[Shoreline evaluations, 1990].

EV-01 – EV-19
SHORELINE EVALUATION

SEGMENT ST/ EV-01    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
7II  Subsistence area: Deer harvesting (8/15 to 2/28)
See attached Ecological Constraint sheet for specific constraints and contacts.

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

SHPO SIGNATURE:  DATE:  5/9/90

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 17 m: V.Light 13 m: No Oil 28 m
Subsurface Oil Observed:  Yes  X  No  Maximum Depth 15 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: ___ Wands
___ Tarmat Removal  ___ Beach Cleaner
___ Oil Snares (pom poms)
___ Absorbents (pads, rolls, etc)
___ Oil Snares (pom poms)
___ Absorbents (pads, rolls, etc)
___ Spot Washing: ___ Wands
___ Beach Cleaner
___ Other (see comments)

COMMENTS:  Recommended treatment includes 1) manual pickup of tarballs, 2) bioremediation of area indicated on sketch map. Work should be conducted after 6/1 with approval of USFWS due to eagle nest constraint.

TAG COMMENTS:  MAXIMUM RATES IN AREA OF TP 4 PRIOR TO BIO

TAG APPROVAL DATE:  5/9/90

ADEC  EXXON  NOAA  USCG
Art Wunsch  D. D. Rowe  David Barnhart  D. J. Rame
FOSC:  DATE:  5-16-90

Notify EVC 24 hrs in advance of work
Salmon stream mouth - try 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 Inplop 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 287-2324

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 Inplop 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 releases (4/15 to 6/15)
1E

Main Bay Hatchery releases (4/23 to 6/15)
1F

Sawmill Bay Hatchery releases (4/15 to 6/1)
1G

Cannery Creek Hatchery releases (4/21 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 Inplop application, prior to 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: PWS Aquaculture Association John McMillan or Bruce Suzomoto 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 uncollared intertidal and subtidal algae and seagrass. If plans for treatment include methods such as hot water wash or Inplop application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.

AGENCY CONTACT PERSON: ADF&G Evelyn Biggs 424-3238

3S

Harbor seal and sea lion pupping (5/1 to 7/1)
Harbor seal and sea lion molting (8/1 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 Inplop within two weeks of arrival dates (work window at these sites is limited to 7/2 to 7/31). Contact ADF&G and USFWS for confirmation and consultation for confirmation.

AGENCY CONTACT PERSON: US National Marine Fisheries Service Steve Zimmerman 585-7235

5S

Seabird colony (5/1 to 9/1)

Restrict air and boat traffic to essential minimum. No personnel within 400m. Aircraft to maintain 900m horizontal, 300m vertical distance from colony. Contact USFWS prior to treatment.

AGENCY CONTACT PERSON: USFWS Jill Parker 785-3377

5T

Seabird/waterfowl concentration (4/1 to 6/15)

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

AGENCY CONTACT PERSON: USFWS Jill Parker 785-3377

F

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 300m horizontal, 300m vertical distance from nests. Contact USFWS prior to treatment for confirmation of dates.

AGENCY CONTACT PERSON: USFWS Jill Parker 785-3377

6U

Recreation:
Tent sites (5/1 to 6/15)
Anchorage (8/1 to 9/15)
Forest Service cabins (8/1 to 6/15)
Lodge (8/1 to 9/15)
Special use designation

7Z

Subsistence area: Salmon harvesting (5/1 to 6/30)

7H

Finfish harvesting

7P

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 Inplop 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 287-3359
SEGMENT ST 1  EVO1  SUBDIVISION:  A  DATE  Apr 11 25-94

USCG  NAME  Shawn Maas  SIGNATURE  Shawn Maas  Jr.

☐ NO TREATMENT RECOMMENDED  ☒ TREATMENT SUGGESTED

RECOMMEND MANUAL REMOVAL OF ASPHALT/PAVEMENT AND BIOREMEDIATION IF SUBSURFACE OILS. AREA COVERED ON BEACH SMALL, COVER ON VERTICAL ROCK FACE BROKEN, WITH NEW POPULATION OF BIRDS GROWING IN OILED BAND AS INDICATED BY BIO REPORT.

ADEC  NAME  Dave Salz  SIGNATURE  Dave Salz

☐ NO TREATMENT RECOMMENDED  ☒ TREATMENT SUGGESTED

Part of the oil was retrieved by SERT TEAR during survey but some remains on the "outer" side of the island (Facing NNW).

1) Tar mat, asphalt, tarbricks should be manually removed
2) Saturated subsurface sediments on west (Oven) side of island should be removed

LAND MANAGER  NAME  Don Kumpf  Jr.  SIGNATURE  Donald P. Kumpf  Jr.

☐ NO TREATMENT RECOMMENDED  ☒ TREATMENT SUGGESTED

COMMENTS

30/21
### SHORELINE OILING SUMMARY

**OG**: R. Marty  **USCG**: S. Maas  **SEGMENT**: EY-01  **BIO**: G. Lemon  **LAND REP**: D. Komphorst  **SUBDIVISION**: A (A OF A)

**EXXON J. Crangardi**  **ADEC**: D. Sale  **TIME**: 12:45 to 12:48

**TEAM NO.**: 20  **TIDE LEVEL**: +1.00 m to +1.07 m  **DATE**: 24/4/90

**EST. SUBDIVISION LENGTH**: 2166 m  **SUBDIVISION**: P. ""SP""

**SURVEYED FROM**: 1. Foot  2. Boat  3. Helo  **WORKING DIRECTION**: S to N


**SURFACE SEDIMENTS**:  1. R  2. %G  3. %S  4. %P  5. %C  6. %V  7. %M  8. %M


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### SURFACE OIL

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

**NEAR SHORE SHEEN?**: NO  **BR**: RW  **SL**: TL  **PATTIES / TARBALLS**: 2 BAGS

**PAVEMENT**: H F S 5 cm by 5 cm


**DID YOU COLLECT DEBRIS?**: 1. YES  2. NO

**PHOTOGRAPHS**: Roll No. 51/0/14  Frames 25 - 30

---

### SUBSURFACE OIL

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**COMMENTS**: No oil remains on the tundra. Except for a small band of tarb ball in places on the rocks, moving along the 'island' chicken oiling continued as a tarry coat in protected areas. Two small pocket beaches on the west side had tarry surface and subsurface oil in the Supratidal (moat/gmas) zone. This oil is volumetrically small and was largely removed during the survey.

**REVIEWED**: 1/1/91  **DATE**: 4/27/90

---

**REVISED NO.**: 04/1990
No visible oil

Manual Pickup
Tarballs & Patties

Granule pebble pocket beach: Tarballs and patties in STZ with local pooling of fluid oil in bedrock pockets. Partially removed during survey.

Boulder, cobble pebble beach: Splattered coat on surface, considerable subsurface oil.

Bioremediate

Vertical face of pillow lava

Low lying tumbles of shells, pebbles, granules - No sign of oil on/in the sediments

1 cm band of Tartry coat on rock face

1.6 m band of broken coat.
SHORELINE ECOLOGICAL SUMMARY

Segment ST / EV-01  Subdivision A ___________________________ Date (mo / day / yr) 4/24/90

Time (24 hr) 1000 - 1743  Scientist Leman

(A) Substrate type and % of segments:
1) Bedrock - 25  2) Boulder - 10  3) Cobble - 5  4) Pebble - 0  5) Sand - 0  6) Silt - 0

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

(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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GASTROPODS

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FUCUS

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Wildlife Observations/ General Comments: There was a fresh barnacle settlement (1mm) and some larger overall the tide heights of the segment; some
Eagle was quite noisy. Some larger overall the tide heights of the segment; some
Eagle was also some Mytilus activity now at 3 mm (approx size).

Ecological Considerations:

Eagle nest not confirmed on 24 Apr 90; Deer harvest area -
XXX Wide
/// Medium
### Narrow
TTTT Very Light
0000 No Oil

EV-1

ADEC Segment Length: 50m

No 1.5 238 239
UL 0.1 15 16
L 0.9 105 111

9045 3440

Map Key: PWS-176
Name: R. Marty
Date: 24 April 1990
Date Entered:
ADDENDUM: SUBDIVISION CONSTRAINTS

SEGMENT EV-1 SUBDIVISION A (1 of 1)

WORK WINDOW

<table>
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<tr>
<th>Manual Pickup</th>
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<tbody>
<tr>
<td>Bioremediation Manual Raking</td>
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ARCHAEOLOGICAL STANDARD CONSTRAINT

If cultural resources are uncovered, PHONE 564-3274.

APPLICABLE ECOLOGICAL TIME CONSTRAINTS

1K  Purse Seine Hook-off

No constraint to manual pickup; closed to manual raking and bioremediation after 7/20.

5T  Bald Eagle Nest

USFWS 6/1/90 map indicates an active nest in Subdivision B. Closed to manual pickup, manual raking, and bioremediation within 400m of active nest.

7II Subsistence: Deer Harvesting

No constraint to manual pickup; closed to manual raking and bioremediation after 8/15.

OTHER ECOLOGICAL CONSIDERATIONS

If eagle nest constraint is removed, other ecological considerations will apply.
No Beach, Boat
Aircraft Access
USFWS Survey
5/26/90
(Lakhar)

ECOLOGY MAP
SEGMENT EV-1
SUBDIVISION A (1 of 1)
METERS

- Seabird Colony
- Active Eagle Nest
- Inactive Eagle Nest
SHORELINE EVALUATION

SEGMENT ST/ EV-02 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)
Eagle nest within 400 M of segment.
6Y Recreation: Special use destination
7II Subsistence area: Deer harvesting (8/15 to 2/28)
See attached Ecological Constraint sheet for specific constraints and contacts.

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

SHPO SIGNATURE: ______ DATE: 5/9/90

OILING CATEGORIZATION:
Wide __ m: Medium 14 ___ m: Narrow 205 ___ m: V.Light 0 ___ m: No Oil 224 ___ m
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 oiled debris and sediments in areas indicated on sketch map, 2) manual removal of pooled tar and tarmats in areas indicated on sketch map, and 3) bioremediation of areas indicated on sketch map after manual work is completed. Work should be conducted between 7/1 and 8/15 due to Exxon study site and deer harvesting constraints, with USFWS approval regarding eagle nest.

TAG COMMENTS: Monitor to assess significance of "oiled" loc. by stream
Avoid dense 1/fz biota during Bid application.

TAG APPROVAL DATE: 5/9/90
ADEC _______ EXXON _______ NOAA _______ USCG _______
TAG APPROVAL DATE: 5/9/90
FOSC: _______ DATE: 5/18/90
Notify Ctr 24 hrs in advance of works

NOTICE OF OIL SPILL
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 inooil 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)

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

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

RESTRICT BOAT AND AIR TRAFFIC TO ESSENTIAL MINIMUM.

AGENCY CONTACT PERSON: USFWS Jill Parker 796-3377

Sea bird 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

Seabird/auklet oiling or contamination. (4/1 to 6/15)
Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.

AGENCY CONTACT PERSON: USFWS Jill Parker 796-3377

AFG & 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 inooil application which might affect intertidal or nearshore oil or toxicity levels, contact ADF&G and appropriate Native Corporation for authorization - see Native Corporation List for each Native Corporation's contact person.

AGENCY CONTACT PERSON: ADF&G Jim Fall 287-2269

Subsistence activities:
Salmon harvesting. (6/1 to 9/30)

AGENCY CONTACT PERSON: ADF&G John Morison 287-2324

Recreation:
Tent sites. (5/1 to 9/15)

AGENCY CONTACT PERSON: USFWS Jill Parker 796-3377

[Additional activities listed for various dates and times, including specific contact information for each activity.]
SEGMENT ST  EV02  SUBDIVISION:  A  DATE  APR 135

USCG  NAME  Shawn Maas  SIGNATURE  Shawn Maas

☐ NO TREATMENT RECOMMENDED  ☒ TREATMENT SUGGESTED

Recommend cleanup in pocket beaches indicated on map. Manual removal of pooled and asphalt pavement some debris and bioremediation on these beaches. SSAT team removed some but didn't get a lot of it.

ADEC  NAME  Dave Sako  SIGNATURE  Dave Sako

☐ NO TREATMENT RECOMMENDED  ☒ TREATMENT SUGGESTED

Oil in pockets in breccia fractures and in upper levels of surge; channels is very tarry and resembling pooled oil in some cases. Benches on breccia faces that occur near high tide lines have generally accumulated oil.

1. Remove contaminated sediments from near mask, stream
2. Remove pooled oil and sediments and clean spots or remove over cobbles in surge channels.
3. Remove any containment or cover, from benches on breccia.

LAND MANAGER  NAME  Don Hopkirk  SIGNATURE  Don Hopkirk

☐ NO TREATMENT RECOMMENDED  ☒ TREATMENT SUGGESTED

12/6/21
**SHORELINE OILING SUMMARY**

**TEAM NO.** 10  
**TIDE LEVEL** +1.00 m  
**DATE** 17/11/00

**USCG SEGMENT** A  
**TIME** 12 17  
**ADJACENT DATE** 17/11/00

**LAND REP.** D. Kemp  
**SUBDIVISION** A

**EXXON J. Chapman**  
**ADEC D. Sale**

**EST. SUBDIVISION LENGTH:** 100 m

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

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

**SURFACE SEDIMENTS:**  
- R  
- Gravel  
- Forest  
- Rock

**SLOPE:**  
- Lang  
- High  
- Low  
- Med

**OIL CATEGORY LENGTH:**  
- W  
- 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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<td>Asphalt &amp; Pavement</td>
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<td>Mousse</td>
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**NEAR SHORE SHEEN?** No  
**PAVEMENT H F** 5 sq. m by 5 cm  
**PATTIES/TARBALLS** 10 BAGS

### SUBSURFACE OIL

<table>
<thead>
<tr>
<th>PIT NO.</th>
<th>PIT DEPTH (cm)</th>
<th>SUBSURFACE OIL CHARACTER</th>
<th>OILED MATERIAL</th>
<th>DX</th>
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**COMMENTS**  
Some fairly high concentrations of oil are present in the Supratidal areas of the narrow pocket beaches. These areas appear to be sheltered from wave action. The exposed rock faces have oiling ranging from none to a broken cover, but generally this oil would be difficult to remove.

**REVIEWED**  
**DATE** 4/17/98
MANUALLY REMOVE POOLED TAR, OILED DEBRIS, SEDIMENTS, AND TAR MATS. BIOSMEDIATE NON-BEDROCK SURFACES AFTER MANUAL WORK IS COMPLETED.

Open joints in rocks contain accumulations of pooled tar and oil debris, especially at the HHWS line.

A pocket of oiled rock is present on the northern bank of the stream at HHWS line. This pocket emits a silver sheen into the stream when it is disturbed. Also one oiled log.

2 m wide band of broken cover. Best developed where sheltered from wave action. Not present on exposed faces.

No visible oil.

Some asphalt dribbled on rock.

EXXON STUDY SITE AP-15

Bedrock

Nose area of tar over bedrock at the HHWS line/midway the crack. Tar is also present in the ooze in a few places, under clasts.

Pool of tar.

2% Max Tar.

Small stream maple arenaceous 2%.

Well sorted GrPS beach.
**SHORELING ECOLOGICAL SUMMARY**

Segment ST/10/1990
Subdivision: A

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

Time (24 hr): 7:00 - 8:10

**Biologist:** Lemon

(A) Substrate type and % of segments:

1. Bedrock: 80%
2. Boulder: 5%
3. Cobble: 5%
4. Pebble: 5%
5. Sand: 5%
6. Silt: 0%

(B) Overall % cover of biota (% of segment):

- Dense: 75%
- Moderate: 25%
- Low: 0%

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

<table>
<thead>
<tr>
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<td>Fucus</td>
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Wildlife Observations/General Comments:
- Fucus reproductive areas.
- Fish egg mass, unknown origin, low zone.

Ecological Considerations:
- Eagle nest not confirmed April 90. A good size stream here may be anomalous; however it's oily. A deer harvest area.

15/6/21
ADDENDUM: SUBDIVISION CONSTRAINTS
SEGMENT EV-2 SUBDIVISION A (1 of 1)

WORK WINDOW

| Manual Pickup & Tarmat Removal Inside Eagle Nest Buffer Zone | CLOSED |
| Manual Pickup & Tarmat Removal Outside Eagle Nest Buffer Zone | OPEN |
| Bioremediation Inside Eagle Nest Buffer Zone | CLOSED |
| Bioremediation Outside Eagle Nest Buffer Zone | WORK PRIOR TO 7/20 |

*EXXON STUDY SITE* Closed to treatment prior to 6/15. No treatment within 50m of site.

ARCHAEOLOGICAL STANDARD CONSTRAINT

If cultural resources are uncovered, PHONE 564-3274.

APPLICABLE ECOLOGICAL TIME CONSTRAINTS

1K Purse Seine Hook-off
No constraint to manual pickup and tarmat removal; closed to bioremediation after 7/20.

5T Bald Eagle Nest
USFWS 6/1/90 map indicates an active nest in Subdivision B. Closed to manual pickup, tarmat removal, and bioremediation within 400m of active nest. USFWS buffer zone delineated by Mike Lockhart 5/26/90. No constraint to manual pickup, tarmat removal, and bioremediation outside buffer zone.

7II Subsistence: Deer Harvesting
No constraint to manual pickup and tarmat removal; closed to bioremediation after 8/15.

OTHER ECOLOGICAL CONSIDERATIONS

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

TAG APPROVAL DATE

ADEC
EXXON
NOAA
USCG

Prepared by [Signature] Date 6/7/90

FOSC [Signature] Date 7/7/90
ECOLOGY MAP
SEGMENT EV-2
SUBDIVISION A (1 of 1)
METERS

★ Seabird Colony
△ Active Eagle Nest
△ Inactive Eagle Nest

1 inch = 1118 feet

No Beach, Boat
Aircraft Access
USFWS Survey
Delineated Buffer
5/26/90
(Lockhart)
SHORELINE EVALUATION

SEGMENT EV-03 SUBDIVISION A (1 OF 1) DATE 4/24/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
Salmon stream no. 226-40-16590 (Ps, 12/89)
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 within 400 m in adjacent segment
6Y Recreation: Special use destination
7II Subsistence area: Deer harvesting (8/15 to 2/28)
See attached Ecological Constraint sheet for specific constraints and contacts.

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

SHPO SIGNATURE: DATE: 5/9/90

OILING CATEGORIZATION:
Wide 0 m: Medium 19 m: Narrow 248 m: V. Light 356 m: No Oil 0 m
Subsurface Oil Observed: Yes X No Maximum Depth 10 cm

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

COMMENTS: Recommended treatment includes 1) manual pickup of tarry oiled sediments and manual removal of tarmat in area indicated on sketch map, and 2) bioremediation in area (study site) indicated on sketch map. Work should be conducted between 7/1 and 7/10 due to Exxon study site and salmon constraints and with the approval of USFWS regarding eagle nest.

TAG COMMENTS: MAXIMUM BARGE IN AREA OF TPZ PRIOR TO 800

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

FOSC: DATE: 5/15/90

ADVISE COM 24 HRS PRIOR TO STARTING WORK
1A Salmon stream mouth - fry outmigration (3/1 to 5/15)

1B 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 inopol 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 Mortson 267-3224

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 inopol 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 consultation 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 sites

No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or inopol 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 and PWS Aquaculture Association for confirmation and authorization.

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

G8 net area 8/7 to 8/31

G1 J Purse seine area 7/20 to 9/30

K Purse seine hook-off 7/20 to 9/30

1L 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 inopol 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

Harri ng 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 unveiled intertidal and subtidal algal communities. If plans for treatment include methods such as hot water wash or inopol 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 (8/1 to 8/15)

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 inopol 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 566-7235

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 Poth 267-2206

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

Subsistence area: Salmon harvesting (5/1 to 6/30)

Finfish harvesting

Deer harvesting (8/15 to 2/28)

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 inopol 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/EV-03  SUBDIVISION: A  DATE 25 APRIL

USCG NAME SHAWN MAAS  SIGNATURE DC SHAWN MAAS

☐ NO TREATMENT RECOMMENDED  ☑ TREATMENT SUGGESTED

COMMENTS

MANUAL REMOVAL OF POOLING OIL AND ASPHALT/PAVEMENT L-ANGLE BEACHES. OILED DEBRIS REMOVED BY SSAT TEAM.

SUBSURFACE OILS NOTED BREAKUP AND BIOREMEDIATION RECOMMENDED.

STAIN ON HIGH ANGLE ROCK FACE NO TREATMENT

ADEC NAME DAVID M. SABUS  SIGNATURE DAVID M. SABUS

☐ NO TREATMENT RECOMMENDED  ☑ TREATMENT SUGGESTED

COMMENTS

1. REMOVE TAR MATS, OILS AND ASPHALT MANUALLY
2. TURN UP, REMOVE, AND ON CLEAN SUBSURFACE OIL FROM SEGMENTS WHERE POREMOTION IS DETECTED, PARTICULARLY, BEACH BY EXEM STAY SITE, WHERE SEGMENTS ARE SATURATED TO 10C
3. REMOVE TAR + RESIDUE ON COBBLES + SEGMENTS BELOW BOULDER AND IN INFILL DRAIN ON HIGHROCK, AND IN SURF CHANNLES.

LAND MANAGER NAME  SIGNATURE

☐ NO TREATMENT RECOMMENDED  ☑ TREATMENT SUGGESTED

COMMENTS
SHORELINE OILING SUMMARY

REVISED NO: 04-13-90

OG R. Marty             USCG S. Moos  SEGMENT ST/ EV-03
BIO B. Lemon            LAND REP D. Komphroff  SUBDIVISION A (A OF A)
EXXON J. Czarnecki      ADEC D. Sale  TIME 11:30 to 19:40
TEAM NO. 10  TIDE LEVEL +0.66m to +0.32m  DATE 2V/ APR/ 90
EST. SUBDIVISION LENGTH: 641  m  ☑ Sun  ☐ Clouds  ☐ Fog  ☐ Rain  ☐ Snow

UPLANDS DESCRIPTION: ☐ Grass  ☑ Forest  ☐ Rock
SURVEYED FROM: ☑ Foot  ☐ Boat  ☐ Helo  WORKING DIRECTION: S to N
SURFACE SEDIMENTS: R 15% B 15% C 20% P 20% G 10% S 10% M 0% V 0% WAVE EXPOSURE: ☐ Low  ☑ Med  ☐ High
SLOPE: Lang 65% Hang 15% Vert 2% WAVE EXPOSURE: ☐ Low  ☑ Med  ☐ High
OIL CATEGORY LENGTH: W 0 m M 25 m N 309 m VL 357 m NO 0 m

SURFACE OIL

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☑ Represents a minor volume - this was removed during survey

SURFACE OIL

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COMMENTS: The majority of the remaining oil is concentrated in a few places. Primarily in the supratidal zone within rock crevices. There is considerable subsurface oil at the south end of the segment in the beach (Exxon winter study site AR-15). The stream appears to have been recently surveyed, probably during the ongoing anadromous stream survey.

REVIEWED BY DATE 4/29/90
**SHORELINE ECOLOGICAL SUMMARY**

Segment ST/10/5/03  Subdivision A  Date (mo/day/yr) 4/24/90

Time (24 hr) 1930-1947  Biologist Lemon  clear, calm

(A) Substrate type and % of segments:
1. Bedrock 15%
2. Boulder 15%
3. Cobble 30%
4. Pebble 20%
5. Sand 20%
6. Silt 0%

(B) Overall % cover of biota (% of segment): Dense 75%  Moderate 50%  Low 25%

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

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### BARNACLES

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### FUCUS

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Wildlife Observations/ General Comments: Low zone very rich, 90% cover; lots of plant diversity; 2 gulls

Ecological Considerations: Anadromous stream & 236-40-16790 may carry spawners of out-migrating Smelts. Subsistence deer harvest area.
ADDENDUM: SUBDIVISION CONSTRAINTS

SEGMENT EV-3 SUBDIVISION A (1 of 1)

WORK WINDOW

| Manual Pickup |
| Tarmat Removal | OPEN |

| Bioremediation and Manual Raking |
| More Than 100m From Stream | WORK PRIOR TO 7/20 |

| Bioremediation and Manual Raking |
| Less Than 100m From Stream | WORK PRIOR TO 7/10 |

*Exxon Study Site* Closed to treatment prior to 6/15. No treatment within 40m of study site.

ARCHAEOLOGICAL STANDARD CONSTRAINT

If cultural resources are uncovered, PHONE 564-3274.

APPLICABLE ECOLOGICAL TIME CONSTRAINTS

1A, 1B  Salmon Stream  ADF&G catalogued anadromous stream (226-40-16590) is present in Subdivision A. This subdivision is closed to bioremediation and manual raking less than 100m from stream 7/10 to 8/31. Before 7/10, bioremediation and manual raking are 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 manual pickup and tarmat removal.

1K  Purse Seline Hook-off  No constraint to manual pickup and tarmat removal; closed to bioremediation and manual raking after 7/20.

5T  Bald Eagle Nest  NO CONSTRAINT. USFWS 6/1/90 map indicates no active nest within 400m of Subdivision A work site.

7II  Subsistence: Deer Harvesting  No constraint to manual pickup and tarmat removal; closed to bioremediation and manual raking after 8/15.

OTHER ECOLOGICAL CONSIDERATIONS

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. Restrict boat and air traffic to essential minimum after 7/20. Restrict beach activity to essential minimum after 8/15. Avoid any unnecessary disturbance or damage to unrolled biota and substrate.

TAG APPROVAL DATE

ADEC
EXXON
NOAA
USCG

FOSC Date 7 June 1990
ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/EV-03 STREAM NO: 226-40-16590 DATE 4/22/90

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)
6Y  Recreation: Special use destination
7II Subsistence area: Deer harvesting (8/15 to 2/28)
See attached Ecological Constraint sheet for specific constraints and contacts.

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

SHPO SIGNATURE: [Signature] DATE: 5/2/90

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
___ Tarmac Removal  ___ Beach Cleaner
___ Other (see comments)

COMMENTS: Recommended treatment includes 1) manual pickup of tarballs and 2) bioremediation of area of surface stain. Work should be conducted between 6/1 and 7/10 based on eagle nest and salmon constraints with approval of USFWS regarding eagle nest and ADF&G regarding bioremediation of stream banks.

TAG COMMENTS: ____________________________________________

TAG APPROVAL DATE: 5/17/90
ADEC  [Signature] DATE: 5-15-70
EXXON  [Signature] NOAA  [Signature] USCG  [Signature]
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 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 Morrison 267-2224

1G 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 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 Paltz 424-3214

1D Esther Hatchery release (4/15 to 6/15)
1E Main Bay Hatchery release (4/20 to 6/15)
1F Sewmill Bay Hatchery release (4/15 to 6/1)
1G Cannery Creek Hatchery release (4/21 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 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: ADF&G Larry Paltz 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 (6/11 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

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 uncollected intertidal and subtidal algae 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

3P Harbor seal and sea lion pupping (5/15 to 7/1)
Harbor seal and sea lion molting (6/15 to 8/15)
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 565-7235
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 ADFG for confirmation.

AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377
ADF&G Tom Rothe 267-2208

7Z 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 Anchorage (6/1 to 9/15)
6W Forest Service cabin (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)
Pinfish 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 Fal 267-2359
FIELD SHORELINE COMMENT SHEET

SEGMENT ST 5V003 SUBDIVISION: 16650 DATE 1/22/90

USCG NAME: CWO MC PETERS SIGNATURE: JG McEwan

☐ NO TREATMENT RECOMMENDED ☑ TREATMENT SUGGESTED

COMMENTS:
1. Manual clean-up; remove tar mats
2. Bioremediation at boulders (see map)

ADFG NAME: Michael Wedmer SIGNATURE: Michael Wedmer

☐ NO TREATMENT RECOMMENDED ☑ TREATMENT SUGGESTED

COMMENTS: Bioremediation not suggested.

LAND MANAGER NAME: TO BE INSERTED SIGNATURE: 

☐ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED

COMMENTS:
# Shoreline Oil Spill Summary

**OIL**

**CHARACTER**

<table>
<thead>
<tr>
<th>Asphalt Pavement</th>
<th>Pooled</th>
<th>Cover</th>
<th>Coat</th>
<th>Stain</th>
<th>Mousse</th>
<th>Patties</th>
<th>Tarsballs</th>
<th>Film</th>
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<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
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</tbody>
</table>

**DATE**

- Date: 4/23/93
- Time: 1:00 PM
- Tide: Low
- Weather: Wind: S
- Rain: Yes
- Snow: No

**Slope:**
- Long: 40%
- Hang: 40%
- Veneer: 20%

**Wave Exposure:**
- Low: Yes
- Med: No
- Hi: Yes

**Oil Category Length:**
- W: 100 m
- M: 50 m
- N: 3 m
- V: 2 m
- S: 1 m

---

**Subsurface Oil**

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<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>A N A</th>
<th>SHEEN</th>
<th>CV</th>
<th>SURFA / SUBSURF SEDIME</th>
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**Comments**

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**Reviewed**

- Reviewed by: [Signature]
- Date: 4/23/93
**ACFPC MULTI-ASSESSMENT DATA FORM**

1. **Survey Type:** ES 560 DE TO AVE SCHA NAME PTA  
2. **Region:** CR, FI, NA
3. **Method:** Aerial  
4. **Date:** 4/22/90  
5. **High Tide Times:** 1205, 1230  
6. **Low Tide Times:** 1240, 1250  
7. **Start Time:** 1315  
8. **Stop Time:** 1345  
9. **Station:** 226  
10. **Tide Ht at Survey:** 0.7
11. **K-Unit:** N  
12. **Station Area:** SEWARD A3  
13. **Location:** Evans Point  
14. **Description:**

### EXTENT OF OIL

<table>
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<tr>
<th>Shoreline</th>
<th>Stream</th>
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<tbody>
<tr>
<td>L</td>
<td>V</td>
</tr>
<tr>
<td>15</td>
<td>100</td>
</tr>
</tbody>
</table>

15. **Surface Coverage:**
16. **Surface Thickness:**
17. **Penetration:**
18. **Overall Oil Impact:**
19. **Oil Type:**
20. **Oiled Descrip:**
21. **Shoreline Type:**
22. **Wave Exposure:**
23. **Substrate Type:**

**Comments:** The site is a small pocket cove with a small seaward opening - bedrock outcrops on both sides. The outcrop to the west has significant tar coverage on vertical surfaces. Some living benthos within tared zones. Tar patches and mats are scattered in the upper intertidal zones adjacent to...
**Recommendations:**

- Remove any tar on the bedrock and splatters. Leave the tar on the outcrop untreated.

I agree with recommendations.  

[Signature]

---

48 OIL DISTRIBUTION DIAGRAM

**Bedrock Outcrop**

- **Tar Patties & Splatters**
- **Bedrock**
- **Heavy Tar on Outcrop**

Scale taken: 15 meters
Segment EU 003
Stream 226-90-16570
Ecological Summary

This small stream enters the sea via a 15m wide gravel/pebble beach in a narrow cove with vertical bedrock on either side. The beach sediments are unstable and there is no macro-biota present. A mature, diverse community including barnacles, mussels, several species of limpets, littorines, whelks, algae, etc., exists on the vertical walls despite a remaining fairly heavy coat of weathered oil. No conifer, beach or stream bank cleanup, but I recommend leaving the vertical walls alone.

Michael Fawcett
ANADROMOUS FISH STREAM EVALUATION ADDENDUM

CONSTRAINTS FOR STREAM NO. 226-40-16590
SEGMENT EV-3 SUBDIVISION A

ARCHAEOLOGICAL STANDARD CONSTRAINT
If cultural resources are uncovered, PHONE 584-3274.

APPLICABLE ECOLOGICAL TIME CONSTRAINTS
1A,1B Salmon Stream
ADFG catalogued anadromous stream (226-40-16590) is in Subdivision A. No constraint to manual pickup.

1K 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.

7II Subsistence: Deer Harvesting
No constraint to manual pickup.

OTHER ECOLOGICAL CONSIDERATIONS
Restrict boat and air traffic and beach disturbance to essential minimum prior to 6/15 and after 8/15. No disturbance to stream bed or banks. Avoid any unnecessary disturbance or damage to unoiied biota and substrate.

