gill net area (6/7 to 6/31)
Gill seine area (7/20 to 9/30)
Gill seine hook-off (7/20 to 9/30)
Set net sites (8/11 to 7/25)
Contact ADF&G for specific dates, locations and constraints. Restrict boat and air traffic to essential minimum. When set net sites are present (1L) restrict beach operations to essential minimum as authorized by ADF&G. If plans for treatment include methods such as hot water wash or Inpol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.

AGENCY CONTACT PERSON: ADF&G James Brady 424-3212

Harbor seal and sea lion pupping (6/15 to 7/1)
Harbor seal and sea lion molting (8/15 to 9/15)
Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts. No application of Inpol within two weeks of arrival dates (work window at these sites is limited to 7/2 to 7/31). Contact ADF&G and USFWS prior to treatment for confirmation.

AGENCY CONTACT PERSON: USFWS Steve Zimmerman 586-7235
USFWS Don Catkins 267-2403

Seabird colony (5/1 to 9/1)
Restrict air and boat traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m vertical distance from colony. Contact USFWS prior to treatment.

AGENCY CONTACT PERSON: USFWS Jill Parker 796-3377

Shorebird/waterfowl concentration (4/1 to 5/15)
Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.

AGENCY CONTACT PERSON: USFWS Jill Parker 796-3377
USFWS Tom Putney 267-2206

All Bald Eagle nests (3/1 to 6/1)
Active Bald Eagle nests (3/1 to 6/1)
Restrict air traffic and all disturbance to essential minimum. No personnel within 400m 3/1 to 6/1. Air approach and takeoff from and to seaward only; maintain 800m horizontal, 300m vertical distance from nests. Contact USFWS prior to treatment for confirmation of dates.

AGENCY CONTACT PERSON: USFWS Jill Parker 796-3377

Recreation: Tent sites (8/1 to 9/15)
Anchorage (8/1 to 9/15)
Forest Service cabin (8/1 to 9/15)
Lodge (8/1 to 9/15)
Special use destination

Sublease area: Salmon harvesting (5/1 to 6/30)
Finfish harvesting
Invertebrate harvesting

Contact ADF&G and appropriate Native Corporation for specific dates, locations, and constraints. Restrict boat and air traffic and beach disturbance to essential minimum. If plans for treatment include methods such as hot water wash or application of Inpol which might affect intertidal or nearshore oil or toxicity levels, contact ADF&G and appropriate Native Corporation for authorization - see Native Corporation Contact List for each Native Corporation's contact person.

AGENCY CONTACT PERSON: ADF&G Jim Fall 267-2359
LAND MANAGER
NAME: R. S.erves, SANSIGUR: Zlerr (M.E.)

No TREATMENT RECOMMENDED
COMMENTS

Oil is on vertical face of large
boulders and in small protected
pockets. No sensitive resources in
the area.

Does not warrant physical treatment
or biological enhancement

Continue Natural Cleanup.
**SHORELINE OILING SUMMARY**

**SHORELINE OILING SUMMARY**

- **USCG**
- **SEGMENT**
- **SUBDIVISION**
- **DATE**
- **Team No.**
- **Tide Level**
- **DATE**

**ST. SUBDIVISION LENGTH:** 1620 m

**SURVEYED FROM:**
- Foot
- Boat
- Helo

**UPLANDS DESCRIPTION:**
- Grass
- Forest
- Rock

**SURFACE SEDIMENTS:**
- R: 30%
- B: 20%
- C: 15%
- P: 25%
- G: 10%
- S: 0%
- M: 0%
- D: 0%
- V: 0%
- %

**SLOPE:**
- Lang: 40%
- Hang: -%
- Vert: 60%

**WAVE EXPOSURE:**
- Low
- Med
- High

**OIL CATEGORY**
- LENGTH: W
- E:
- N:
- O:
- M:

**SURFACE OIL**

<table>
<thead>
<tr>
<th>CHARACTER</th>
<th>DISTRIBUTION</th>
<th>OIL / FILM COLOR</th>
<th>IMPACTED ZONES</th>
<th>PAVEMENT</th>
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**NEAR SHORE SHEEN?**
- No
- BR
- RW
- SL
- TL

**OILED DEBRIS**
- Logs
- Vegetation
- Trash
- Debris

**AMOUNT**
- DID YOU COLLECT DEBRIS?
  - Yes
  - No

**TYPE**
- #BAGS

**Photographs:**
- Roll No.
- Frames

**SUBSURFACE OIL**

<table>
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<tr>
<th>PIT NO.</th>
<th>PIT DEPTH (cm)</th>
<th>SUBSURFACE OIL CHARACTER</th>
<th>OILED DEBRIS</th>
<th>OIL / FILM COLOR</th>
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**COMMENTS**:
- Exposed rocky shore, partly scalloped w/ small pc boulders.
- Trace of surface oil at NE end of segment — crs and cv's
- in protected rock channel — driftlines and splashes plus
- 30 cm dia. CV patches on LG between boulders.
- No subsurface oil.

**REVIEWED**
- DATE
SUBDIVISION A

DATE: 4/24/90

CHECKLIST
- BLK
- Approx. Scale
- Seg/Sub Div.
- CB Dist.
- Well
- Length
- Percent Cover
- Substrate Character
- Est. HWL, WL
- SSL
- Profile Location(s)
- Post(s)
- Pit Location(s)
- Photo Location(s)

LEGEND
- 1A
- Pit - No Subsurface Oil
- 2A
- Pit - Subsurface Oil

SCALE
- 0 100 200 300 m

Sketch Map

- Trace tar chips <1", 2mm long e. of HHTZ
- BC/J below vert.
- Steep rocky shore
- Waterfall
- Scoured slope
- w/pc. pockets / surge gullies
- Set in vert. overhanging rock walls.
- 10m x 35m CT/S
- Trace CT/S; DRR/ABL
tar chips / splashers in B, stream channel in rock; @ up. HHTZ
- < 10% cover; low exposure in rock channel.

Oil Character Length (m): AP - PO - CV 20 CT 35 BT - MS - PT - TB - FL - NO 1595
**SHORELINE ECOLOGICAL SUMMARY**

Segment ST / CY-9  Subdivision A  Date (mo/day/yr) 4/25/92

(A) Substrate type and % of segments:
1. Bedrock
2. Boulder
3. Cobble
4. Pebble
5. Sand
6. Silt

(B) Overall % cover of biota (% of segment):
- Dense
- Moderate
- Low

(C) Density, substrate preference (by number from A, above), &
vertical zonation of major taxa: (upper-U; mid-M; low tidal-L):
- Juveniles/adults (X), new settlement (3)

**BARNACLES**

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**MYTILUS**

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**GASTROPODS**

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**Fucus**

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Wildlife Observations/ General Comments:
- 2 eagles
- 5% barnacle ear-rock wall
- 2 golden eyes

Ecological Considerations:
- Eagle nest (as located on "eco-map"), eagle in vicinity
- Boulders: very low diversity & density
- Rock/wet meadows: moderate density & diversity; appears to be slight increase in density & diversity from 10 east (200 ft inland through survey to CY-4A); dense patches of well established Mytilus (3 new settlement) new settlement of barnacles, Fucus

Photographs:
- Roll No.
- Frames
SHORELINE EVALUATION

SEGMENT ST/ CU-09 SUBDIVISION A (1 OF 1) DATE 4/24/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
- ST-1 All bald eagle nests (3/1 to 6/1) - Active eagle nests (3/1 to 9/1)
- 6Y Recreation: Special use destination
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:
Avoid any unnecessary disturbance or damage to unoiled biota and substrate.

ARCHAEOLOGICAL CONSTRAINTS:
If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO SIGNATURE: [Signature] DATE: 5/3/90

OILING CATEGORIZATION:
- Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 39 m: No Oil 1264 m
Subsurface Oil Observed: Yes No

RECOMMENDATIONS:
- X No Treatment Recommended
- ______ Treatment Recommended
- ______ Manual Pickup
- ______ Bioremediation
- ______ Tarmat Removal
- Snare/Absorbent Booms
- Oil Snares (pom poms)
- Absorbents (pads, rolls, etc)
- Spot Washing: Wands
- Beach Cleaner
- Other (see comments)

COMMENTS:

TAG COMMENTS:

TAG APPROVAL DATE: 5/3/90

ADEC
EXXON
NOAA
USCG
SKETCH MAP

SCALE

0 100 200 300 m

SUBDIVISION A

DATE 4/124/90

CHECKLIST

- N Arrow
- Approx Scale
- Species Body
- Oil Ring
- Width
- Length
- % Cover
- Sediment Character
- Est. HWL
- MLS
- Profile Location(s)
- Profile(s)
- Pit Location(s)
- Photo Location(s)

LEGEND

1 A

PH - No Subsurface Oil

2 A

PT - Subsurface Oil

Continuous Distribution

CT/C

Broken Distribution

CT/B

Patchy Distribution

CT/P

Splashed Distribution

Oiled Vegetation

SSL - Pixel Location, direction, and number

1 DEC. LOC

18% C

rock shore

beach

sandy beach

w/pocket

surge gulley

rocky shore

steep

rocky shore

19.40

35 m

CT/S

10 m x 35 m CT/S

tree tru c/5'; DRR/ABL

tree tru c/5'; splash in B stream

channel in rock; @ up. HHTZ.

< 10% cover; 1 loc. exp. in

rock channel.

OIL CHARACTER LENGTH (m): AP — PO — CV 20 ST 35 BT MS — PT — TB FL — NO 1595

OG E. MACDONALD

SEGMENT 9-9

HR-25-1595

FROM NO BELL-PLUM

TO EXON SCAT

P.23
REGION: PRINCE WILLIAM SOUND
SEGMENT: ST/CU-10
SUBDIVISIONS: A (1 OF 1)
SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
Salmon stream no. 224-20-13020 (Ps, 2/90)
1A  Salmon stream mouth - fry outmigration (3/1 to 5/15)
1B  Salmon stream mouth - spawning (7/10 to 8/31)
5T-2 All bald eagle nests (3/1 to 6/1) - Active eagle nests (3/1 to 9/1)
6Y  Recreation: Special use destination
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:
Avoid any unnecessary disturbance or damage to unoiled biota and substrate.

ARCHAEOLOGICAL CONSTRAINTS:
If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact a member of Exxon's Cultural Resource Program immediately (564-3657; 564-3658 or 564-3276).

SHPO SIGNATURE: ____________________ DATE: ________________________

OILING CATEGORIZATION:
Wide 0 m: Medium 0 m: Narrow 29 m: V.Light 536 m: No Oil 1534 m
Subsurface Oil Observed: Yes ___ No X ___ Maximum Depth ______

RECOMMENDATIONS:
__ No Treatment Recommended _____ Snare/Absorbent Booms
__ X Treatment Recommended _____ Oil Snare (pom poms)
__ _ Manual Pickup _____ Absorbents (pads, rolls, etc)
__ _ Bioremediation _____ Spot Washing: _____ Wands
__ _ X Tarmat Removal _____ Beach Cleaner
__ _ _ Other (see comments)

COMMENTS: Recommended treatment includes manual pickup of mousse patties and manual removal of tarmats in area indicated on sketch map. Work should be conducted between 6/1 and 7/10 with approval of USFWS regarding eagle nest constraint.

TAG COMMENTS:___________________________________________________________
___________________________________________________________
___________________________________________________________
___________________________________________________________

TAG APPROVAL DATE:______________
ADEC _____________________________ FOSC: ____________ DATE: _____________
EXXON ____________________________
NOAA _____________________________
USCG _____________________________
Salmon stream mouth - fry outmigration (5/1 to 5/15)
Salmon stream mouth - spawning (7/10 to 8/31)
No disturbance of stream bed or banks unless authorized by ADF&G. No beach flushing into stream drainage. No bioremediation or other chemical application within 100m of stream without authorization from ADF&G. No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or in-pool application, prior to at least July 1 unless authorized by ADF&G. Treatment which is not intrusive and which will not affect nearshore oil or toxicity levels, such as manual removal, can probably proceed without adherence to time constraints. In any case, contact ADF&G Habitat Division prior to treatment for consultation and/or permit application.

AGENCY CONTACT PERSON: ADF&G  John Morison  267-2324

Salmon fry nursery area (4/30 to 7/31)
No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or in-pool application, prior to July 31 unless authorized by ADF&G. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G prior to treatment for confirmation and advice.

AGENCY CONTACT PERSON: ADF&G  Larry Peltz  424-3214

Esther Hatchery release (4/15 to 6/15)
Main Bay Hatchery release (4/20 to 6/15)
Sewall Bay Hatchery release (4/15 to 6/1)
Cannery Creek Hatchery (4/21 to 6/1)
Remote release site
No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or in-pool application, prior to at least July 1 unless authorized by ADF&G and/or PWS Aquaculture Association. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G or PWS Aquaculture Association for confirmation and authorization.

AGENCY CONTACT PERSON: ADF&G  Larry Peltz  424-3214

Contact ADF&G for specific dates, locations and constraints. Restrict boat and air traffic to essential minimum. When set net sites are present (1L) restrict beach operations to essential minimum as authorized by ADF&G. If plans for treatment include methods such as hot water wash or in-pool application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.

AGENCY CONTACT PERSON: ADF&G  James Brady  424-3212

Harvesting spawning (4/1 to 6/15)
Contact ADF&G for confirmation - dates and locations may vary. Restrict boat traffic to essential minimum. Avoid damage to uncolled Intertidal and subtidal algae and seagrass. If plans for treatment include methods such as hot water wash or in-pool application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.

AGENCY CONTACT PERSON: ADF&G  Evelyn Biggs  424-3235

Harbor seal and sea lion pupping (5/15 to 7/1)
Harbor seal and sea lion molting (8/15 to 9/15)
Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts. No application of in-pool within two weeks of arrival date (window at these sites is limited to 7/2 to 7/31).
Contact ADF&G and USFWS prior to treatment for confirmation.

AGENCY CONTACT PERSON: US National Marine Fisheries Service  Steve Zimmerman  586-7235
ADF&G  Don Calkins  267-2403

Seabird colony (5/1 to 9/1)
Restrict air and boat traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m vertical distance from colony. Contact USFWS prior to treatment.

AGENCY CONTACT PERSON: USFWS  Jill Parker  786-3377

Shorebird/waterfowl concentration (4/1 to 5/15)
Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.

AGENCY CONTACT PERSON: USFWS  Jill Parker  786-3377
ADF&G  Tom Rothby  267-2206

All Bald Eagle nests (5/1 to 8/1)
Active Bald Eagle nests (5/1 to 9/1)
Restrict air traffic and all disturbance to essential minimum. No personnel within 400m 3/1 to 8/1. Air approach and takeoff from and to seaward only; maintain 800m horizontal, 300m vertical distance from nests. Contact USFWS prior to treatment for confirmation of dates.

AGENCY CONTACT PERSON: USFWS  Jill Parker  786-3377

Recreation:
Tent sites (8/1 to 9/15)
Anchorage (8/1 to 9/15)
Forest Service cabins (8/1 to 9/15)
Lodge (8/1 to 9/15)
Special use designation

Subsistence area: Salmon harvesting (5/1 to 9/30)
Finfish harvesting
Deer harvesting (8/15 to 2/20)
Invertebrate harvesting

Contact ADF&G and appropriate Native Corporation for specific dates, locations, and constraints. Restrict boat and air traffic and beach disturbance to essential minimum. If plans for treatment include methods such as hot water wash or application of in-pool which might affect Intertidal or nearshore oil or toxicity levels, contact ADF&G and appropriate Native Corporation for authorization - see Native Corporation Contact List for each Native Corporation's contact person.

AGENCY CONTACT PERSON: ADF&G  Jim Fall  267-2359
SEGMENT ST1  C U - 1 O  SUBDIVISION:  A  DATE 4/24/90

NO TREATMENT RECOMMENDED  □ TREATMENT SUGGESTED

NAME:  ST EPH E N  F E R G U S O N  SIGNATURE  Stephen Ferguson

NO TREATMENT RECOMMENDED  □ TREATMENT SUGGESTED

Ref to WHERE PIT #1 IS LOCATED ON SKETCH MAP PATCHY PAVEMENT LOCATED IN THE 4m(w) X 41m(l) AREA OF OILING SUGGEST MANUAL REMOVAL OF PAVEMENT (1-2 HRS. WORK) THEN PUT BIR D DOW NS IN THIS AREA WHERE PAVEMENT IS LOCATED 1S APPROX. 4m(w) X 10 m(l). PAVEMENT IS JUST SOUTH OF TEST PIT #1.

AND MANAGER NAME:  Leigh Carlson  SIGNATURE  Leigh Carlson  ADNR

NO TREATMENT RECOMMENDED  □ TREATMENT SUGGESTED

Listed as priority 2 by PWSCA. Area used for recreation. Most of the oil found on this segment was very sporadic and mainly coat and stain splatters on the boulders and bedrock. Due to the coloring of the rocks, the splatters are not readily visible. Recommend manual removal of the mousse patties located in area of the sketch map as they are adjacent to a pocket beach that is good for recreational use. Also recommend bioremediation after removal of the patties.
**SHORELINE OILING SUMMARY**

**SEGMENT ST/ CU:10**
**TEAM NO. 4**
**TIME 3:27 to 7:50**
**DATE 4/27/90**

**ST. SUBDIVISION LENGTH:** 312 m
**SUBDIVISION:** W
**LEVEL:** +4 ft
**LAND REP:** Sun
**Clouds:** Fog
**Rain:** Snow
**SURVEYED FROM:** Foot
**BOAT:**
**HELO:**
**WORKING DIRECTION:** N to S

**SURFACE OIL**

<table>
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<th>DISTRIBUTION</th>
<th>OIL / FILM COLOR</th>
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**PAVEMENT H (g) 164 sq. m by 1.5 cm**

**NEAR SHORE SHEEN?**

**OILED DEBRIS**

- Logs
- Vegetation
- Trash
- Debris

**DID YOU COLLECT DEBRIS?**

- Yes
- No

**TYPE**

**# BAGS**

**Photographs:**

- Roll No.
- Frames

**SUBSURFACE OIL**

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**COMMENTS**

This segment was composed of bedrock outcrops with 1) a small cover made of boulders, cobbles, pebbles and gravel 2) two beaches. The cave on diagram labeled as area 1 had coat + stain splashes on boulders in W. There was an area of mossy asphalt which was outcropping - v. sporadic. There was an area of moussey asphalt at one time but has hardened down to friable AP almost completely.

**REVIEWED**

**DATE**
**COMMENTS**

This area covered most of the cove x 41m long x 4m wide x 1.5 cm thick. However, coverage was only about 10% over the S1TZ + H1TZ. Area 2 (shown on diagram) was a small pocket beach of cobbles which had CT + ST/S and olive-brown boulders in SU + UD. Same type of CT + ST as was seen in area 1. The last bay area had the same type of CT + ST but it was also seen in the mitz. There was an area of CT/B in a rock crevice in S1TZ. The crevice was about 2m wide x 3-4m deep.

**REVIEWSD_______ DATE_______
SEGMENT CU-10
SUBDIVISION A
DATE 9/24/00

CHECKLIST

1) Arrow
2) Approx. Scale
3) Bounding Entity
4) Oil Dis
5) Width
6) Length
7) % Cover
8) Substrate Character
9) Ext. Haulage
10) Site
11) Profile Location(s)
12) Profile(s)
13) Pit Location(s)
14) Photo Location(s)

LEGEND

1) ☐
   Pit - No Subsurface Oil

2) ☐
   Pit - Subsurface Oil

CT/C
   Continuous Distribution

CT/B
   Broken Distribution

CT/P
   Patchy Distribution

CT/S
   Spotted Distributions

LEGEND

Oil Vegetation

MAP

MANUALLY REMOVE TARMAT AND MOUSE PATTIES

Oil Character Length (ac): AP 41 PO CS 5 GT 750 ST 750 MS 20 PT 0 TB 0 FL 0 NO 133

RECORD 9/24/00
SHORELINE ECOLOGICAL SUMMARY

Segment ST/ C4-10 Subdivision A

Date (mo/day/yr) 4-24-90

Biolgst. PENN

(A) Substrate type and % of segments:
   (1) Bedrock (2) Boulder (3) Cobble (4) Pebble (5) Sand (6) Silt

(B) Overall % cover of biota (% of segment):
   Dense 12 Moderate 5 Low 65

(C) Density, substrate preference (by number from A, above), & vertical zonation of major taxa: (upper-U; mid-M; low tidal-L);
   juveniles/adults (X), new settlement (3)

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Photographs:
   Roll No. ________
   Frames ________

Wildlife Observations/ General Comments:
   2 Eagle Nests - occupied (one with chicks)  - sweep
   2 Seals

Ecological Considerations:
ADDENDUM: SUBDIVISION CONSTRAINTS
SEGMENT CU-10 SUBDIVISION A (1 of 1)

ARCHAEOLOGICAL STANDARD CONSTRAINT
If cultural resources are uncovered, PHONE 564-3274.

APPLICABLE ECOLOGICAL TIME CONSTRAINTS

1A,1B Salmon Stream
ADF&G catalogued anadromous stream (224-20-13020) is more than 100m from work site. No constraint to manual pickup and tarmat removal.

1K Purse Seine Hook-off
No constraint to manual pickup and tarmat removal.

5T Bald Eagle Nest
USFWS 6/1/90 map indicates an active nest in Subdivision A. Closed to manual pickup and tarmat removal within 400m of active nest.

OTHER ECOLOGICAL CONSIDERATIONS
If eagle nest constraint is removed, other ecological considerations will apply. Avoid any unnecessary disturbance or damage to unoccupied nests and substrates.

FOSC: [Signature]
Date: 6/24/90

Prepared by: [Signature]
Date: 6/22/90
SHORELINE EVALUATION

SEGMENT ST/ CU-10 SUBDIVISION A (1 OF 1) DATE 4/24/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
Salmon stream no. 224-20-13020 (Ps, 2/90)
1A Salmon stream mouth - fry outmigration (3/1 to 5/15)
1B Salmon stream mouth - spawning (7/10 to 8/31)
5T-2 All bald eagle nests (3/1 to 6/1) - Active eagle nests (3/1 to 9/1)
6Y Recreation: Special use destination
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:
Avoid any unnecessary disturbance or damage to uncoiled biota and substrate.

ARCHAEOLOGICAL CONSTRAINTS:
If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact a member of Exxon's Cultural Resource Program immediately (564-3657; 564-3658 or 564-3276).

SHPO SIGNATURE: DATE: 5/9/90

OILING CATEGORIZATION:
Wide 0 m; Medium 0 m; Narrow 29 m; V.Light 536 m; No Oil 1534 m
Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:
_____ No Treatment Recommended
X Treatment Recommended
X Manual Pickup
X Bioremediation
X Tarmat Removal
Snare/Absorbent Booms
Oil Snares (pom poms)
Absorbents (pads, rolls, etc)
Spot Washing: Wands
Beach Cleaner
Other (see comments)

COMMENTS: Recommended treatment includes manual pickup of mousse patties and manual removal of tarmats in area indicated on sketch map. Work should be conducted between 6/1 and 7/10, with approval of USFWS regarding eagle nest constraint.

TAG COMMENTS:

TAG APPROVAL DATE: 5/9/90
ADEC
EXXON
NOAA
USCG
SHORELINE EVALUATION

SEGMENT ST/ ___ CU-10 ___ SUBDIVISION A (1 OF 1) DATE 4/24/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
Salmon stream no. 224-20-13020 (Ps, 2/90)
1A Salmon stream mouth - fry outmigration (3/1 to 5/15)
1B Salmon stream mouth - spawning (7/10 to 8/31)
ST-2 All bald eagle nests (3/1 to 6/1) - Active eagle nests (3/1 to 9/1)
6Y Recreation: Special use destination
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:
Avoid any unnecessary disturbance or damage to unoiled biota and substrate.

ARCHAEOLOGICAL CONSTRAINTS:
If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact a member of Exxon's Cultural Resource Program immediately (564-3657; 564-3658 or 564-3276).

SHPO SIGNATURE: ___________________________ DATE: 5/9/90

OILING CATEGORIZATION:
Wide_ 0 m; Medium_ 0 m; Narrow 29 m; V.Light 536 m; No Oil 1534 m
Subsurface Oil Observed: Yes ___ No X ___ Maximum Depth ______

RECOMMENDATIONS:
___ No Treatment Recommended ___ Snare/Absorbent Booms
___ Treatment Recommended ___ Oil Snares (pom poms)
___ Manual Pickup ___ Absorbents (pads, rolls, etc)
___ Bioremediation ___ Spot Washing: _____ Wands
___ Tarmat Removal ___ Beach Cleaner
___ Other (see comments)

COMMENTS: Recommended treatment includes manual pickup of mousse patties and manual removal of tarmats in area indicated on sketch map. Work should be conducted between 6/1 and 7/10 with approval of USFWS regarding eagle nest constraint.

TAG COMMENTS: ____________________________________________

TAG APPROVAL DATE: 5/9/90
ADEC ___________________________ EXXON ___________________________
NOAA ___________________________ USCG ___________________________

TAG APPROVAL DATE: 5/9/90
FOSC: ___________________________
SEGMENT: cu-10
SUBDIVISION: A
DATE: 1/24/90

CHECKLIST:
- Av, Av
- Appro, Scale
- Site Description
- Oil Date
- Width
- Length
- Site Code
- Subsite Character
- Est. H, M, A, Y
- SSL
- Profile Location(n)
- Profile(s)
- Plot Location(ng)
- Plot Location(n)

LEGEND:
1 " A
- Ph - No Subsurface Oil
2 " A
- Ph - Subsurface Oil

CT/C
- Continuous Distribution
CT/B
- Broken Distribution
CT/P
- Patchy Distribution
CT/S
- Splashed Distribution

Olived Vegetation

PH: 0
- Ph: Location, direction, and number

MANUALLY REMOVE TAILMAT AND MOUSE PATTIES

Oil Character Length (m): AP 41 PO 0 CV 5 CT 750 ST 750 MS 20 PT n TB n FL n NO 1336
1991 MAYSAP EVALUATION

SEGMENT: CU 010  SUB: A  REGION: FWS  SURVEY DATE: 5/3/91

ENVIRONMENTAL SENSITIVITIES:
Work Window(s)  RESTRICTED 3/1 - 9/15

Ecological/Constraints (see page two for details)  Eagle nest, Anadromous stream, Subsistence - salmon harvesting

ARCHAEOLOGICAL CONSTRAINTS:
If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO Signature: __________________________ Date: __________________

RECOMMENDATIONS:

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<th>TREATMENT REQUIRED (Y or N)</th>
<th>INITIAL</th>
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Manual Pickup (Check as Req.)  _____
Spot Washing  _____
Bio-Customblen Only  _____
Bio-Inipol/Customblen  _____
Other  ____________________  _____
Other  ____________________  _____

COMMENTS:

INITIAL: _______________________________________________________

TAG: ---------------------------------------------------

FOSC: __________________________________________________________

TAG APPROVAL DATE: __________  FOSC APPROVAL DATE: __________

ADEC________________________  FOSC________________________

EXXON________________________

USCG________________________

NOAA________________________
ECOLOGICAL CONSTRAINTS
1991 FIELD ACTIVITIES

Eagle Nest: Access restricted from 3/1 to 9/1. USF&WS authorization required. Maintain 1000' vertical and 1/4 mile horizontal buffer.

Anadromous Stream: Unlimited treatment up to stream bank between May 15 and July 10. ADF&G approval required for work after July 10. Fish Habitat Permit required for instream work. ADF&G approval required for bioremediation within 100 meters of anadromous stream after July 10.

Subsistence - Salmon Harvesting: Unlimited treatment up to stream bank between May 15 and July 10. ADF&G approval required for work after July 10. Fish Habitat Permit required for instream work. ADF&G approval required for bioremediation within 100 meters of anadromous stream after July 10.
TEAM NO. ----  
SEGMENT  EU-10  
SUBDIVISION  A  
DATE  5/3/91  

ADEC  
NAME  JEFF GUSOVAY  
SIGNATURE  

NTR  
ONLY AREA OF DEBATE (in my opinion) is segment A4 (OG Map) 
SOME SURFACE MONSO/ASPHALT OBSERVED SUTZ-WUTZ IN SMALL AREA (1m x 5m). 
OIL IS TRAPPED AMONG SPACES BETWEEN BOULDERS, LEAVING DIFFICULT ACCESS. 
SURFACE OIL, OIL IN STAGE OF DEZENATION. TRADE OFF IS THAT THIS AREA 
HAS POTENTIAL HIGH MOUNT USE ACTIVITY, PLUS UNSIGHTLY IF TREATMENT TO 
occur. SMALL CREW (2-5 PERSON) MANUAL REMOVAL OR TILLING. 
CONTRUCTION DOES NOT APPEAR TO COURSE HIGH 
CONTRUCTION DOES NOT APPEAR TO COURSE HIGH 
SUSTAINING LITTLE ENVIRONMENTAL DAMAGE FROM TREATMENT. RATHER, ISOLATED AREA ON SMALL SEGMENT 

EXXON  
NAME  FRANK A. BOX  
SIGNATURE  

NTR  
very little oil- patches of the patties observed in 
the middle of the bog. Heavy debris, recommend nothing 
be done, rather than let nature take care of it. 

ANDMANAGER  
NAME  MARSHA HALL  
SIGNATURE  

NTR  
TREATMENT 
IN AREA OF A4, A SMALL CREW 2-4 PEOPLE, 
could break up the asphalt patties and remove. SOME 
of the oil seems to be less potent but with some 
sun shine and warmer days it could be 
contaminating recreational area. 

USCG/NOAA  
NAME  JENSEN FIELDS  
SIGNATURE  

NTR  
FURTHER REMOVAL OPERATIONS WOULD CAUSE MORE 
environmental harm than the oil to be removed. 
Rough, slippery, coastline w/ Boulders, Pebble Pebble Rock Beac. 
No subsurface oil was observed. Surface oil consisted of 
Degraded MS9 AP localized & coats on Vertical Rock Face.
**SHORELINE OILING SUMMARY**

**TEAM NO.**

**CG:** A. MACDONALD  
**BIO:** M. FANNEST  
**ADEC:** J. GINTAS  
**EXXON:** F. BROX

**TIME:** 11:10 to 13:20  
**TIDE LEVEL:** +1.0 ft. to +3.5 ft.  
**ENERGY LEVEL:** ☒

**SURVEYED FROM:** ☒ FOOT ☒ BOAT ☒ HELO  
**WEATHER:** ☑ SUN ☑ CLOUDS ☐ FOG ☑ RAIN ☐ SNOW

**TOTAL LENGTH SHORELINE SURVEYED:** 12.09 m

**NEAR SHORE SHEEN:** ☒ BR ☐ RB ☐ SL ☒ NONE

**EST. OIL CATEGORY LENGTH: W — m M — m N — m VL — mL NO — m US — mL

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**SURFACE-OILED TOTAL LENGTH:** W — m M — m N — mL VL — mL NO — mL US — mL

**SEGMENT**

**SUBDIVISION**

**DATE**

**TIME**

**TIDE LEVEL**

**ENERGY LEVEL**

**SURVEYED FROM**

**WEATHER**

**TOTAL LENGTH SHORELINE SURVEYED**

**NEAR SHORE SHEEN**

**EST. OIL CATEGORY LENGTH**

**DISTRIBUTION:** C — 91-100%; B — 51-90%; P — 11-50%; S — 1-10%; T — <1%

**SLOPE:** V — VERTICAL; H — HIGH ANGLE; M — MEDIUM ANGLE; L — LOW ANGLE

**PHOTO ROLL**

**FRAMES**

**PIT NO.**

**PIT DEPTH**

**SUBSURFACE OIL CHARACTER**

**OILED ZONE**

**CLEAN ZONE**

**H2O LEVEL**

**SHEEN COLOR**

**PIT ZONE**

**SURFACE-SUBSURFACE SEDIMENTS**

**NOTES**

**OG COMMENTS:**

Steep, exposed rocky coast w/ BCL packetry.

Surface oil only as remnant MS/PAP/patches and CU/FR.

Oil often in B Interfaces and rock crevices; often well degraded, may produce forced sheen; mixed w/ vegetation.