SEE SUBDIVISION CONSTRAINT ADDENDUM EV-3A FOR ADDITIONAL CONSTRAINT INFORMATION.

FOSC ________________ Date ________________
Prepared by ________________ Date ________________
**SHORELINE EVALUATION**

**SEGMENT ST/ EV-04**

**SUBDIVISION A**

**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)
- 5V  Recreation: Special use destination
- 7II  Subsistence area: Deer harvesting (8/15 to 2/28)

See attached Ecological Constraint sheet for specific constraints and contacts.

**SUBDIVISION ECOLOGICAL CONSTRAINTS:**

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

---

**SHPO SIGNATURE:**

**DATE:** 5/5/90

**OILING CATEGORIZATION:**

- Wide 0 m: Medium 0 m: Narrow 282 m: V.Light 0 m: No Oil 73 m
- Subsurface Oil Observed: Yes No X
- Maximum Depth

**RECOMMENDATIONS:**

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

---

**COMMENTS:**

---

**TAG COMMENTS:**

---

**TAG APPROVAL DATE:** May 5 1990

ADEC

EXXON

NOAA

USCG

---
Salmon stream mouth - fry outmigration (5/1 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 drainages. 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 in opp 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 287-2224

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 inopp 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 inopp 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-off (7/20 to 8/20)
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 inopp 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 (5/15 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 inopp 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 556-7235

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/restoration concentration (4/1 to 8/15)

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

AGENCY CONTACT PERSON: USFWS Jill Parker 788-3377

ADF&G Tom Roth 287-2205

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 (5/1 to 9/15)
Anchorage (6/1 to 9/15)
Forest Service cabins (5/1 to 6/15)
Lodge (5/1 to 8/15)
Special use destination

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 inopp 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 287-2359
NO TREATMENT RECOMMENDED  □ TREATMENT SUGGESTED

Comments:

Cover consisted on vertical rock faces only very hard to access for cleaning.

No subsurface oils noted.

□ NO TREATMENT RECOMMENDED  □ TREATMENT SUGGESTED

Comments:

There is oil on this segment, on hi-moist rock faces which make up most of the segment, in a patchy cover roughly coinciding with the upper limits of the berm and zone overlapping it. No treatment would likely be effective; would probably cause damage if no note made. Results sign-off should include notation that oil exists, and cannot be removed.

LAND MANAGER
NAME: DON KAMPFHEFF JR. SIGNATURE: Donald L. KAMPFHEFF JR.

□ NO TREATMENT RECOMMENDED  □ TREATMENT SUGGESTED

Comments:

30 of 46
SHORELINE OILING SUMMARY

SEGMENT NO. EV-04

USCG S. Maas

LAND REP. D. Kamschat

ADEC R. Sale

TIME 09 40 to 10 00

TEAM NO. 10

TIDE LEVEL +0.2m to +0.8m

DATE 21 April 90

EST. SUBDIVISION LENGTH: 365m

UPLANDS DESCRIPTION: □ Grass □ Forest □ Rock

SURVEYED FROM: □ Foot □ Boat □ Helo

WORKING DIRECTION: S to N

SURFACE SEDIMENTS: A 10% B 0% C 0% D 0% E 0% F 0% G 0% H 0% V 0% W 0% Y 0% Z 0%

SLOPE: Lang 0% Hang 0% Vert 100%

WAVE EXPOSURE: □ Low □ Med □ High

OIL CATEGORY LENGTH: W 0m M 0m N 0m

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>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>POOLED</td>
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</tr>
<tr>
<td>COVER</td>
<td>P</td>
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<tr>
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<td></td>
</tr>
<tr>
<td>PATTIES</td>
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</tr>
<tr>
<td>TARBALLS</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FILM</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>NO OIL</td>
<td>X</td>
<td>X</td>
<td>X</td>
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</tbody>
</table>

PAVEMENT H F S NONE sq. m by cm

PATTIES / TARBALLS BAGS

NEAR SHORE SHEEN? □ BR □ RW □ SL □ TL

OILED DEBRIS

<table>
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<tr>
<th>AMOUNT</th>
<th>DID YOU COLLECT DEBRIS?</th>
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<tr>
<td>Logs</td>
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<tr>
<td>Vegetation</td>
<td>X</td>
</tr>
<tr>
<td>Trash</td>
<td>X</td>
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<td>Debris</td>
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Type

# BAGS

Photographs:

Roll No. S7/10/14

Frames 36, 37, 3, 3

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 SHEEN (cm)</th>
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</tbody>
</table>

COMMENTS

vertical clumps with dense attached communities. Sporadic oiling.

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REVIEWED Jd DATE 4/27/90
SHORELINE ECOLOGICAL SUMMARY

Segment ST/10/6V-04 Subdivision A _______________ Date (mo/day/yr) 4/24/90

Time (24 hr) 141-2000 Biologist Lemon

(A) Substrate type and % of segments:
   (1) Bedrock 100  (2) Boulder  a  (3) Cobble  a  (4) Pebble  a  (5) Sand  a  (6) Silt  

(B) Overall % cover of biota (% of segment): Dense 85% 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)

   Photographs: Roll No. 5T/10/14
   Frames 36, 37, 38

BARNACLES

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MYTILUS

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Wildlife Observations/General Comments: mostly shift by with just 1 stop. Probably a
5 sea otters
2 sea lions
1 Eagle

Ecological Considerations: Eagle nest was not confirmed; a deep Homer area.

NOT PRESENT

33 of 98
SHORELINE EVALUATION

SEGMENT ST/ EV-05   SUBDIVISION A (1 OF 3) DATE 4/7/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

- ADF&G anadromous stream no. 226-40-16575, 16580, 16582, 16577.
- 5T-2 All bald eagle nests (3/1 to 6/1) - Active eagle nests (3/1 to 9/1)
- 6Y Recreation: Special use destination
- 7II Subsistence area: Deer harvesting (8/15 to 2/28)
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:
Avoid any unnecessary disturbance or damage to unoiled biota and substrate. 2 eagle nests in EV-05; 1 nest also near border with EV-06, another on or near border with EV-01. No anadromous stream in this Subdivision.

SHPO SIGNATURE: __________________________ DATE: ________________

OILING CATEGORIZATION:

- Wide 0 m: Medium 0 m: Narrow 21 m: V.Light 275 m: No Oil 97 m
- Subsurface Oil Observed: Yes X No___ Maximum Depth 8 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: Wands
- Beach Cleaner
- Other (see comments)

COMMENTS: Recommended treatment includes 1) manual asphalt removal, 2) manual pick up of oiled debris, 3) bioremediation of areas shown on attached sketch map. Work should be conducted between 6/1 and 7/10 based on eagle nest and salmon constraints after approval of USFWS regarding eagle nest.

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 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. Contact ADF&G Habitat Division prior to treatment for permits.

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

Esther Hatchery release (4/15 to 6/1)

Main Bay Hatchery release (4/20 to 5/10)

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

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

Remote release site

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)

For Codes 1C through 1L contact ADF&G for specific dates, locations and constraints.

Herring spawning (4/1 to 6/15)
Restrict boat traffic to essential minimum. Avoid damage to unoiled intertidal and subtidal algea and seagrass. Contact ADF&G for specific dates and locations.

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.

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

Shorebird/waterfowl concentration (4/1 to 5/15)
Restrict all activity to essential minimum, especially air traffic.

All Bald Eagle nests (3/1 to 6/1)
Active Bald Eagle nests (3/1 to 9/1)
Restrict air traffic 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.

Recreation:
Tent sites (6/1 to 9/15)
Anchorages (6/1 to 9/15)
Forest Service cabins (6/1 to 9/15)
Lodge (8/1 to 9/15)
Special use destination

Subsistence area:
Salmon harvesting (5/1 to 9/30)
Finfish harvesting
Deer harvesting (8/15 to 2/26)
Invertebrate harvesting

For Codes 7Z through 7JJ contact ADF&G and Chenega Corporation for specific dates, locations, and constraints.
FIELD SHORELINE COMMENT SHEET

SEGMENT ST / E.V. - 5 SUBDIVISION: A DATE 4/7/90

NAME GARY SHIGENACA SIGNATURE Gary Shigeharo

☐ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED

COMMENTS

SUBDIVISION QUALITY OF AN APPROXIMATELY 800M POCKET BEACH ALONG THE NORTHWESTERN TIP OF EVANS ISLAND. THE BEACH WAS COVERED TO HAVE BEEN HEAVILY OILED (THE CVCREP VIEWED IT LAST YEAR DURING CLEANUP OF '95) AND SHOWED EVIDENCE OF CONTINUED PRESENCE OF OIL. HOWEVER, THE BEACH WAS APPARENTLY IMPROVED DRAMATICALLY IN APPEARANCE IN THE INTERVENING MONTHS. A RISE OUTLOOK BISECTED THE BEACH; AT THE SOUTH END OF THE BEACH, CHARACTERIZED BY A ROCK RISE, SOME COAT WAS OBSERVED. IN Boulders adjacent to the wall, a 15 M (WIDE) BY 5 M (LENGTH) PATCH OF OIL AND POOL D OIL UP TO APPROXIMATELY 3 CM IN DEPTH was found. Clusters of mussels, some live and some dead, were found in this zone. Mussels also extended into the cobble beach area adjacent to the boulders, and oiling in the form of sheen on the water as well as some cover on surface of cobble and segments. Mussels, covers, and sheen were also observed on the rock outcrop bisecting the outer beach in the southern subregion supratidal. Oiled vegetation and other debris was found. Oiled vegetation was also found in the supratidal of the beach north of the outer beach as well. Stain was observed in other parts of this northern subregion, but heaviest oiling was found in the southern. Snow covered some of this supratidal, but it appeared contaminated vegetation and debris could be manually removed.

NAME John Neyer SIGNATURE

☐ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED

COMMENTS

LAND MANAGER NAME James A. Barker SIGNATURE James A. Barker

☐ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED

COMMENTS

4/7/90 1600

SAT OBSERVED WEATHER OIL AT THE SOUTH END OF SEGMENT EVS SUBDIVISION A WHILE PROCEEDING NORTH. HINTS EVS, A HISTORY, SUMMER 1988 EVS, A WAS CONSIDERED MODERATE TO HEAVILY CONTAMINATED. THE CHENECA BAY OIL RESPONSE TEAM CLEANING EVS, A USING OIL CONTAMINATION FROM ABSORBENT MATERIALS AND RADAR SCRAPERS HAVING WITNESSED CONTAMINATION BEFORE CLEAN UP SUMMER 89, I CAN CONCLUDE THAT WINTER WEATHERING AND WORK EROSION BY THE CHENECA BAY RESPONSE CLEAN UP TEAM MADE A NOTicable AN SIGNIFICANT DIFFERENCE OF OIL REMOVAL AND BEACH DECONTAMINATION. SATUXA DETERMINED THAT CONTINUOUS NAVY CLEANING OF THIS ISOLATED AREA WOULD BE BENEFICIAL. STAY HIGH RESS WATER AND ROUGHING WITH CONTAMINATION BEYOND MAY BE HELPFUL AND DESIRABLE AS A CLEANING AND OSL FROM MID TO HIGH TIDES ONLY.

REVISION NO. 05/21/90
**SHORELINE OILING SUMMARY**

<table>
<thead>
<tr>
<th>TEAM NO.</th>
<th>TIDE LEVEL</th>
<th>DATE</th>
<th>EST. SUBDIVISION LENGTH</th>
<th>SEGMENT ST/</th>
<th>SUBDIVISION A</th>
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<tr>
<td>11</td>
<td>1.0 to 0.5</td>
<td>9/7/90</td>
<td>490 m</td>
<td>EV-S</td>
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**UPLANDS DESCRIPTION:**
- ☐ Sun
- ☐ Clouds
- ☐ Fog
- ☐ Rain
- ☐ Snow

**SURFACE SEDIMENTS:**
- A: 10 % B: 20 % C: 20 % P: 10 % G: 10 % S: ☐ M: ☐ V: ☐

**SLOPE:**
- Lang: 20 %
- Hang: 10 %
- Vert: 60 %

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

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**SOMET OIL**

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<th>DISTRIBUTION</th>
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<td>TARBALLS</td>
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**PAVEMENT:**
- H: 3 m by 5 cm

**PATTIES/TARBALLS:**
- 0: 0

**NEAR SHORE SHEEN?**
- ☐ BR RW SL TL

**OILED DEBRIS:**
- SM MD LG

**DEBRIS COLLECTED:**
- ☐ YES ☐ NO

**PHOTOGRAPHS:**
- Roll No. ST-11-2
- Frames: 26

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**SUBSURFACE OIL**

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<th>PIT NO.</th>
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<th>SUBSURFACE OIL CHARACTER</th>
<th>OILED INTERVAL</th>
<th>OILED INTERVAL</th>
<th>OIL/FILM COLOR</th>
<th>PIT ZONE</th>
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**COMMENTS:**
Subdivision is located in the southern part of EV-5. The area consists of the rock wall running out to the point and two rock covers. The vertical rock wall running out to the point with the northern exposure has a discontinuous 0.5 m wide CT/P cover running the length of the wall in the HTT2 (approx. 50 m) where this band meets the beach in the HTT2, there is a 3m x 5m area of heavy oiling in between the crevices in the rock.
### SUBSURFACE OIL (CONTINUED)

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**COMMENTS**

Boulders and cobble. There is also some pooling and asphalt patties up to 3 cm in depth. Extended across the beach from this zone is a 1m x 2m ET/5 distributed asphalt patties among the Pebble beach. In the MITZ, located in the Supra J-Z in this cove and the adjacent pocket cove are some oil coated debris both 1m x 2m in size. Some of the oiled storm beans were covered by snow. The MITZ also has some rainbow sheen under the cobble. This subdivision consists of vertical Bedrock and large boulders and a couple of pocket cobble/pebble beach.

**REVIEWED_________ DATE_________**
SHORELINE ECOLOGICAL SUMMARY

Segment ST-1 EV005 Subdivision A Date (mo/day/yr) 4/7/90

Time (24 hr) 1900 hr Biologist Ambrose

(A) Substrate type and % of segments:
   (1) Bedrock 40 (2) Boulder 20 (3) Cobble 20 (4) Pebble 10 (5) Sand 10 (6) Silt

(B) Overall % cover of biota (% of segment): Dense 25 Moderate 15 Low 60

(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)

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Wildlife Observations/General Comments:
* Mature bald eagle (near nest seen earlier) + deer tracks.
  Bedrock walls have moderate to dense cover, with mainly red algae in lower
  intertidal; pocket core has areas of Fucus and Mytilus, otherwise sparse to
  moderate cover.

Ecological Considerations:
7/11, 6/7, 5/7-5: Bald eagle seen near nest.
Mussels and Fucus occur below ciliated areas in core

Note: rocks in low intertidal are slippery due to filamentous algae.

*Note: part surveyed by boat
Conditions Observed: In cracks between slabs and underneath slabs in RMS AP OP motor. Because of oil's location amongst slabs manual removal will be difficult. Also in ground at 14x7 in an area of AP approx. 3m in width OP oil is extending 20cm over a valve area.

Followup Recommendations: ASAP/HEDO worked on the site but did not complete manual removal/treatment. Further manual removal is needed which should be followed by remediation.

Completed by Pickup Crew: [ ] YES [x] NO

Priority for Addressing in 1990: [x] High [ ] Mod. [ ] Low

ADEC

Bob McCraney

[Signature]

Comments: Convene with above recommendations.

Exxon

John Dean

[Signature]

Comments: Limited manual pick-up should be done before rectification of Exxon blow

USCG

[Signature]

Comments: Manual removal completed. Need manual removal still remain, when can be assessed by big team

Land Rep.

Steve Ward CVC

[Signature]

Comments: More manual to work before this is done. More follow up to start. Job should be done then last time. Above conditions are recommenced one day.
SEGMENT AS/ EV AS
SUBDIVISION: A
SITE: 1
DATE: 91

NAME: Don Craig
SIGNATURE: Don Craig

☐ YES  ☐ NO PRIORITY SITE FOR REASSESSMENT IN 1991
REASON:

Amyl Nitrile, asphalt, and intestinal clogs found in lateral sanitary pipe. A 10m proxim area of mouse and asphalt debris requiring manual removal. Reoccur began work on site which was delayed due to times some additional work needed this year with manual and bio. reasons in 1991.

AND MANAGER

NAME: Bob McCoy
SIGNATURE: Bob McCoy

☐ YES  ☐ NO PRIORITY SITE FOR REASSESSMENT IN 1991
REASON:

MS, AP, PP and OR subsurface oil has fairly wide disribution . on this segment. Clogged reach at South end of segment as well as entry point would require further treatment in 90. Mechanical means would greatly facilitate accessing the MS and OP on the entry point.

CONCUR

AND MANAGER

NAME: Steve Ladd
SIGNATURE: Steve Ladd

☐ YES  ☐ NO PRIORITY SITE FOR REASSESSMENT IN 1991
REASON:

Manual should be done here in 90, cust prev month was.
In conjuct, should be bid again in 90. OJ yes
<table>
<thead>
<tr>
<th>SURFACE OIL</th>
<th>SITE 1</th>
<th>SITE 2</th>
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<td>OILED ZONES</td>
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<td>/C</td>
<td>B</td>
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<td>S.O.R.</td>
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| EST. SITE LENGTH | 667 m |

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<th>PIT DEPTH (cm)</th>
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<th>OILED (certain)</th>
<th>CLEAN BELOW (Y/N)</th>
<th>PIT ZONE</th>
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<th>COMMENTS</th>
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Consisting of C/SO was located on both sides of the stream. The SOR was loose, granular material that was broken in the field by the crew. The C/SO was set in bowlers in the S/E portion of the site. This area showed signs of previous treatment in the...
ASAP TAG REVIEW SHEET

Segment: EV05  Subd: A  Site:  Date
PRE-Review 11/6/90

Priority For Addressing In 1990

__ HIGH  __ MEDIUM  __ LOW  X NTR

Treatment Recommended:

SOR/Cover/Stain  NTR


Recommendation:

Commit sheet does not agree with OG sheet. What is the Asphalt?

If mousse/Asphalt present, Rdr Manual Pickup.

Priority Site For Reassessment In 1991

YES NO  YES NO  YES NO  YES NO
CG  NO  ADEC  NO  EXXON  NO  LAND MGR

TAG 13 11/6/90

Limited Manual Pickup 1/3/90

Low Priority
SHORELINE EVALUATION

SEGMENT ST/ EV-05 SUBDIVISION B (2 OF 3) DATE 4/7/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

ADFG anadromous stream no. 226-40-16575, 16580, 16582, 16577.

1A  Salmon stream mouth - fry outmigration (3/1 to 5/15)
1B  Salmon stream mouth - spawning (7/10 to 8/31)
5T-4 All bald eagle nests (3/1 to 6/1) Active eagle nests (3/1 to 9/1)
6Y  Recreation: Special use destination
7II Subsistence area: Deer harvesting (8/15 to 2/28)

See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

Avoid any unnecessary disturbance or damage to uncoiled biota and substrate. Two anadromous streams in Subdivision B (226-40-16577, 16575) and 2 bald eagle nests, with one bald eagle nest within 400m in Subdivision A.

SHPO SIGNATURE: ________________________ DATE: 4/28/90

OILING CATEGORIZATION:

Wide 0 m: Medium 32 m: Narrow 0 m: V.Light 33 m: No Oil 1107 m

Subsurface Oil Observed: Yes No X Maximum Depth__________

RECOMMENDATIONS:

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

COMMENTS: Recommended treatment includes 1) manual removal of pooled mousse and tar patties. 2) manual removal of oiled debris. Work should be conducted after 6/1, with the approval of USFWS regarding eagle nests. FOLLOWUP TREATMENT WITH BIOREMEDIATION

TAG COMMENTS: ________________________________

TAG APPROVAL DATE: 4/26/90

ADEC JOHN BAYEF
EXXON
NOAA
USCG

FOSC: ___________________ DATE: 5-9-90

CRC not concurrent with bioremediation
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. Contact ADF&G Habitat Division prior to treatment for permits.

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

1D
Estrait Hatchery release (4/15 to 6/1)

1E
Main Bay Hatchery release (4/20 to 5/10)

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

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

1H
Remote release site

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 (6/11 to 7/25)
For Codes 1C through 1L contact ADF&G for specific dates, locations and constraints.

2M
Herring spawning (4/1 to 6/15)
Restrict boat traffic to essential minimum. Avoid damage to uncollected intertidal and subtidal algae and seagrass. Contact ADF&G for specific dates and locations.

3N, 3P
Harbor seal and sea lion pupping (5/15 to 7/1)

3O, 3Q
Harbor seal and sea lion molting (6/15 to 8/15)
Restrict boat and air traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts.

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

5S
Shorebird/waterfowl concentration (4/1 to 5/15)
Restrict all activity to essential minimum, especially air traffic.

5T
All Bald Eagle nests (3/1 to 6/1)
Active Bald Eagle nests (5/1 to 6/1)
Restrict air traffic to essential minimum. No personnel within 400m 3/1 to 6/1. Air approach and takeoff from and to seaward only; maintain 300m horizontal, 300m vertical distance from nests. Contact USFWS prior to treatment for confirmation of dates.

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

7Z
Subsistence area:
Salmon harvesting (5/1 to 9/30)

7H
Finfish harvesting

7H
Deer harvesting (9/15 to 2/28)

7JJ
Invertebrate harvesting
For Codes 7Z through 7JJ contact ADF&G and Chenega Corporation for specific dates, locations, and constraints.
FIELD SHORELINE COMMENT SHEET

SEGMENT ST / EV-5 _______ SUBDIVISION: B __________________ DATE 4/7/90

ADEC NOAA
NAME GARY SHIGENARA ___________ SIGNATURE ______________________

☐ NO TREATMENT RECOMMENDED  ☐ TREATMENT SUGGESTED

COMMENTS
The subdivision consisted of a section of Ewaus Island shoreline that included rocky faces and outcrops as well as small beaches. A Boulder Beach on the southern end of the subdivision represented the only significant portion showing signs of oiling. This small (approximately 25 m length) beach was bordered on both sides by rock faces and so was a relatively confined piece of shoreline. The upper reaches of the upper intertidal were fairly heavily contaminated with a mousy cover and pooled oil, and the supratidal contained oiled vegetation and debris. A small cave extending from the upper intertidal back contained relatively unweathered mousse to an undetermined depth. Biological resources in the lower reaches of this beach were not particularly notable, although new barnacle recruits were observed.

THE REMAINDER OF THE SUBDIVISION WAS FREE FROM OILING.

ADEC
NAME John Hayes ___________ SIGNATURE ______________________

☐ NO TREATMENT RECOMMENDED  ☐ TREATMENT SUGGESTED

COMMENTS
This segment consisted of a set of pocked beaches along shoreline segment EV-5.

Oil/g was observed in two of three pocket beaches (see sketch map). One of the beaches had surface oil/g which consisted of residual mousse and debris in crevices of bedrock at one soft asphalt patch 5x25cm was observed. This beach was weathered at steep. The other pocket beach was observed oiled above the stream here is the supposed, the oil was MS and was spread 3-5cm thick. The oil was a more weathered oil contamination on regular edible ad in mortar of bedrock as suggested. The pocket beach is located between two walls of bedrock and is a good site for HHHP treatment. AHH to HHHP manual clean up is recommended to shore some gear contamination. Bush has an abundant colony of nutritional concern (see site info) to end is accessible by small back crew.

LAND MANAGER
NAME James A Barker ___________ SIGNATURE ______________________

☐ NO TREATMENT RECOMMENDED  ☐ TREATMENT SUGGESTED

COMMENTS
SSAT DISCOVERED COVE, HIGH BLUFF SHORES, DIAMOND SHORE, BASE 10m A LOW TIDE MARK
RECEDING TO 8m ABOVE HIGH TIDE MARK. THIS SUBDIVISION CONTAINED POCKETS OF WEATHERED OIL BETWEEN GUTS AND CREEKAGES. BEACH UNTAUGHT BY CLEANING.

SSAT HAVE DETERMINED THAT HAND CLEAN UP WITH ABSORBENT MATERIAL WOULD BE MOST EFFECTIVE ON OIL POOLS. DUE TO JOE SHALLOW ROCK AND HIGH BLUFF SIDES, HIGH PRESSURE WASH WAS INAPPROPRIATE AND CONFOUNDED BEACH DURING A MODERATE TIDE WOULD BE MOST EFFECTIVE CLEANING AGENT FOR THE REMAINING SEGMENT.

REVISION NO. 03/21/90
**SHORELINE OILING SUMMARY**

**NO.** 3108765437719  P.04

OG: Mike Foget  NOAA  Gary Shigemura SEGMENT ST: EV-5

BIO: Richard Ambrose  LAND REP: John Hays  SUBDIVISION: 13

EXXON: Larry Arizona  ADEC: John Hays  TIME: 10:30 to 14:30

DATE: 9/7/90  EST. SUBDIVISION LENGTH: 1200 m

UPLANDS DESCRIPTION:  Sun  Clouds  Fog  Rain  Snow

SURVEYED FROM:  Foot  Boat  Helo  WORKING DIRECTION:  to N

SURFACE SEDIMENTS:  R  90%  B  25%  G  20%  P  10%  O  %  S  %  M  %  V  %

SLOPE:  Lang  25%  Hang  30%  Vert  25%

OIL CATEGORY LENGTH:  W m  M  Z m  N m  V m  NO 1145 m

**SURFACE OIL**

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<th>CHARACTER</th>
<th>DISTRIBUTION</th>
<th>OIL / FILM COLOR</th>
<th>IMPACTED ZONES</th>
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**PAVEMENT:**  H  F  S  eq. m by cm

**PATTIES / TARBALLS**:  bags

**NEAR SHORE SHEEN?**  NO  BR  RW  SL  TL

**OILED DEBRIS**

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<th>DEBRIS COLLECTED</th>
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<td>Vegetation</td>
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<tr>
<td>Trash</td>
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<tr>
<td>Debris</td>
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</table>

**DEBRIS TYPE**

Photographs:

- Roll No.: ST-11-2
- Frames: 29

**COMMENTS**

Most of the oiling in this subdivision occurred in a small V crevasse beach which is 30 m at the base. This shore zone is bounded by two rocky vertical walls with large boulders in the supra and infralittoral zones. There is pooling and oil cover between the crevices of the boulders and beneath the boulders. This oiling occurred in SEP. SUPRA and INFRAE. The exposed areas of these boulders show no indication of oiling.

**REVIEWED**  DATE: 4/14/90

Page 1 of 2
## Subsurface Oil (Continued)

<table>
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<tr>
<th>Pit No.</th>
<th>Pit Depth (cm)</th>
<th>Subsurface Oil Character</th>
<th>Oiled Interval (cm)</th>
<th>Below Oil/Film Color</th>
<th>Pit Zone</th>
<th>Subsurface Sediments</th>
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**Comments:**

Also located in the substrate is some oil coated vegetation (pine needles, Lors). Along the western rock wall of this pocket cove is a 15m x 0.5m stain in the HETZ. No oil was observed in the rest of the subsegment with the exception of a total of 0.00m of staining in the HETZ on some vertical rock walls (see map 2).

---

**Reviewed:**

**Date:**
SEGMENT ST/ EV-5
SUBDIVISION DB
DATE 4/7/90

CHECKLIST
- 
- Approx. Scale
- Slag/Sub Slag
- Oil Drift
- Wheat Length
- % Cover
- Substrate Character
- Est. MLA
- SSB
- Prove (occasion(s)
- Notes (occasion(s)
- Photo Location(s)

LEGEND
- 1
- No Subsurface Oil

- 2
- Subsurface Oil

- CTV
- Continuous Distribution

- CTVB
- Broken Distribution

- CTP
- Patchy Distribution

- CT/S
- Splashed Distribution

Oiled Vegetation
- 4
- Photo location, direction, and number

OIL CHARACTER LENGTH (m): AP - PO 20 - CV - CT 10 - ST 35 - MS - FT - TB - FL - NO 1145

SKECH MAP 1

Moderate oil, see map 2.

Bedrock/Boulder

Bedrock/Mudrock

Anadromous Stream

Tar stain on wet rock, H172

Scale

200 m
Sketch Map 2

- 0.5m x 15m CVS in the HJTZ
- High angle water/cobble beach
- 2m x 20m CTT/CP asphalt in
- the HJTZ, with some pooling

Legend:
- 
- steep rock

Manual removal Pooling Mousse & Tar
- Patties between large
- Boulders,
- Followed by Bio.

Manual removal Oiled Debris.

Legend:
- Boulders
- Snow

See Map 1
SHORELINE ECOLOGICAL SUMMARY

Segment ST Ev005 Subdivision B Date (mo / day / yr) 4/7/90

Time (24 hr) 1830 LO Biologist Ambrose

(A) Substrate type and % of segments:
(1) Bedrock 40 (2) Boulder 25 (3) Cobble 20 (4) Pebble 10 (5) Sand 5 (6) Silt

(B) Overall % cover of biota (% of segment): Dense 15 Moderate 25 Low 60

(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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MYTILUS

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GASTROPODS

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FUCUS

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<tr>
<td>3</td>
<td>6</td>
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</tbody>
</table>

Wildlife Observations/General Comments: Eagles (see below), deer (and deer bones), 3 crows, seal.

Ecological Considerations:

711, 69, 5T-5: 1 mature bald eagle and 1 immature eagle.

One anadromous stream occurs in this subdivision; no oil was noted nearby.

Weathered mousse noted in upper intertidal of transect (see page 2)
Oiling on Beach #1 and ecological constraints:

Algae are fairly common in the lower tidal zones: Rhodomela and Enteromorpha occurred in the mid intertidal, Palmaria (or the like) is dense in the low intertidal, and Laminaea is dense in the subtidal.

There is also a good set of barnacles on one side of the cove.

However, the overall biota of the cove is not unusual or rich; in fact, there was virtually no Fucus or Mytilus in the upper intertidal on the beach.

Impacts to the cove from remediation activities could be minimized by working at mid to high tides, but in any case these would not appear to be great to intertidal resources from cleaning this area.
Conditions Observed: Small pocket beach just south of Aand 226-40-167.25. Area was worked in Summer '90. Left MS, OP, and BR has little time under building and subgrade. Because much O&I is behind building, manual removal will be difficult.

Followup Recommendations: Manual removal of MS OP and BR that is accessible. Remaining residual will to be filled and backgraded.

Completed by Pickup Crew: [ ] YES [X] NO

Priority for Addressing in 1990: [X] High [ ] Mod. [ ] Low

ADEC [ ]

Comments:

Exxon [ ]

Comments: I AGREE WITH RECOMMENDATION 9/20 2, ASSESSMENT IN 91

USCG [ ]

Comments: Manual work required in T1. Work will be difficult at least...

Land Rep. [ ]

Comments: Manual work insufficient and will require in...
SEGMENT AS/ cv-05  SUBDIVISION:  B  SITE:  1  DATE: 10/1/90

NAME  Department:  SIGNATURE  Department:

☑ YES  ☐ NO  PRIORITY SITE FOR REASSESSMENT IN 1991
REASON:

Towards the rear of 30m wide cut with medium to large rocks. A 30 x 5m band of intertidal sand. A 15cm pit due to rock block device owing to 15cm space. Manual work could be performed, but minimum of reapplication of BIO. Definite reassessment in 1991. Agree — dev. owing between boulders will make manual removal difficult.

NAME  Robert M. Langa
SIGNATURE  Robert M. Langa

☑ YES  ☐ NO  PRIORITY SITE FOR REASSESSMENT IN 1991
REASON:  Small pocket beach just south of Moody Point. 326+90, 16575, area was washed in '90, but MS, OP, DR, etc. had been done. Should be done again in '90, MS should be measured in '91. If MS remains, mechanical means relocating boulders should be assessed.

NAME  Steve Lowko CVC
SIGNATURE  Steve Lowko

☑ YES  ☐ NO  PRIORITY SITE FOR REASSESSMENT IN 1991
REASON:  This area was not finished by manual crew. More manual is needed to get oil that has dried from roots. More manual in '90 — MS in '90 + '91 yes check for Sub Surface in '91

NAME  John Dean
SIGNATURE  John Dean

☑ YES  ☐ NO  PRIORITY SITE FOR REASSESSMENT IN 1991
REASON:  Additional small amount can be recovered manually and reapplication of Custom Blend
**TOTAL EST LENGTH OF SHORELINE SURVEYED:** 130 m

**SURVEYED FROM:** Foot □ Boat □ Helo

**WEATHER:** □ Sun □ Clouds □ Fog □ Rain □ Snow

**OIL CATEGORY LENGTH:** W □ m M □ m N □ m V □ m NO/100 m US □ m

---

**SURFACE OIL**

<table>
<thead>
<tr>
<th>SITE 1</th>
<th>SITE 2</th>
<th>SITE 3</th>
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<tbody>
<tr>
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<td><strong>DISTRIBUTION</strong></td>
<td><strong>OILED ZONES</strong></td>
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<tr>
<td>ASPHALT</td>
<td>/C/B/P/S</td>
<td>SU/UI/MI/LI</td>
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<td>MOUSSE</td>
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<td>NO OIL</td>
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**EST. SITE LENGTH** 130 m

---

**SUBSURFACE OIL**

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<th>SITE NO</th>
<th>PIT NO.</th>
<th>PIT DEPTH (cm)</th>
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<th>OILED ZONE INTERVAL</th>
<th>CLEAN BELOW (Y/N)</th>
<th>PIT ZONE</th>
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<td>18</td>
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<td>0·15</td>
<td>Y</td>
<td>X</td>
<td>P/GK</td>
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**COMMENTS**

- Oil consisted of SL/CT and patchy mousse on 60 cm boulders
- 1 big. balloon recovered
- Work on site was initiated by the field crew
- Depth width was 5m x length was 20m
ADDENDUM: SUBDIVISION CONSTRAINTS
SEGMENT EV-5 SUBDIVISION B (2 of 3)

WORK WINDOW

<table>
<thead>
<tr>
<th>Manual Pickup</th>
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<tr>
<td>Bioremediation</td>
<td>WORK PRIOR TO 7/20</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 streams (226-40-16575 and 16577) are more than 100m from work area.

1K Purse Seine Hook-off  Closed to bioremediation after 7/20. No constraint to manual pickup.

5T Bald Eagle Nest  NO CONSTRAINT. USFWS 6/1/90 map indicates no active nest within 400m of Subdivision B work site.

711 Subsistence: Deer Harvesting  Closed to bioremediation after 8/15. No constraint to manual pickup.

OTHER ECOLOGICAL CONSIDERATIONS

Restrict boat and air traffic to essential minimum after 7/20. Restrict beach disturbance to essential minimum after 8/15. Avoid any unnecessary disturbance or damage to unooled biota and substrate.

TAG APPROVAL DATE

ADEC
EXXON
NOAA
USCG

Prepared by WJK  Date 6/1/90

FOSC  Date 7 June 1990
SHORELINE EVALUATION

SEGMENT ST/ EV-05 SUBDIVISION C (3 OF 3) DATE 4/7/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

ADF&G anadromous stream no. 226-40-16575, 16580, 16582, 16577.
1A Salmon stream mouth - fry outmigration (3/1 to 5/15)
1B Salmon stream mouth - spawning (7/10 to 8/31)
5T-4 All bald eagle nests (3/1 to 6/1) - Active eagle nests (3/1 to 9/1)
6Y Recreation: Special use destination
7II Subsistence area: Deer harvesting (8/15 to 2/28)
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:
Avoid any unnecessary disturbance or damage to unoiled biota and substrate. Two anadromous streams: 226-40-16582 and 226-40-16580 and one eagle nest in Subdivision C, and a second eagle nest within 400m in adjacent Subdivision B.

SHPO SIGNATURE: __________ DATE: 5/3/90

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V. Light 63 m: No Oil 1317 m
Subsurface Oil Observed: Yes X No Maximum Depth

RECOMMENDATIONS:

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

COMMENTS: Pickup asphalt + debris as indicated on sketch

TAG COMMENTS: MONITOR TO CHECK SUITDURIN G TREATMENT

TAG APPROVAL DATE: 4/26/90

ADEC John Baker A
EXXON Mark Crisler FOSC: __________ DATE: 5/18/90
NOAA Gary Patrick Ray
USCG Kenneth Virgin
PWS, SEWARD AND HOMER ECOLOGICAL CONSTRAINTS

1A
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. Contact ADF&G Habitat Division prior to treatment for permits.

1B

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

1D
Escher Hatchery release (4/15 to 8/1)

1E
Main Bay Hatchery release (4/20 to 5/10)

1F
Sawmill Bay Hatchery release (4/15 to 8/1)

1G
Cannery Creek Hatchery release (4/21 to 8/1)

1H
Remote release sites

1I
 Gill net area (6/7 to 8/31)

1J
Purse seine area (7/20 to 9/20)

1K
Purse seine hook-off (7/20 to 9/20)

1L
Set net sites (6/11 to 7/25)
For Codes 1C through 1L contact ADF&G for specific dates, locations and constraints.

2M
Herring spawning (4/1 to 6/15)
Restrict boat traffic to essential minimum. Avoid damage to uncoiled intertidal and subtidal algae and seagrass. Contact ADF&G for specific dates and locations.

3N, 3P
Harbor seal and sea lion pupping (5/15 to 7/1)

3Q, 3Q
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.

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

5S
Shorebird/waterfowl concentration (4/1 to 5/15)
Restrict all activity to essential minimum, especially air traffic.

5T
All Bald Eagle nests (3/1 to 6/1)
Active Bald Eagle nests (3/1 to 9/1)
Restrict air traffic 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.

6U
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 destination

7Z
Subsistence area: 
Salmon harvesting (5/1 to 9/30)
Finfish harvesting

7H
Deer harvesting (8/15 to 2/28)

7J
Invertebrate harvesting
For Codes 7Z through 7JJ contact ADF&G and Chenega Corporation for specific dates, locations, and constraints.
NO TREATMENT RECOMMENDED

COMMlNTS


AT A COBBLE-PEBBLE BEACH TO THE NORTH, A 1 M (WIDE) X 10 M (LENGTH) BAND OF TAR PATTERNS AND STAIN WAS FOUND ON THE NORTH SIDE OF THE BEACH. AT THIS LOCATION, A PARTIALLY OILED SNARE BOOM WAS RECOVERED.

NO TREATMENT RECOMMENDED

COMMlNTS

OIL IN THE FORM OF TAR PATTERNS WERE OBSERVED ON THIS SEGMENT. ALTHOUGH BEACH APPEARS TOBE A 1M. TAR BAND FOUND ON THE BEACH BUT NOT ON THE STREAM BED. THE BEACH IS ANOMALOUS. THERE ARE ALONG THE STREAM BED, COBBLE AND STONE BURIES. RECOMMEND THAT A SNARE TEAM WITHIN STREAM AREA A RESCUE TREATMENT IF NEEDED. THE REST OF THE SEGMENT HAD WASHING.
### SHORELINE OILING SUMMARY

**REVISION NO. 06/24/90**

**APR-09-1990 21:13 FROM PACIFIC SEAHORSE TO 01H---00135/643771P**

**SEGMENT NO: 19**

**DATE & TIME:** 04-07-90 21:13

**FROM:** PACIFIC SEAHORSE

**TO:** 01H---00135/643771P

---

**TEAM NO:** 11

**TIDE LEVEL:** 0.9 to 2.8

**DATE & TIME:** 4/7/90

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

**SURVEYED FROM:**
- Foot
- Helo

**WORKING DIRECTION TO SURFACE SEDIMENTS:**
- Low
- Med
- High

**OIL CATEGORY:**

<table>
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<tr>
<th>Length (ft)</th>
<th>M</th>
<th>N</th>
<th>VL</th>
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<tr>
<td>W</td>
<td>F</td>
<td>H</td>
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**SURFACE OIL**

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<td>COAT STAIN</td>
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<td>MOUSSE PATTIES</td>
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<tr>
<td>TARBALLS FILM</td>
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<tr>
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</table>

**PAVEMENT:**
- H F 3 sq. m by 3 cm

**PATTIES/TARBALLS:**
- 0 BAGS

**NEAR SHORE SHEEN:**
- NO

**OILED DEBRIS AMOUNT:**
- Log
- Vegetation
- Trash
- Debris

**DEBRIS COLLECTED:**
- 0 YES

**TYPE SHELL BOOM:**
- No

**BAGS:**
- 0

---

**PHOTOGRAPHS:**
- Roll No. ST-11-C
- Frames: 30, 31

---

**SUBSURFACE OIL**

<table>
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<tr>
<th>PIT NO.</th>
<th>DEPTH (cm)</th>
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<th>OILED INTERVAL (cm)</th>
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**COMMENTS:**

Oiling in this subdivision occurs at the Southern most cove of subdivision C. This is a low angle cobble/pebble beach with two streams. There is a CT/PR distribution of asphalt patties in this area along the Hitz approximately 1m x 2.7m. This band is broken into 3 areas by the forked stream. The patties were manually broken up by the PPAT team. This subdivision also has approximately 25m of very light CT/PR staining.

---

Page 1 of 9

**REVIEWED**

**DATE**
SEGMENT ST/ EV 5
SUBDIVISION C
DATE 4/7/90

CHECKLIST

- Manhole
- Approx Scale
- Seg/Sub Boundary
- Oil Dst.
- Mean
- Length
- % Cover
- Substrate Character
- Est. FFA/ML
- SSL
- (Preferred successional stage
- Percent)
- Plant species(s)
- Photo Location(s)

LEGEND

1 ▲
Pt. - No Subsurface Oil

2 ▲
Pt. - Subsurface Oil

CT/C
Concentration Distribution

CT/B
Bedrock Distribution

CT/P
Patchy Distribution

CT/S
Spattered Distribution

Oiled Vegetation

See map 1

Air Character (type): AP PO CV CT ST MS PT TB FL NO
Sketch of cove with anadromous stream:

- Breakwater
- Sparse mussel bed
- Relatively barren beach
- Fall field
- Beach (and salmon spawning)
- Asphalt
- Anadromous streams (w/salmon bones)
- Oil coat

Ambrose
4/7/90

Subdivision EVO05C

Bio: page 2 of 2
**SHORELINE ECOCLOGICAL SUMMARY**

Segment ST EV005 Subdivision C Date (mo/day/yr) 4/7/90

Time (24 hr) 1930 hrs Biologist Ambrose

(A) Substrate type and % of segments:

<table>
<thead>
<tr>
<th></th>
<th>(1) Bedrock</th>
<th>(2) Boulder</th>
<th>(3) Cobble</th>
<th>(4) Pebble</th>
<th>(5) Sand</th>
<th>(6) Silt</th>
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(B) Overall % cover of biota (% of segment): Dense 10 Moderate 25 Low 65

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

juvenile/adult (X), new settlement (3)

Photographs: Roll No. 

Frames 

**BARNACLES**

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**MYTILUS**

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**FUCUS**

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Wildlife Observations/General Comments: Eagle (below), 2 deer plus deer bones, 1 otter, otter carcass in supralittoral (no sign of oiling).

Ecological Considerations:

711, 64, 5T-5: One immature eagle seen in tree.

See next page for information on anadromous stream.
ADDENDUM: SUBDIVISION CONSTRAINTS

SEGMENT EV-5 SUBDIVISION C (3 of 3)

WORK WINDOW

Manual Pickup
Tarmat Removal
OPEN

ARCHAEOLOGICAL STANDARD CONSTRAINT

If cultural resources are uncovered, PHONE 564-3274.

APPLICABLE ECOLOGICAL TIME CONSTRAINTS

1A,1B Salmon Streams  ADF&G catalogued anadromous streams (226-40-
16580 and 16582) are present in Subdivision C. 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 NO CONSTRAINT. USFWS bald eagle impact assessment completed on 5/26/90 by Mike Lockhart indicates no active nests within 400m of the work area.

711 Subsistence: Deer Harvesting No constraint to manual pickup and tarmat removal.

OTHER ECOLOGICAL CONSIDERATIONS

Restrict boat and air traffic to essential minimum after 7/20. Restrict beach activity to essential minimum after 8/15. Avoid any unnecessary disturbance or damage to unrolled biota and substrate.

TAG APPROVAL DATE 6/04/90
ADEC Ray Mannix, Director
EXXON
NOAA
USCG

Prepared By: Andrew Mage Date 6/3/90

FOSC D. Jaworski DATE 6/4/90
SHORELINE EVALUATION

SEGMENT ST/ EV-05 SUBDIVISION A (1 OF 1) DATE 4/7/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
55 All bald eagle nests (3/1 to 6/1) - Active eagle nests (3/1 to 9/1)
65 Recreation: Anchorages (6/1 to 9/15)
7II Subsistence area: Deer harvesting (8/15 to 2/28)
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:
Avoid any unnecessary disturbance or damage to uneoiled biota and substrate. Stream not listed in anadromous catalogue (USGS Seward A-3 Revision 12/89).

SHPO SIGNATURE: _______________________________________ DATE: 4/20/90

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V. Light 0 m: No Oil 1299 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: 4/20/90
ADEC ART WEISS DATE: 5-1-90
EXXON ANDY G. DATE: 5-1-90
NOAA BURT WESTOFF
USCG KENNETH KIMBER
PWS, SEWARD AND HOMER ECOLOGICAL CONSTRAINTS

1A
Salmon stream mouth - fry outmigration (3/1 to 6/15)
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. Contact ADF&G Habitat Division prior to treatment for permits.

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

1D
Estuary Hatchery release (4/15 to 6/1)

1E
Main Bay Hatchery release (4/20 to 5/10)

1F
Sewmill Bay Hatchery release (4/15 to 8/1)

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

1H
Remote release sites

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 (6/11 to 7/25)
For Codes 1C through 1L contact ADF&G for specific dates, locations and constraints.

2M
Herring spawning (4/1 to 6/15)
Restrict boat traffic to essential minimum. Avoid damage to unveilled intertidal and subtidal algae and seagrass. Contact ADF&G for specific dates and locations.

3N, 3P
Harbor seal and sea lion pupping (5/15 to 7/1)

3O, 3Q
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.

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

5S
Shorebird/waterfowl concentration (4/1 to 5/15)
Restrict all activity to essential minimum, especially air traffic.

8T
All Bald Eagle nests (3/1 to 6/1)
Active Bald Eagle nests (3/1 to 9/1)
Restrict boat traffic 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.

6U
Recreation:
Tent sites (6/1 to 9/15)
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

7Z
Subsistence area: Salmon harvesting (5/1 to 6/30)

7H
Finfish harvesting

7I
Deer harvesting (9/15 to 2/28)

7J
Invertebrate harvesting
For Codes 7Z through 7JJ contact ADF&G and Chenega Corporation for specific dates, locations, and constraints.
FIELD SHORELINE COMMENT SHEET

SEGMENT ST/ EV- 6  SUBDIVISION: ________________ DATE 4/7/90

NOAA
NAME GARY SHIGENAKA  SIGNATURE Gary Shigenaka

☐ NO TREATMENT RECOMMENDED  ☐ TREATMENT SUGGESTED

COMMENTS
SEGMENT CONSISTED OF ROCKY SHORELINE, SOMETIMES WITH VERTICAL ROCK WALLS. AN EAGLE WEST AND AT LEAST ONE ANOMALOUS STREAM WERE INCLUDED IN THE AREA SURVEYED. NO EVIDENCE OF OILING WAS OBSERVED IN THIS SEGMENT.

ADEC
NAME John Hooper  SIGNATURE

☐ NO TREATMENT RECOMMENDED  ☐ TREATMENT SUGGESTED

COMMENTS
No oil was observed on this segment.

We saw a small possibly anomalous stream (fish bone, jaws) present along side stream. Dry gill in L.M.B. T2's oil in stream bed. No sheening or evidence of oiling in or around stream. No S.S. oiling observed on this segment.

LAND MANAGER
NAME: James A. Barker  SIGNATURE James Barker

☐ NO TREATMENT RECOMMENDED  ☐ TREATMENT SUGGESTED

COMMENTS NO OIL OBSERVED ON THIS BEACH SEGMENT
SHORELINE OILING SUMMARY

NOAA

6.8 to 8.6
DATE 5/17/90

SURFACE OIL

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PAVEMENT: H F S

PATTIES / TARBALLS

NEAR SHORE SHEEN?

DEBRIS COLLECTION:

OILED DEBRIS

AMOUNT

DEBRIS COLLECTED

TYPE

Photographs:

Roll No. 0

Frames 0

SUBSURFACE OIL

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COMMENTS

No oil was observed in this segment. Shore zone mostly bedrock / boulders w/ a few small pocket cove / pebble beaches. These beaches had snow in the supra NZ.

Page 1 of

REVIEWED

DATE
### Subsurface Oil (Continued)

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<th>Subsurface Oil Character</th>
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**Comments**

Reviewed: 4/12/70
Sketch Map

Legend
/// Boulder/Bedrock
A - Forest

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

EV-6A

ADEC Segment Length: 1818m

Map Key: PWS-259
Name: Mike Rogers
Date: 4/7/10

Date Entered:
**SHORELINE ECOLOGICAL SUMMARY**

Segment ST, EV006  Subdivision A  Date (mo/day/yr) 4/7/90

Time (24 hr) 0850  Biologist Ambrose

(A)  Substrate type and % of segments:
- (1) Bedrock 50%
- (2) Boulder 25%
- (3) Cobble 15%
- (4) Pebble 5%
- (5) Sand 5%
- (6) Silt

(B)  Overall % cover of biota (% of segment):
- Dense 10%
- Moderate 25%
- Low 65%

(C)  Density, substrate preference (by number from A, above), & vertical zonation of major taxa:
- Juveniles/adults (X), new settlement (3)

**BARNACLES**

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Photographs:
- Roll No. __________
- Frames __________

Wildlife Observations/General Comments:
- Eagles (see below), 2 otters, 4 gulls, 2 Canada geese, 4 Cormorants, 2 Harlequin ducks.
- Moderate cover on high-angle beaches; moderate barnacles and limpets on cobble in pocket beaches, but no Fucus or Mytilus.

Ecological Considerations:
- 6V, 711, 57-2: One pair of mature bald eagles nest nearby.
- A anadromous stream occurs in segment (salmon bones found on bank of stream). No oil found nearby.

*Note: part surveyed by boat.
SHORELINE EVALUATION

SEGMENT ST/ EV-07   SUBDIVISION A (1 OF 1) DATE  4/7/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
ADFG anadromous stream no. 226-40-16550, 16557, 16561, 16559, 16563.
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
7II Subsistence area: Deer harvesting (8/15 to 2/28)
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:
Avoid any unnecessary disturbance or damage to unoiled biota and substrate. If treatment is planned, avoid damage to mussel beds.

SHPO SIGNATURE (V. Holm) DATE: 04/28/90

OILING CATEGORIZATION:
Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 83 m: No Oil 5603 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: 5/26/90
ADEC (John Lack) EXXON (Alynn) FOSC ( )
NOAA (Gary Penzer) USCG ( ) DATE: 5/12/90
Salmon stream mouth - fry outmigrant (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. Contact ADF&G Habitat Division prior to treatment for permits.

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

Estuary Hatchery release (4/15 to 6/1)

Main Bay Hatchery release (4/20 to 5/10)

Seward Bay Hatchery release (4/15 to 8/1)

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

Remote release sites

Gill net area (6/7 to 6/31)

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)
For Codes 1C through 1L contact ADF&G for specific dates, locations and constraints.

Herring spawning (4/1 to 6/15)
Restrict boat traffic to essential minimum. Avoid damage to unoiled intertidal and subtidal algae and seagrass. Contact ADF&G for specific dates and locations.

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 800m. Aircraft to maintain 800m horizontal and 300m vertical distance from haulouts.

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

Shorebird/waterfowl concentration (4/1 to 5/15)
Restrict all activity to essential minimum, especially air traffic.

All Bald Eagle nests (3/1 to 6/1)
Active Bald Eagle nests (3/1 to 6/1)
Restrict air traffic to essential minimum. No personnel within 800m. 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.

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 destination

Subsistence area: Salmon harvesting (5/1 to 9/30)
Finfish harvesting
Deer harvesting (8/15 to 2/28)
Invertebrate harvesting
For Codes 7Z through 7U contact ADF&G and Chenega Corporation for specific dates, locations, and constraints.
FIELD SHORELINE COMMENT SHEET

SEGMENT: SE/ EV-7 SUBDIVISION: ___________________________ DATE: 4/7/90

NAME: Gary Shigenaka SIGNATURE: ___________________________

☐ NO TREATMENT RECOMMENDED ☑ TREATMENT SUGGESTED

COMMENTS:

SEGMENT CONSISTED OF A LARGELY ROCKY SHORELINE OCCASIONALLY INTERRUPTED BY POCKET BEACHES, ON THE NORTHERN END OF EVAUX ISLAND. LITTLE EVIDENCE OF OILING WAS ENCOUNTERED ON THIS SEGMENT. AT THE FIRST POCKET BEACH FOUND AT THE SOUTH END OF THE SEGMENT, A VERY LIGHT SHEEN WAS FOUND IN ONE PIT DUG INTO THE PEBBLE BEACH, BUT NO OTHER SIGN OF OIL WAS FOUND IN THIS PIT OR ANY OTHER. THE ONLY OTHER OILING SEEN IN THE SEGMENT WAS A BAND OF ASPHALT IN THE UPPER INTERTIDAL ZONE BETWEEN TWO ANAPROXIMATE STREAMS, MEASURING APPROXIMATELY 1 M WIDE BY ABOUT 50 M IN LENGTH. THE NATURE OF THE DISTRIBUTION WAS DISCONTINUOUS, AND VARIED FROM WEATHERED STAIN TO COVER.

MUCH OF THE SURFICIAL ON BEACHES OF THE SEGMENT WAS COVERED BY SNOW.

☐ NO TREATMENT RECOMMENDED ☑ TREATMENT SUGGESTED

COMMENTS:

Oilings observed on this segment consisted of an asphault baulk 1-5 cm thick. The baulk was between two Anapressive streams (beaches or streambeds) although it was over 40-60 m from stream banks. No surface or submersed contamination was found in other streams. If the Anap- Seat team is in the area these streams should be assessed for oiling although marginal is within 100yds. Also observed was a very light contaminant sheen in the ripples on one of the pocket beaches, this was isolated or nearby pits revealed no others. Treatment suggested is to have Anap-Seat look at streams and make recommendations although this is not a priority area.

LAND MANAGER

NAME: James A. Barker SIGNATURE: ___________________________

☐ NO TREATMENT RECOMMENDED ☑ TREATMENT SUGGESTED

COMMENTS:

TEAM OBSERVED INTERMITTENT PATTIES AND ASPHALT BAND 1-5 CM IN Width, NEAR STREAM BANKS. DUE TO THE SUSPECTIVITY OF THESE STREAM BANKS STOWELS SHOULD BE USED AS CLEAN-UP AGENT. NOTE THAT ANAP-3CM SHOULD MAKE RECOMMENDATIONS CONCERNING RECOMMUNICATE.
**SHORELINE OILING SUMMARY**

**O.G.** Mike Fogle  NOA: Gary Sharraco  SEGMENT ST/ EU-07

**BIO** Richard Ambrose  LAND REP: James A Dorsey  SUBDIVISION A (104)

**EXXON** Larry Olson  ADEC: John Hyst  TIME 16: 60 to 17:50

TEAM NO.: 11  TIDE LEVEL: 5.4 to 1.4  DATE 4/7/90

EST. SUBDIVISION LENGTH: 549 m  □ Sun □ Clouds  □ Fog  □ Rain  □ Snow

UPLANDS DESCRIPTION:  □ Grass  □ Forest  □ Rock  □ Road  □ Subdivision

SLOPE:  □ Lang  □ Hang  □ Vert  □ Slope

SURFACE SEDIMENTS:  □ R  □ B  □ C  □ P □ G □ S □ M □ V □ %

OIL CATEGORY LENGTH: W m M m N m V m W m NO m

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PAVEMENT: H F $\text{sq. m by cm}$

PATTIES / TARBALLS BAGS

NEAR SHORE SHEEN? □ BR RW SL TL

OILED DEBRIS AMOUNT DEBRIS COLLECTED

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Photographs:

Roll No.  
Frames  

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<td>P,G</td>
<td></td>
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</tr>
<tr>
<td>5</td>
<td>25</td>
<td>Y</td>
<td>-</td>
<td>Y</td>
<td>X</td>
<td>M (H.O 10 cm)</td>
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</tr>
<tr>
<td>6</td>
<td>30</td>
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<td>-</td>
<td>Y</td>
<td>X</td>
<td>P,S,M</td>
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</table>

COMMENTS

Most of the segment was clean with the exception of a line x 30 cm asphalt patties distribution in the 1:1275 scale map. This is located on a low angle O/C beach. The end of the segment consists mainly of bedrock/boulders with some low angle pocket cobble beaches.
## Subsurface Oiling (Continued)

<table>
<thead>
<tr>
<th>Pit No.</th>
<th>Pit Depth (cm)</th>
<th>Subsurface Oil Character</th>
<th>Oiled Interval (cm)</th>
<th>Below Oil/Film Color</th>
<th>Pit Zone</th>
<th>Ana</th>
<th>Subsurface Sediments</th>
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<td>7</td>
<td>20</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
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<td>G, R</td>
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<td>8</td>
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<td>P, G</td>
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<tr>
<td>9</td>
<td>15</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td></td>
<td>P, G (H2O @ 10 cm)</td>
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<tr>
<td>10</td>
<td>20</td>
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<td>P, G.S</td>
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<tr>
<td>11</td>
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<td>P, G</td>
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<tr>
<td>12</td>
<td>20</td>
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<td>-</td>
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<td>X</td>
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<td>P, G</td>
</tr>
<tr>
<td>13</td>
<td>15</td>
<td>X</td>
<td>-</td>
<td>X</td>
<td>X</td>
<td></td>
<td>G, M (H2O @ 5 cm)</td>
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</tbody>
</table>

### Comments

[No comments provided]
SHORELINE ECOLOGICAL SUMMARY

Segment ST / EV007 Subdivision A __________ Date (mo / da) __________ 4/7/90

Time (24 hr) 1545 hrs. Biologist __________

DRAFT

(A) Substrate type and % of segments:
   (1) Bedrock 60 (2) Boulder 20 (3) Cobble 10 (4) Pebble 5 (5) Sand 5
   (6) Silt ___

(B) Overall % cover of biota (% of segment): Dense 15 Moderate 45 Low 50

(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 (G)

<table>
<thead>
<tr>
<th>Substrate Type</th>
<th>Dense</th>
<th>Moderate</th>
<th>Sparse</th>
<th>Rare</th>
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<tr>
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<td>1M</td>
<td>1L</td>
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</table>

Wildlife Observations / General Comments:
1 otter, 1 deer (plus deer tracks (2 sets) & skat),
13 Barrow's goldeneyes, 6 Harlequin ducks, 2 cormorants.
Many sections (esp. high-tide beaches & walls) have moderate density,
but cover is sparse on cobble beaches.

Ecological Considerations:
18, 71, 6V: 3 (possibly four) anadromous streams (see next page)

*Note: part surveyed by boat.
Three anadromous streams are in EVO07A, as identified by salmon bones found in or nearby the streams.

At the first stream there was an extensive beach comprised of cobbles and pebbles. There were some barnacles on cobbles, and *Fucus* has accumulated (as drift) near the mouth of the stream, but the beach was mostly barren. No oil was found nearby.

Two (and possibly three) anadromous streams were in one core, as noted below. A band of asphalt was found 40m from one stream, with a scattered mussel bed below.
ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/ EV-07 STREAM NO: 226-40-16559 DATE 4/22/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
Salmon stream no's: 226-40-16550 (P, 12/89), 226-40-16563 (Ps, 12/89),
226-40-16557 (Ps, 12/89), 226-40-16561 (Ps, 12/89)
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)
6V Recreation: Anchorages (6/1 to 9/15)
7II Subsistence area: Deer harvesting (8/15 to 2/28)
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).

SHPO SIGNATURE: DATE: 5/8/90

Subsurface Oil Observed: Yes____ No__X____ Maximum Depth____

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

COMMENTS:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

TAG COMMENTS:

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

TAG APPROVAL DATE: 5/7/90
ADEC Exxlon NOAA USCG

DATE: 5-15-90
Salmon stream mouth - try 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 prior to treatment for consultation and/or permit application.
AGENCY CONTACT PERSON: ADF&G John Morlan 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 Peitz 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 8/1)
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 Peitz 424-3214 1D 1F 1G PWS Aquaculture Association John McMillan or Bruce Suzamoto 424-7511

Gill net area (8/7 to 8/31)
Purse seine area (7/20 to 9/30)
Purse seine hook-off (7/25 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 (11) 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 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 unveiled intertidal and subtidal algae 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 (5/15 to 7/1)
Harbor seal and sea lion molting (8/15 to 9/1)
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 Jill Parker 786-3377

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 786-3377

Shorebird/waterflow concentration (4/1 to 6/15)
Restrict all activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.
AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377 1D 1F 1G ADF&G Tom Roth 267-2236

All Bald Eagle nests (6/1 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

Recollection:
Tent sites (6/1 to 6/15)
Anchorage (6/1 to 9/15)
Forest Service cabin (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 (9/15 to 2/28)
Invertebrates 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 EV 007  SUBDIVISION: 16 85 9  DATE 4/22/90

NO TREATMENT RECOMMENDED ☑ TREATMENT SUGGESTED

COMMENTS

USCG NAME AND McMahan SIGNATURE

☐ NO TREATMENT RECOMMENDED ☑ TREATMENT SUGGESTED

COMMENTS

NAME, HOME TEAM MEMBER SIGNATURE

☐ NO TREATMENT RECOMMENDED ☑ TREATMENT SUGGESTED

COMMENTS

LAND MANAGER
NAME, HOME TEAM MEMBER SIGNATURE

☐ NO TREATMENT RECOMMENDED ☑ TREATMENT SUGGESTED

COMMENTS
ASC # 226-40-16599

Segment EV-007

Observations: The only observed oil impacts at this site were 3 to 4 widely scattered tar splatters and one asphalt chunk 8 cm in diameter.

Treatment Recommendations: If future observations do not reveal significant quantities of buried oil, no treatment is recommended.
**SHORELINE OILING SUMMARY (ANADOL) 7/55**

**FROM**

**TO**

**TEAM NO.** 15

**TIDE LEVEL** 1.5 FT

**DATE** 7/21/70

**EST. SUBDIVISION LENGTH:** 200 ft

**SURVEYED FROM:** Boat

**SURFACE SEDIMENTS:**

- % S: 10%
- % C: 45%
- % P: 45%
- % G: 0%
- % B: 0%
- % M: 0%
- % V: 0%

**SLOPE:**

- Long: 25%
- Hang: 35%
- Var: 25%

**WAVE EXPOSURE:**

- Low
- Med
- High

**OIL CATEGORY LENGTH:** W: __ m  M: __ m  N: __ m  V: __ m  NO: __

---

### SURFACE OIL

<table>
<thead>
<tr>
<th>CHARACTER</th>
<th>DISTRIBUTION</th>
<th>OIL / FILM COLOR</th>
<th>IMPACTED ZONES</th>
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<tr>
<td>Asphalt Pavement</td>
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<td>Pool</td>
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<td></td>
</tr>
<tr>
<td>Cover</td>
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</tr>
<tr>
<td>Patties</td>
<td></td>
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</tr>
<tr>
<td>Tarballs</td>
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<td></td>
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<tr>
<td>Film</td>
<td></td>
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<td>No Oil</td>
<td><strong>NONE</strong></td>
<td><strong>XXX</strong></td>
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**Pavement W F S**

- W: __ sq. m by __

**Patties/Tarballs**

- 0

**Near Shore Sheen?**

- No

**Oiled Debris**

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<tr>
<th>Debris Classification</th>
<th>SM</th>
<th>MD</th>
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<th>Did You Collect</th>
<th>Debris Type</th>
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**Photographs:**

- Roll No.
- Frame

---

### SUBSURFACE OIL

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<th>BELOW OIL / FILM COLOR</th>
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</tbody>
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| PIT ZONE | A N A | SHEEN | | SURFACE OIL |
|----------|-------|-------|----------|
|          |       |       | P I C K  |

**REVIEWED**

- Date: 4-24-8
Segment EV 007
Stream 226-40-16559

Ecological Summary

This small stream has vertical bedrock walls at the mouth on the east side, and a boulder/cobble/gravel beach on the west side. There are very dense barnacle populations on the bedrock from LTZ to UT, and on the cobbles and boulders in LTZ. Two harbor seals swimming nearby. No cleanup needed.
ADPAC MULTI-ASSESSMENT DATA FORM

1. SURVEY TYPE: SE 85-28 TO AVE SCHM M655 PTA
   METHOD: Aerial
   DATE: 4/22/90
   HIGH TIDE TIMES: 12:05
   HIGH TIDE HTS: 10.0
   LOW TIDE TIMES: 06:05, 18:14
   STOP TIME: 17:05
   SEGMENT #: EV-007
   STATION #: 236-40-008
   7. TIDE HT AT SURVEYS:
   8. K-UNIT:
   9. STAT AREA:
   10. LAY:
   11. LONG:
   12. SOURCES:
   13. LOCATION:
   14. DESCRIPTION:

EXTENT OF OIL

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<th>STREAM</th>
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<tr>
<td>L</td>
<td>V</td>
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<td>60</td>
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CULTED AHAO, FISH STREAM

CULTED #: 236-40-1433

CATALOG #: T

EVALUATION:

OIL IN STREAM BED
OIL ON STREAM BANK
OIL ON BEACH ADJACENT TO HOUTH Y/N
OIL WITHIN 1 MILE OF STREAM
WEATHER

OIL SPILLS

HIGH
MODERATE
LOW

SUBSTRATE TYPE:
Bedrock  | Boulder  | Cobble
Gravel   | Sand     | Mud/silt

35
20
10
20
35
35
20
4

4.1 TAR SPLATTERS WIDELY SCATTERED

THROUGH INTERTIDAL ZONE. EXTREMELY LOW IMPACT OBSERVED.
Recommendations: No treatment required.
I agree with recommendations.