Sheen/m creosote log mapped for reference only.
WILDLIFE OBSERVATIONS
TO BE COMPLETED IN ALL SUBDIVISIONS

BIRDS

<table>
<thead>
<tr>
<th>EAGLES</th>
<th># OF SPECIES</th>
<th>TOTAL BIRDS</th>
<th>FISH OBSERVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seabirds</td>
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<tr>
<td>Waterfowl</td>
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<td></td>
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<tr>
<td>Gulls/Kittiwakes</td>
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<tr>
<td>Shorebirds</td>
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<tr>
<td>Corvids</td>
<td></td>
<td></td>
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<tr>
<td>Other Birds</td>
<td></td>
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</table>

MARINE MAMMALS

<table>
<thead>
<tr>
<th>SPECIES</th>
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<tbody>
<tr>
<td>Sea Otters</td>
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<tr>
<td>Pinnipeds (specify)</td>
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<tr>
<td>Whales (specify)</td>
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LAND MAMMALS

<table>
<thead>
<tr>
<th>SPECIES</th>
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</thead>
<tbody>
<tr>
<td>Deer (bones)</td>
<td></td>
</tr>
</tbody>
</table>

Shoreline subdivision map showing important biological features attached.
3 May 91: CU 010 Faust

- Arrive 11:40
- Good walkall, non-anal/rap
- BR/BR/CTZ-MTZ, BR/PCLZ-sup

- Dense woodland among 5am
- Dense MTZ
- Small spot every where
- CT in grey, in wet area
- CTZ-supra west of stream
- Mostly dense Ficus
downstream from CT-
also dense barn, 1/4
Whales de part 12:25
- 1 has been seen
CU 18A Site B Fawcett
3 May 91 Arr. 12:30
- Small cave, high - rock
  energy, point of entry problems
- Site large big BR - lots
  of abrasion in cave
- BR at exit with deep funk
- barn, 1st, 1nd, 2nd, 
  3rd, 4th, 
- Large tree rocks in cave
- Have dense bamboo growth on lee
  side, one big bamboo handout
  mussels on level
- Deer prints
- Eagle in tree at entrance
  Depart 12:45

Arrive Site C 12:50
- Small pocket cave similar
  to B but more manmade
  hidden by grass
- Dense Every, many, barn, 1st
  woods, line + BR - LT
  site in LT - Lygia, Spain
  - MT 11th
  - Depart 13:50 after lunch

- 1/3
Isopods, sparse limpets under boulders near asphalt; sparse barnacles nearby; rockweed, barnacles, littorinids, whelks, sparse mussels downshore.

Sparse limpets, isopods near CT in SUTZ; biota downshore same as at A3.

No biota except lichen near oil traces; dense barnacles, mussels, patchy littorinids, whelks, limpets downshore in MTZ.

No macro-biota near oil in SUTZ; dense rockweed, barnacles, littorinids, whelks downshore; dense barnacle patch throughout intertidal zone.

WL @ 12:00 42.8
n + 2 FT

Bio Sketch Map
CU 010-A
3 May 91
M. Fawcett
1991 MAYSAP EVALUATION

SEGMENT: CU 010  SUB:  A  REGION:  PWS  SURVEY DATE: 5/3/91

ENVIRONMENTAL SENSITIVITIES:
Work Window(s)  RESTRICTED 3/1 - 9/15

Ecological/Constraints (see page two for details)  Eagle nest, Anadromous stream, Subsistence - salmon harvesting

ARCHAEOLOGICAL CONSTRAINTS:
If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO Signature:  [Signature]  Date: 5/14/91

RECOMMENDATIONS:

<table>
<thead>
<tr>
<th>TREATMENT REQUIRED (Y or N)</th>
<th>INITIAL</th>
<th>TAG</th>
<th>FOSC</th>
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</thead>
<tbody>
<tr>
<td>N</td>
<td>---------</td>
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</table>

Manual Pickup (Check as Req.)
Spot Washing
Bio-Customblen Only
Bio-Inipol/Customblen
Other ______________________
Other ______________________

COMMENTS:

INITIAL: ____________________________________________________

TAG: ________________________________________________________

FOSC: _______________________________________________________

TAG APPROVAL DATE: MAY 14 1991  FOSC APPROVAL DATE: 5/7/91

ADEC  [Signature]  FOSC  [Signature]

E. E. PAGE, CDR, USCG  CHIEF OF STAFF, FOSC

USCG  [Signature]

NOAA  [Signature]
ECOLOGICAL CONSTRAINTS
1991 FIELD ACTIVITIES

Eagle Nest: Access restricted from 3/1 to 9/1. USF&WS authorization required. Maintain 1000' vertical and 1/4 mile horizontal buffer.

Anadromous Stream: Unlimited treatment up to stream bank between May 15 and July 10. ADF&G approval required for work after July 10. Fish Habitat Permit required for instream work. ADF&G approval required for bioremediation within 100 meters of anadromous stream after July 10.

Subsistence - Salmon Harvesting: Unlimited treatment up to stream bank between May 15 and July 10. ADF&G approval required for work after July 10. Fish Habitat Permit required for instream work. ADF&G approval required for bioremediation within 100 meters of anadromous stream after July 10.
MAYSAP FIELD SHORELINE COMMENT SHEET

TEAM NO. 1 SEGMENT C1-10 SUBDIVISION A DATE 5-3-91

ADEC NAME JEFF GINNIS SIGNATURE

[Newspaper in red ink]

[In black ink]

NTR ONLY AREA OF DEBATE (in my opinion) is SEGMENT A4 (OG MAP)

Some surface moss/algae observed SUTZ-VITZ in small area (1m x 5m).

Oil is trapped among spaces between boulders, leaving difficult access.

Surface only, oil in state of degradation. Trade-off is that this area in potential high human use activity, thus unsightly. If treatment to occur, small crew (2-3 persons) manual removal or filling. Biota, thus little environmental damage from treatment. Rather, isolated area on small segment.

EXXON NAME FRANK A. BOX SIGNATURE Frank A. Box

[In black ink]

NTR Very still oiling - patches of the oil observed in the back of the bay. Heavy debris, recommend nothing be done, other than let nature take care of it.

ADEC NAME JEFF GINNIS SIGNATURE

[In black ink]

NTR Treatment in area of A4. A small crew 2-4 people, could break up the asphalt patches and remove. Some of the oil seems to be less potent but with some sun shine and warmer days it could be contaminating recreational area.

ADEC NAME JEFF GINNIS SIGNATURE

[In black ink]

NTR Further removal operations would cause more environmental harm than the oil to be removed.

USCG/NOAA NAME JENSEN CHILDS SIGNATURE Jensen

[In black ink]

NTR Rough, Graphic, coastline w/Bald Cobble Pebble Pocket Beaches. Subsurface oil was observed. Surface oil consisted of dislocated MSL AP localized & coats on Vertical Rock Face.
MAYSAP SHORELINE OILING SUMMARY

TEAM NO. 1

OG G. MACDONALD BIO M. FAWCETT
ADEC J. GINAZA LANDMANAGER M. HALL for DNL
USCG/NOAA TENSE/JOHN

SEGMENT CU-10
SUBDIVISION A
DATE 5/3/91

TIME 11:10 to 13:30
TIDE LEVEL +1.6 ft. to +3.6 ft.
ENERGY LEVEL:

SURVEYED FROM: FOOT BOAT HELO
WEATHER: SUN CLOUDS FOG RAIN SNOW

TOTAL LENGTH SHORELINE SURVEYED: 1209 m
NEAR SHORE SHEEN: BR RB SL NONE

EST. OIL CATEGORY LENGTH: W m M m N 15 m V 20 m NO 174 m US 890 m

SURFACE OIL CHARACTER

<table>
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<tr>
<th>L</th>
<th>OIL</th>
<th>SEDIMENT TYPE</th>
<th>SLOPE</th>
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<td>A3</td>
<td>T</td>
<td>RC H 1 1/2</td>
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<tr>
<td>A4</td>
<td>P</td>
<td>B-F M 1/2 15</td>
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</tbody>
</table>

DISTRIBUTION: C = 91-100%; B = 51-90%; P = 11-50%; S = 1-10%; T = <1%

SLOPE: V = VERTICAL; H = HIGH ANGLE; M = MEDIUM ANGLE; L = LOW ANGLE

PIT NO. DEPTH

<table>
<thead>
<tr>
<th>NO.</th>
<th>PIT</th>
<th>DEPTH (cm)</th>
<th>OIL CHARACTER</th>
<th>OILED ZONE</th>
<th>CLEAN H2O LEVEL</th>
<th>SHEEN COLOR</th>
<th>SURFACE SUBSURFACE SEDIMENTS</th>
<th>NOTES</th>
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</table>

SHEEN COLOR: B = BROWN; R = RAINBOW; S = SILVER; N = NONE

OG COMMENTS: Steep, exposed rocky cliff w/ BCL pocketed. Surface oil only as remnant MS&AP patches and CT/TH. Oil often in B intertices and rock crevices; often well degraded, may produce forced sheen; mixed w/ vegetation. Sheening creosote log mapped for reference only.
WILDLIFE OBSERVATIONS
TO BE COMPLETED IN ALL SUBDIVISIONS

<table>
<thead>
<tr>
<th>BIRDS</th>
<th># OF SPECIES</th>
<th>TOTAL BIRDS</th>
<th>FISH OBSERVED SPECIES PRESENT</th>
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<tr>
<td>Eagles</td>
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<td>Waterfowl</td>
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<tr>
<td>Other Birds</td>
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<table>
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<tr>
<th>MARINE MAMMALS</th>
<th># OBSERVED</th>
<th>SPECIES</th>
<th># OBSERVED</th>
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<tbody>
<tr>
<td>Sea Otters</td>
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<tr>
<td>Pinnipeds(specify)</td>
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<td>harbor seal</td>
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</tr>
<tr>
<td>Whales(specify)</td>
<td></td>
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</tbody>
</table>

Shoreline subdivision map showing important biological features attached.
3 May 91 - CU010 - Farwell

Arrive 1140
Car w/ small non-functional
in center
BR/BR/LT2/MT2, BR/PV2-SRP

Just Whales among barn
or buildings MT2
- deer spot every where
- CT in querty monument
1LT2 super west of stream
- mostly dense fencing
downhill from CT
- also dense barn, 1/111
Wheeler-Depast 12.25
- has been seal

CU 10A site A1

CT

BR

Fucked

- 300m

BR

LH 0.3

Barn

Fire

Stream

O8R

Large B/BR

VT2 to LT2
ARRIVE Site C 12:50
Sandpoint

Sunset lake is beautiful, wide open water.

Vehicles
Wear a helmet and life jacket.

Party Food

To B, not more than 1 hour.

Dinner: Pizza, Burgers, Grilled Chicken.

Boat trip to Point 1.

Depart 12:35

Arrival Site C 12:50
Sandpoint
REGION: PRINCE WILLIAM SOUND

SEGMENT: ST/CU-11

SUBDIVISIONS: A (1 OF 1)
SHORELINE EVALUATION

SEGMENT ST/ CU-11 SUBDIVISION A (1 OF 1) DATE 4/25/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Salmon stream no. 224-20-13024 (Ps, 2/90)

- 1A Salmon stream mouth - fry outmigration (3/1 to 5/15)
- 1B Salmon stream mouth - spawning (7/10 to 8/31)
- 6Y Recreation: Special use destination

See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to unoiled biota and substrate.

ARCHAEOLOGICAL CONSTRAINTS:

If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact a member of Exxon's Cultural Resource Program immediately (564-3657; 564-3658 or 564-3276).

SHPO SIGNATURE: ______________________ DATE: ______________________

OILING CATEGORIZATION:

- Wide 0 m: Medium 66 m: Narrow 140 m: V.Light 939 m: No Oil 1890 m
- Subsurface Oil Observed: Yes X No____
- Maximum Depth 10 cm

RECOMMENDATIONS:

- No Treatment Recommended
- Treatment Recommended
- Manual Pickup
- Bioremediation
- Tarmat Removal

Snare/Absorbent Booms
Oil Snares (pom poms)
Absorbents (pads, rolls, etc)
Spot Washing: 4 Wands
Beach Cleaner
Other (see comments)

COMMENTS: Recommended treatment includes 1) manual removal of tarmat in area indicated on sketch map #1, 2) spot hot water washing in areas indicated on sketch maps #1, and 2, and 3) bioremediation in areas indicated on sketch maps #1 and 2. Work should be conducted between 5/15 and 7/10 due to salmon stream constraints.

TAG COMMENTS:

__________________________________________________________

__________________________________________________________

__________________________________________________________

TAG APPROVAL DATE: ________________

ADEC
EXXON
NOAA
USCG

FOSC: ________________ DATE: ________________
Salmon stream mouth - fry outmigration (3/1 to 5/15)
Salmon stream mouth - spawning (7/10 to 6/31)
No disturbance of stream bed or banks unless authorized by ADF&G. No beach flushing into stream drainage. No bio remediation or other chemical application within 100m of stream without authorization from ADF&G. No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or inpulp application, prior to at least July 1 unless authorized by ADF&G. Treatment which is not intrusive and which will not affect nearshore oil or toxicity levels, such as manual removal, can probably proceed without adherence to time constraints. In any case, contact ADF&G Habitat Division prior to treatment for consultation and/or permit application.

AGENCY CONTACT PERSON: ADF&G John Morrison 267-2324

Salmon fry nursery area (4/31 to 7/31)
No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or inpulp application, prior to July 31 unless authorized by ADF&G. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G prior to treatment for confirmation and advice.

AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214

Estuary Hatchery release (4/15 to 6/15)
Main Bay Hatchery release (4/20 to 6/15)
Sawmill Bay Hatchery release (4/15 to 6/1)
Cannery Creek Hatchery release (4/21 to 6/1)
Remote release site
No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or inpulp application, prior to at least July 1 unless authorized by ADF&G and/or PWS Aquaculture Association. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G for confirmation and authorization.

AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214

 Gill net area (3/5 to 5/31)
Purse seine area (7/20 to 9/30)
Purse seine hook-off (7/20 to 9/30)
Set net sites (5/11 to 7/25)
Contact ADF&G for specific dates, locations and constraints. Restrict boat and air traffic to essential minimum. When set net sites are present (1) restrict beach operations to essential minimum as authorized by ADF&G. If plans for treatment include methods such as hot water wash or inpulp application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.

AGENCY CONTACT PERSON: ADF&G Evelyn Biggs 424-3209

Herring spawning (4/1 to 6/15)
Contact ADF&G for confirmation - dates and locations may vary. Restrict boat traffic to essential minimum. Avoid damage to uncultured Intertidal and subtidal algal and seagrass. If plans for treatment include methods such as hot water wash or inpulp application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.

AGENCY CONTACT PERSON: ADF&G Evelyn Biggs 424-3209

Seabird colony (5/1 to 9/1)
Restrict air traffic and boat traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal and 300m vertical distance from colony. Contact USFWS prior to treatment.

AGENCY CONTACT PERSON: USFWS Jill Parker 766-3377

Shorebird/waterfowl concentration (4/1 to 5/15)
Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.

AGENCY CONTACT PERSON: USFWS Jill Parker 766-3377

All Bald Eagle nests (3/1 to 6/1)
Active Bald Eagle nests (3/1 to 9/1)
Restrict air traffic and all disturbance to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal, 300m vertical distance from nests. Contact USFWS prior to treatment for confirmation of dates.

AGENCY CONTACT PERSON: USFWS Jill Parker 766-3377

Recreation:
Tent sites (6/1 to 9/15)
Anchorage (6/1 to 9/15)
Forest Service cabins (6/1 to 9/15)
Lodge (6/1 to 9/15)
Special use destination

Subsistence areas: Salmon harvesting (9/1 to 9/30)
Finfish harvesting
Deer harvesting (9/15 to 2/28)
Invertebrate harvesting

Contact ADF&G and appropriate Native Corporation for specific dates, locations, and constraints. Restrict boat and air traffic and beach disturbance to essential minimum. If plans for treatment include methods such as hot water wash or inpulp application which might affect Intertidal or nearshore oil or toxicity levels, contact ADF&G and appropriate Native Corporation for authorization - see Native Corporation Contact List for each Native Corporation's contact person.

AGENCY CONTACT PERSON: ADF&G Jim Fall 267-2359
SEGMENT ST  CU-11  SUBDIVISION:  A  DATE 4/25/90

MJ. SHARPE  SIGNATURE

☐ NO TREATMENT RECOMMENDED  ☐ TREATMENT SUGGESTED

☐ NO TREATMENT RECOMMENDED  ☐ TREATMENT SUGGESTED

ADEC
NAME  STEPHEN FERGUSON  SIGNATURE  STEPHEN FERGUSON

☐ (K DEC (MAP) RECOMMENDATIONS
Pocket 2-3  SPOT WASH  FOCUSED MARSH ON SALT COUNTRY RT.
Pocket 2-4  SPOT WASH + BED
Pocket 2-5  SPOT WASH (FOCUSED MARSH  BEACED AREAS  MARSHAL REACH

☐  IF SPOT WASHING IS GOING ON AT POCKET'S 3+4+5  MAY WANT TO ASSESS POSSIBILTY OF WASHING THIS AREA ALSO

LAND MANAGER
NAME  Leigh Carlson  SIGNATURE  Leigh Carlson  ADVR

☐ NO TREATMENT RECOMMENDED  ☐ TREATMENT SUGGESTED

COMMENTS:
Listed as priority 2 by PWSCA. Area used for recreation.
Oiling is in or adjacent to pocket beaches that are good for recreational uses. Recommend treatment as suggested by ADEC above.
## SHORELINE OILING SUMMARY

**SEGMENT ST/ CU-11**

**FROM** MV BEULAH CANDIES **TO** EXXON SCR

### SURFACE OIL

<table>
<thead>
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<th>CHARACTER</th>
<th>DISTRIBUTION</th>
<th>OIL / FILM COLOR</th>
<th>IMPACTED ZONES</th>
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### SUBSURFACE OIL

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### COMMENTS

See attached sheet
Segment CU-11 consists of mainly high angle to vertical rocky headlands with several boulder and cobble pocket beaches and coves. The northern bay area is a low wave exposure environment, and the southern bay is a moderate to high wave exposure area. In general, there is a band which ranges from patchy coat, cover and stain found in the southern bay. It is roughly 3-4 m in width and is found at the HWL along the vertical bedrock face.

The second predominant oiling is pooled with soft dull black oil which occurs in the crevices and interstices of bedrock and localized areas in the upper intertidal zone. There are a couple of pocket beaches worthy of notice. See diagram for location.

Pocket beach No. 3. This beach is a cobble pocket beach which has pooled mousse splash in an area approx. 13 m long x 2 m wide. Then there is an area of heavier pooled mousse described as patchy (20 - 30% coverage) in an area approx. 13 m long x 4 m wide. Next to this area, there is a small area of friable asphalt pavement about 1 m x 1 m and 3 cm deep.

Pocket beach No. 4. The south side of this pocket beach had the band on the bedrock and patchy pooled mousse which ran from the mitz to sitz. There was oiled fucus in the mitz. There was subsurface oiling in the storm berm and the north size of this pocket beach. The subsurface oiling was 5 cm down and was about 5 cm thick. It covers an area about 1 m wide x 7 m long.

Pocket beach No. 5. There is a runoff stream located mid way on this pocket beach. There is pooled mousse under the runoff water trapped behind boulders which creates a shallow tidal pool. A light brown film occurs on the surface of the water in this area.
SEGMENT  CU-11
SUBDIVISION A
DATE 4/25/90

CHECKLIST
- Area
- Approx. Scale
- Depth/Thickness
- Oil Dis
- Water
- Length
- % Carbon
- Subsurface Character
- Est. HWL/LL
- BBL
- Profile Location(s)
- Profile(s)
- Plot Location(s)
- Plot Location(s)

LEGEND
1. △
   Ph - No Subsurface Oil
2. △
   Ph - Subsurface Oil
   CT/C
   Continuous Distribution
   CT/B
   Broken Distribution
   CT/P
   Patchy Distribution
   CT/S
   Splashed Distribution
   OEE
   Oiled Vegetation

- W
  Profile location, direction, and number

Manual Removal of Tarmat, Spot Hot Water Wash & Bioremediation (see Sketch Map #1)
Spot Hot Water Wash and Bioremediation (see Sketch Map #2)

Oil Character Length (ft): AP 1 PO 267c 153 c 143 st 143 mb 5 pt 500 lb 50 fl 6 0 No 2 513
SHORELINE ECOLOGICAL SUMMARY

Segment ST / C-u-11 Subdivision A Date (mo/day/yr) 4/25/80

Time (24 hr) 0820 Biologist PEN

(A) Substrate type and % of segments:
   (1) Bedrock 70  (2) Boulder 20  (3) Cobble 3  (4) Pebble 7  (5) Sand 0  (6) Sir 0

(B) Overall % cover of biota (% of segment): Dense 5  Moderate 10  Low 40

(C) Density, substrate preference (by number from A, above), & vertical zonation of major taxa: (upper-U: mid-M: low tidal-L); juveniles/adults (X), new settlement (3)

BARNACLES

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<td>1L</td>
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<td>XX</td>
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Wildlife Observations/General Comments:

- 3 Seagulls
- 4 Harlequin
- 2 Seals
- 1 Steller's Jay
- 1 Merion Otter
- 1 Kelp Gull
- 2 Northern Harriers
- 1 Song Sparrow

Ecological Considerations:
ECOLOGY MAP

RESOURCE CODES FOR ENTIRE SEGMENT:

XXX Wide
/// Medium
--- Narrow
TTTT Very Light
0000 No Oil

ADEC Segment Length: 2438m

Island is very light but
not calculated in segment ADEC
length. However, since ADEC
LENGTH is calculated in
oil category
length.

Map Key: PWS-69
Name: K. Ramsey
Date: 4/25/90
Date Entered: %
Island is very light but not calculated in Segment ADEC length. However, since Dam Length is using Exxon SEG LENGTH, it is calculated in oil category length.

Map Key: FWS-68
Name: K. Ramsey
Date: 4/25/90

XXX Wide
/// Medium
--- Narrow
TTTT Very Light
0000 No Oil

ADEC Segment Length: 2458m

Scale: 5 - 100 200 300 400 METERS
SHORELINE EVALUATION

SEGMENT ST/ CU-11 SUBDIVISION A (1 OF 1) DATE 4/25/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Salmon stream no. 224-20-13024 (Ps, 2/90)

1A  Salmon stream mouth - fry outmigration (3/1 to 5/15)
1B  Salmon stream mouth - spawning (7/10 to 8/31)
6Y  Recreation: Special use destination

See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to unoiled biota and substrate.

ARCHAEOLOGICAL CONSTRAINTS:

If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact a member of Exxon's Cultural Resource Program immediately (564-3657; 564-3658 or 564-3276).

SHPO SIGNATURE: ______________________ DATE: 5/9/90

OILING CATEGORIZATION:

Wide 0 m: Medium 66 m: Narrow 140 m: V.Light 939 m: No Oil 1890 m

Subsurface Oil Observed: Yes X No No Maximum Depth 10 cm

RECOMMENDATIONS:

___ No Treatment Recommended  ___ Snare/Absorbent Booms
 ___ Treatment Recommended  ___ Oil Snaps (pom poms)
 ___ Manual Pickup  ___ Absorbents (pads, rolls, etc)
 ___ Bioremediation  ___ Spot Washing: 4 Wands
 ___ Tarmat Removal  ___ Beach Cleaner
 ___ Other (see comments)

COMMENTS: Recommended treatment includes 1) manual removal of tarmat in area indicated on sketch map #1, 2) spot hot water washing in areas indicated on sketch maps #1 and 2, and 3) bioremediation in areas indicated on sketch maps #1 and 2. Work should be conducted between 5/15 and 7/10 due to salmon stream constraints.

TAG COMMENTS: ______________________________________________________________

TAG APPROVAL DATE: 5/9/90

ADEC  EXXON  NOAA  USCG

DATE: 5/12/90

FOSC:  DATE: 5/12/90
Island is very light but not calculated in segment ADEC length. However, since FAM using Exxon SEG. LENGTHS it is calculated in oil category length.

E C O L O G Y  M A P
RESOUR Codes for Entire Segment
FAM 224 - 20 - 13024

XXX Wide
/// Medium
-- Narrow
TTTT Very Light
0000 No Oil

CU-11

Map Key: FWS-69
Name: K. Ramsey
Date: 4/25/90
Date Entered: 27
Island is very light but not calculated in Segment ADEC Length. However, since Farm Length is using Exxon SEG Length is calculated in oil category length.

Anadromous Stream
224-20-13024

Narrow

CU-11

Wide

// Medium

---- Narrow

TTTT Very Light

0000 No Oil

Map Key: PWS-69
Name: K. Ramsey
Date: 4/25/90
Data Entered: 

ADEC Segment Length: 2450 m
**ADDENDUM: SUBDIVISION CONSTRAINTS**

**SEGMENT CU-11 SUBDIVISION A (1 of 1)**

<table>
<thead>
<tr>
<th>WORK WINDOW</th>
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<tbody>
<tr>
<td>Tarmat Removal</td>
<td>OPEN</td>
</tr>
<tr>
<td>Spot Washing</td>
<td>OPEN</td>
</tr>
<tr>
<td>Bioremediation More Than 100m From Stream</td>
<td>OPEN</td>
</tr>
<tr>
<td>Bioremediation Less Than 100m From Stream</td>
<td>WORK PRIOR TO 7/10 (ADF&amp;G MONITOR REQ.)</td>
</tr>
</tbody>
</table>

**ARCHAEOLOGICAL STANDARD CONSTRAINT**

If cultural resources are uncovered, PHONE 564-3274.

**APPLICABLE ECOLOGICAL TIME CONSTRAINTS**

1A,1B *Salmon Stream*  
ADF&G catalogued anadromous stream (224-20-13024) is present within Subdivision A. This subdivision is closed to bioremediation less than 100m from stream 7/10 to 8/31. Before 7/10, bioremediation is permitted less than 100m from stream with on-site ADF&G monitor or ADEC alternate present. No constraint to bioremediation more than 100m from stream. No constraint to tarmat removal or spot washing.

1K *Purse Seine Hook-off*  
No constraint to tarmat removal and spot washing. Closed to bioremediation after 7/20.

5T *Bald Eagle Nest*  
NO CONSTRAINT. USFWS bald eagle impact assessment was completed 5/27/90 by Mike Lockhart. The work areas are outside the buffer zone around active nests established by USFWS.

**OTHER ECOLOGICAL CONSIDERATIONS**

Use designated access corridor. Restrict boat and air traffic and all disturbance to essential minimum. No personnel or boat traffic within 400m of active nests. Air approach and takeoff from and to seaward only; maintain 800m horizontal, 300m vertical distance from active nests. No disturbance to stream bed or bank. No flushing of pollutants or sediments into stream drainage; do not allow Inpol to enter stream flow. On-site examination and consultation by ADF&G monitor is required prior to bioremediation in order to authorize a setback distance from the stream during chemical application; if ADF&G monitor's presence is impossible, authorization may be given by the ADEC monitor. Avoid any unnecessary disturbance or damage to unölled biota and substrate.

**TAG ADDENDUM DATE** 6/04/90  
ADEC  
EXXON  
NOAA  
USCG  
FOSC  

**DATE** 5/4/90  
Prepared by: Alvera Rupp  
Date: 6/2/90
Incorporates information from USAF bald eagle survey 5/27/90.

ANADROMOUS STREAM (224-20-1024)

WORK AREAS

CU-10

ECOLOGY MAP 5/30
SEGMENT CU-11
SUBDIVISION A (___) of (___)

METERS

1 inch = 1377 feet

Seabird Colony

Eagle Nest
SHORELINE EVALUATION

SEGMENT ST.: CU-11  SUBDIVISION A (1 OF 1) DATE: 4/25/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
Salmon stream no. 224-20-13024 (Ps, 2/90)
1A Salmon stream mouth - fry outmigration (3/1 to 5/15)
1B Salmon stream mouth - spawning (7/10 to 8/31)
6Y Recreation: Special use destination
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:
Avoid any unnecessary disturbance or damage to unoiled biota and substrate.

ARCHAEOLOGICAL CONSTRAINTS:
If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact a member of Exxon's Cultural Resource Program immediately (564-3657; 564-3658 or 564-3276).

SHPO SIGNATURE: [Signature] DATE: 5/19/90

OILING CATEGORIZATION:
Wide 0 m: Medium 66 m: Narrow 140 m: V.Light 939 m: No Oil 1890 m
Subsurface Oil Observed: Yes X No Maximum Depth 10 cm

RECOMMENDATIONS:
No Treatment Recommended
X Treatment Recommended
Manual Pickup
X Bioremediation
X Tarmat Removal
--- Snare/Absorbent Booms
--- Oil Snare (pom poms)
--- Absorbents (pads, rolls, etc)
--- X Spot Washing: 4 Wands
--- Beach Cleaner
--- Other (see comments)

COMMENTS: Recommended treatment includes 1) manual removal of tarmat in area indicated on sketch map #1, 2) spot hot water washing in areas indicated on sketch maps #1 and 2, and 3) bioremediation in areas indicated on sketch maps #1 and 2. Work should be conducted between 5/15 and 7/10 due to salmon stream constraints.

TAG COMMENTS:

TAG APPROVAL DATE: 5/19/90
ADEC [Signature] DATE: 5/12/90
EXXON [Signature] DATE: 5/12/90
NOAA [Signature] DATE: 5/12/90
USCG [Signature] DATE: 5/12/90
1991 MAYSAP EVALUATION


ENVIRONMENTAL SENSITIVITIES:
Work Window(s)  RESTRICTED 3/1 - 9/15

Ecological/Constraints (see page two for details)  Eagle nest, Fish harvest area, Anadromous stream

ARCHAEOLOGICAL CONSTRAINTS:
If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO Signature: ___________________________ Date: __________________________

RECOMMENDATIONS:

<table>
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<tr>
<th>TREATMENT REQUIRED (Y or N)</th>
<th>INITIAL</th>
<th>TAG</th>
<th>FOSC</th>
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</thead>
<tbody>
<tr>
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</tbody>
</table>

Manual Pickup (Check as Req.)  ________  ________  ________
Spot Washing  ________  ________  ________
Bio-Customblen Only  ________  ________  ________
Bio-Inipol/Customblen  ________  ________  ________
Other  ____________________  ________  ________
Other  ____________________  ________  ________

COMMENTS:

INITIAL: ________________________________________________________________

TAG: _________________________________________________________________

FOSC: ____________________________________________________________

TAG APPROVAL DATE:  __________________   FOSC APPROVAL DATE:  __________________

ADEC  __________________
EXXON  __________________
USCG  __________________
NOAA  __________________
ECOLOGICAL CONSTRAINTS
1991 FIELD ACTIVITIES

Eagle Nest: Access restricted from 3/1 to 9/1. USF&WS authorization required. Maintain 1000' vertical and 1/4 mile horizontal buffer.

Fish Harvest Area: Unlimited treatment unless otherwise directed by ADF&G. Sheen containment/recovery procedures required for mechanical treatment.

Anadromous Stream: Unlimited treatment up to stream bank between May 15 and July 10. ADF&G approval required for work after July 10. Fish Habitat Permit required for instream work. ADF&G approval required for bioremediation within 100 meters of anadromous stream after July 10.
**TEAM NO.** ______  **SEGMENT** CU-11  **SUBDIVISION** A  **DATE** 5/3/91

<table>
<thead>
<tr>
<th>ADEC NAME</th>
<th>JEFF GIVENS</th>
<th>SIGNATURE</th>
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</thead>
</table>

- **TREATMENT RECOMMENDED**
  - I recommend manual removal at OG map sites & A3, A4, A5.
  - Oil is on surface with, amongst animals and flat cobble/boulders. Manual crew (3-5 persons) could work area very quickly and proceed thoroughly. Area very scenic, high recreational use potential (camp areas, calm clear water, and waterfalls). Easy access to treatment sites, oil readily accessible. No damage to flora and fauna. As oil on surface, simply remove & slide away a couple rocks. No damage to flora.

<table>
<thead>
<tr>
<th>EXXON NAME</th>
<th>FRANK A. BOX</th>
<th>SIGNATURE</th>
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- **Treat**
  - Intermittent fires at back of the segment at mid lode in very busy location. Seems to be encroaching away on its own. I feel evidence shows is enough oil to justify extensive clean up.

<table>
<thead>
<tr>
<th>DNR MANAGER NAME</th>
<th>MARSHA HALL</th>
<th>SIGNATURE</th>
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</thead>
</table>

- **TREATMENT**
  - Manual removal in areas A1, A3, A4 & A5. This is a popular area, scenic, no core takes a while. Cold maybe? Areas are small yet a couple people assigned to each site could take care of it. Better quickly. Recreational will be Island. No steep or walk.