3-4 Tar Splatters (maximum diameter 10 cm) found in entire intertidal zone.
SHORELINE EVALUATION

SEGMENT ST/ EV-08 SUBDIVISION A (1 OF 3) DATE 4/20/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
ADFG anadromous stream no. 226-40-16543, Ps, 12/89 & 226-40-16545, Ps, 12/89
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)
6V Recreation: Anchorages (6/1 to 9/15)
7II Subsistence area: Deer harvesting (8/15 to 2/28)
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:
Avoid any unnecessary disturbance or damage to unoiled biota and substrate. Salmon stream 226-40-16545, Ps, 12/89 located near boundary of EV-08 B. Eagle nests located across embayment.

SHPO SIGNATURE: DATE: 5/3/80

OILING CATEGORIZATION:
Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 0 m: No Oil 462 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: Monitors to check suit while in the vicinity

TAG APPROVAL DATE: 5/3/80
ADEC Art Weiner DATE: 5/18/90
EXXON Larry Ted
NOAA Sunni Peters
USCG Kenneth Keene
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 washing 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 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 areas—(5/31 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

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

No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or Inipol application, prior to 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 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-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 Inipol 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

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

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 cabin—(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

Duck harvesting—(8/15 to 2/28)

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 Fial 267-2359
USCG NAME: Shawn MAAS SIGNATURE: Dc

☑ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED
COMMENTS:

No further oils found on beach. Tarballs found were removed by SSAT team. No subsurface oils noted in this subdivision.

ADEC NAME: Dave Sale SIGNATURE: Dc

☐ NO TREATMENT RECOMMENDED ☒ TREATMENT SUGGESTED
COMMENTS:

Tar patches found on beach were picked up by SSAT team, so there may not be any need for work here. Treatment would simply require verifying that all tar was picked up and removed. While cleanup crews are picking up subdivision B.

LAND MANAGER NAME: Dc Rumpker Jr SIGNATURE: Dc

☐ NO TREATMENT RECOMMENDED ☒ TREATMENT SUGGESTED
COMMENTS:
SHORELINE OILING SUMMARY

**SEGMENT ST:** CV-OIL
**LAND REP:** D. Komprust

**ADVANCED:** R. samo

**DATE:** 20 April 1990

**TIME:** 10:33 to 10:45

**TEAM NO.:** 10

**TIDE LEVEL:** +1.01 m to +1.67 m

**EST. SUBDIVISION LENGTH:** 302 m

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

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

**WORKING DIRECTION:**
- □ N to S

**SURFACE SEDIMENTS:**
- □ R 10% B
- □ C 55% P
- □ S 10% G
- □ 0

**SLOPE:**
- □ Lang 100% Hang
- □ Vert 0%

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

**OIL CATEGORY LENGTH:**
- □ W 0 m
- □ M 0 m
- □ N 0 m
- □ V 15 m

**SURFACE OIL**

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**OILED DEBRIS AMOUNT**

- Log: X
- Vegetation: X
- Trash: X
- Debris: X

**PAVEMENT**
- H F S
- □ All patts and bags removed.
- N

**NEAR SHORE SHEEN?**
- □ BR RW SL TL

**OIL FIELD**
- □ All
- □ 0

**OIL FIELD SURFACE SEDIMENTS**
- □ R
- □ C
- □ S
- □ G

**COMMENTS**

Tar patties become concentrated at south end of segment.

The segment is primarily a low angle beach front with local shallow peat. All detected oil was removed.

**DATE:** 28/59

**REVIEWED:** Jw

**DATE:** 9/25/90
**SHORELINE ECOLOGICAL SUMMARY**

**Segment ST/E 1-8**  
**Subdivision:** A  
**Date (mo/day/yr):** 4/20/90

**Time (24 hr):** 1930-1930  
**Biologist:** Lemon  
**Conditions:** clear, calm, no seas

(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  
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)

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**BARNACLES**

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**Wildlife Observations/General Comments:**
- 6 gulls  
- 2 eider ducks  
- 1 steller's jay  
- 2 waterfowl

**Ecological Considerations:**
- This is a good anchorage area; a pleasure craft was anchored during our survey. Subsistence deer hunting also takes place here.
- Anadromous stream = 226 - 40 - 16545 Flows through here too. Though not formally documented, Pacifichorn snail shells are abundant on the beach indicating rich beds nearby.

**Photographs:**
- Roll No. ST/10/13
- Frames 23, 24

---

This low energy, small angular-substrate bay head probably is greatly diluted by freshwater, perhaps limiting the diversity and density of marine forms in the water and crustaceans here than outside the bay and thus it is bloom time.
SHORELINE EVALUATION

SEGMENT ST/ EV-08 SUBDIVISION B (2 OF 3) DATE 4/23/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

ADF&G anadromous stream no. 226-40-15543, Ps, 12/89 and 226-40-15545, Ps, 12/89

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)
6V Recreation: Anchorages (6/1 to 9/15)
7II Subsistence area: Deer harvesting (8/15 to 2/28)

See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:
Avoid any unnecessary disturbance or damage to unoiled biota and substrate. Salmon stream 226-40-15545, Ps, 12/89 located at boundary of EV-08A, and 226-40-15543 located within subdivision. 5T(2) 1 nest located within subdivision, another <400 M in subdivision C.

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

OILING CATEGORIZATION:
Wide 0 m: Medium 263 m: Narrow 0 m: V.Light 451 m: No Oil 174 m
Subsurface Oil Observed: Yes No X Maximum Depth

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

COMMENTS: Recommend removal of asphalt mats where indicated on sketch map. Work should be conducted after 6/1 and with USFWS approval based on eagle nest constraints.


TAG APPROVAL DATE: 5/3/93
ADEC [Signature] DATE: 5-14-90
EXXON [Signature] FOSC: [Signature] DATE: [Signature]
NOAA [Signature] Caring not to harm essential following treatment.
USCG [Signature] Notify CVC 24 hrs. in advance of work.
Salmon stream mouth - try 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 Ininpol 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 Ininpol 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)
Seawall Bay Hatchery release (4/15 to 6/11)
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 Ininpol 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 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 areas (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 Ininpol 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 Ininpol 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 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 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 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 766-3377

Recreation:
Tent sites (6/1 to 9/15)
Anchorage (8/1 to 9/15)
Forest Service cabins (8/1 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 2/28)
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 Ininpol 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 267-2358
SEGMENT #1 EVOK  SUBDIVISION: 3  DATE: April 23, 1999

USCG  NAME: SHAW - M.D.  SIGNATURE: [Signature]

☐ NO TREATMENT RECOMMENDED  ☑ TREATMENT SUGGESTED

COMMENTS:

MANUAL REMOVAL OF ASPHALT/PAVEMENT RECOMMENDED FOR THIS SUBDIVISION. ALSO A REINSPECTION OF SUPRATIDAL. SNOW COVERED MUCH AND MOST OILS FOUND IN UPPER INTERVAL. NO SUBSURFACE OILS NOTED.

ADEC  NAME: [Name]  SIGNATURE: [Signature]

☐ NO TREATMENT RECOMMENDED  ☑ TREATMENT SUGGESTED

COMMENTS:

1. MANUAL REMOVAL OF TAR PATTIES AND TAR BALLS AT E+4 TIDE.

2. REMOVE ANY DEBRIS FOUND IN SUPRATIDAL WE WERE UNABLE TO VIEW BECAUSE OF SNOW.

LAND MANAGER  NAME: [Name]  SIGNATURE: [Signature]

☐ NO TREATMENT RECOMMENDED  ☑ TREATMENT SUGGESTED

COMMENTS:

16 of 59
## SURFACE OIL

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### PAVEMENT
- H: 692 cm by 3 cm

### NEAR SHORE SHEEN?
- NO BR RW SL TL

### OILED DEBRIS
- Log: X
- Vegetation: X
- Trash: X
- Debris: X

### DID YOU COLLECT DEBRIS?
- YES X NO

### TYPE
- Tar mat: X

### SURFACE SOIL SEDIMENTS

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### COMMENTS
A low angle pebble, cobble, gravel beach. Initial oiling was in the form of mousse, pattiels which are now changing to tar. There is no evidence of any oil below about 3 cm depth. Tar mats are quite soft and are easily removed. No evidence for any oiling in E72, but area was snow covered.
SHORELINE ECOLOGICAL SUMMARY

Segment ST/EV-08 Subdivision B Date (mo/day/yr) 4/20/90
Time (24 hr) 0306-0830 Biologist Leon

(A) Substrate type and % of segments:
(1) Bedrock O (2) Boulder 5 (3) Cobble 40 (4) Pebble 40 (5) Sand 15 (6) Silt 0

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

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Wildlife Observations/General Comments:

10 waterfowl
2 Macnae
3 Oystercatchers

Ecological Considerations: This area is used for deer herds, boat anchorages, and lies between 2 substantial streams w 226-40 16E 43.5
226-40 16E 45
<table>
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**Map Key:** PWS-273  
**Name:** L. Marty  
**Date:** 23 April 1990  
**Date Entered:**

---

**Legend:**
- XXXX Wide
- /// Medium
- --- Narrow
- TTTT Very Light
- 0000 No Oil

---

**ADEC Segment Length:** 1910m
ARCHAEOLOGICAL STANDARD CONSTRAINT

If cultural resources are uncovered, PHONE 564-3274.

APPLICABLE ECOLOGICAL TIME CONSTRAINTS

<table>
<thead>
<tr>
<th>Code</th>
<th>Description</th>
<th>Details</th>
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<tr>
<td>1A,1B</td>
<td>Salmon Stream</td>
<td>ADF&amp;G catalogued anadromous stream (226-40-16543) is located in this subdivision. No constraint to tarmat removal.</td>
</tr>
<tr>
<td>5T</td>
<td>Bald Eagle Nest</td>
<td>NO CONSTRAINT. Work area is more than 400m from nest.</td>
</tr>
<tr>
<td>7II</td>
<td>Subsistence: Deer Harvesting</td>
<td>No constraint to tarmat removal.</td>
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</tbody>
</table>

OTHER ECOLOGICAL CONSIDERATIONS

No disturbance of stream bed or banks. Restrict boat and air traffic and beach disturbance to essential minimum after 8/15. Avoid any unnecessary disturbance or damage to uncollected biota and substrate.

TAG APPROVAL DATE: 5/29/90

Prepared By: Andrew Toma

Date 5/24/90
SHORELINE EVALUATION

SEGMENT ST/ EV-08 SUBDIVISION C (3 OF 3) DATE 4/23/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

ADFG anadromous stream no. 226-40-16543, Ps, 12/89 & 226-40-16545, Ps, 12/89

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)
6V Recreation: Anchorages (6/1 to 9/15)
7II Subsistence area: Deer harvesting (8/15 to 2/28)
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:
Avoid any unnecessary disturbance or damage to unoined biota and substrate. 5T (2) located proximal to boundary with Subdivision B and with Subdivision C.

SHPO SIGNATURE: Charles __________ DATE: 5/3/90

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 0 m: No Oil 635 m
Subsurface Oil Observed: Yes No 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: 5/13/90

ADEC: Art Werner  D_________ FOSC: ______ DATE: 5-18-90
EXXON: Andy Meier  A_________
NOAA: Gary Jeffers  D_________
USCG: Kenneth Kern  D_________
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/or permit application.

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

Salmon fry nursery area: (3/1 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 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 Peitz 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 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: 1E ADF&G Larry Peitz 424-3214

USFWS Jill Porlcor 78&-3377
USFWS prior to treatment for confirmation of dates.

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

Contact ADF&G for confirmation - dates and locations may vary. Restrict boat traffic to essential minimum. Avoid damage to uncoiled intertidal and subtidal algae 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 Bigga 424-3235

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

Restrain 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. Contact ADF&G and USFWS prior to confirmation.

AGENCY CONTACT PERSON: ADF&G Steve Zimmerman 586-7235

US National Marine Fisheries Service

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

ADF&G Tom Rothby 267-2208

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 267-2208

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 destinations

Subsistence area: Salmon harvesting (6/1 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 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 Fail 267-2359
SUBDIVISION: C

NO TREATMENT RECOMMENDED

PARTIES FOUND WERE REMOVED BY SSAF TEAM
NO FURTHER OILS NOTED
NO SUBSURFACE OILS NOTED

ADEC
NAME: Dave Spie
SIGNATURE: [Signature]

NO TREATMENT RECOMMENDED
COMMENTS: EXCEPT VERIFICATION BY TREATMENT TEAMS THAT
ALL OIL PARTIES ARE GONE.
No oil was found in this subdivision, except for
some thin patches that were removed.

LAND MANAGER
NAME: Don Kempkeff, Jr
SIGNATURE: [Signature]

NO TREATMENT RECOMMENDED
TREATMENT SUGGESTED

27959
### Shoreline Oiling Summary

**Date:** 23/04/90  
**Team No.:** 10  
**Tide Level:** 7:44 m  
**Entrapment Date:** 23/04/90  
**Surf Description:** Sun  
**Uplands Description:** Grass  
**Surveyed From:** Foot  
**Surface Sediments:** Grass  
**Surface Oil:**  
- **Character:** Asphalt Pavement  
- **DISTRIBUTION:**  
- **Oil/Film Color:**  
- **Impacted Zones:**  

**Subsurface Oil**  
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### Comments

**REVIEWED**  
**DATE:** 4/25/90
SHORELINE ECOLOGICAL SUMMARY

Segment ST 12-08 Subdivision C

Date (mo/day/yr) 23 Apr 90

Time (24 hr) 0630-0930 Biologist Lamon

(A) Substrate type and % of segments:
   (1) Bedrock 10 (2) Boulder 10 (3) Cobble 40 (4) Pebble 20 (5) Sand 20 (6) Silt 0

(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)

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Photographs:
   Roll No. ST10/14
   Frames 9, 10

NOT PRESENT

Wildlife Observations/General Comments: Bedded clams, Littorina eggs, Fucus is reproductive and dead oyster (see). New growth, pictures has sporing on bedrock. Bedrock did not extend into low tide.

Ecological Considerations:
   Eagle nest could not be confirmed; no eagle seen 23 Apr 90. Good anchorage and deep harvest area. Uplifted clam beds may indicate winter beds below. Another stream in this area may also be a spawning...
SHORELINE EVALUATION

SEGMENT ST/EV-09 SUBDIVISION A (1 OF 1) DATE 4/25/90

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)
Eagle nest within 400 M of segment
6V Recreation: Anchorages (6/1 to 9/15)
7II Subsistence area: Deer harvesting (8/15 to 2/28)
See attached Ecological Constraint sheet for specific constraints and contacts.

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

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

OILING CATEGORIZATION:
Wide 0 m: Medium 0 m: Narrow 125 m: V.Light 347 m: No Oil 257 m
Subsurface Oil Observed: Yes No X Maximum Depth

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

COMMENTS: Recommend manual pickup of scattered tar patties and removal of tarmats as shown on sketch map. Work should be conducted after 6/1 and with USFWS approval based on eagle nest constraints.

TAG COMMENTS:

TAG APPROVAL DATE: 5/3/90

ADEC Exxon NOAA USCG

FOSC: [Signature] DATE: 5/14/90

Access need for bioremediation following tarmat removal notify CVC 24 hrs. in advance of work.
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 intracolony 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/or permission application.

AGENCY CONTACT PERSON: ADF&G John Morison 207-2324

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 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 Peitz 424-3214

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 Peitz 424-3214 1D 1F 1G PWS Aquaculture Association John McMillan or Bruce Suzamoto 424-7511

Restrict boat and air traffic to essential minimum. When set net sites are present (1L) restrict boat 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

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 566-7235 ADF&G Don Calkins 267-2403

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

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

AGENCY CONTACT PERSON: USFWS Jill Parker 796-3377 ADF&G Tom Roth 207-2208

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

Restrict air traffic and all disturbance to essential minimum. No personnel within 800m. 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

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 207-2359

Safeguarding the salmon stream mouth - fry outmigration (3/1 to 5/15)

Contact ADFG for confirmation - dates and locations may vary. Restrict boat traffic to essential minimum. Avoid damage to unveiled intertidal and subtidal ealgal 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 207-4233

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 566-7235 ADF&G Don Calkins 267-2403

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

AGENCY CONTACT PERSON: USFWS Jill Parker 796-3377 ADF&G Tom Roth 207-2208

Restrict air traffic and all disturbance 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

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

Contact ADFG 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 ADFG and appropriate Native Corporation for authorization - see Native Corporation Contact List for each Native Corporation's contact person.

AGENCY CONTACT PERSON: ADFG Jim Fall 207-2359

Native Corporation's contact person. 

AGENCY CONTACT PERSON: ADFG Jim Fall 207-2359
MANUAL REMOVAL OF TARBALES AND ASPHALT/PAVEMENT, IN POCKET BEACHES DETAILLED ON DRAWINGS. NTR ON COVER WHICH IS SPORADIC AND ON VERTICAL ROCK FACE.

SPLATTER ON HI-ANGLE ROCKIES PROBABLY NOT REMOVABLE.
2. ALL ASPHALT AND TAR PATIES SHOULD BE REMOVED MANUALLY AND ANY PENETRATION INTO SEDIMENTS BY MORE FLUID ONS UNDERSIDES OF PATIES & ASPHALT.

NO TREATMENT RECOMMENDED  ☑ TREATMENT SUGGESTED

NO TREATMENT RECOMMENDED  ☑ TREATMENT SUGGESTED

NO TREATMENT RECOMMENDED  ☑ TREATMENT SUGGESTED
SHORELINE OILING SUMMARY

SEGMENT: EV-09


TIME: 09:30 10/19/90

TEAM NO.: 10

TIDE LEVEL: +1.28 m → +1.92 m

DATE: 30/April/90

UPLANDS DESCRIPTION:

SURVEYED FROM:

WORKING DIRECTION:

SURFACE SEDIMENTS:

OIL CATEGORY:

OIL LENGTH:

PAVEMENT:

PATTERNS/TABS:

SURFACE OIL

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<td>TARBALLS</td>
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<td>FILM</td>
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NO OIL

PAVEMENT H F (sq. m by )

PATTERNS/TABS 1 BAGS

NEAR SHORE SHEEN? NO 8R RW SL TL

OILED DEBRIS

AMOUNT

DID YOU COLLECT DEBRIS?

YES NO

TYPE OF DEBRIS

PHOTOGRAPHS:

Roll No. ST/10/14

Frame 11, 12

SUBSURFACE OIL

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

COMMENTS:

Note: all observed oil removed (except very widely spaced splatters) from 5 half of the segment (see map).

A few areas of tar mat remain in the northern half of the segment (as mapped).

28/5/90

REVIEWED: B.A. DATE 25 Apr 90
**SHORELINE ECOLOGICAL SUMMARY**

**Segment ST/6V-09**  
**Subdivision:** A  
**Date (mo/day/yr):** 4/23/90

**Time (24 hr):** 0630-1030  
**Biologist:** Lemon

(A) **Substrate type and % of segments:**  
- Bedrock 5  
- Boulder 30  
- Cobble 20  
- Pebble 5  
- Sand 5  
- Silt

(B) **Overall % cover of biota (% of segment):**  
- Dense  
- Moderate 50%  
- 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:**  
- Many dead bedded clams, Fucus conceptus, swelling, brown, eggs.

**Ecological Considerations:**  
- Eagle nest was not confirmed 23 Apr 90, no eagles seen. Other research was done earlier and may have disturbed eagles.

24FL59
ADDENDUM: SUBDIVISION CONSTRAINTS

SEGMENT EV-9 SUBDIVISION A (1 of 1)

WORK WINDOW

Manual Pickup
Tarmat Removal       OPEN

ARCHAEOLOGICAL STANDARD CONSTRAINT

If cultural resources are uncovered, PHONE 564-3274.

APPLICABLE ECOLOGICAL TIME CONSTRAINTS

<table>
<thead>
<tr>
<th>Time</th>
<th>Activity</th>
<th>Constraint</th>
</tr>
</thead>
<tbody>
<tr>
<td>1K</td>
<td>Purse Seine Hook-off</td>
<td>No constraint to manual pickup and tarmat removal.</td>
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<tr>
<td>5T</td>
<td>Bald Eagle Nest</td>
<td>NO CONSTRAINT. Work areas are more than 400m from nest.</td>
</tr>
<tr>
<td>7II</td>
<td>Subsistence: Deer Harvesting</td>
<td>No constraint to manual pickup and tarmat removal.</td>
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OTHER ECOLOGICAL CONSIDERATIONS

Restrict boat and air traffic to essential minimum after 7/20. Restrict beach disturbance to essential minimum after 8/15. Avoid any unnecessary disturbance or damage to unrolled biota and substrate.
SHORELINE EVALUATION

SEGMENT ST/ EV-10 SUBDIVISION A (1 OF 2) DATE 4/23/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
3N,3P Harbor seal and sea lion pupping (5/15 to 7/1)
3O,3Q Harbor seal and sea lion molting (8/15 to 9/15)
5T-1 All bald eagle nests (3/1 to 6/1)-Active eagle nests (3/1 to 9/1)
7II Subsistence area: Deer harvesting (8/15 to 2/28)
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:
Avoid any unnecessary disturbance or damage to unoiled biota and substrate. 5T within 400M.

SHPO SIGNATURE: ______ DATE: __5/3/90____

OILING CATEGORIZATION:
Wide 0 m: Medium 0 m: Narrow 121 m: V. Light 58 m: No Oil 161 m
Subsurface Oil Observed: Yes No 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
____ Tarmat Removal ______ Other (see comments)

COMMENTS: Recommend manual pickup of debris, tarballs and patties. Work should be conducted between 7/1 and 8/15 based on above listed constraints.

TAG COMMENTS: ______ Monitor to check site on pocket beaches and ______ Oiled noch.

TAG APPROVAL DATE: 5/3/90 ________ DATE: __5-15-90____

ADEC Art Weiner Art Weiner
EXXON Andy Tittl Ron
NOAA anchorage anchorage
USCG ________ ________
Salmon stream mouth - fry outmigration (3/1 to 5/15)

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 Morison 267-2324

Salmon fry nursery areas (4/21 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 consultation and advice.

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

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

Invertebrate harvesting

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

Purse seine area (7/6 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 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 Evelyn Biggs 424-3255

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

AGENCY CONTACT PERSON: US National Marine Fisheries Service Steve Zimmerman 565-7235

Seabird colony (5/1 to 9/1)

Restrict air and boat traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal 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)

Restrict air traffic and all disturbance to essential minimum. No personnel within 400m. Aircraft to maintain 400m horizontal, 300m vertical distance from nests. Contact USFWS prior to treatment for confirmation of dates.

AGENCY CONTACT PERSON: USFWS Jill Parker 766-3377

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

agencies

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

AGENCY CONTACT PERSON: ADF&G Evelyn Biggs 424-3255

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

AGENCY CONTACT PERSON: USFWS Jill Parker 766-3377

AGENCY CONTACT PERSON: USFWS Jill Parker 766-3377

AGENCY CONTACT PERSON: USFWS Jill Parker 766-3377

AGENCY CONTACT PERSON: ADF&G Jim Fall 267-2359
SEGMENT ST / EVI 10  SUBDIVISION: A  DATE 4/15/90

USCG
NAME: Shawn MAPS  SIGNATURE: -- Shane Pittman
☐ NO TREATMENT RECOMMENDED  ☑ TREATMENT SUGGESTED
COMMENTS
MANUAL REMOVAL OF PATTIES AND TAR BALLS AND OILY DEBRIS.
BIODEGRADATION OF THICKEST COVER.

NO SUBSURFACE OILS NOTED

ADEC
NAME: Dave sale  SIGNATURE: Don J. Sale
☐ NO TREATMENT RECOMMENDED  ☑ TREATMENT SUGGESTED
COMMENTS
1. REMOVE HEAVIEST COAT FROM HI ANGLE ROCKY FACES
2. REMOVE MANUALLY ALL TAR BALLS, TARMAT AND/or ASPHALT FROM SHELVES ON HIGH ANGLE ROCK, AND LOW-AR
BEACHES WHERE OILY AND INTERSECTS.
3. REMOVE OILY DEBRIS, LOGS AND GRASSES IN SUPRATIDAL ZONE
4. REMOVE OR TURN OVER VIA ANY SEGMENTS COATED WITH OIL

LAND MANAGER
NAME: Don HumphreF Jr. SIGNATURE: Donald P. HumphreF Jr
☐ NO TREATMENT RECOMMENDED  ☑ TREATMENT SUGGESTED
COMMENTS
**SHORELINE OILING SUMMARY**

**OG** R. Marty  
**BIO** B. Landis  
**USCG** J. Maas  
**SEGMENT ST.** AY-10

**EXXON** J. Caustis  
**LAND REP.** D. Birkett  
**ADEC** C. S.  
**TIME 16:15 10/17/95**

**TIDE LEVEL** +1.67 ft  
**DATE** 13 April 1990

**EXST. SUBDIVISION LENGTH:** 346 m  
**UPLANDS DESCRIPTION:**  
- Grass  
- Forest  
- Rock  
**SURFACE SEDIMENTS:**  
- Asphalt  
- Paved  
- Pooled  
- Cover  
- Coat  
- Stain  
- Mousse  
- Patties  
- Tarballs  
- Film  
- No Oil

**OIL CATEGORY LENGTH:**  
- W 0 m  
- M 0 m  
- N 0 m  
- VL 0 m  
- NO 0 m

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

**SURFACE - SUBSURFACE SEDIMENTS:**

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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>
<th>PIT ZONE</th>
<th>ANNA SHEEN (Y/N)</th>
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**COMMENTS:**
Tar patties are quite abundant in this subsegment. During the survey, 3 bags of debris and tar were removed, but additional patties remain. The 572 was snow covered on the pocket beaches during the survey and may contain additional debris and/or tar patties.
ECOLOGICAL MAP (1 of 2)

5T
3NP, 30G
7II

BAUD EAGLE NEST

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

EV-10

ADEC Segment Length: 1876m

PWS 177A

Map Key: PWS-177b
Name: R. Marty
Date: 23 April 1990
Date Entered:
ADDENDUM: SUBDIVISION CONSTRAINTS

SEGMENT EV-10 SUBDIVISION A (1 of 2)

WORK WINDOW

Manual Pickup	OPEN

ARCHAEOLOGICAL STANDARD CONSTRAINT

If cultural resources are uncovered, PHONE 564-3274.

APPLICABLE ECOLOGICAL TIME CONSTRAINTS

<table>
<thead>
<tr>
<th>No.</th>
<th>Event/Activity</th>
<th>Constraints</th>
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<tbody>
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<td>Harbor Seal &amp; Sea Lion Pupping and Molting</td>
<td>NO TIME CONSTRAINT. Authorized per memorandum dated 5/14/90 from Kathryn Frost/ADF&amp;G to Mark Kuwada/ADF&amp;G.</td>
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<tr>
<td>5T</td>
<td>Bald Eagle Nest</td>
<td>NO CONSTRAINT. Work area is more than 400m from nest.</td>
</tr>
<tr>
<td>1K</td>
<td>Purse Seine Hook-off</td>
<td>No constraint to manual pickup.</td>
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<td>711</td>
<td>Subsistence: Deer Harvesting</td>
<td>No constraint to manual pickup.</td>
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OTHER ECOLOGICAL CONSIDERATIONS

Restrict boat and air traffic to essential minimum after 7/20. Restrict beach disturbance to essential minimum after 8/15. Do not chase or harass seals or sea lions, and do not approach pups under any circumstances. When working on or near haulouts, complete the job as quickly as possible with minimum personnel, equipment, noise and disturbance. Keep boats and personnel as far from actual haulouts as is practical to do the work specified. Minimize air traffic near haulouts, maintain elevation as is practical, and avoid repeated overflights of the same haulout areas. Avoid any unnecessary disturbance or damage to unrolled biota and substrate. Restrict air traffic and all disturbance to essential minimum. Air approach and takeoff from and to seaward only; maintain 800m horizontal, 300m vertical distance from nests.

TAG APPROVAL DATE
ADEC
EXXON
NOAA
USCG

Prepared by Andrew Meurer
Date 5/24/90
SHORELINE EVALUATION

SEGMENT ST/ EV-10 SUBDIVISION B (2 OF 2) DATE 4/23/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
3N,3P Harbor seal and sea lion pupping (5/15 to 7/1)
3O,3Q Harbor seal and sea lion molting (8/15 to 9/15)
5T-2 All bald eagle nests (3/1 to 6/1) - Active eagle nests (3/1 to 9/1)
(one eagle nest within 400 M)
7II Subsistence area: Deer harvesting (8/15 to 2/28)
See attached Ecological Constraint sheet for specific constraints and
contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:
Avoid any unnecessary disturbance or damage to unoiled biota and
substrate. (1 eagle nest within 400M)

SHPO SIGNATURE: ____________________ DATE: 5/8/90

OILING CATEGORIZATION:

Wide 0 m: Medium 0 m: Narrow 104 m: V.Light 1354 m: No Oil 808 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: ____________________________
(Sketch attached to EV-10 - A)

TAG COMMENTS:

TAG APPROVAL DATE: 5/3/90
ADEC Art Wener ___________ FOSC: _______ DATE: 5-15-90
EXXON ___________ NOTIFY ABC 24 HRS prior to work
NOAA ___________
USCG ___________________
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 lnopol 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 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 267-2324

1C Salmon fry nursery areas (4/31 to 7/31)
No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or lnopol 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 424-3214

1D Esther Hatchery release (4/15 to 8/15)
1E Main Bay Hatchery release (4/20 to 8/15)
1F Sawmill Bay Hatchery release (4/15 to 6/1)
1G Cannery Creek Hatchery release (4/21 to 6/4)
1H Remote release site
No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or lnopol 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: 1D ADF&G 424-3214  
1E 1F 1G PWS Aquaculture Association John McMillan or Bruce Suzumoto 424-7511

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 (6/11 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 lnopol application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.
AGENCY CONTACT PERSON: ADF&G 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 uncoiled intertidal and subtidal algae and seagrass. If plans for treatment include methods such as hot water wash or lnopol 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

3P Harbor seal and sea lion pupping (5/15 to 7/1)
3Q 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 lnopol 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 and USFWS 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 activity to essential minimum, especially air traffic. Contact USFWS and ADF&G for confirmation.
AGENCY CONTACT PERSON: USFWS and ADF&G 786-3377

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

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 (5/1 to 9/30)
7H1 Fish harvest (5/1 to 9/30)
7H2 Deer harvesting (8/15 to 2/28)
7J Rickshaw 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 lnopol 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 1 EU 10 SUBDIVISION: B DATE 1/33/70

USCG NAME S h a u n MAAS SIGNATURE D C - C L E A N K E T T I N G

☐ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED

COMMENTS

COVER IS PATCHY SPORADIC ALONG VERTICAL ROCK FACE, HARD TO GET AT.

NO SUBSURFACE OBS NOTED

ADEC NAME DAVE SAGE SIGNATURE D ANDREW SAGE

☐ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED

COMMENTS

THERE IS A STAIN/COVER ON HI-ANGLE ROCKS THAT IS SPOTTY AND PROBABLY CANNOT BE CLEARED OFF. SOME TALLY COVER REMAINS IN VOID.

LAND MANAGER NAME Donald Kompfett Jr. SIGNATURE Donald P. Kompfett Jr.

☐ NO TREATMENT RECOMMENDED ☑ TREATMENT SUGGESTED

COMMENTS

58 659
SHORELINE OILING SUMMARY

OG: C. Mark
USCG: J. Meas
BIO: R. Land
LAND REP: D. Langholtz
SEGMENT ST: EV-10

TEAM NO. 10
TIDE LEVEL: +1.6 ft
DATE: 3/31/90

EST. SUBDIVISION LENGTH: 1944 m
□ Sun □ Clouds □ Fog □ Rain □ Snow

UPLANDS DESCRIPTION: □ Grass □ Forest □ Rock

SURVEYED FROM: □ Foot □ Boat □ Helo
WORKING DIRECTION: □ to □

SURFACE SEDIMENTS: R: 50% B: 30% C: 10% P: 5% G: 5% S: 0% M: 0% V: 0%

SLOPE: Lang: 50% Hang: 50% Vert: 20%

WAVE EXPOSURE: □ Low □ Med □ High

OIL CATEGORY LENGTH: W: 0 m M: 0 m N: 6.9 m VL: 1842 m NO: 697 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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<td>NO OIL</td>
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PAVEMENT 0 cm by 0 cm

PATTIES / TARBALLS

NEAR SHORE SHEEN?

OILED DEBRIS

AMOUNT

DID YOU COLLECT

DEBRIS?

LOGS

V: YES □ NO □

TYPE

VEGETATION

T: YES □ NO □

TRASH

D: YES □ NO □

DEBRIS

BAGS: < 1

Photographs:

Roll No.: None

Frames:

SUBSURFACE OIL

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<th>PIT NO.</th>
<th>DEPTH (cm)</th>
<th>SUBSURFACE OIL CHARACTER</th>
<th>OILED DEBRIS</th>
<th>OIL / FILM COLOR</th>
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COMMENTS

Oiling consists of a very few splatters (becoming more to the north) and a few tar balls (not collected). The splatters, were present, and as a cover and are quite furry. There is quite a bit of older, friable tar on the beach which was in place prior to the Exxon Valdez incident. This older tar is, in places, almost as abundant as the newer, softer 'Exxon' tar.

REVIEWED: J 4/25/90

DATE: 46 of 59
## SHORELINE ECOLOGICAL SUMMARY

**Segment ST/5V10**  
**Subdivision:** 8  
**Date (mo/day/yr):** 4/23/90

**Time (24 hr):** 16:15 - 19:00  
**Biologist:** Lemon

### (A) Substrate type and % of segments:
- Bedrock 50%  
- Boulder 30%  
- Cobble 10%  
- Pebble 5%  
- Sand 5%  
- Silt 0%

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

### (C) Density, substrate preference (by number from A, above), & vertical zonation of major taxa:
- Juveniles/adults

#### Photographs:
- Roll No.: none
- Frames: not present

### Ecological Considerations:
- Reported eagle nest and plumed hawkmouth could not be confirmed 9/3 Apr 90
- However, an eagle was heard during the survey. The largest offshore rock appears to be developing a gull nesting area.
- This is a subsistence deer hunting area.
XXXX Wide
/// Medium
--- Narrow
TTTT Very Light
0000 No Oil

EV-10

ADEC Segment Length: 1870m

Map Key: PWS-177b
Name: R. Marty
Date: 23 April 1990
Date Entered:
ADDENDUM: SUBDIVISION CONSTRAINTS
SEGMENT EV-10 SUBDIVISION B (2 of 2)

WORK WINDOW

Manual Pickup OPEN

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

APPLICABLE ECOLOGICAL TIME CONSTRAINTS

1K Purse Seine Hook-off

3N,Q,P,Q Harbor Seal & Sea Lion Pupping and Molting

5T Bald Eagle Nest

7II Subsistence: Deer Harvesting

No constraint to manual pickup.

NO TIME CONSTRAINT. Authorized per memorandum dated 5/14/90 from Kathryn Frost/ADF&G to Mark Kuwada/ADF&G.

NO CONSTRAINT. USFWS 6/1/90 map indicates no active nest within 400m of Subdivision B work site.

NO constraint to manual pickup.

OTHER ECOLOGICAL CONSIDERATIONS
Restrict boat and air traffic to essential minimum after 7/20. Restrict beach disturbance to essential minimum after 8/15. Do not chase or harass seals or sea lions, and do not approach pups under any circumstances. When working on or near haulouts, complete the job as quickly as possible with minimum personnel, equipment, noise and disturbance. Keep boats and personnel as far from actual haulouts as is practical to do the work specified. Minimize air traffic near haulouts, maintain elevation as is practical, and avoid repeated overflights of the same haulout areas. Avoid any unnecessary disturbance or damage to uniled biota and substrate.

TAG APPROVAL DATE

ADEC FOSC

EXXON NOAA USCG

Prepared By: Date 6/7/90

DATE & TIME 90
SHORELINE EVALUATION

SEGMENT ST/ EV-11  SUBDIVISION A (1 OF 1) DATE 4/20/90

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)

Subsistence area: Deer harvesting (8/15 to 2/28)

See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:
Avoid any unnecessary disturbance or damage to unoiled biota and substrate. Bald eagle nest in adjacent segment.

SHPO SIGNATURE: Charles 5/2/90

DATE: 5/2/90

OILING CATEGORIZATION:
Wide 0 m: Medium 0 m: Narrow 0 m: V. Light 26 m: No Oil 223 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: 5/2/90
ADEC Art Wetmore  Don skepticism
EXXON  Frank C. White
NOAA  Gary Peters  Don Durbin
USCG  Ken Wirth  Ken Kinzbach

FOSC: 6-19-90
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 intended to 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/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 Pelitz 424-3214

1D 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 Sot net site (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 424-3236

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 unincorporated 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 James Brady 424-3212

SR Seabird colony (5/1 to 9/1)

Restrict air and boat traffic to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 300m vertical distance from colonies. Contact USFWS prior to treatment.

AGENCY CONTACT PERSON: USFWS Jill Parker 786-3377

SS 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

ST 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 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)
7HH Finfish harvesting
7I Deer harvesting (9/15 to 2/28)

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
FIELD SHORELINE COMMENT SHEET

SEGMENT ST/EU-11 SUBDIVISION: EU-11A (1061) DATE 4-20-90

NOAA NAME: Michael Buckman SIGNATURE: M Buckman

☐ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED

COMMENTS:
Majority of this segment (~50%) is a vertical rock wall with focus covered boulders at water line. Very light stain/splatters were seen from bent in this area. The small pocket beach of boulders/cobbles also had a band of light staining. (This beach was walked.)

ADEC NAME: John Hayes SIGNATURE: 

☐ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED

COMMENTS:
Light tar stain + random tar splashes observed on this segment. Segment is very lightly oiled no treatment recommended.

LAND MANAGER NAME: Steve Ward, Chemsigna Corp. SIGNATURE: 

☐ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED

COMMENTS:
Above information is accurate. I agree with above comments.
SHORELINE OILING SUMMARY

OG: Mike Fugnet
BIO: Kathleen Connor
LAND REP: Steve Waad
ADEC: John Hayes
SEGMENT ST: EU-11
TEAM NO: 11
TIDE LEVEL: 2'-1'
DATE: 4/20/90

WEST. SUBDIVISION LENGTH: 325 m

UPLANDS DESCRIPTION:
- Grass
- Forest
- Rock
- Sand
- Clay

SURVEYED FROM:
- Foot
- Boat
- Helo

WORKING DIRECTION: U to S

SPOLE:
- Lang 20%
- Hang 10%
- Ven 70%

WAVE EXPOSURE:
- Low
- Med
- High

OIL CATEGROY LENGTH:
- W 0 m
- M 0 m
- N 0 m
- V 0 m
- NO 365 m

SURFACE OIL

<table>
<thead>
<tr>
<th>CHARACTER</th>
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<th>IMPACTED ZONES</th>
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<td>MOUSSE</td>
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<td>NO OIL</td>
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</table>

PAVEMENT H F S 0 sq. m by 0 cm

PATTIES / TARBALLS 0 BAGS

NEAR SHORE SHEEN? No BR RW SL TL

OILED DEBRIS AMOUNT
- Logs
- Vegetation
- Trash
- Debris

DID YOU COLLECT DEBRIS?
- Yes
- No

PHOTOGRAPHS:
- Roll No.
- Frames

SUBSURFACE OIL

<table>
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<th>PIT NO.</th>
<th>PIT DEPTH (cm)</th>
<th>SUBSURFACE OIL CHARACTER</th>
<th>OILED DEBRIS INTERVAL</th>
<th>BELOW</th>
<th>OIL / FILM COLOR</th>
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<th>ANA SEASON</th>
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COMMENTS

- No pits were excavated due to the nature of the shore zone.
- Only some very light staining was observed in the H172 among the rocks for.
- No oiling was observed underground the cobble. Shore zone consists mostly of vertical rock face w/ a small pocket O/B bench at the Southern end of the segment.

REVIEWED: JAI DATE: 4-23-9
SEGMENT A

DATE 4/20/90

CHECKLIST
- Name
- Approx. Scale
- Segment Boundry
- Oil Dist.
- Width
- Length
- % Cover
- Substrate Character
- EEL, WHL, WL
- SSL
- Profile Location(s)
- Profile(s)
- Plot Location(s)
- Photo Location(s)

LEGEND
1. H - Vegetation Rock Cliff
2. ○ - Large Boulder
3. ‾ - Trees

Legend

100 m

Legend

Vegetation Rock Cliff on some Large Boulder, and a 1m x 10m SSL in the HIZ on the rock face

Low angle D/C Beach 1m x 10m SSL staining in the HIZ

Oil Character Length (m): AP 0 PO 0 CV 0 CT 0 ST 20 MS 0 PT 0 TB 0 FL 0 NO 365
## SHORELINE ECOLOGICAL SUMMARY

**Segment ST** / EV-11 Subdivision A (on) Date (mo/day/yr) 4/20/90

**Time (24 hr)** 1812 - Biologist KATHLEEN CONLAN

### (A) Substrate type and % of segments:

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<th>Substrate Type</th>
<th>% of Segments</th>
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<tr>
<td>Boulder</td>
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<td>Cobble</td>
<td>5</td>
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<td>Pebble</td>
<td>0</td>
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<tr>
<td>Sand</td>
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<td>Silt</td>
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</tbody>
</table>

### (B) Overall % cover of biota (% of segment):

- Dense: 90
- Moderate: 10
- 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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<th>1U</th>
<th>1M</th>
<th>1L</th>
<th>Moderate</th>
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<th>Sparse</th>
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#### Wildlife Observations/General Comments:

- 3 Bald Eagles

#### Ecological Considerations:

- [ ]

- [ ]

- [ ]
SHORELINE EVALUATION

SEGMENT ST/ EV-12 SUBDIVISION A (1 OF 1) DATE 4/7/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
7II Subsistence area: Deer harvesting (8/15 to 2/28)
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:
Avoid any unnecessary disturbance or damage to unoiled biota and substrate. Stream in segment not in ADF&G anadromous catalogue (USGS Seward A-3; Rev. 12/89).

SHPO SIGNATURE: Charles Schmeul DATE: 4/23/90

OILING CATEGORIZATION:
Wide 147 m: Medium 47 m: Narrow 71 m: V.Light 30 m: No Oil 361 m
Subsurface Oil Observed: Yes X No
Maximum Depth 15 cm

RECOMMENDATIONS:
___ No Treatment Recommended
X Treatment Recommended
X Manual Pickup
X Bioremediation
X Tarmat: X Removal

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

COMMENTS: Recommended treatment includes 1) manual tarmat removal, 2) manual pick up of mousse and oiled pom pom, 3) bioremediation of cover and subsurface oil in areas around pit locations 1 and 2, 4) do not bioremediate around pits 4 and 5 due to the proximity to the stream unless approved by ADF&G and, 5) *Remove oiled logs if >10% coverage or burn in place if too numerous to remove. No specific time constraints identified.

TAG COMMENTS: ADF&G Approves Brye in area of Pits 4 & 5 and up to the stream.

TAG APPROVAL DATE: 4/25/90
ADEC
EXXON
NOAA
USCG

FOSC: [Signature] DATE: 5-4-90
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 bio remediation or other chemical application within 100m of stream. Contact ADF&G Habitat Division prior to
   treatment for permits.
1C Salmon fry nursery area (4/31 to 7/31)
1D Esther Hatchery release (4/15 to 6/1)
1E Main Bay Hatchery release (4/20 to 5/10)
1F Sewmill Bay Hatchery release (4/15 to 6/1)
1G Cannery Creek Hatchery release (4/21 to 6/1)
1H Remote release site
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 (6/11 to 7/25)
   For Codes 1C through 1L contact ADF&G for specific dates, locations and constraints.
2M Herring spawning (4/1 to 6/15)
   Restrict boat traffic to essential minimum. Avoid damage to unvegetated intertidal and subtidal algae and seagrass.
   Contact ADF&G for specific dates and locations.
3N, 3P Harbor seal and sea lion pupping (5/15 to 7/1)
3O, 3Q 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.
5R Seabird colony (5/1 to 9/1)
   Restrict air traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m
   vertical distance. Contact AOF&G and USFWS prior to treatment.
5S Shorebird/waterfowl concentration (4/1 to 5/15)
   Restrict all activity to essential minimum, especially air traffic.
5T All Bald Eagle nests (3/1 to 8/1)
   Active Bald Eagle nests (3/1 to 9/1)
   Restrict air traffic 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.
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
7Z Subsistence area: Salmon harvesting (6/1 to 9/30)
   Finfish harvesting
   Deer harvesting (8/15 to 2/28)
7J Invertebrate harvesting
   For Codes 7Z through 7JJ contact ADF&G and Chenega Corporation for specific dates, locations, and constraints.

PWS-CODE 4/11/90
FIELD SHORELINE COMMENT SHEET

SEGMENT ST  EV - 12  SUBDIVISION: 

USCG NAME: R. HILLERD  SIGNATURE: 

☐ NO TREATMENT RECOMMENDED   ☑ TREATMENT SUGGESTED  

COMMENTS

I feel some type of manual cleaning be done, to eliminate spilled oil patch.

ADEC NAME: J. LYNN MARTIN  SIGNATURE:  

☐ NO TREATMENT RECOMMENDED   ☑ TREATMENT SUGGESTED  

COMMENTS

AGREE WITH EXXON OPS. RECOMMENDATION FOR MANUAL REMOVAL OF ASPHALT AND POOLED OIL IN AREAS. DUE TO THE SIZE OF BEACH I WOULD ALSO SUGGEST MANUAL REMOVAL OF SUBSURFACE OIL ON EAST SIDE OF STREAM SHOULD ALSO BE REVIEWED BY ASDO SCAT. SUPER-TIDAL SHOULD REVIEWED AFTER SNOW MELT.

LAND MANAGER

NAME: TREVOR WRIGHT  SIGNATURE: 

☐ NO TREATMENT RECOMMENDED   ☑ TREATMENT SUGGESTED  

COMMENTS

Agree With part
SHORELINE OILING SUMMARY

REVIEWED: DATE 4/1/80

TEAM NO.: 16
DATE 4/3/80
EST. SUBDIVISION LENGTH: 542 m
UPLANDS DESCRIPTION: Grass Forest Rock Snow
SURVEYED FROM: Foot Boat Helo

TIME: 18:30 to 19:30

OIL CATEGORY LENGTH: W 150 m M 15 m N 20 m VL 25 m NO 333 m

SURFACE OIL

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<tr>
<th>CHARACTER</th>
<th>DISTRIBUTION</th>
<th>OIL / FILM COLOR</th>
<th>IMPACTED ZONES</th>
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PAVEMENT: H F S 10 sq. m by 3 cm

PATTIES / TARBALLS 1 BAGS

NEAR SHORE SHEEN? NO BR RW SL TL

OILED DEBRIS AMOUNT

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Photographs:

Roll No.

Frames

SUBSURFACE OIL

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<th>PIT NO.</th>
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COMMENTS

Small pocket beach with rock headlands on either side and fresh water stream in center of bay. Sporadic oil seen on rock headland on east side of segment. Asphalt mats along east rocky cliff in upper/subtidal zone and on beach just to west of stream. A sporadic cover of oil was found access west of beach (3-10%) in mid-upper tidal zone from pit observations. This oiling is heavier on west side of stream. This subaccumulation appears to connect with asphalt along rock cliff.
SHORELINE ECOLOGICAL SUMMARY

Segment ST / EV 12 Subdivision 1730 on
Date (mo/day/yr) 4/7/90

Time (24 hr) 1100 B. Biol. TONY BAZAR

(A) Substrate type and % of segments:
   (1) Bedrock 10  (2) Boulder 10  (3) Cobble 24  (4) Pebble 25  (5) Sand 5  (6) Silt

(B) Overall % cover of biota (% of segment): Dense 5  Moderate 15  Low 90

(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-16-00
Frames 1-10

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Wildlife Observations/General Comments:
- OBSERVED
- OTTERS
- COBBLER
- EGGS - GASTRO UNID - MOLLUSC EGGS - ECHINODERM
- LC CLAM SHELLS, SQUID, PENNEKOP IN L1

Ecological Considerations: TII, TII, 14/8

(Map on reverse)
SEGMENT 57 - EV-12
SUBMISSION
DATE 4/7/90

CHECKLIST
- Annotations
- Approx. Scale
- Source/Entry
- Oil/Dis.
- Width
- Length
- Corner
- Substrate Character
- Est. HYLAW.
- ES
- Feature Location(s)
- Location(s)
- Photo Location(s)

LEGEND
1 A
Red - Subsurface Oil

2 A
Red - Subsurface Oil

CT/C
Continuous Distribution

CT/B
Broken Distribution

CT/P
Patchy Distribution

CT/S
Splashed Distribution

Oil Character Length (m): AP - 8 PO - CV - 185 CT - ST - MS - 25 PT - TB - FL - NO - 322
ADDENDUM: SUBDIVISION CONSTRAINTS

SEGMENT EV-12 SUBDIVISION A (1 of 1)

WORK WINDOW

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<th>Manual Pickup</th>
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<td>Oiled Log Removal/Burning</td>
<td>WORK PRIOR TO 7/10</td>
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<tr>
<td>Bioremediation More Than 100m From Stream</td>
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</tr>
<tr>
<td>Bioremediation Less Than 100m From Stream</td>
<td>(ADF&amp;G MONITOR REQ.)</td>
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ARCHAEOLOGICAL STANDARD CONSTRAINT

If cultural resources are uncovered, PHONE 566-3274.

APPLICABLE ECOLOGICAL TIME CONSTRAINTS

1A,1B Salmon Stream

ADF&G uncatalogued anadromous stream is present in 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 manual pickup, tammat removal, and oiled log removal/burning.

1K Purse Seine

Hook-off

No constraint to manual pickup, tammat removal, and oiled log removal/burning; closed to bioremediation after 7/25.

7l Subsistence:

Deer Harvesting

No constraint to manual pickup, tammat removal, and oiled log removal/burning; closed to bioremediation after 8/15.

OTHER ECOLOGICAL CONSIDERATIONS

No disturbance to stream bed or banks. No flushing of pollutants or sediments into stream drainage. Restrict boat and air traffic to essential minimum after 7/25. Restrict beach disturbance to essential minimum after 8/15. Avoid any unnecessary disturbance or damage to unolied biota and substrate.

SEE ANADROMOUS FISH STREAM EVALUATION ADDENDUM (SEGMENT EV-12) FOR ADDITIONAL CONSTRAINT INFORMATION

TAG APPROVAL DATE 6/10/90
ADEE Pay Morales 6/7/90
EXXON
NOAA
USCG

Prepared by Andrea May 6/3/90
ANADROMOUS FISH STREAM EVALUATION ADDENDUM
CONSTRAINTS FOR STREAM NO. UNCATALOGUED
SEGMENT EV-12 SUBDIVISION A

WORK WINDOW

<table>
<thead>
<tr>
<th>Manual Pickup</th>
<th>OPEN</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bioremediation and Manual Raking 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

An ADF&G uncatalogued anadromous stream is in 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 manual pickup.

1K  Purse Seine Area

Closed to bioremediation and manual raking after 7/25. No constraint to manual pickup.

711  Subsistence: Deer Harvesting

Closed to bioremediation and manual raking after 8/15. No constraint to manual pickup.

OTHER ECOLOGICAL CONSIDERATIONS

No disturbance to stream bed or banks. No flushing of pollutants or sediments into stream drainage; do not allow input 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 boat and air traffic and beach disturbance to essential minimum after 7/20. Avoid any unnecessary disturbance or damage to unpolished biota and substrate.

SEE SUBDIVISION CONSTRAINT ADDENDUM EV-12A FOR ADDITIONAL CONSTRAINT INFORMATION.

Prepared by [Signature]  Date 6/4/90
Prepared by [Signature]  Date 6/14/90
ASAP FOLLOWUP RECOMMENDATIONS

Condition Observed: On west side of stream is a large SAP, SR right after Summer '90 treatment. On east side of stream is an odd amount of SAP and SP/DP from 15m-30m, surface penetration.

Followup Recommendations: ASAP/Survey crew recommends the annual removal of surface SAP and sub-surface SP and SR to a depth of 5cm-7cm. Also, the EAST side of stream should be thoroughly tilled and disinfected as should area surrounding manual removal.

Completed by Pickup Crew: Yes [ ] No [x] Priority for Addressing in 1990: High [x] Mod. [ ] Low [ ]

ADEC: Bob McCrea

Comments: For area east stream, the mechanical removal of small gravelly, spawning, nile, and DP and SP sediment would greatly facilitate treatment.

Exxon: John Drew

Comments: Previous work in area rather intensive. Re-tilling source seems to be under large cobble/small boulders. Manual crew should be able to roll rocks adequately to remove this source and bio remediate.

USCG: Don Davis

Comments: Manual removal of sand gravel in affected area by work crew with exposure to bit one by ASAP team shows only light flooding and accumulation of "sand" following manual work required.

Land Rep: Scott Ward

Comments: Agree with Scott Cominelli's recommendations above.
SEGMENT AS I  EV-012 SUBDIVISION:   DATE 8-7-90

NAME:   DON DEVIS, GM, USCE

SIGNATURE  

• YES  □ NO  PRIORITY SITE FOR REASSESSMENT IN 1991

REASON:  
Area to east of stream was broken up by ASAP crew and contained little free oil. In contrast, a 3x15m area to the west of the stream contains a large amount of mobile oil despite earlier work efforts. This area should be treated (manual removal, bio, raking) in 1990 and checked in 1991.

NAME:   ROB MCGLAUGHLIN  SIGNATURE  

• YES  □ NO  PRIORITY SITE FOR REASSESSMENT IN 1991

REASON:  
An area east of stream approx 3nx 20m ? Light AP and OR oil, requires thorough tilling, diluting down beach, and bioremediation. An area west portion requires manual removal from surface AP and subsurface oil to 20cm followed by thorough tilling and bioremediation. An ASAP followup recommendation for was submitted calling for their treatment recommendations.

AND MANAGER  
NAME:   STEVE WILL  CUR SIGNATURE  

• YES  □ NO  PRIORITY SITE FOR REASSESSMENT IN 1991

REASON:  
Enough oil west of the stream to need more manual in 90. Check Sub Surface oil.

NAME:   JOHN DEAN  SIGNATURE  

• YES  □ NO  PRIORITY SITE FOR REASSESSMENT IN 1991

REASON:  
The area west of stream justifies additional work in 90 per “ASAP follow up recommendations” & reassessment in 91
### Surface Oil

<table>
<thead>
<tr>
<th>Site 1</th>
<th>Site 2</th>
<th>Site 3</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Character</strong></td>
<td><strong>Distribution</strong></td>
<td><strong>Oiled Zones</strong></td>
</tr>
<tr>
<td>Asphalt</td>
<td>/C /B /P /S</td>
<td>SU / UI / MI / LI</td>
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<tr>
<td>S.O.R.</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Pooled</td>
<td></td>
<td>X</td>
</tr>
<tr>
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<td></td>
</tr>
<tr>
<td>Mousse</td>
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<td></td>
</tr>
<tr>
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<td></td>
</tr>
<tr>
<td>Film</td>
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<td>X</td>
</tr>
<tr>
<td>No Oil</td>
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</tr>
<tr>
<td>Est. Site Length</td>
<td>66.7 m</td>
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</table>

### Subsurface Oil

<table>
<thead>
<tr>
<th>Pit No.</th>
<th>Pit Depth (cm)</th>
<th>Subsurface Oil Character</th>
<th>Clean Below (Y/N)</th>
<th>Pit Zone</th>
<th>Surface Subsurface Sediments</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>20</td>
<td>X</td>
<td>0.7</td>
<td>Y</td>
<td>P/G/S</td>
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<tr>
<td>2</td>
<td>20</td>
<td>X</td>
<td>0.17</td>
<td>Y</td>
<td>P/G/S</td>
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</tbody>
</table>

### Comments

- A container of C/SOR was located on both sides of the stream. The SOR was loose, granular material that was broken in the field by the crew. The CU was set in backhoes in the s/e portion of the site. This area showed signs of previous treatment. The stream was not contoured as per the ANAD. MAR/SM. FORM
ASAP DATA ENTRY FORM

GENERAL DATA

SEG ID: EV012  SBGV: A  SITE: 1  TEAM: 3  DATE: 8/7/90
SITE LETH: 667  OIL CATEGORIES: W - M - N - VLS - NO

SURFACE DATA

CHAR #: OIL CHAR: SOR OIL DIST: CONT  BRKN  PTCH  SPLH 15
  TIDAL ZONE: Su - UI - MI - LI

CHAR #: OIL CHAR: CV OIL DIST: CONT  BRKN 15  PTCH  SPLH
  TIDAL ZONE: Su - UI - MI - LI

CHAR #: OIL CHAR: ST OIL DIST: CONT  BRKN  PTCH  SPLH 15
  TIDAL ZONE: Su - UI - MI - LI

CHAR #: OIL CHAR: NO OIL DIST: CONT  BRKN  PTCH  SPLH
  TIDAL ZONE: Su - UI - MI - LI

CHAR #: OIL CHAR: OIL DIST: CONT  BRKN  PTCH  SPLH
  TIDAL ZONE: Su - UI - MI - LI

CHAR #: OIL CHAR: OIL DIST: CONT  BRKN  PTCH  SPLH
  TIDAL ZONE: Su - UI - MI - LI

CHAR #: OIL CHAR: OIL DIST: CONT  BRKN  PTCH  SPLH
  TIDAL ZONE: Su - UI - MI - LI

CHAR #: OIL CHAR: OIL DIST: CONT  BRKN  PTCH  SPLH
  TIDAL ZONE: Su - UI - MI - LI

CHAR #: OIL CHAR: OIL DIST: CONT  BRKN  PTCH  SPLH
  TIDAL ZONE: Su - UI - MI - LI

CHAR #: OIL CHAR: OIL DIST: CONT  BRKN  PTCH  SPLH
  TIDAL ZONE: Su - UI - MI - LI
ASAP DATA ENTRY FORM

SUBSURFACE DATA

SEGMENT ID: EU612  SUBDIV: A  SITE: 1

PIT # 1  PIT DEPTH 20  OIL CHARACTER OR OIL INTVAL: FROM 0 TO 7
CLEAN BELOW: Y  PIT ZONE: SU UI X MI LI
SUBSURFACE SEDIMENT: BRK BLD COB PEB X GRN X SAM X MUD VEG

PIT # 2  PIT DEPTH 20  OIL CHARACTER OR OIL INTVAL: FROM 0 TO 17
CLEAN BELOW: Y  PIT ZONE: SU UI X MI LI
SUBSURFACE SEDIMENT: BRK BLD COB PEB X GRN X SAM X MUD VEG

PIT # 3  PIT DEPTH____ OIL CHARACTER____ OIL INTVAL: FROM____ TO____
CLEAN BELOW:_____  PIT ZONE: SU UI MI LI
SUBSURFACE SEDIMENT: BRK BLD COB PEB GRN SAM MUD VEG

PIT # 4  PIT DEPTH____ OIL CHARACTER____ OIL INTVAL: FROM____ TO____
CLEAN BELOW:_____  PIT ZONE: SU UI MI LI
SUBSURFACE SEDIMENT: BRK BLD COB PEB GRN SAM MUD VEG

PIT # 5  PIT DEPTH____ OIL CHARACTER____ OIL INTVAL: FROM____ TO____
CLEAN BELOW:_____  PIT ZONE: SU UI MI LI
SUBSURFACE SEDIMENT: BRK BLD COB PEB GRN SAM MUD VEG

PIT # 6  PIT DEPTH____ OIL CHARACTER____ OIL INTVAL: FROM____ TO____
CLEAN BELOW:_____  PIT ZONE: SU UI MI LI
SUBSURFACE SEDIMENT: BRK BLD COB PEB GRN SAM MUD VEG

PIT # 7  PIT DEPTH____ OIL CHARACTER____ OIL INTVAL: FROM____ TO____
CLEAN BELOW:_____  PIT ZONE: SU UI MI LI
SUBSURFACE SEDIMENT: BRK BLD COB PEB GRN SAM MUD VEG

PIT # 8  PIT DEPTH____ OIL CHARACTER____ OIL INTVAL: FROM____ TO____
CLEAN BELOW:_____  PIT ZONE: SU UI MI LI
SUBSURFACE SEDIMENT: BRK BLD COB PEB GRN SAM MUD VEG

PIT # 9  PIT DEPTH____ OIL CHARACTER____ OIL INTVAL: FROM____ TO____
CLEAN BELOW:_____  PIT ZONE: SU UI MI LI
SUBSURFACE SEDIMENT: BRK BLD COB PEB GRN SAM MUD VEG

PIT # 10  PIT DEPTH____ OIL CHARACTER____ OIL INTVAL: FROM____ TO____
CLEAN BELOW:_____  PIT ZONE: SU UI MI LI
SUBSURFACE SEDIMENT: BRK BLD COB PEB GRN SAM MUD VEG

PIT # 11  PIT DEPTH____ OIL CHARACTER____ OIL INTVAL: FROM____ TO____
CLEAN BELOW:_____  PIT ZONE: SU UI MI LI
SUBSURFACE SEDIMENT: BRK BLD COB PEB GRN SAM MUD VEG

PIT # 12  PIT DEPTH____ OIL CHARACTER____ OIL INTVAL: FROM____ TO____
CLEAN BELOW:_____  PIT ZONE: SU UI MI LI
SUBSURFACE SEDIMENT: BRK BLD COB PEB GRN SAM MUD VEG

PIT # 13  PIT DEPTH____ OIL CHARACTER____ OIL INTVAL: FROM____ TO____
CLEAN BELOW:_____  PIT ZONE: SU UI MI LI
SUBSURFACE SEDIMENT: BRK BLD COB PEB GRN SAM MUD VEG

PIT # 14  PIT DEPTH____ OIL CHARACTER____ OIL INTVAL: FROM____ TO____
CLEAN BELOW:_____  PIT ZONE: SU UI MI LI
SUBSURFACE SEDIMENT: BRK BLD COB PEB GRN SAM MUD VEG

PIT # 15  PIT DEPTH____ OIL CHARACTER____ OIL INTVAL: FROM____ TO____
CLEAN BELOW:_____  PIT ZONE: SU UI MI LI
SUBSURFACE SEDIMENT: BRK BLD COB PEB GRN SAM MUD VEG