<table>
<thead>
<tr>
<th>USCG/NOAA NAME</th>
<th>JENSEN CHILD</th>
<th>SIGNATURE</th>
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</thead>
</table>

- **Cleanup measures would be excessively costly in view of their insignificant contribution to minimizing a threat to the public health or wetland or the environment.**

**DEEP ENTRAPMENT W/PASTE, SLEEP SHOES & POCKET BEARER. NO SUBMERSE FOUND.**

- Subsistence located. Subsistence typically. No RAP in crevices or crevices or seeps. Bar C, oil in very degraded condition.
# MAYSAP SHORELINE OILING SUMMARY

**SEGMENT:** CU-11  
**SUBDIVISION:** A  
**DATE:** 5/3/91

## Survey Details
- **Team No.:**  
- **OG:** O. Macdonald  
- **Bio:** M. Fawcett  
- **ADEC:** J. Ginalae  
- **Landman:** M. Hall for DNR  
- **USCG/NOAA:** Jensen/childs  
- **EXXON:** E. Bok  
- **TIME:** 13:10 - 14:45  
- **TIDE LEVEL:** +4.7 ft to +6.1 ft  
- **ENERGY LEVEL:** L  
- **SURVEYED FROM:** Foot, Boat, Helo  
- **WEATHER:** Sun, Clouds, Fog, Rain, Snow  
- **TOTAL LENGTH SHORELINE SURVEYED:** 247.5 m  
- **NEAR SHORE SHEEN:** Br, Rb, Sl, None  
- **EST. OIL CATEGORY LENGTH:** 
  - W: 1-90 m  
  - M: 91-190 m  
  - N: 190-410 m  
  - V: 410-650 m  
  - US: >650 m

## Surface Oil Character

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## Subsurface Oil Character

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## Pit Details

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<th>HORIZ.</th>
<th>MORA L</th>
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## SHEEN COLOR
- B = Brown  
- A = Rainbow  
- S = Silver  
- N = None

## SHEEN COLOR
- B = Brown  
- A = Rainbow  
- S = Silver  
- N = None

## OG COMMENTS
- Cove w/ steep rocky shore and scattered BCZ pockets  
- Surface oil only, as remnant MS, Al/S e HTZ, <10%; plus cr/B-T @ HTZ & SUZ. Biodegradation of oil (MS) evident - water soluble in tar, v. slow to sheen for y slightly sticky.
WILDLIFE OBSERVATIONS
TO BE COMPLETED IN ALL SUBDIVISIONS

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<td>Gulls/Kittiwakes</td>
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<tr>
<td>Shorebirds</td>
<td></td>
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<tr>
<td>Corvids</td>
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</tr>
<tr>
<td>Other Birds</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

MARINE MAMMALS

| SPECIES | # OBSERVED | |
|---------|------------|-
| Sea Otters |            | |
| Pinnipeds (specify) | | |
| Whales (specify) | | |

LAND MAMMALS

<table>
<thead>
<tr>
<th>SPECIES</th>
<th># OBSERVED</th>
</tr>
</thead>
<tbody>
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</tbody>
</table>

shoreline subdivision map showing important biological features attached.

REVIEWED: 5/7/54
ENVIRONMENTAL SENSITIVITIES:
Work Window(s) **RESTRICTED 3/1 - 9/15**

Ecological/Constraints (see page two for details) Eagle nest, Fish harvest area, Anadromous stream

If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find, and contact Exxon's Cultural Resource Program immediately: 564-3276; 564-3657; (Anchorage) or 229-1514 (24 hrs.).

SHPO Signature: [Signature] Date: 5/13/91

**RECOMMENDATIONS:**

<table>
<thead>
<tr>
<th>TREATMENT REQUIRED (Y or N)</th>
<th>INITIAL</th>
<th>TAG</th>
<th>FOSC</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>Y</td>
<td></td>
<td>Y</td>
</tr>
</tbody>
</table>

Manual Pickup (Check as Req.)
Spot Washing
Bio-Customblen Only
Bio-Inopol/Customblen
Other______________________
Other______________________

**COMMENTS:**

INITIAL: [Initial]

TAG: **MANUAL PICKUP OF EASILY ACCESSIBLE HOUSEHOLD IN AREAS A1, A3, A5**

FOSC: [Signature]

TAG APPROVAL DATE: 5/17/91

FOSC APPROVAL DATE: 5/25/1991

ADEC [Signature]

EXXON [Signature]

USCG [Signature]

NOAA [Signature]
ECOLOGICAL CONSTRAINTS
1991 FIELD ACTIVITIES

Eagle Nest: Access restricted from 3/1 to 9/1. USF&WS authorization required. Maintain 1000' vertical and 1/4 mile horizontal buffer.

Fish Harvest Area: Unlimited treatment unless otherwise directed by ADF&G. Sheen containment/recovery procedures required for mechanical treatment.

Anadromous Stream: Unlimited treatment up to stream bank between May 15 and July 10. ADF&G approval required for work after July 10. Fish Habitat Permit required for instream work. ADF&G approval required for bioremediation within 100 meters of anadromous stream after July 10.
MAYSAP FIELD SHORELINE COMMENT SHEET

TEAM NO. 1 SEGMENT CU-11 SUBDIVISION A DATE 5/3/91

ADEC
NAME: JEFF GINNANS SIGNATURE: [Signature]

[ ] NTR [ ] TREATMENT RECOMMENDED

I recommend manual removal at OA MP Sites 1 & 2, A3, A4, A5.

Oil is on surface and amount manageable. Manual crew (3-5 persons) could work area very quickly and thoroughly. Area very scenic, high recreational use potential (camp sites, calm clear water, two showers, waterfalls). Easy access to treatment sites, oil readily accessible. Damage to flora.

EXXON
NAME: FRANK A. BOY SIGNATURE: [Signature]

[ ] NTR

Intermittent to p015 at back of 20 segment at west side of strong shoulders. Seems to be coming away against stems. Use and treat here. Need enough oil to justify intensive clean up.

LANDMANAGER
NAME: MARSHA HALL OF DNR SIGNATURE: [Signature]

[ ] NTR

Treatment

Manual removal in areas A1, A3, A4 & A5. This is a popular area scenic. Moose takes a while to shear - cold may be? Areas are small yet a couple of people assigned to each side could take care of it rather quickly. Recreational use - Island is steep rate wall!

USCG/NOAA
NAME: JENSEN J. CHILDs SIGNATURE: [Signature]

[ ] NTR

Cleanup measures would be excessive costly in view of their insignificant contribution to minimizing a threat to the public health or welfare or the environment.

The eminent with Peak Slip slopes & Point Beach No surface oil located. Subsurface typically MS CAP in cracks & crevices on Beach. Oil in very degraded condition.
# Maysap Shoreline Oiling Summary

**Team No.** ADEC

**Bio.** M. Fawcett

**Land Manager.** M. Hall

**USCG/NOAA.** Jensen/Childs

**Exxon.** F. Box

**Date.** 5/3/94

**Time.** 13:45 to 14:45

**Tide Level.** +24 ft to -6 ft

**Energy Level.** H M XL

**Surveyed From.** Foot

**Weather.** Sun

**Total Length Shoreline Surveyed.** 2475 m

**Near Shore Sheen.** None

**Est. Oil Category Length.** 2.5 m

---

### Surface Oil Character

<table>
<thead>
<tr>
<th>LO</th>
<th>C</th>
<th>AP</th>
<th>MS</th>
<th>TB</th>
<th>BOR</th>
<th>CV</th>
<th>CT</th>
<th>ST</th>
<th>FL</th>
<th>DB</th>
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<th>Surface</th>
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<td></td>
<td></td>
<td></td>
<td>Oil Type</td>
<td>Slop e</td>
<td>Width</td>
<td>Length</td>
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<tr>
<td>A1</td>
<td>S</td>
<td>S</td>
<td>B C V</td>
<td>H</td>
<td>2</td>
<td>12</td>
<td>X</td>
<td>boat</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A2</td>
<td></td>
<td></td>
<td>B</td>
<td>R B</td>
<td>V</td>
<td>≤1</td>
<td>10</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>A3</td>
<td>T</td>
<td></td>
<td>B R C</td>
<td>H</td>
<td>2</td>
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<td>X</td>
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<td>A4</td>
<td>S</td>
<td>T</td>
<td>B R C</td>
<td>H</td>
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<td>100</td>
<td>X</td>
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<tr>
<td>A5</td>
<td>S</td>
<td>S</td>
<td>R B C</td>
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<td>A6</td>
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<td>V</td>
<td>R P</td>
<td>H</td>
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<td>10</td>
<td>X</td>
<td>penman &amp; branches</td>
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**DISTRIBUTION:**

- **C:** 91-100%
- **B:** 51-90%
- **P:** 11-50%
- **S:** 1-10%
- **T:** <1%

**Slope:**

- **V:** Vertical
- **H:** High Angle
- **M:** Medium Angle
- **L:** Low Angle

**Photo Roll # Maysap-** 16 frames 8-10

---

**Subsurface Oil Character**

<table>
<thead>
<tr>
<th>Pit No.</th>
<th>Depth (cm)</th>
<th>Subsurface Oil Character</th>
<th>Oiled Zone</th>
<th>Clean Below</th>
<th>H2O Level</th>
<th>Sheen Color</th>
<th>Pit Zone</th>
<th>Subsurface SEDIMENTS</th>
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<td>1</td>
<td>20</td>
<td>X</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>x</td>
<td>CD-PG-V boat</td>
</tr>
<tr>
<td>2</td>
<td>25</td>
<td>X</td>
<td>-</td>
<td>5</td>
<td>2</td>
<td>x</td>
<td>x</td>
<td>CV-LG-V fire</td>
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<tr>
<td>3</td>
<td>20</td>
<td>X</td>
<td>-</td>
<td>5</td>
<td>2</td>
<td>X</td>
<td>x</td>
<td>CV-LG-V fire</td>
</tr>
<tr>
<td>4</td>
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<td>X</td>
<td>-</td>
<td>10</td>
<td>4</td>
<td>x</td>
<td>x</td>
<td>CV-LG-V fire</td>
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<tr>
<td>5</td>
<td>20</td>
<td>X</td>
<td>-</td>
<td>20</td>
<td>2</td>
<td>x</td>
<td>x</td>
<td>BCL-PGG</td>
</tr>
</tbody>
</table>

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**Sheen Color:**

- **B:** Brown
- **P:** Rainbow
- **E:** Silver
- **N:** None

---

**OG Comments:** Cove w/ steep rocky shoreline and sheltered BCP pockets. Surface oil only, as remnant MS, A1/5 e H2O, ≤10%. Slow crept. Biodegradation of oil (MS) evident - water soluble in parts, v. slow to sheen, oily, slightly sticky.
**MAYSAP BIOLOGICAL SUMMARY FORM**

**TEAM #** 1  
**DATE** 3 May 91

**SEGMENT #** C1 01  
**TIDAL HEIGHT (Range)** +3.5 to +5.8

**SUBDIVISION** A  
**BIOLOGIST** Michael Fawcett

**STATE** 1 ft seas  
**WIND SPEED/DIRECTION** NE 10 knots

**PHOTOGRAPHS: ROLL #**  
**FRAME #**

**COMMENTS/OBSERVATIONS (to be completed in oiled subdivisions only):**

This subdivision contains pocket beaches composed mostly of shell shingle, boulders, and outcrops. Low to moderate wave energy, lowest near walls on the sides of the beaches. Residual oil (M's AP & GT) found in UTZ, UTZ zones above 7 ft, generally near only lichen, filamentous green algae, isopods and the UTZ limpet, Notoacmaea peruviana. However, in some sites, AP or M's 103 within upper range of barnacles, intertidal rockweed, mussels, and other organisms. See accompanying sketch map for descriptions of sites near each oiled site.

**WILDLIFE OBSERVATIONS**

**TO BE COMPLETED IN ALL SUBDIVISIONS**

<table>
<thead>
<tr>
<th>BIRDS</th>
<th># OF SPECIES</th>
<th>TOTAL BIRDS</th>
<th>FISH OBSERVED</th>
</tr>
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<tbody>
<tr>
<td>Eagles</td>
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<tr>
<td>Seabirds</td>
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<td></td>
<td></td>
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<tr>
<td>Waterfowl</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Gulls/Kittiwakes</td>
<td>2 (common merganser, Harlquin duck)</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Shorebirds</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Corvids</td>
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<td></td>
<td></td>
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<tr>
<td>Other Birds</td>
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</tbody>
</table>

**MARINE MAMMALS**

<table>
<thead>
<tr>
<th>SPECIES</th>
<th># OBSERVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sea Otters</td>
<td></td>
</tr>
<tr>
<td>Pinnipeds</td>
<td></td>
</tr>
<tr>
<td>Whales</td>
<td></td>
</tr>
</tbody>
</table>

**LAND MAMMALS**

Shoreline subdivision map showing important biological features attached.

Reviewed: 5/7/94 MC
CW 011A - Site 1 - Fawcett

May 91 - Arr 4.45

Shale slope - Beak - Breakaway - Walk - Plateau - Dead bank
7 spot, paths down Fawcett
MTZ - 452 - Red, 1st morning
- 2 small streams cross beach
(Near camp) - 508 - Incline
Spot, sparse Fucuses, in hold
11th imp. - SE + 78 ft

Side 2: 1415 hours - So.
Type outshell as #1
508 - 2nd Elbow behind
13 rd - 6rd 6th, 8-9 ft among
dark rock, barn, RIP
7th - SW walls along
Spot 8th barn, MT - down
was shown above - location
burned in single-petal area among 9th 6th, barn,
site 1. Fucuses, Spotted, in
in MTZ - 172 - dense spot
small Fucuses, coke,coffee
2 common heath
2 Harlequins
S.V. 11 A (cont) Fasc 24th 3 May 91
3rd side same description as 2
Final 1945
Sketch Map
CU 011-A
3 May 91
M.H. Fawcett

- Filamentous green algae, diatoms near CT, sparse rockweed, barnacles, etc., downshore
- Lichen, isopods, limpets near CT, moderate rockweed, barnacles, littorinids, downshore
- Dense barnacle spot, sparse rockweed, shells, littorinids, limpets near SR, all of above more dense downshore, patchy mussels, too

- Stream: non-ammonia

- B/R

- A1
- A2
- A4
- A5
- A6

- Stream
- NO OIL
- NO OIL

- 0 100 m

- N

- N WL

- Common mergansers
- Harlequin ducks
REGION: PRINCE WILLIAM SOUND

SEGMENT: CU-12

SUBDIVISIONS: A (1 OF 1)
SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
Gill net area (1I) - 6/7 to 8/31; Purse seine area (1J) - 7/21 to 9/30; bald eagle nests (5T) - 3/1 to 6/1; Recreation special use destination (6Y) - 6/1 to 9/15.

SUBDIVISION ECOLOGICAL CONSTRAINTS: (1I, 1J) Contact ADF&G for dates, locations, constraints. (5T) Restrict air traffic to essential minimum. Air approach and takeoff from and to seaward only. Contact USFWS prior to treatment for confirmation dates and avoidance minimums.

ARCHAEOLOGICAL CONSTRAINTS: If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO SIGNATURE: ____________________ DATE: ____________________

OILING CATEGORIZATION:
Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 0 m: No Oil 1767 m
Subsurface Oil Observed: Yes____ No X____ Maximum Depth____

RECOMMENDATIONS:
X No Treatment Recommended _____ Snare/Absorbent Booms
Treatment Recommended _____ Oil Snares (pom poms)
_____ Manual Pickup _____ Absorbents (pads, rolls, etc)
_____ Bioremediation _____ Spot Washing: _____ Wands
_____ Tarmat: _____ Breakup _____ Beach Cleaner
_____ Removal _____ Other (see comments)

COMMENTS: ____________________________ __________________________

TAG COMMENTS: ____________________________ __________________________

TAG APPROVAL DATE: ____________________________
ADEC EXXON FOSC: ________ DATE: ________
NOAA USCG
FIELD SHORELINE COMMENT SHEET

SEGMENT ST/ CU-12 SUBDIVISION: A-10f1 DATE 04/24/9

NAME  David Sohmer  SIGNATURE  

☐ NO TREATMENT RECOMMENDED  ☐ TREATMENT SUGGESTED

COMMENTS

NAME Clara Crosby  SIGNATURE  Clara S. Crosby  

☐ NO TREATMENT RECOMMENDED  ☐ TREATMENT SUGGESTED

COMMENTS

No oil observed - unable to land on any Part of Segment - rock face & surf limited

NAME MARSHA MARTIN  SIGNATURE  Marsha Martin  

☐ NO TREATMENT RECOMMENDED  ☐ TREATMENT SUGGESTED

COMMENTS
SHORELINE OILING SUMMARY

SHORELINE OILING SUMMARY

SURFACE OIL

<table>
<thead>
<tr>
<th>CHARACTER</th>
<th>DISTRIBUTION</th>
<th>OIL / FILM COLOR</th>
<th>IMPACTED ZONES</th>
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<tbody>
<tr>
<td>ASPHALT PAVEMENT</td>
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<td>COVER</td>
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<td>MOUSSE</td>
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<td>PATIEES</td>
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<tr>
<td>TARBALLS</td>
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<tr>
<td>FILM</td>
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</tr>
<tr>
<td>NO OIL</td>
<td></td>
<td></td>
<td><strong>X X X</strong></td>
</tr>
</tbody>
</table>

PAVEMENT: H F S N/A sq. m by cm
PATTIES / TARBALLS: N/A BAGS
NEAR SHORE SHEEN?: NO BR RW SL TL
OILED DEBRIS AMOUNT
Loge / Vegetation / Trash / Debris
DEBRIS COLLECTED YES NO
TYPE
NO BAGS
Photographs:
Roll No. N/A
Frames N/A

SUBSURFACE OIL

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<th>PIT DEPTH (cm)</th>
<th>SUBSURFACE OIL CHARACTER</th>
<th>Oiled INTERVAL</th>
<th>BELOW</th>
<th>OIL / FILM COLOR</th>
<th>PIT ZONE</th>
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<td>VI</td>
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COMMENTS
1. SURVEYED BY BOAT. UNABLE TO LAND BECAUSE OF STEEP REDROCK SHORELINE. NO BEACHES. HIGH WAVE
2. PREVIOUS SURVEYS INDICATED NO OIL.

Page 1 of _
REVIEWED JW DATE 4-7-90
SHORELINE ECOLOGICAL SUMMARY

Segment ST / LU 0114 Subdivision Date (mo/day/yr) 4-4-90

Time (24 hr) 15:45 Biologist David Cole

(A) Substrate type and % of segments:

(B) Overall % cover of biota ( % of segment): Dense 70% Moderate 50% Low 30%

(C) Density, substrate preference ( by number from A, above ), & vertical zonation of major taxa: ( upper-U; mid-M; low tidal-L ); juveniles / adults (X), new settlement (0)

Photographs:
Roll No. ___ Frames ______

BARNACLES

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MYTILUS

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GASTROPODS

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Wildlife Observations/ General Comments:
1. This segment was surveyed by boat due to difficult landing condition. Only those organisms evident from the boat were recorded
2. Low intertidal not seen.
Ecological Considerations: 3. Ulva/Enteromorpha present in mid zone
4. Dulse seen in area

ST - no comment
CULROSS ISLAND

SEGMENT: CU-12
SUBDIVISION: A-15FL

NORTH PART

Map Key: PWS-70b
Name: GILLIE
Date: 4-4-90

Scale: 1:1000

Legend:
- XXXX Wide
- ///// Medium
- ----- Narrow
- TTTT Very Light
CUERDA ISLAND

SEGMENT: CU-12
SUBSIMULATION: A, 1of 1

SOUTH PART

XXX Wide
/// Medium
---- Narrow
TTTT Very Light

ADEC Segment Length: 1767m

Map Key: PWS-70a
Name: GILLIE
Date: 4-4-90

Data Entered:
SHORELINE EVALUATION

SEGMENT ST/ CU-12 SUBDIVISION A (1 OF 1) DATE 4/4/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
Gill net area (1J) - 6/7 to 8/31; Purse seine area (1J) - 7/21 to 9/30; bald eagle nests (5T) - 3/1 to 6/1; Recreation special use destination (6Y) - 6/1 to 9/15.

SUBDIVISION ECOLOGICAL CONSTRAINTS: (1J, 1J) Contact ADF&G for dates, locations, constraints. (5T) Restrict air traffic to essential minimum. Air approach and takeoff from and to seaward only. Contact USFWS prior to treatment for confirmation dates and avoidance minimums.

ARCHAEOLOGICAL CONSTRAINTS: If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO SIGNATURE: [Signature] DATE: April 14, 1990

OILING CATEGORIZATION:
Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 0 m: No Oil 1767 m
Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:
X No Treatment Recommended Snare/Absorbent Booms
_____ Treatment Recommended Oil Snares (pom poms)
_____ Manual Pickup Absorbents (pads, rolls, etc)
_____ Bioremediation Spot Washing: Wands
_____ Tarmat: Breakup Beach Cleaner
_____ Removal Beach Cleaner
_____ Other (see comments)

COMMENTS:

TAG COMMENTS:

TAG APPROVAL DATE: 4/14/90
ADEC: [Signature] DATE: 4/20/90
EXXON: [Signature] DATE: [Signature]
NOAA: [Signature] DATE: [Signature]
USCG: [Signature] DATE: [Signature]
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REGION: PRINCE WILLIAM SOUND

SEGMENT: CU-13

SUBDIVISIONS: A (1 OF 1)
SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
Salmon stream mouth (ADF&G catalogue 224-20-13030) - fry out migration (1A) - 3/1 to 5/15 and spawning (1B) 7/10 to 8/31; Gill net area (1I) - 6/7 to 8/31; Purse seine area (1J) - 7/21 to 9/30; Recreation special use designation (6Y)

SUBDIVISION ECOLOGICAL CONSTRAINTS: (1A, 1B) No disturbance of stream bed or banks unless authorized by ADF&G. Contact ADF&G Habitat Division prior to treatment for permits. (1I, 1J) Contact ADF&G for dates, locations, constraints.

ARCHAEOLOGICAL CONSTRAINTS: If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact a member of Exxon's Cultural Resource Program immediately (564-3657; 564-3658 or 564-3276).

OILING CATEGORIZATION:
Wide 45 m: Medium 38 m: Narrow 0 m: V.Light 650 m: No Oil 0 m
Subsurface Oil Observed: Yes X No Maximum Depth 10 cm

RECOMMENDATIONS:
____ No Treatment Recommended _____ Snare/Absorbent Booms
____ Treatment Recommended _____ Oil Snares (pom poms)
____ Manual Pickup _____ Absorbents (pads, rolls, etc)
____ Bioremediation _____ Spot Washing: _____ Wands
____ Tarmat: _____ Breakup _____ Beach Cleaner
____ Removal _____ Other (see comments)

COMMENTS: Treatment activities are recommended as follows: 1) Manual pickup of mousse and tar patties, 2) tarmat removal and 3) bioremediation of areas shown on attached sketch map. Work should be conducted between 5/15 and 6/7 based on above constraints.

TAG COMMENTS:

TAG APPROVAL DATE: ___________
ADEC ________________ FOSC: ____________ DATE: __________
EXXON ________________
NOAA __________________
USCG ___________________
SHORELINE OILING SUMMARY

SUBUPLANDS DESCRIPTION:
SURVEYED FROM:
TIDE LEVEL:
SURVEYED FROM:
SURFACE SEDIMENTS:
SLOPE: Lang ~ Hang ~ Vert ~
OIL CATEGORY LENGTH:
SURFACE OIL
CHARACTER
ASPHALT
POOLED
COVER
COAT
STAIN
MOUSSE
PATTIES
STAINS
PIT OIL
NO OIL
DISTRIBUTION
OIL / FILM COLOR
IMPACTED ZONES
OIL AMOUNT
DEBRIS COLLECTED
DEBRIS TYPE
PHOTOGRAPHS:
PAVEMENT:
PATTIES / TARBALLS
NEAR SHORE SHEEN?
OILED INTERVAL < 5 cm in Pits Nos. 5 and 6 do not constitute Subsurface Oil.

<table>
<thead>
<tr>
<th>PIT NO.</th>
<th>PIT DEPTH (cm)</th>
<th>SUBSURFACE OIL CHARACTER</th>
<th>OILED INTERVAL</th>
<th>BELOW OIL / FILM COLOR</th>
<th>PIT ZONE</th>
<th>ANA</th>
<th>SUBSURFACE SEDIMENTS</th>
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COMMENTS (GENERAL)
1. OIL: WIDE AND MEDIUM OIL CATEGORY AT SITE 1 AND 2.
2. OTHERWISE "V. LIGHT".
3. GEOMORPHOLOGY: ROCK SHORELINE (HANG) EXCEPT FOR TWO OILED BEACHES.

Page 1 of
FIELD SHORELINE COMMENT SHEET

SEGMENT ST: CU-13  SUBDIVISION: A-13F1  DATE: 04/04/9

USCG
NAME: David S. Thomas  SIGNATURE:

☐ NO TREATMENT RECOMMENDED  ☑ TREATMENT SUGGESTED

COMMENTS

ADEC
NAME: Clara Crosby  SIGNATURE: Clara S. Crosby

☐ NO TREATMENT RECOMMENDED  ☑ TREATMENT SUGGESTED

COMMENTS

Site #1 & 2: Bedrock base-wash site; ox - manual removal of mussel-saturated peat - (pooled mussel to 7.5 cm) MAEP - manual removal.

No specific treatment technique recommended for the rest of the segment.

LAND MANAGER
NAME: MARSHA MARTIN/DNR  SIGNATURE: Marsha Martin

☐ NO TREATMENT RECOMMENDED  ☑ TREATMENT SUGGESTED

COMMENTS
SHORELINE ECOLOGICAL SUMMARY

Segment ST/12013 Subdivision A Date (mo/day/yr) 4-4-90

Time (24 hr) 14:25 Biologist David Lauer

(A) Substrate type and % of segments:
   (1) Bedrock 50 (2) Boulder 30 (3) Cobble 10 (4) Pebble 5 (5) Sand 5

(B) Overall % cover of biota (% of segment):
Dense 70 Moderate 45 Low 8

(C) Density, substrate preference (by number from A, above) &
vertical zonation of major taxa: (upper-U; mid-M; low tidal-L);
juveniles/adults (X), new settlement (O)

BARNACLES

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Wildlife Observations/ General Comments:

See page 2

Ecological Considerations:

T, 15, 64 - no comment

1B - Several small running streams found in segment
Biol.gist David Lobos

Wildlife Observations / General Comments

1. Present in low intertidal - Enteromorpha, Ulva, Halosaccion, coralline algae
   mid intertidal - Polis, Anthopleura, sculpins, coralline algae, Entomorpha, unidentified "branchy redalg"
   high intertidal - Enteromorpha

2. Patches of just byssal threads found in mid-intertidal on bedrock
   and boulders

3. Cormorants spotted in area

4. Enteromorpha is dense on mid- and high-intertidal boulders in
   some areas.

5. One mature bald eagle sighted in area.
ADDENDUM: SUBDIVISION CONSTRAINTS
SEGMENT CU-13 SUBDIVISION A (1 of 1)

WORK WINDOW

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<td>Tarmat Removal</td>
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<td>Bioremediation</td>
<td>WORK PRIOR TO 6/7</td>
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ARCHAEOLOGICAL STANDARD CONSTRAINT

If cultural resources are uncovered, PHONE 564-3274.

APPLICABLE ECOLOGICAL TIME CONSTRAINTS

1A,1B Salmon Stream  No constraint. ADF&G catalogued anadromous stream (224-20-13030) is more than 100m from recommended treatment areas.

11 Gill Net Area  No constraint to manual pickup and tarmat removal; Subdivision A is closed to bioremediation from 6/7 to 8/31.

1K Purse Seine Hook-off  No constraint to manual pickup and tarmat removal; closed to bioremediation after 7/20.

1J Purse Seine Area  No constraint to manual pickup and tarmat removal; closed to bioremediation after 7/20.

OTHER ECOLOGICAL CONSIDERATIONS

Restrict boat and air traffic to essential minimum. Avoid any unnecessary disturbance or damage to unprocessed biota and substrate.

TAG ADDENDUM DATE

ADEC
EXXON
NOAA
USCG

Prepared by: [Signature]  Date: 5/17/90

Date: 5/18/90
SEGMENT ST/ CU-13 SUBDIVISION A (1 OF 1) DATE 4/4/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
Salmon stream mouth (ADF&G catalogue 224-20-13030) - fry out migration (1A) - 3/1 to 5/15 and spawning (1B) 7/10 to 8/31; Gill net area (1I) - 6/7 to 8/31; Purse seine area (1J) - 7/21 to 9/30; Recreation special use designation (6Y)

SUBDIVISION ECOLOGICAL CONSTRAINTS: (1A, 1B) No disturbance of stream bed or banks unless authorized by ADF&G. Contact ADF&G Habitat Division prior to treatment for permits. (1I, 1J) Contact ADF&G for dates, locations, constraints.

ARCHAEOLOGICAL CONSTRAINTS: If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact a member of Exxon's Cultural Resource Program immediately (564-3657; 564-3658 or 564-3276).

SHPO SIGNATURE: DATE: 4/4/90

OILING CATEGORIZATION:
Wide 45 m: Medium 38 m: Narrow 0 m: V.Light 650 m: No Oil 0 m
Subsurface Oil Observed: Yes X No Maximum Depth 10cm

RECOMMENDATIONS:
No Treatment Recommended Snare/Absorbent Booms
X Treatment Recommended Oil Snare (pom poms)
X Manual Pickup Absorbents (pads, rolls, etc)
X Bioremediation Spot Washing: Wands
X Tarmat: Breakup Beach Cleaner

COMMENTS: Treatment activities are recommended as follows: 1) Manual pickup of mousse and tar patties, 2) tarmat removal and 3) bioremediation of areas shown on attached sketch map. Work should be conducted between 5/15 and 6/7 based on above constraints.

TAG COMMENTS:

TAG APPROVAL DATE: 4/16/90
ADEC
EXXON
NOAA
USCG
FOSC: DATE:
Segment ST/ CU-13 Subdivision A (1 of 1) Date 4/4/90

Segment Environmental Sensitivities and Time Constraints:
Salmon stream mouth (ADF&G catalogue 224-20-13030) - fry out migration (1A) 3/1 to 5/15 and spawning (1B) 7/10 to 8/31; Gill net area (1I) 6/7 to 8/31; Purse seine area (1J) 7/21 to 9/30; Recreation special use designation (6Y)

Subdivision Ecological Constraints: (1A, 1B) No disturbance of stream bed or banks unless authorized by ADF&G. Contact ADF&G Habitat Division prior to treatment for permits. (1I, 1J) Contact ADF&G for dates, locations, constraints.

Archeological Constraints: If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact a member of Exxon's Cultural Resource Program immediately (564-3657; 564-3658 or 564-3276).

SHPO Signature: [Signature] Date: 4/17/90

Oiling Categorization:
Wide 45 m: Medium 38 m: Narrow 0 m: V.Light 650 m: No Oil 0 m
Subsurface Oil Observed: Yes X No

Recommendations:
X Treatment Recommended _____ Snare/Absorbent Booms
_____ Oil Snares (pom poms)
_____ Manual Pickup
_____ Absorbents (pads, rolls, etc)
_____ Bioremediation
_____ Spot Washing: _____ Wands
_____ Tarmat: _____ Breakup
_____ Removal
_____ Other (see comments)

Comments: Treatment activities are recommended as follows: 1) Manual pickup of mousse and tar patties, 2) tarmat removal and 3) bioremediation of areas shown on attached sketch map. Work should be conducted between 5/15 and 6/7 based on above constraints.

TAG Comments:

TAG Approval Date: 4/16/90
ADEC: [Signature] Date: 4/16/90
EXXON: [Signature] Date: 4/30/90
NOAA: [Signature] Date: 4/30/90
USCG: [Signature] Date: 4/30/90
**1991 MAYSAP EVALUATION**

**SEGMENT:** CU 013  **SUB:** A  **REGION:** PWS  **SURVEY DATE:** 5/15/91

**ENVIRONMENTAL SENSITIVITIES:**
Work Window(s) **RESTRICTED 3/1 - 9/15**

Ecological/Constraints (see page two for details)  **Eagle nest,**  **Fish harvest area, Anadromous stream**

**ARCHAEOLOGICAL CONSTRAINTS:**
If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO Signature: ______________________ Date: ____________________

**RECOMMENDATIONS:**

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<tr>
<th>TREATMENT REQUIRED (Y or N)</th>
<th>INITIAL</th>
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Manual Pickup (Check as Req.)  ____
Spot Washing  ____
Bio-Customblen Only  ____
Bio-Inipol/Customblen  ____
Other  ____
Other  ____

**COMMENTS:**
INITIAL: ________________________

TAG: ____________________________

FOSC: __________________________

TAG APPROVAL DATE: ____________  FOSC APPROVAL DATE: ____________

ADEC  _________________________  FOSC  _________________________
EXXON  ________________________
USCG  _________________________
NOAA  _________________________
ECOLOGICAL CONSTRAINTS
1991 FIELD ACTIVITIES

Eagle Nest: Access restricted from 3/1 to 9/1. USFWS authorization required. Maintain 1000' vertical and 1/4 mile horizontal buffer.

Fish Harvest Area: Unlimited treatment unless otherwise directed by ADF&G. Sheen containment/recovery procedures required for mechanical treatment.

Anadromous Stream: Unlimited treatment up to stream bank between May 15 and July 10. ADF&G approval required for work after July 10. Fish Habitat Permit required for instream work. ADF&G approval required for bioremediation within 100 meters of anadromous stream after July 10.
TEAM NO. 1  SEGMENT CU013  SUBDIVISION A  DATE 5/15/91

ADEC NAME  JEFF GUALAS  SIGNATURE  

NTR  ONLY OIL IS OCCASIONAL COAT OR ISOLATED RESIDUAL BETWEEN BOULDERS. VERY SPORADIC.

EXXON NAME  RANDALL E. BOWE  SIGNATURE  RANDALL E. BOWE

NTR  NO TREATABLE OILING CONDITIONS WERE FOUND ON CU013A. SEVERAL TAEBUS WERE PICKED UP BY THE SURVEYORS. THE AP LAYER LOCATED IN THE MIDDLE OF THE SUBDIVISION THAT WAS TREATED BY SQUAD 6 IN 1990 WAS UNDETECTABLE ON THIS SURVEY. NO FURTHER REASSESSMENT IS WARRANTED. BEAUTIFUL BEACH.