PIT # 16  PIT DEPTH____ OIL CHARACTER____ OIL INTVAL: FROM____ TO____
CLEAN BELOW:_____  PIT ZONE: SU UI MI LI
SUBSURFACE SEDIMENT: BRK BLD COB PEB GRN SAM MUD VEG

PIT # 17  PIT DEPTH____ OIL CHARACTER____ OIL INTVAL: FROM____ TO____
CLEAN BELOW:_____  PIT ZONE: SU UI MI LI
SUBSURFACE SEDIMENT: BRK BLD COB PEB GRN SAM MUD VEG

PIT # 18  PIT DEPTH____ OIL CHARACTER____ OIL INTVAL: FROM____ TO____
CLEAN BELOW:_____  PIT ZONE: SU UI MI LI
SUBSURFACE SEDIMENT: BRK BLD COB PEB GRN SAM MUD VEG

PIT # 19  PIT DEPTH____ OIL CHARACTER____ OIL INTVAL: FROM____ TO____
CLEAN BELOW:_____  PIT ZONE: SU UI MI LI
SUBSURFACE SEDIMENT: BRK BLD COB PEB GRN SAM MUD VEG

PIT # 20  PIT DEPTH____ OIL CHARACTER____ OIL INTVAL: FROM____ TO____
CLEAN BELOW:_____  PIT ZONE: SU UI MI LI
SUBSURFACE SEDIMENT: BRK BLD COB PEB GRN SAM MUD VEG

PIT # 21  PIT DEPTH____ OIL CHARACTER____ OIL INTVAL: FROM____ TO____
CLEAN BELOW:_____  PIT ZONE: SU UI MI LI
SUBSURFACE SEDIMENT: BRK BLD COB PEB GRN SAM MUD VEG

PIT # 22  PIT DEPTH____ OIL CHARACTER____ OIL INTVAL: FROM____ TO____
CLEAN BELOW:_____  PIT ZONE: SU UI MI LI
SUBSURFACE SEDIMENT: BRK BLD COB PEB GRN SAM MUD VEG

PIT # 23  PIT DEPTH____ OIL CHARACTER____ OIL INTVAL: FROM____ TO____
CLEAN BELOW:_____  PIT ZONE: SU UI MI LI
SUBSURFACE SEDIMENT: BRK BLD COB PEB GRN SAM MUD VEG

PIT # 24  PIT DEPTH____ OIL CHARACTER____ OIL INTVAL: FROM____ TO____
CLEAN BELOW:_____  PIT ZONE: SU UI MI LI
SUBSURFACE SEDIMENT: BRK BLD COB PEB GRN SAM MUD VEG

PIT # 25  PIT DEPTH____ OIL CHARACTER____ OIL INTVAL: FROM____ TO____
CLEAN BELOW:_____  PIT ZONE: SU UI MI LI
SUBSURFACE SEDIMENT: BRK BLD COB PEB GRN SAM MUD VEG

PIT # 26  PIT DEPTH____ OIL CHARACTER____ OIL INTVAL: FROM____ TO____
CLEAN BELOW:_____  PIT ZONE: SU UI MI LI
SUBSURFACE SEDIMENT: BRK BLD COB PEB GRN SAM MUD VEG

PIT # 27  PIT DEPTH____ OIL CHARACTER____ OIL INTVAL: FROM____ TO____
CLEAN BELOW:_____  PIT ZONE: SU UI MI LI
SUBSURFACE SEDIMENT: BRK BLD COB PEB GRN SAM MUD VEG

PIT # 28  PIT DEPTH____ OIL CHARACTER____ OIL INTVAL: FROM____ TO____
CLEAN BELOW:_____  PIT ZONE: SU UI MI LI
SUBSURFACE SEDIMENT: BRK BLD COB PEB GRN SAM MUD VEG

PIT # 29  PIT DEPTH____ OIL CHARACTER____ OIL INTVAL: FROM____ TO____
CLEAN BELOW:_____  PIT ZONE: SU UI MI LI
SUBSURFACE SEDIMENT: BRK BLD COB PEB GRN SAM MUD VEG

PIT # 30  PIT DEPTH____ OIL CHARACTER____ OIL INTVAL: FROM____ TO____
CLEAN BELOW:_____  PIT ZONE: SU UI MI LI
SUBSURFACE SEDIMENT: BRK BLD COB PEB GRN SAM MUD VEG
ASAP TAG REVIEW SHEET

Segment: EV12  Subd: A  Site:  Date
PRE-Review 11/26/90

Priority For Addressing In 1990

✓ HIGH  ___ MEDIUM  ___ LOW  ___ NTR

Treatment Recommended: MANUALLY REMOVE - POOLED OIL, AP, SOUR

NO OG SHEET PROVIDED

Priority Site For Reassessment In 1991

YES  NO  YES  NO  YES  NO  YES  NO
✓ CG  ✓ ADEC  ✓ EXXON  ✓ LAND MGR

TAG 13 AUG 90
Access AP/OP/HOR & BIO

SEE SKETCH
ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/EV-12 STREAM NO: UNCATALOOGUED DATE 4/22/90

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)
7II Subsistence area: Deer harvesting (8/15 to 2/28)
See attached Ecological Constraint sheet for specific constraints and contacts.

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

SHPO SIGNATURE: __________________________ DATE: 5/7/90

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

RECOMMENDATIONS:

_____ No Treatment Recommended

X Treatment Recommended

X Manual Pickup

X Bioremediation

_____ Tar mat Removal

_____ Snare/Absorbent Booms

_____ Oil Snares (pom poms)

_____ Absorbents (pads, rolls, etc)

_____ Spot Washing: Wands

_____ Beach Cleaner

_____ Other (see comments)

COMMENTS: Recommended treatment includes 1) manual pickup of tar patties and debris, 2) bioremediation of areas of surface and subsurface oil shown on attached sketch map. Work should be conducted between 5/15 and 7/10 based on anadromous stream constraints.

TAG COMMENTS: In area indicated on the sketch: Manual Raking of surface material to expose subsurface mousse, manually remove mousse in this beam, follow up with bioremediation.

TAG APPROVAL DATE: 5/7/90

ADEC Art Wexler, Fish

EXXON Exxon

NOAA

USCG

FOSC: ____ DATE: 5-14-90

Notify USCG 24 hrs prior to work
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 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 or mechanical removal, can probably proceed without adherence to time constraints. In any case, contact ADF&G 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 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 consultation and advice.

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

1D Gill net area (8/7 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 area (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 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 unveiled intertidal and subtidal algae 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 James Brady 424-3212

3P Harbor seal and sea lion pupping (6/15 to 7/1)
3Q Harbor seal and sea lion molting (9/15 to 9/19)

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 72 hours 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

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

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 nesting site to 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:
6V Anchorage (6/1 to 9/15)
6W Forest Service cabin (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)
7H2 Bear harvesting (6/15 to 2/28)
7JJ 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 267-2350

PWS-C002 APR 1990
FIELD SHORELINE COMMENT SHEET

SEGMENT ST 1 EV012 SUBDIVISION: NO ASC # DATE 4/22/90

USCG NAME AND SIGNATURE

☐ NO TREATMENT RECOMMENDED ☑ TREATMENT SUGGESTED COMMENTS

1. MANUAL CLEAN-UP: Removal the Balls + ASPIRE

2. Bioremediation of front berm (cooking on shore)

☐ NO TREATMENT RECOMMENDED ☑ TREATMENT SUGGESTED

☐ BIOREMEDIATION NOT SUGGESTED

LAND MANAGER NAME AND SIGNATURE

☐ NO TREATMENT RECOMMENDED ☑ TREATMENT SUGGESTED COMMENTS
SHORELINE OILING SUMMARY

**SURFACE OIL**

<table>
<thead>
<tr>
<th>CHARACTER</th>
<th>DISTRIBUTION</th>
<th>OIL / FILM COLOR</th>
<th>IMPACTED ZONE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asphalt pavement</td>
<td>X</td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Pool</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cover</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Coat</td>
<td>X</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Stain</td>
<td>X</td>
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</tr>
<tr>
<td>Mousse</td>
<td>X</td>
<td></td>
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</tr>
<tr>
<td>Patties</td>
<td>X</td>
<td></td>
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</tr>
<tr>
<td>Tarballs</td>
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<td></td>
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</tr>
<tr>
<td>Film</td>
<td>X</td>
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**Subsurface Oil**

<table>
<thead>
<tr>
<th>PIT NO.</th>
<th>PIT DEPTH (cm)</th>
<th>SUBSURFACE OIL CHARACTER</th>
<th>OILED</th>
<th>OIL / FILM COLOR</th>
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**Comments**

**Review**

[Date and signature]

---

**Important Notes:**
- The oiled interval (≤ 5 cm) in Pit 5 does not constitute subsurface oil.
**ADPRC MULTI-ASSESSMENT DATA FORM**

1. **SURVEY TYPE:** OIL DISCHARGE ASSESSMENT  
2. **METHOD:** Aerial
3. **DATE:** APR-23-1991
4. **START TIME:** 14:45
5. **STOP TIME:** 17:10
6. **SECTOR #:** EV-012
7. **STATION #:** EV-012A
8. **LAT.:** ____________
9. **LONG.:** ____________
10. **SOURCES (Map, Large Scale):** NORTHEAST END, LUCY EVANS IS.
11. **DESCRIPTION:** ____________
12. **OIL TYPE (Pooled and Separated):**
   - Ammonia
   - Asphalt
   - Sleek, Spotty
13. **OILED DEBRIS:**
   - Yes
14. **SHEERLINE TYPE:**
   - Headland
   - Low-lying Rocks
   - Beach
   - Lagoon
   - Marsh
15. **WAVE EXPOSURE:**
   - High
   - Moderate
   - Low
16. **SUBSTRATE TYPE:**
   - Sediment
   - Boulder
   - Cable
   - Gravel
   - Sand
   - Mud/Silt
17. **PREDOMINANTLY FINE GRAINED SUBSTRATE:**

### EXTENT OF OIL

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18. **OIL IN STREAM:**
19. **OIL ON STREAM BANK:**
20. **OIL ON BEACH:**
21. **OIL ON BEACH ADJACENT TO MOUTH:**
22. **ANOMALOUS FISH PRESENT:**

---

**C3** EXON CMD CORDOVA TO SCAT TEAM P.16

---

**Remarks:**
- Predominantly fine-grained substrate on low exposure beach.
- Tar mats 20m x 2m N.W. of stream.
- Buried Lounge Lens (5-15 cm below surface: 5-10 cm S.E. of stream)  
- 6 m of stream (26 m x 1 m). Tar mats in small gravel.
RECOMMENDATIONS: MANUAL REMOVAL OF SUEPA
TAR MATS. MANUALLY REMOVE BURIED HOUSE LENS
(REMOVE ONLY OILY LENS, NOT CLEAN OVERBURDEN)

I agree with recommendations.

S. P. Faur

OIL DISTRIBUTION DIAGRAM

TAR MATS TO 10 CM
STREAM DELTA
Segment EV 012
no stream number
Ecological Summary

This small stream enters via a biologically barren boulder/cobble/pebble/gravel beach in a small cove. More stable sediments and boulders on either end of cove have healthy communities of Fucus, barnacles, mussels, etc. Two or three harbor seals were hauled out on rocky point at east end of cove when we arrived. One sea otter and a pair of red-breasted mergansers were also seen.

No ecological constraints re: cleanup procedures.

Michael Fawcett
SUBJECT SITE
WITHIN EV-12 A
(1 CF 2)

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

EV-12

ADEC Segment Length: 687m

Map Key: PWS-189
Name: Resmer
Date: 4/2/90
Date Entered:
SHORELINE EVALUATION

SEGMENT ST/ EV-014 SUBDIVISION A (1 OF 1) DATE 4/6/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
Salmon stream mouth no. (226-40 $16640)
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 nest (3/1 to 6/1)-Active eagle nest (3/1 to 9/1)
7II Subsistence area: Deer harvesting (8/15 to 2/28)
See attached Ecological Constraint Sheet for specific constraints and contacts.

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

SHPO SIGNATURE: [Signature] DATE: 4/17/90

OILING CATEGORIZATION:
Wide 0 m: Medium 98 m: Narrow 48 m: V. Light 39 m: No Oil 591 m
Subsurface Oil Observed: Yes ___ No X ___ Maximum Depth _______

RECOMMENDATIONS:
X 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: ___ Breakup ___ Beach Cleaner
X Removal ___ Other (see comments)

COMMENTS: The recommended treatment activities are as follows: 1) Bioremediation of area shown on attached sketch map, 2) Removal of tarmat along stream (see map) and, 3) Manual pick up of oiled vegetation. Treatment activities should be conducted 5/15 to 7/10 based on above anadromous stream constraints.

TAG COMMENTS:
AT TIME OF TREATMENT MONITORS TO ASSESS SUITABILITY.

TAG APPROVAL DATE: 4/17/90
ADEC [Signature] FOSC: [Signature] DATE: 5-1-90
EXXON [Signature] NOAA [Signature] Do not bioremediate just clean
USCG [Signature]
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. Contact ADF&G Habitat Division prior to treatment for permits.

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

Esther Hatchery release (4/15 to 6/1)

Main Bay Hatchery release (4/20 to 5/10)

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

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

Remote release site

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)
For Codes 1C through 1L contact ADF&G for specific dates, locations and constraints.

Herring spawning (4/1 to 6/15)
Restrict boat traffic to essential minimum. Avoid damage to unoiled intertidal and subtidal algae and seagrass. Contact ADF&G for specific dates and locations.

Harbor seal and sea lion pupping (5/1 to 7/1)
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 800m horizontal and 300m vertical distance from haulouts.

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

Shorebird/waterfowl concentration (4/1 to 5/15)
Restrict all activity to essential minimum, especially air traffic.

All Bald Eagle nests (3/1 to 6/1)
Active Bald Eagle nests (3/1 to 9/1)
Restrict air traffic 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.

Tent sites (5/1 to 9/15)
Anchorages (6/1 to 9/15)
Forest Service cabins (6/1 to 9/15)
Lodge (5/1 to 9/15)
Special use destination

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

Finfish harvesting

Deer harvesting (9/15 to 2/28)

Invertebrate harvesting

For Codes 7Z through 7JJ contact ADF&G and Chenega Corporation for specific dates, locations, and constraints.
FIELD SHORELINE COMMENT SHEET

SEGMENT ST1_ EV-14  SUBDIVISION: ___________________ DATE 4-6-90

USCG NAME: Randall Hubbard  SIGNATURE: ___________________

[ ] NO TREATMENT RECOMMENDED  [ ] TREATMENT SUGGESTED

COMMENTS

1. Area appears to be fairly free of oil damage, maybe in small spot where oil storm occurred I believe natural environment will decay most substance remaining.

ADEC

NAME: J. Lynn Martin  SIGNATURE: ___________________

[ ] NO TREATMENT RECOMMENDED  [ ] TREATMENT SUGGESTED

COMMENTS

Agree with Exxon ORS recommendation to only use manual cleanup techniques around stream bed to remove tarmats and oiled grass.

No treatment recommended for light bands of oil found in rocky areas or either side of segment, due to accessibility.

Super-tidal need to be looked at after snow melts.

LAND MANAGER

NAME: Patrick Selawoff  SIGNATURE: ___________________

[ ] NO TREATMENT RECOMMENDED  [ ] TREATMENT SUGGESTED

COMMENTS

Because oil was found so far up the stream, I would recommend the super tidal zone be removed could overrun.

If oil is fuel, I would reconsider my recommendation decision.

If it is a sensitive salmon creek.
SHORELINE OILING SUMMARY

OG: Reimer  
BIO: Zamar  
EXXON: Garcia  

USCG Hubbard  
LAND REP: Selanoff (GSC)  
ADEC: Martin  

SEGMENT ST/ EV-14  
SUBDIVISION FT  
TIME 17:37 10/8/90  
DATE 4/6/90

TEAM NO.: 16  
TIDE LEVEL: +1 to -4.5  
DATE 4/6/90

EST. SUBDIVISION LENGTH: 3.92 m  
Sun. Clouds  
Fog  
Rain  
Snow

SURVEYED FROM: Foot  
Boat  
Halo  
WORKING DIRECTION: East to West

SURFACE SEDIMENTS: R 10% B 20% C 10% P 20% G 15% S 5% M - V -

SLOPE: Lang 80% Hang 20% Vert

WAVER MEASUREMENTS:

OIL CATEGORY LENGTH:

SURFACE OIL

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PAVEMENT: M F 3/14 sq. m by 1 cm

PATTIES / TARBALLS: 0 BAGS

NEAR SHORE SHEEN?: NO

NEAR SHORE OILED?: NO  
BR RW SL TL

OILED DEBRIS AMOUNT:

Logs M

VEGETATION:

Trash M

Debris

Photographs:

Roll No. 5T-16-5

Frames 32-36

OILED DEBRIS AMOUNT:

Logs M

VEGETATION:

Trash M

Debris

SUBSURFACE OIL

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COMMENTS

Pocket beach with rocky headlands on either side, wide tidal flats on stream mouth. Broken oil cover under and around boulders and rock on the east and west side of Segment ST/ EV-12. Small (1x5m x 1cm) pavement patch in USZ along east side of stream, oiled grass along sides of stream in the headshore. No oil was found on the tidal flats, super-tidal area with snow.
### SHORELINE OILING SUMMARY (PAGE 2 of 2)

#### SEGMENT ST/ EV-14, SUBDIVISION A

#### SUBSURFACE OIL (CONTINUED)

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**COMMENTS**

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REVIEWED:

DATE: 4/9/90
SHORELINE ECOLOGICAL SUMMARY

Segment ST/ E4-14 Subdivision: ___________ Date (mo/day/yr) 4/6/90

B (24 hr) 1835 Off Biologist: TONY ZAMORA

(A) Substrate type and % of segments:

(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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FUCUS

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Wildlife Observation/General Comments:
- Bedrock overall alga coverage is dense, Fucus ~50% with Palmaria, Fil. Crn. (Filamentous Green Algae)
- Biotas dense only on rocky points bordering sand/pebble beach
- Little seen on beach except barnacle laminiarians anchored to pebbles and barnacles on Ln. Pebble
- 30% mortality observed on oil coated barnacles
- Under cobble in low zone: Lambradrium, Ussh, Alcyonides, Bryozoans, Gu. Spirorbids, Oligochats, Hemipexes, Amphipods
Wildlife: Sea Lion

Ecological Comments: 14% 2 Ty G.
ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/ EV-14  STREAM NO: 226-40-16640  DATE 4/22/90

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)
7II  Subsistence area: Deer harvesting (8/15 to 2/28)
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 located in Subdivision A (1 of 1).

SHPO SIGNATURE: ____________________________ DATE: 5/8/90

Subsurface Oil Observed: Yes____ No____ 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
_X_Tarmat Removal  _____Beach Cleaner
_____Other (see comments)

COMMENTS: Recommend manual removal of tarmats as indicated on sketch map. Work should be conducted between 5/15 and 7/10 based on anadromous stream constraints.

TAG COMMENTS:

TAG APPROVAL DATE: 5/7/90
ADEC  EXXON  USCG
NOAA

FOSC: ____________________________ DATE: 5/8/90

following Tarmat Removal. Notify CVC
24 hrs prior to work.
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 washing 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 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 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 method, 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

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 algae and seagrass. 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

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 766-3377

Shorebird/waterfowl concentration (4/1 to 6/15)

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

AGENCY CONTACT PERSON: USFWS Jill Parker 766-3377

AGENCY CONTACT PERSON: ADF&G Tom Roth 267-2206

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

Restrict air traffic and all disturbance to essential minimum. No personnel within 400m. Aircraft to maintain 800m horizontal and 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 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 in situ 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 EV 014 SUBDIVISION: 16640 DATE 9/22/90

USCG NAME AND MC INSTRUCTION: J.M. MEHER

☐ NO TREATMENT RECOMMENDED ☑ TREATMENT SUGGESTED

COMMENTS

1. MANUAL CLEAN-UP; REMOVE ASPHALT AT RED STAKE.

☐ NO TREATMENT RECOMMENDED ☑ TREATMENT SUGGESTED

IN ADDITION TO ABOVE MANUAL CLEAN-UP OF TAR PATCHES ON WEST SIDE OF CHANNEL (SEE DIAGRAMS AND ADFEC OBSERVATIONS AND RECOMMENDATION)

☐ NO TREATMENT RECOMMENDED ☑ TREATMENT SUGGESTED

IN ADDITION TO ABOVE MANUAL CLEAN-UP OF TAR PATCHES ON WEST SIDE OF CHANNEL (SEE DIAGRAMS AND ADFEC OBSERVATIONS AND RECOMMENDATION)

☐ NO TREATMENT RECOMMENDED ☑ TREATMENT SUGGESTED

IN ADDITION TO ABOVE MANUAL CLEAN-UP OF TAR PATCHES ON WEST SIDE OF CHANNEL (SEE DIAGRAMS AND ADFEC OBSERVATIONS AND RECOMMENDATION)

☐ NO TREATMENT RECOMMENDED ☑ TREATMENT SUGGESTED

IN ADDITION TO ABOVE MANUAL CLEAN-UP OF TAR PATCHES ON WEST SIDE OF CHANNEL (SEE DIAGRAMS AND ADFEC OBSERVATIONS AND RECOMMENDATION)
Observations. The intertidal zone surrounding the stream channel consists mostly of small-grained material. The site has low exposure to wind and waves. Northwest of the channel, in the upper-intertidal zone, tar mats are scattered within a 20 m x 2 m area. East of the channel a 25 m x 1 m lens (5 - 10 cm thick) of mousse is buried beneath 5 - 15 cm of clean sand.

Treatment Recommendations. Manually remove surface tar mats. Uncover subsurface mousse lens and remove oiled sand. Do not remove clean overburden above subsurface lens.

Observations. This is a well-protected, sandy, gravelly beach. Northwest of the stream channel in the upper-intertidal zone are scattered tar patches. Tar mats and patties are scattered on the east bank of the stream, within the extreme upper-intertidal zone. At this point, there are some oiled gravels and cobbles within the submerged portion of the stream channel. No buried oil was observed.

Treatment Recommendations. Manually remove all tar mats and patties from the beach adjacent to the channel, from the stream bank, and from the stream channel.

Observations. This site is a small pocket cove confined on either side by bedrock walls. Tar patties are scattered in a ring around the high tide line on either side of the channel. The bedrock outcrop at the western entrance to the cove has significant surface coverage of tar. Some living biota remains or has re-invaded these areas, although in lower concentrations than in nearby clean areas.

Treatment Recommendations. Manual removal of tar mats on the high tide line. No treatment is recommended for the bedrock outcrop.
**SHORELINE OILING SUMMARY (ANAD.) 37/55**

**EXXON CMD CORDOVA TO SCAT TEAM P.37**

**OIL WILLIAM REID USOG Mc MAHON SEGMENT ST'/ EVOLMA**  
**BIO. MICHAEL FALKON LAND REP. Tom Grow ADFG ADG MRR. F.**  
**GARCIA WILDL IFI TRIM 35 90 0.00.**  
**TEAM NO. 15 TIDE LEVEL At. 0 DATE 2/2/8**

**EST. SUBDIVISION LENGTH: m**  
**UPLANDS DESCRIPTION: [Grass, Forest, Rock]**  
**SURVEYED FROM: [Foot, Boat, Helo]**  
**SURFACE SEDIMENTS: R % B % C % D % P % G % S % M % V**  
**SLOPE: Lang % Hang % Vert %**  
**WAVE EXPOSURE: [Low, Med, Hi]**

**OIL CATEGORY LENGTH: W m M m N m V m 4.5 m NO 2.5**

### SURFACE OIL

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<th>DISTRIBUTION</th>
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<th>IMPACTED ZONES</th>
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<tr>
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<tr>
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<tr>
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**PAVEMENT H F 8 sq. m by 8 sq. m**

**PATTIES / TARBALLS**

**NEAR SHORE SHEEN? [No] BR AW SL**

**OILED DEBRIS**

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<th>Did You Col</th>
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**Photographs:**

- Roll No.  
- Frames  

### SUBSURFACE OIL

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<th>PIT NO.</th>
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<th>SUBSURFACE OIL CHARACTER</th>
<th>OILED INTERVAL</th>
<th>BELOW OIL / FILM COLOR</th>
<th>PIT ZONE</th>
<th>ANA SHEEN (TYPE)</th>
<th>SURFACE SUBSURF. SEDIMENT</th>
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**COMMENTS**

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**Extent of Oil**

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**Surface Coverage**

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**Penetration**

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**Overall Oil Impact**

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**Oil Type**

- Puddle
- Mousse
- Tar
- Asphalt
- Sticky
- Stain

**Oiled Debris**

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<thead>
<tr>
<th>Debris</th>
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**Shoreline Type**

- Headland
- Low lying Rocks
- Beach
- Cave
- Lagoon
- Marsh

**Wave Exposure**

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**Substrate Type**

- Bedrock
- Boulder
- Cobble
- Sand
- Mud/

**Conditions:** Predominantly Small Grained Sheltered Cove, Scattered Tar Patches 20m N.W. of Channel, Upper-Mid Intension 20m x 4m, Band of Tar Mats, 8 Patties Along West Stream Bank, Some Tarred
**Description**

**Recommendations:** Manual removal of all tar patties and mats.

I agree with recommendations.

**48 OIL DISTRIBUTION DIAGRAM**

- Scattered tar patties
- Tar mats and patties
- Scattered cobblestones and gravel in the channel

Date: APR-23-1990
Time: 19:07
From: EXXON CMD CORDOVA
To: SCAT TEAM
Page: P.36

Z26-40-10640
38/55
Segment EV 014
stream 226-40-16620

Ecological Summary

This stream enters the sea in a small cove similar to EV 012 - sand/pebble/cobble bank with larger boulders at each end of cove. Patches of Eules, mussels, and barnacles occur on cobble around the stream mouth and are more dense on boulders at either end of cove. Tar mats were found on UTZ on East and West sides of stream, manual removal recommended. No ecological constraints re: intertidal biota.

M. F. Fawcett
ANADROMOUS FISH STREAM EVALUATION ADDENDUM

CONSTRAINTS FOR STREAM NO. 226-40-16640

SEGMENT EV-14 SUBDIVISION A

WORK WINDOW

Tarmat Removal

OPEN

Bioremediation Less Than 100m From Stream WORK PRIOR TO 7/10

(ADF&G MONITOR REQ.)

*Assess need for custom blend following tarmat removal (FOSC comment)

ARCHAEOLOGICAL STANDARD CONSTRAINT

If cultural resources are uncovered, PHONE 564-3274.

APPLICABLE ECOLOGICAL TIME CONSTRAINTS

1A, 1B Salmon Stream

ADF&G catalogued anadromous stream (226-40-16640) is in 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.

1K Purse Seine Area

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.

7II Subsistence: Deer Harvesting

No constraint to tarmat removal.

OTHER ECOLOGICAL CONSIDERATIONS

No disturbance to stream bed or banks. No flushing of pollutants or sediments into stream drainage; do not allow Inpox 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 boat and air traffic and beach disturbance to essential minimum after 8/15. Avoid any unnecessary disturbance or damage to unoiled biota and substrate.

SEE SUBDIVISION CONSTRAINT ADDENDUM EV-14A
FOR ADDITIONAL CONSTRAINT INFORMATION

FOSC: D. Jareck

Prepared by: A. Mullina

Date 6/4/90

Date 6/14/90
SHORELINE EVALUATION

SEGMENT ST/ EV-15 SUBDIVISION A (1 OF 1) DATE 4/20/90

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)
(an eagle nest located in adjacent segment)
6Y Recreation: Special use destination
7II Subsistence area: Deer harvesting (8/15 to 2/28)
See attached Ecological Constraint sheet for specific constraints and contacts.

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

SHPO SIGNATURE: __________________________ DATE: 5/3/90

OILING CATEGORIZATION:
Wide 0 m: Medium 66 m: Narrow 62 m: V.Light 43 m: No Oil 884 m
Subsurface Oil Observed: Yes ___ No ___ Maximum Depth ______

RECOMMENDATIONS:
_____ No Treatment Recommended
_____ X Treatment Recommended
_____ 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: Recommend bioremediation in areas shown on sketch map (difficult access - safety concerns). Work should be conducted after 6/1 and with USFWS approval regarding eagle nest constraint.

TAG COMMENTS: Manual Pickup of Asphalt & Photo from Asbestos
Embedded if feasible prior to 9/0

TAG APPROVAL DATE: 5/3/90
ADEC ART WEIER DATE: 5/18/90
EXXON AMOS T. WILKINS FOSC: ________ DATE: 5/18/90
NOAA C. PETROS CHASE
USCG KENNETH HINKEL
**PWS, SEWARD AND HOMER ECOLOGICAL CONSTRAINTS**

1A Salmon stream mouth - fly 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 oilspill 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 oilspill 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 consultation 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 Swannell Bay Hatchery release (4/15 to 6/1)

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

1H Fur seal release site

No use of methods which might affect nearshore oil or toxicity levels, such as hot water wash or oilspill 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 8/31)

1J Purse seine area (7/20 to 9/30)

1K Purse seine hook-up (7/20 to 9/30)

1L Set net site (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 oilspill 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 unveiled intertidal and subtidal algae and seagrass. If plans for treatment include methods such as hot water wash or oilspill application which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.

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

3N, 3P Harbor seal and sea lion pupping (5/15 to 7/1)

3Q 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 800m horizontal and 300m vertical distance from haulouts. No application of oilspill 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 566-7235

ADFG 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/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

ADFG Tom Roth 267-2206

6F: 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 Anchorage (6/1 to 9/15)

6W Forest Service cabin (6/1 to 9/15)

6X Lodge (6/1 to 9/15)

Special use destination

7Z Subsistence area: Salmon harvesting (6/1 to 9/30)

7HH Deer harvesting (8/15 to 2/26)

7JJ 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. It plans for treatment include methods such as hot water wash or oilspill 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 267-2369
FELD SHORELINE COMMENT SHEET

SEGMENT ST: EV-15 SUBDIVISION: A (100) DATE 6-30-90

NOAA
NAME: Michael Buchman SIGNATURE: 

☐ NO TREATMENT RECOMMENDED ☑ TREATMENT SUGGESTED

COMMENTS: NORTHERN Tip is around toward SE is califred slate outcrop with very slight spillage. Rock works on either side of NUD'n pedestal beach and a band of parry coating. Pocke beach had winter storm barn. No oil observed there. Eastern side of segment is rounded pebble, 1: angle beach break by vertical rock wall. Winter Storm barn here too. No surface oil observed. Rock fissure of tilted Slate at southern end and had 5mm band of coating. A (9) rock outcrop just south of that had covering of oil on backside. At very south end, 2 pockets of 2 same slates over Bolder & cobble separated by a outcrop had a coat of crude of oil on surface. Rocks & fissures had greater oilling. Asphalt patties were seen in underlying gravel. Silver to Rainbow sheen was seen in tide pools. Southern pocket had numerous patties of mousse at bottom of cracks.

ADEC
NAME: John Heyer SIGNATURE: 

☐ NO TREATMENT RECOMMENDED ☑ TREATMENT SUGGESTED

COMMENTS:

Most of segment is light to no oilling.

Two pocket beaches at southern end of segment need treatment. Oil is down below boulders + will be difficult to remove.

☐ Pom poms, Shells, towels, sorba+ pads re. for treatment on pocket beaches. See sketch map #2

LAND MANAGER
NAME: Leo Wargo change Copy SIGNATURE: 

☐ NO TREATMENT RECOMMENDED ☑ TREATMENT SUGGESTED

COMMENTS:

Manual Clean. 1 Hand labor.
SHORELINE OILING SUMMARY

OG Mike Fott
BIO Kathleen Cools
EXXON Larry Osso

LAND REP. STEVE WARD
ADEC JOHN HAYES

SEGMENT ST/ EU-15
SUBDIVISION A (1 OF 1)
TEAM NO. 11

TIDE LEVEL 41.5
DATE 5/20/90

EST. SUBDIVISION LENGTH: 1055 m

SURVEYED FROM: Foot Boat Helo

UPLANDS DESCRIPTION: Grass Forest Rock 3000 feet back

SURFACE SEDIMENTS: R 60% B 20% C 15% P 5% G 0% S 0% M 0% V 0%
SLOPE: Lang 20% Hang 20% Var 60%

OIL CATEGORY LENGTH: W 0 m M 60 m N 50 m V 40 m

WAVE EXPOSURE: Low Med High

SURFACE OIL

CHARACTER

DISTRIBUTION

OIL / FILM COLOR

OIL / FILM COLOR

IMPACTED ZONES

OILED AMOUNT

DEBRIS

OILED

AMOUNT

DEBRIS

PAVEMENT

H

9

Z

sq. m by 10

PAVEMENT

H

9

Z

sq. m by 10

NEAR SHORE SHEEN?

NO

MRM RW SL TL

DEBRIS

DID YOU COLLECT

DEBRIS?

YES ☐ NO ☐

OILED

AMOUNT

LOGS

Vegetation

Trash

Debris

#BAGS

1

Photographs:

Roll No.

Frames

1052

SUBSURFACE OIL

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<th>OIL / FILM COLOR</th>
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COMMENTS: Some stain and coating occurred near the 3000 ft mark along the northern end of the segment. A 3000 ft marker was observed along a reef wall on the southern end of the segment. The area consisted mostly of high angle rock and Boulder face wi some low angle Boulder/ cobble beaches. The southern end of the segment (south eastern) contained some substantial oiling. This area consisted of 3 pocket B/C beaches, the northern most of these beaches had a 5m x 15m oil slick on the R/R in the HITZ on the N side of the beach.

REVIEWED 4-23-90

DATE 4-23-90
## SUBSURFACE OIL (CONTINUED)

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### COMMENTS

The other two pocket beaches (map 2) had some substantial oiling. They consisted of two boulder pocket coves separated by a 70 m rocky headland. Both coves have a CT/P tar coat on the exposed boulder face but in the crevasses between the boulders are asphalt patches, hardened mousse and tar cover. One cove has a 15 m x 20 m affected area, the other a 10 m x 20 m area. The rocky headland which separates the two coves has a 1 m x 2 m CT/P stain in the HETZ.
LEGEND

1 - trees

// - steep Bedrock Boulder Backshore

O - Large Boulder

/// - mousse and Asphalt

High angle Rock/Boulder Cliffs

High angle Large Boulder Pocket Beach

15m x 20m CT/P tar coat on Boulder, Hardened mousse, Asphalt and tar between crevices in boulders

1m x 20m CT/P tar coat on rock face between the two coves

10m x 20m CT/P Boulder/Rock face Hardened mousse, Asphalt and tar between crevices in boulders

High angle Large Boulder Pocket Beach

See map 1

Oil Character, Length (m): AP PO CV CT ST MB PT TB FL NO
**SHORELINE ECOLOGICAL SUMMARY**

Segment ST 15-15  Subdivision A  (1 of 1)  

Date (mo/day/yr)  04/20/90  

Time (24 hr)  1600  

Biologist  Kathleen Conlan  

(A) Substrate type and % of segments:  

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<th>(3) Cobble</th>
<th>(4) Pebble</th>
<th>(5) Sand</th>
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(B) Overall % cover of biota (% of segment):  

- Dense: 50  
- Moderate: 20  
- Low: 0  

(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 (S)  

**BARNACLES**  

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Photographs:  

Roll No. ST 11-3  
Frames 11, 12, 13  

Wildlife Observations/ General Comments:  

- Baltic Sculpin Abundant  
- 2 Sea Otters  
- 3 Harbor Seals  
- 1 Bald Eagle  

Ecological Considerations:
ECOLOGY MAP (1 OF 1)

RESOURCE CODES FOR ENTIRE SEGMENT:

1

Bald Eagle Nest ≤ 400 M of Segment as Shown.

EV-1

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

ADEC Segment Length: 1055 M

Map Key: PWS-183
Name: K. Conlan
Date: 20 April 1990
Data Entered:

St-11-3
± 11, 12, 13

Dead Eagle Nest
ADDENDUM: SUBDIVISION CONSTRAINTS
SEGMENT EV-15 SUBDIVISION A (1 of 1)

WORK WINDOW

<table>
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<th>Manual Pickup</th>
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<td>Bioremediation</td>
<td>WORK BEFORE 7/25</td>
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ARCHAEOLOGICAL STANDARD CONSTRAINT

If cultural resources are uncovered, PHONE 564-3274.

APPLICABLE ECOLOGICAL TIME CONSTRAINTS

<table>
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<th>1K</th>
<th>Purse Seine Hook-off</th>
<th>Closed to bioremediation after 7/25. No constraint to manual pickup and tarmat removal.</th>
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<td>5T</td>
<td>Bald Eagle Nest</td>
<td>NO CONSTRAINT. Work area is more than 400m from nest.</td>
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<tr>
<td>7II</td>
<td>Subsistence: Deer Harvesting</td>
<td>Closed to bioremediation after 8/15. No constraint to manual pickup and tarmat removal.</td>
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OTHER ECOLOGICAL CONSIDERATIONS

Restrict boat and air traffic to essential minimum after 7/25. Restrict beach disturbance to essential minimum after 8/15. Avoid any unnecessary disturbance or damage to unrolled biota and substrate.
I

ASAP FOLLOWUP RECOMMENDATIONS

Segment: AS/ENV-15 Subd.: A Site: Date: 8-17-90

Conditions Observed: Area is two shoulder pocket beaches side by side. Several large arrays of MS, AP, and OP and OR surface oil are located.

Followup Recommendations: Recommend removal of MS, AP, and OP and OR oil using skimmers and sleds to be followed by manual picking where possible and desalinization.

Completed by Pickup Crew: [ ] YES [ ] NO

Priority for Addressing in 1990: [ ] High [ ] Mod. [ ] Low

ADBC

[Signature]

Comments:

Exxon

[Signature]

Comments: I AGREE OF RECOMMENDATIONS

USCG

[Signature]

Comments: agree w/ above comments.

Land Rep.

[Signature]

Comments: Inadequate manual in 10-90 back and out the oil out.

Name: WARD E W

[Signature]
SEGMENT AS: EV-15
SUBDIVISION: A
SITE: 1
DATE: 8-3-90

NAME: Robert D. Ford
SIGNATURE: [Signature]

☑ YES ☐ NO PRIORITY SITE FOR REASSESSMENT IN 1991

REASON:
Oiling is pervasive in two small pocket beaches, with heavy accumulations found between large boulders and in bedrock cracks. Recommend additional treatment in 1990 and reassessment in 1991.

NAME: Bob McCreadie
SIGNATURE: [Signature]

☑ YES ☐ NO PRIORITY SITE FOR REASSESSMENT IN 1991

REASON:
A substantial amount of MS, AP, and OP or other subsurface oil remains on two boulder pocket beaches. Summer cleanup crews ('90) have been on site, but large amounts of gross contamination remain. An ASAP follow-up recommendation form has been submitted calling for the removal of all mannual AP and OP or OR.

NAME: Steve Corinno
SIGNATURE: [Signature]

☑ YES ☐ NO PRIORITY SITE FOR REASSESSMENT IN 1991

REASON:
Lots of oil remaining to pick up in 90. Check Sub surface carefully in 91.

NAME: John Deen
SIGNATURE: [Signature]

☑ YES ☐ NO PRIORITY SITE FOR REASSESSMENT IN 1991

REASON:
Candidate for early '91, High Priority Assessment. See follow up recommendation for '90.
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**EST. SITE LENGTH:** 66 m

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<td>PATTIES/T.B.</td>
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<td>FILM</td>
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**EST. SITE LENGTH:** 66 m

### SUBSURFACE OIL

<table>
<thead>
<tr>
<th>SITE NO</th>
<th>PIT NO</th>
<th>PIT DEPTH (cm)</th>
<th>SUBSURFACE OIL CHARACTER</th>
<th>OILED BELOW (Y/N)</th>
<th>PIT ZONE</th>
<th>SUBSURFACE OIL CHARACTER</th>
<th>OILED BELOW (Y/N)</th>
<th>PIT ZONE</th>
<th>SUBSURFACE OIL CHARACTER</th>
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<th>PIT ZONE</th>
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<th>SUBSURFACE OIL CHARACTER</th>
<th>OILED BELOW (Y/N)</th>
<th>PIT ZONE</th>
</tr>
</thead>
</table>

**COMMENTS:**
- Two small discrete patches are oiled with 07/57/65, ranging from patchy to broken. Most of the oil is deposited on large boulders approximately 15 m in angular.
GENERAL DATA

SEG ID: EU045  SBV:  A  SITE:  1  TEAM:  3  DATE:  8/10/90
SITE LTH:  OIL CATEGORIES:  W  M  ZON:  VL  NO: 6  989

SURFACE DATA

CHAR #:  1  OIL CHAR:  CT  OIL DIST:  CONT  BRKN  20  PTCH  10  SPLH
TIDAL ZONE:  SU  V1  X  MI  LI

CHAR #:  2  OIL CHAR:  ST  OIL DIST:  CONT  BRKN  20  PTCH  10  SPLH
TIDAL ZONE:  SU  V1  X  MI  LI

CHAR #:  3  OIL CHAR:  MS  OIL DIST:  CONT  BRKN  PTCH  30  SPLH
TIDAL ZONE:  SU  V1  X  MI  LI

CHAR #:  4  OIL CHAR:  NO OIL DIST:  CONT  BRKN  PTCH  SPLH
TIDAL ZONE:  SU  V1  X  MI  LI X

CHAR #: OIL CHAR: OIL DIST: CONT BRKN PTCH SPLH
TIDAL ZONE:  SU  V1  X  MI  LI

CHAR #: OIL CHAR: OIL DIST: CONT BRKN PTCH SPLH
TIDAL ZONE:  SU  V1  X  MI  LI

CHAR #: OIL CHAR: OIL DIST: CONT BRKN PTCH SPLH
TIDAL ZONE:  SU  V1  X  MI  LI

CHAR #: OIL CHAR: OIL DIST: CONT BRKN PTCH SPLH
TIDAL ZONE:  SU  V1  X  MI  LI

CHAR #: OIL CHAR: OIL DIST: CONT BRKN PTCH SPLH
TIDAL ZONE:  SU  V1  X  MI  LI

CHAR #: OIL CHAR: OIL DIST: CONT BRKN PTCH SPLH
TIDAL ZONE:  SU  V1  X  MI  LI

CHAR #: OIL CHAR: OIL DIST: CONT BRKN PTCH SPLH
TIDAL ZONE:  SU  V1  X  MI  LI

CHAR #: OIL CHAR: OIL DIST: CONT BRKN PTCH SPLH
TIDAL ZONE:  SU  V1  X  MI  LI

CHAR #: OIL CHAR: OIL DIST: CONT BRKN PTCH SPLH
TIDAL ZONE:  SU  V1  X  MI  LI

CHAR #: OIL CHAR: OIL DIST: CONT BRKN PTCH SPLH
TIDAL ZONE:  SU  V1  X  MI  LI

CHAR #: OIL CHAR: OIL DIST: CONT BRKN PTCH SPLH
TIDAL ZONE:  SU  V1  X  MI  LI

CHAR #: OIL CHAR: OIL DIST: CONT BRKN PTCH SPLH
TIDAL ZONE:  SU  V1  X  MI  LI
ASAP DATA ENTRY FORM

SUBSURFACE DATA

SEGMENT ID:  EV015  SUBDIV: A  SITE: 1

PIT #  O  PIT DEPTH:  OIL CHARACTER:  OIL INTERVAL: FROM:  TO:
CLEAN BELOW:  PIT ZONE:  SUBSURF SEDIMENT:  RIC  BLD  COB  PEB  GRN  SAM  MUD  VEG

PIT #  O  PIT DEPTH:  OIL CHARACTER:  OIL INTERVAL: FROM:  TO:
CLEAN BELOW:  PIT ZONE:  SUBSURF SEDIMENT:  RIC  BLD  COB  PEB  GRN  SAM  MUD  VEG

PIT #  O  PIT DEPTH:  OIL CHARACTER:  OIL INTERVAL: FROM:  TO:
CLEAN BELOW:  PIT ZONE:  SUBSURF SEDIMENT:  RIC  BLD  COB  PEB  GRN  SAM  MUD  VEG

PIT #  O  PIT DEPTH:  OIL CHARACTER:  OIL INTERVAL: FROM:  TO:
CLEAN BELOW:  PIT ZONE:  SUBSURF SEDIMENT:  RIC  BLD  COB  PEB  GRN  SAM  MUD  VEG

PIT #  O  PIT DEPTH:  OIL CHARACTER:  OIL INTERVAL: FROM:  TO:
CLEAN BELOW:  PIT ZONE:  SUBSURF SEDIMENT:  RIC  BLD  COB  PEB  GRN  SAM  MUD  VEG

PIT #  O  PIT DEPTH:  OIL CHARACTER:  OIL INTERVAL: FROM:  TO:
CLEAN BELOW:  PIT ZONE:  SUBSURF SEDIMENT:  RIC  BLD  COB  PEB  GRN  SAM  MUD  VEG

PIT #  O  PIT DEPTH:  OIL CHARACTER:  OIL INTERVAL: FROM:  TO:
CLEAN BELOW:  PIT ZONE:  SUBSURF SEDIMENT:  RIC  BLD  COB  PEB  GRN  SAM  MUD  VEG

PIT #  O  PIT DEPTH:  OIL CHARACTER:  OIL INTERVAL: FROM:  TO:
CLEAN BELOW:  PIT ZONE:  SUBSURF SEDIMENT:  RIC  BLD  COB  PEB  GRN  SAM  MUD  VEG
ASAP TAG REVIEW SHEET
Segment: EV15  Subd: A  Site:  Date  PRE-Review  11 Aug

Priority For Addressing In 1990

HIGH  MEDIUM  LOW  NTR

Treatment
Recommended: WAVE ACTION  NTR

NTR
PATCH MOUSE  NTR

Priority Site For Reassessment In 1991

YES CG  NO  YES ADEC  NO  YES EXXON  NO  YES LAND MGR  NO

TAB 13476/90
Manual Remove Accessible Mouse
OF BIO
SHORELINE EVALUATION

SEGMENT ST/ EV-16 SUBDIVISION A (1 OF 1) DATE 4/20/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
5T-2 All bald eagle nests (3/1 to 6/1) - Active eagle nests (3/1 to 9/1)
7II Subsistence area: Deer harvesting (8/15 to 2/28)
See attached Ecological Constraint sheet for specific constraints and contacts.

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

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

OILING CATEGORIZATION:
Wide 0 m: Medium 141 m: Narrow 0 m: V.Light 742 m: No Oil 0 m
Subsurface Oil Observed: Yes X No Maximum Depth 45 cm

RECOMMENDATIONS:
____ No Treatment Recommended
X Treatment Recommended
X Manual Pickup
X Bioremediation
____ Tarmat Removal

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

COMMENTS: Recommended treatment includes 1) manual removal of patties, 2) rake down storm berm and, 3) bioremediation per sketch map. Work should be conducted after 6/1 with USFWS approval based on eagle nest constraints.

TAG COMMENTS:

TAG APPROVAL DATE: 5/3/90
ADEC Art Weiner Art Deen
EXXON Amy Jolene Bead
NOAA Gayle Parvin
USCG [Signature]

NOTICE OIL 24 HRS IN ADVANCE OF WORK
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 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 Mortson 257-2324

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 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

1D. Esther Hatchery release (4/15 to 6/1)

1E. Main Bay Hatchery release (4/20 to 6/10)

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 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

11. Gill net area (5/7 to 6/31)

1J. Purse seine area (7/20 to 8/30)

1K. Purse seine hook-off (7/20 to 8/30)

1L. Set net area (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 (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

2A. 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 uncollected 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 424-3233

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

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 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 556-7235 ADF&G Don Calkins 257-2403

5. 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 Roth 257-2208

7A. All Bald Eagle nests (5/1 to 6/1)

Active Bald Eagle nests (5/1 to 6/1)

Restrict air and boat 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

8A. Recreation:

Tent sites (5/1 to 9/15)

8B. Anchorage (5/1 to 9/15)

8C. Forest Service cabins (5/1 to 9/15)

8D. Lodge (5/1 to 9/15)

8E. Special use destination

7Z. Subsistence area: Salmon harvesting (5/1 to 9/30)

7F. Pinkfish harvesting

7H. 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. 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 257-2359
FIELD SHORELINE COMMENT SHEET

SEGMENT ST: EV-16  SUBDIVISION: A (10f1)  DATE 4-20-90

NOAA
NAME Michael Burchman  SIGNATURE

☐ NO TREATMENT RECOMMENDED  ☑ TREATMENT SUGGESTED

COMMENTS
Entire segment alternates from rock walls to pocket beaches.
All rock walls had bands of stone or capping. Beaches to the south
were made of more angular cobbles or pebbles (lower exposure),
while those to north were more rounded. All beaches had light
stoning on cobbles.
Several had occasional asphalt patches. All beaches had
significant winter storm berms at Supra 272. (Above current
drift line). One beach
was found to have a significant layer of relatively unweathered
oil in pits dug in the winter storm berm. The storm berm at these pits
was 25-30 cm thick.

ADEC
NAME John Heyer  SIGNATURE

☐ NO TREATMENT RECOMMENDED  ☑ TREATMENT SUGGESTED

COMMENTS
1. Manual pick up of asphalt patties (small) on
solder/cobble pocket beaches. Also mop up of recoverable
oil in bands with asphalt patties.

Three areas noted on sketch map N45 9x30m Band
5x60m Band 6x40m Band

The rest of segment is Stein + VE oiling. NTR

LAND MANAGER
NAME Sherrill New.  SIGNATURE

☐ NO TREATMENT RECOMMENDED  ☑ TREATMENT SUGGESTED

COMMENTS
Manual pick up.

☐ NO TREATMENT RECOMMENDED  ☑ TREATMENT SUGGESTED

COMMENTS
Manual pick up.

ADEC. One pocket beach had subsurface oiling in a 5cm lens
below 30cm. of storm berm. Oil was mousse that had not
weathered and remained a pool of oil lens. No cattle for treatment.
**SHORELINE OILING SUMMARY**  
**CG. Mike Snegut**  
**Bio: Kathleen Connor**  
**Land Rep: creek, ADEC Team: No.**  
**Exxon Land Rep: creek, ADEC Team: Yes.**  
**Time: 14:42 16.40.**  
**Tide Level: 2.6.**  
**DATE: 4/2/90.**  
**Est. Subdivision Length: 226 m.**  
**Uplands Description: Sun - Clouds - Fog - Rain - Snow.**  
**Surveyed From: Foot - Boat - Helo.**  
**Working Direction: S - N.**  
**Surface Sediments: R - B - C - P - G - S - O - M - V - D.**  
**Slope: Lang - Hang - Ven - 30°.**  
**Wave Exposure: Low - Med - High.**  
**Oil Category Length: W - O - M - N - 0 - V.**  
**Surface Oil**  
<table>
<thead>
<tr>
<th>Character</th>
<th>Distribution</th>
<th>Oil / Film Color</th>
<th>Impacted Zones</th>
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<tr>
<td>Cover</td>
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<tr>
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<td>X</td>
<td>X</td>
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<td>Stain</td>
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<td>Patties</td>
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<td>Tarballs</td>
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<tr>
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**Surface Oil**  
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<th>Oiled Debris</th>
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<th>Did You Collect Debris?</th>
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<td>Debris</td>
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<tr>
<td>Bags</td>
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**Photographs:**  
Roll No.  
Frames  

**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>Anaerobic Zone</th>
<th>Sediments</th>
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<td>Y</td>
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<td>-</td>
<td>X</td>
<td>Y</td>
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</table>

**Comments:**  
The shore zone consists of Bedrock / Boulder w/ some loose O/C km. that have pebble storm berm. The southern most Pocket O/C beach has a 6m x 40m CP / P / coat w/ some asphalt patches on the O/C outcrop. At the northern end of the beach. The nextPocket Beach contains a 2m x 10m Pebble storm berm with O/C/OC subsurface oiling 30 cm deep. The storm berm has a stream to the North and a moderate amount of drift logs to the South.  
**Reviewed:** [Signature]  
**Date:** 4/23/90.
## Subsurface Oil (Continued)

<table>
<thead>
<tr>
<th>PIT NO.</th>
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<th>Subsurface Oil Character</th>
<th>Oiled Interval (cm)</th>
<th>Below Oil/Film Color</th>
<th>Pit Zone</th>
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<td>N 30 P</td>
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<td>X</td>
<td>X</td>
<td>N 20 P, C</td>
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<td>30</td>
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<tr>
<td>16</td>
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<tr>
<td>17</td>
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<td>X</td>
<td>X</td>
<td>N - C, B, C</td>
<td></td>
</tr>
</tbody>
</table>

**Comments**

At the northern end of this pocket beach is a 13/C outcrop which has a 5m x 60m CT/P degree of oiling with some asphalt patties. The rest of the shore zone has a 5T/5 distribution of stain in the 1-272.
I. Sketch Map

Legend

- Trees
- Borders
- Steep Rock/Border outcrop
- Stream

Checklist

- N Anne
- Approx. Scale
- Seg/Sub Entry
- Oil Dist.
- Width
- Length
- % Cover
- Subsoil Character
- End Haul with
- SSL
- Profile Location(s)
- Profile(s)
- Pit Location(s)
- Photo Location(s)

Legend

A
- No Subsurface Oil

B
- Subsurface Oil

CT/C
- Complete Distribution

CT/P
- Broken Distribution

CT/S
- Patchy Distribution

CT/PS
- Splashed Distribution

Oiled Vegetation

Photo location, direction, and number

Oil Character Length (m): AP 10 PO 0 CV 40 CT 100 ST 886 MS 0 PT 0 TB 0 FL 0 NO 0

Manual Rock Beach
- 2m x 40m or 0.4m oiling band 30m below rubble in the Supra LTZ

Pocket Pebble Beach
- 5m x 60m CT/P on D/R

Pocket Pebble Beach
- 5m x 10m CT/P on D/R

Pocket Pebble Beach
- 9m x 30m ST/5 on very rock

Pocket Pebble Beach
- 1m x 50m ST/P on very rock

Pocket Pebble Beach
- 5m x 50m ST/5 in HTZ on same Cobbled Beach

Pocket Pebble Beach
- 5m x 50m ST/5 in LTZ on same Cobbled Beach

Manually Raked
- Storm Boom

Manual Rock Outcrop
- Stream
**SHORELINE ECOLOGICAL SUMMARY**

**Segment ST EY-16**  | **Subdivision A (SE1)**  | **Date (mo/day/yr) 04/20/90**

**Time (24 hr) 1448 - 1445**  | **Biologist KATHLEEN CONLAN**

(A) **Substrate type and % of segments:**

<table>
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<tr>
<th></th>
<th>Bedrock</th>
<th>Boulder</th>
<th>Cobble</th>
<th>Pebble</th>
<th>Sand</th>
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(B) **General % cover of biota (% of segment):**

- Dense_10
- Moderate_90
- Low_10

(C) **Density, substrate preference (by number from A, above), & vertical zonation of major taxa:**

- upper (U), mid (M), low (L), tidal (T)
- juveniles (J), adults (A), new settlement (N)

**BARNACLES**

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**Photographs:**

- Roll No. ST 11-3
- Frames 5-10

**Wildlife Observations/General Comments:**

2 SHOREBIRDS: PELICAN, AMERICAN ANTELOPE ROCKET ROCKS AT MID-TIDE LEVEL

**Ecological Considerations:**
ADDENDUM: SUBDIVISION CONSTRAINTS

-SEGMENT EV-16 SUBDIVISION A (1 of 1)

WORK WINDOW

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<td>Bioremediation</td>
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<tr>
<td>Manual Raking</td>
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ARCHAEOLOGICAL STANDARD CONSTRAINT

If cultural resources are uncovered, PHONE 564-3274.

APPLICABLE ECOLOGICAL TIME CONSTRAINTS

5T Bald Eagle Nest

USFWS 6/1/90 map indicates an active nest in Subdivision A. Closed to manual pickup, manual raking, and bioremediation within 400m of active nest.

7ll Subsistence: Deer Harvesting

Closed to bioremediation and manual raking after 8/15. No constraint to manual pickup.

OTHER ECOLOGICAL CONSIDERATIONS

If eagle nest constraint is removed, other ecological considerations will apply.

Prepared By: J.P. Phillips Date 6/9/90

FOSC DATE 6-10-90
ECOLOGY MAP
SEGMENT EV-16
SUBDIVISION A (1 of 1)
METERS

- No Beach, boat, aircraft access. USFWS Survey 5/26/90 (Mike Lockhart)
- Exxon Company, USA
- Exxon Map Key: 06-02-06 EV-16

- Seabird Colony
- Active Eagle Nest
- Inactive Eagle Nest

1 inch = 100 feet
SHORELINE EVALUATION

SEGMENT EV-17    SUBDIVISION A (1 OF 1) DATE 4/9/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

ADF&G anadromous stream no. 226-40-16620, 16630.

1A Salmon stream mouth - fry outmigration (3/1 to 5/15)
1B Salmon stream mouth - spawning (7/10 to 8/31)
7II Subsistence area: Deer harvesting (8/15 to 2/28)

See attached Ecological Constraint sheet for specific constraints and contacts.

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

SHPO SIGNATURE:        DATE: 4/23/90

OILING CATEGORIZATION:

Wide 74 m: Medium 0 m: Narrow 88 m: V.Light 773 m: No Oil 679 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:  ____ Wands
  X  Tarmat:  ____ Breakup  ____ Beach Cleaner
  X  Removal  ____ Other (see comments)

COMMENTS: Recommended treatment includes 1) manual tarmat removal, 2) manual pick up of oiled debris, 3) bioremediation of surface and subsurface oil in areas shown on attached sketch map. Work should be conducted between 5/15 and 7/10 based on salmon constraints. No bioremediation within 100 m of stream without permit from ADF&G.

TAG COMMENTS:--------------------------------------------

TAG APPROVAL DATE: 4/23/90

ADEC  EXXON  NOAA  USCG
Art Weir  Arvy Tate  Joseph Talbot  Kenneth Kenney
Art Weir  Arvy Tate  Joseph Talbot  Kenneth Kenney

FOSC:  DATE: 5/1/90  Do not bioremediate without drain.
PWS, SEWARD AND HOMER ECOLOGICAL CONSTRAINTS

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 bioremediation or other chemical application within 100m of stream. Contact ADF&G Habitat Division prior to treatment for permits.

Salmon fry nursery area (4/31 to 7/31)
Esther Hatchery release (4/15 to 6/1)
Main Bay Hatchery release (4/20 to 5/10)
Cannery Creek Hatchery release (4/21 to 6/1)
Remote release sites

Gill net area (6/7 to 6/31)
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)
For Codes 1C through 1L contact ADF&G for specific dates, locations and constraints.

Herring spawning (4/1 to 6/15)
Restrict boat traffic to essential minimum. Avoid damage to un-oiled intertidal and subtidal algae and seagrass. Contact ADF&G for specific dates and locations.

Herring pupping (5/15 to 7/1)
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.

Sea bird colony (5/1 to 9/1)
Restrict air traffic to essential minimum. No personnel within 800m. Aircraft to maintain 800m horizontal, 300m vertical distance. Contact ADF&G and USFWS prior to treatment.

Shorebird/waterfowl concentration (4/1 to 5/15)
Restrict all activity to essential minimum, especially air traffic.

Bald Eagle nests (3/1 to 6/1)
Restrict air traffic 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.

Recreation:
Tent sites (6/1 to 9/15)
Anchorages (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 (8/15 to 2/28)
Invertebrate harvesting

For Codes 7Z through 7JJ contact ADF&G and Chenega Corporation for specific dates, locations, and constraints.
USCG NAME R. Hubbard SIGNATURE Randolph Hubbard

☐ NO TREATMENT RECOMMENDED  ☑ TREATMENT SUGGESTED

COMMENTS

1. Manually remove oil tainted particulates & fill underneath area to allow natural process of nature.
2. Leave debris to notes proceed.

ADEC NAME J. Lynn Martin SIGNATURE A. Lynn Martin

☐ NO TREATMENT RECOMMENDED  ☑ TREATMENT SUGGESTED

COMMENTS

Agree with Exxon ops. recommendation for manual removal of asphalt areas through out segment.
Also agree with recommendation for no clean up on north end of segment due to accessibility of area.
On east side of bay (segment) the light surface cover and heavy subsurface should oil should be further reviewed and scat no due to its location to a active stream.

LAND MANAGER NAME Patrick Schmier SIGNATURE Patrick Schmier

☐ NO TREATMENT RECOMMENDED  ☑ TREATMENT SUGGESTED

COMMENTS

Refer to 10/11 ADEC comment
SHORELINE OILING SUMMARY

Team No.: 16

Est. Subdivision Length: 800 m

Uplands Description: Grass

Surveyed From: Foot

Working Direction: East

Surface Sediments: 80 % Sand, 20 % Clay

Surface Oil Category Length: W 75 m, M 50 m, N 20 m, VL 381 m, NO 41.3 m

Surface Oil

<table>
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<tr>
<th>Character</th>
<th>Distribution</th>
<th>Oil / Film Color</th>
<th>Impacted Zones</th>
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<td>No Oil</td>
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</tbody>
</table>

Pavement: H 8 sq m by 4 cm

Patties / Tarballs: 2 Bags

Near Shore Sheen? No BR RW SL TL

Photographs:

Roll No. ST-16-78
Frames 31-37, 1-18

Subsurface Oil

<table>
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<th>Pit No.</th>
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<th>Subsurface Oil Character</th>
<th>Oiled Interval (cm)</th>
<th>Oily Below</th>
<th>Oil / Film Color</th>
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Comments: The area is composed of stream and tidal intertidal flats separated by rocky headlands. The tidal flats are generally covered with pebbles, gravel, and scattered eelgrass. The majority of this segment has no very little oiling in the form of sheen, oil, or tar balls on rocky areas and mud banks on unvegetated beaches. These are the areas where the oiling is present, one of which extends under the snow and should be further investigated. The only wide oiling is along the eastern shore of the segment where there exists a substantial band 20 m wide. Stream beds appear clean.

Reviewed: J. W. Date: 4/12/90
### Subsurface Oil (Continued)

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**Comments**  

[Signature and Date: Reviewed 4/12/90]
BIOLOGY & MAPIC
WITH PHOTO LOCATIONS
SHORELINE ECOLOGICAL SUMMARY

Segment ST/EU:7 Subdivision ___________________________ Date (mo/day/yr) 1/3/90

Time (24 hr) 1000 off Biologist TONY SAKUMA

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

(B) Overall % cover of biota (% of segment): Dense 60 Moderate 25 Low 5

(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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<tr>
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<td>5</td>
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</tr>
<tr>
<td>5</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
</tbody>
</table>

Wildlife Observations/General Comments:
- Sighted guillemots, deer scat, otter
- Barnacle scat abundant - including 112 area of un identified larval
- Low zone was unexposed during survey, shells found (P. stamineus, Pellinales) may indicate clam habitat in
- 3 astrophodium streams within segment - stream on east side was dry traps (mussel mud)

Ecological Considerations 1 A/B, 10/10
ADDENDUM: SUBDIVISION CONSTRAINTS
SEGMENT EV-17 SUBDIVISION A (1 of 1)

WORK WINDOW

Manual Pickup
Tarmat Removal
OPEN

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

APPLICABLE ECOLOGICAL TIME CONSTRAINTS

1A, 1B Salmon Stream
Two ADF&G catalogued anadromous streams (226-40-16620 and 226-40-16630) are in Subdivision A. No constraint to manual pickup and tarmat removal.

7II Subsistence: Deer Harvesting
No constraint to manual pickup and tarmat removal.

OTHER ECOLOGICAL CONSIDERATIONS
No disturbance to stream bed or banks. Restrict boat and air traffic and beach disturbance to essential minimum after 8/15. Avoid any unnecessary disturbance or damage to unrolled biota and substrate.

SEE ANADROMOUS FISH STREAM EVALUATION ADDENDUM (STREAM NOS. 226-40-16620 and 226-40-16630) FOR ADDITIONAL CONSTRAINT INFORMATION
ANADROMOUS FISH STREAM EVALUATION

SEGMENT ST/ EV-17 A STREAM NO: 226-40-16620 DATE 4/21/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
Two anadromous streams are in EV-17: 226-40-16620, 226-40-16630.
1A Salmon stream mouth - fry outmigration (3/1 to 5/15)
1B Salmon stream mouth - spawning (7/10 to 8/31)
7II Subsistence area: Deer harvesting (8/15 to 2/28)
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 is located in Subdivision A (1 of 1). No ecological constraints re: intertidal biota.