LANDMANAGER NAME  MARSHA HALL OF DNR  SIGNATURE  MARSHA HALL

NTR  SURFACE STAIN OCCASIONAL CT.

USCG/NOAA NAME  SCHOLTZ  SIGNATURE  

NTR  WHAT LITTLE OILING FOUND WAS OF NO SIGNIFICANCE. FURTHER INVESTIGATION IS NOT WARRANTED

H: ANGLE BENDISH OUTCROP SHORELINE W/ POORLY SORTED POCKET BEACHES. SURFACE OILING OBSERVED AT CT 4 ST AT UI ZONE. A FEW TAR BALLS WERE DETECTED. ONLY MINOR AMOUNTS. NO SUBSURFACE OIL OBSERVED.
# MAYSAP SHORELINE OILING SUMMARY

**TEAM NO. 1**
- **OG**: E. MACDONALD
- **LONG**: M. FANTS
- **EXXON**: J. GINALIUS
- **LANDMANAGER**: M. HALL
- **USCG/NOAA**: SCHULTZE/CHILD

**SEGMENT**: CU-13
**SUBDIVISION**: A
**DATE**: 5/15/91
**TIME**: 12:20 to 13:05
**TIDE LEVEL**: +17 ft
**ENERGY LEVEL**: H X M L
**SURVEYED FROM**: FOOT BOAT HELO
**WEATHER**: SUN CLOUDS FOG RAIN SNOW
**TOTAL LENGTH SHORELINE SURVEYED**: 405 m
**NEAR SHORE SHEEN**: BR RB SL X NONE

**EST. OIL CATEGORY LENGTH**:
- **W**: m
- **M**: m
- **N**: m
- **VL**: 300 m
- **NO**: 105 m
- **US**: 330 m

### Surface Oil Character

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<thead>
<tr>
<th>LO</th>
<th>SURFACE OIL CHARACTER</th>
<th>SURFACE SEDIMENT</th>
<th>SHORE SLOPE</th>
<th>AREA</th>
<th>ZONE</th>
<th>NOTES</th>
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<tr>
<td></td>
<td></td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>A</td>
<td>S T S S</td>
<td>RBC H</td>
<td>2</td>
<td>40</td>
<td>X X</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>S T T</td>
<td>VBC L</td>
<td>10</td>
<td>15</td>
<td>X X</td>
<td>10 sor</td>
</tr>
<tr>
<td>C</td>
<td>S S</td>
<td>ZCP H</td>
<td>1/2</td>
<td>B</td>
<td>X X</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>T T T</td>
<td>RFG M</td>
<td>2</td>
<td>10</td>
<td>X</td>
<td>10 sor</td>
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</table>

### Subsurface Oil Character

<table>
<thead>
<tr>
<th>PIT NO.</th>
<th>DEPTH (cm)</th>
<th>OILED ZONE</th>
<th>OILED SUBSURFACE SEDIMENTS</th>
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<tbody>
<tr>
<td>1</td>
<td>20</td>
<td>-</td>
<td>Y-FC</td>
</tr>
<tr>
<td>2</td>
<td>15</td>
<td>-</td>
<td>VGM-GR, gray-peat</td>
</tr>
<tr>
<td>3</td>
<td>15</td>
<td>-</td>
<td>CT-CP</td>
</tr>
<tr>
<td>4</td>
<td>20</td>
<td>-</td>
<td>Pe-PCA</td>
</tr>
<tr>
<td>5</td>
<td>20</td>
<td>-</td>
<td>G-GMV</td>
</tr>
</tbody>
</table>

**SHEEN COLOR**: B = BROWN; R = RAINBOW; S = SILVER; N = NONE

**OG COMMENTS**:
- Steep rocky shore w/ massive B, C, L over bedrock in embayment.
- Surface oil only as (i) trace CV below massive B, w/ assoc. CT, SGTZ
- (ii) CT, ST, TB, 10 sor C Hitz, on grassy beach, R, B, C
- A trace of subsurface oil was detected in KG born @ pit 1 - this was a local occurrence.
CU-13A
G. Macdonald
6.16.91

A
CT, ST: <10% up, HTZ
TB, <10% on R, BC
2 x 40m; <10%
trace CV; below massive BC.

B
CT, ST: <10%
12m x 8m

C
Creosote bog

D
CB/R

TB, 15 m SOR
CT, <1%
2 x 10 m

Rock stable

Hi E BCR beach
~20m wide

Stream

Grass w/ BC.
SOR 10 < 10%
10 x 15m

CT, ST < 1%

H - SHTZ
WILDLIFE OBSERVATIONS
TO BE COMPLETED IN ALL SUBDIVISIONS

<table>
<thead>
<tr>
<th>BIRDS</th>
<th># OF SPECIES</th>
<th>TOTAL BIRDS</th>
<th>FISH OBSERVED SPECIES PRESENT</th>
</tr>
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<tbody>
<tr>
<td>Eagles</td>
<td>1</td>
<td>1 (immature)</td>
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<tr>
<td>Seabirds</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waterfowl</td>
<td>1 (harlequin duck)</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Gulls/kittiwakes</td>
<td>2 (black-legged kittiwake)</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Shorebirds</td>
<td>2 (black oystercatcher)</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Corvids</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other Birds</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

LAND MAMMALS

<table>
<thead>
<tr>
<th>MARINE MAMMALS</th>
<th># OBSERVED</th>
<th>SPECIES</th>
<th># OBSERVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sea Otters</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pinnipeds(specify)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Whales(specify)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Shoreline subdivision map showing important biological features attached.
CU 13 5/15/91 Faulk
Ayr 1220 wind 15NE, rain
Wavel 1st, seas 5ft
-1mm eagle over fly
-2 harlequin ducks
Site 6: CT 8 CU 17Z-1Z + 10F
-Wavebreak, castle & R
-oak fires at night
-ct at end of pocket - semi-
-probably by cut
-Sponge barn 1m, lift in lower edge of wall over, more clave
3-4m cliff
-Deep barn 5m, cliffstone at
+4-7Ft - patchy Eucals, Pohos, and lift, Ireland
for scattered small patches
young mussel
2 shallow patches w grassy
in syphon - them - amphiads
aluminae, barnacles, 70m
aluminae - 50Ft
Trematoast rock w lice
10m South
CT in lee side +10Ft - no bivalves
CU 13 (cont) 5/15/91 Fayrett

- Sparrow, been Fency 11/7 5m
- Downed q ci on BR - surrounded by loose feathers @ 64 k
- 2 oystercatchers
- 2 rhino frogs
- 5-6 rust shorebirds (3am-7pm)

- Tuna QT at south end of beach +10 ft just offshore
dense young Ficus - 2 pass
- baby jumps off
- Kitiwaka

Finish 1305
sparse barnacles, limpets, and littorinids at lower edge of CT, more dense 3-4 m downshore. Dense barnacles 5 m downshore at 4-7 ft MLLW with patchy Fucus, Rhodomela, young mussels, whelks, and moderately dense littorinids.

no biota except lichen near CT, gravel below

Dense young Fucus sparse barnacles, limpets, littorinids just below CT & SOR

rocks, slabs

Amphipods, wavy terrestrial grass near SOR in SUTZ, barnacles, rocks, littorinids, limpets, etc. 10 m downshore over edge of shelf

M.H. Fawcett

Sketch Map
CU 13-A
15 May 91
1991 MAYSAP EVALUATION

SEGMENT: CH.013  SUB: A  REGION: PWS  SURVEY DATE: 5/1/91

ENVIRONMENTAL SENSITIVITIES:
Work Window(s)  RESTRICTED 3/1 - 9/15

Ecological/Constraints (see page two for details)  Eagle nest, subsistence - Deer harvesting

ARCHAEOLOGICAL CONSTRAINTS:
If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO Signature: Charles E. Holmes  Date: 5/10/91

RECOMMENDATIONS:

<table>
<thead>
<tr>
<th>TREATMENT REQUIRED (Y or N)</th>
<th>INITIAL</th>
<th>TAG</th>
<th>FOSC</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Manual Pickup (Check as Req.)
Spot Washing
Bio-Customblen Only
Bio-Inipol/Customeblen
Other
Other

COMMENTS:
INITIAL: ______________________________________________________

TAG: ______________________________________________________

FOSC: ______________________________________________________

TAG APPROVAL DATE: MAY 10 1991  FOSC APPROVAL DATE: 8/15/91

ADEC  [Signature]  FOSC  [Signature]
EXXON  [Signature]  CHIEF OF STAFF, FOSC
USCG  [Signature]  The State will evaluate the need for treatment at this subsection. John
NOAA  [Signature]  

(Handwritten note: The State will evaluate the need for treatment at this subsection. John
ECOLOGICAL CONSTRAINTS
1991 FIELD ACTIVITIES

Eagle Nest: Access restricted from 3/1 to 9/1. USF&WS authorization required. Maintain 1000' vertical and 1/4 mile horizontal buffer.

Subsistence - Deer Harvesting: Unlimited treatment prior to 8/15.
# MAYSAP FIELD SHORELINE COMMENT SHEET

**TEAM NO.** 4  
**SEGMENT** CH013  
**SUBDIVISION** A  
**DATE** 1 MAY 91

## ADEC
**NAME** Dianne Munson  
**SIGNATURE**  
- [ ] **NTR**  
- [x] Treatment Recommended

> Although some oil was removed during the survey, tar balls, tar patches and MSOR remain. Recommend C.V.C. crew for manual pickup.

## EXXON
**NAME** LARRY D. CLISON  
**SIGNATURE**  
- [x] **NTR**

> Survey found patches of MSOR. Although weathered, an option would be to have CVC clean up crew remove patches as located on 06 sheet map.

## LANDMANAGER
**NAME** LARRY EVANOFF of CVC  
**SIGNATURE**  
- [ ] **NTR**  
- [ ] Treatment Recommended

> This segment still needs to be worked on. TB/patties need to be removed. No bioremediation recommended.

## USCG/NOAA
**NAME** JERRY SCHULTZ  
**SIGNATURE**  
- [x] **NTR**

> Although some MSOR was found, the patches were weathered to the point they were inert. As an option the CVC work crew could work this subdivision.
## MAYSAP SHORELINE OILING SUMMARY

### Team No.
OG: M. Sempel  
ADEC: D. Munro  
TOXON: L. Olson  
USCG/NOAA: O. Schulz

### Bio.
J. Barry  
LANDMANAGER: L. Krumm

### Date
1/17/91

### Segment
CH 013

### Subdivision
A

### Time
12:17 to 12:40

### Tide Level
2.5 ft. to 4 ft.

### Surveyed From
- FOOT  
- BOAT  
- HELO

### Weather
- SUN  
- CLOUDS  
- FOG  
- RAIN  
- SNOW

### Est. OIL Category Length
- W  
- M  
- N

<table>
<thead>
<tr>
<th>LOCATION</th>
<th>SURFACE OIL CHARACTER</th>
<th>SURFACE OIL TYPE</th>
<th>SLOPE</th>
<th>WIDTH</th>
<th>LENGTH</th>
<th>ZONE</th>
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<tbody>
<tr>
<td>A1</td>
<td>P</td>
<td>CB,CI</td>
<td>L</td>
<td>3</td>
<td>5</td>
<td>X</td>
</tr>
<tr>
<td>A2</td>
<td>S</td>
<td>CB,CI</td>
<td>L</td>
<td>2</td>
<td>3</td>
<td>X</td>
</tr>
<tr>
<td>A3</td>
<td>P</td>
<td>CB,CI</td>
<td>L</td>
<td>1</td>
<td>2</td>
<td>X</td>
</tr>
<tr>
<td>A4</td>
<td>P</td>
<td>CB,CI</td>
<td>L</td>
<td>1</td>
<td>2</td>
<td>X</td>
</tr>
<tr>
<td>A5</td>
<td>B</td>
<td>CB,CI</td>
<td>L</td>
<td>1</td>
<td>2</td>
<td>X</td>
</tr>
<tr>
<td>A6</td>
<td>P</td>
<td>CB,CI</td>
<td>L</td>
<td>1</td>
<td>2</td>
<td>X</td>
</tr>
</tbody>
</table>

### Notes
- DISTRIBUTION: C = 91-100%; B = 51-90%; P = 11-50%; S = 1-10%; T = <1%
- SLOPE: V = VERTICAL; H = HIGH ANGLE; M = MEDIUM ANGLE; L = LOW ANGLE
- PHOTO ROLL: MAYSAP

### Pit Comments

OG Comments:

Short section of bedrock outcrop and angular CB/CI in intertidal zone. Most of the bedrock is steep bedrock. All bedrock has vertical foliation.

6 areas of SOR were found, and worked on and a number of tar pellets were found and picked up.

Revised 5/4/91 M.E.
Oiled site (Tar Balls) located along the drift line between the upper intertidal and supratidal zones. This is a small pocket beach with small angular cobble and pebbles. The biota at the immediate area of the oil are beach grass (moderate), a few littorines and limpets, and sparse black lichen. Below the oiled location, the beach forms a ramp to the water with moderate cover of Fucus, and barnacles, as well as sparse to moderate densities of mussels and littorines.

MANUAL PICK-UP OF OILED SEDIMENTS PERFORMED DURING SURVEY. Further clean-up, if necessary, will have little adverse effect on the intertidal biota.

This site has oil (L/MSOR) in the upper intertidal zone on a zone of small broken cobble and pebbles. At this site there are moderate densities of littorines (adults, juveniles, eggs), limpets, and sparse barnacles. Fucus is present both above and below the oiled sediments, primarily on the bedrock outcrops where high numbers of juveniles are growing within the small crevices and cracks. The lower zones bordering the site form a medium angle cobble beach, with a small bedrock outcrop. Fucus is sparse in this lower zone beach and barnacles are present in moderate densities in the lower shore.

MANUAL PICKUP PERFORMED DURING SURVEY. Additional cleanup, if recommended, will not adversely affect the intertidal biota.

(continued)

WILDLIFE OBSERVATIONS — Completed on all subdivisions

<table>
<thead>
<tr>
<th>BIRDS</th>
<th># OF SPECIES</th>
<th>TOTAL BIRDS</th>
<th>FISH OBSERVED</th>
<th>SPECIES PRESENT</th>
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<tbody>
<tr>
<td>Eagles</td>
<td>Nest Marked on Map, but not Observed, 0 eagles</td>
<td></td>
<td></td>
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<tr>
<td>Seabirds</td>
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<td>Waterfowl</td>
<td>2</td>
<td>6</td>
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<tr>
<td>Gulls/Kittiwakes</td>
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<td>6</td>
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<td></td>
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<td>Shorebirds</td>
<td>1</td>
<td>2</td>
<td></td>
<td></td>
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<tr>
<td>Corvids</td>
<td>1</td>
<td>3</td>
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<td>Other Birds</td>
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<thead>
<tr>
<th>MARINE MAMMALS</th>
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<th>LAND MAMMALS</th>
<th>SPECIES</th>
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<td>Sea Otters</td>
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<td>River Otter</td>
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<tr>
<td>Whales (specify)</td>
<td></td>
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</table>

Shoreline subdivision map showing important biological features attached.
Subdivision CH013-A, Biology Report, (continued)

Oiled Site (MSOR) is located in the upper zone of a cobble/boulder and scattered bedrock beach. The site has a low cover of Fucus on the bedrock above the oiled site, with sparse densities of barnacles, and moderate densities of limpets and littorine snails. The densities of Fucus, mussels, barnacles and limpet snails, as well as green and red algae, increase to moderate levels towards the low intertidal on this fairly narrow (ca 15 - 25 m) cobble beach.

PARTIAL MANUAL REMOVAL OF OILED SEDIMENTS PERFORMED ON THIS LOCATION. Additional clean-up operations, if performed, will have little adverse effect on the intertidal biota of the site.

Summary of Biological Features of CH013-A

This short subdivision has two major habitat types; 1) cobble beaches and 2) bedrock headlands. The beaches are mostly low to medium exposure habitats with low cover of attached biota. The most abundant species are small littorine snails, limpets, and scattered barnacles. Densities of these species increase towards the lower intertidal. The bedrock habitats have higher abundances of organisms, mainly Fucus, both in the low and upper intertidal zones.

Juveniles, egg masses, or spat of many species were present on the subdivision, although in generally low densities on the cobble beaches. Fucus, barnacles, and littorine snails are notable in their recent reproductive output.

Cleanup operations will have little impact on the beaches, due to their generally sparse abundances of biota, and due to the lack of sensitive habitats (e.g. eel grass and clam beds) in subtidal habitats contiguous with the oil-impacted beaches.

List of Common Species on Subdivision CH013-A

A. Marine Plants
1. Diatoms, Blue Greens
2. Green Algae - Chlorophyta
   Acrosiphonia sp., Enteromorpha sp., Ulva sp., Urospora sp.
3. Brown Algae - Phaeophyta
   Agarum fimbriatum, Fucus distichus, Syctosiphon lomentaria
4. Red Algae - Rhodophyta
   Corallina sp., Cumagloia andersonii, Membranoptera dimorpha, Odonthalia floccosa, Rhodomela larix
5. Higher Plants
   Zostera marina (eel grass), Leymus mollis (beach rye grass)

II. Marine Animals
2. Anemones - Anthopleura artemesia
5. Flatworms - Platyhelminthes - Polyclads
6. Nemertean Worms - Ribbon Worms - Emplochonema gracile
7. Polychaete Worms -
   Nereidae - Nereis spp.
   Serpulidae
     Crucigera sp., Eudistyla polymorpha
   Sprioreidae - Spiorbis sp.
9. Peanut worms - Sipunculids - Phascolosoma agassizii worm)
10. Crustaceans
   a. Amphipods - Orchestia sp.?
   b. Barnacles - Balanus glandula.
   c. Crabs
      Hemigrapsus oregonensis. Paguridae (hermit crabs)

11. Mollusca
   a. Chitons - Mopalia mucosa
   b. Snails - Gastropods
      Littorina scutulata, L. sitkana, Natica clausa, Nucella lamellosa, N. lima
   c. Limpets - Lottia digitalis, L. persona
   d. Mussels and Clams
      Clinocardium sp., C. nuttalli, Macoma sp., Mya arenaria (soft-shell clam), Mytilus edulis, Prototheca staminea, Saxidomus giganteus

12. Echinoderms
   b. Sea stars
      Dermasterias imbricata, Evasterias truscheli, Leptasterias hexactis, Pycnopodia helianthoides
   c. Urchins - Strongylocentrotus droebachiensis

13. Bryozoans - Schizoporella sp.

15. Fishes
   Cottidae - 2-3 species
   Liparidae - Liparis callyodon
   Stichaeidae - Xiphister atropurpureus, X. mucosus
BIO SKETCH MAP

CH013-A

1 MAY 91

SPARSE BLACK LICHEN
BEACH GRASS,
LITTORINES,
LIMPETS

FUCUS BELOW (MODERATE)

FUCUS ADJACENT TO OILED
SEDIMENTS, SPARSE LIMPETS
BARNACLES, LITTORINES.
LOWER ZONES: MODERATE INCREASE IN COVER OR DENSITY OF THESE SPECIES

MODERATE LITTORINA DENSITIES (ALL STAGES), LIMPETS, SPARSE
BARNACLES, FOCUS ON BEDROCK
ABOVE AND BELOW OILED SEDIMENTS
1991 MAYSAP EVALUATION

SEGMENT: CU 013   SUB: A   REGION: PWS   SURVEY DATE: 5/15/91

ENVIRONMENTAL SENSITIVITIES:
Work Window(s)  RESTRICTED 3/1 - 9/15

Ecological/Constraints (see page two for details)  Eagle nest, Fish harvest area, Anadromous stream

ARCHAEOLOGICAL CONSTRAINTS:
If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO Signature: ___________________ Date: 5/24/91

RECOMMENDATIONS:

TREATMENT REQUIRED (Y or N)  N

Manual Pickup (Check as Req.)  
Spot Washing  
Bio-Customblen Only  
Bio-Inipol/Customboil  
Other  

COMMENTS:
INITIAL: ________________________________________________________

TAG: ________________________________________________________

FOSC: ________________________________________________________

TAG APPROVAL DATE: 5/24/91  FOSC APPROVAL DATE: 5/29/91

ADEC  
USCG  
NOAA

FOSC  
E. E. PAGE, CDR, USCG  CHIEF OF STAFF, FOSC

EXxon
ECOLOGICAL CONSTRAINTS
1991 FIELD ACTIVITIES

Eagle Nest: Access restricted from 3/1 to 9/1. USF&WS authorization required. Maintain 1000' vertical and 1/4 mile horizontal buffer.

Fish Harvest Area: Unlimited treatment unless otherwise directed by ADF&G. Sheen containment/recovery procedures required for mechanical treatment.

Anadromous Stream: Unlimited treatment up to stream bank between May 15 and July 10. ADF&G approval required for work after July 10. Fish Habitat Permit required for instream work. ADF&G approval required for bioremediation within 100 meters of anadromous stream after July 10.
MAYSAP FIELD SHORELINE COMMENT SHEET

TEAM NO. 1  SEGMENT CU013  SUBDIVISION A  DATE 5/15/91

ADEC NAME JEFF GWINNAX  SIGNATURE

ONLY OIL IS OCCASIONAL COAT OR ISOLATED RESIDUAL BETWEEN BOULDERS. VERY SPORADIC.

EXXON NAME RANDALL E. BODD  SIGNATURE RandalH E. Bodd

NO TREATABLE OILING CONDITIONS WERE FOUND ON CU013A. SEVERAL TARBAS WERE PICKED UP BY THE SURVEYORS. THE AP LAYER LOCATED IN THE MIDDLE OF THE SUBDIVISION THAT WAS TREATED BY SQUAD 6 IN 1990 WAS UNDETECTABLE ON THIS SURVEY. NO FURTHER REASSESSMENT IS WARRANTED. BEAUTIFUL BEACH.

LANDMANAGER NAME MARSHA HALL OF DNR  SIGNATURE MARSHA HALL

SURFACE STAIN OCCASIONAL CT.

USCG/NOAA NAME SCHOLTZ /CHILD  SIGNATURE

WHAT LITTLE OILING FOUND WAS OF NO SIGNIFICANCE. FURTHER INVESTIGATION IS NOT WARRANTED

Hi ANGLE BEDROCK OUTCROP SHORELINE w/ POORLY SORTED ROCK BEACHES. SURFACE OILING OBSERVED AT CT1, ST AT UI-ZONE AT A FEW TAR BALLS WERE DETECTED. ONLY MINOR AMOUNTS, NO SUBSURFACE OIL OBSERVED.
## MAYSAP SHORELINE OILING SUMMARY

**Team No.:**

**SEGMENT:** CU-13

**Subdivision:** A

**Date:** 5/15/91

**Time:** 12:20 to 13:05

**Tide Level:** +5' to +7'

**Energy Level:**

- H: High
- M: Medium
- L: Low

**Surveyed From:**

- X: Foot
- B: Boat
- H: Helo

**Weather:**

- Sun
- Clouds
- Fog
- Rain
- Snow

**Total Length Shoreline Surveyed:** 405 m

**Near Shore Sheen:**

- BR: Brown
- BB: Rainbow
- BS: Silver
- SN: None

**Est. Oil Category Length:**

- W: Water
- M: Mud
- N: Sand
- V: Veil
- L: Ledge
- U: US, 200 m

---

### Surface Oil Character

<table>
<thead>
<tr>
<th>LOC</th>
<th>Surface Oil Character</th>
<th>Sediment Type</th>
<th>Width m</th>
<th>Length m</th>
<th>Notes</th>
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<tbody>
<tr>
<td>A</td>
<td>S T S S</td>
<td>RBC H</td>
<td>2</td>
<td>40</td>
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<tr>
<td>B</td>
<td>S T T</td>
<td>VBC L</td>
<td>10</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>S S</td>
<td>RPCG H</td>
<td>1/2</td>
<td>8</td>
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<tr>
<td>D</td>
<td>T T T</td>
<td>RPCG M</td>
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### Pit Depth and Subsurface Oil Character

<table>
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<tr>
<th>Pit No.</th>
<th>Pit Depth (cm)</th>
<th>Subsurface Oil Character</th>
<th>Oiled Zone</th>
<th>Clean Below</th>
<th>H2O Level</th>
<th>Sheen Color</th>
<th>Pit Zone</th>
<th>Subsurface Sediments</th>
<th>Notes</th>
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<td>VGR-GR</td>
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<td>CP</td>
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<td>20</td>
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<td>PE-TEC</td>
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<td>20</td>
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<td></td>
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<td>G-GMV</td>
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</tbody>
</table>

**Sheen Color:**

- B: Brown
- R: Rainbow
- S: Silver
- N: None

---

**OG Comments:**

- Steep rocky shore w/ massive B, C over bedrock in embayment.

- Surface oil only as:
  1. Trace CV below massive B, w/ assoc. CT & SGI-SATZ.
  2. CT, ST, TB to 10 SOR C HTZ, on grassy beach, R, BS, C.

- A trace of subsurface oil was detected in PA born @ Pit 1 - this was a local occurrence.
CU-13A
G. Macdonald
6-15-81

CT, ST <10% up, H/TZ
TB, <10% on R, BC.
2x40m; <10%
trace CV; below
massive BC.

massive B/R

rock stable

BCPR beach
~20m wide

Treeline

Grass w/ BC.
SOR to CT <10%
10x15m

CT, ST <10%
up, H/TZ

Treeline

D
TB, 10SOM
CT, <1%
2x10m

Creosote
bg.

C8/R

SEG.
BDY

Stable

Stream

Δ1 P-PG TR H/TZ 4 30
Δ2 VCGR - - 0 10
Δ3 CP-GP - H/TZ 15
Δ4 PE-PG - - 2 20
Δ5 G-GM - H/TZ - 20
<table>
<thead>
<tr>
<th>BIRDS</th>
<th># OF SPECIES</th>
<th>TOTAL BIRDS</th>
<th>FISH OBSERVED</th>
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<tbody>
<tr>
<td>Eagles</td>
<td></td>
<td>1 (signature)</td>
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<tr>
<td>Seabirds</td>
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<tr>
<td>Waterfowl</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gulls/kittiwakes</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Shorebirds</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Corvids</td>
<td></td>
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</tr>
<tr>
<td>Other Birds</td>
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</table>

### WILDLIFE OBSERVATIONS

**TO BE COMPLETED IN ALL SUBDIVISIONS**

<table>
<thead>
<tr>
<th>BIRDS</th>
<th># OF SPECIES</th>
<th>TOTAL BIRDS</th>
<th>FISH OBSERVED</th>
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</thead>
<tbody>
<tr>
<td>Eagle</td>
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<td>1 (signature)</td>
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<tr>
<td>Seabirds</td>
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<tr>
<td>Waterfowl</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gull/kittiwake</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shorbird</td>
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<td>Corvid</td>
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<tr>
<td>Other Birds</td>
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### MARINE MAMMALS

<table>
<thead>
<tr>
<th>MARINE MAMMALS</th>
<th># OBSERVED</th>
<th>SPECIES</th>
<th># OBSERVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sea Otters</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pinnipeds</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Whales</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Shoreline subdivision map showing important biological features attached.
CU13 5/15/91  Fawcett
Arr 1220 wind WSW NE, rain
Swell 4 ft, seas 3 ft
1 tiny egg flew by
2 heron flew north
Site A
CT 4 CU 0T2 - 5UT2 + 10 ft
-Small homestead
Large hollender cottage, BR
Outhouse at right
CT at next of pocket - semi-
protected by outcrop
-Sarge barn, limping in lower
edge of field, more dune
3-4 m downshore
-Deer barn, 5 m downshore at
+ 4-7 ft - patchy cover
Rocks, most litter, wharfs
-Scattered small patches
Young mussels

2 cloudy patches in grass under
in same - sheen on surface
-flying barnacles 18 ft
downshore - west

Tombolo + rock w/ trees
10 m South
CT in the pile + 10 ft - no biota
1 C.H. 13 (cont) 5/15/91 Favreott
- Pass by garage (441 111 St)
- Junction of CT on BR - surrounded by loose golden cobble
- 2 Rysolcatchus
- 2 Alice tarns
- 5-6 unf. shorebirds (3 + bug)

- Turn CT at South end of beach +10 ft past outlet
- Dense young Flicker - 5 pm
- Barn Imp. #1
- Kittiwake

Finish 1305
sparse barnacles, limpets, and littorinids at lower edge of CT, more dense 3-4 m downshore. Dense barnacles 5 m downshore at 4-7 ft MLLW with patchy Fucus, Rhodoloma, young mussels, whelks, and moderately dense littorinids.

no biota except lichen near CT, gravel below

rock slab

massive B/R

Amphipods, warm terrestrial grass near SOR in SUT 2, barnacles, radulae, littorinids, limpets, etc., 10 m downshore and over edge of Shelf.

UH - SUT 2
1991 MAYSAP EVALUATION

SEGMENT: CU 013 SUB: A REGION: PWS SURVEY DATE: 5/15/91

ENVIRONMENTAL SENSITIVITIES:
Work Window(s) RESTRICTED 3/1 - 9/15

Ecological/Constraints (see page two for details) Eagle nest, Fish harvest area, Anadromous stream

ARCHAEOLOGICAL CONSTRAINTS:
If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO Signature: Rachel Warren Date: 5/24/91

RECOMMENDATIONS:

TREATMENT REQUIRED (Y or N) INITIAL TAG FOSC
N N P

Manual Pickup (Check as Req.) Spot Washing Bio-Customblen Only Bio-Inipol/Customblen Other Other

COMMENTS:
INITIAL:

TAG:

FOSC:

TAG APPROVAL DATE: 5/24/91 FOSC APPROVAL DATE: 5/29/91

ADEC

FOSC

E. E. PAGE, CDR, USCG
CHIEF OF STAFF, FOSC

NOAA
Eagle Nest: Access restricted from 3/1 to 9/1. USF&WS authorization required. Maintain 1000' vertical and 1/4 mile horizontal buffer.

Fish Harvest Area: Unlimited treatment unless otherwise directed by ADF&G. Sheen containment/recovery procedures required for mechanical treatment.

Anadromous Stream: Unlimited treatment up to stream bank between May 15 and July 10. ADF&G approval required for work after July 10. Fish Habitat Permit required for instream work. ADF&G approval required for bioremediation within 100 meters of anadromous stream after July 10.
TEAM NO. 1  SEGMENT CU013  SUBDIVISION A  DATE 5/15/91

ADEC
NAME: JEFF GUALIUS  SIGNATURE: [signature]

TEAM NO. 1  SEGMENT CU013  SUBDIVISION A  DATE 5/15/91

EXXON
NAME: RANDALL J. BETH  SIGNATURE: [signature]

TEAM NO. 1  SEGMENT CU013  SUBDIVISION A  DATE 5/15/91

LANDMANAGER
NAME: MARSHA HALL OF DNR  SIGNATURE: [signature]

TEAM NO. 1  SEGMENT CU013  SUBDIVISION A  DATE 5/15/91

USCG/NOAA
NAME: SCHULTZ / CHILDS  SIGNATURE: [signature]

TEAM NO. 1  SEGMENT CU013  SUBDIVISION A  DATE 5/15/91

ONLY OIL IS OCCASIONAL COAT OR ISOLATED RESIDUAL BETWEEN BOULDERS. VERY SPORADIC.

NO TREATHABLE OILING CONDITIONS WERE FOUND ON CU013A. SEVERAL TARBAAS WERE PICKED UP BY THE SURVEYORS. THE AP LAYER LOCATED IN THE MIDDLE OF THE SUBDIVISION THAT WAS TREATED BY SQUAD 6 IN 1990 WAS UNDETECTABLE ON THIS SURVEY. NO FURTHER REASSESSMENT IS WARRANTED. BEAUTIFUL BEACH.

SURFACE STAIN OCCASIONAL CT.

WHAT LITTLE OILING FOUND WAS OF NO SIGNIFICANCE. FURTHER INVESTIGATION IS NOT WARRANTED.

HI ANGLE BEDROCK OUTCROP SHORELINE W/ POORLY SORTED POCKET BEACHES. SURFACE OILING OBSERVED AT CT & ST AT UI ZONE. A FEW TAR BAILS WERE DETECTED. ONLY MINOR AMOUNTS. NO SUBSURFACE OIL OBSERVED.
## MAYSAP SHORELINE OILING SUMMARY

**Team No.:** 1  
**Og:** G. MACDONALD  
**Bio:** M. FAWCETT  
**ADEC** J. G. BIANCHI  
**Land Manager:** M. HALL for DNL  
**Exxon:** R. R. YEE  
**USCG/NOAA:** SCHULTZ/CHILDs  
**Date:** 5/15/91  
**Time:** 12:20 to 12:05  
**Energy Level:** □ H □ M □ L  
**Tide Level:** +5 ft. to +7 ft.  
**Surveyed From:** [X] Foot [□] Boat [□] Helo  
**Weather:** [□] Sun [□] Clouds [□] Fog [□] Rain [□] Snow  
**Total Length Shoreline Surveyed:** 4050 m  
**Near Shore Sheen:** [□] BR [□] RB [□] SL [□] None  
**Est. Oil Category Length:** XX m  
**Surveyed From:** [□] Boat [□] Helo  
**Surveyed From:** [□] Boat [□] Helo  
**Surveyed From:** [□] Boat [□] Helo  

### Surface Oil Character

<table>
<thead>
<tr>
<th>LOC</th>
<th>Surface Sediment Type</th>
<th>Shore Broad</th>
<th>Area</th>
<th>Zone</th>
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<tbody>
<tr>
<td>A</td>
<td>RBC</td>
<td>H</td>
<td>2</td>
<td>40</td>
<td>XXX</td>
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<tr>
<td>B</td>
<td>VBC</td>
<td>L</td>
<td>10</td>
<td>15</td>
<td>XXX</td>
</tr>
<tr>
<td>C</td>
<td>P.CPG</td>
<td>H</td>
<td>1/2</td>
<td>5</td>
<td>XXX</td>
</tr>
<tr>
<td>D</td>
<td>P.CGF</td>
<td>M</td>
<td>2</td>
<td>10</td>
<td>XXX</td>
</tr>
</tbody>
</table>

**Distribution:** C = 91-100%; B = 81-90%; P = 71-80%; S = 1-10%; T = <14  
**Slope:** V = Vertical; H = High Angle; M = Medium Angle; L = Low Angle  
**Photo Roll # MAYSAP-**  
**Frames:** 1-23  

### Subsurface Oil Character

<table>
<thead>
<tr>
<th>Pit No.</th>
<th>Pit Depth (cm)</th>
<th>Subsurface Oil Character</th>
<th>Oiled Zone</th>
<th>Clean Below</th>
<th>H2O Level</th>
<th>Sheen Color</th>
<th>Pit Zone</th>
<th>Surface-Subsurface Sediments</th>
<th>Notes</th>
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<td>Pe-Ga</td>
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<td>-</td>
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<td>X</td>
<td>Gi-GM</td>
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</tbody>
</table>

**Sheen Color:** B = Brown; R = Rainbow; S = Silver; N = None  
**Notes:** Y-GP  
**Surface-Subsurface Sediments:** Y-GP  
**Subsurface Oil Character:** Y-GP  

### OG Comments:

- Steep rocky shore w/ massive B, Cp over bedrock m. embayment.
- Surface oil only as (i) trace CV below massive B, w/ assoc. CT, ST, TB, SS, HTZ.  
  (ii) CT, ST, TB, SS, HTZ, on grassy bench, B, R, S/C.
- A trace of subsurface oil was detected in PGA bore @ Pit 1 - this was a local occurrence.
WILDLIFE OBSERVATIONS
TO BE COMPLETED IN ALL SUBDIVISIONS

<table>
<thead>
<tr>
<th>BIRDS</th>
<th># OF SPECIES</th>
<th>TOTAL BIRDS</th>
<th>FISH OBSERVED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eagles</td>
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<tr>
<td>Sea Birds</td>
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<td>Waterfowl</td>
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<tr>
<td>Gulls/kittiwakes</td>
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<td>Shorebirds</td>
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<tr>
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<tr>
<td>Other Birds</td>
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MARINE MAMMALS

<table>
<thead>
<tr>
<th>SPECIES</th>
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<tbody>
<tr>
<td>Sea Otters</td>
<td></td>
</tr>
<tr>
<td>Pinnipeds(specific)</td>
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</tr>
<tr>
<td>Whales(specific)</td>
<td></td>
</tr>
</tbody>
</table>

Shoreline subdivision map showing important biological features attached.

CU 13 5/15/91 Fawley
AR 1220 wind SE, rain
Smell, H2S, seas up
Tiny egrets flew by
2 harlequin ducks
Site A CT q CV WTZ - WTZ + 10 ft
Small non-aq. life
Large brownish crabs, BR
Anchors at night
+ a Word of pocket - semi-
- protected by water
- Scare bary limpet in seven
- edge of pool here, more slow
3-4m Downshore
+ dense barn 5m downshore at
+ 4-7 ft - patchy Furms,
- Pheas, molt, lift, whelks
- scattered small patches
- Young mussels
2nd little spot site in grass with
- 9 Supers - sheen - amplified
- clams - barnacles, 10m
- Downshore - west
- Tumble + rock w/ trees
- 10m South
- CT in the side + 10 ft - no bio
CU 13 (cont) 5/15/91 Fawcett
- 2 skunks near Fawcett 1st
- clamming, CT on BR - surrounded by loose shells & cabbis
- 2 oystercatchers
- 2 oystercatchers
- 5-6 wax shellfish (5 active)

- Tree CT at South end of beach + 10 ft quill existing dense young Eucalyptus - 5 pm
- Desmarestia
- Kelpweed

Finish 1:30 P.M.
Sparse barnacles, limpets, and litorinids at lower edge of CT, more dense 3-4 m downshore. Dense barnacles 5 m downshore at 4-7 ft MLLW with patchy Fucus, Rhodomela, young mussels, whelks, and moderately dense litorinids.
ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/ CU-13 STREAM NO: 224-20-13030 DATE 4/25/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
1A  Salmon stream mouth - fry outmigration (3/1 to 5/15)
1B  Salmon stream mouth - spawning (7/10 to 8/31)
1I  Gill net area (6/7 to 8/31)
1J  Purse seine area (7/20 to 9/30)
6Y  Recreation: Special use destination
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:
Avoid any unnecessary disturbance or damage to unoiled biota and substrate. Subject stream is located within Subdivision A (1 of 1).

ARCHAEOLOGICAL CONSTRAINTS:
If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact a member of Exxon's Cultural Resource Program immediately (564-3657; 564-3658 or 564-3276).

SHPO SIGNATURE: __________ DATE: 5/10/90

Subsurface Oil Observed: Yes______ No____ Maximum Depth_______

RECOMMENDATIONS:
____ No Treatment Recommended  ____ Snare/Absorbent Booms
____ Treatment Recommended  ____ Oil Snare (pom poms)
____ Manual Pickup  ____ Absorbents (pads, rolls, etc)
____ Bioremediation  ____ Spot Washing: Wands
____ Tarmat Removal  ____ Beach Cleaner
____ Other (see comments)

COMMENTS: Recommended treatment includes 1) manual pickup of tarmat patties and tarmat balls in areas indicated on sketch map, 2) manual removal of tarmat in area indicated on sketch map, and 3) bioremediation of broken tarmat in area indicated on sketch map. Work should be conducted between 5/15 and 6/7 due to salmon and gill net constraints.

TAG COMMENTS: No. 61 OF STAINS.

TAG APPROVAL DATE: 5/10/90

ADEC Art Wagon  
EXXON Art Wagon  
NOAA Burnt Island  
USCG D.D. Rome

FOSC: ______ DATE: 5/15/90

NOTIFY BOAT 24 HRS PRIOR TO WORK.
treatment recommendations:
Manually remove tar mat (24x2x3cm) in U1T2 of 8nd pocket beach by pit 3.
Manually remove scattered tar balls & oil-soaked spruce needles in U1T2 of 1st pocket beach.
Bio remediate oil trapped in boulder interstices in U1T2 in areas unreachable by shovel & trowel.
ANADROMOUS FISH STREAM EVALUATION ADDENDUM

CONSTRAINTS FOR STREAM NO. 224-20-13030

SEGMENT CU-13 SUBDIVISION A

WORK WINDOW

<table>
<thead>
<tr>
<th>Manual Pickup &amp; Tarmat Removal More Than 400m From Eagle Nest</th>
<th>OPEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Manual Pickup &amp; Tarmat Removal Less Than 400m From Eagle Nest</td>
<td>CLOSED</td>
</tr>
</tbody>
</table>

ARCHAEOLOGICAL STANDARD CONSTRAINT

If cultural resources are uncovered, PHONE 564-3274.

APPLICABLE ECOLOGICAL TIME CONSTRAINTS

1A, 1B  Salmon Stream  ADF&G catalogued anadromous stream (224-20-13030) is present in Subdivision A. No constraint to manual pickup and tarmat removal.

1I  Gill Net Area  No constraint to manual pickup and tarmat removal.

1J  Purse Seine Area  No constraint to manual pickup and tarmat removal.

5T  Bald Eagle Nest  Closed to manual pickup and tarmat removal less than 400m from nest. Open to manual pickup and tarmat removal more than 400m from nest.

OTHER ECOLOGICAL CONSIDERATIONS

No disturbance to stream bed or banks. When set net sites are present, restrict beach operations to essential minimum. Restrict boat and air traffic and all disturbance to essential minimum. No personnel or boat traffic within 400m of active nests. Air approach and takeoff from and to seaward only; maintain 400m horizontal, 300m vertical distance from active nests. Avoid any unnecessary disturbance or damage to uneled biota and substrate.

SEE SUBDIVISION CONSTRAINT ADDENDUM CU-13 FOR ADDITIONAL CONSTRAINT INFORMATION.

TAG APPROVAL DATE

ADEC
EXXON
NOAA
USCG

FOSC  Date 6-5-90
CU-13

ANADROMOUS FISH STREAM
EVALUATION
(2-24-90-13030)

CU-14

INACTIVE
NEST

ACTIVNE
NEST

TREATMENT
AREAS

CU-12

Incorporates USFWS 61190 map of active bald eagle nests.

ANADROMOUS FISH STREAM EVALUATION
(2-24-90-13030)

ECOLOGY MAP
SEGMENT CU-13

SUBDIVISION 
METERS

STAR Seabird Colony

△ Eagle Nest

1 inch = 1147 feet
ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/ CU-13  STREAM NO: 224-20-13030  DATE  4/25/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
1A  Salmon stream mouth - fry outmigration (3/1 to 5/15)
1B  Salmon stream mouth - spawning (7/10 to 8/31)
1I  Gill net area (6/7 to 8/31)
1J  Purse seine area (7/20 to 9/30)
6Y  Recreation: Special use destination

See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:
Avoid any unnecessary disturbance or damage to unoiled biota and substrate. Subject stream is located within Subdivision A (1 of 1).

ARCHAEOLOGICAL CONSTRAINTS:
If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact a member of Exxon's Cultural Resource Program immediately (564-3657; 564-3658 or 564-3276).

SHPO SIGNATURE:  DATE: 5/10/90

Subsurface Oil Observed:  Yes ___  No  X  Maximum Depth ______

RECOMMENDATIONS:
___  No Treatment Recommended  ___ Snare/Absorbent Booms
X  Treatment Recommended  ___ Oil Snares (pom poms)
X  Manual Pickup  ___ Absorbents (pads, rolls, etc)
X  Bioremediation  ___ Spot Washing:  Wands
X  Tarmat Removal  ___ Beach Cleaner
___  Other (see comments)

COMMENTS: Recommended treatment includes 1) manual pickup of tarmat patties and tar balls in areas indicated on sketch map, 2) manual removal of tarmat in area indicated on sketch map, and 3) bioremediation of broken tarmat in area indicated on sketch map. Work should be conducted between 5/15 and 6/7 due to salmon and gill net constraints.

TAG COMMENTS:  NO. 610 OF STAINS.
ANADROMOUS FISH STREAM ASSESSMENT

REGION: PRINCE WILLIAM SOUND
SEGMENT: CU-13
STREAM NO: 224-20-13030
ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/ CU-13  STREAM NO: 224-20-13030  DATE 4/25/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
1A  Salmon stream mouth - fry outmigration (3/1 to 5/15)
1B  Salmon stream mouth - spawning (7/10 to 8/31)
1I  Gill net area (6/7 to 8/31)
1J  Purse seine area (7/20 to 9/30)
6Y  Recreation: Special use destination
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:
Avoid any unnecessary disturbance or damage to unoiled biota and substrate. Subject stream is located within Subdivision A (1 of 1).

ARCHAEOLOGICAL CONSTRAINTS:
If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact a member of Exxon's Cultural Resource Program immediately (564-3657; 564-3658 or 564-3276).

SHPO SIGNATURE: ___________________________  DATE: ___________________________

Subsurface Oil Observed: Yes_____  No  X  Maximum Depth_________

RECOMMENDATIONS:

____ No Treatment Recommended
_X_ Treatment Recommended

____ Snare/Absorbent Booms
____ Oil Snares (pom poms)
____ Absorbents (pads, rolls, etc)
____ Spot Washing: Wands
____ Spot Washing: Wands
____ Beach Cleaner
____ Other (see comments)

COMMENTS: Recommended treatment includes 1) manual pickup of tar patties and tar balls in areas indicated on sketch map, 2) manual removal of tarmat in area indicated on sketch map, and 3) bioremediation of broken stain in area indicated on sketch map. Work should be conducted between 5/15 and 6/7 due to salmon and gill net constraints.

TAG COMMENTS: ____________________________________________________________
_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________

TAG APPROVAL DATE: __________

ADEC
EXXON
NOAA
USCG

FOSC: ___________________  DATE: __________
PWS, SEWARD AND HOMER ECOLOGICAL CONSTRAINTS

Salmon stream mouth - fry outmigration (3/1 to 5/15)
Salmon stream mouth - spawning (7/10 to 8/31)
No disturbance of stream bed or banks unless authorized by ADF&G. No beach flushing into stream drainage. No bioremediation or other chemical application within 100m of stream without authorization from ADF&G. No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or lnipol application, prior to at least July 1 unless authorized by ADF&G. Treatment which is not intrusive and which will not affect nearshore oil or toxicity levels, such as manual removal, can probably proceed without adherence to time constraints. In any case, contact ADF&G Habitats Division prior to treatment for consultation and/or permit application.

AGENCY CONTACT PERSON: ADF&G John Morton 267-2324

Salmon fry nursery area (4/31 to 7/31)
No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or lnipol application, prior to July 31 unless authorized by ADF&G. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G prior to treatment for confirmation and advice.

AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214

Esther Hatchery release (4/15 to 6/15)
Main Bay Hatchery release (4/20 to 6/15)
Sawmill Bay Hatchery release (4/15 to 6/1)
Cannery Creek Hatchery release (4/21 to 6/1)
Remote release site
No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or lnipol application, prior to at least July 1 unless authorized by ADF&G and/or PWS Aquaculture Association. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G or PWS Aquaculture Association for confirmation and authorization.

AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214

Gill net area (6/7 to 8/31)
Purse seine area (7/20 to 9/30)
Purse seine hook and line (7/20 to 9/30)
Set net sites (6/11 to 7/26)
Contact ADF&G for specific dates, locations and constraints. Restrict boat and air traffic to essential minimum. When set net sites are present (1) restrict beach operations to essential minimum as authorized by ADF&G. If plans for treatment include methods such as hot water wash or lnipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.

AGENCY CONTACT PERSON: ADF&G Evelyn Biggs 424-3235

Herring spawning (4/1 to 6/15)
Contact ADF&G for confirmation - dates and locations may vary. Restrict boat traffic to essential minimum. Avoid damage to unlooted Intertidal and subtidal algae and seagrass. If plans for treatment include methods such as hot water wash or lnipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.

AGENCY CONTACT PERSON: ADF&G Steve Zimmerman 586-7235

Habitat and sea lion pupping (5/15 to 7/1)
Habitat and sea lion molting (8/15 to 9/15)
Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts. No application of lnipol within two weeks of arrival dates (work window at these sites is limited to 7/2 to 7/31). Contact ADF&G and USFWS prior to treatment for confirmation.

AGENCY CONTACT PERSON: ADF&G Steve Zimmerman 586-3377

Seabird colony (5/1 to 9/1)
Restrict air and boat traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal and 300m vertical distance from colony. Contact USFWS prior to treatment.

AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

Shorebird/waterfowl concentration (4/1 to 5/15)
Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.

AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

All Bald Eagle nests (3/1 to 6/1)
Active Bald Eagle nests (3/1 to 9/1)
Restrict air traffic and all disturbance to essential minimum. No personnel within 400m 3/1 to 6/1. Air approach and takeoff from and to seaward only; maintain 800m horizontal, 300m vertical distance from nests. Contact USFWS prior to treatment for confirmation of dates.

AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

Recreation:
Tent sites (5/1 to 10/15)
Anchorage (6/1 to 9/15)
Forest Service cabins (6/1 to 10/15)
Lodge (6/1 to 9/15)
Special use destination

Aggregation areas:
Salmonharvesting (5/1 to 6/30)
Finfish harvesting
Diver harvesting (9/15 to 2/28)
Invertebrate harvesting

Contact ADF&G and appropriate Native Corporation for specific dates, locations, and constraints. Restrict boat and air traffic and beach disturbance to essential minimum. If plans for treatment include methods such as hot water wash or lnipol application which might affect intertidal or nearshore oil or toxicity levels, contact ADF&G and appropriate Native Corporation for authorization - see Native Corporation Contact List for each Native Corporation's contact person

AGENCY CONTACT PERSON: ADF&G Jim Fall 267-2359
FIELD SHORELINE COMMENT SHEET

SEGMENT ST1 CO-013 SUBDIVISION: 224-20-1206 DATE: 25 APR 90

USCG NAME: Kerwin L. Dreher SIGNATURE: cwo H. S. Dreher

☐ NO TREATMENT RECOMMENDED ☑ TREATMENT SUGGESTED

COMMENTS:

A pocket beach salmon spawning area with a small stream/spir running through it.
- Manually remove tar mat (24 x 24 x 3 cm) in UITZ cobble of southern beach
- Manually remove scattered tar balls & patties in UITZ 4 SITZ of northern cove - interspersed between rocks/boulders/gravel
- Bioremediate oil pockets on northern cove, unreachable by shovel/trowel

APEC NAME: Aimee Weseman SIGNATURE: Aimee Weseman

☐ NO TREATMENT RECOMMENDED ☑ TREATMENT SUGGESTED

COMMENTS:

LAND MANAGER NAME: ___________________________ SIGNATURE: ___________________________

☐ NO TREATMENT RECOMMENDED ☑ TREATMENT SUGGESTED

COMMENTS:
**SURFACE OIL**

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**SUBSURFACE OIL**

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**COMMENTS**

To Pocket Beaches at this site, no major stream at this site; run off from snow melt/boil and large sediment hold fresh water, making for pink salmon breeding area.
Seg ID: CU-013     Subdiv: 224-20-13030
Survey Date: 4/25/90
Comments by: Ken Critchlow

At first appraisal, this site doesn't appear to be an "anadromous fish stream" in that it isn't characterized by a defined channel. The "stream" is comprised of numerous spring flows across and through the beach sediments. At high water, much of the freshwater is probably discharged through cobble and boulder as up-welling, providing suitable spawning habitat for pink salmon.

Virtually all oil observed on this site was confined to the UITZ and STZ. Asphalt pavement, tarballs and patties can be removed by a small crew using shovels and trowels. Only surface sediments will need removal since pits indicate that subsurface oil isn't present. In locations where large boulders/bedrock preclude ready access to oil, and thus removal, use of Inipol may be advisable. This is a diverse and productive inter-tidal region; it is also very difficult to traverse safely. Therefore, foot traffic should be limited to the UITZ and STZ for worker safety and to minimize impact of cleanup on the biota.
ADPEC MULTI-ASSESSMENT DATA FORM

1 SURVEY TYPE: SS 85 03 TS AVG SQA HMS PTA
METHOD: Aerial Ground Boat

2 REGION: KO KP CL X AP

3 DATE: 4-25-90
4 START TIME: 0815
5 STOP TIME: 0915
6 SECTORS: KCUO19
7 STATION #: 19 TIDE HT AT SURVEY:
8 X-UNIT #: Ibb Slack Flood Slack
9 STATION #: 20 USCQ QUAD: $<3
10 LAT #: 11 LONG:
11 SOURCE: I Map
12 LOCATION: SE SIDE, Cutross T. coastline
13 DESCRIPTION:

14 EXTENT OF OIL
SHORELINE
STREAM
L Y N2 X L Y N2
27 SURFACE COVERAGE
28 SURFACE THICKNESS
29 PENETRATION
30 OIL IMPACT: N VL C N H
31 OIL TYPES: Pooled Nasse IAF Asphalt Sticky Stain
32 OILED DEBRIS: Y H
33 OIL TYPE: Headland Low-lying Rocks Beach Cove
34 WAVE EXPOSURE: H I N
35 SUBSTRATE TYPE: Bedrock 10 Boulder 40 Cobble 35
Gravel 10 Sand 5 Mud/silt

36 OIL CATALOGED ANAD. FISH STREAM Y H
37 CATALOG #: 99-04-00-13038
38 STREAM NAME:
39 OIL IN STREAM BED: Y H
40 OIL ON STREAM BANK: Y H
41 OIL ON BEACH, ADJACENT TO MOVING Y H
42 OIL WITHIN 1 MILE OF STREAM: Y H
43 ANADROMOUS FISH PRESENT: Y H
44 ANADROMOUS FISH OBSERVATION

COMMENTS: salmon spawning area fed by small stream/springs
salmon seen spawning in cobble/pebble substrate with rocks/boulders interspersed through out. (last fall)
Area consists of 19, steeply inclined pocket beaches surrounded
fart mats & patties. Some oil was trapped in boulder
positions in UITZ.

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<td>1+2.4m deep</td>
<td>no noticeable oil</td>
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<tr>
<td>1+2 = 24cm</td>
<td>no oil UITZ</td>
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<tr>
<td>1+2-15cm</td>
<td>12cm oil on marble oil</td>
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48 Oil distribution diagram

- Treatment recommendations:
  - Manually remove tar mat (0.4+2.3cm) in UITZ of 2nd pocket beach by pit 3.
  - Manually remove scattered tar balls & oiled spruce needles in UITZ of 1
    pocket beach.
  - Bioremediate oil trapped in boulder positions in UITZ in areas
    unreachable by shovel & trowel.
SUBJECT
ANADROMOUS
STREAM
# 224-26-13030
(53, 2/10)
REGION: PRINCE WILLIAM SOUND

SEGMENT: CU-14

SUBDIVISIONS: A (1 OF 1)
SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Salmon stream mouth (no. 13036, 13034) Salmon fry outmigration (1A) - 3/1 to 5/15 and spawning (1B) - 7/10 to 8/31; Bald eagle nest (5T) - 3/1 to 6/1; Gill net area (11) - 6/1 to 8/31 (contact ADF&G for exact dates and locations); Purse seine area (1J) - 7/20 to 9/30 (contact ADF&G for exact dates and locations). Special use designation (6Y) - 6/1 to 9/15. Restrict boat and air traffic to a minimum essential. Air approach and takeoff from and to seaward only.

SUBDIVISION ECOLOGICAL CONSTRAINTS: Do not disturb stream bed or banks unless authorized by ADF&G. Contact ADF&G prior to treatment for permit and USFWS re: eagle nests. Avoid unnecessary disturbance /damage to unciled substrate and biota.

ARCHAEOLOGICAL CONSTRAINTS: If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact a member of Exxon's Cultural Resource Program immediately (564-3657; 564-3658 or 564-3278).

SHPO SIGNATURE: ______________________ DATE: ______________________

OILING CATEGORIZATION:

Wide 0 m; Medium 580 m; Narrow 64 m; V.Light 0 m; No Oil 1649 m

Subsurface Oil Observed: Yes X No ___ Maximum Depth 20 cm

RECOMMENDATIONS:

_____ No Treatment Recommended _____ Snare/Absorbent Booms

X Treatment Recommended _____ Oil Snares (ponpons)

X Manual Pickup _____ Absorbents (pads, rolls, etc) _____ Spot Washing: X Wands

X Bioremediation _____ Breakup X Removal

_____ Tarmat: _____ Removal

_____ Spot Washing: _____ Beach Cleaner

_____ Other (see comments)

COMMENTS: Spot wash area where pooled mousse found with wands and absorbents. Manual pickup of any debris. Tarmat removal as indicated on sketch map. Bioremediation of areas where cover and coat found. Work between 6/1 and 7/10 based on constraints.

TAG COMMENTS: __________________________________________________________

TAG APPROVAL DATE: ______________________

ADEC ______________________ EXXON ______________________ FOSC: ______________________ DATE: ______________________

NOAA ______________________ USCG ______________________
FIELD SHORELINE COMMENT SHEET

SEGMENT ST / CUS-14 SUBDIVISION: A - Loft DATE 4/2/90

USCG NAME: David S. Thomas SIGNATURE:

☐ NO TREATMENT RECOMMENDED ☑ TREATMENT SUGGESTED

COMMENTS

Agree with below comments

ADEC NAME: Clara S. Crosby SIGNATURE: Clara S. Crosby

☐ NO TREATMENT RECOMMENDED ☑ TREATMENT SUGGESTED

COMMENTS

Site #1 - Moderate Oiling - Bedrock Base - Shallow Sediments - Suggest wash/flush -

Site #2 - Anadromous Fish Stream - Recommend Manual Removal of Asphalt Mats -

Site #3 - Suggest Treatment At Site - Bedrock Base -

Disagree with 5% Distribution For CT CV, Consider Coverage CV/P, CV/P.

LAND MANAGER
NAME: Marsha Martin/DNR SIGNATURE: Marsha Martin

☐ NO TREATMENT RECOMMENDED ☑ TREATMENT SUGGESTED

COMMENTS

See comments from ADEC for site #2 and site #3.
# SHORELINE OILING SUMMARY

REVISION NO: 03/22/90

**SURFACE OIL**

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**SUBSURFACE OIL**

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**FOOTNOTE**

*OILED INTERVAL < 5 cm in PIT Nos. 3 and 4 does not constitute SUBSURFACE OIL*
**SHORELINE ECOLOGICAL SUMMARY**

Segment ST / CU 014  Subdivision A  Date (mo / day / yr) 4-2-90

Time (24 hr) 13:30  Biologist  David Lake

- **(A)** Substrate type and % of segments:
  - Bedrock 40
  - Boulder 30
  - Cobble 20
  - Pebble 10
  - Sand 10

- **(B)** Overall % cover of biota (% of segment):
  - Dense 30
  - Moderate 40
  - Low 30

- **(C)** Density, substrate preference (by number from A, above), & vertical zonation of major taxa: (upper-U; mid-M; low tidal-L):
  - Juveniles / adults (X), new settlement (3)

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</table>

Wildlife Observations/ General Comments:

See page 2

Ecological Considerations:

- 13, 64 - no comment
- One running stream found in segment. Oil is present in the area of the stream mouth.
- ST-1 mature bald eagle was observed.
- There are dense barnacles and mussels in mid-intertidal at site 1 (see comp)
Shoreline Ecological Summary

Segment ST-0014 Subdivision A

4-2-90

Biologist David Udwin

Wildlife Observations/General Comments

1. Present in low intertidal - Scytosiphon, coralline algae, Halosaccion, Ulva, Enteromorpha, Ectocarpus, Ceramium, unidentified red algae “blobs” and unidentified “branching” red algae.

2. In some areas of mid-intertidal on bedrock there were patches of byssal threads where mussels were previously attached.

3. Some of this segment was surveyed by boat due to the impassability of the cliff faces. The abundance of Fucus and Mytilus (the only obvious species from the boat) appeared comparable to those areas visited on foot.
SEGMENT: ST/CU-14
SOUTH PART

XXX Wide
/// Medium
---- Narrow
TTTT Very Light
0000 No Oil

CU-14

Map Key: PWS-72a
Name: GILLIE
Date: 4-2-90
Data Entered:
ADDENDUM: SUBDIVISION CONSTRAINTS
SEGMENT CU-14 SUBDIVISION A (1 of 1)

WORK WINDOW

<table>
<thead>
<tr>
<th>Manual Pickup and Tarmat Removal</th>
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<tbody>
<tr>
<td>More Than 400m From Active Nest</td>
<td></td>
</tr>
<tr>
<td>Manual Pickup and Tarmat Removal</td>
<td>CLOSED</td>
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<tr>
<td>Less Than 400m From Active Nest</td>
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</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Bioremediation, Manual Raking, Spot Washing &amp; Other Approved Treatment</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>More Than 100m From Stream</td>
<td>WORK PRIOR TO 6/11</td>
</tr>
<tr>
<td>Less Than 100m From Stream</td>
<td>WORK PRIOR TO 6/11</td>
</tr>
<tr>
<td>(ADF&amp;G MONITOR REQ.)</td>
<td></td>
</tr>
</tbody>
</table>

| More Than 400m From Active Nest | WORK PRIOR TO 6/11 |
| Less Than 400m From Active Nest  | CLOSED |

ARCHAEOLOGICAL STANDARD CONSTRAINT

If cultural resources are uncovered, PHONE 564-3274.

APPLICABLE ECOLOGICAL TIME CONSTRAINTS

1A,1B Salmon Stream

ADF&G catalogued anadromous streams (224-20-13036 and 244-20-13034) are present in Subdivision A. Subdivision is closed to bioremediation, manual raking, spot washing, and other approved treatment less than 100m from stream from 7/10 to 8/31. Prior to 7/10, bioremediation, manual raking, spot washing, and other approved treatment is permitted less than 100m from stream with on-site ADF&G monitor or ADEC alternate present. No constraint to these activities more than 100m from stream. No constraint to manual pickup and tarmat removal.

1I Gill Net Area

No constraint to manual pickup and tarmat removal; closed to bioremediation, manual raking, spot washing, and other approved treatment after 6/11 without ADF&G approval.

1J Purse Seine Area

No constraint to manual pickup and tarmat removal; closed to bioremediation, manual raking, spot washing, and other approved treatment after 7/20.
1K Purse Seine  
No constraint to manual pickup and tar mat removal, closed to bioremediation manual raking, spot washing, and other approved treatment after 7/20

5T Bald Eagle Nest  
USFWS 6/1/90 map indicates an active nest in Subdivision B  Closed to manual pickup, tar mat removal, bioremediation, manual raking, spot washing and other approved treatment within 400m of active nest

OTHER ECOLOGICAL CONSIDERATIONS

No disturbance to stream bed or bank  No flushing of pollutants or sediments into stream drainage, do not allow Inipol to enter stream flow  On-site examination and consultation by ADF&G monitor is required prior to bioremediation in order to authorize a setback distance from the stream during chemical application, if ADF&G monitor's presence is impossible, authorization may be given by the ADEC monitor  Restrict air traffic and all disturbance to essential minimum  No personnel or boat traffic within 400m of active nests  Air approach and takeoff from and to seaward only, maintain 400m horizontal, 300m vertical distance from active nests  Avoid any unnecessary disturbance or damage to unoilied biota and substrate

Prepared by  

Date 6/9/90
ECOLOGY MAP
SEGMENT CU-14

ACTIVE NEST

CU-13

CU-14

CU-15

INACTIVE NEST

TREATMENT AREA

ANADROMOUS STREAM 100m ZONE

ANADROMOUS STREAM
(224-20-13034)

5

6

EXxon Company, USA

Seabird Colony

Eagle Nest

Incorporates USFWS 61,190
map of active Eagle Nests.

EXxon

CU-12
1991 MAYSAP EVALUATION

SEGMENT: CU 014 SUB: A REGION: PWS SURVEY DATE: 5/14/91

ENVIRONMENTAL SENSITIVITIES:
Work Window(s) RESTRICTED 3/1 - 9/15

Ecological/Constraints (see page two for details) Eagle nest, Anadromous stream, Fish harvest area

ARCHAEOLOGICAL CONSTRAINTS:
If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find, and contact Exxon's Cultural Resource Program immediately: 564-3276; 564-3657; (Anchorage) or 229-1514 (24 hrs.).

RECOMMENDATIONS:
TREATMENT REQUIRED (Y or N) Y
Manual Pickup (Check as Req.) X
Spot Washing
Bio-Customblen Only X
Bio-Inipol/Customblen
Other
Other

COMMENTS:
INITIAL: Remove easily accessible mousse and high SOR at locations F1, F2 and G. Apply Customblen at locations F1, F2, and G.

TAG: -------------------------------------------------------
FOSC: ____________________________________________________________

TAG APPROVAL DATE: MAY 29 1991 FOSC APPROVAL DATE: 6/3/91

ADEC
EXXON
USCG
NOAA

E. E. PAGE, CDR, USCG
CHIEF OF STAFF, FOSC
ECOLOGICAL CONSTRAINTS
1991 FIELD ACTIVITIES

Eagle Nest: Access restricted from 3/1 to 9/1. USF&WS authorization required. Maintain 1000' vertical and 1/4 mile horizontal buffer.

Anadromous Stream: Unlimited treatment up to stream bank between May 15 and July 10. ADF&G approval required for work after July 10. Fish Habitat Permit required for instream work. ADF&G approval required for bioremediation within 100 meters of anadromous stream after July 10.

Fish Harvest Area: Unlimited treatment unless otherwise directed by ADF&G. Sheen containment/recovery procedures required for mechanical treatment.
TEAM NO. 1
SEGMENT CU 014
SUBDIVISION A
DATE 05/14/91

ADEC
NAME Jeff Cusick
SIGNATURE

(Anomalous Stream Segment)

☐ NTR AOFTG Very little oiling remaining at stream site 224-20-1306. All remaining visible AP/SOR oiling was picked up and removed at the time of the survey. Recommend no treatment for this stream. Oil tree CV/CT deposits found at stream site 224-20-13084 in Boulder Geobank areas. Treatment here is not recommended. Tom Cusick

EXXON
NAME Randall L. Beyer
SIGNATURE

☐ NTR Area F, F2 & G contained a band of treatable oiling in the upper intertidal zone. In the subaqueous sediments AP consistency of 1 m² patches were present. The survey team did not have the time to pick up all the treatable oil. Areas surrounding the anomalous stream segments looked in good shape with no further treatment recommended. In areas F, F2 and G, would not recommend removing the boulder armor to access oil.

LANDMANAGER
NAME Marsha Hall of DNR
SIGNATURE

☐ NTR ☑ Treatment Stream site A is fine.
Manual labor to remove surface cobble boulder take out lens, leave treated area exposed for two come back in 40 for armor layer back at site F1. Manual removal of MS at location F2 and G. Attempted to remove oil at F1 but too much there for this team to deal with.

USCG/NOAA
NAME Schwartz
SIGNATURE

☐ NTR Treatable oiling existed in F-F2-G (see map) and should be addressed. No treatment at any other location.

High Angle Bedrock outcrop shoreline w/ isolated pocket beaches. Beaches consist of sand blown by wind blown onto BCP's then from low shoreline. Two small streams in subzone oiling observed was typical remnants - low silt very degraded, CT & MS in protected spots. A non continuous layer be submarine oil observed in N14 pasture.
**MAYSAP SHORELINE OILING SUMMARY**

**TEAM NO. 1**

<table>
<thead>
<tr>
<th>OI</th>
<th>G. MACDONALD</th>
<th>BIO</th>
<th>M. FAWCETT</th>
</tr>
</thead>
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<tr>
<td>ADEC</td>
<td>J. G. HANES</td>
<td>LANDMANAGER</td>
<td>M. HALE for JNR</td>
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<tr>
<td>EXXON</td>
<td>R. BOLTE</td>
<td>USCG/NOAA SCHUTZ/CHILD</td>
<td></td>
</tr>
</tbody>
</table>

**TIME:** 17:16 to 17:45  
**TIDE LEVEL:** +6.2 ft. to +2.0 ft.  
**ENERGY LEVEL:** □ H □ N □ X

**TOTAL LENGTH SURVEYED:** mm  
**NEAR SHORE SHEEN:** □ BR □ RB □ SL □ X □ NONE

**SURVEYED FROM:** □ FOOT □ BOAT □ HELO  
**WEATHER:** □ SUN □ CLOUDS □ FOG □ RAIN □ SNOW

**EST. OIL CATEGORY LENGTH:** W_______m M_______m N_______m V_______m L_______m U_______m

<table>
<thead>
<tr>
<th>L</th>
<th>O</th>
<th>SURFACE OIL CHARACTER</th>
<th>SURFACE SEDIMENT</th>
<th>SHORE SLOPE</th>
<th>WIDTH</th>
<th>LENGTH</th>
<th>ZONE</th>
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<td>PC</td>
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<td>T</td>
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<tr>
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**DISTRIBUTION:** C = 81-100%; B = 61-80%; P = 11-60%; S = 1-10%; T = <1%

**SLOPE:** V = VERTICAL; H = HIGH ANGLE; M = MEDIUM ANGLE; L = LOW ANGLE

**PHOTO ROLL & MAYSAP**

**FRAMES:** 1-2

<table>
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<tr>
<th>PITT</th>
<th>DEPTH</th>
<th>SUBSURFACE OIL CHARACTER</th>
<th>OILED ZONE</th>
<th>CLEAN ZONE</th>
<th>H2O SHEEN</th>
<th>PIT</th>
<th>SURFACE SUBSURFACE SEDIMENTS</th>
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<td>12-15</td>
<td>Y</td>
<td>-</td>
<td>x</td>
<td>PC-GTGMV</td>
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</tbody>
</table>

**SHEEN COLOR:** B = BROWN; R = RAINBOW; S = SILVER; N = NONE

**OG COMMENTS:**

Silt, rocky shore w/ some coarse-grained beaches on breachers in the rock wall. Two areas fish stream were surveyed by Tom Chance. A thin, sparce barrier layer of subsurface oil.
OG COMMENTS: Remains on N end @ sketch 1 stream (-13026).
Topped under RC, over a P peat layer.
Oil locations for remaining sites were poorly located by SSAT '90
& subsequent visits by ASAT '90 missed 2 out of 3 oiled site.
Sketch #3 illustrates oiling identified by SSAT '90 survey sketch.
MS & hi SO2 bands to 20 m long, under CB armor typify these sites.
Sketch #4 illustrates remnant oiling @ rocky pocket, thought to be location of pooled oil (SSAT '90); Boyer confirmed
that site lying ~ ½ mile NW. - surveyed 5/18/91.
Sketch #5 illustrates site of 5/15: It had MS/F under massive B
and some associated CR.

<table>
<thead>
<tr>
<th>PIT NO.</th>
<th>PIT DEPTH (cm)</th>
<th>SUBSURFACE OIL CHARACTER</th>
<th>OILED ZONE cm-cm</th>
<th>CLEAN BELOW cm</th>
<th>H20 LEVEL Y/N</th>
<th>SHEEN COLOR</th>
<th>PIT ZONE</th>
<th>SURFACE-SUBSURFACE SEDIMENTS</th>
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<td>-</td>
<td>x</td>
<td>GPC-PM</td>
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</tbody>
</table>

Sheen Color: B = Brown; R = Rainbow; G = Silver; N = None
Sketch #1

North

Approx. 25 m

WLC 18.00

BC

BC-Gc

25 wide x

180 circm.

PCG

CG-GPMV

CTR, Trace

Subsurface Oil - Trace

1 x 70 m @ Watkins, discontin.

Photo locations - LOL

≤ 2 cm thick; burned to 10 cm

Surface Oil - Soil battery

TREELINE

Stream

KEY

× Scanned @ HWL

× Soil battery

Log

Old stump
CU-14A
ASC # 2242013034
G. MACDONALD
5-14-91

Sketch # 2

0
10 m
approx.

CT, <1°
5 x 10 m
on B.

ST, <10°
3 m long.

Dimensions on CC.
stein are < 1/2 x 3 m.
CU-14 A
G. MACDONALD
5-14-81

Sketch #3

Dimensions from CG sheet: 41 x 50m

Tb, CT <1%
BU HITZ - SUTZ

MS/I <10% - PU 15%
G

MS/I, >50% under
CANNOT
5m x 20m x 3m us
G

MS, liSor/I; CT
3 x 10 C 15%

Es

CT, lo SOR/I
between B;
< 1%
8 x 5 m long

Pu 60%

Pu

ANAD STREAM

ANOAD STREAM

see sketch
# 1

see sketch
# 2

revised 5/15/81 KG
6/15/81
H-V. R cliff

H

| massive B

massive B over R

Bedrock bench

massive B.

Li Sor/I, biodegraded in part below & between B. <3%
CT/T on R, B. <1%
6m x 15mm

CU-14A
G. MACDONALD
6-14-91

Sketch #4
Note: conflicting information on this & following map re: active? nest

Mike,
This is the zoom buffer zone

EAGLE NEST

Segment Reference Map
Map Key: PUBCU014

Reviewed by: B. 5/17/64
MAYSAP BIOLOGICAL SUMMARY FORM

TEAM # 1
SEGMENT # CV 014
SUBDIVISION A
SEA STATE 1ft swell

PHOTOGRAPHS: ROLL # FRAME #

BIOLOGIST: Michael Faured

WIND SPEED/DIRECTION NE 10-15 Kts

WILDLIFE OBSERVATIONS

TO BE COMPLETED IN ALL SUBDIVISIONS

BIRDS # OF SPECIES TOTAL BIRDS FISH OBSERVED SPECIES PRESENT
Eagles 1 1 Salmon fry
Seabirds 1
Waterfowl 1
Gulls/kittiwakes 1 (G+W Gull) 3 Black prickleback
Shorebirds 1
Corvids 1
Other Birds 1

LAND MAMMALS

MARINE MAMMALS # OBSERVED SPECIES # OBSERVED
Sea Otters 1
Pinnipeds (specify) 1
Whales (specify) 1

COMMENTS/OBSERVATIONS (to be completed in oiled subdivisions only):
Completed anomalous stream sites and two other sites with Tom Crowe (AEF+6 monitor) on May 14; returned May 15 to survey 6th site (Sketch #5). See sketches 1-5 for descriptions of biota near each oiled site. Salmon fry were observed in the intertidal zone near the mouth of the smaller stream (#224-20-13034). 500+ ct typically found in UTZ-5TZ areas at +10-12 ft MLLW above most biota except lichen, limpet, amphipod, oligochaete worms. MTZ areas below oil typically have dense rockweed and barnacle spat, and variable densities of littorinids, mussels, limpet, kelped etc. Whelks (Nucella emarginata) are abundant in MTZ-6TZ throughout the subdivision, N. lamellosa sparse.

Shoreline subdivision map showing important biological features attached.
No biota near Sor at toft; sparse barnacles, rockweed, mussels, limpets, Littorinids, Ulva, Enteromorpha, and dense barnacle spat about 5 m from toft. No at 11:41.

CU 014 A
Bio Sketch Map
ASC # 224-20 13036
M.H. Fawcett 5/14/91

Sketch # 1
No biota except lichen near oil residue in SUTZ at n + 10 ft.
Sparse rockweed, dense barnacles and whelks downshore below +3 ft (also dense spot, sparse limpets, litt).
B10. Sketch Map
CU-14 A
14 May 91
M. Fawcett

Sketch #3

approx.
0
100m

- Same as E
- B/K
- BC/K
- Same biota and distribution relative to SOK and CT as at E
- PU 60%

- This pocket not seen by biologist except from skiff, probably similar to F

- Sparse limpets (v. persona), amphipods near SOK and CT at +10-12 ft. isopods, barnacles, littorinids begin 3 ft. down in sparse rockweed, dense barn, spot + patchy dense adults + dense whelks further down in skiff

ANAD. STREAM

ANAD. STREAM

see sketch #1

see sketch #2

Reviewed M.B. 81
No biota except lichen; terrestrial grass near SOR + CT at 10+ ft.
Tidepools 2m downshore with dense lithoids, plus hermit crabs and coralline algae; rockweed, limpets, lithoids, sparse barnacles around pools on BRj LT2-MT2 tidepools with typical diverse biota.
B10 Sketch Map
CU-14-A
15 May 91
M. Fawcett

Sketch #5

Lichen, sparse limpets near S0R; dense rockweed 5 m
downshore, along with moderately dense littorinids & limpets,
patches of dense barnacles, sparse patches of young mussels.
CM 14A Arr 1715 - Fawcett
5/14/91 1/4 NE 5-18, Ran

Pink Salmon Stream
Eagle Glen oars
1940

Site B 1800 hrs
Smaller ton stream
Sleep shore 1940

Spawns 60% 4.8 ft on boulders
BR - very dead bony whole
no life in stream
Salmon fry a month

draft 1920, went North

over
14 May (cont)

Site C - no show
- splats SOR + CT UTZ + 10 - 14 ft
- call of unknown - BUP - no broods
- war rupp and in SUZ, but
- 2 Karelie FPH was wings near
- SOR (picked up) at 10 ft
- dense FPH - bird / fowl
- walking etc. down slope
- 2m below at 7 - 8 ft - walked
- north to end of substation
- some red. diet of birds of
- tracks of CT at 10 ft
- 2 N. lamellaea breeding under
- hedge at + 3 ft, near and funnel
- 1900 hrs - heard SOR rode
- Graham's map - 50% cover
- UTZ = SUZ + 10 - 12 feet - only
- birds are sparrow, N. passerine, amp.
- victims
- Ponde bamboos, Lill beah 3m
- Lowshoe wood fowl sparrow
- Ficus fastidiosa at + 4 - 5 ft
- Woodham fruit pachydiscus
- catle, dense, N. strong
- a few N. lamellaea
CU 14A (cont) 14 May
1730 hrs

Last mile south end of Segment 2 SR, CT in UTZ-SUTZ. 10-15 boulders above biota - 2m downslope on BR bank on pools w/ Lith, Hermit, Rift, but sparse algae - mouth deep focusing on BR around pals - rift, limp, sparse, bam - pools in LTZ-MTZ w/ rich biota - very dense n area all over the substrates

*quilla

Finish 1945

15 May 91 Returned to CU14A
11:45/5:05 - area mussel

yesterday -
Shallow BR w/ SRT - 50A SUTZ in colonies of cases - no blow except lips 10-20 small at -8 ft - dense Focus - sparse, bare (some dense patches, most rift, limp, sparse, mussels)
<table>
<thead>
<tr>
<th>Width</th>
<th>ADEC Subsegment Length: 2203m</th>
</tr>
</thead>
<tbody>
<tr>
<td>XXXX</td>
<td>Meters</td>
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<td>/////</td>
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<td>----</td>
<td></td>
</tr>
<tr>
<td>TTTT</td>
<td>Very Light</td>
</tr>
<tr>
<td>0000</td>
<td>No Oil</td>
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</table>

**Map Key:** PWSCU014Ab

**Name:** GM

**Date:** 5/15/81

**Data Entered:**

Reviewed 5/16/91 KG

KG reviewed 5/17
SHORELINE EVALUATION

SEGMENT ST/ CU-14 SUBDIVISION A (1 OF 1) DATE 4/2/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

Salmon stream mouth (no. 13036, 13034) Salmon fry outmigration (1A) - 3/1 to 5/15 and spawning (1B) - 7/10 to 8/31; Bald eagle nest (5T) - 3/1 to 6/1; Gill net area (1I) - 6/1 to 8/31 (contact ADF&G for exact dates and locations); Purse seine area (1J) - 7/20 to 9/30 (contact ADF&G for exact dates and locations). Special use designation (6Y) - 6/1 to 9/15. Restrict boat and air traffic to a minimum essential. Air approach and takeoff from and to seaward only.

SUBDIVISION ECOLOGICAL CONSTRAINTS: Do not disturb stream bed or banks unless authorized by ADF&G. Contact ADF&G prior to treatment for permit and USFWS re: eagle nests. Avoid unnecessary disturbance/damage to uncoiled substrate and biota.

ARCHAEOLOGICAL CONSTRAINTS: If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact a member of Exxon's Cultural Resource Program immediately (564-3657; 564-3658 or 564-3276).

SHPO SIGNATURE: [Signature] DATE: April 14, 1990

OILING CATEGORIZATION:

Wide 0 m: Medium 580 m: Narrow 64 m: V.Light 0 m: No Oil 1649 m

Subsurface Oil Observed: Yes X No Maximum Depth 20 cm

RECOMMENDATIONS:

____ No Treatment Recommended ______ Snare/Absorbent Booms

X Treatment Recommended ______ Oil Snares (pom poms)

X Manual Pickup ______ Absorbents (pads, rolls, etc)

X Bioremediation ______ Spot Washing: X Wands

X Tarmat: ______ Breakup _______ Beach Cleaner

____ Removal ______ Other (see comments)

COMMENTS: Spot wash area where pooled mousse found with wands and absorbents. Manual pickup of any debris. Tarmat removal as indicated on sketch map. Bioremediation of areas where cover and coat found. Work between 6/1 and 7/10 based on constraints.

MAKE OILED GRAVEL AREA AT SITE TWO - PILE - PRIOR TO BIOREMEDIATION

TAG COMMENTS:

__________________________________________________________

TAG APPROVAL DATE: 4/15/90

ADEC JOHN BAUER

EXXON ANDY TICE FOSC: ________________________________________ DATE: 4-20-90

NOAA

USCG G. A. KAUFER
SEGMENT: ST/CU-14
SOUTH PART

XXXX Wide
/// Medium
---- Narrow
TTTT Very Light
0000 No Oil

CU-14

Map Key: PWS-72a
Name: GILLIE
Date: 4-2-90
Data Entered:
ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/ CU-14 STREAM NO: 224-20-13034 DATE 4/25/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
Subject stream and one additional stream 224-20-13036, Ps, 2/90
1A Salmon stream mouth - fry outmigration (3/1 to 5/15)
1B Salmon stream mouth - spawning (7/10 to 8/31)
1I Gill net area (6/7 to 8/31)
1J Purse seine area (7/20 to 9/30)
5T-3 All bald eagle nests (3/1 to 6/1) - Active eagle nests (3/1 to 9/1)
6Y Recreation: Special use destination
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:
Avoid any unnecessary disturbance or damage to unoiled biota and substrate. Subject stream exists within Subdivision A (1 of 1).

ARCHAEOLOGICAL CONSTRAINTS:
If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact a member of Exxon's Cultural Resource Program immediately (564-3657; 564-3658 or 564-3276).

SHPO SIGNATURE: ___________________________ DATE: 5/10/90

Subsurface Oil Observed: Yes____ No_X____ Maximum Depth_____

RECOMMENDATIONS:
___ No Treatment Recommended  ___ Snare/Absorbent Booms
___ Treatment Recommended  ___ Oil Snares (pom poms)
___ Manual Pickup  ___ Absorbents (pads, rolls, etc)
___ Bioremediation  ___ Spot Washing: ___ Wands
___ Tarmat Removal  ___ Beach Cleaner
___ Other (see comments)

COMMENTS: Recommended treatment includes manual pickup of oiled vegetation, cleanup debris (zodiac), and mousse patties in areas indicated on sketch map. Work should be conducted after 6/1 with approval of USFWS regarding eagle nest.

TAG COMMENTS:
________________________________________________________________________________________
________________________________________________________________________________________
________________________________________________________________________________________

TAG APPROVAL DATE: 5/10/90
ADEC ____________ EXXON ____________ FOSC: ____________ DATE: 5/15/90
NOAA ____________ USCG ____________ Notify CVC 24 hrs prior to work.
treatment recommendations

Remove scattered tar patties in the UTSTZ on NYS sides of stream

Remove oiled parts of log on south bank

If possible - remove trash bed zodiac
ANADROMOUS FISH STREAM EVALUATION ADDENDUM

CONSTRAINTS FOR STREAM NO. 224-20-13034
SEGMENT CU-14 SUBDIVISION A

WORK WINDOW

| Manual Pickup | OPEN |

ARCHAEOLOGICAL STANDARD CONSTRAINT

If cultural resources are uncovered, PHONE 564-3274.

APPLICABLE ECOLOGICAL TIME CONSTRAINTS

1A, 1B  Salmon Stream

ADF&G catalogued anadromous streams (224-20-13036 and 224-20-13034) are present in Subdivision A. No constraint to manual pickup.

11  Gill Net Area

No constraint to manual pickup.

2K  Purse Seine Hook-off

No constraint to manual pickup.

5T  Bald Eagle Nest

NO CONSTRAINT. USFWS 6/1/90 map indicates no active nest within 400m of Subdivision A work site.

OTHER ECOLOGICAL CONSIDERATIONS

No disturbance to stream bed or banks. Restrict boat and air traffic and all disturbance to essential minimum. No personnel or boat traffic within 400m of active nests. Air approach and takeoff from and to seaward only; maintain 400m horizontal, 300m vertical distance from active nests. Avoid any unnecessary disturbance or damage to uncoiled biota and substrate.

SEE SUBDIVISION CONSTRAINT ADDENDUM CU-14A FOR ADDITIONAL CONSTRAINT INFORMATION.
SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
Subject stream and one additional stream 224-20-13036, Ps, 2/90
1A Salmon stream mouth - fry outmigration (3/1 to 5/15)
1B Salmon stream mouth - spawning (7/10 to 8/31)
1I Gill net area (6/7 to 8/31)
1J Purse seine area (7/20 to 9/30)
5T-3 All bald eagle nests (3/1 to 6/1) - Active eagle nests (3/1 to 9/1)
6Y Recreation: Special use destination
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:
Avoid any unnecessary disturbance or damage to unoiled biota and substrate. Subject stream exists within Subdivision A (1 of 1).

ARCHAEOLOGICAL CONSTRAINTS:
If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact a member of Exxon's Cultural Resource Program immediately (564-3657; 564-3658 or 564-3276).

SHPO SIGNATURE: ___________________________ DATE: 5/10/90

Subsurface Oil Observed: Yes____ No X Maximum Depth_____

RECOMMENDATIONS:
_____ No Treatment Recommended   _____ Snare/Absorbent Booms
_____ Treatment Recommended      _____ Oil Snares (pom poms)
_____ Manual Pickup               _____ Absorbents (pads, rolls, etc)
_____ Bioremediation              _____ Spot Washing: _Wands
_____ Tarmat Removal              _____ Beach Cleaner
_____ Other (see comments)

COMMENTS: Recommended treatment includes manual pickup of oiled vegetation, cleanup debris (zodiac), and mousse patties in areas indicated on sketch map. Work should be conducted after 6/1 with approval of USFWS regarding eagle nest.

TAG COMMENTS: ____________________________________________

TAG APPROVAL DATE: 5/10/90

ADEC   EXXON   NOAA   USCG
ART WEINBERG  ANN TULL  BILL WASSOFF  D. D. ROOME

DATE: 5/10/90

FOSC: ___________________________ NOTIFY OCE 24 HRS PRIOR TO WORK
ANADROMOUS FISH STREAM ASSESSMENT

REGION: PRINCE WILLIAM SOUND
SEGMENT: CU-14
STREAM NO: 224-20-13034
ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/ CU-14 STREAM NO: 224-20-13034 DATE 4/25/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
Subject stream and one additional stream 224-20-13036, Ps, 2/90
1A Salmon stream mouth - fry outmigration (3/1 to 5/15)
1B Salmon stream mouth - spawning (7/10 to 8/31)
1I Gill net area (6/7 to 8/31)
1J Purse seine area (7/20 to 9/30)
5T-3 All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)
6Y Recreation: Special use destination
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:
Avoid any unnecessary disturbance or damage to unoiled biota and substrate. Subject stream exists within Subdivision A (1 of 1).

ARCHAEOLOGICAL CONSTRAINTS:
If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact a member of Exxon's Cultural Resource Program immediately (564-3657; 564-3658 or 564-3276).

SHPO SIGNATURE: __________________ __ DATE: ______________________ 

Subsurface Oil Observed: Yes____ No_ X_ Maximum Depth____

RECOMMENDATIONS:
____No Treatment Recommended ____Snare/Absorbent Booms
_X_Treatment Recommended ____Oil Snares (pom poms)
_X_Manual Pickup ____Absorvents (pads, rolls, etc)
____Bioremediation ____Spot Washing: ____Wands
____Tarmat Removal ____Beach Cleaner
____Other (see comments)

COMMENTS: Recommended treatment includes manual pickup of oiled vegetation, cleanup debris (zodiac), and mousse patties in areas indicated on sketch map. Work should be conducted after 6/1 with approval of USFWS regarding eagle nest.

TAG COMMENTS: ____________________________________________

TAG APPROVAL DATE: __________________
ADEC __________________
EXXON ____________________ FOSC: __________________ DATE: __________
NOAA ____________________
USCG ____________________
PWS, SEWARD AND HOMER ECOLOGICAL CONSTRAINTS

1A Salmon stream mouth - try outmigrating (3/1 to 6/15)
1B Salmon stream mouth - spawning (7/10 to 8/31)

No disturbance of stream bed or banks unless authorized by ADF&G. No beach shuffling into stream drainage. No bioremediation or other chemical application within 100m of stream without authorization from ADF&G. No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Jnipol application, prior to at least July 1 unless authorized by ADF&G. Treatment which is not intrusive and which will not affect nearshore oil or toxicity levels, such as manual removal, can probably proceed without adherence to time constraints. In any case, contact ADF&G Habitat Division prior to treatment for consultation and/or permit application.

AGENCY CONTACT PERSON: ADF&G John Morison 267-2324

1C Salmon try nursery area (4/31 to 7/31)

No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Jnipol application, prior to July 31 unless authorized by ADF&G. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G prior to treatment for confirmation and advice.

AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214

1D Esther Hatchery release (4/15 to 6/15)
1E Main Bay Hatchery release (4/20 to 6/15)
1F Sawmill Bay Hatchery release (4/15 to 6/1)
1G Cannery Creek Hatchery release (4/21 to 6/1)
1H Remote release site

No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Jnipol application, prior to at least July 1 unless authorized by ADF&G and/or PWS Aquaculture Association. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G or PWS Aquaculture Association for confirmation and authorization.

AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214

1J Gill net area (6/7 to 8/31)
1K Purse seine area (7/2 to 9/30)
1L Purse seine hook-off (7/2 to 9/30)

Contact ADF&G for specific dates, locations and constraints. Restrict boat and air traffic to essential minimum. When set net sites are present (1L) restrict beach operations to essential minimum. If plans for treatment include methods such as hot water wash or Jnipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.

AGENCY CONTACT PERSON: ADF&G Evelyn Biggs 424-3235

2M Herring spawning (4/1 to 6/15)

Contact ADF&G for confirmation - dates and locations may vary. Restrict boat traffic to essential minimum. Avoid damage to uncilled intertidal and subtidal algae and seagrass. If plans for treatment include methods such as hot water wash or Jnipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.

AGENCY CONTACT PERSON: ADF&G Evelyn Biggs 424-3235

3A Harbor seal and sea lion pupping (5/15 to 7/1)
3B Harbor seal and sea lion molting (5/15 to 9/15)

Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 900m horizontal and 300m vertical distance from haulouts. No application of Jnipol within two weeks of arrival dates (work window at these sites is limited to 7/2 to 7/31). Contact ADF&G and USFWS prior to treatment for confirmation.

AGENCY CONTACT PERSON: US National Marine Fisheries Service Steve Zimmerman 586-7235

ADF&G Don Calkins 267-2403

5R Seabird colony (5/1 to 9/1)

Restrict air and boat traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m vertical distance from colony. Contact USFWS prior to treatment.

AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

5S Shorebird/waterbird concentration (4/1 to 5/15)

Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.

AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

ADF&G Tom Rothy 267-2206

5P All Bald Eagle nests (3/1 to 6/1)

Active Bald Eagle nests (3/1 to 9/1)

Restrict air traffic and all disturbance to essential minimum. No personnel within 400m 3/1 to 6/1. Air approach and takeoff from and to seaward only; maintain 800m horizontal, 300m vertical distance from nests. Contact USFWS prior to treatment for confirmation of dates.

AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

6U Recreation: Tent sites (6/1 to 9/15)
6V Anchorages (6/1 to 9/15)
6W Forest Service cabins (6/1 to 9/15)
6X Lodge (6/1 to 9/15)
6Y Special use destination

Subsistence area: Salmon harvesting (5/1 to 9/30)
7H Salmon harvesting (5/1 to 9/30)
7I Finfish harvesting
7J Deer harvesting (6/15 to 2/28)
Invertebrate harvesting

Contact ADF&G and appropriate Native Corporation for specific dates, locations, and constraints. Restrict boat and air traffic and beach disturbance to essential minimum. If plans for treatment include methods such as hot water wash or application of Jnipol which might affect intertidal or nearshore oil or toxicity levels, contact ADF&G and appropriate Native Corporation for authorization - see Native Corporation Contact List for each Native Corporation's contact person.

AGENCY CONTACT PERSON: ADF&G Jim Fall 267-2359

PWS-C002 ANN 4/25/90
FIELD SHORELINE COMMENT SHEET

SEGMENT ST1   CU-014   SUBDIVISION: 224-20-13054   DATE 25 APR 9

USCG
NAME: Kerwin L. Archer
SIGNATURE: cwo R.L. Huber

☐ NO TREATMENT RECOMMENDED   ☐ TREATMENT SUGGESTED

COMMENTS

☐ NO TREATMENT RECOMMENDED   ☐ TREATMENT SUGGESTED

COMMENTS

Remove scattered tar patches in the upper surge ITZ on north and south sides of stream.
Remove oiled parts of log on south bank.
If possible, remove trash and debris.

LAND MANAGER
NAME: None
SIGNATURE:

☐ NO TREATMENT RECOMMENDED   ☐ TREATMENT SUGGESTED

COMMENTS
SHORELINE OILING SUMMARY (ANAD)

OG CAL LARSON USCG DREHER CWE SEGMENT ST/ CU014 N 19%
BIO PEN CRITCHLOW LAND REP STREAM 224-28-0524 OF
EXXON DARL H TOLLS ADFG-RK KUSHT-AIMPE WEDMAN TIME/10 00/00 1350
TEAM NO. 14 TIDE LEVEL -0 FT DATE 4-27S 1 90
EST. SUBDIVISION LENGTH: 15 m [Sun] [Rain] [Snow]
UPLANDS DESCRIPTION: [Grass] [Forest] [Rock]
SURVEYED FROM: [Foot] [Boat] [Halo]
SURFACE SEDIMENTS: R 20 % B 40 % C 30 % P 5 % G 5 % S 5 % M 95 % V
SLOPE: Lang 40 % Hang 60 % Ven 90 % WAVE EXPOSURE: Low Med High
OIL CATEGORY LENGTH: W m M m N m

SURFACE OIL

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<tr>
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PAVEMENT H F S sq. m by
NEAR SHORE SHEEN? BR RW SL

OILED DEBRIS AMOUNT

Did You Collect DEBRIS?

Vegetation

Trash

Debris

PBAGS

Photographs:
Roll No. 7
Frames 11-7

SUBSURFACE OIL

| PIT NO. | PIT DEPTH (cm) | SUBSURFACE OIL CHARACTER | OILED INTERVAL | OILED DEBRIS | OILED DEBRIS INTERVAL | OILED DEBRIS INTERVAL | OILED DEBRIS INTERVAL | OILED DEBRIS INTERVAL | OILED DEBRIS INTERVAL | OILED DEBRIS INTERVAL | OILED DEBRIS INTERVAL | OILED DEBRIS INTERVAL | OILED DEBRIS INTERVAL | OILED DEBRIS INTERVAL | OILED DEBRIS INTERVAL | OILED DEBRIS INTERVAL | OILED DEBRIS INTERVAL | OILED DEBRIS INTERVAL | OILED DEBRIS INTERVAL | OILED DEBRIS INTERVAL | OILED DEBRIS INTERVAL | OILED DEBRIS INTERVAL | OILED DEBRIS INTERVAL | OILED DEBRIS INTERVAL | OILED DEBRIS INTERVAL | OILED DEBRIS INTERVAL | OILED DEBRIS INTERVAL | OILED DEBRIS INTERVAL | OILED DEBRIS INTERVAL | OILED DEBRIS INTERVAL | OILED DEBRIS INTERVAL | OILED DEBRIS INTERVAL | OILED DEBRIS INTERVAL | OILED DEBRIS INTERVAL | OILED DEBRIS INTERVAL | OILED DEBRIS INTERVAL | OILED DEBRIS INTERVAL |
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| 1 24    |                |                          |                |              |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |                        |

COMMENTS

VERY LITTLE OIL FOUND ON THIS BEACH

REVIEWED: [Signature] DATE 4-28
Very little oil was observed in the vicinity of the stream at this site. Scattered tarballs and patties were present in the upper MITZ and lower STZ on the south side, some distance from the stream. A log in this vicinity was stained sporadically. Stain was also observed on boulders and bedrock at the same elevation on the opposite side of the stream. An uncoiled Avon raft/boat was stranded as debris in the STZ channel.

I suggest that the tarballs and patties be removed by a small crew using shovels and rakes. This should be sufficient since a pit in this location didn’t indicate the presence of subsurface oil. The oil-stained log could be scraped and shouldn’t be removed. Bio-remediation isn’t required.

HR Critchlow
ADPEC MULTI-ASSESSMENT DATA FORM

1. SURVEY TYPE: ES OS TS AYS OCHA PTA
   METHOD: Aerial

2. REGION: FRC X33 KAP

3. DATED: 4-25-90
   10 HIGH TIDE TIMES: 1
   17 HIGH TIDE TIMES: 1

4. START TIME: 1000
   17 LOW TIDE TIMES: 1

5. STOP TIME: 1020
   17 LOW TIDE TIMES: 1

6. SECTORS: C004
   18 TIDE MT AT SURVEY

7. STATION: 41
   20 USCG QUAD: S.C.3

8. LOST AREA:
   20 SAMPLES TAKEN: Y
   20 NUMBER:

9. SOURCE: Loran
   LOCATION: SE Culebra T coast line - south of
   DESCRIPTION: hidden bay

EXTENT OF OIL:

SHORELINE STREAM

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</table>

30. CATALOGED ANOM. FISH STREAM: Y
37. CATALOG: 3-24-90 - 13.03.4

38. STREAM NAME:

39. OIL IN STREAM BED: Y
40. OIL ON STREAM BANKS: Y
41. OIL ON BEACH ADJACENT TO MOUTH: Y
   (within 30 meters)
42. OIL WITHIN 1 MILE OF STREAM: Y

43. ANOMALOUS FISH PRESENT: Y
44. ANOMALOUS FISH OBSERVATION:

<table>
<thead>
<tr>
<th>SPECIES</th>
<th>AERIAL</th>
<th>GROUND</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
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</tbody>
</table>

XXX comments: this stream runs through a small cobble/gravel pocket beach which is between bedrock headlands. The oiling we found consisted of scattered mouse/ tar patties in the UT72 & WAP 177, on the south side of the stream, and staining tar patties on the north side in the same zone.
treatment recommendations

Remove scattered tar patties in the UTSITZ on N-S sides of stream
Remove oiled parts of log on south bank
If possible - remove trashed Zodiac
ECOLOGICAL MAP

1A, 1B
ST (3)
II, 15
Gy

SUBJECT ANOMALOUS STREAM
# 224-20-13034 (1/8, 2/90)

(SEWARD C-4)
ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/ CU-14 STREAM NO: 224-20-13036 DATE 4/25/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
Subject stream and additional stream 224-20-13034
1A Salmon stream mouth - fry outmigration (3/1 to 5/15)
1B Salmon stream mouth - spawning (7/10 to 8/31)
1I Gill net area (6/1 to 8/31)
1J Purse seine area (7/20 to 9/30)
ST-3 All bald eagle nests (3/1 to 6/1) - Active eagle nests (3/1 to 9/1)
6Y Recreation: Special use destination
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:
Avoid any unnecessary disturbance or damage to unoiled biota and substrate. Subject stream exists within Subdivision A (1 of 1).

ARCHAEOLOGICAL CONSTRAINTS:
If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact a member of Exxon's Cultural Resource Program immediately (564-3657; 564-3658 or 564-3276).

SHPO SIGNATURE: [Signature] DATE: 5/10/90
Subsurface Oil Observed: Yes ___ No X Maximum Depth ___

RECOMMENDATIONS:
_____ No Treatment Recommended ___ Snare/Absorbent Booms
X Treatment Recommended ___ Oil Snare (pom poms)
_____ Manual Pickup ___ Absorbents (pads, rolls, etc)
_____ Bioremediation ___ Spot Washing: ___ Wands
X Tarmat Removal ___ Beach Cleaner
_____ Oil Snares (pam poms)
_____ Other (see comments)

COMMENTS: Recommended treatment includes removal of tarmats in areas indicated on sketch map. Work should be conducted between 6/1 and 6/7 with approval of USFWS regarding eagle nest.

TAG COMMENTS:__________________________________________________________
__________________________________________________________
__________________________________________________________
__________________________________________________________

TAG APPROVAL DATE: 5/10/90
ADEC [Signature] DATE: 5/10/90
EXXON [Signature] DATE: 5/10/90
NOAA [Signature] DATE: 5/10/90
USCG [Signature] DATE: 5/10/90
NOTIFY CREW 24 HRS prior to work.
P.2.7 APR-25-1990 18:31 FROM EXON AND CORDOVA TO SCAT TEAM P.27

48 Photolog

**Description**

pil 1-22mm ag oil visible

**OIL DISTRIBUTION DIAGRAM**

- 4x4 m
- tar patches
- 1 km
- asphalt
- 1 km
- 1 km
- gravel cobble beach
- 2N
- Bedrock
- Sample taken
- photo frame # and shot direction.

**Treatment Recommendations**

Remove tar mat patches in U1TZ on north side of stream

- 0 - 1x1 m areas where exca

Remove 4 x 4 m tar mat in U1TZ on south side of stream between bedrock outcrops.
ANADROMOUS FISH STREAM EVALUATION ADDENDUM

CONSTRAINTS FOR STREAM NO. 224-20-13036
SEGMENT CU-14 SUBDIVISION A

WORK WINDOW

Tarmat Removal OPEN

ARCHAEOLOGICAL STANDARD CONSTRAINT
If cultural resources are uncovered, PHONE 564-3274.

APPLICABLE ECOLOGICAL TIME CONSTRAINTS

1A,1B Salmon Stream
If culturally significant resources are discovered, phone 564-3274.
ADFG catalogued anadromous streams (224-20-13036 and 224-20-13034) are present in Subdivision A. No constraint to tarmat removal.

1I Gill Net Area
No constraint to tarmat removal.

1J Purse Seine Area
No constraint to tarmat removal.

1K Purse Seine Hook-off
No constraint to tarmat removal.

5T Bald Eagle Nest
NO CONSTRAINT. USFWS 6/1/90 map indicates no active nest within 400m of Subdivision A work site.

OTHER ECOLOGICAL CONSIDERATIONS

No disturbance to stream bed or banks. Restrict boat and air traffic and all disturbance to essential minimum. No personnel or boat traffic within 400m of active nests. Air approach and takeoff from and to seaward only; maintain 400m horizontal, 300m vertical distance from active nests. Avoid any unnecessary disturbance or damage to uncoiled biota and substrate.

SEE SUBDIVISION CONSTRAINT ADDENDUM CU-14A FOR ADDITIONAL CONSTRAINT INFORMATION

TAG APPROVAL DATE
ADEC
EXXON
NOAA
USCG

Prepared by ___________________________ Date ___________________________
ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/  CU-14  STREAM NO: 224-20-13036  DATE  4/25/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
Subject stream and additional stream 224-20-13034
1A  Salmon stream mouth - fry outmigration (3/1 to 5/15)
1B  Salmon stream mouth - spawning (7/10 to 8/31)
1I  Gill net area (6/7 to 8/31)
1J  Purse seine area (7/20 to 9/30)
5T-3  All bald eagle nests (3/1 to 6/1) - Active eagle nests (3/1 to 9/1)
6Y  Recreation: Special use destination
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:
Avoid any unnecessary disturbance or damage to uncoiled biota and substrate. Subject stream exists within Subdivision A (1 of 1).

ARCHAEOLOGICAL CONSTRAINTS:
If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact a member of Exxon's Cultural Resource Program immediately (564-3657; 564-3658 or 564-3276).

SHPO SIGNATURE:  DATE:  5/10/90

Subsurface Oil Observed:  Yes  No  X  Maximum Depth  

RECOMMENDATIONS:
  _ No Treatment Recommended  Snare/Absorbent Booms
  _ Treatment Recommended  Oil Snares (pom poms)
  _ Manual Pickup  Absorbents (pads, rolls, etc)
  _ Bioremediation  Spot Washing: Wands
  _ Tarmat Removal  Beach Cleaner
  _ Other (see comments)

COMMENTS:  Recommended treatment includes removal of tarmats in areas indicated on sketch map. Work should be conducted between 6/1 and 6/7 with approval of USFWS regarding eagle nest.

TAG COMMENTS:  

TAG APPROVAL DATE:  5/10/90
ADEC  DATE:  5/14/90
EXXON  FOSC:  DATE:  5/14/90
ANADROMOUS FISH STREAM ASSESSMENT

REGION: PRINCE WILLIAM SOUND
SEGMENT: CU-14
STREAM NO: 224-20-13036
SEGMENT ST/ CU-14  STREAM NO: 224-20-13036  DATE 4/25/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
Subject stream and additional stream 224-20-13034
1A  Salmon stream mouth - fry outmigration (3/1 to 5/15)
1B  Salmon stream mouth - spawning (7/10 to 8/31)
1I  Gill net area (6/7 to 8/31)
1J  Purse seine area (7/20 to 9/30)
ST-3  All bald eagle nests (3/1 to 6/1) - Active eagle nests (3/1 to 9/1)
6Y  Recreation: Special use destination
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:
Avoid any unnecessary disturbance or damage to unoiled biota and substrate. Subject stream exists within Subdivision A (1 of 1).

ARCHAEOLOGICAL CONSTRAINTS:
If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact a member of Exxon's Cultural Resource Program immediately (564-3657; 564-3658 or 564-3276).

SHPO SIGNATURE: ______________________ DATE: ______________________
Subsurface Oil Observed: Yes ___ No _X_ Maximum Depth ______

RECOMMENDATIONS:
___ No Treatment Recommended  ___ Snare/Absorbent Booms
_ _X_ Treatment Recommended  ___ Oil Snares (pom poms)
___ Manual Pickup  ___ Absorbents (pads, rolls, etc)
___ Bioremediation  ___ Spot Washing: _____ Wands
___ Tarmat Removal  ___ Beach Cleaner
___ Other (see comments)

COMMENTS: Recommended treatment includes removal of tarmats in areas indicated on sketch map. Work should be conducted between 6/1 and 6/7 with approval of USFWS regarding eagle nest.

TAG COMMENTS: _____________________________________________________________

TAG APPROVAL DATE: __________
ADEC ___________________________ FOSC: __________ DATE: __________
EXXON ___________________________ NOAA ___________________________
USCG ___________________________
1A Salmon stream mouth - fry outmigration (4/3 to 5/15)
1B Salmon stream mouth - spawning (7/10 to 8/31)
No disturbance of stream bed or banks unless authorized by ADF&G. No beach flushing into stream drainage. No bioremediation or other chemical application within 100m of stream without authorization from ADF&G. No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or lnipol application, prior to at least July 1 unless authorized by ADF&G. Treatment which is not intrusive and which will not affect nearshore oil or toxicity levels, such as manual removal, can probably proceed without adherence to time constraints. In any case, contact ADF&G Habitat Division prior to treatment for consultation and/or permit application.
AGENCY CONTACT PERSON: ADF&G John Morison 267-2224

1C Salmon fry nursery area (4/31 to 7/31)
No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or lnipol application, prior to July 31 unless authorized by ADF&G. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G prior to treatment for confirmation and advice.
AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214

1D Esther Hatchery release (5/15 to 6/15)
1E Main Bay Hatchery release (4/20 to 6/15)
1F Seward Bay Hatchery release (4/15 to 6/1)
1G Cannery Creek Hatchery release (4/1 to 6/1)
1H Remote release sites
No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or lnipol application, prior to at least July 1 unless authorized by ADF&G and/or PWS Aquaculture Association. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G or PWS Aquaculture Association for confirmation and authorization.
AGENCY CONTACT PERSON: AOF&G Larry Peltz 424-3214

AGENCY CONTACT PERSON: AOF&G Evelyn Biggs 424-2359

2M Herring spawning (4/1 to 6/15)
Contact ADF&G for confirmation - dates and locations may vary. Restrict boat traffic to essential minimum. Avoid damage to unholed intertidal and subtidal algae and seagrass. If plans for treatment include methods such as hot water wash or lnipol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.
AGENCY CONTACT PERSON: ADF&G Evelyn Biggs 424-3235

3M, 3P, 3Q Harbor seal and sea lion pupping (5/15 to 7/1)
Harbor seal and sea lion molting (6/1 to 9/15)
Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts. No application of lnipol within two weeks of arrival dates (work window at these sites is limited to 7/2 to 7/31).
Contact ADF&G and USFWS prior to treatment for confirmation.
AGENCY CONTACT PERSON: US National Marine Fisheries Service Steve Zimmerman 586-7235
AGENCY CONTACT PERSON: ADF&G Don Calkins 267-2403

4S Shorebird/waterfowl concentration (4/1 to 5/15)
Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
AGENCY CONTACT PERSON: ADF&G Tom Rothe 267-2206

5R Seabird colony (5/1 to 9/1)
Restrict air and boat traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m vertical distance from colony. Contact USFWS prior to treatment.
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

6U Subsistence area: Salmon harvesting (5/1 to 9/30)
Contact ADF&G and appropriate Native Corporation for specific dates, locations, and constraints. Restrict boat and air traffic and beach disturbance to essential minimum. If plans for treatment include methods such as hot water wash or application of lnipol which might affect intertidal or nearshore oil or toxicity levels, contact ADF&G and appropriate Native Corporation for authorization - see Native Corporation Contact List for each Native Corporation's contact person.
AGENCY CONTACT PERSON: ADF&G Jim Fall 267-2359

6V Recreation: Tent sites (6/1 to 9/15)
6W Anchorages (6/1 to 9/15)
6X Forest Service cabins (6/1 to 9/15)
6Y Lodge (6/1 to 9/15)
Special use destination

Fishing harvesting
Gravel harvesting
Invertebrata harvesting

Contact ADF&G and appropriate Native Corporation for specific dates, locations, and constraints. Restrict boat and air traffic and beach disturbance to essential minimum. If plans for treatment include methods such as hot water wash or application of lnipol which might affect intertidal or nearshore oil or toxicity levels, contact ADF&G and appropriate Native Corporation for authorization - see Native Corporation Contact List for each Native Corporation's contact person.
AGENCY CONTACT PERSON: ADF&G Jim Fall 267-2359

7J U.S. Fish and Wildlife Service - Seward office - (3/1 to 6/15)
FIELD SHORELINE COMMENT SHEET

SEGMENT-ST/ CU-014 SUBDIVISION: 224-20-13036 DATE: 26 APR 90

USCG NAME: Kerwin L. Dreher SIGNATURE: CWO K. L. Dreher

☐ NO TREATMENT RECOMMENDED   ☑ TREATMENT SUGGESTED

COMMENTS

ADEC NAME: Rick Gustin SIGNATURE: Richard Gustin

☐ NO TREATMENT RECOMMENDED   ☑ TREATMENT SUGGESTED

COMMENTS

Remove tarmat patches in Upper T12 on north side of stream. Two 1x1 meter areas were encountered.

Remove 4x4 meter tarmat in Upper T12 on south side of stream between bedrock outcrops.

LAND MANAGER NAME: None SIGNATURE:

☐ NO TREATMENT RECOMMENDED   ☐ TREATMENT SUGGESTED

COMMENTS
**SHORELINE OILING SUMMARY (ANAD)**

**FROM EXXON CMD CORDOVA TO SCOT TEAM P.11**

**DATE: APR-25-1990 18:22**

**FROM EXXON CMD CORDOVA TO SCOT TEAM**

---

### SURFACE OIL

<table>
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<tr>
<th>CHARACTER</th>
<th>DISTRIBUTION</th>
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<th>IMPACTED ZONES</th>
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<td>✔</td>
</tr>
<tr>
<td>NO OIL</td>
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</tbody>
</table>

- PAVEMENT H F 07 sq m by .3
- PATTIES/TARBALLS 5 BA
- NEAR SHORE SHEEN? NO

- Photographs:
  - Roll No. 8
  - Frames 1-10

---

### SUBSURFACE OIL

<table>
<thead>
<tr>
<th>PIT NO.</th>
<th>PIT DEPTH (cm)</th>
<th>SUBSURFACE OIL CHARACTER</th>
<th>OILED DEBRIS MATERIAL</th>
<th>OILED DEBRIS</th>
<th>OILED DEBRIS</th>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

- OILED DEBRIS
  - Logs
  - Vegetation
  - Trash
  - Debris

- Did You Collect Debris? YES

- # BAGS

---

**COMMENTS:** Long Beach fetch. Little oiling. No oil in stream.

---

**REVIEWS:**

- Reviewed by S. Date: 4-28-90
Seg ID: CU-014  Subdiv: 224-20-13036
Survey Date: 11/25/96
Comments by: Ken Critchlow

Oiling on this stream site was limited essentially to three small areas of patchily distributed asphalt pavement, patties and tarballs in the WITZ on both sides of the stream.

Oiled sediments can be readily removed by a small crew using shovels and trowels. No additional treatment should be required as subsurface oil wasn't evident in the one pit excavated in the WITZ.

K.R. Critchlow
ADPAC MULTI-ASSESSMENT DATA FORM

1. SURVEY TYPE: RS 55 OS TS AVS SUBA HRH PTA

2. METHODS: Air/a Ground

3. DATE: 4-25-90

4. START TIME: 09:00

5. STOP TIME: 09:50

6. SAMPLE #: CU1105

7. STATION #: 10 TIDE HT AT SURVEY

8. K-UNIT:________ Ebb Slack Flood Slack

9. STAT AREA:________ 20 USCQUAD: SC3

10. LAT:________

11. LONG:________

12. SOURCE: Lep

13. LOCATION: SE Calvass coastline-south

14. DESCRIPTION: of hidden bay

EXTENT OF OIL

SHORELINE X Y X Y

STREAM X Y

36. CATALOGED ANAD. FISH SREATY Y N

37. CATALOG #: 204-20-1 2036

38. STREAM NAME:________

39. OIL IN STREAM BED: Y N

40. OIL ON STREAM BANK: Y N

41. OIL ON BEACH ADJACENT TO MOUTH: Y N

42. OIL WITHIN 1 MILE OF STREAM: Y N

43. ANADROMOUS FISH PRESENT: Y N

44. ANADROMOUS FISH OBSERVATION:

<table>
<thead>
<tr>
<th>Species</th>
<th>Aerial</th>
<th>Ground</th>
</tr>
</thead>
</table>

COMMENTS: Visible oiling on this beach occurs on the north and south sides of the stream. It is restricted to tar mats and patties.
Treatment recommendations:

Remove tar mat patches in U172 on north side of stream
2 4x1m areas where exca

Remove 4x4m tar mat in U172 on south side of stream between bedrock outcrops.
REGION: PRINCE WILLIAM SOUND

SEGMENT: ST/CU-15

SUBDIVISIONS: A (1 OF 4)
SHORELINE EVALUATION

SEGMENT ST/ CU-15  SUBDIVISION A  (1 OF 4)  DATE  4/25/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

ADF&G anadromous stream no. (224-20-13076, Ps, 2/90 and 224-20-13042, Ps, 2/90)
1A  Salmon stream mouth - fry outmigration (3/1 to 5/15)
1B  Salmon stream mouth - spawning (7/10 to 8/31)
5T-1  All bald eagle nests (3/1 to 6/1) - Active eagle nests (3/1 to 9/1)
6Y  Recreation: Special use destination

See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:
Avoid any unnecessary disturbance or damage to uncoiled biota and substrate.

ARCHAEOLOGICAL CONSTRAINTS:
If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact a member of Exxon's Cultural Resource Program immediately (564-3657; 564-3658 or 564-3276).

SHPO SIGNATURE: __________________  DATE: __________________

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 29 m: No Oil 6467 m
Subsurface Oil Observed: Yes  No _ X  Maximum Depth ______

RECOMMENDATIONS:
______ No Treatment Recommended  ______ Snare/Absorbent Booms
______ Treatment Recommended  ______ Oil Snares (pom poms)
______ Manual Pickup  ______ Absorbents (pads, rolls, etc)
______ Bioremediation  ______ Spot Washing: _____ Wands
______ Tarmat Removal  ______ Beach Cleaner
______ Other (see comments)

COMMENTS: Recommended treatment includes 1) manual removal of cleanup debris and oiled sediments in area indicated on sketch map. Work should be conducted after 6/1 and with approval of USFWS regarding eagle nest.

TAG COMMENTS: ____________________________________________________________

TAG APPROVAL DATE: __________

ADEC  ___________________________  FOSC: __________ DATE: __________

EXXON  ___________________________

NOAA  ___________________________

USCG  ___________________________
PWS, SEWARD AND HOMER ECOLOGICAL CONSTRAINTS

1A Salmon stream mouth - try outmigration (3/1 to 5/15)
1B Salmon stream mouth - spawning (7/10 to 8/31)
No disturbance of stream bed or banks unless authorized by ADF&G. No beach flushing into stream drainage. No bioremediation or other chemical application within 100m of stream without authorization from ADF&G. No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inpol application, prior to at least July 1 unless authorized by ADF&G. Treatment which is not intrusive and which will not affect nearshore oil or toxicity levels, such as manual removal, can probably proceed without adherence to time constraints. In any case, contact ADF&G Habitat Division prior to treatment for consultation and/or permit application.

AGENCY CONTACT PERSON: ADF&G John Morison 267-2324

1C Salmon fry nursery area (4/31 to 7/31)
No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inpol application, prior to July 31 unless authorized by ADF&G. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G prior to treatment for confirmation and advice.

AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214

1D Esther Hatchery release (4/15 to 6/15)
1E Main Bay Hatchery release (4/20 to 6/15)
1F Sawmill Bay Hatchery release (4/15 to 6/1)
1G Cannery Creek Hatchery release (4/21 to 6/1)
1H Release site
No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inpol application, prior to at least July 1 unless authorized by ADF&G and/or PWS Aquaculture Association. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G or PWS Aquaculture Association for confirmation and authorization.

AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214

1I Gill net area (6/7 to 6/31)
1J Purse seine area (7/20 to 9/30)
1K Purse seine hook-off (7/20 to 9/30)
1L Set net sites (6/1 to 7/25)
Contact ADF&G for specific dates, locations and constraints. Restrict boat and air traffic to essential minimum. When set net sites are present (1L) restrict beach operations to essential minimum as authorized by ADF&G. If plans for treatment include methods such as hot water wash or Inpol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.

AGENCY CONTACT PERSON: ADF&G James Brady 424-3212

2M Herring spawning (4/1 to 6/15)
Contact ADF&G for confirmation - dates and locations may vary. Restrict boat traffic to essential minimum. Avoid damage to unseeded intertidal and subtidal algae and seagrass. It plans for treatment include methods such as hot water wash or Inpol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.

AGENCY CONTACT PERSON: ADF&G Evelyn Biggs 424-3235

3N Harbor seal and sea lion pupping (6/15 to 7/1)
3O Harbor seal and sea lion molting (6/15 to 9/15)
Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 600m horizontal and 300m vertical distance from haulouts. No application of Inpol within two weeks of arrival dates (work window at these sites is limited to 7/2 to 7/31). Contact ADF&G or USFWS prior to treatment for confirmation.

AGENCY CONTACT PERSON: US National Marine Fisheries Service Steve Zimmerman 566-7235 ADF&G Don Calkins 287-2403

5R Seabird colony (5/1 to 6/1)
Restrict air and boat traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m vertical distance from colony. Contact USFWS prior to treatment.

AGENCY CONTACT PERSON: USFWS Jil Parker 786-3377

5S Shorebird/waterfowl concentration (4/1 to 5/15)
Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.

AGENCY CONTACT PERSON: USFWS Jil Parker 786-3377 ADF&G Tom Rothen 267-2208

5T All Bald Eagle nests (3/1 to 6/1)
Active Bald Eagle nests (3/1 to 9/1)
Restrict air traffic and all disturbance to essential minimum. No personnel within 400m 3/1 to 6/1. Air approach and takeoff from and to seaward only; maintain 800m horizontal, 300m vertical distance from nests. Contact USFWS prior to treatment for confirmation of dates.

AGENCY CONTACT PERSON: USFWS Jil Parker 786-3377

6U Recreation: Tent sites (6/1 to 9/15)
6V Anchorage (6/1 to 9/15)
6W Forest Service cabins (6/1 to 9/15)
6X Lodge (6/1 to 9/15)
6Y Special use destination .

7Z Subsistence area: Salmon harvesting (6/1 to 9/30)
Fiish harvesting
7H Deer harvesting (6/15 to 2/25)
Invertebrate harvesting
Contact ADF&G and appropriate Native Corporation for specific dates, locations, and constraints. Restrict boat and air traffic and beach disturbance to essential minimum. If plans for treatment include methods such as hot water wash or application of Inpol which might affect intertidal or nearshore oil or toxicity levels, contact ADF&G and appropriate Native Corporation for authorization - see Native Corporation Contact List for each Native Corporation's contact person.

AGENCY CONTACT PERSON: ADF&G Jim Fall 267-2359
FIELD SHORELINE COMMENT SHEET

SEGMENT ST 1 CU-015 SUBDIVISION: A DATE 4/25/90

NAME: SCOTT PAULSFORD SIGNATURE: Scott Paulsfond 1987

☐ NO TREATMENT RECOMMENDED ☑ TREATMENT SUGGESTED

COMMENTS

☐ NO TREATMENT RECOMMENDED ☑ TREATMENT SUGGESTED

COMMENTS

The surveyed segment consists of high angle bedrock shoreline.

One location (see OS sketch), patches of pooled splashes and coat splashes were observed on rock, channels and walls. Dark brown to dull black oil penetrate to 3 cm into gravel and average 0.30 cm diameter, over an area of approx. 0.3 m x 10 m. Oil category is very light.

An oiled pompon and oiled net could not be disentangled. They need to be picked up; see location on OS map. No other treatment is recommended.

LAND MANAGER

NAME ___________________________ SIGNATURE ___________________________

☐ NO TREATMENT RECOMMENDED ☑ TREATMENT SUGGESTED

COMMENTS

A small patch of oil found at southeast end of Bay (mapped). Oil is between rock and on vertical face. Some very light sheen in puddle of water. Could be treated. Biological enhancement is already in the area. Must not warrant sending a crew in for on its own.

Continue Natural Cleaning.
### SURFACE OIL

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<th>DISTRIBUTION</th>
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**Photographs:**
- Roll No. ST-2-3
- Frames

### SUBSURFACE OIL

**Rock only - no suitable substrate for pits.**

### Comments

Deep, sheltered bay with occasional muddy coves which are exposed at very low tide. The steep rock walls harbor a rich, diverse intertidal biota. Surface oil only at a single location at the segment's south boundary - here, oil/foam and small oil debris cover a 10 m long rocky channel near Hitz, <5% cover; R0 ≤ 30 cm dia.

**Reviewed:** 7/0  **Date:** 1/24/90
SHORELINE ECOCLOGICAL SUMMARY

Segment ST/C-01-15 Subdivision A (B,C+D) Date (mo/day/yr) 7/30/80

Time (24 hr) 7:45-10:00 Biologist in Ascov

(A) Substrate type and % of segments:
1) Bedrock 2) Boulder 3) Cobble 4) Pebble 5) Sand 6) Silt

(B) Overall % cover of biota (% of segment): Dense 80 Moderate 15 Low 5

(C) Density, substrate preference (% by number from A, above), &
vertical zonation of major taxa:

1) Juvenile/adults (X) new settlement (3)

BARNACLES

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Wildlife Observations/ General Comments:

- Golden eyes (35)
- Local game
- Eastern third of bay (west of cut-off) not accessible due to ice
- Patches of kelp still covered by thin sheet of ice

Ecological Considerations:

- Extensive kelp beds exposed a lush, diverse subtidal community; high density and diversity
- Diversity occurs west of narrow neck in the mid-bay area; extensive kelp beds (low subtidal) in small coves off mid and bottom and in inner bay; Mytilus found only
- Low densities in outer (cut-off) part of bay; no disturbance mortality observed; diverse, well established nearshore community; no barnacle spots observed
- Various islands (subdivisions B,C+D) similar to adjacent mainland coast (surveyed together)
ENLARGEMENT of small scale map

Sketch 292

DBR-DBL tax as CT/S and trace P0/S @ up, HTZ; on rock channels' gap walls.

< 5% cover, ≤0.3m wide × 10m × ≤8mm penetration in granules over bedrock;
P0/S patches ≤300m, dia.

CU-15A

VL  10m
NO  11,340m
US  5,100m

Map Key: PWS-734
Name: G.M.
Date: 4.25.90
Data Entered:
CU-16

CU-15

CU-14

XXX Wide

/// Medium

--- Narrow

TTTT Very Light

0000 No Oil

Approx. Segment Length: 19062m

Map Key: PWS-CU-15b

Name: ________________

Date: ________________

Data Entered:
REGION: PRINCE WILLIAM SOUND
SEGMENT: ST/CU-15
SUBDIVISIONS: B (2 OF 4)
SHORELINE EVALUATION

SEGMENT ST/ CU-15 SUBDIVISION B (2 OF 4) DATE 4/25/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

1A  Salmon stream mouth - fry outmigration (3/1 to 5/15)
1B  Salmon stream mouth - spawning (7/10 to 8/31)
5T-1 All bald eagle nests (3/1 to 6/1) - Active eagle nests (3/1 to 9/1)
Eagle nest in adjacent segment.
6Y  Recreation: Special use destination
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:
Avoid any unnecessary disturbance or damage to unoiled biota and substrate.

ARCHAEOLOGICAL CONSTRAINTS:
If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO SIGNATURE: ____________________ DATE: __________________

OILING CATEGORIZATION:
Wide 0 m; Medium 0 m; Narrow 0 m; V.Light 165 m; No Oil 1919 m
Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:

X No Treatment Recommended
___ Treatment Recommended
___ Manual Pickup
___ Bioremediation
___ Tarmat Removal
___ Snare/Absorbent Booms
___ Oil Snares (pom poms)
___ Absorbents (pads, rolls, etc)
___ Spot Washing: Wands
___ Beach Cleaner
___ Other (see comments)

COMMENTS:

TAG COMMENTS:

TAG APPROVAL DATE:
ADEC
EXXON
NOAA
USCG

FOSC: ___________ DATE: ______

TAG APPROVAL DATE: ___________
Salmon stream mouth - fry outmigration (3/1 to 5/15)
Salmon stream mouth - spawning (7/10 to 8/31)
No disturbance of stream bed or banks unless authorized by ADF&G. No beach flushing into stream drainage. No bioremediation or other chemical application within 100m of stream without authorization from ADF&G. No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inpol application, prior to at least July 1 unless authorized by ADF&G. Treatment which is not intrusive and which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. In any case, contact ADF&G Habitat Division prior to treatment for consultation and/permit application.
AGENCY CONTACT PERSON: ADF&G John Morison 267-2324

Salmon fry nursery area (4/31 to 7/31)
No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inpol application, prior to July 31 unless authorized by ADF&G. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G prior to treatment for confirmation and advice.
AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214

Estuary Hatchery release (4/15 to 6/15)
Main Bay Hatchery release (4/20 to 6/15)
Sawmill Bay Hatchery release (4/15 to 6/1)
Cannery Creek Hatchery release (4/21 to 6/1)
Remote release sites
No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inpol application, prior to at least July 1 unless authorized by ADF&G and/or PWS Aquaculture Association. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G or PWS Aquaculture Association for confirmation and authorization.
AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214

Gill net area (6/7 to 8/31)
Pure seine area (7/20 to 9/30)
Pure seine hook-off (7/20 to 9/30)
Set net sites (6/1/ to 7/25)
Contact ADF&G for specific dates, locations and constraints. Restrict boat and air traffic to essential minimum. When set net sites are present (1L) restrict beach operations to essential minimum as authorized by ADF&G. If plans for treatment include methods such as hot water wash or Inpol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.
AGENCY CONTACT PERSON: ADF&G James Brady 424-3212

Herring spawning (4/1 to 6/15)
Contact ADF&G for confirmation - dates and locations may vary. Restrict boat traffic to essential minimum. Avoid damage to unrolled intertidal and subtidal eelgrass and seagrass. If plans for treatment include methods such as hot water wash or Inpol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.
AGENCY CONTACT PERSON: ADF&G Evelyn Biggs 424-3235

Harbor seal and sea lion pupping (6/15 to 7/1)
Harbor seal and sea lion molting (6/15 to 9/15)
Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from colony. Contact USFWS prior to treatment.
AGENCY CONTACT PERSON: USFWS Jill Parker 768-3377

Seabird colony (6/1 to 9/1)
Restrict air and boat traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m vertical distance from colony. Contact USFWS prior to treatment.
AGENCY CONTACT PERSON: USFWS Jill Parker 768-3377

Shorebird/waterfowl concentration (4/1 to 5/15)
Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.
AGENCY CONTACT PERSON: USFWS Jill Parker 768-3377

All Bald Eagle nests (3/1 to 8/1)
Active Bald Eagle nests (3/1 to 9/1)
Restrict air traffic and all disturbance to essential minimum. No personnel within 400m. 3/1 to 8/1. Air approach and takeoff from and to seaward only; maintain 800m horizontal, 300m vertical distance from nests. Contact USFWS prior to treatment for confirmation of dates.
AGENCY CONTACT PERSON: USFWS Jill Parker 768-3377

Contact ADF&G and appropriate Native Corporation for specific dates, locations, and constraints. Restrict boat and air traffic and beach disturbance to essential minimum. If plans for treatment include methods such as hot water wash or application of Inpol which might affect intertidal or nearshore oil or toxicity levels, contact ADF&G and appropriate Native Corporation for authorization - see Native Corporation Contact List for each Native Corporation's contact person.
AGENCY CONTACT PERSON: ADF&G Jim Faill 257-2359
NO TREATMENT RECOMMENDED

The segment consisted of an island of high angle bedrock and boulders. On one beach, very light coat was splashed on boulders with a band 1/2 meter wide along a 20-meter length. Along vertical bedrock, a very light stain was splashed along a "tripline" at UI.

No treatment is recommended due to insignificant oiling.

TREATMENT SUGGESTED

DREW OIL ON OUTSIDE, vertical face. Not treatable.

No Treatment Recommended.
SHORELINE OILING SUMMARY

OG G. MACKWILK USCG S. RANSEY SEGMENT ST/ C5 - 15
BIO MA. SCOTT LAND REP L. KEELER FIS SUBDIVISION 3 (20F4)
EXXON J. BUTLER ADEC LOG STRAPTON TIME: 07:10:30

TEAM NO. 3 TIDE LEVEL +1 + 2 PT DATE 4/25/90

EST. SUBDIVISION LENGTH: 7,500 m □ Sun □ Clouds □ Fog □ Rain □ Snow

UPLANDS DESCRIPTION: □ Grass □ Forest □ Rock

SURVEYED FROM: □ Foot □ Boat □ Helo WORKING DIRECTION:

SURFACE SEDIMENTS: R 85 % B 15 % C 0 % P 0 % O 0 % S 0 % M 0 % V 0 %

SLOPE: Lang 2 % Hang 20 % Vert 78 % WAVE EXPOSURE: □ Low □ Med □ High

OIL CATEGORY LENGTH: W 0 m M 0 m N 0 m VL 100 m NO 2,400 m

SURFACE OIL

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PAVEMENT H F S ____ sq. m by ____ cm

PATTIES / TARBALLS ____ BAGS

NEAR SHORE SHEEN? NO BR RW SL TL

OILED DEBRIS AMOUNT SM MD LG

DID YOU COLLECT DEBRIS?

LOGS YES □ NO □

Vegetation

Trash

Debris

TYPE ____________

# BAGS ____

Photographs:

Roll No. ______

Frames ______

SUBSURFACE OIL

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COMMENTS

Steep rock island at the entrance to Hidden Bay. Trace of surface oil at ST/S and ST/E upper Hitz, < 10 cm.

Side 1 < 5% cover, on exposed east side of island.

No subsurface oil.

REVIEWED ______ DATE 4/26/90
**SHORELINE ECOLOGICAL SUMMARY**

Segment ST1 C01-15  Subdivision A (B, C, D) \_ Date (mo/day/yr) 4/25/80

Time (24 hr) 7:45-10:45 Biologist  m.Ascor

(A) Substrate type and % of segments:

1) Bedrock 2) Boulder 3) Cobble 4) Pebble 5) Sand 6) SLIM

(B) Overall % cover of biota (% of segment): Dense 80  Moderate 15  Low 5

(C) Density, substrate preference (by number from A, above), & vertical zonation of major taxa: (upper-U; mid-M; low L);

juveniles / adults (*) , new settlement (*)

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</tbody>
</table>

Wildlife Observations/ General Comments: (observations made by boat)

6 golden eyes  
1 seal  
3 Canadian geese

Ecological Considerations:

- Extremely low tide exposed a lush, diverse intertidal community; high diversity and density in areas with decreasing diversity in the inner bay (increase in diversity occurs west of narrow area in the mid-bay area); extensive transition beds (low substrata) in small coves (not bottom and in inner bay) Mytilus found only in low densities in outer eastern part of bay; no disturbance/mortality observed; diverse, well established inter tidal community; no barnacle settlement observed in intertidal areas (subdivisions B, C, D) similar to adjacent mainland coast (surveyed together)
REGION: PRINCE WILLIAM SOUND

SEGMENT: ST/CU-15

SUBDIVISIONS: C (3 OF 4)
SHORELINE EVALUATION

SEGMENT ST/ CU-15    SUBDIVISION C (3 OF 4) DATE 4/25/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
1A  Salmon stream mouth - fry outmigration (3/1 to 5/15)
1B  Salmon stream mouth - spawning (7/10 to 8/31)
5T-1 All bald eagle nests (3/1 to 6/1) - Active eagle nests (3/1 to 9/1)
5Y  Recreation: Special use destination
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:
Avoid any unnecessary disturbance or damage to unoiled biota and substrate.

ARCHAEOLOGICAL CONSTRAINTS:
If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO SIGNATURE:____________________ DATE:____________________

OILING CATEGORIZATION:
Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 0 m: No Oil 811 m
Subsurface Oil Observed: Yes____ No X_ Maximum Depth_____

RECOMMENDATIONS:
X_ No Treatment Recommended
_____ Treatment Recommended
_____ Manual Pickup
_____ Bioremediation
_____ Tarmat Removal

COMMENTS:

_____ Snare/Absorbent Booms
_____ Oil Snares (pom poms)
_____ Absorbents (pads, rolls, etc)
_____ Spot Washing: Wands
_____ Beach Cleaner
_____ Other (see comments)

TAG COMMENTS:

TAG APPROVAL DATE:__________
ADEC ______________
EXXON ______________
NOAA ______________
USCG ______________
FOSC:_____________ DATE:_________
PWS, SEWARD AND HOMER ECOLOGICAL CONSTRAINTS

1A Salmon stream mouth - fry outmigration (3/1 to 5/15)
1B Salmon stream mouth - spawning (7/10 to 8/31)
No disturbance of stream bed or banks unless authorized by ADF&G. No beach flushing into stream drainage. No bioremediation or other chemical application within 100m of stream without authorization from ADF&G. No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or inpolit application, prior to July 1 unless authorized by ADF&G. Treatment which is not intrusive and which will not affect nearshore oil or toxicity levels, such as manual removal, can probably proceed without adherence to time constraints. In any case, contact ADF&G Habitat Division prior to treatment for consultation and/or permit application.

AGENCY CONTACT PERSON: ADF&G John Morton 267-2324

1C Salmon fry nursery area (4/31 to 7/31)
No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or inpolit application, prior to July 31 unless authorized by ADF&G. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G prior to treatment for confirmation and advice.

AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214

1D Estuar Hatchery release (4/15 to 6/15)
1E Main Bay Hatchery release (4/1 to 6/15)
1F Seward Bay Hatchery release (4/15 to 6/1)
1G Cannery Creek Hatchery release (4/21 to 6/1)
1H Remote release site
No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or inpolit application, prior to at least July 1 unless authorized by ADF&G and/or PWS Aquaculture Association. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G or PWS Aquaculture Association for confirmation and authorization.

AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214

1I Gill net area (6/7 to 6/31)
1J Purse seine area (7/20 to 9/30)
1K Purse seine hook-off (7/20 to 9/30)
1L Set net area (6/11 to 7/25)
Contact ADF&G for specific dates, locations and constraints. Restrict boat and air traffic to essential minimum. When set net sites are present (1L) restrict beach operations to essential minimum as authorized by ADF&G. If plans for treatment include methods such as hot water wash or inpolit application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.

AGENCY CONTACT PERSON: ADF&G John McMillan or Bruce Suzumoto 424-7511

2M Herring spawning (4/1 to 6/15)
Contact ADF&G for confirmation - dates and locations may vary. Restrict boat traffic to essential minimum. Avoid damage to unclosed Intertidal and subtidal algae and eelgrass. If plan for treatment include methods such as hot water wash or inpolit application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.

AGENCY CONTACT PERSON: ADF&G Evelyn Biggs 424-3235

3N, 3O, 3Q Harbor seal and sea lion pupping (5/16 to 7/1)
3N Harbor seal and sea lion molting (8/15 to 9/15)
Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts. No application of inpolit within two weeks of arrival dates (work window at these sites is limited to 7/1 to 7/31). Contact ADF&G and USFWS prior to treatment for confirmation.

AGENCY CONTACT PERSON: US National Marine Fisheries Service Steve Zimmerman 566-7235

ADF&G Don Caldwell 267-2403

5R Seabird colony (5/1 to 9/1)
Restrict air and boat traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m vertical distance from colony. Contact USFWS prior to treatment.

AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

5S Shorebird/waterfowl concentration (4/1 to 5/15)
Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.

AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

ADF&G Tom Rotty 267-2206

5T All Bald Eagle nests (3/1 to 6/1)
Active Bald Eagle nests (3/1 to 9/1)
Restrict air traffic and all disturbance to essential minimum. No personnel within 400m 3/1 to 6/1. Air approach and takeoff from and to seaward only; maintain 800m horizontal, 300m vertical distance from nests. Contact USFWS prior to treatment for confirmation of dates.

AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

ADF&G Tom Rotty 267-2206

6U Recreation:
6V Tent sites (6/1 to 9/15)
6W Anchorage (6/1 to 6/15)
6W Forest Service cabins (6/1 to 6/15)
6X Lodge (6/1 to 9/15)
6Y Special use destination

7Z Subsistence area: Salmon harvesting (5/1 to 9/30)
7HH Finfish harvesting
7HH Deer harvesting (8/15 to 2/29)
7HH Invertebrate harvesting

Contact ADF&G and appropriate Native Corporation for specific dates, locations, and constraints. Restrict boat and air traffic and beach disturbance to essential minimum. If plans for treatment include methods such as hot water wash or application of inpolit which might affect Intertidal or nearshore oil or toxicity levels, contact ADF&G and appropriate Native Corporation for authorization - see Native Corporation Contact List for each Native Corporation's contact person.

AGENCY CONTACT PERSON: ADF&G Jim Fall 267-2359
FIELD SHORELINE COMMENT SHEET

SEGMENT ST  
CU-015  
SUBDIVISION:  
C  
DATE 4/25/90

Scott Rainford  
SIGNATURE:  Scott Rainford  
MS71

☐ NO TREATMENT RECOMMENDED  
☐ TREATMENT SUGGESTED

COMMENTS

☐ NO TREATMENT RECOMMENDED  
☐ TREATMENT SUGGESTED

COMMENTS

Due to ice on the water, 15% of the segment could not be surveyed. The island was high angle bedrock. No oil was observed. No treatment recommended due to no oil present.

AND MANAGER

NAME:  Lori J. Stratton  
SIGNATURE:  Lori J. Stratton

☐ NO TREATMENT RECOMMENDED  
☐ TREATMENT SUGGESTED

COMMENTS

No oil.
No treatment recommended.
**SHORELINE OILING SUMMARY**

OG: G. MacDonald, USCG
S. Ramsoond, SEGMENT ST/ CU-15
BIO: MA Scott, LAND REP. L. Kelley, SUBDIVISION C (3 OF 4)
EXXON: J. Butler, ADEC/LORI, STRATPLAN, TIME: 11:10 AM 5-10-90

ST. NO.
AM NO.
OCEAN LEVEL: 0
DATE: 4/25/90

SURVEYED FROM:
Foot  ☐ Boat ☐ Helo ☐ WORKING DIRECTION: W to E

UPLANDS DESCRIPTION:
☐ Grass ☐ Forest ☐ Rock

SURFACE OILS:
R 70% B 20% C 2% P 10% G 10% S 2% M S % V

SLOPE: Lang % Hang % Ven % WAVE EXPOSURE: Low ☐ Med ☐ High

OIL CATEGORY LENGTH: W m M m N m D m

**SURFACE OIL**

<table>
<thead>
<tr>
<th>CHARACTER</th>
<th>DISTRIBUTION</th>
<th>OIL/FILM COLOR</th>
<th>IMPACTED ZONES</th>
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</thead>
<tbody>
<tr>
<td>ASPHALT</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>POOLED</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>NO OIL</td>
<td>X X X</td>
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</tr>
</tbody>
</table>

PAVEMENT H F S sq. m by cm

PATTIES/TARBALLS BAGS

NEAR SHORE SHEEN? ☐ BR RW SL TL

OILED DEBRIS AMOUNT DID YOU COLLECT DEBRIS?

<table>
<thead>
<tr>
<th>Debris</th>
<th>AMOUNT</th>
<th>COLLECT</th>
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<tr>
<td>Logs</td>
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<td>YES ☐</td>
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<tr>
<td>Vegetation</td>
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<td>NO ☐</td>
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<tr>
<td>Trash</td>
<td></td>
<td>TYPE O</td>
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<td>#BAGS O</td>
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Photographs:

Roll No. ______

Frames ______

**SUBSURFACE OIL**

NO PITS - ROCK SHORE

<table>
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<tr>
<th>PIT NO.</th>
<th>PIT DEPTH</th>
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<th>OILED DEBRIS</th>
<th>OIL INTERVAL</th>
<th>OIL/FILM COLOR</th>
<th>PIT ZONE</th>
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</thead>
</table>

COMMENTS:

Small isle in Hidden Bay, with shore bound ice E. West end. No oil here, nor within 1 mile radius.

Reviewed YW 4/25/90
### Wildlife Observational / General Comments:

- High diversity, with many different species of all sizes and types observed: diving, well camouflaged, and others not. In general, the community was very diverse and healthy.

<table>
<thead>
<tr>
<th>Substrate Type</th>
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<th>DORSEY</th>
<th>GASTROPODS</th>
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<td>Low</td>
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<td>Boulders</td>
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<tr>
<td>Cobble</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Low</td>
<td>Low</td>
<td>Not Present</td>
</tr>
<tr>
<td>Pebble</td>
<td>Low</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Low</td>
<td>Not Present</td>
</tr>
<tr>
<td>Sand</td>
<td>Moderate</td>
<td>Moderate</td>
<td>Low</td>
<td>Low</td>
<td>Not Present</td>
</tr>
</tbody>
</table>

### Ecological Considerations:

- High biodiversity observed, with diverse species in various sizes and types. The community was very healthy and diverse.

---

### Segment ST1 (24.2°C)

- **Substrate Type and % of Substrates:**
  - Bedrock: 25%
  - Boulder: 25%
  - Cobble: 25%
  - Pebble: 25%

- **Overall % cover of flora (% of segment):**
  - Dense: 80%
  - Moderate: 15%
  - Low: 5%

- **Density, substrate preference (by number from A, above):**
  - Bedrock: 25%
  - Boulder: 25%
  - Cobble: 25%
  - Pebble: 25%
  - Sand: 25%

- **Photographer:**
  - Roll No: S-2-3

---

### Vertical Zonation:

- Upper: High diversity
- Mid: Moderate diversity
- Low: Low diversity

---

### Wildlife Observational / General Comments:

- High diversity, with many different species of all sizes and types observed: diving, well camouflaged, and others not. In general, the community was very diverse and healthy.

---

### Ecological Considerations:

- High biodiversity observed, with diverse species in various sizes and types. The community was very healthy and diverse.
REGION: PRINCE WILLIAM SOUND

SEGMENT: ST/CU-15

SUBDIVISIONS: D (4 OF 4)
SHORELINE EVALUATION

SEGMENT ST/ CU-15 SUBDIVISION D (4 OF 4) DATE 4/25/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
1A Salmon stream mouth - fry outmigration (3/1 to 5/15)
1B Salmon stream mouth - spawning (7/10 to 8/31)
5T-1 All bald eagle nests (3/1 to 6/1) - Active eagle nests (3/1 to 9/1)
Eagle nest in adjacent segment.
6Y Recreation: Special use destination
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:
Avoid any unnecessary disturbance or damage to unoiled biota and substrate.

ARCHAEOLOGICAL CONSTRAINTS:
If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO SIGNATURE: __________________________ DATE: __________________________

OILING CATEGORIZATION:
Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 0 m: No Oil 470 m
Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:
X No Treatment Recommended Snare/Absorbent Booms
___ Treatment Recommended Oil Snares (pom poms)
___ Manual Pickup Absorbents (pads, rolls, etc)
___ Bioremediation Spot Washing: Wands
___ Tarmat Removal Beach Cleaner
___ Other (see comments)

COMMENTS:


TAG COMMENTS:


TAG APPROVAL DATE: ____________
ADEC
EXXON
NOAA
USCG

FOSC: ____________ DATE: ____________
PWS, SEWARD AND HOMER ECOLOGICAL CONSTRAINTS

1A
Salmon stream mouth - fry outmigration (3/1 to 5/15)

1B
Salmon stream mouth - spawning (7/10 to 8/31)
No disturbance of stream bed or banks unless authorized by ADF&G. No beach flushing into stream drainage. No bioremediation or other chemical application within 100m of stream without authorization from ADF&G. No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or infill application, prior to at least July 1 unless authorized by ADF&G. Treatment which is not intrusive and which will not affect nearshore oil or toxicity levels, such as manual removal, can probably proceed without adherence to time constraints. In any case, contact ADF&G Habitat Division prior to treatment for consultation and/permit application.
AGENCY CONTACT PERSON: ADF&G John Morison 267-2324

1C
Salmon fry nursery area (4/31 to 7/31)
No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or infill application, prior to at least July 1 unless authorized by ADF&G. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G prior to treatment for confirmation and advice.
AGENCY CONTACT PERSON: ADF&G Larry Peltz 424-3214

1D
Estuarine Hatchery release (4/15 to 6/15)

1E
Main Bay Hatchery release (4/20 to 6/15)

1F
Swan Hill Hatchery release (4/16 to 5/1)

1G
Cannery Creek Hatchery release (4/21 to 6/1)

1H
Remote release site
No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or infill application, prior to at least July 1 unless authorized by ADF&G and/or PWS Aquaculture Association. Treatment which will not affect nearshore oil or toxicity levels, such as manual or mechanical removal, can probably proceed without adherence to time constraints. Contact ADF&G or PWS Aquaculture Association for confirmation and authorization.
AGENCY CONTACT PERSON: 1E ADF&G Larry Peltz 424-3214

1I
Gill net area (6/7 to 8/31)

1J
Purse seine area (7/20 to 9/30)

1K
Purse seine hook-off (7/20 to 9/30)

1L
Set net sites (6/1 to 7/29)
Contact ADF&G for specific dates, locations and constraints. Restrict boat and air traffic to essential minimum. When set net sites are present (1L) restrict beach operations to essential minimum as authorized by ADF&G. If plans for treatment include methods such as hot water wash or infill application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.
AGENCY CONTACT PERSON: ADF&G James Brady 424-3212

2M
Herring spawning (4/1 to 6/15)
Contact ADF&G for confirmation - dates and locations may vary. Restrict boat traffic to essential minimum. Avoid damage to unvegetated intertidal and subtidal algae and seagrass. If plans for treatment include methods such as hot water wash or infill application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.
AGENCY CONTACT PERSON: ADF&G Evelyn Biggs 424-3335

3H
Harbor seal and sea lion pupping (5/15 to 7/1)

3O
Harbor seal and sea lion molting (6/15 to 9/15)
Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts. No application of infill within two weeks of arrival dates (work window at these sites is limited to 7/2 to 7/31). Contact ADF&G and USFWS prior to treatment for confirmation.
AGENCY CONTACT PERSON: US National Marine Fisheries Service Steve Zimmerman 588-7235

4D
Seabird colony (5/1 to 9/1)
Restrict air and boat traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m vertical distance from colony. Contact USFWS prior to treatment.
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

5S
Shorebird/waterfowl concentration (4/1 to 5/15)
Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

5T
All Bald Eagle nests (3/1 to 6/1)
Active Bald Eagle nests (3/1 to 9/1)
Restrict air traffic and all disturbance to essential minimum. No personnel within 400m 3/1 to 6/1. Air approach and takeoff from and to seaward only; maintain 800m horizontal, 300m vertical distance from nests. Contact USFWS prior to treatment for confirmation of dates.
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

6U
Resortation: Tent sites (6/1 to 9/15)

6V
Anchorage (6/1 to 9/15)

6W
Forest Service cabins (6/1 to 9/15)

6X
Lodge (8/1 to 9/15)

6Y
Special use destination

7Z
Subsistence area: Salmon harvesting (5/1 to 9/30)

7H
Finfish harvesting

7I
Deer harvesting (8/15 to 2/28)

7J
Invertebrate harvesting
Contact ADF&G and appropriate Native Corporation for specific dates, locations, and constraints. Restrict boat and air traffic and beach disturbance to essential minimum. In addition to treatment include methods such as hot water wash or application of infill which might affect intertidal or nearshore oil or toxicity levels, contact ADF&G and appropriate Native Corporation for authorization - see Native Corporation Contact List for each Native Corporation's contact person.
AGENCY CONTACT PERSON: ADF&G Jim Fall 267-2359
FIELD SHORELINE COMMENT SHEET

SEGMENT ST / CN - 015 SUBDIVISION: D DATE 4/25/90

NAME: SCOTT RAINSFORD SIGNATURE: Scott Rainsford

☒ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED

COMMENTS

ADEC

NAME: Lori J. Stratton SIGNATURE: Lori J. Stratton

☒ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED

COMMENTS

No oil was observed on this high-angle bedrock/boulder segment. Therefore, no treatment is recommended.

LAND MANAGER

NAME: U.S. Forest Service SIGNATURE: [Signature]

☒ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED

COMMENTS

No oil

No treatment needed.
## SHORELINE OILING SUMMARY

**M. Macdonald** USCG S. Rainsford SEGMENT ST/ CO-15  
**J. Butts** ADEC LOCATION D (ALP4)

**AM NO.** 5  
**TIDE LEVEL** +2 to +4  
**DATE** 4/25/90

**UPLANDS DESCRIPTION:**  
- Grass  
- Forest  
- Rock  
- Clouds  
- Fog  
- Rain  
- Snow

**SURVEYED FROM:**  
- Foot  
- Boat  
- Helo

**WORKING DIRECTION:** N to S

**SURFACE SEDIMENTS:**  
- R  
- B  
- D  
- C  
- G  
- M  
- P  
- S

**SLOPE:**  
- Lang  
- Hang  
- Vert 100%

**WAVE EXPOSURE:**  
- Low  
- Med  
- High

### SURFACE OIL

<table>
<thead>
<tr>
<th>CHARACTER</th>
<th>DISTRIBUTION</th>
<th>OIL / FILM COLOR</th>
<th>IMPACTED ZONES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt Pavement</td>
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</tr>
<tr>
<td>Cover</td>
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<tr>
<td>Patties</td>
<td>O O</td>
<td>O O</td>
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<tr>
<td>Tarballs</td>
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<tr>
<td>No Oil</td>
<td>X X X X</td>
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**PAVEMENT**  
- H  
- F  
- S

**NEAR SHORE SHEEN?**  
- No

**OILED DEBRIS**  
- Logs
- Vegetation
- Trash
- Debris

**AMOUNT**  
- SM  
- MD  
- LG

**DID YOU COLLECT DEBRIS?**  
- Yes  
- No

**TYPE**  
- O

**# BAGS**  
- 0

**Photographs:**  
- Roll No.  
- Frames

### SUBSURFACE OIL

**ALL ROCK - NO PITS.**

<table>
<thead>
<tr>
<th>PIT NO.</th>
<th>PIT DEPTH (cm)</th>
<th>SUBSURFACE OIL CHARACTER</th>
<th>OILED DEBRIS</th>
<th>OILED OIL/FOAM</th>
<th>OIL / FILM COLOR</th>
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**COMMENTS**  
- Small rock island guarding the entrance to Hidden Bay.  
- No oil present this survey.
SHORELINE ECOLOGICAL SUMMARY

Date (mo/day/yr) 4/19/79

Subdivision A (C,D,E,F,G) Substrate type and % of segments:

(1) Bedrock 25%  (2) Boulder 9%  (3) Cobble 3%  (4) Pebble 6%  (5) Sand 3%  (6) Silt 4%

Overall % cover of biota (% of segment): Dense 80  Moderate 15  Low 5

Photographs: Roll No. ST-3-3

Vertical zonation of major taxa: (upper-U; mid-M; low tidal-L);
juveniles/adults (X), new settlement (3)

BARNACLES

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<thead>
<tr>
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<th>Moderate</th>
<th>Sparse</th>
<th>Rare</th>
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<td>1U</td>
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MYTILUS

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FUCUS

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Wildlife Observations/General Comments: (Observations marked by foot)

6 golden eyes
1 seal
3 Canadian geese

6 adult ducks

Ecological Considerations:

Extensive, well established mussel community. High density and diversity in lower tidal zones. Decrease in diversity occurs west of narrow neck in mid-tidal area. Intensive beds (low-subtidal) in small coves, up and bottom and in inner bay. Mytilus found only in low densities in outer (eastern) part of bay; no disturbance/mortality observed. Diverse, well established barnacle community; no barnacle spot observed. Islands (Subdivisions E,F,G,H) similar to adjacent mainland coast (surveyed together)
ADDENDUM: SUBDIVISION CONSTRAINTS
SEGMENT CU-15 SUBDIVISION A (1 of 4)

WORK WINDOW

Manual Pickup  OPEN

ARCHAEOLOGICAL STANDARD CONSTRAINT
If cultural resources are uncovered, PHONE 564-3274

APPLICABLE ECOLOGICAL TIME CONSTRAINTS
1A,1B  Salmon Stream  Two anadromous streams (224-20-13042 and 224-20-13036) are in Subdivision A. No constraint to manual pickup.
1K  Purse Seine Hook-off  No constraint to manual pickup.
5T  Bald Eagle Nest  No constraint to manual pickup.

OTHER ECOLOGICAL CONSIDERATIONS
No disturbance to stream bed or banks. Avoid any unnecessary disturbance or damage to unrolled biota and substrate.

TAG APPROVAL DATE
ADEC  Ray Morris  10/20/90
EXXON  Andy Teal  10/20/90
NOAA  USCG

Prepared By:  Undecipherable Signature  Date 7/4/90

FOSC  Undecipherable Signature  Date 6/6/90

DATE 8 June 90
SHORELINE EVALUATION

SEGMENT ST/ CU-15 SUBDIVISION A (1 OF 4) DATE 4/25/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

ADF&G anadromous stream no. (224-20-13076, Ps, 2/90 and 224-20-13042, Ps, 2/90)

1A  Salmon stream mouth - fry outmigration (3/1 to 5/15)
1B  Salmon stream mouth - spawning (7/10 to 8/31)
5T-1 All bald eagle nests (3/1 to 6/1) - Active eagle nests (3/1 to 9/1)
6Y  Recreation: Special use destination

See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to unoiled biota and substrate.

ARCHAEOLOGICAL CONSTRAINTS:

If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact a member of Exxon's Cultural Resource Program immediately (564-3657; 564-3658 or 564-3276).

SHPO SIGNATURE: Charles J. Holmes DATE: 5/6/90

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 29 m: No Oil 6467 m

Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:

_ No Treatment Recommended _ Snare/Absorbent Booms
X Treatment Recommended _ Oil Snares (pom poms)
X Manual Pickup _ Absorbents (pads, rolls, etc)
___ Bioremediation _ Spot Washing: ___ Wands
___ Tarmat Removal _ Beach Cleaner
___ Oil Snare
___ Absorbents
___ Spot Washing
___ Beach Cleaner
___ Other (see comments)

COMMENTS: Recommended treatment includes 1) manual removal of cleanup debris and oiled sediments in area indicated on sketch map. Work should be conducted after 6/1 and with approval of USFWS regarding eagle nest.

TAG COMMENTS:

________________________________________________

TAG APPROVAL DATE: May 5, 1990

ADEC ART WILEN DATE: 5/15/90

EXXON Gary Peterson DATE: 5/15/90

NOAA:

USCG:

NOTARY CUR 2H HAS PRIOR TO WORK.
SHORELINE EVALUATION

SEGMENT ST/ CU-15  SUBDIVISION A (1 OF 4)  DATE  4/25/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

ADF&G anadromous stream no. (224-20-13076, Ps, 2/90 and 224-20-13042, Ps, 2/90)

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If cultural resources are uncovered during shoreline treatment, stop work in the vicinity, mark the location of the find and contact a member of Exxon's Cultural Resource Program immediately (564-3657; 564-3658 or 564-3276).

SHPO SIGNATURE: ________________________  DATE: __________

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 29 m: No Oil 6467 m
Subsurface Oil Observed: Yes___ No X__ Maximum Depth ______

RECOMMENDATIONS:

____ No Treatment Recommended  ______ Snare/Absorbent Booms
X  Treatment Recommended  ______ Oil Snares (pom poms)
X  Manual Pickup  ______ Absorbents (pads, rolls, etc)
____ Bioremediation  ______ Spot Washing: ______ Wands
____ Tarimat Removal  ______ Beach Cleaner
____ Other (see comments)

COMMENTS: Recommended treatment includes 1) manual removal of cleanup debris and oiled sediments in area indicated on sketch map. Work should be conducted after 6/1 and with approval of USFWS regarding eagle nest.

TAG COMMENTS: ______________________________

TAG APPROVAL DATE: May 5, 1990

ADEC  ____________  DATE: __________
Exxon  ____________  DATE: __________
NOAA  ____________  DATE: __________
USCG  ____________  DATE: __________
ENLARGEMENT of small scale map.

Sketch 2.92

DEER-DUCK ton as CT/S and trace PO/S @ up, HINT; on rock channels & gap walls.

< 5% cover, ≤0.3m wide x 10m x ≤3mm penetration in granules over bedrock.

PO/S patches ≤ 300cm. dia

CU-15D
No Oil

OILED NET & RAMPS

Manually Remove
CLEANUP DEBRIS & OILED SEDIMENTS

CU-15A

VL 10m
No 11,340m
US 5,100m

XXX Wide
/// Medium
--- Narrow
TTTT Very Light
0000 No Oil

Map Key: PWS-73d
Name: G.M.
Date: 4/25/90
Data Entered:
SHORELINE EVALUATION

SEGMENT ST/ CU-15 SUBDIVISION B (2 OF 4) DATE 4/25/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
1A  Salmon stream mouth - fry outmigration (3/1 to 5/15)
1B  Salmon stream mouth - spawning (7/10 to 8/31)
ST-1 All bald eagle nests (3/1 to 6/1) - Active eagle nests (3/1 to 9/1)
Eagle nest in adjacent segment.
6Y Recreation: Special use destination
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:
Avoid any unnecessary disturbance or damage to unoiled biota and substrate.

ARCHAEOLOGICAL CONSTRAINTS:
If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO SIGNATURE: [Signature]
DATE: 5/5/90

OILING CATEGORIZATION:
Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 165 m: No Oil 1919 m
Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:
X No Treatment Recommended
____ Treatment Recommended
____ Manual Pickup
____ Bioremediation
____ Tarmat Removal

Snare/Absorbent Booms
Oil Snare (pom poms)
Absorbents (pads, rolls, etc)
Spot Washing: Wands
Beach Cleaner
Other (see comments)

COMMENTS:

____ Absorbents (pads, rolls, etc)
____ Spot Washing: Wands
____ Beach Cleaner
____ Other (see comments)

TAG COMMENTS:

TAG APPROVAL DATE: May 5, 1990
ADEC Art Weiner Art Weiner
EXXON Mark N. Whist Mark N. Gilbert FOSC: [Signature] DATE: 5-15-80
NOAA Gary Petrace Gary Petrace
USCG [Signature] [Signature]
XXX Wide
/// Medium
--- Narrow
TTTT Very Light
0000 No Oil

CU-15

Approx. Segment Length: 19062 m

Map Key: PWS-CU-15

Name:

Date:

Data Entered:
SHORELINE EVALUATION

SEGMENT ST/CU-15 SUBDIVISION C (3 OF 4) DATE 4/25/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
1A Salmon stream mouth - fry outmigration (3/1 to 5/15)
1B Salmon stream mouth - spawning (7/10 to 8/31)
5T-1 All bald eagle nests (3/1 to 6/1) Active eagle nests (3/1 to 9/1)
Eagle nest in adjacent segment.
6Y Recreation: Special use destination
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:
Avoid any unnecessary disturbance or damage to unoiled biota and substrate.

ARCHAEOLOGICAL CONSTRAINTS:
If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO SIGNATURE: ______ DATE: 5/5/90

OILING CATEGORIZATION:
Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 0 m: No Oil 811 m
Subsurface Oil Observed: Yes ___ No X ___ Maximum Depth ___

RECOMMENDATIONS:
X No Treatment Recommended ___ Snare/ Absorbent Booms
___ Treatment Recommended ___ Oil Snare (pom poms)
___ Manual Pickup ___ Absorbents (pads, rolls, etc)
___ Bioremediation ___ Spot Washing: Wands
___ Tarmat Removal ___ Beach Cleaner
___ Other (see comments)

COMMENTS:


TAG COMMENTS:


TAG APPROVAL DATE: May 5, 1990
ADEC A. W. Weiger X D. W. W. E. X.
EXXON M. J. Millard X M. N. Sutherland
NOAA C. D. Pavlovic X L. B. Evers
USCG B. H. Heilte X C. J. Porter

DATE: 5-18-90
SHORELINE EVALUATION

SEGMENT ST/ CU-15 SUBDIVISION D (4 OF 4) DATE 4/25/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

1A Salmon stream mouth - fry outmigration (3/1 to 5/15)
1B Salmon stream mouth - spawning (7/10 to 8/31)
5T-1 All bald eagle nests (3/1 to 6/1) - Active eagle nests (3/1 to 9/1)
Eagle nest in adjacent segment.
6Y Recreation: Special use destination
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:
Avoid any unnecessary disturbance or damage to unoiled biota and substrate.

ARCHAEOLOGICAL CONSTRAINTS:
If treatment is planned, a cultural resource evaluation is required prior to shoreline treatment.

SHPO SIGNATURE: Charles E. Davis DATE: 5/15/90

OILING CATEGORIZATION:
Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 0 m: No Oil 470 m
Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:

X No Treatment Recommended
___ Treatment Recommended
___ Manual Pickup
___ Bioremediation
___ Tarmat Removal

___ Snare/Absorbent Booms
___ Oil Snares (pom poms)
___ Absorbents (pads, rolls, etc)
___ Spot Washing: Wands
___ Beach Cleaner
___ Other (see comments)

COMMENTS:

____________________________________________________________________

____________________________________________________________________

____________________________________________________________________

TAG COMMENTS:

____________________________________________________________________

____________________________________________________________________

TAG APPROVAL DATE: May 5, 1990
ADEC Art Weyer, Dick Weber
EXXON Mark N. Sill, Mark N. Sill
FOSC: DATE: 5-15-90
NOAA Cary Retzer, Cary Retzer
USCG G.A. Kinzer, G.A. Kinzer
ST/CU-15D

ICE (thick & white)

ICE (thick & clear)

MUD

WATERFALL

GLACIER SCoured BEDROCK

BL&W

BCMR 0

+ HILLOP

PROFILE

G

M/R

500.0

MHW

B/R

STEEP R.

SOME B.

NO OIL

CU-15A

CU-15B

CU-15D

NO OIL

SEE ENLARGEMENT

ST/B

CT/SE HTZ

20M, 2%

CT/SE HTZ

OILED M.B.

POWDER

ST/B

SOME B /R

ST/B

-3.5 FT

MAP BASE

by ADEC.

GM

4-25-90