SHPO SIGNATURE: ______________________ DATE: 5/10/90

Subsurface Oil Observed: Yes No X Maximum Depth

RECOMMENDATIONS:
__ No Treatment Recommended __ Snare/Absorbent Booms
__ Manual Pickup __ Oil Snare (pom poms)
__ Bioremediation __ Absorbents (pads, rolls, etc)
__ Tarmat Removal __ Spot Washing: Wands

COMMENTS: Recommended treatment includes manual removal of small tarmat as indicated on sketch map. Work should be conducted between 5/15 and 7/10 based on above listed constraints.

TAG COMMENTS:

TAG APPROVAL DATE: 5/10/90
ADEC ___________ EXXON ___________ NOAA ___________ USCG ___________ FOSC: ___________ DATE: 5/10/90

Arrangements for customized following tarmat removal. Notify CVC 24 hours in advance.
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 bioirremediation 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 inlip oil 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 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 inlip oil 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 Petz 424-3214

1D Gill net area (6/7 to 9/31)

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, limit restrict boat operations to essential minimum as authorized by ADF&G. If plans for treatment include methods such as hot water wash or inlip oil 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

3P Harbor seal and sea lion mating (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 600m horizontal and 300m vertical distance from beach. No application of inlip oil or any other methods which might affect nearshore oil or toxicity levels, contact ADF&G for consultation and authorization.

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

SR Seabird colony (5/1 to 9/1)

Restrict air and boat traffic to essential minimum. No personnel within 800m. Aircraft to maintain 600m horizontal, 300m vertical distance from colony. Contact USFWS prior to treatment.

AGENCY CONTACT PERSON: USFWS Jill Parker 766-3377

SS 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

ADF&G Tom Rothly 267-2206

ST 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. 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 766-3377

6U Recreation:

Tent sites (6/1 to 9/15)

Anchorages (6/1 to 9/15)

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

Lodge (6/1 to 9/15)

Special use destination

7Z Subsistence area: Salmon harvesting (5/1 to 9/30)

7A Fishing harvesting

7B Deer harvesting (6/15 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. If plans for treatment include methods such as hot water wash or application of inlip oil 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

PARAMETERS:
- SEGMENT: ST/EV 017
- SUBDIVISION: 16620
- DATE: 4/2/90

USCG NAME: [Signature]

[ ] NO TREATMENT RECOMMENDED
[ ] TREATMENT SUGGESTED

COMMENTS:
1. Manual removal of tar mats (asphalt)

[Signature]

[ ] NO TREATMENT RECOMMENDED
[ ] TREATMENT SUGGESTED

ADFG NAME: [Signature]

[ ] NO TREATMENT RECOMMENDED
[ ] TREATMENT SUGGESTED

REFER TO ADFG OBSERVATIONS AND RECOMMENDATIONS FOR THIS DATE.

[Signature]

[ ] NO TREATMENT RECOMMENDED
[ ] TREATMENT SUGGESTED

LAND MANAGER

[Signature]

[ ] NO TREATMENT RECOMMENDED
[ ] TREATMENT SUGGESTED
## Oiling Summary

**ANAD**

---

**OIL COUNTING SUMMARY**

### Environmental Conditions
- **Date:** 2/7/90 11:50 from EXXON OIL TEAM 15
- **Oil Type:** Class B

### 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/Pavement</td>
<td>Yes</td>
<td>White</td>
<td>X</td>
</tr>
<tr>
<td>Pooled</td>
<td>Yes</td>
<td>White</td>
<td>X</td>
</tr>
<tr>
<td>Cover</td>
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</tr>
<tr>
<td>Coat</td>
<td>Yes</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>
<tr>
<td>Tarballs</td>
<td>Yes</td>
<td>White</td>
<td>X</td>
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<tr>
<td>Film</td>
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<tr>
<td>No Oil</td>
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<td>White</td>
<td>X</td>
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### SubsurfaceOil

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<th>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>Sheen</th>
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<tbody>
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<td>1</td>
<td>20</td>
<td>X</td>
<td>D-A</td>
<td>X</td>
<td>X</td>
<td>N</td>
<td>N</td>
</tr>
<tr>
<td>2</td>
<td>20</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
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</table>

### Comments
- **Oiled Interval:** < 5 cm in Pit No. 1 does not constitute subsurface oil.

---

**Photographs:**
- Roll No: AS-15-2
- Frames: 27-32

---

**Reviewed:** [Signature] Date: 4/23/90
**ARPEQ Multi-Assessment Data Form**

1. **Survey Type:** SE 35 CS AVS Sec 994 PTA
2. **Region:** PS P, C, EAP
3. **Date:** 4/21/90
4. **Start Time:** 17:20
5. **Stop Time:** 17:48
6. **Vehicle:** EV-01
7. **Station:** 226-20-16620
8. **Tide Ht at Survey:** 1.11
9. **X-Unit:**
10. **Station Area:** 20 USC Quad Beward A3
11. **Lat:**
12. **Long:**
13. **Location:** NORTHEAST EVANS IS.
14. **Description:**

### Extent of Oil

<table>
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<th>Shoreline</th>
<th>Stream</th>
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</thead>
<tbody>
<tr>
<td>L</td>
<td>W</td>
</tr>
<tr>
<td>100</td>
<td>100</td>
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</tbody>
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27. **Surface Coverage:**

<table>
<thead>
<tr>
<th>Surface Thickness</th>
<th>2mm</th>
<th>5mm</th>
<th>0.1mm</th>
<th>0</th>
<th>0</th>
<th>0</th>
</tr>
</thead>
</table>

29. **Penetration:**

| 4cm | 0cm | 0 | 0 | 0 |

30. **Overall Oil Impact:**

| N | Y | L | H | N |

31. **Oil Type:**

Pooled, Nascent, Tar, Asphalt, Sticky, Static

32. **Oiled Debris:**

Y

33. **Shoreline Type:**

Headland, Low-lying Anchusa, Beach, Coral

34. **Wave Exposure:**

High, Moderate, Low

35. **Substrate Type:**

Sediment, Boulder, Pebble, Cobble, Sand, Mud/silt

36. **Cataloged Animal Fish Present:**

Y

41. **Oil on Beach Adjacent to Mouth:**

(Within 50 meters)

N

42. **Oil Within 1 Mile of Stream:**

Y

43. **Anadromous Fish Presence:**

Y

44. **Anadromous Fish Observation:**

Species, Aerial, Ground

### Comments:

Tar Hat Band along E. Side of Stream. Very sporadic staining of boulders and cobble on W side of stream.

46. OIL DISTRIBUTION DIAGRAM

Pit dug by previous survey. Buried oil (pit outside anadromous stream zone).

Band of tar mats (surface to 4cm)

Pit (no buried oil)

Scattered stained boulders & cobbles

Vegetation

Max. Width of intertidal zone as drawn ~ 100 m
Segment EV 17
Stream 226-40-16620
Ecological Summary

This stream enters an unstable gravel/pebble beach with sparse biota (scattered barnacles, mussels, and Fucus). Light oil stains scattered in one area of UTZ, and some light surface tar mats were found in a 2 x 10m area on NW stream bank. Six James and Moore smolt traps are installed in the stream.

No ecological constraints re: intertidal biota. If manual cleanup of tar mats is conducted, crews should avoid causing stream bank to slump.

Michael Fawcett
ANADROMOUS FISH STREAM EVALUATION ADDENDUM
CONSTRAINTS FOR STREAM NO. 226-40-16620
SEGMENT EV-17 SUBDIVISION A

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

APPLICABLE ECOLOGICAL TIME CONSTRAINTS
1A,1B Salmon Stream
ADF&G catalogued anadromous streams (226-40-16620 and -16630) are in Subdivision A. No constraint to tarmat removal.

7II Subsistence: Deer Harvesting
No constraint to tarmat removal.

OTHER ECOLOGICAL CONSIDERATIONS
No disturbance to stream bed or banks. Restrict boat and air traffic and beach disturbance to essential minimum after 8/15. Avoid any unnecessary disturbance or damage to unoiAed biota and substrate.

SEE SUBDIVISION CONSTRAINT ADDENDUM EV-17A FOR ADDITIONAL CONSTRAINT INFORMATION.
Incorporates information from USFWS bald eagle surveys 5/12 & 5/26/92.

Exxon Company, USA
Map Key: PMG-EV-17
May 11, 1990

ECOLOGY MAP
SEGMENT EV-17
SUBDIVISION (A) (L_of_L)

METERS

1 inch = 1550 feet

☆ Seabird Colony
△ Eagle Nest
SEGMENT ST/ EV-17  STREAM NO: 226-40-16630  DATE  4/21/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
Two catalogued anadromous streams are in EV-17:
226-40-16630 and 226-40-16620
1A  Salmon stream mouth - fry outmigration (3/1 to 5/15)
1B  Salmon stream mouth - spawning (7/10 to 8/31)
7II  Subsistence area: Deer harvesting (8/15 to 2/28)
See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:
Avoid any unnecessary disturbance or damage to unoiled biota and substrate. Avoid trampling and disturbance below the oiled areas in the dense beds of fucus and mussels.

SHPO SIGNATURE:  
DATE:  5/14/90

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

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 removal of tarmat and debris. Work should be conducted between 5/15 and 7/10 based on salmon constraints.

TAG COMMENTS:  FOLLOWING-  MANUAL REMOVAL OF ASPHALT + SMALL ASPHALT DATES MONITORS TO ASSESS THE NEED TO TAKE IN CUSTOMS CEN FOR ANY REMAINING OILED AREAS.

TAG APPROVAL DATE:  5/7/90.

ADEC  
DATE:  5/18/90

EXXON  
NOAA  
USCG  

FOSC:
Salmon stream mouth - fly 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 inipol 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. In any case, contact ADF&G or PWS Aquaculture Association for confirmation and authorization.

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 inipol application, prior to July 31 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 consultation and authorization.

AGENCY CONTACT PERSON: AOF&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 Seaward Bay Hatchery release (4/20 to 6/15)

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 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

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 (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 boat 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

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 tounal intertidal and subtidal algae 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

3N, 3P Harbor seal and sea lion pupping (5/15 to 7/1)

3Q 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 800m horizontal and 300m vertical distance from haulout. No application of inipol within two weeks of arrival dates (work window at these sites is limited to 7/2 to 7/31). Contact AOF&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 766-3377

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 766-3377

ADF&G Tom Raths 257-2206

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 766-3377

6L Recreation: Tent sites (8/1 to 9/15)

6W Anchorages (6/1 to 9/15)

6X Forrest Service cabins (6/1 to 9/15)

6Y Lodge (6/1 to 9/15)

Special use destination

7Z Subistence area: Salmon harvesting (5/1 to 9/30)

7HH Finfish harvesting

7T Deer harvesting (8/15 to 2/28)

7JJ 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 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, EV 017  SUBDIVISION: 166 0  DATE: 4/21/90

USCG NAME: ______________ SIGNATURE: ______________

☐ NO TREATMENT RECOMMENDED  ☒ TREATMENT SUGGESTED

COMMENTS:

1. Bioremediation (selected areas per map)

ADFG NAME: ______________ SIGNATURE: ______________

☐ NO TREATMENT RECOMMENDED  ☒ TREATMENT SUGGESTED

COMMENTS:

Manual removal only. No bioremediation recommended. See ADF&G observations and recommendation summary for this date. (Exxon rep. concurs with ADF&G's recommendation)

LAND MANAGER NAME: ______________ SIGNATURE: ______________

☐ NO TREATMENT RECOMMENDED  ☐ TREATMENT SUGGESTED

COMMENTS:___
**SURFACE OIL**

<table>
<thead>
<tr>
<th>CHARACTER</th>
<th>DISTRIBUTION</th>
<th>OIL / FILM COLOR</th>
<th>IMPACTED ZONES</th>
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<tr>
<td>Asphalt Pavement</td>
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**SURFACE OIL**

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<th>CHARACTER</th>
<th>DISTRIBUTION</th>
<th>OIL / FILM COLOR</th>
<th>IMPACTED ZONES</th>
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</thead>
<tbody>
<tr>
<td>Asphalt Pavement</td>
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<tr>
<td>No Oil</td>
<td></td>
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</table>

**PAVEMENT**

- **625 sq. m**
- **BR RW SL 1**

**NEAR SHORE SHEEN?**

- **A**

**OILED DEBRIS**

- **Logs**
- **Vegetation**
- **Trash**

**TYPE**

- **BAGS**

**PHOTOGRAPHS**

- **Frames 17-26**

**SUBSURFACE OIL**

<table>
<thead>
<tr>
<th>PIT NO.</th>
<th>PIT DEPTH (cm)</th>
<th>OILED INTERVAL</th>
<th>OILED OIL CHARACTER</th>
<th>OILED OIL COLOR</th>
<th>OILED OIL DENSITY</th>
<th>OILED OIL VISCOSITY</th>
<th>PIT ZONE</th>
<th>ANA</th>
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<th>SUBSURFACE SEDIMENT</th>
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</tbody>
</table>

**COMMENTS**

- **REVIEWED**
- **DATE:** 4-25-90
This is a large intertidal zone with widely distributed patches of oiled substrate. The oil that remains is predominanly tar soaked gravels and sand underneath and between relatively clean cobbles and boulders. Treatment at this site will be difficult. A low concentration of oil is...
Recommendation: Remove surface tar mats where shown in diagram. Bag and remove only oil-substantially smaller than 5 cm. Manually till larger substrate to speed weathering.

Maximum Width of Interior Zone as Drawn ~ 150 m
Segment EV 17  
Stream 226-40-16630  
Ecological Summary

This stream has a fairly broad delta composed of shale cobbles/pebbles/sand, with dense beds of Fucus and mussels near the mouth, with clams and other infauna beneath the mussels in MTZ and LTZ. Splatters, stains, and surface tar mats were found in a wide area of UTZ among boulders and cobbles on SE side of the stream. Other intermittent surface oil and sheen was found among cobbles and sand in the MTZ of the stream delta, on north side of stream, directly above dense Fucus and mussel beds. Two sea otters were seen feeding nearshore. Manual pickup and bio-remediation recommended, with avoidance of trampling and disturbance below the oiled areas.

Michael Fawcett
Upper points document limits of fish surveys and usually not the extent of fish habitat.
ANADROMOUS FISH STREAM EVALUATION ADDENDUM

CONSTRAINTS FOR STREAM NO. 226-40-16630

SEGMENT EV-17 SUBDIVISION A

WORK WINDOW

| Manual Pickup | Tarmat Removal | OPEN |

ARCHAEOLOGICAL STANDARD CONSTRAINT

If cultural resources are uncovered, PHONE 564-3274

APPLICABLE ECOLOGICAL TIME CONSTRAINTS

1A,B   Salmon Stream

ADF&G catalogued anadromous streams (226-40-16620 and -16630) are in Subdivision A. No constraint to manual pickup and tarmat removal.

7ii   Subsistence: Deer Harvesting

No constraint to manual pickup and tarmat removal.

OTHER ECOLOGICAL CONSIDERATIONS

No disturbance to stream bed or banks. Restrict boat and air traffic and beach disturbance to essential minimum after 8/15. Avoid any unnecessary disturbance or damage to unoiled biota and substrate.

SEE SUBDIVISION CONSTRAINT ADDENDUM EV-17A FOR ADDITIONAL CONSTRAINT INFORMATION.

TAG APPROVAL DATE 6/1/90

ADEC Ray Wellman 6/1/90

EXXON 6/1/90

NOAA 6/1/90

USCG 6/1/90

FOSC 6/1/90

Date 5/31/90

Prepared By: M. Myer
Incorporates information from USFWS bald eagle surveys 5/2 & 5/26/90.

ECOLOGY MAP
SEGMENT EV-17
SUBDIVISION Area (A) of Area (A)

METERS

1 inch = 1550 feet

Exxon Company, USA
Map Key: PM-EV-17
May 11, 1990
SHORELINE EVALUATION

SEGMENT ST/ EV-18 SUBDIVISION A (1 OF 1) DATE 4/20/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:

ST-2 All bald eagle nests (3/1 to 6/1) - Active eagle nests (3/1 to 9/1)

7II Subsistence area: Deer harvesting (8/15 to 2/28)

See attached Ecological Constraint sheet for specific constraints and contacts.

SUBDIVISION ECOLOGICAL CONSTRAINTS:

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

SHPO SIGNATURE: _______________________________ DATE: 5/1/90

OILING CATEGORIZATION:

Wide 0_m: Medium 0_m: Narrow 270_m: V.Light 270_m: No Oil 0_m

Subsurface Oil Observed: Yes X No _____ Maximum Depth 30 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 Removal  ______ Beach Cleaner

_____ Other (see comments)

COMMENTS: Recommended treatment includes bioremediation of area of subsurface and surface oil as shown on sketch map. Work should be conducted after 6/1 based on above constraints.

TAG COMMENTS:

__________________________________________________________

__________________________________________________________

__________________________________________________________

TAG APPROVAL DATE: 5/1/90

ADEC  EXXON  NOAA  USCG

FOSC: _______________________________ DATE: 5/6/90

[Signature] does not object to bioremediation
Salmon stream mouth - fly 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 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 Morton 267-2234

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

Esther Hatchery release (4/15 to 6/11)

Main Bay Hatchery release (4/20 to 6/10)

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 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

PWS Aquaculture Association John McMillian or Bruce Suzumoto 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 (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 (11) restrict beach operations to essential minimum as authorized by ADF&G. If plans include treatment 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

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 unveils Intertidal and subtidal algae and seagrass. For plans include treatment 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 (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 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: US National Marine Fisheries Service Steve Zimmerman 586-7235

ADFG 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 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

ADFG Tom Roty 267-2205

All Bald Eagle nests (3/1 to 6/11)

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 768-3377

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

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

Finfish harvesting

Deer harvesting (8/15 to 2/25)

Invertebrate harvesting
NOAA
NAME Michael Buchman SIGNATURE ______________

☐ NO TREATMENT RECOMMENDED ☑ TREATMENT SUGGESTED
COMMENTS
Northern end is a raised shelf/platform outcropping with a
boulder/cobble beach behind. This beach had a cap of surface rocks, with
a cover on the underside, one of small (≈ 14 m²) patches of sargassum
observed here. Center of segment is a beach of medium-size shell/shale
rocks with slivered shell/shale pebbles underneath, and a 14 rock outcrop
on the Northern end of the beach. An eel希尔 log was seen near the outer
edge in the winter storm zone. South of the outcrop, suggest a continuous
layer of subsurface oil throughout the beach. A 15 cm band of surface stain,
with color on underside of rocks, diminished in intensity to the South.
Southern end is a rock wall with some boulders essentially below the Focus
Zone. Light splattering was observed here. Rainbow sheens were observed on
the rocks near the northern rock platform.

ADEC
NAME John Hayes SIGNATURE __________________

☐ NO TREATMENT RECOMMENDED ☑ TREATMENT SUGGESTED
COMMENTS
Midle of segment has two areas with
surface + subsurface oiling.
Extant of oiling is U/I2 + not a good candidate
for Bio. Bedrock below surface of the cobble + gravel is no
water flush to H2O. Recommend
☐ Mop up of any recoverable oil
☐ Monitor for sheens S.S. oiling is primarily below
0-15 cm. of clean gravel + cobble.

LAND MANAGER
NAME [Handwritten: Oregon Dept. of
Fish & Wildlife] SIGNATURE __________________

☐ NO TREATMENT RECOMMENDED ☑ TREATMENT SUGGESTED
COMMENTS
Clean up loose oil that can be reached
Monitor Rae sheens.
**SHORELINE OILING SUMMARY**

**SEGMENT ST:** EU-18

**LAND REP:** Steve Walsh

**TIME/DATE:** 12/20/90

**DATE:** 4/20/90

**SUBDIVISION:** A

**TIDE LEVEL:** 4.5

**UPLANDS DESCRIPTION:** Grass, Forest, Rock, Rocky shore

**SURVEYED FROM:** Foot, Boat, Helo

**WORKING DIRECTION:** N to S

**SLOPE:** Lang 50% Hang 10% Ven 40% WAVE EXPOSURE: Low Med High

**SURFACE SEDIMENTS:** R 20% C 20% P 20% O 0% S O M 0% V D %

**OIL CATEGORY LENGTH:** W 0 m M 0 m N 240 m Vl 29 m

---

**SURFACE OIL**

<table>
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<th>CHARACTER</th>
<th>DISTRIBUTION</th>
<th>OIL / FILM COLOR</th>
<th>IMPACTED ZONES</th>
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<td>Tarballs</td>
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**PAVEMENT**

- H F S 0 sq. m by 0 cm
- PATTIES / TARBALLS: 0 BAGS
- NEAR SHORE SHEEN? BR RW SL TL

**OILED DEBRIS AMOUNT**

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**Photographs:**

- Roll No.
- Frames

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**SUBSURFACE OIL**

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<th>PIT NO.</th>
<th>PIT DEPTH (cm)</th>
<th>SUBSURFACE OIL CHARACTER</th>
<th>OILED INTERVAL</th>
<th>BELONG</th>
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<th>PIT ZONE</th>
<th>SURFACE - SUBSURFACE SEDIMENTS</th>
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**COMMMENTS**

The Northern end of the segment contains low angle Rock outcrop w/ 1m x 150m CT/s along the HI7Z. The middle of the segment contain a long D/C beach, w/ a 15m x 230m CT/P (20% cover) coat/stain in the HI7Z and MI7Z. In the HI7Z is a 2m x 150m subsurface oiling about 20 cm below surface. The Southern end of the segment contains 3 large Rock outcrops w/ Z Cobble/Boulder Pocket. REVIEWED: J/M DATE A-23-90

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* OILED INTERVAL 5 cm IN PITS 1 AND 2 DOES NOT CONSTITUTE SUBSURFACE OIL.
### Subsurface Oil (Continued)

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<th>Subsurface Oil Character</th>
<th>Oiled Interval (cm)</th>
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**Comments**

REVIEWED: JW  DATE: 4-23-90
SHORELINE ECOLOGICAL SUMMARY

Segment ST/EN-18  Subdivision A  (1 of 1)  Date (mo/day/yr) 4/20/90

Time (24 hr) 1325  Biologist  KATHLEEN CONLAN  1990

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

(B)  Overall % cover of biota (% of segment):  Dense  20  Moderate  80  Low  20

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

BARNACLES

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FUCUS

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Wildlife Observations/General Comments:
OLIGochaetes, amphipods IN COBBLE, gastropod EGGS

Ecological Considerations:
ECOLOGY MAP (1 of 1)

RESOURCE CODES FOR ENTIRE SEGMENT:

1 BALE EAGLE NEST ≤ 400m OF SEGMENT AS SHOWN.

EV-1

ST 11-3

EV-18

EV-17

XXXX Wide

///// Medium

-- Narrow

TTTT Very Light

0000 No Oil

MAP KEY: PWS-186

Name: __________________

Date: __________________

Data Entered: __________________
ADDENDUM: SUBDIVISION CONSTRAINTS
SEGMENT EV-18 SUBDIVISION A (1 of 1)

WORK WINDOW

Bioremediation WORK PRIOR TO 8/15

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

APPLICABLE ECOLOGICAL TIME CONSTRAINTS
5T Bald Eagle Nest

NO CONSTRAINT. USFWS 6/1/90 map indicates no active nest within 400m of Subdivision A work site.

711 Subsistence: Deer Harvesting
Closed to bioremediation after 8/15.

OTHER ECOLOGICAL CONSIDERATIONS
Restrict boat and air traffic and beach disturbance to essential minimum after 8/15. Avoid any unnecessary disturbance or damage to unlopped biota and substrate.
SHORELINE EVALUATION

SEGMENT ST/ EV-19  SUBDIVISION A (1 OF 1) DATE 4/7/90

SEGMENT ENVIRONMENTAL SENSITIVITIES AND TIME CONSTRAINTS:
1. All bald eagle nests (3/1 to 6/1) - Active eagle nests (3/1 to 9/1)
2. Subsistence area: Deer harvesting (8/15 to 2/28)
See attached Ecological Constraint sheet for specific constraints and contacts.

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

SHPO SIGNATURE: [Signature] DATE: 4/20/90

OILING CATEGORIZATION:
Wide 0 m: Medium 0 m: Narrow 0 m: V.Light 93 m: No Oil 1337 m
Subsurface Oil Observed: Yes No Maximum Depth

RECOMMENDATIONS:
X No Treatment Recommended
T Treatment Recommended
M Manual Pickup
B Bioremediation
T Tarmat: B Breakup
R Removal
S Snare/Absorbent Booms
O Oil Snares (pom poms)
A Absorbents (pads, rolls, etc)
W Spot Washing: Wands
B Beach Cleaner
O Other (see comments)

COMMENTS: 

TAG COMMENTS:

TAG APPROVAL DATE: 4/20/90
ADEC ART WEBER ART WEBER
EXXON ANNY TELL
NOAA [Signature]
USCG KENNETH KEANE

FOSC: [Signature] DATE: 5/7/90
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. Contact ADF&G Habitat Division prior
to treatment for permits.
1C Salmon fry nursery area (4/31 to 7/31)
1D Esther Hatchery release (4/15 to 6/1)
1E Main Bay Hatchery release (4/20 to 5/10)
1F Sewmill Bay Hatchery release (4/15 to 6/1)
1G Cannery Creek Hatchery release (4/21 to 6/1)
1H Remote release site
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 (6/11 to 7/25)
For Codes 1C through 1L contact ADF&G for specific dates, locations and constraints.

2M Harvesting (4/1 to 6/15)
Restrict boat traffic to essential minimum. Avoid damage to unoined intertidal and subtidal algae and seagrass.
Contact ADF&G for specific dates and locations.

3N, 3P Harbor seal and sea lion pupping (5/15 to 7/1)
3O, 3Q 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 800m
horizontal and 300m vertical distance from haulouts.

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

5S Shorebird/waterfowl concentration (4/1 to 5/15)
Restrict all activity to essential minimum, especially air traffic.

7T All Bald Eagle nests (3/1 to 6/1)
Active Bald Eagle nests (3/1 to 9/1)
Restrict air traffic 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.

6J Recreation:
6V 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)
6Z Special use destination

7Z Subsistence area:
7A Salmon harvesting (5/1 to 9/30)
7B Finfish harvesting
7C Deer harvesting (9/15 to 2/28)
7D Invertebrate harvesting

For Codes 7Z through 7JJ contact ADF&G and Chenega Corporation for specific dates, locations, and constraints.
FIELD SHORELINE COMMENT SHEET

SEGMENT ST / EV-19 SUBDIVISION: ____________________ DATE 4/7/90

USCG NOAA
NAME GARY SHIGENAKA SIGNATURE G. Shigemick

☐ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED

COMMENTS

SEGMENT consisted of boulder and rock outcrop shoreline on Evans Island at the northeastern approach to Shelter Bay. Some evidence of oiling was noted in the form of coat/covers on the seaward faces of rock outcrops not directly exposed to surf (i.e., located behind other outcrops). Weathered stain and coat were found on another portion of beach closer in to Shelter Bay and with a more westerly orientation in the upper intertidal zone. This stain and coat was seen on large boulders, mostly on the leeward side. In one case, moss growing on a boulder had been coated and had died, but there was clearly new moss growth over the weathered oil and moss.

Although the stain/coat/covers was occasionally found in bands on this segment, this was a sporadic occurrence. Much of the segment showed no sign of oil.

Much of the supratidal that could be refined was covered with snow; the upper portion of beaches were frozen (and somewhat difficult to dig in.)

ADEC
NAME John Hayer SIGNATURE J. Hayer

☐ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED

COMMENTS

Oiling observed consisted of light staining on boulders + bedrock in U.I.R. No S.S. oiling observed.

Intertidal zone was mostly covered with snow.

Bench was frozen so S.S. holes were difficult to dig in some areas although no S.S. oiling was observed where holes were dug. Bench appeared to be free of mobile oil + well washed.

LAND MANAGER
NAME James A. Bauser SIGNATURE J. A. Bauser

☐ NO TREATMENT RECOMMENDED ☐ TREATMENT SUGGESTED

COMMENTS

Observed very light staining on protected sides of rocks. Stains weathered. Small bands of weathered oil also found.
SHORELINE OILING SUMMARY

OG: Mike Fogel, NOAA Gary Shaparal SEGMENT ST: EV-19 (1of1)
BIO: Richard Ambrose LAND REP: James D. Walker SUBDIVISION: A
EXXON: Larry Alter ADEC: John Wages TIME: 7:20 to 8:10
TEAM NO.: 11 TIDE LEVEL: 1.5 to 2.8 DATE: 4/7/90
EST. SUBDIVISION LENGTH: 1414 m

SURFACE OIL

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<tr>
<th>CHARACTER</th>
<th>DISTRIBUTION</th>
<th>OIL / FILM COLOR</th>
<th>IMPACTED ZONES</th>
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PAVEMENT: H F S ______ sq. m by ______ cm
PATTIES / TARBALLS ______ BAGS
NEAR SHORE SHEEN? NO / BR / RW / SL / TL

OILED SHEEN AMOUNT

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<th>DEBRIS</th>
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<tr>
<td>Debris</td>
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Debris Collected: YES / NO
/type: Wood/Plastic /Bags

Photographs:
Roll No. __
Frames __

SUBSURFACE OIL

| PIT NO. | PIT DEPTH (cm) | SUBSURFACE OIL CHARACTER | OILED INTERVAL | OILED INTERVAL (cm) | OILED INTERVAL | OILED INTERVAL | OILED INTERVAL | OILED INTERVAL | OILED INTERVAL | OILED INTERVAL | OILED INTERVAL | OILED INTERVAL | OILED INTERVAL | OILED INTERVAL | OILED INTERVAL |
|---------|----------------|---------------------------|---------------|---------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|
| 1 | 20 | X | - | X | X | C, P, S | |
| 2 | 20 | X | - | X | X | C, P, S | |
| 3 | 25 | X | - | X | X | P, S, R | |
| 4 | 10 | X | - | X | X | P, S | |
| 5 | 25 | X | - | X | X | P, S | |

COMMENTS: Only some very light staining C/TS on the protected sides of rock outcrops and boulders was observed. The oil/tar appeared to be weathered (dull black tar stain) The oiling occurred in the HETZ. The shore zone consists mostly of boulder/rock shore line with some pocket cobble beaches.

Page 1 of

Reviewed: M. G. DATE: 4/11/90
Sketch Map

- Very light C/T/S stain H/ITZ
- 0.5m x 0.5m on protected side of rock outcrop

- Very light C/T/S stain H/ITZ
- 0.5m x 0.5m on protected side of rock outcrop

Legend

- PC - No Subsurface Oil
- PT - Subsurface Oil

Scale

100 M

Cited Vegetation

- Photo location, direction, and number

Old Character Length (m): AP PO CV CT ST 35 MS PT TB FL NO 1379
**SHORELINE ECOLOGICAL SUMMARY**

Segment ST / EVO19  Subdivision A  Date (mo/day/yr) 4/7/90

Time (24 hr) 02:20 hrs  Biologist Ambrose

(A) Substrate type and % of segments:
1) Bedrock 40  2) Boulder 5  3) Cobble 15  4) Pebble 5  5) Sand 5  6) Silt

(B) Overall % cover of biota (% of segment): Dense 20  Moderate 20  Low 60

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

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Wildlife Observations: General Comments: otter, mink, bald eagle, seal (hauled out on rock)
Dense cover on bedrock walls in low to mid intertidal; on cobbles, dense filamentous algal cover in lower intertidal, otherwise fairly sparse.

Ecological Considerations:
ST: One mature bald eagle seen, but no nests.

*Additional wildlife observations: Pair of mature bald eagles with nest & immature nearby in EVO72, pair of mature eagles and nest in EVO05, plus 3 adult otters & 1 in buffet. 1 eagle, 1 deer, pair of mature eagles and one solitary mature eagle, 1 common loon, 3 gulls, 3 white ducks, and 6 surf scoters.
EV-19A

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

EV-18

Map Key: PWS-187
Name: Mike Forst
Date: 4/7/90
Date Entered: