

RPWG
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**RESTORATION PLANNING OFFICE
Oil Spill-Related Activities
Weekly Summary Report
July 27, 1990**

*** Meeting held during the past week**

- all staff attended Restoration/Cleanup briefing for Administrator Reilly on 7/23
- Linda Comerici and other RPWG members attended Management Team meeting of 7/26 to discuss the revised draft Restoration Progress Report
- Kirsten Ballard attended Coastal Habitat Synthesis meetings 7/23-24
- Kirsten Ballard attended FOSC/OPS meetings of 7/24-25
- Nancy Menning attended a Land Use Management Symposium 7/26

*** Meetings scheduled for the coming week**

- Shoreline Assessment Surveys will begin on 8/1/90. The RPO will have a participant in the surveys on Prince William Sound
- Shoreline Assessment Training will be held on 7/30. Potential RPO staff participants will attend

*** Draft or final reports completed**

- Revised draft Restoration Progress Report will be approved by the Management Team and forwarded to the Trustee Council for review at 7/27 meeting

*** Project or report-related milestones reached**

- Restoration Symposium Report is in its second printing

*** Issues or problems which must be resolved**

- none

*** Other issues or comments**

- Brian Ross - Annual Leave 7/17 - 8/7
- Ruth Yender (ARTFO) arrival at RPO set tentatively for 7/12 and remaining through 9/30
- Conrad Kleveno (ARTFO) is here from 7/23-26
- Hal Kibby (ORD/Corvallis) will arrive in Anchorage 7/30 & remain through 8/10

*** Contact Brian Ross (FTS 686-2461 or 907-271-4261)
for further information**

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JULY 26, 1990

MEMORANDUM

SUBJECT: EXXON VALDEZ OIL SPILL, WEEKLY OPS MEETING OF JULY 25, 1990

FROM: KIRSTEN BALLARD, AOO/A

TO: BRIAN ROSS, RESTORATION PLANNING TEAM LEADER, AOO/A

Synopsis of the Ops meeting as follows:

USCG

- Kodiak should be finished between the 1st or 8th of August.
- ASAP (August Shoreline Assessment Program) will begin on Aug. 1. RADM Ciancaglini has requested that EPA have observers on board the ASAP vessels (one helo crew in Kodiak), strictly as observers on a space available basis. These observers must have HAZWOPER training and most likely must attend the monitor training on Monday, July 30, 1990 (Ciancaglini said it was mandatory, but if our status is strictly observer, it does not seem entirely necessary that we be orientated to fill out beach assessment forms, etc. Also, people who are available to attend the orientation should be able to write up a brief summary of the training for other people coming up).
- Operations in Sleepy Bay are pulling "lots of oil" out of the shoreline. Proper stream/spray for the hot water flush is being worked on (this is important for proper agitation of the beach sediment to work out a maximum amount of oil). The beach is being tilled with a dozer with ripper bars. Pom pons are placed to catch any oil that may run off the shore.
- The FOSC Transition-90 plan is out and copies have been distributed. This plan describes how the FOSC will move its winter operations to Juneau CGD17, and addresses startup of spring '91 operations (shoreline assessment) and general operations and transfer information.

USFS

- Archaeologist is working on damage assessment and debris pick up (some from wildlife deterrent, some unrelated to the spill) in the sound.
- ASAP plans are under review.

OSHA

- Visited cleanup sites to observe beach operations. No major violations noted.

DOI

- Has coordinated with EPA regarding additional testing (bioremediation) and supports further testing.
- Has identified the people going out on ASAP
- Geological investigations permits have been applied for by Exxon.
- Continuing monitoring at eagle sites, etc.
- BIA & BLM are conducting some of their own assessments.
- Some segments have been selected for further treatment and will be forwarded to TAG.
- SSAT addendum's are being processed.
- NPS-MR-1 seems to be caught in some kind of misunderstanding. NPS is ready for work to begin, but something (Exxon) is holding up the process. MR-1 is a sensitive archaeological site.
- Burning of log boom logs in Halo bay has been completed.
- 18 segments have been missed for Customblen application.
- USFWS-will be sending out a letter to lift eagle nest restrictions.

The program worked well this year. There was less abandonment of nest sites this year than last.

NOAA

- Summer teams are in from their study sites. They will be going back out for the 1st 17 days of September.
- TAG is going to 3 sites in PWS to preview modifications requests on the work orders.

ADEC

- Visited LA-20 (Sleepy Bay) with 28 representatives of Environmental Conservation Commissioners from Lower 48 on 7/24.

IN GENERAL

- RADM Ciancaglini addressed the issue that it was improper to consider a live oil exercise in PWS this year. One could possibly be performed in the Gulf of Alaska on a good day.
- A letter should be out this week to the State and the Land Managers regarding the oil cleanup criteria. It should be no surprise. The admiral wishes to hold to the qualitative measure that has been used so far.

RESTORATION PLANNING OFFICE
Oil Spill-Related Activities
Weekly Summary Report
July 20, 1990

*** Meeting held during the past week**

- Janet Pawlukiewicz met with the Pratt Museum Director and exhibit team in Homer, Alaska to discuss first draft of exhibit text and EPA funding for traveling exhibition on oil spill
- Kirsten Ballard attended the FOSC/OPS meeting on 7/18/90

*** Meetings scheduled for the coming week**

- Administrator Reilly's visit to Alaska (7/23) - Restoration briefing scheduled for the morning, preceeding the tour of Prince William Sound
- RPWG will be meeting throughout the week to revise/finalize the draft Progress Report
- RPWG member will attend the Coastal Habitat Synthesis meetings 7/23-24

*** Draft or final reports completed**

- RPWG delivered the revised draft Progress Report to Management Team, Legal Team, and Trustee Council members on 7/16/90

*** Project or report-related milestones reached**

- Mailing labels for distribution of Symposium Report have been received by ARTFO; the first mailing of 2000 copies is underway

*** Issues or problems which must be resolved**

- none

*** Other issues or comments**

- Brian Ross - Annual Leave - 7/17 -8/7
- Janet Pawlukiewicz (ARTFO) arrived at RPO on 7/12 and will be here through 7/24
- Jim Clark has returned to the Gulf Breeze Lab

*** Contact Brian Ross (FTS 686-2461 or 907-271-4261)
for further information
for further information**

**EXXON VALDEZ OIL SPILL
WEEKLY UPDATE
July 15-21, 1990**

SHORELINE TREATMENT

Shoreline Treatment Progress Status:

Method/Type of Treatment	Total Segments to be Treated	Segments Treated to Date	Segments Remaining to be Treated
Bioremediation	417	245	172
Manual & Mechanical	564	372	192

1990 Treatment Goal:

The USCG FOSC's goal for the remainder of this year's shoreline treatment activities is as follows: (a) Begin post treatment survey/assessment of treated sites by August 1; (b) Complete initial/planned cleanup operations of sites requiring treatment by August 15; and (c) Terminate all treatment activities by September 15.

Future Treatment Activity:

The FOSC reiterated that there will be a third cleanup season next year (1991), in order to address sites that remain contaminated with Exxon Valdez related oil.

BIOREMEDIATION

Application of Customblen and Inipol fertilizers continues, with the endorsement of the State of Alaska. The three monitoring sites/segments at Bay of Isles on Knight Island, used during the first six weeks of fertilizer application, have received a second application of fertilizers. These sites will be monitored throughout August.

ADEC is expected to concur with EPA's recommendation that all sites selected for bioremediation treatment shall receive a second application of appropriate fertilizers a month after initial application. (Recall the EPA/ADEC/Exxon-Joint Bioremediation Program findings, as reported in last week's update, that the activity of oil degradation with fertilizer enhancement is sustained for approximately 32 days post application.)

COREXIT 9580 CHEMICAL CLEANER

A field test of Corexit 9580 was performed on July 14 at Herring Bay on Knight Island, PWS. EPA, ADEC, NOAA, USCG, and other agencies were on-site.

Corexit 9580 was applied at the rate of 1 gal/100 sq.ft. to several vertical rock faces that were coated with oil and that have not received any treatment since the 1989 cleanup operations. The test areas treated with Corexit were washed with hot water at 110°F and then compared to adjacent areas that were washed at 160-170°F. Based on visual observations, the Corexit appeared to be very effective in removing oil in conjunction with spotwashing at lower hot water temperatures. Oil was contained and removed by laying massive amounts of sorbents and pompoms at the base of the boulders washed. No runoff was observed entering nearby waters, which were about 50 feet away.

Based on these observations, EPA believes the product can be safely used to increase the efficiency of spotwashing vertical rock faces where oil remains in wave shadows--which is the area behind rocks, in relation to the shoreline, that does not get hit by the tide. There are currently less than 30 of such sites identified.

The FOSC is expected to make a determination regarding the use of Corexit, upon concurrence of EPA, ADEC and other Natural Resource Trustees. ADEC is formulating its position on the product at present.

ROCK WASHER RESEARCH & DEVELOPMENT

The FOSC announced that he would not endorse the large-scale use of the rock washing machine being championed by the State of Alaska. The FOSC agreed with NOAA's assessment that use of such technology would result in more environmental harm than benefit.

The status of the Exxon funded full-scale prototype test scheduled for the end of July remains uncertain. This planned demonstration is not an on-site field test and will be held in Anchorage, AK.

ALASKAN COMMERCIAL FISHERIES

No fisheries have been closed this week due to Exxon Valdez related oil.

July 20, 1990

EPA Region 10, Regional Office in Seattle

Oil Spill-Related Activities
Weekly Summary Report

- Meetings held during the past week: None
- Meetings scheduled for the coming week:

Tom Dunne and Ron Kreizenbeck will accompany Administrator Reilly on his trip to Prince William Sound and surrounding areas.

- Reviews of reports, outlines, etc.:

Reviewed second draft of Restoration Progress Report. Comments given to Linda Comerchi (Restoration Planning Work Group)

Received copy of Net Environmental Benefit Analysis (NEBA) report which compared the benefits of rock washing with the benefits of natural cleanup.

- Issues needing resolution:

A response to the recent Region 10 request for resources for oil spill-related activities for FY 91 has not been received yet.

A commitment of funds for the Restoration Feasibility Study of Fucus has not reached the Principle Investigator for this study. Various personal matters within the Forest Service have caused the delay and should be resolved early in the week of July 23. This delay, plus other factors pertaining to Fucus recovery in the study area, have necessitated a change in the scope of the study. This change will incorporate as much of the original scope as practical and add new components dealing with documenting natural recovery under varying environmental conditions.

A meeting between the EPA offices dealing with restoration planning will hopefully occur in Seattle in August (possibly August 14). Each office will be contacted regarding the preferred meeting date and a draft agenda.

- Miscellaneous:

The Natural Resources Damage Assess study reports from the 1989 field season have been sent to OMEP.

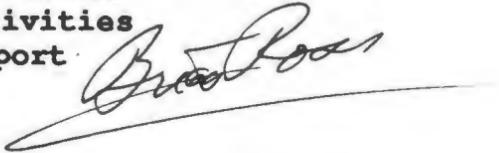
Contact: John Armstrong FTS 399-1368

Management Team, AOO/A
Oil Spill-Related Activities
Weekly Summary Report
16 July 1990



- O Meetings held during the past week
 - No major meetings
- O Meetings scheduled for the coming week
 - Coastal Habitat and Air/Water data synthesis meeting 23 - 24 July (Anchorage).
 - Mink/Otter data synthesis meeting 25 July (Fairbanks).
 - Management Team meeting 26 July (Anchorage).
 - Trustee Council meeting 27 July, 10:30 am, Regional Forester's Conference Room, Fed. Bldg. (Juneau).
- O Draft or final reports completed
 - Draft Restoration Progress Report revised July 16.
- O Project or report-related milestones reached
 - See above
- O Issues or problems which must be resolved
(date by which resolution is required, if appropriate)
 - The decision concerning the release of the Restoration Progress Report by the Administrator during his visit on the 23rd is on hold. There will be a statement by the Administrator that the report will be available shortly.
- O Other issues or comments
 - At HQ's request (OMEP's travel ceiling) I have arranged a site visit to PWS for Ron Kreizenbeck, Louise Wise, Conrad Kleveno and myself for 23 July.
- O Contact and phone number for further information on the above items
 - Stephen Bugbee: (907) 278-8012: FAX (907) 276-7178

RESTORATION PLANNING OFFICE
Oil Spill-Related Activities
Weekly Summary Report
July 13, 1990



* **Meeting held during the past week**

- Brian Ross and Stan Senner met with Rear Admiral Ciancaglini to discuss release of the NEBA report and concerns it raised for the NRDA
- RPWG met with the Management Team to receive comments on the draft Restoration Progress Report
- RPWG members met several times during the week to revise the Progress Report
- Brian Ross attended the biweekly FOSC/OPS meeting on 7/10/90
- Kirsten Ballard attended the FOSC/OPS meeting of 7/11/90

* **Meetings scheduled for the coming week**

- RPWG to deliver revised draft Progress Report to the Management Team and Legal Team on Monday 7/16/90
- RPWG to meet about 7/19/90 to make final Management Team changes, and then deliver final draft report to Trustee Council on 7/23/90 for their review

* **Draft or final reports completed**

- Symposium Report due back from printers 7/16/90. Looks like second printing of 2,000 will be necessary

* **Project or report-related milestones reached**

- RPWG Comments on draft Technical Workshop report returned to Hal Kibby, Reg 10, for forwarding to contractor
- Kirsten Ballard combined NRDA & DNR/RESTORATION mailing lists (not yet in database as of now)

* **Issues or problems which must be resolved**

- Initiation of Fucus feasibility study delayed due to contracting difficulties between USFS & UAF. Delay may necessitate changes in study design (to be worked out during week of 7/16/90).

*** Other issues or comments**

- John Armstrong, Hal Kibby, and Linda Comerci took a limited tour of PWS sites on 7/10/90, focusing on oiled marshes and Fucus study sites
- Kirsten Ballard will attend COREXIT testing on space available basis

*** Contact Brian Ross (FTS 686-2461 or 907-271-4261)
for further information**

Management Team, AOO/A
Oil Spill-Related Activities
Weekly Summary Report
July 9, 1990

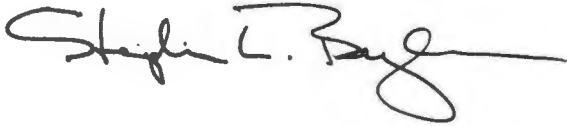
- O Meetings held during the past week
 - NRDA Sea Otter data synthesis meeting 7/9-10 discussion on population census/thermoregulation.
 - Met with USCG, NOAA on the Net Environmental Benefit Analysis (NEBA) report 7/9 - see Issues below.
 - The Management Team met 7/11 to discuss a number of issues including the draft Restoration Progress Report. Other items of interest include the schedule for oil years 2 and 3, status of NRDA data synthesis process, and the NEBA report.
- O Meetings scheduled for the coming week
 - No major meetings currently scheduled
- O Draft or final reports completed
 - Draft Restoration Progress Report comment from Management Team due RPWG 7/16 and revised draft sent to the Trustee Council for review 7/20.
- O Project or report-related milestones reached
 - See above
- O Issues or problems which must be resolved
(date by which resolution is required, if appropriate)
 - NOAA will be undertaking an internal review of the data and conclusions in the NEBA report as the first step in "damage control". The Management Team will be briefed on NOAA's findings on July 26th at which time a decision will be made on a formal reply to NOAA.
 - USCG has been requested to delete reference to USEPA's involvement in RADM Ciancaglini's final decision on the use of a rock washing technology in EVOS clean up activities.

O Other issues or comments

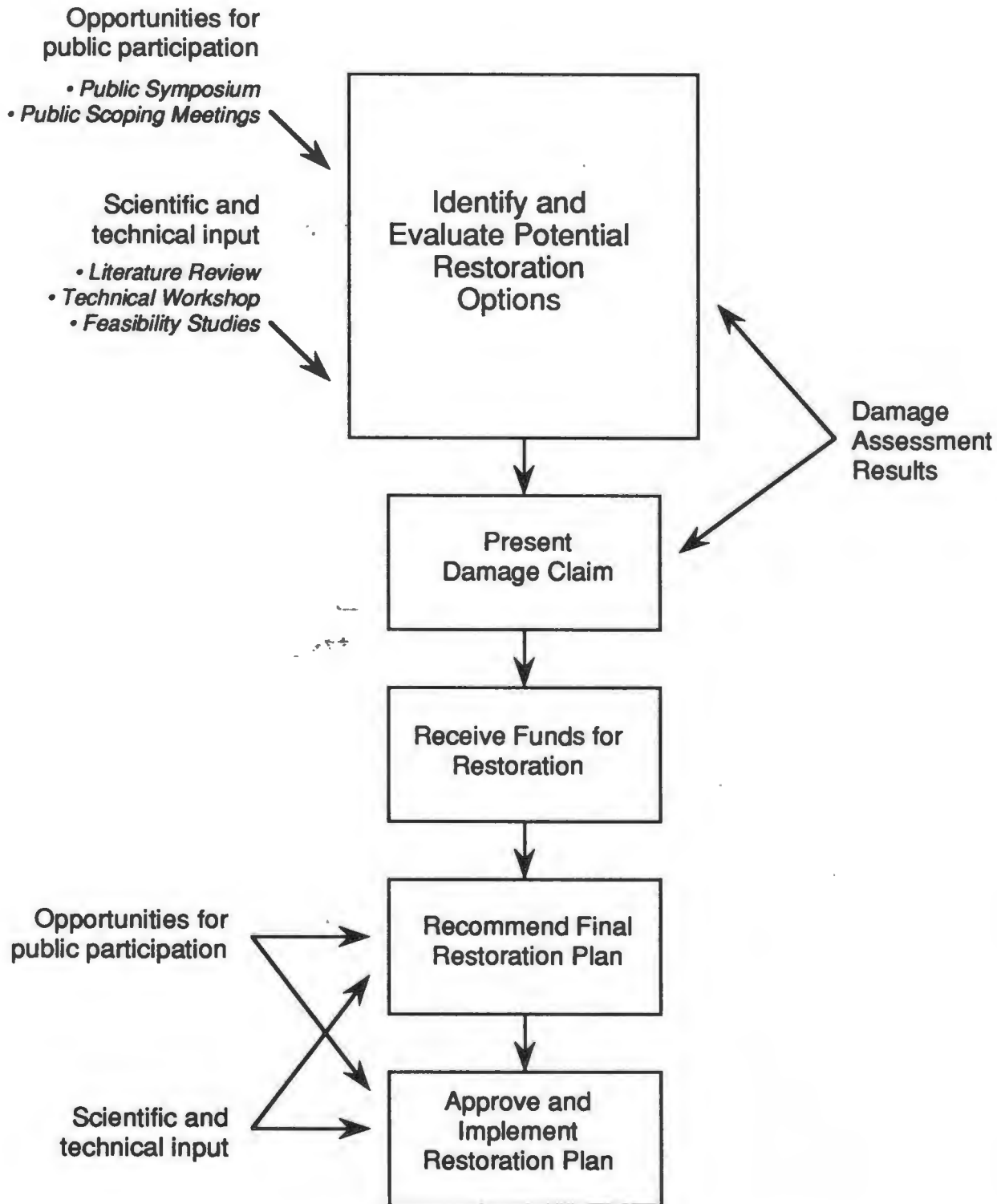
- I conducted a site visit in Prince William Sound along with John Armstrong, Hal Kibby and Linda Comerchi on 7/10. We visited several beaches and marsh areas on Crafton, Knight, and Latouche Islands. I will be happy to brief interested parties on this trip.

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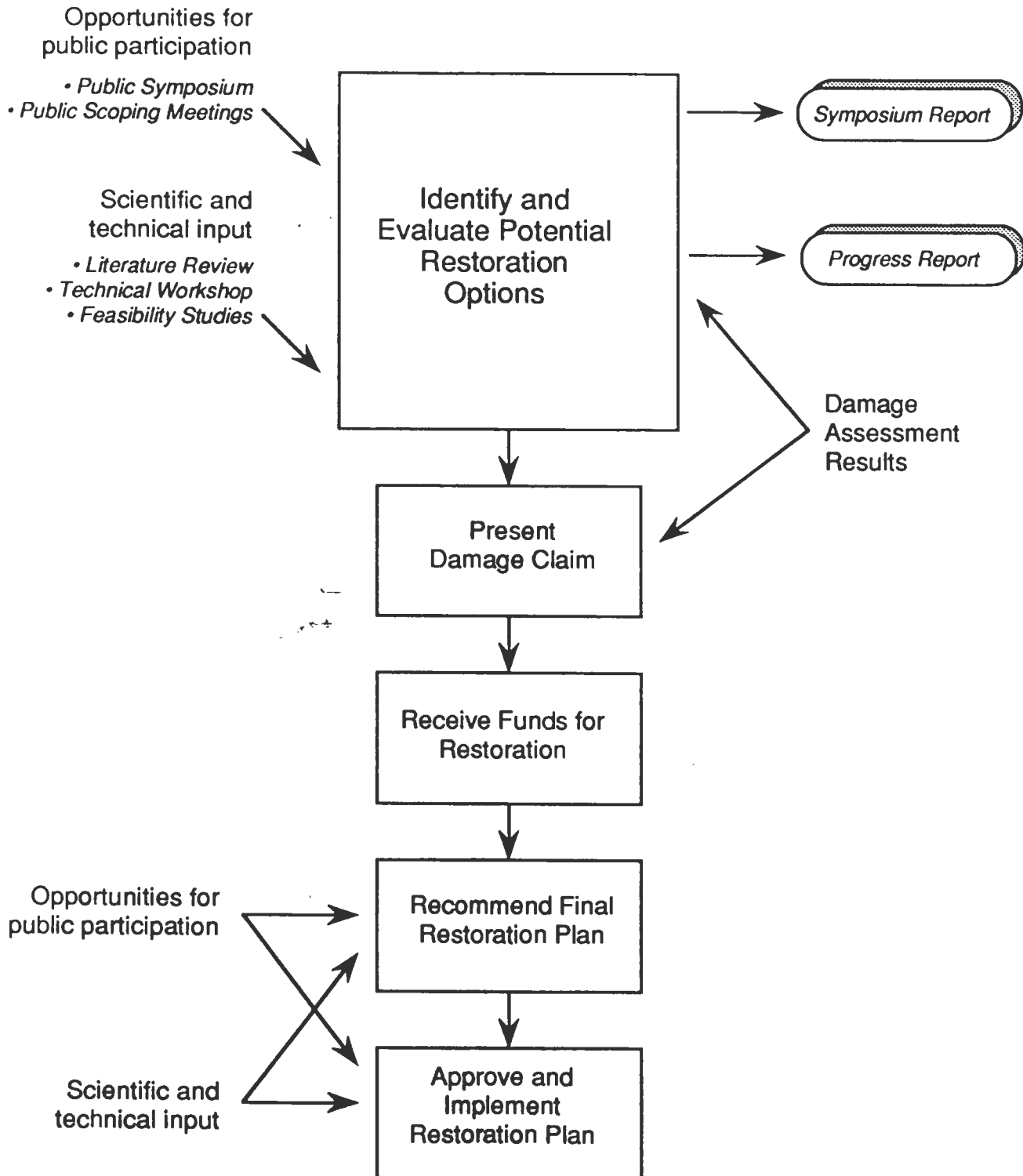
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THE RESTORATION PLANNING PROCESS



THE RESTORATION PLANNING PROCESS



7/13/90

MEMORANDUM

SUBJECT: Weekly Ops Meeting at FOSC Headquarters, 7/11/90

FROM: Kirsten Ballard ~~Handwritten signature~~ AOO/A

TO: Brian Ross, Restoration Planning Team Leader, AOO/A

The meeting was short and sweet. There seemed little reason to re-hash the fervor of the Ops Steering Committee Meeting of Tuesday, 7/10.

USCG

-USFWS has submitted more beach segments to be cleaned (these were probably missed during SSAT because of snow). They are going throughout the TAG approval process.

-Yalik Glacier Beach is being cleaned manually, with shovels and bulldozers, and with bioremediation.

-RADM Ciancaglini is calling a meeting with EPA, NOAA and the state. He will be requesting a recommendation regarding the "dirty dozen" beaches that may require additional work next season (1991).

-RADM Ciancaglini stated that "There is no question that the shorelines are recovering." He also stated that this is the term he will continue to use despite what the lawyers say in reference to the state of things in PWS and the oil spill in general.

-ASAP (August Shoreline Assessment Program) will consist of 5 crews. The admiral may require more since he does not want to finish up the assessment on 9/15. He wants to be able to address additional cleanup needs before the pull out date.

DOI

-From USFWS- A lens of oil has been uncovered at the Barren Is. This was included in the work order requests mentioned above.

USFS- No new news to report.

EPA- No new news to report.

OSHA

-Continuing testing for worker exposure to Inipol shows that the highest levels of exposure to workers is during product transfer from the drums to the trucks, trucks to the vessel. The levels are ~4ppm, which is still well below the level of concern.

IN GENERAL:

-Rock washer test scheduled for 8/10/90 on the pad here in Anchorage (exact location not given). The prototype will be tested. The location is a LUST site which will be sampled for contamination before the pad is made and after the pad is removed.

Alaska Restoration Task Force Weekly July 9-13, 1990

- o **BRIEFING FOR THE ADMINISTRATOR.** Briefed the Administrator on 7/12. Coordinated with the EPA Alaska workgroup and provided briefings papers and briefing books to the Administrator. Topics covered; cleanup, bioremediation, restoration, damage assessment data, litigation, and legislation. Reilly and Esty told L.W. that it was an excellent briefing.
- o **RESTORATION PLANNING PROGRESS REPORT.** Janet left for Alaska and will be there through the 23rd. She is helping the Restoration Planning Task Force revise and finish the report. Trustee Council pushed back the release date from mid-July to mid-August to accommodate one more round of Management Team reviews. However, EPA would like it released on the original schedule. The changes from the review just completed were not controversial and easily made.
- o **INTERAGENCY AGREEMENT.** Susan nearly finished interagency agreement between EPA and NOAA to fund an assessment of recovery of the shoreline in PWS since the spill. CEPPO (OSWER) is providing the funding for the agreement.
- o **OUTREACH.** EPA offices have agreed to fund between \$20,000-\$30,000 of the cost for the Homer Museum Exhibit "Darkened Waters" on the effects of the oil spill. The exhibit will be in Washington in February of 1991.
- o **DAMAGE ASSESSMENT STUDIES.** Draft of options for releasing damage assessment data almost completed. These options will be discussed at the Washington Policy Group Meetings this week. Meetings are scheduled for Tuesday, Wednesday, and Thursday. Louise, Nancy Jones, and Charles Openchowski will attend for EPA.
- o **RESOURCES.** We have travel ceiling!
- o **MEETINGS.** John Armstrong and Susan are developing outlines of issues for an organizational meeting between Region 10 and headquarters on Alaska. Meeting is not yet scheduled. Preliminary topic list: distribution of resources, roles and responsibilities, recovery, monitoring, this summer's restoration activities.

EPA-OMEPUS ENVIRONMENTAL PROTECTION AGENCY
TELECOMMUNICATIONS CENTER
WASHINGTON, DC 20460**FACSIMILE REQUEST AND COVER SHEET**

PLEASE PRINT IN BLACK INK ONLY

TO **Brian Ross 271 2467** **Al Ewing 8907271 3974**
John Armstrong **Steve Bugbee 2767778**

OFFICE/PHONE

REGION/LAB

FROM

PHONE

MAIL CODE

OFFICE

DATE

NUMBER OF PAGES TO INCLUDE THIS COVER SHEET

*Please number all pages***INFORMATION FOR SENDING FACSIMILE
MESSAGES TO EPA HEADQUARTERS**

EQUIPMENT	FACSIMILE NUMBER NUMBER	VERIFICATION NUMBER
RAPICOM	(202) 382-7883 (auto)	(202) 382-2078
PANAFAX	(202) 382-7884 (auto)	(202) 382-2078
PANAFAX	(202) 382-7886 (auto)	(202) 382-2078
MANUAL	(202) 382-2078	

The EPA Communications Center has the capability for sending and receiving facsimile messages to CCITT Group I, II, and III Equipment.

Management Team, AOO/A
Oil Spill-Related Activities
Weekly Summary Report
July 9, 1990

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 - Met with USCG, NOAA on the Net Environmental Benefit Analysis (NEBA) report 7/9 - see Issues below.
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 - NOAA will be undertaking an internal review of the data and conclusions in the NEBA report as the first step in "damage control". The Management Team will be briefed on NOAA's findings on July 26th at which time a decision will be made on a formal reply to NOAA.
 - USCG has been requested to delete reference to USEPA's involvement in RADM Ciancaglini's final decision on the use of a rock washing technology in EVOS clean up activities.

0 Other issues or comments

- I conducted a site visit in Prince William Sound along with John Armstrong, Hal Kibby and Linda Comerchi on 7/10. We visited several beaches and marsh areas on Crafton, Knight, and Latouche Islands. I will be happy to brief interested parties on this trip.

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July 6, 1990

Weekly Significant Issues

Brian D. Ross *Brian D. Ross*
Restoration Planning Team Leader

Alvin L. Ewing
Assistant Regional Administrator

COMPLETED

- Restoration Progress Report: Draft completed and sent to Management and Legal Teams for review. Management Team meeting tentatively scheduled for July 10 or 11 to consolidate comments.
- Symposium Report completed, at printers as of July 2.
- Briefed Allen Steinbeck and Elizabeth Stolpe, aides to AK Sen. Murkowski, on current status of oil spill issues incl. bioremediation, NRDA, and restoration planning. They requested, and were given a copy of the draft restoration Progress Report (with appropriate caveats as to its draft status).

UPCOMING/ONGOING

- RPWG met Tuesday 7-3 to discuss status of current activities and continue planning for upcoming tasks (including additional public meetings, the peer review process, further technical workshops, development of a comprehensive recovery/restoration monitoring program, and ongoing literature search work).
- Will review "Net Environmental Benefit Analysis" report (due from FOSC on Friday, 7-6) for any concerns regarding restoration or the NRDA. Comments due to FOSC at 8:00 am, Sunday 7-8.
- Next Corexit 9580 test postponed until at least early next week
- Steve Bugbee arrived in Anchorage from ARFTO to replace Steve Torok on the Management Team while Steve T. is on vacation.
- John Armstrong (R. 10) and Hal Kibby (ORD, Corvallis) to arrive Monday in Anchorage. Will fly to PWS Tuesday for preliminary marsh survey work, and to view the *Fucus* feasibility study site. Steve Bugbee may accompany them.

OUTREACH

- None

TRAVEL

- None

**Restoration Planning Team, AOO/A
Oil Spill-Related Activities
Weekly Summary Report**

*** Meetings Held during the past week**

- RPWG met Tuesday 7-3 to discuss status of current activities and continue planning for upcoming tasks (including additional public meetings, the peer review process, further technical workshops, development of a comprehensive recovery/restoration monitoring program, and ongoing literature search work).
- Briefed Allen Steinbeck and Elizabeth Stolpe, aides to AK Sen. Murkowski, on current status of oil spill issues incl. bioremediation, NRDA, and restoration planning. They requested, and were given a copy of the draft restoration Progress Report (with appropriate caveats as to its draft status)>
- K. Ballard attended weekly operations meeting at FOSC office.

*** Meetings scheduled for the coming week**

- Management Team meeting tentatively scheduled for July 10 or 11 to consolidate comments.

*** Draft or final reports completed**

- Restoration Progress Report: Draft completed and sent to Management and Legal Teams for review.
- Symposium Report completed, at printers as of July 2.

*** Project or report-related milestones reached**

- See reports, above

*** Issues or problems which must be resolved
(date by which resolution is required, if appropriate)**

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*** Contact and phone number for further information on the above items**

- Brian Ross: FTS 868-2461/(907) 271-2461

July 6, 1990

MEMORANDUM

Subject: Availability of Net Environmental Benefit Analysis report
on use of the "Rock Washer" proposed by ADEC

From: Brian D. Ross *Brian D. Ross*
Restoration Planning Team Leader, AOO/A

To: Alvin L. Ewing
Assistant Regional Administrator

The subject report was to have been provided by the U.S. Coast Guard FOSC office on Thursday, July 5. As of noon today, it had not been received. I met with RADM Ciancaglini and CPT Zwadski at 12:30pm; they had not yet received the report either, and therefore decided to postpone the meeting, scheduled for Sunday at 8:00am, until Monday at 10:00. The purpose of the Monday meeting will be to consolidate comments on the report so that the Admiral can make a final decision on that day about use of the rock washer. I informed the Admiral that EPA may or may not express a position about the rock washer itself, but would comment to the extent that the NEBA report raised issues of concern for the Damage Assessment or Restoration Planning processes.

As of 3:00 pm, the report is still not available. However, we received from the State a 9-page summary attached to a NOAA transmittal memo to the Admiral, dated July 5. The July 5 summary was faxed to John Armstrong, Conrad Kleveno, Steve Bugbee, Martha Fox, and Jim Nicoll. The following comments are based on a review of this summary. Recommendations are provided following these comments.

Comments on the July 5, 1990 Summary of the Net Environmental Benefit Analysis report

The overall tone of the summary, at least, seems somewhat less than objective and gives the appearance that NOAA is biased against the rock washing technique. For example, page 8 of the summary bases its estimates of secondary impacts on the scenario that "four or five rock washing units were active for a two-month period." I understand that only one such unit is currently available, and that even it may or may not be ready for use on short notice.

Pages 3, 6, 7, and 8 of the summary present NOAA's estimates of the rates of "natural" removal of oil from shorelines (given no further treatment) and of the rates of recovery and recolonization with and without using the rock washer. The specific bases for these estimates are not provided, other than to state that they are NOAA estimates. More importantly from the standpoint of the overall NRDA are inferences about "full recovery." Such statements could have bearing on the damage claim and any future litigation. There is no definition of "recovery" provided in the summary. The pertinent measure of recovery for the NRDA would be the return of the affected communities to pre-spill conditions. While recolonization is already beginning in locations that have had sufficient oil removed to allow "r-selected" species to reestablish themselves, this is not the case in all areas. Furthermore, the initiation of recolonization does not equate with "recovery;" nor does it necessarily equate with "clean." The report could present just as strong an evaluation by noting that recolonization would be well underway more quickly without excavation of the shoreline.

The summary on page 9 addresses human uses, including recreation and subsistence. Given that the NRDA process is evaluating the potential impacts to such uses, it is probably inappropriate for the NEBA report to reach conclusions about whether there are any such impacts, what they are, and how long it may take before they disappear. For example, the summary mentions only that the digging of fire pits could impact users where subsurface oil remains. Other impacts are certainly possible, not the least of which may be impacts to "existence value" for recreational users. This may be true for subsistence, as well. In the Restoration Planning process to date, we have received numerous comments about a "loss of faith" in the quality of the subsistence environment; remaining subsurface oil could continue to cause subsistence users to avoid areas even if the residue is no longer biologically active. This type of avoidance may constitute a "real" impact under the Damage Assessment.

Recommendations

The discussions and inferences concerning "recovery" are of significant concern with respect to the Damage Assessment process. These statements, appearing as they do in a report from a group which includes NOAA and the State of Alaska - both Trustees - could significantly affect the damage claim and any litigation over it. Exxon, of course, is a member of the group authoring the report, as well. They will certainly be taking full advantage of any sloppy or poorly thought-out passages. Unfortunately, it appears that such passages in fact exist. It is particularly unfortunate that the report was prepared without participation from individuals associated with the Damage Assessment, and that the Legal Team, at least, was not provided with the opportunity to review the document and suggest changes prior to its finalization. (As I understand from CAPT Zwadski, the report is in fact final. It does not become policy until the FOSC signs it, and he may or may not agree with its recommendations. However, it is not expected that revisions to the report itself would be necessary.)

The preceeding comments were based on the summary of the NEBA report. If the report itself is accurately reflected by the summary, concerns about the possible effects of the report on the NRDA process are significant enough that I recommend a letter be delivered on Monday morning from you to the FOSC containing the following points:

1. The NEBA report should not be accepted as a final document nor released to the public until it has been reviewed by the NRDA Legal Team, at a minimum, and appropriate revisions incorporated. It is expected that the report can be appropriately revised with relatively little effort, and with no significant consequence to its evaluation or conclusions. Note, in addition, that the process of reviewing and revising the report itself need not delay the FOSC's decision about the use of the rock washer.
2. Sections needing revision include those addressing recovery and recolonization. Substitute language treating recolonization as a process that may have begun, rather than as an endpoint, should be used. Also, conclusions about impacts to human uses should be rewritten. Specific language should be as recommended or approved by the Legal Team or the Trustee Council.
3. Statements or inferences about recovery or "how clean is clean" raise the issue of the interface between cleanup and restoration. (Just as the NRDA/Restoration process is not directing the FOSC's decisions about cleanup actions, cleanup decisions should avoid hampering the NRDA/Restoration process.) With the potential completion of active cleanup efforts on the horizon, now may be the time for direct coordination between the Trustee Council and the FOSC's office to increase. [I.e., this could be an opening for earlier T.C. concerns to be voiced.]
4. Given the disagreement noted in the report between Alaska and Exxon over the potential usefulness of the rock washer, EPA would not object to a single field test of the technology. In fact, an aspect of the issue overlooked in the report is the benefit that would accrue to cleanup efforts for future high-latitude spills from having conducted such a test with appropriate follow-up monitoring. In particular, while it is certainly possible that shoreline excavation could do more harm than good at this point - well over a year after the spill - it may also be true that a different conclusion would have been reached last year. It would be unfortunate to base future decisions about this technology on an incomplete (and not agreed-upon) knowledge base. It would be just as unfortunate if no better answers had been developed by the time that next spill occurs.
5. It would have been appropriate for EPA to have been a part of the NEBA committee for two main reasons. First, the topic of the report raises issues concerning "how clean is clean." EPA has significant expertise dealing with this issue under a variety of environmental circumstances. Second, EPA is clearly recognized as a lead agency in terms of research and development into new oil spill cleanup technologies, as evidenced by the fact that along with the Coast Guard, EPA has received considerable funding for FY91 for this type of work.

I will be reviewing the full report this weekend. I will prepare a draft letter to the FOSC for your consideration for Monday morning.

July 4, 1990

MEMORANDUM

To: Alvin L. Ewing
Assistant Regional Administrator

From: Brian D. Ross
Restoration Planning Team Leader

Subject: Acting Team Leader Assigned

Effective July 9 - August 9, 1990, Linda Comerchi will be Acting Team Leader while I am on annual leave. She can be reached at (907) 271-2461 if you need assistance from the Restoration Planning Office/AOO.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10

June 30, 1990

REPLY TO
ATTN OF:

Restoration Planning Office

MEMORANDUM

SUBJECT: Transmittal of Draft Restoration Progress Report

FROM: *[Handwritten signature]*
Restoration Planning Work Group

TO: Management Team,
Legal Team

The Restoration Planning Work Group is pleased to submit for you review-the attached draft report, "Restoration Following the Exxon Valdez Oil Spill: July 1990 Progress Report." This report summarizes the activities carried out to date under the Restoration Planning Project, including the Restoration Symposium, local public scoping meetings, the technical workshop, the initial literature review, and the 1990 feasibility study projects. The report also documents public comments received regarding restoration options and approaches, and provides matrices of these options for the resources potentially injured by the spill. No data from NRDA studies are discussed in the report.

It is our understanding that the Trustee Council's target date for finalization of this report is mid-July. We recognize that this will necessarily limit the time available for your review. Work Group members are available to meet with you in Anchorage or Juneau to answer any questions you may have, or to help develop a consolidated set of comments for revising the report as efficiently as possible. We understand that a Management Team meeting may be held on July 10 or 11; if necessary we can be available to work with you at that time. Should there be any questions in the interim, please contact your agency's Work Group member directly, or call the Restoration Planning Office at (907) 271-2461.

ATTACHMENT

cc: RPWG members

July 1, 1990
Draft Restoration Progress Report
Distribution List

<u>Addressee</u>	<u>No. of Copies</u>
Management Team:	
G. Erickson, ADFG.....	2
D. Dulac, DOA.....	2
P. Gertler, DOI.....	2
C. Roy, DOI.....	2
B. Morris, DOC.....	2
S. Torok, EPA.....	<u>2</u>
	12
Legal Team:	
Dept. of Justice.....	3
Dept. of Law.....	3
DOI (Luthie).....	1
DOA (Maynard).....	1
EPA (Fox).....	<u>1</u>
	9
Restoration Planning Work Group Members/file.....	9
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P. Wahl, ADNR.....	1
EPA-Headquarters.....	5
EPA-Region 10.....	<u>4</u>
	10
Total Copies of Draft Report Distributed.....	40

file

MEMORANDUM

SUBJECT: Exxon Valdez Oil Spill, Weekly Ops Meeting
7/3/90

FROM: Kirsten Ballard, AOD/A

TO: Brian Ross, Restoration Planning Team Leader,
AOD/A-RPO

Weekly meeting went as follows:

USCB

- Reports that Exxon, as requested, is diverting additional resources to the anadromous streams so as to finish up by the July 10 ecological constraint window.
- This marks the third week that the helicopter cleanup crew has been working in Kodiak. It seems to be working well, and USCB even got complements from the mayor of Kodiak.
- There are about 70 days left to the cleanup season.

DOI

- Finishing up the SSAT information and passing on requests for additional shoreline assessments and cleanup for shorelines that were covered with snow during the SSAT.
- NOAA is requesting formal approval (memo or letter) for burning logs that had been used for boom in Halo Bay (Kodiak zone/Katmai coast)

OSHA

- The personnel that had been reported positive for Inipol exposure (blood in the urine screening) have been returned to their squads. Apparently other health factors caused the blood in their urine.

NOAA

- NEBA (Net Environmental Benefit Analysis) should be out on schedule by July 3.
- There is a special meeting scheduled on Sunday, July 8, to discuss comments from EPA and others on the NEBA report.
- Corexit test was cancelled. The next test will be no sooner than Friday, July 6. See attached newspaper article for details of the cancellation.
- NOAA's "Summer Program" has begun. Two teams of kayaks will be out in the Sound and part of the Kenai coast to man the long term study sites. A program will be distributed describing the studies and objectives. Objectives include: continue the

winter '89 studies, fate and effects, changes and more intensive study in general. Funding has been provided by the EPA, NOAA, USCG R&D. It will be a shared data program.

USF8

-Sponsored a "show me" trip to Eleanor Island with teachers and instructors from Anchorage Community Schools, Alaska Pacific University, and University of Alaska-Anchorage.

-Expressed concern regarding pick-up of wildlife deterrent balloons and survey tape (which marks the boundaries of the application areas).

EPA

-Jim Clark is at Sleepy Bay (LaTouche Island) conducting a "workshop" for calibration of evaluation of shorelines for bioremediation. Exxon, USCG and DEC (other agencies may also be) are in attendance.

R 030328Z JUL 90
FM COGARD FOSC ANCHORAGE AK
TO UC FS DU HB DX AN VZ MJ SB OC KO/AIG FOUR NINE NINE ONE
INFO COGARD R AND DC GROTON CT
BT

UNCLAS //N16465//

SUBJ: POLREP 284 MAJOR CRUDE OIL SPILL, T/V EXXON VALDEZ, PRINCE
WILLIAM SOUND, AK MP 89002004, FPN 33-179007

SITUATION: DATA PROVIDED IS THUR 01JUL90 UNLESS OTHERWISE NOTED.

A. GULF OF ALASKA: 3 CG OVERFLIGHTS SINCE 28JUN90 AND 3 VESSEL
OPERATIONS.

B. PRINCE WILLIAM SOUND: 2 CG OVERFLIGHTS SINCE 28JUN90

C. WX: 02JUL90

1. PRINCE WILLIAM SOUND INCLUDING KNIGHT ISLAND: VARIABLE
WINDS TO 15KT. SEAS TO 3FT. TEMP 53.

2. KODIAK: NORTHWEST WINDS TO 10KT. TEMP 50. BARREN ISLAND
AND KAMISHAK BAY WATERS: NORTHEAST WINDS TO 15KT. SEAS TO 5FT. TEMP
50.

2. ACTION:

A. ON 29JUN90 CONDUCTED AERIAL SURVEILLANCE OVER THE FOLLOWING
AREAS IN PRINCE WILLIAM SOUND: WHITTIER, WELLS PASSAGE, CULROSS
PASSAGE, KNIGHT PASSAGE, GREEN ISLAND, SMITH ISLAND, SLEEPY BAY,
SAWMILL BAY, POINT HELEN, SNUG HARBOR, MARSHA BAY, BAY OF ISLES,
UPPER AND LOWER PASSAGE, NORTHWEST BAY, MAIN AND ESHAMY BAYS. A
60YD X 10YD LIGHT GREY SHEEN NEAR SMITH ISLAND. ON 29JUN90 IN THE
GULF OF ALASKA 1 CG OVERFLIGHT TO PUALE BAY-HELEN CREEK. CONDUCTED
SPECIAL SSAT OF HELEN CREEK (K10-07-PB016 ANAD). SURVEY INDICATED
20M X 3M AREA OF 1-2" OF MOUSSE SCATTERED ALONG NE SIDE OF CREEK
MOUTH.

B. ON 01JUL90 - M/V CORINTHIAN (SQD 1) WORKING KNIGHT ISLAND.
M/V COLUMBIA (SQD 2) WORKING LATOUCHE ISLAND, DANGER ISLAND. M/V DON
BOLLINGER (SQD 3) WORKING KNIGHT ISLAND. M/V ARTIC SALVOR (SQD 4)
WORKING EVANS ISLAND. M/V ADELE CANDIES (SQD 5) WORKING BAINBRIDGE
PASSAGE. M/V BEULAH CANDIES (SQD 6) WORKING CHENEGA ISLAND, KNIGHT
ISLAND, CULROSS ISLAND. M/V YUKON RIVER (SQD 7) WORKING USHAGUT
ISLAND, CHUGACH BAY, WINDY BAY. M/V ENSCO ATLAS (SQD 8) WORKING
TONSINA BAY. M/V SEA TRADER (SQD 9) WORKING KODIAK AREA. ON 02JUL90
SQUADS 1,3,5,6,8,9 INPORT FOR CREW CHANGES.

C. STATUS OF SHORELINE SURVEYS AND CLEANUP AS OF 30JUN90:

1. 1035 SUBDIVISIONS (PART OF SHORELINE SEGMENTS) WORKORDERS
HAVE BEEN ISSUED BY FOSC. 606 REQUIRE TREATMENT.

2. 560 SUBDIVISIONS REQUIRE MANUAL TREATMENT (TARMAT REMOVAL,
MANUAL PICKUP AND SPOT WASHING). TO DATE, 302 OUT OF 560
SUBDIVISIONS HAVE RECEIVED INITIAL APPLICATION (54%) WITH 26 WORK
SITES IN PROGRESS.

3. 412 SUBDIVISIONS REQUIRE BIOREMEDIATION TREATMENT. TO DATE
140 OUT OF 412 SUBDIVISIONS HAVE RECEIVED INITIAL APPLICATION (34%),
WITH AN ADDITIONAL 26 WORK SITES IN PROGRESS.

D. COREXIT 9580 TEST SCHEDULED FOR 1 JULY IN SLEEPY BAY CANCELLED
DUE TO CHENEGA VILLAGE CORPORATION (CVC) OBJECTIONS, EXXON
DISCUSSING CONCERNS WITH CVC THIS DATE.

E. NEBA COMMITTEE MET 29 JUNE TO DISCUSS DRAFT REPORT TO FOSC.

3. FUTURE PLANS AND RECOMMENDATIONS:

A. EXTERNAL/PUBLIC AFFAIRS

1. MEDIA RELATIONS: MODERATE LOCAL INTEREST.

2. PROTOCOL: VADM BERAN TO VISIT 16JUL90.

B. CONDUCT SECOND COREXIT 9580 TEST WHEN EITHER CVC CONCERNS ARE
ADDRESSED OR ALTERNATE SITE CHOSEN.

C. NEBA REPORT DUE TO FOSC 5 JULY. OPERATIONAL REVIEW AND FOSC
DECISION WITHIN 10 DAYS.

STATE OF ALASKA

STEVE COWPER, GOVERNOR

JUL 2 1990

FOSC $\sqrt{B-2}$
COS $\sqrt{B-2}$
OAS _____
NOAA _____
HIST _____

DEPT. OF ENVIRONMENTAL CONSERVATION

OIL SPILL RESPONSE CENTER
2550 DENALI ST., SUITE 705
ANCHORAGE AK 99503

(907) 265-4600

June 28, 1990

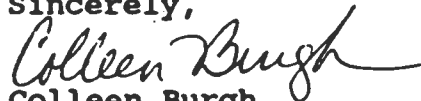
Rear Admiral D.E. Ciancaglini
Federal On-Scene Coordinator
United State Coast Guard
601 W. 5th Ave. Suite 500
Anchorage, AK 99501

Dear Admiral Ciancaglini,

I am responding to your June 27, 1990 letter concerning the conditional use of bioremediation. We are just now receiving our data from the six-week monitoring program and we are on a tight schedule for review of the information prior to a final decision on continued use of bioremediation.

In order to facilitate continued cleanup of the oil on our shorelines, application of nutrients does seem appropriate in this interim time period, provided the oiled areas recommended for bioremediation are properly pre-treated manually and mechanically where necessary and the application of fertilizers takes place according to the existing operational guidelines. In our May 1, 1990 approval letter we stated that approval for any reapplication of fertilizers will come after results from the six-week monitoring program are in and evaluated, and we will adhere to that condition for areas where bioremediation has already occurred this season and a second application is requested.

Sincerely,



Colleen Burgh
State of Alaska
Deputy On-Scene Coordinator

cc: John Bauer, ADEC-PWS Operations
Doug Lockwood, ADEC-GOA Operations
Marshal Kendziorek, ADEC-Technical Services

U.S. Department
of Transportation

United States
Coast Guard



Federal On Scene
Coordinator
U. S. Coast Guard

Key Bank Bldg.
601 W 5th Ave.
Suite 300
Anchorage, AK 99501
(907) 277-3833

16465
27 June 1990

Mr. Randy Bayliss
State On Scene Coordinator
ADEC Oil Spill Response Center
2550 Denali Street, Suite 705
Anchorage, AK 99503

Dear Mr. Bayliss:

In your letter of May 1, 1990, to the Alaska Regional Response Team, concerning the conditional use of nutrient addition, you required that a monitoring program demonstrate within the first six weeks that accelerated biodegradation has occurred. That six week period will end on 30 June 1990 since the first application of nutrients was made on May 21, 1990.

Preliminary data from the joint EPA/ADEC/EXXON bioremediation team has shown accelerated biodegradation. The team is currently preparing a report for panel review by July 10, 1990. In light of the above, I request that the nutrient applications continue past 30 June until you evaluate the panel report and decide whether or not to continue bioremediation efforts.

I apologize for this late request, but nevertheless your timely response would be appreciated.

Sincerely,

D. E. CIANCAGLINI
Rear Admiral, U. S. Coast Guard
Federal On Scene Coordinator

Copy: Otto Harrison, EXXON USA
Gary Hayden, ADEC



CAMEO Exxon Valdez '90

July 1, 1990



Total Area
Treatment vs. No Treatment
(Subdivisions)

No Treatment Required - 429

Treatment Required - 606



Total Subdivisions = 1035



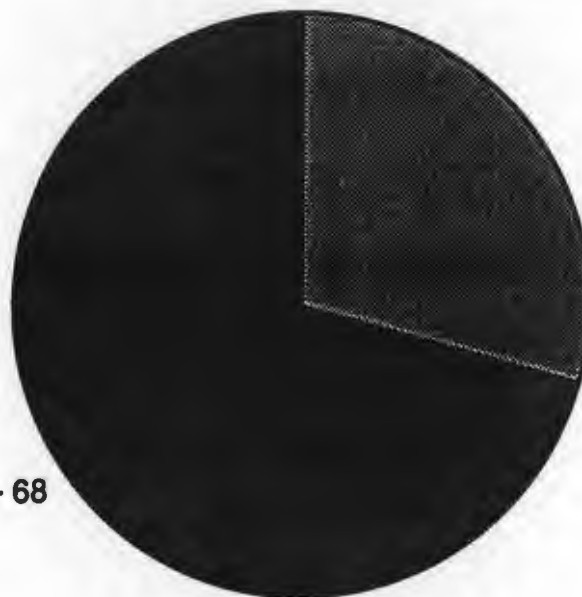
CAMEO Exxon Valdez '90

July 1, 1990



Total Area
Treatment vs. No Treatment
(Anadromous Streams)

No Treatment Required - 28



Treatment Required - 68

Total Streams = 96

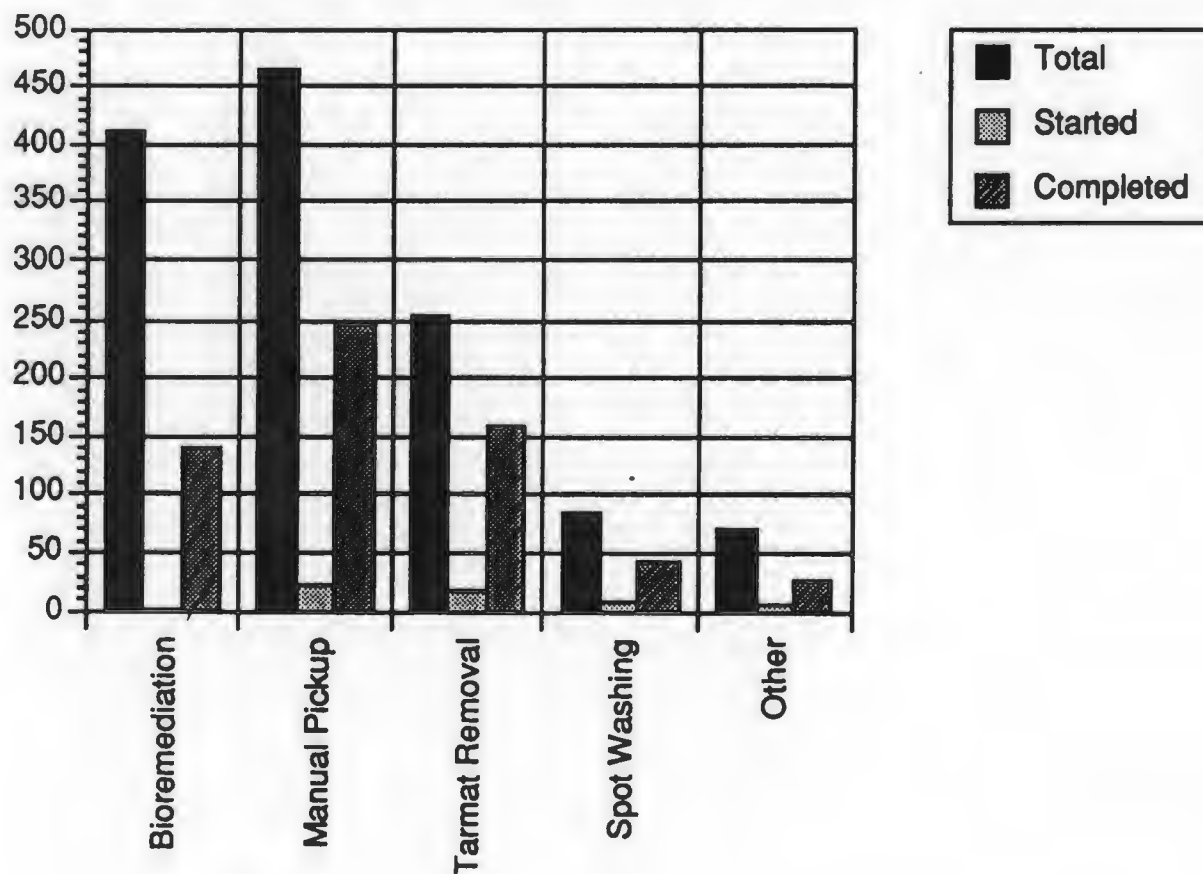


CAMEO Exxon Valdez '90

July 1, 1990



Total Area Subdivision Treatment Types

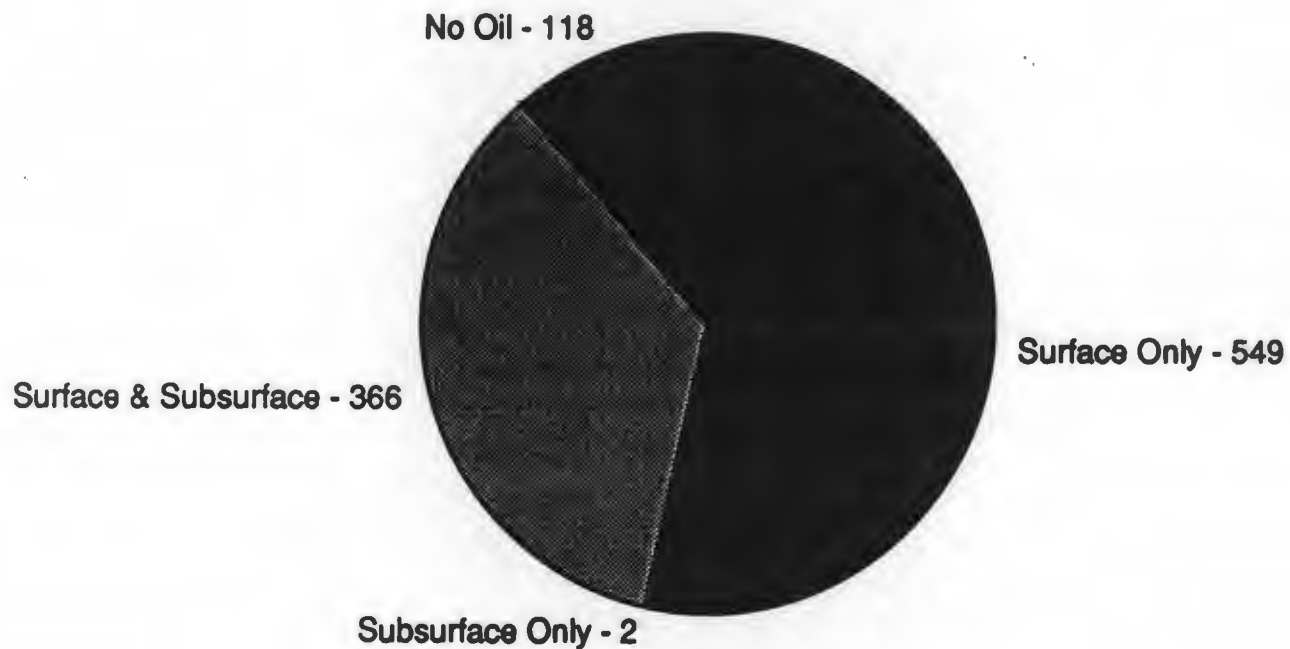




CAMEO Exxon Valdez '90
July 1, 1990



Total Area
Subdivision Oiling



Total Subdivisions = 1035

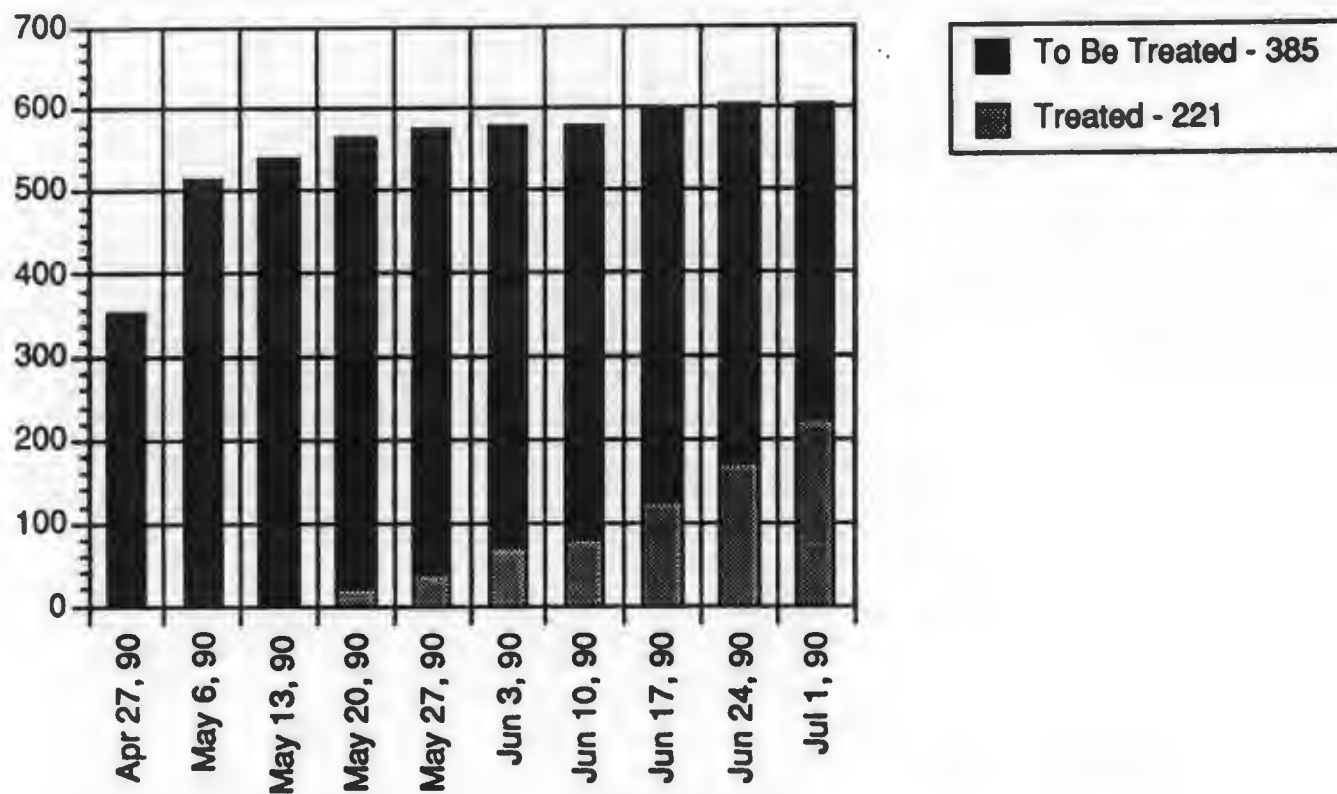


CAMEO Exxon Valdez '90

July 1, 1990



Total Area Subdivisions Treated vs. To Be Treated



Total Subdivisions Requiring Treatment = 606



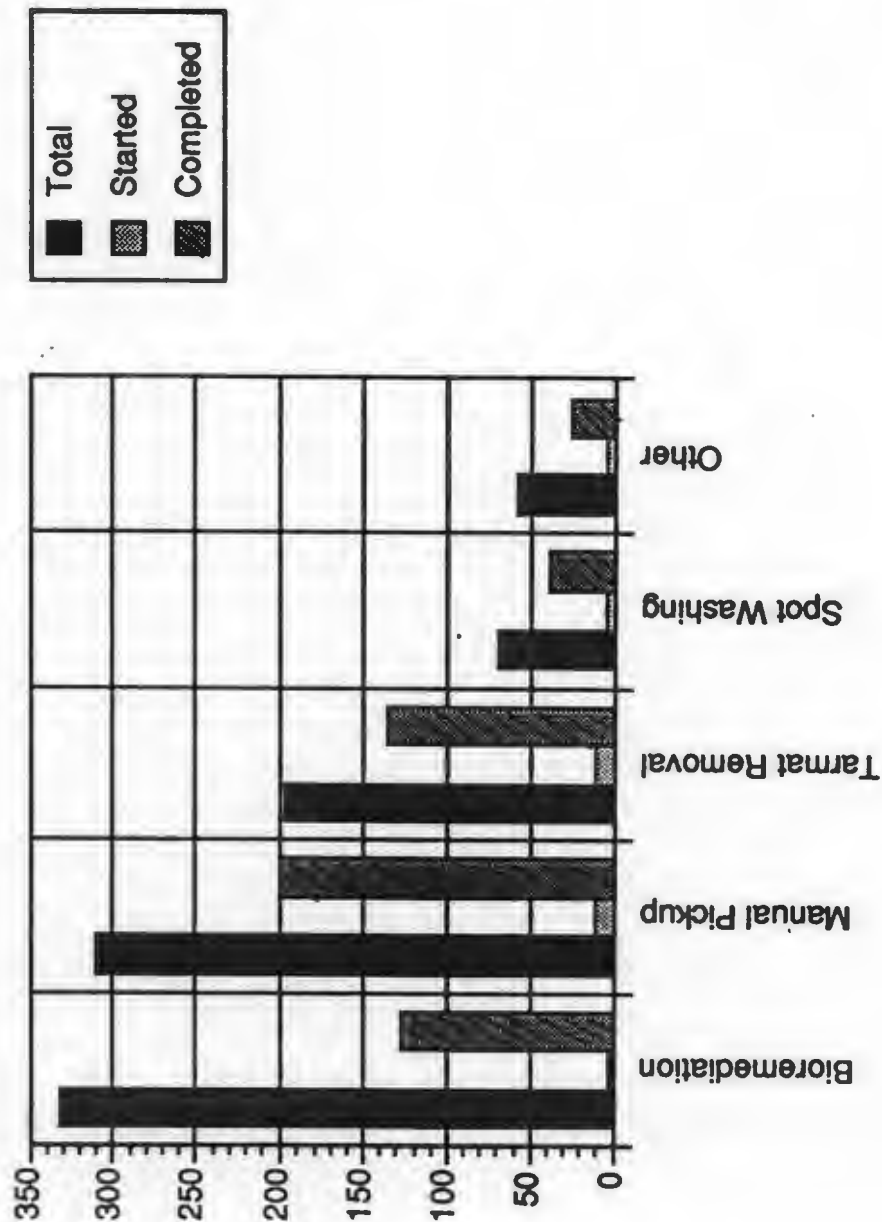
CAMEO Exxon Valdez '90

July 1, 1990



PWS

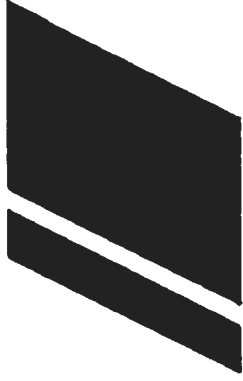
Subdivision Treatment Types



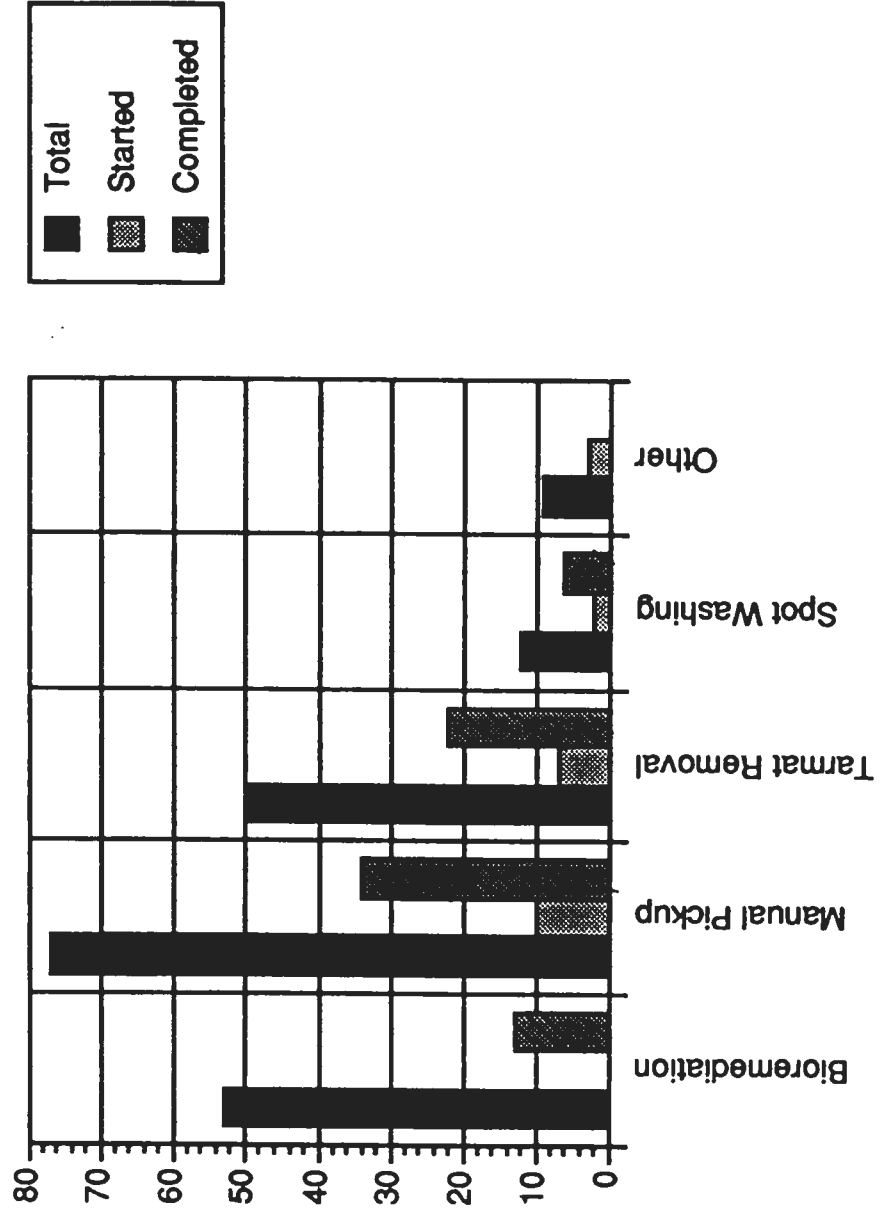


CAMEO Exxon Valdez '90

July 1, 1990



Kenai Subdivision Treatment Types



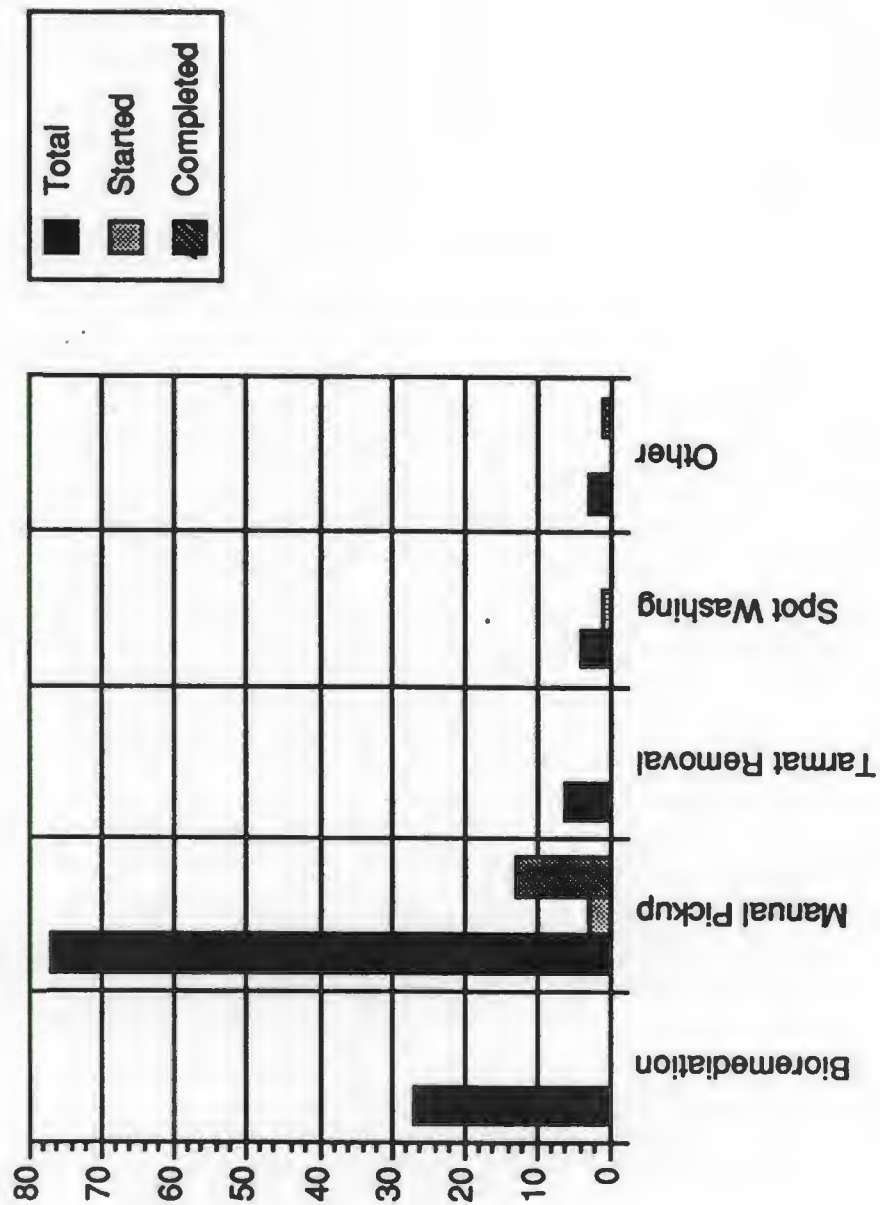


CAMEO Exxon Valdez '90

July 1, 1990



Kodiak Subdivision Treatment Types



Native corporation won't let Exxon test oil-spill chemical

By GEORGE FROST
and KIM FARARO
Daily News reporters

A Native village corporation refused to allow Exxon to test a powerful oil-cleaning chemical on the stained cobblestones of La-Touche Island in Prince William Sound, forcing cancellation of a field test last weekend.

Exxon had wanted to use the island as a laboratory for its Corexit 9580, developed last summer after the Exxon Valdez oil spill. The company has U.S. Coast Guard permission for five tests in all.

But Chenega Corp., representing villagers in Chenega



Bay, told Exxon in a letter Saturday that it opposed the testing because "the toxic effects of Corexit 9580 in the environment has not been determined" and because Exxon had not yet figured out how to recover all the gunk that will be washed off the rocks. So it refused permission to spray the chemical on the island it owns.

On Monday, Exxon presented the corporation with more information on the proposed test but was un-

able to convince officials to change their minds. Instead, according to a Chenega official, the oil company has agreed to allow a representative of the Native firm to attend its next test.

"Chenega is not in the position to give agreement to testing until we've seen a test off our lands," said Gail Evanoff, vice president of corporate operations.

Jim Robertson, an Exxon spokesman, said that he did not know what happened at the meeting because an Exxon representative who visited the corporation Monday had not yet returned.

A statement released Monday by Exxon said that Chenega had given its ap-

proval for the test earlier last week, but Evanoff denies that.

Scott said Corexit is a low-toxicity solvent that softens and dissolves weathered tar on rocks. The formula also contains a detergent that, mixed with warm water, washes oil from the surfaces of rocks.

She said the chemical causes minimal dispersion and the material that washes off the rocks is supposed to be captured using absorbent material.

"We think it's good for use in environmentally sensitive areas," she said.

Corexit 9580 has had a controversial history since its development after the

1989 Exxon spill.

Coast Guard Rear Adm. David Ciancaglini restricted the chemical's use last summer because workers could not keep it from draining off the beaches and mixing with seawater.

In a field test June 23 at the Bay of Isles, the first this summer, rock surfaces treated with Corexit appeared cleaner than those just sprayed with hot water. But the test was inconclusive because workers could not adjust the sprayer to the correct temperature, said L.J. Evans, a spokeswoman for the state Department of Environmental Conservation.

She said the same defect, a failure to contain the brown plumes of Corexit runoff, surfaced in the latest field test.

"They did the test too late in the tide cycle. It was coming up too fast and Corexit got mixed with water."

The DEC has expressed reservations about use of the chemical because the dislodged oil either sinks into the beach or is washed back in the water.

David Hall, a member of the Prince William Sound Conservation Alliance, said use of the chemical shows misplaced priorities. He said the Coast Guard and Exxon are too concerned about removing relatively harmless surface tar while leaving buried pools of oil untouched.

The Coast Guard wants the cleanup to be completed by Aug. 15 to allow time for a survey and any follow-up work that may be needed.

Unions demand security in newly merged economy

The Associated Press

HENNIGSDORF, East Germany — West Germany's biggest union gave a glimpse of its power to mobilize East Germany's anxious workforce Monday by orchestrating a series of strikes by thousands of factory workers.

A West German employer group also is advising East Germany's newly private enterprises on how to deal with their increasingly militant workers.

One day after East Germany merged its economy with the West and opened its borders to the free market, the West

Germans were taking their labor-management struggle to the new economic frontier of the East.

About 3,000 workers staged a one-hour warning strike at the giant Locomotive Electronics Works in Hennigsdorf, a city of brown brick factories and 25,000 people about 12 miles northwest of Berlin.

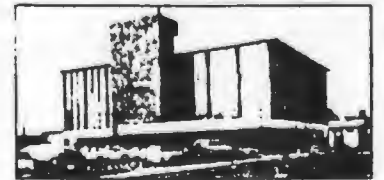
They were among 30,000 workers in 10 factories around Berlin who staged brief strikes or protests Monday as a prelude to wage talks between manage-

ment and the powerful IG Metall labor union.

The union is demanding wage increases and guaranteed jobs as East Germany begins its transition to a market economy, a process expected to result in widespread factory closings and joblessness.

"If Kohl wants to go into the annals of history, he'll have to pay for it," said local union leader Karl-Heinz Graffenberger, referring to West German Chancellor Helmut Kohl's swift push for German unification.

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RESTORATION PLANNING OFFICE

June 29, 1990

**Oil Spill-Related Activities
Weekly Summary Report**

*** Meeting held during the past week**

- RPWG met several times during the week to work on the draft Restoration Progress Report
- K. Ballard attended Ops Steering Committee meeting 6/26 Ops Committee meeting 6/27, and Corexit evaluation and discussion session with NOAA, USCG, Exxon, DEC, and ADF&G

*** Meetings scheduled for the coming week**

- Management Team to meet 7/10 or 7/11 to consolidate review their comments/approve the Restoration Progress Report
- Ops Meeting scheduled for Tuesday 7/2 (moved due to holiday)

*** Draft or final reports completed**

- Restoration Symposium Report sent to printers by ARTFO
- Draft Restoration Progress Report to be delivered to Management and Legal Teams for review on 6/30
- Draft Progress Report in process of being completed

*** Project or report-related milestones reached**

- Draft Restoration Progress Report to be delivered to Management and Legal Teams for review on 6/30
- Restoration Symposium Report will be available in HQ on 7/2. Copies will be sent to AOO/A, AOO/J, and Reg 10. Final printed copies should be mailed mid-July
- Draft Progress Report to Management Team

*** Issues or problems which must be resolved**

-

*** Other issues or comments**

- Work continues on bibliography and c/u related activities
- Corexit test application is scheduled/proposed for Saturday, June 30. No one is available & Exxon has been asked to re-schedule
- Corexit 9580 (M2) test on 6/23 proceeded w/o the presence of agency personnel. Since the evaluation of the effectiveness of the chemical has been a "visual science," the test was declared a total failure, because there was no "before" to compare with the "after"
- K. Ballard filling in for C. Lautenberger till 7/10

*** X Contact Brian Ross (FTS 686-2461 or 907-271-4261) for further information**

EXXON VALDEZ OIL SPILL
WEEKLY UPDATE
JUNE 24-30, 1990

Shoreline Survey Assessments

Plans continue to be formulated for the post-treatment surveys on segments where some form of clean-up occurred this year. Some beaches that were not worked on may also be included. The August Shoreline Assessment Program should begin by August 15 at the latest, with some assessment to begin in July.

Shoreline Treatment (also see report of June 17-23)

TREATMENT PROGRESS STATUS AS OF JUNE 24

<u>Method</u>	<u>Total</u> <u>to be Treated</u>	<u>Treated</u> <u>to Date</u>	<u>Remaining</u>
Bioremediation	411	95	316
Manual & Mechanical	559	264	295

- The third Inipol bioremediation squad began work on June 22, 1990.
- Of the 67 anadramous streams designated as requiring treatment, approximately 37 have been completed. Anadramous stream clean up has a deadline of July 10, 1990.
- Heavy equipment is being tested on KN-26 for storm-berm relocation. Oily storm berms are being moved by a Hitachi track loader to the mid-tidal zone. The material is then surrounded by booms (absorbent, snare and then harbor types in a triple layer) and washed by hot water. The results look promising. The Exxon/USCG/State of Alaska Quality Control team will be deciding the extent that this technique will be used.
- Manual treatment is being enhanced by the application of Customblen after tartrat removal. Efficiency is reported to be improving with the addition of this treatment.

Corexit 9580 Shoreline Chemical Cleaner

The field demonstration for Corexit was conducted on June 23, 1990. Weather conditions precluded the on-time arrival of the aircraft which was transporting agency personnel. Exxon videotaped the test. ADEC, EPA, NOAA and other agency personnel did not witness the test, and could not render judgement based on "visual science".

Others have reported a significant difference. Videotape by Exxon shown at a Corexit meeting showed the rock face the day after application (when the rock had dried) and declared the test a success. Another test application is scheduled (tentatively) for June 30.

Rock Washer Research and Development Update

- Release of draft NEBA (Net Environmental Benefit Analysis) report has been extended to July 5, 1990. The FOSC has assured that EPA will receive a copy of the draft NEBA report for review and comment before the final report is published.

USF&WS Activities

- Seabird colony restrictions for the Katmai area have been relaxed. USF&WS continue to provide wildlife monitors at cleanup locations.
- A Bald Eagle nest failure has been reported in Tonsina Bay. USF&WS continues to implore aircraft to observe restricted areas. It is not conclusive, however, if the nest failure is due to oil spill related aircraft. Many helicopter and aircraft tours, as well as natural factors, could have resulted in this nest failure.

Memo to

Brian Ross, Restoration Planning Office

RE: Review of RPI Shoreline Monitoring Program Proposal

From: Jim Clark, Bioremediation Monitoring Team

JRC 6/28/90

I have reviewed the proposal submitted by RPI for monitoring the Prince William Sound shoreline during the summer of 1990. The proposal is a comprehensive assessment of pertinent environmental and ecological factors potentially affected by the EXXON Valdez oil spill. The RPI staff are certainly experienced and qualified for this type of work and would offer a sensible degree of continuity. Their familiarity with ongoing activities would assure that information obtained through this effort would be integrated into essential ongoing clean-up activities.

The selection of ecological test parameters assumes impact and damages have already occurred. Those familiar with the damage assessment data should be consulted to answer such questions as "Is there sufficient evidence to believe that these monitoring efforts will be necessary, or is damage to the resource of interest merely speculation?". What evidence is there that grass beds or mussel populations have been exposed to oil to the extent that a large-scale monitoring program is necessary at such a large number of sites? The amount of biological evidence supporting this proposal is limited, thus the need for the ecological program remains unclear to me. Assessing oiling is much more straight forward and appears justified.

The sampling strategies for invertebrate communities probably will not provide quantitative estimates of the species distributions and abundances because of the low number of replicates proposed for each site. These communities are highly variable and patchy, requiring a large sample size to obtain quantitative environmental metrics. What evidence is there that the proposed sampling strategy will be effective?

The heterogenous nature of the sediment composition and oil distributions also would seem to require considerably greater numbers of replicate samples to quantify trends in oiling characteristics. RPI has been working with NOAA to quantify oil using only 5 samples per site as part of the winter sampling program. Have these data been analyzed to demonstrate that they are capable of detecting the trends such as those proposed in this study? The high degree of variability in animal tissues may negate the ability to detect trends as well.

The parameters selected for assessing physiological and developmental effects of oil exposure to shoreline invertebrates should be developed into a more detailed protocol to justify their use. What is the scientific basis for selecting these endpoints (pathology of gills, liver, kidney, etc)? Is this research or is there a strong proven link between environmental hydrocarbon exposures and the proposed monitoring endpoints. If laboratory data only are cited, I doubt if environmental exposures have been comparable to most laboratory exposure response studies, making the links for such intensive sampling and analyses programs tenuous.

The sampling program will generate some interesting data on oil in the shoreline environment and the presence or absence of some species or physiological conditions. However, this \$536,117 study for one year will most likely generate qualitative data with little predictive or statistical utility. To meet the objective of characterizing the recovery of intertidal areas impacted by the spill, the investigators could generate more quantitatively meaningful data if they focused their efforts on fewer sites where exposure and recovery can be studied in detail.

MEMORANDUM

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SUBJECT: Exxon Valdez oil spill, Operations Steering Committee Meeting of 6/26/90 and Operations meeting of 6/27/90

FROM: Kirsten Ballard, AOO/A

TO: Brian Ross, Restoration Planning Team Leader, AOO/A

The content of the two meetings was essentially the same. In the interest of saving time, space and paper, I have combined my report as follows:

USCG

-Reported on status of cleanup operations. 9 squads continue to work, 5 in PWS, 3 in Kenai and one in Kodiak. See attachments for work completed, etc.

-Track vehicles for storm berm relocation "testing" has begun at KN-26. The berm will be relocated to the mid-tidal zone and washed with hot water.

-Bioremediation- one squad working in PWS, a second is being sent to Kenai. A Bio-team has been added to the *Corinthian* to speed application of Inipol after tar-mat removal. A fourth helicopter squad may be added to the cleanup effort. The helo-squad will work in difficult areas and time-restricted areas. USCG feels that all work will be completed on time.

-Five test sites have been approved by DEC for test application of Corexit 9580. One test has been performed, but was considered a failure since agency (ADEC, NOAA, EPA, etc.) personnel did not arrive in time (due to weather) to see the "before and after" effect of the application (a "wet, black rock face" was reported. Videos taken by Exxon on the sunny day that followed the test, showed a reported "marked difference". However, since agency personnel did not see the rock face before the test, there was technically no "after"). The USCG is encouraged by the results, and feels that further testing is warranted.

-There seems to be a hold up on some of the work orders for some beach segments. "The black hole of Exxon" is credited with the unsigned documents. Efforts are being made to track down the documents and to get the work orders through the approval process so the segments can be worked.

-USCG will be sending a letter to ADEC informing Commissioner Kelso that USCG intends to continue using bioremediation while the state ponders the results of the monitoring program (see EPA section of this memo).

DOI

-Seabird colony restrictions for the Katmai area have been relaxed to allow cleanup. USF&WS continues to provide monitors.

-BIA--All allottees are reported to have given permission for cleanup to proceed on their lands. Private landowners have already been contacted by Exxon.

-NPS-- Cleanup at Katmai going well. Concern was expressed that under the pressure to complete cleanup by a certain date, quality may be sacrificed to quantity. RADM Ciancaglini stated that quality of cleanup is his greatest concern and that all beaches will be cleaned as best as is practical. He does not want to return to re-clean beaches that were not cleaned properly in the first place.

-USF&WS--Inipol was mistakenly applied in the area of a USFWS field camp. Personnel there observed river otters, harlequin ducks and oyster catchers around the wildlife deterrent balloons. The exact time of application is approximated at 1600 hours, the wildlife sightings were between 2100 and 2200 hours. Stellar sea lions and sea otters were spotted off shore as well. Concern that the wildlife deterrents are not working is to be addressed.

-USFWS--A Bald Eagle nest is reported to have failed in Tonsina Bay. USFWS is imploring all aircraft to observe the restricted areas and avoid eagle nests. It is not certain, however, that the nest failure can be attributed to oil spill related aircraft. Many tour companies offer sight-seeing flights around the state, and other natural factors, cannot be ruled out.

NOAA

-NEBA report is due July 5. Most of NOAA's efforts are being concentrated in this area at this time.

OSHA

-State Labor Commissioner is not willing to relieve the respirator requirement for Inipol workers, even though test results show very low levels of butoxy-ethanol in test subjects.

-ACE (Alaska Center for the Environment) went to an Inipol treated beach <24 hours after application. FOSC has boat ID information. It was not clear if any further action would take place against ACE. Apparently it was a protest to demonstrate their right to occupy treated beaches <24 hours after application. USCG asked them to leave the area, and they did.

USFS

-MOA regarding cultural resources has been "signed, sealed and delivered" to the FOSC and other appropriate agencies.

ADEC

-Presented the Rock Washer update at the 6/26 meeting: -Northwest Enviro Services out of Seattle Washington has won the contract with the State and Exxon.

-A prototype, with a 1 cubic yard/hour capacity, and the full scale model (100 cu. yds. capacity) are being constructed. Exxon and the State plan to test them by the latter part of July, early August. Existing technology and mining equipment are the main components of the simple design of the Rock Washer.

-The prototype will be operated continuously for 3 days. This will allow the closed system to attain equilibrium and provide engineering data to apply to the full scale model.

-The full scale model will be operated in testing conditions for a 24 hour period. The full scale model will be able to handle rocks up to 24 inches in diameter.

-The tests will be performed in the Anchorage area.

-The units are totally self contained and will be placed on a lined cement pad with containment curbs. The site will be sampled before and after the test.

-Material collected from the spill at the Seward receiving station will be used for the tests.

-Estimated cost of the initial test is one million dollars.

-No mention of detergents or surfactants was made. Hot water will be used and recycled in the units, the wastewater will be treated at the Alyeska treatment plant in Valdez. Sticks and other debris that cannot be treated will be collected and sent to an approved landfill (such as Arlington in Oregon). It is proposed that cleaned material (soils) will be replaced to its original location.

-The unit is approximately 125 feet long by 20 feet wide. A swing out feed trommel of 125 feet will allow the proposed barge mounted system to anchor close to the beach and heavy equipment will be able to feed the system from shore.

EPA

-Presented preliminary results on Bioremediation at Operations Steering Committee meeting, 6/26. No toxicity was seen in any samples taken from the nearshore zone of any of the monitoring sites. Measurements of ammonia in water samples collected have shown levels at the threshold of acute toxic effect concentrations for the most sensitive species reported in the literature, and are a order of magnitude less than acutely toxic concentrations for most fish and invertebrates.

-Re-application at some of the monitoring sites has been recommended.

-A report of the results of the 6-week program by the bioremediation team is being formatted to present to the state. A combination report and oral presentation with a panel of experts is the expected format.

-The bioremediation monitoring team has asked Exxon to continue to support the monitoring effort past the 32-day program, which ends this weekend. A decision is expected from Exxon soon.

**AGENDA FOR
OPERATIONS STEERING COMMITTEE
MEETING**

JUNE 26, 1990 - 5:30 P.M.

GSA/FEDERAL BLDG, 222 W. 7TH ST., ROOMS 133-137, ANCHORAGE, AK

- 1. OPENING REMARKS - CAPTAIN/ZAWADZKI**
- 2. 1990 CLEANUP ACTIVITY - ADEC/USCG/EXXON**
SPECIFIC TOPICS - *GENERAL OPERATIONS REPORT (EXXON)
***PROGRESS MEASUREMENT REPORT (EXXON)**
***ANADRAMOUS STREAM CLEANUP**
PROGRESS (ADF&G/EXXON)
***COREKIT 9580 TESTING - STATUS (USCG)**
- 3. BIOREMEDIATION MONITORING PROGRAM STATUS - ADEC/EXXON/EPA**
- 4. ROCK WASHER UPDATE**
 - DEVELOPMENT STATUS - EXXON/ADEC**
 - NET ENVIRONMENTAL BENEFIT ANALYSIS - NOAA**
- 5. FISHERIES - SURVEILLANCE, STUDIES - EXXON**
SHEENING STUDIES/REPORTS (EXXON)
- 6. CLOSING REMARKS - REAR ADMIRAL CIANCAGLINI**



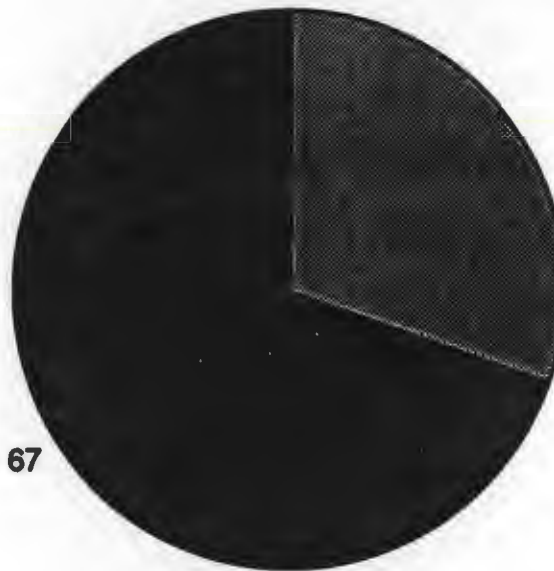
CAMEO Exxon Valdez '90

June 24, 1990



Total Area
Treatment vs. No Treatment
(Anadromous Streams)

No Treatment Required - 29



Treatment Required - 67

Total Streams = 96

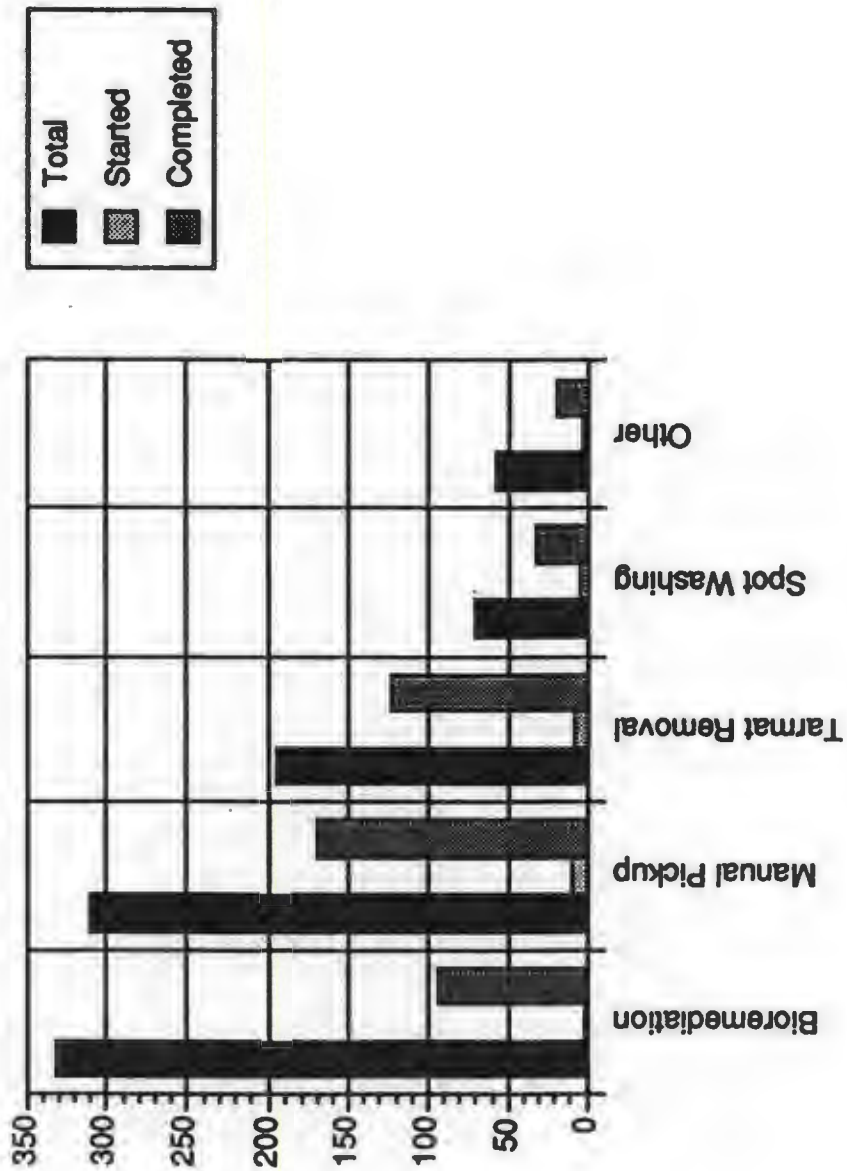


CAMEO Exxon Valdez '90

June 24, 1990



PWS Subdivision Treatment Types



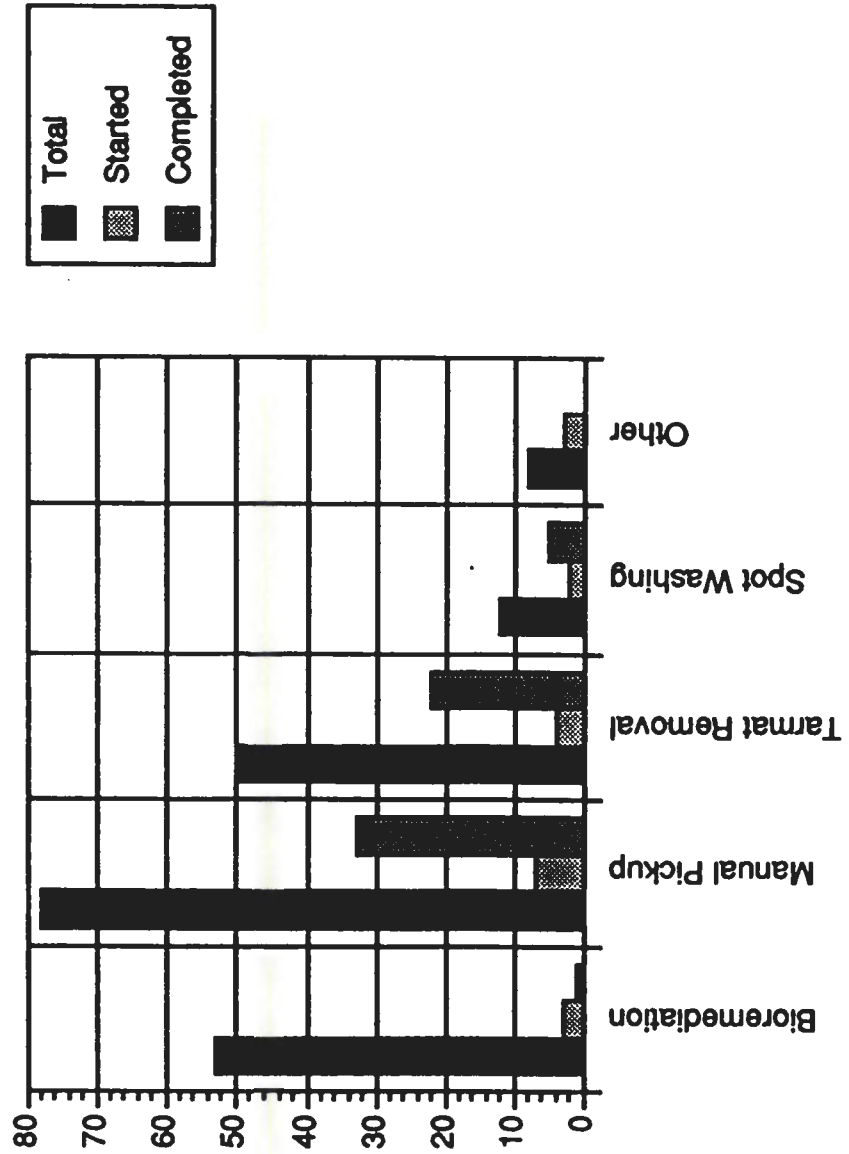


CAMEO Exxon Valdez '90

June 24, 1990



Kenai Subdivision Treatment Types



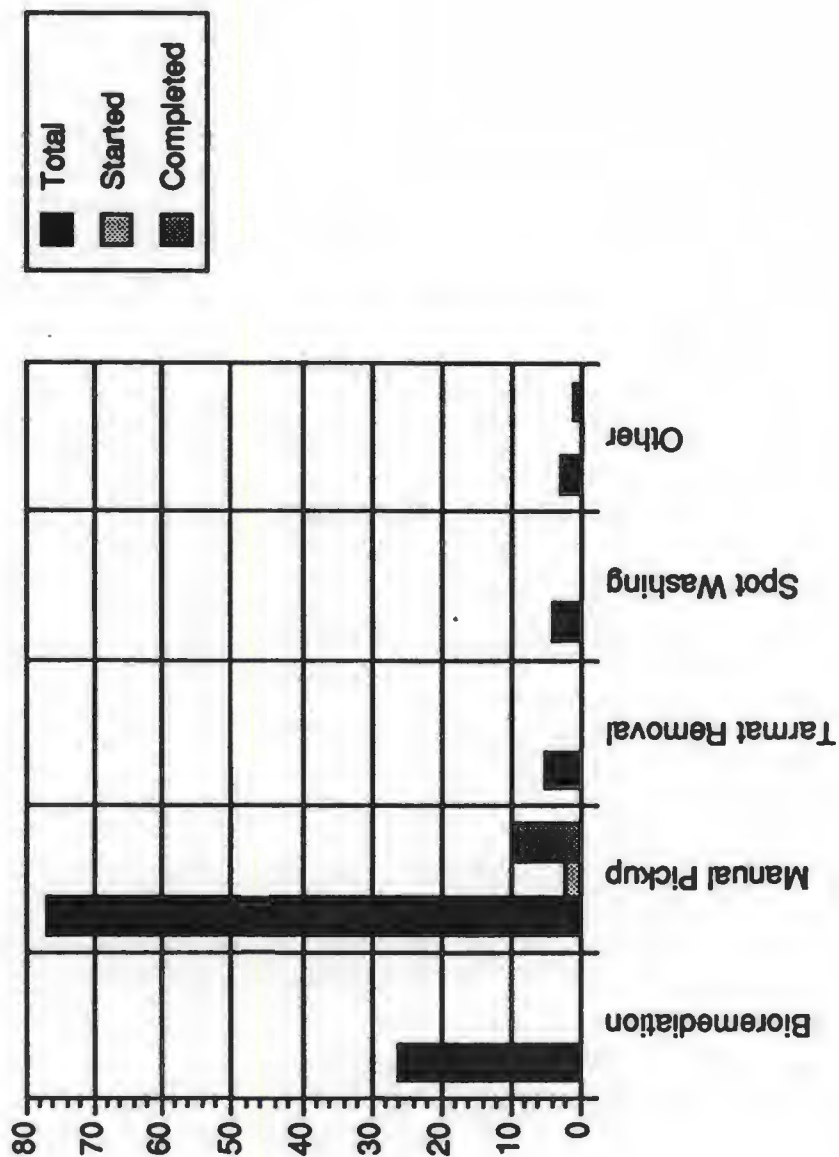


CAMEO Exxon Valdez '90

June 24, 1990

Kodiak

Subdivision Treatment Types





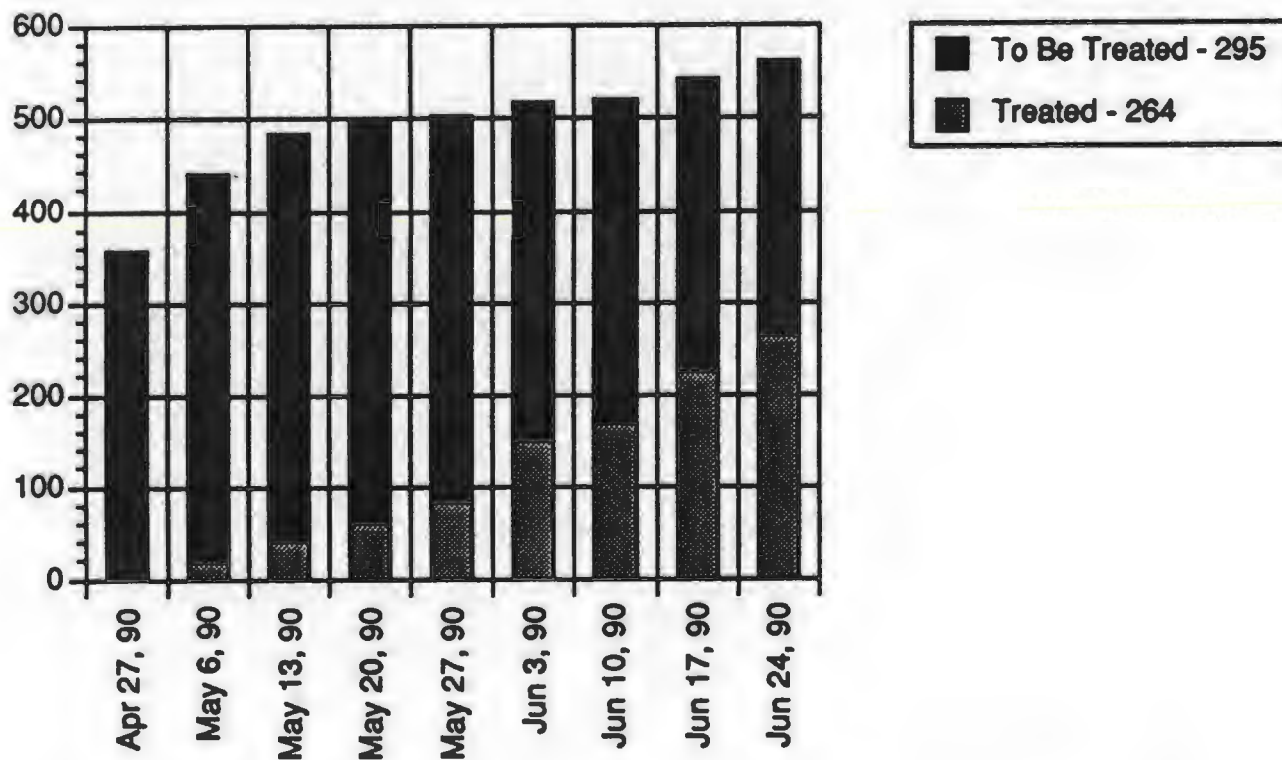
CAMEO Exxon Valdez '90

June 24, 1990



Total Area Manual & Mechanical Treatments Subdivisions Treated vs. To Be Treated

(Includes Manual Pickup, Tarmat Removal & Spot Washing)



Total Subdivisions Requiring Manual Treatment = 559

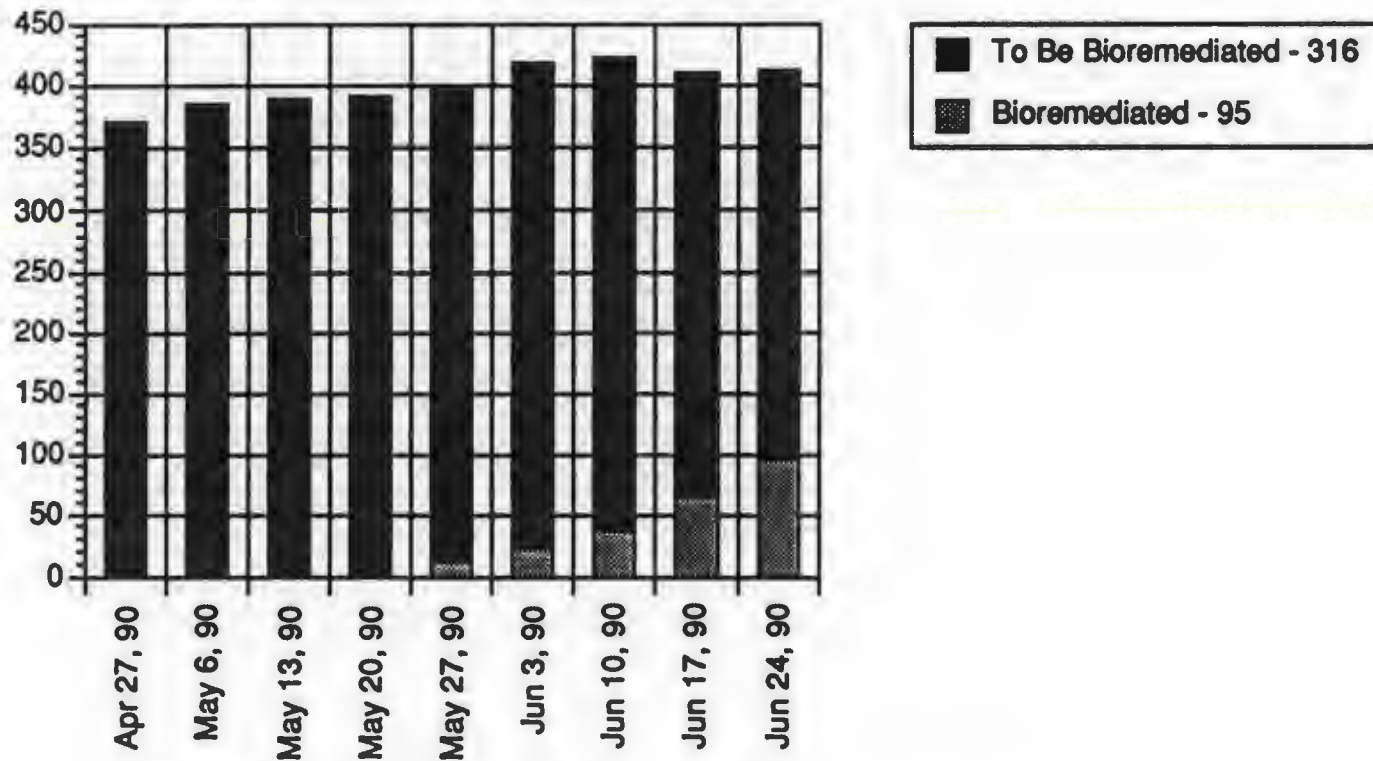


CAMEO Exxon Valdez '90

June 24, 1990



Total Area Bioremediation Treatment Treated vs. To Be Treated



Total Subdivisions Requiring Bioremediation = 411

Completed Subdivisions 6/24/90

Prince William Sound Completed Subdivisions									
Subdivision ID	Sector	Completed	Bio	Bio Start	Bio End	Man	Man Start	Man End	Land Owner
AE001A	A	6/09/90	X	6/09/90	6/09/90	X	5/17/90	5/17/90	NFS
AE002A	A	6/09/90	X	6/09/90	6/09/90	X	6/06/90	6/06/90	NFS
AE004A	A	6/15/90	X	6/14/90	6/15/90	X	6/01/90	6/04/90	NFS
AE004B	A	6/15/90	X	6/09/90	6/15/90	X	6/02/90	6/03/90	NFS
AE005A	A	6/17/90	X	6/15/90	6/17/90	X	5/17/90	5/23/90	NFS
AE005C	A	6/15/90	X	6/15/90	6/15/90	X	6/05/90	6/06/90	NFS
AE007A	A	5/23/90				X	5/23/90	5/23/90	NFS
BA001B	A	6/22/90				X	6/22/90	6/22/90	NFS
BA001E	A	6/23/90				X	6/23/90	6/23/90	NFS
BA002A	A	5/07/90				X	5/05/90	5/07/90	NFS
BA007A	A	5/29/90				X	5/29/90	5/29/90	NFS
BA008A	A	6/23/90				X	6/23/90	6/23/90	NFS
CH015A	A	6/20/90				X	6/20/90	6/20/90	CVC
CP001A	A	6/09/90				X	6/06/90	6/09/90	NFS
CR001A	A	6/05/90	X	6/05/90	6/05/90				NFS
CR002C	A	6/06/90	X	6/06/90	6/06/90	X	6/05/90	6/05/90	NFS
CR005A	A	6/06/90	X	6/06/90	6/06/90	X	5/28/90	5/28/90	NFS
CR005B	A	6/06/90	X	6/06/90	6/06/90	X	5/28/90	5/28/90	NFS
CR005E	A	5/27/90				X	5/27/90	5/27/90	NFS
CU001A	A	6/13/90	X	6/09/90	6/13/90	X	5/18/90	5/23/90	NFS
CU003A	A	6/09/90	X	6/09/90	6/09/90	X	5/29/90	5/29/90	NFS
CU011A	A	6/08/90	X	6/08/90	6/08/90	X	5/29/90	6/05/90	NFS
CU013A	A	6/07/90	X	6/07/90	6/07/90	X	6/02/90	6/03/90	NFS
DI059A	B	5/27/90	X	5/27/90	5/27/90	X	5/12/90	5/12/90	NFS
DI062A	B	5/27/90	X	5/27/90	5/27/90	X	5/12/90	5/13/90	NFS
DI064A	B	5/29/90	X	5/29/90	5/29/90	X	5/29/90	5/29/90	NFS
DI067A	B	5/10/90				X	5/09/90	5/10/90	NFS
DI068A	B	5/12/90				X	5/12/90	5/12/90	NFS
DI069A	B	5/27/90	X	5/27/90	5/27/90	X	5/13/90	5/14/90	NFS
EB006A	A	5/02/90				X	5/02/90	5/02/90	NFS
EB008A	A	5/26/90				X	5/26/90	5/26/90	CVC
EB013A	A	6/01/90				X	5/31/90	6/01/90	CVC
EB015A	A	5/31/90				X	5/31/90	5/31/90	CVC
EL015A	B	5/25/90				X	5/24/90	5/25/90	NFS
EL104C	B	6/18/90	X	6/18/90	6/18/90				NFS
EL108A	B	4/29/90				X	4/28/90	4/29/90	NFS
ER001A	C	5/30/90				X	5/30/90	5/30/90	DNR
ER002B	C	6/22/90	X	6/22/90	6/22/90	X	6/02/90	6/02/90	NFS
ER004B	C	6/22/90	X	6/22/90	6/22/90				NFS
ER007A	C	6/14/90	X	6/14/90	6/14/90	X	6/02/90	6/04/90	DNR
ER008A	C	6/14/90	X	6/14/90	6/14/90	X	5/30/90	5/31/90	NFS
ER009A	C	6/16/90	X	6/15/90	6/16/90	X	5/31/90	5/31/90	NFS
ER010A	C	6/16/90	X	6/15/90	6/16/90	X	5/30/90	5/30/90	NFS
ER011A	C	6/15/90	X	6/15/90	6/15/90	X	5/30/90	6/01/90	NFS
ER012B	C	6/15/90	X	6/15/90	6/15/90	X	6/03/90	6/03/90	NFS
ER018A	C	6/19/90	X	6/19/90	6/19/90				NFS
ER020A	C	6/22/90	X	6/22/90	6/22/90				DNR

Completed Subdivisions 6/24/90

EV003A	C	6/21/90	X	6/19/90	6/21/90	X	6/10/90	6/10/90	CVC
EV005A	C	6/21/90	X	6/19/90	6/21/90	X	6/07/90	6/07/90	CVC
EV005B	C	6/21/90	X	6/19/90	6/21/90	X	6/09/90	6/09/90	CVC
EV005C	C	6/07/90				X	6/07/90	6/07/90	CVC
EV008B	C	6/02/90				X	6/02/90	6/02/90	CVC
EV009A	C	6/02/90				X	6/02/90	6/02/90	CVC
EV010A	C	6/03/90				X	6/02/90	6/03/90	CVC
EV010B	C	6/16/90				X	6/16/90	6/16/90	CVC
EV012A	C	6/23/90	X	6/06/90	6/06/90	X	5/02/90	6/23/90	CVC
EV015A	C	6/06/90	X	6/06/90	6/06/90	X	6/03/90	6/03/90	CVC
EV017A	C	5/15/90				X	5/15/90	5/15/90	CVC
EV018A	C	6/08/90	X	6/06/90	6/08/90				CVC
EV021A	C	6/08/90	X	6/08/90	6/08/90	X	5/11/90	5/14/90	CVC
EV023A	C	5/10/90				X	5/09/90	5/10/90	CVC
EV024A	C	6/09/90	X	6/08/90	6/08/90	X	6/06/90	6/09/90	CVC
EV025A	C	5/17/90				X	5/15/90	5/17/90	CVC
EV026A	C	6/10/90	X	6/09/90	6/10/90	X	6/02/90	6/02/90	CVC
EV027A	C	5/16/90				X	5/16/90	5/16/90	CVC
EV050B	C	6/13/90	X	6/09/90	6/13/90	X	6/05/90	6/05/90	NFS
EV050C	C	6/13/90	X	6/09/90	6/13/90				NFS
EV051A	C	6/13/90	X	6/09/90	6/13/90	X	6/05/90	6/05/90	NFS
EV053D	C	6/05/90				X	6/05/90	6/05/90	NFS
EV054A	C	6/13/90	X	6/13/90	6/13/90	X	6/04/90	6/04/90	NFS
EV070D	C	6/10/90	X	6/10/90	6/10/90	X	6/02/90	6/02/90	NFS
EV070F	C	6/12/90	X	6/12/90	6/12/90				NFS
EV070G	C	6/11/90	X	6/11/90	6/11/90	X	6/10/90	6/11/90	NFS
EV070H	C	6/18/90				X	6/18/90	6/18/90	NFS
FA002A	A	5/28/90				X	5/27/90	5/28/90	NFS
FL001A	C	6/11/90	X	6/11/90	6/11/90	X	5/02/90	5/02/90	CVC
FL002A	C	6/11/90	X	6/11/90	6/11/90	X	5/17/90	5/17/90	CVC
IN022A	B	5/31/90	X	5/31/90	5/31/90	X	5/06/90	5/07/90	PG
IN024C	B	6/10/90				X	6/10/90	6/10/90	NFS
IN031A	B	5/08/90				X	5/06/90	5/08/90	NFS
IN031B	B	5/29/90	X	5/29/90	5/29/90	X	5/06/90	5/08/90	NFS
KN0004A	E	6/21/90	X	6/21/90	6/21/90	X	5/29/90	5/29/90	CAC
KN0005B	E	6/22/90	X	6/22/90	6/22/90	X	5/23/90	5/27/90	CAC
KN0006A	E	5/30/90				X	5/30/90	5/30/90	NFS
KN0007A	E	6/21/90	X	6/21/90	6/21/90	X	6/08/90	6/08/90	CAC
KN0008A	E	5/31/90				X	5/30/90	5/31/90	CAC
KN0009A	E	6/23/90	X	6/22/90	6/23/90	X	6/06/90	6/09/90	CAC
KN0011A	E	6/21/90	X	6/21/90	6/21/90	X	6/05/90	6/05/90	CAC
KN0012A	E	6/21/90	X	6/21/90	6/21/90	X	6/03/90	6/04/90	CAC
KN0013A	E	6/21/90	X	6/21/90	6/21/90	X	6/03/90	6/04/90	CAC
KN0014A	E	6/21/90	X	6/21/90	6/21/90	X	6/01/90	6/01/90	CAC
KN0019A	E	6/22/90	X	6/22/90	6/22/90	X	6/04/90	6/04/90	NFS
KN0023A	E	6/22/90	X	6/22/90	6/22/90	X	6/09/90	6/09/90	CAC
KN0102A	B	5/22/90	X	5/22/90	5/22/90	X	5/05/90	5/07/90	NFS
KN0105B	B	5/26/90	X	5/26/90	5/26/90	X	5/11/90	5/11/90	NFS
KN0106A	B	5/26/90	X	5/26/90	5/26/90	X	5/16/90	5/16/90	NFS

Completed Subdivisions 6/24/90

KN0106B	B	5/16/90				X	5/16/90	5/16/90	NFS
KN0106D	B	5/16/90				X	5/16/90	5/16/90	NFS
KN0109A	D	5/25/90	X	5/25/90	5/25/90	X	5/25/90	5/25/90	NFS
KN0116A	D	5/23/90	X	5/23/90	5/23/90	X	5/03/90	5/03/90	NFS
KN0117A	D	5/23/90	X	5/23/90	5/23/90	X	5/02/90	5/02/90	NFS
KN0118A	D	6/01/90	X	6/01/90	6/01/90				NFS
KN0119A	D	6/01/90	X	6/01/90	6/01/90	X	5/02/90	5/02/90	NFS
KN0123B	D	5/31/90	X	5/24/90	5/24/90	X	5/31/90	5/31/90	NFS
KN0127A	D	5/30/90				X	5/30/90	5/30/90	NFS
KN0129A	D	6/19/90	X	6/19/90	6/19/90	X	5/30/90	5/30/90	NFS
KN0129B	D	6/19/90	X	6/19/90	6/19/90	X	5/30/90	5/30/90	NFS
KN0131A	D	6/01/90	X	6/01/90	6/01/90	X	5/09/90	5/09/90	NFS
KN0132A	D	5/29/90				X	5/29/90	5/29/90	NFS
KN0132B	D	6/02/90	X	6/02/90	6/02/90	X	5/26/90	5/29/90	NFS
KN0132C	D	6/19/90	X	6/19/90	6/19/90	X	5/29/90	5/29/90	NFS
KN0134A	E	6/23/90	X	6/23/90	6/23/90	X	5/23/90	5/26/90	NFS
KN0135A	E	6/23/90	X	6/23/90	6/23/90	X	5/18/90	5/21/90	CAC
KN0135B	E	5/21/90	X	5/21/90	5/21/90	X	5/15/90	5/18/90	CAC
KN0141B	D	5/03/90				X	5/03/90	5/03/90	NFS
KN0145A	D	5/25/90	X	5/25/90	5/25/90				NFS
KN0200A	E	6/20/90	X	6/20/90	6/20/90	X	5/14/90	5/14/90	CAC
KN0201A	E	6/21/90	X	6/20/90	6/21/90	X	5/31/90	6/01/90	CAC
KN0202A	E	6/01/90				X	5/31/90	6/01/90	CAC
KN0204A	E	6/01/90				X	6/01/90	6/01/90	CAC
KN0205B	E	6/04/90	X	6/01/90	6/04/90	X	6/01/90	6/04/90	CAC
KN0206A	E	6/22/90	X	6/22/90	6/22/90	X	6/04/90	6/06/90	CAC
KN0211E	E	5/30/90	X	5/30/90	5/30/90	X	5/30/90	5/30/90	NFS
KN0413A	E	5/13/90				X	5/13/90	5/13/90	CVC
KN0701A	E	5/25/90				X	5/25/90	5/25/90	CAC
KN0701C	E	5/26/90				X	5/26/90	5/26/90	CAC
LA015D	C	6/14/90				X	6/12/90	6/14/90	CVC
LA021B	C	6/17/90	X	6/17/90	6/17/90	X	6/13/90	6/13/90	CVC
LA023A	C	5/25/90				X	5/25/90	5/25/90	CVC
LA024A	C	6/01/90				X	6/01/90	6/01/90	CVC
LA038A	C	6/17/90	X	6/17/90	6/17/90	X	5/12/90	5/12/90	CAC
LA039A	C	5/23/90				X	5/23/90	5/23/90	CAC
LN001A	A	6/07/90				X	6/07/90	6/07/90	NFS
LN004A	A	6/08/90				X	6/07/90	6/08/90	NFS
MA002A	A	6/07/90	X	6/07/90	6/07/90	X	6/07/90	6/07/90	DNR
MA003A	A	5/03/90				X	5/03/90	5/03/90	DNR
MA004A	A	6/04/90	X	6/04/90	6/04/90	X	5/02/90	5/02/90	NFS
MA006A	A	5/29/90				X	5/29/90	5/29/90	PG
MA009A	A	6/07/90	X	6/07/90	6/07/90	X	5/24/90	5/24/90	NFS
MA010A	A	6/04/90	X	6/04/90	6/04/90	X	6/01/90	6/02/90	NFS
NJ001A	A	5/04/90				X	5/03/90	5/04/90	DNR
PR003C	A	6/08/90				X	6/08/90	6/08/90	NFS
PR005B	A	6/08/90	X	6/08/90	6/08/90	X	6/08/90	6/08/90	NFS
SP043A	B	5/31/90	X	5/31/90	5/31/90	X	5/13/90	5/13/90	NFS

Completed Subdivisions 6/24/90

Kenal Completed Subdivisions									
Subdivision ID	Sector	Completed	Bio	Bio Start	Bio End	Man	Man Start	Man End	Land Owner
CB003A	F	5/20/90				X	5/16/90	5/20/90	GVC
NK004C	F	5/13/90				X	5/12/90	5/13/90	DNR
PD002A	F	5/03/90				X	5/03/90	5/03/90	DNR
PD003A	F	5/05/90				X	5/05/90	5/05/90	DNR
PD008A	F	6/20/90				X	6/20/90	6/20/90	DNR
PY006A	F	5/08/90				X	5/08/90	5/08/90	FWS
PY007B	F	5/08/90				X	5/07/90	5/08/90	FWS
PY012B	F	5/14/90				X	5/14/90	5/14/90	FWS
PY015D	F	5/14/90				X	5/14/90	5/14/90	FWS
US005A	F	6/03/90				X	6/03/90	6/03/90	FWS
WB001B	F	5/18/90				X	5/16/90	5/18/90	PG
WB002A	F	6/23/90	X	6/23/90	6/23/90	X	6/02/90	6/03/90	PG/EB
WB002E	F	5/30/90				X	5/18/90	5/30/90	PG/EB
WB002F	F	5/18/90				X	5/16/90	5/18/90	PG/EB
WB003B	F	6/19/90				X	6/19/90	6/19/90	PG
WB003E	F	6/08/90				X	6/08/90	6/08/90	PG
WB008A	F	5/26/90				X	5/26/90	5/26/90	PG
Kodlak Completed Subdivisions									
Subdivision ID	Sector	Completed	Bio	Bio Start	Bio End	Man	Man Start	Man End	Land Owner
K0204-FB011A	G	6/08/90				X	6/08/90	6/08/90	FWS
K0204-FB013B	G	6/08/90				X	6/07/90	6/08/90	FWS
K0302-IB004A	G	6/05/90				X	6/05/90	6/05/90	FWS
K0302-IB005A	G	6/05/90				X	6/05/90	6/05/90	FWS
K0619-SB006A	G	6/17/90				X	6/17/90	6/17/90	FWS
K0634-SL007A	G	6/17/90				X	6/17/90	6/17/90	DNR
K0919-HB001A	G	6/14/90				X	6/12/90	6/14/90	NPS
K0924-KU001A	G	6/20/90				X	6/19/90	6/20/90	NPS

**OPERATIONS STEERING COMMITTEE
SUMMARY OF MEETING
12 JUNE 1990
1900**

CAPT David Zawadzki, FOSC Chief of Staff, opened the meeting by mentioning the events since the last meeting. The Spring Shoreline Assessment has been finished; actual treatment of shorelines is still ongoing. He noted the need for additional equipment which will be discussed later in the meeting. The fisheries have started and everything is going well.

Mr. Andy Teal, Exxon, reviewed Spring Shoreline Assessment Team (SSAT) progress. He mentioned that the SSAT has been finished except one segment in Kodiak has not been completed because of an eagle nest constraint. A waiver of this constraint has been granted, and it is anticipated the survey will take place in the next 2 or 3 days.

Question from the Audience: On the 282 PWS segments where no treatment is required, will there be any further assessment above the very high tide line or any other assessments before they are signed off? Mr. Teal: Yes, this is being addressed. There is a special team that now is looking at certain identified areas which were covered with snow during the earlier assessment. Some results are expected by the end of the week.

Mr. Teal discussed fall shoreline assessments which are scheduled to begin in August. At the TAG Meeting tomorrow there will be a discussion of the type of program to be conducted. It is hoped that some initial conclusions will be drawn about what the best approach will be.

Capt Zawadzki provided a status report on assessments and treatment progress. A slide presentation and handouts showed subdivisions requiring treatment versus no treatment, types of oiling by subdivision, subdivision treatment types, and numbers of subdivisions treated and to be treated. Of the 94 anadromous stream subdivisions, 65 require work. All 13 of the anadromous stream subdivisions in the Kenai Peninsula require treatment.

Mr. Paul Gertler, U. S. Fish and Wildlife Service (USFWS), discussed the constraints presented by active bald eagle nests on subdivisions needing treatment work. To resolve or minimize those conflicts, Exxon and USFWS have been conducting detailed surveys of the entire cleanup area, starting with PWS, to determine the location of all bald eagle nests and to assess how many nests are active. In PWS there are 574 nests, of which 245 are active; in the Kodiak area there are 836 nests, with 434 being active; and in Kenai there are 78 nests, of which 38 are active. Anadromous fish streams needing cleanup face a "critical window" that closes about 10 July when the adult fish will return to those streams. There are approximately 500 streams in the Prince William sound area. Seventy-five streams were assessed and 48 were found to be in need of some type of treatment. Of the 48, ten are in the vicinity of active eagle nests. Some level of treatment at these sites will occur with USFWS supervision to assure that if any disturbance occurs, the cleanup will be stopped. In conclusion, everything seems to be working well to allow maximum treatment while ensuring that eagles are not unduly disturbed. USFWS has relaxed the original one-half mile buffer zone around active nests to one-quarter mile to allow additional treatment.

Question from the audience: Have work order approvals been issued for areas with inactive eagle nests? Answer: Blanket approval has been given for cleanup if nests are inactive.

Commander (CDR) Gary Reiter, USCG, discussed Corexit 9580 approval status. RADM Ciancaglini requested the Alaska Regional Response Team (ARRT) approve Corexit 9580 use for spot washing during the summer program. On 7 June, a response was received from CAPT Bodron, ARRT Chairman, in which he indicated that comments from all member agencies were generally positive. Concerns expressed primarily had to do with worker safety. Alaska Department of Environmental Conservation (ADEC) and the Environmental Protection Agency (EPA) have initially approved the use of Corexit 9580 at no more than 5 test sites. This week representatives of EPA, ADEC, Exxon, National Oceanic and Atmospheric Administration (NOAA), & the USCG will begin selection of test sites and determination of the test protocol.

Question from the audience: Are the sites yet to be determined? CDR Reiter: Yes, they are to be selected from a list of all subdivisions to be spot washed.

Question from the Audience: Do you know when the tests will occur?
Answer from CDR Reiter: No, but hopefully they will occur soon.

Comment from the audience: The local response group from Valdez would like to see the testing. Response from CDR Reiter: The early plan is to have the land manager representatives involved.

Question from the audience: If specific towns do not want Corexit 9580 used, will it be forced on them? CDR Reiter replied that the concerns of the land managers will be taken into consideration.

Question from the audience: How are concerns regarding the workers' safety being handled? Answer: The State and Federal Occupational and Safety Administrations (OSHA) will determine the requirements for the workers. RADM Ciancaglini asked Cindy Coe, Federal OSHA, to discuss the toxicity of Corexit 9580. Ms. Coe compared the Corexit 9580 to Vaseline, another de-aromatized hydrocarbon. She stated it has low toxicity, but is combustible requiring that no ignition sources be present. 300 parts per million (ppm) is the maximum allowable exposure. Last year the workers on Smith Island were exposed to 30 ppm.

Mr. Randy Buckley, Exxon, addressed the Storm Berm Relocation Project. Segments identified to have oiling in the storm berm by SSAT were re-surveyed. Based on data collected, arrangements have been made for tracked mechanical equipment and one additional hot water wash unit for work on storm berms. He also reported that an additional bioremediation squad will be added onboard the *M/V Corinthian* next week. A ninth cleanup squad started work in the Kodiak area last week and will be used until shorelines there are completed.

Question from the audience: Are there plans to add more work crews to the Kodiak area? Mr. Buckley: No, at this point Exxon is comfortable with the current situation. Exxon believes more than ample resources are on line. Personnel from other areas can be moved in if needed.

Question from the audience: Is Exxon aware of how inefficient Squad 9 is? Reply from Mr. Buckley: Squad 9 has only worked two days due to weather. At this point it is too early to judge their work. Exxon is comfortable about having Kodiak cleaned up ahead of schedule. Follow-up question: Has the KISSC informed Exxon they

are not comfortable with the results of Squad 9 work? Mr. Buckley: Their concerns were addressed this afternoon. Question from RADM Ciancaglini: When will work in the Kodiak area be complete? Answer: As soon as possible. Exxon estimates work will be finished in late July to early August. The start of the Fall survey does not have to coincide with the finish of the cleanup. RADM Ciancaglini emphasized that there is time to finish work in Kodiak. FOSC will satisfy the land managers before the fall surveys of the shorelines.

Mr. Roger Prince, Exxon, provided a report on monitoring of the bioremediation test program. The objective is to assess the effectiveness of bioremediation, to reassess its toxicity, and to discover any problems with excess nutrients. The three test beaches are in Bay of Isles (moderate to low energy with heavy oiling), on the northeast side of Knight Island (high energy with subsurface oiling), and in Herring Bay (moderate energy with moderate oiling). Treated areas are paired with non-treated reference areas and an additional remote site for toxicity testing. Samples are being taken at specified intervals for microbiology and toxicity tests. Time lapse photography as well as visual observations are also being done.

Mr. Jon Lindstrom, ADEC, explained the studies being conducted on the microbiology samples from the bioremediation test sites. Samples are processed at University of Alaska Fairbanks and are arriving within a minimum twelve hour time limit after collection. More than 640 samples have been received to date, of which 399 have been processed. Because the analysis takes time, the data base is still small. Heterotrophic bacteria and hydrocarbon degraders are being enumerated and an assay is being done on hydrocarbon degrading activity. Mr. Lindstrom emphasized the point that data gathered must be considered in an integrated fashion. Data will be coming in over the next several weeks.

Mr. Rod Parrish, EPA, gave an overview on toxicity testing both this year and last year. Mysids, which are important in fish diets, were among species studied. A large data base already exists on the effects of chemicals on mysids. Last year it was determined fish were far less susceptible to Inipol than mysids. Tests being conducted this year on mysids using water samples taken from KN-135 post-Inipol application resulted in no toxicity to the mysids. Other conclusions were that invertebrates are more sensitive to bioremediation than fish are and that no chronic toxicity to fish is

indicated. Mr. Parrish also displayed data from Exxon ecological observations at the test sites.

Mr. Chipper Loggie, Exxon Planning Manager, discussed the development of the rock washer. The focus has been on vendor selection. Facilities of three vendors have been visited and evaluated. Work is progressing and being done very thoroughly.

Mr. Joe Talbott, NOAA, reported on the Net Environment Benefit Analysis of Rock Washing Study. He said it is too early to make conclusions. The deadline for the committee members to submit their draft documents is this Friday. A report is to be issued in about a week. A formal presentation will be made at the next Operations Steering Committee meeting.

Mr. Dan Taft, Exxon, discussed surveillance activities. Exxon is attempting to fly each day in Prince William Sound (PWS). He indicated that about fifty percent of the sheens sighted were unrelated to the *T/V Exxon Valdez* spill. These non-*Valdez* related sheens make up almost 90 percent of the estimated volumes sighted over the same time period.

Mr. Tom Monahan, Exxon, addressed commercial fishing. Exxon is very optimistic that salmon fishing will continue without problems. He described a tar ball survey done earlier in Upper Cook Inlet tide rips. The survey found nothing. Exxon plans no further Upper Cook Inlet surveys. He did mention a few small isolated shorelines in Eshamy Bay are closed to fishing, but it is believed this will not have any impact on the fisheries. A test fishery is scheduled using a purse seiner in the Point Helen and Bishop Rock area at the north end of Evans Island. It was designed with the concurrence of ADFG.

Mr. Joe Talbott, NOAA, discussed subsistence issues. The finfish and shellfish sampling is continuing as it has been throughout the winter. Test results of these samples plus those of a small number of marine and terrestrial mammals have shown nothing alarming. Yakutat is a new sampling reference area.

RADM David Ciancaglini, Federal On Scene Coordinator, praised the high degree of cooperation between agencies. He mentioned that there are still a few very dirty shorelines, specifically KN-135 and KN-136, but they will be treated. He applauded the efforts of the work crews and said all agencies are doing everything possible to

cleanup shorelines without disturbing wildlife. Reviewing the timeline for the audience, he indicated his belief that the cleanup will be completed on time. A decision will be made on Corexit 9580 use within ten days. By mid-July a decision will be made on the use of rock washers. The Kodiak area treatment is to be completed in early August and assessments will start. The cleanup is to be done in entirety about 15 August, except in those areas that may be found to be in need of further work during the shoreline assessment surveys. Work would then continue as necessary until 15 September.

Operations Steering Committee meeting dates will remain the same on the second and fourth Tuesdays of each month. The meeting time will change from 7:00 P.M. to 5:30 P.M.

The meeting was adjourned at 8:20 P.M.

Scientists encouraged by results of fertilizer on oiled beaches

By CHARLES WOHLFORTH
Daily News reporter

New, preliminary scientific data shows that chemical fertilizer is doing little harm and working well in removing oil from beaches soiled by the Exxon Valdez spill.

Three scientists — representing the state, Exxon and the federal government — presented the information at a meeting of spill officials Tuesday night. Their report was the first backed by the state that showed bioremediation — the use of oil-eating bacteria to clean beaches — is working in the field. They found that on three sites in



Prince William Sound, the bacteria worked two to three times faster on beaches treated with fertilizer than on untreated beaches.

And they reported that Inipol fertilizer is not as toxic as state officials had feared. Concentrations of toxic material in the water near the beaches reached levels only about one-tenth of what

would be lethal to the most sensitive organisms in the Sound.

Inipol could still be toxic to small animals that come in direct contact with it before it is diluted by the tide washing over the beach, but Exxon Senior Staff Biochemist Roger Prince said workers monitoring the beaches saw only one Steller's jay land on a treated beach.

"It's a trivial facet of the whole issue," said Jon Lindstrom, a chemist with the state Department of Environmental Conservation. "It seems by comparison to what we're doing as so small. ... Toxicity

is an important issue, but I don't think the toxicity to small birds landing on a beach right after Inipol is applied is a problem."

The studies are part of the DEC's six-week trial period for bioremediation, which will end early in July. DEC officials approved the use of Inipol this year only reluctantly, at the last minute, saying there was no proof it was safe and effective. They have said they would reconsider allowing the chemical after six weeks.

But DEC Commissioner Dennis Kelso said the information pres-

ented Tuesday night was not enough to convince him. He will wait for a final report.

"If we get partial or small improvement, what does that mean?" he said. "Do we keep using it, or do we look for some other method?"

Jim Clark of the Environmental Protection Agency said the science team still has no evidence there is less oil on a beach where Inipol was used than on one that was left alone. Tests to show the precise

Please see Page B-3, INIPOL

Anchorage Daily News Wednesday, June 27, 1990

INIPOL: So far, so good

Continued from Page B-1

amount of oil removed from the rocks are difficult and not yet complete.

A heavily oiled beach where the most extensive test took place does not look noticeably better than its neighbor, Clark said. But the oil was heavy and oil-eating bacteria were unlikely to finish it off in only a month, he said.

"To get visual improvement, you have to get all the oil off," he said.

DEC's Lindstrom presented the most striking evidence, a chart showing that the process of bacteria breaking down oil into carbon dioxide and other material has accelerated two- to threefold on treated beaches.

But he would not commit himself to say fertilizers should be used, because he

said more information is still due back from the lab.

"I am encouraged by the results I have seen thus far," he said.

Prince, the Exxon chemist, was less equivocal.

"I think this is a clear demonstration of a benefit, and a clear demonstration there is no risk," he said.

Prince presented data that showed nutrients sank deep into the beaches and that fertilized beaches contained less oxygen, suggesting bacteria were using it to break down oil.

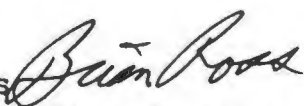
He said the question now is how much and how frequently beaches should be treated with fertilizer.

"We already have a benefit with no cost, let's see if we can get a bigger benefit," Prince said. "It's always possible to get more fertilizer and get several years of biodegradation in one year."

June 21, 1990

Restoration Planning Office/AOO

Weekly Significant Issues

Brian Ross 
Restoration Planning Team Leader, AOO

Al Ewing
Assistant Regional Administrator

COMPLETED

*****EPA RISK ASSESSMENT CONFERENCE - Ross (271-2461)**

- Brian Ross attended the 5th Annual EPA Regional Risk Assessment Conference in Chicago 6/18-19 & presented paper on status of EVOS and Restoration Planning

*****MEETINGS - Ross (271-2461)**

- RPWG members attended NRDA workshop on Sublethal Effects of Hydrocarbons on Fish. Held in Anchorage at DOT facility
- Kirsten Ballard attended OPS meeting at FOSC on 6/20,
- Linda Comerchi attended (via teleconference) AFTFO meeting regarding public availability of NRDA data 6/18

***SYMPOSIUM REPORT - Ross (271-2461)**

- final editing of Symposium Report completed. Artwork being finalized
- final Symposium Report to be shipped to HQ by 6/25 for printing
- first draft copies of all chapters of Restoration Report available & translated into one document for review, revision, & formatting

*****PERSONNEL UPDATE - Ross (271-2461)**

- RPWG new member: John Strand, formerly with Battelle NW (Sequim), started 6/21 as new RPWG member for NMFS. John is stationed in Juneau
- Donley Hill, a candidate for USFS RPWG member, is in Anchorage on a 2-week trial detail to work with RPWG
- ORD personnel: Rod Parrish returned to Gulf Breeze Lab Jim Clark has returned to RPO/AOO

UPCOMING/ONGOING

***REPORTS - Ross (271-2461)**

- RPWG will continue meeting to prepare Restoration Report and Technical Workshop Report
- as of Thursday, RPWG had received no instructions from higher authorities regarding possible concurrent review of rough draft Restoration Report by Management/Legal Teams and the Washington Policy Group

OUTREACH

- None

TRAVEL

- None

**Oil Spill-Related Activities
Weekly Summary Report**

*** Meeting held during the past week**

- Brian Ross attended the 5th Annual EPA Regional Risk Assessment Conference in Chicago 6/18-19 & presented paper on status of EVOS and Restoration Planning
- RPWG members attended NRDA workshop on Sublethal Effects of Hydrocarbons on Fish. Held in Anchorage at DOT facility
- Kirsten Ballard attended OPS meeting at FOSC on 6/20,
- Linda Comerchi attended (via teleconference) AFTFO meeting regarding public availability of NRDA data 6/18

*** Meetings scheduled for the coming week**

- RPWG will continue meeting to prepare Restoration Report and Technical Workshop Report

*** Draft or final reports completed**

- final editing of Symposium Report completed. Artwork being finalized

*** Project or report-related milestones reached**

- none

*** Issues or problems which must be resolved**

- final Symposium Report to be shipped to HQ by 6/25 for printing
- first draft copies of all chapters of Restoration Report available & translated into one document for review, revision, & formatting
- RPWG new member: John Strand, formerly with Battelle NW (Sequim), started 6/21 as new RPWG member for NMFS. John is stationed in Juneau
- Donley Hill, a candidate for USFS RPWG member, is in Anchorage on a 2-week trial detail to work with RPWG

*** Other issues or comments**

- as of Thursday, RPWG had received no instructions from higher authorities regarding possible concurrent review of rough draft Restoration Report by Management/Legal Teams and the Washington Policy Group

*** Contact Brian Ross (FTS 686-2461 or 907-271-4261)
for further information**

MEMORANDUM

SUBJECT: EXXON VALDEZ WEEKLY OPS MEETING AT FOSC-6/6/90

FROM: KIRSTEN BALLARD AOO/A

TO: BRIAN ROSS AOO/A

Summary of the meeting is as follows:

USCG

- Gave report of oiling and treatments completed as of 6/3/90 (see attached).
- Received a reply from the RRT regarding the use of Corexit 9580. USCG is still reviewing the test approval letter before they send a letter to Exxon. It is apparent that the use of 9580 is not really approved, but continued testing has been approved at 5 sites (yet to be selected by the Joint Selection process between ADEC, USEPA, USCG, etc.) There are approximately 67 subdivisions that USCG has designated for spot washing with the 9580.

DOI

- Is continuing work on the color coded maps which identify land owners of the entire spill area.
- Is beginning an effectiveness study on the wildlife deterrent balloons.
- Letter is being sent to the RRT stating DOI's position on the use of Corexit
- All segments have been field completed. TAG process is ongoing.
- USFWS is finishing up the designation of the time constraints regarding eagle nests.
- Snow Goose* is on line to monitor the effectiveness of the deterrent balloons.
- USFWS now has a 24 hr beeper number- (907) 268-9471.
- The clean up of the Barren Is. requires further discussion (to follow meeting-between USCG and USFWS).

EPA

- Toxicity tests on KN-135 (two weeks post application) are completed. No toxic levels of ammonia were found in any samples.
- Bacterial samples show an increase in bio-activity. Levels of bio-activity are 2x on the surface level, and 4x subsurface (to 30 cm).
- Feasibility tests for wipe tests of Inipol on the rocks is ongoing.

USFS

- Is dispatching an Archaeologist (contracted) to USFS property for screening sites.

- Met with Exxon and the State agencies regarding the Cultural resource agreements. A report is due at the end of July.
- The MOA regarding cultural resources is waiting for the attorney's opinion from Chugach Alaska Corp. The MOA will then go to the RADM Ciancaglini for his signature. If this document is not returned "soon", from CAC, it will go to Washington DC with or without CAC's signature.

DOL/OSHA

- Results are in from Exxon's health monitoring on the toxicity of Inipol. Levels are <1/2-1 ppm. DOL is, therefore, not requiring the use of respirators. The state may disagree with this.

NOAA

- Is on the Inipol monitoring team.
- NEBA (net environmental benefit analysis) continues for the state's proposed rock washer.
- Are compiling a list of the Ecological constraints for the work sites
- Working on the Work order addendum for the Archaeological problem when a lens of oil extends into the supra tidal berm area. Basically, if it involves < 6" of digging, it's alright to go ahead and remove the oil. If removal of oil may involve >6" of digging, an archaeologist will have to be called in, especially in identified cultural resource areas. Permission will be granted through the USCG.

IN GENERAL:

I did not recognize anyone at the meeting who was from the state. It is therefore assumed that the state was not present at this meeting.

RADM Ciancaglini was not present.

05-Jun 02:28 PM	TUE 05-Jun	WED 06-Jun	THU 07-Jun	FRI 08-Jun	SAT 09-Jun	SUN 10-Jun	MON 11-Jun
SQUAD 1 CORINTHIAN	CR-2C (R) CU-13A	AE-2A AE-5C	AE-5C	LN-1A LN-4A LN-5A	LN-5A LN-6A LN-7A LN-8A	EL-53A EL-55A EL-55C EL-58D	EL-102A EL-102B
SQUAD 2 COLUMBIA	KN-205B (L) KN-7A KN-11A	KN-23A (L) KN-9A (L)	KN-135A (L)	KN-135A (L)	KN-136A (L)	KN-136A (L)	WHITTIER CREW CHANGE
SQUAD 3 DON BOLLINGER	CR-1A CR-5A CR-5B PN-1A CR-2C (R)	EB-10A MA-2A	CU-13A CU-1A CU-3A CU-11A	EL-58A EL-58B (R) EL-58C (R)	EL-56A EL-56C (R) EL-56D	EL-57A	SEWARD CREW CHANGE
SQUAD 4 ARCTIC SALVOR	FIELD BIO EXERCISE	EV-21A EV-12A EV-15A EV-18A	EV-25A EV-26A EV-24A (L)	EV-70D ER-7A ER-8A	ER-9A ER-10A ER-11A	ER-12B ER-18A ER-20B	ER-20A
SQUAD 5 ADELE CANDIES	EV-50B (L) EV-50C (L) EV-51A (L)	EV-24A (L) EV-16A (L)	EV-20A (L)	EV-37A (L) EV-39A (L)	EV-1A (L) EV-2A (L) EV-3A (L)	EV-5A (L) EV-5B (L) EV-5C (L)	VALDEZ CREW CHANGE
SQUAD 6 BEULAH CANDIES	CU-11A CP-1A	PR-7A (R)	PR-3A PR-3B PR-3C PR-7A (R)	PR-2A	PR-2A	PR-5B PR-8B PR-8C	PR-13A
SQUAD 7 YUKON RIVER	IB004A IB005A	US-9A US-10A	CB-3C	CB-4B CB-4A	CB-4C CB-4D	PD-5A PD-8A (R)	PD-1A PD-1B
SQUAD 8 ENSCO ATLAS	WB-9A	WB-9A (R)	WB-3A WB-3B	WB-3C WB-3D	WB-3D WB-3E	TB-4A	TB-4A
SQUAD 9 SEA TRADER	KODIAK MOBILIZE	K0110-SI003A	K0103-SS02B	K0103-SS02B	K0103-SS02B	K0111-PI003A K0119-SE002A	K0909-CD008A K0909-CD009A

*SCHEDULE DEVELOPED DAILY AND IS SUBJECT TO FREQUENT CHANGE; L-LAND MANAGER R- CULTURAL RESOURCE

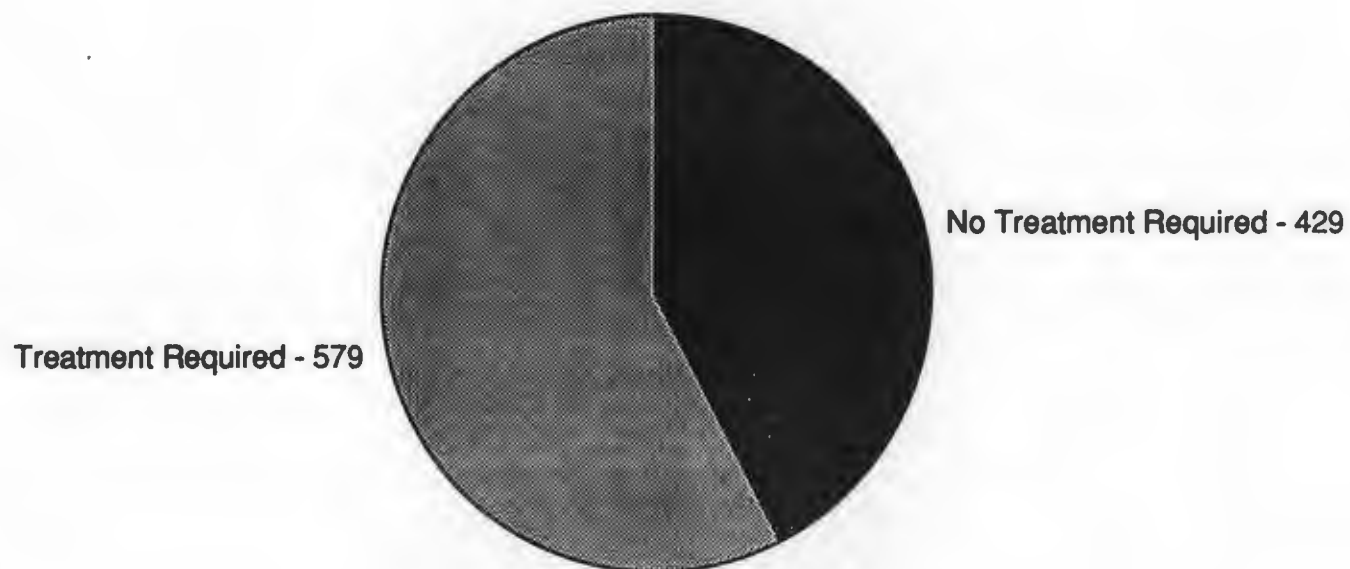


CAMEO Exxon Valdez '90

June 3, 1990



Total Area
Treatment vs. No Treatment
(Subdivisions)



Total Subdivisions = 1008

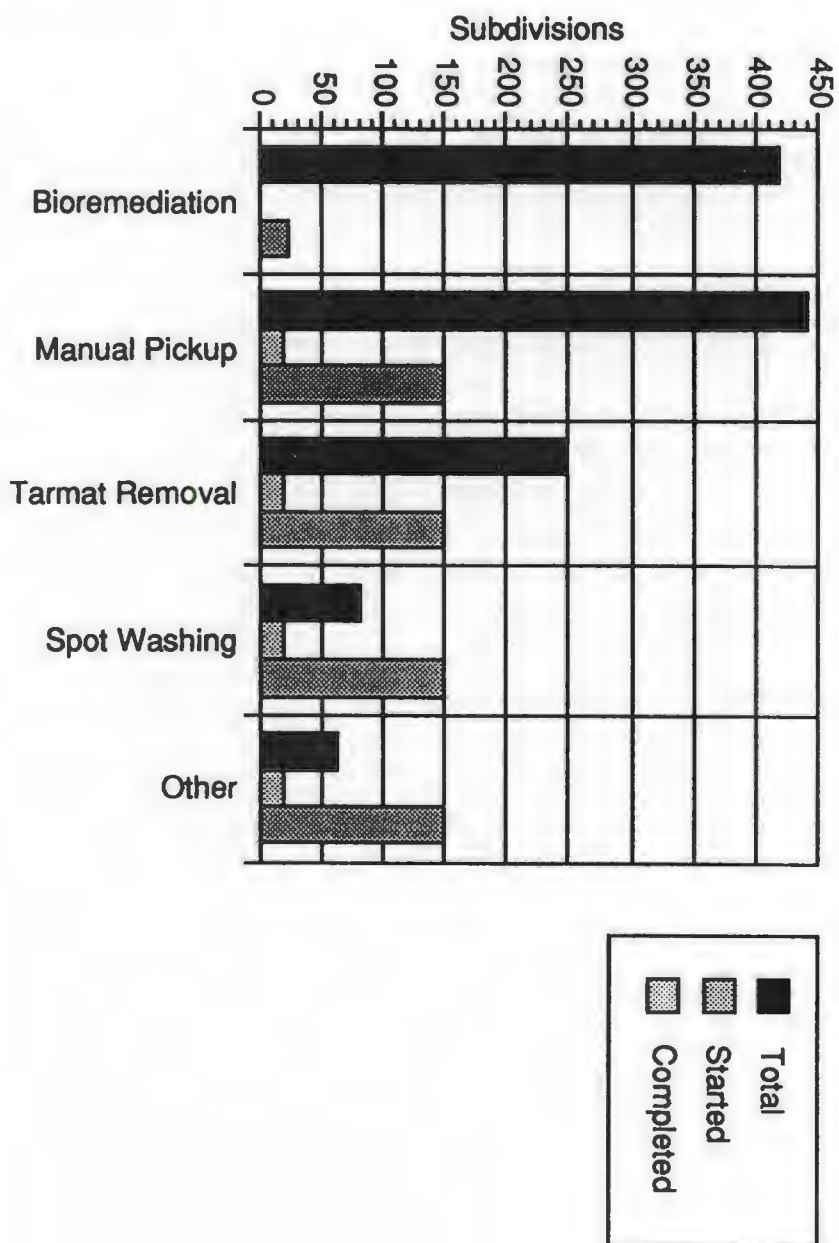


CAMEO Exxon Valdez '90

June 3, 1990

Total Area

Subdivision Treatment Types

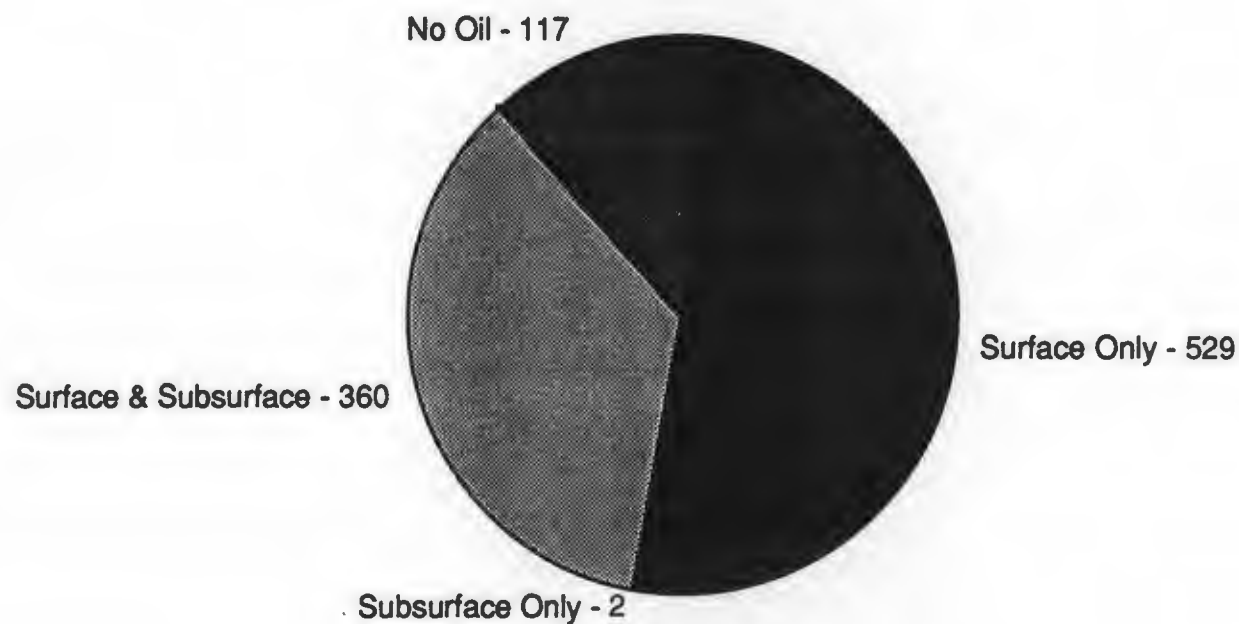




CAMEO Exxon Valdez '90
June 3, 1990



Total Area
Subdivision Oiling



Total Subdivisions = 1008

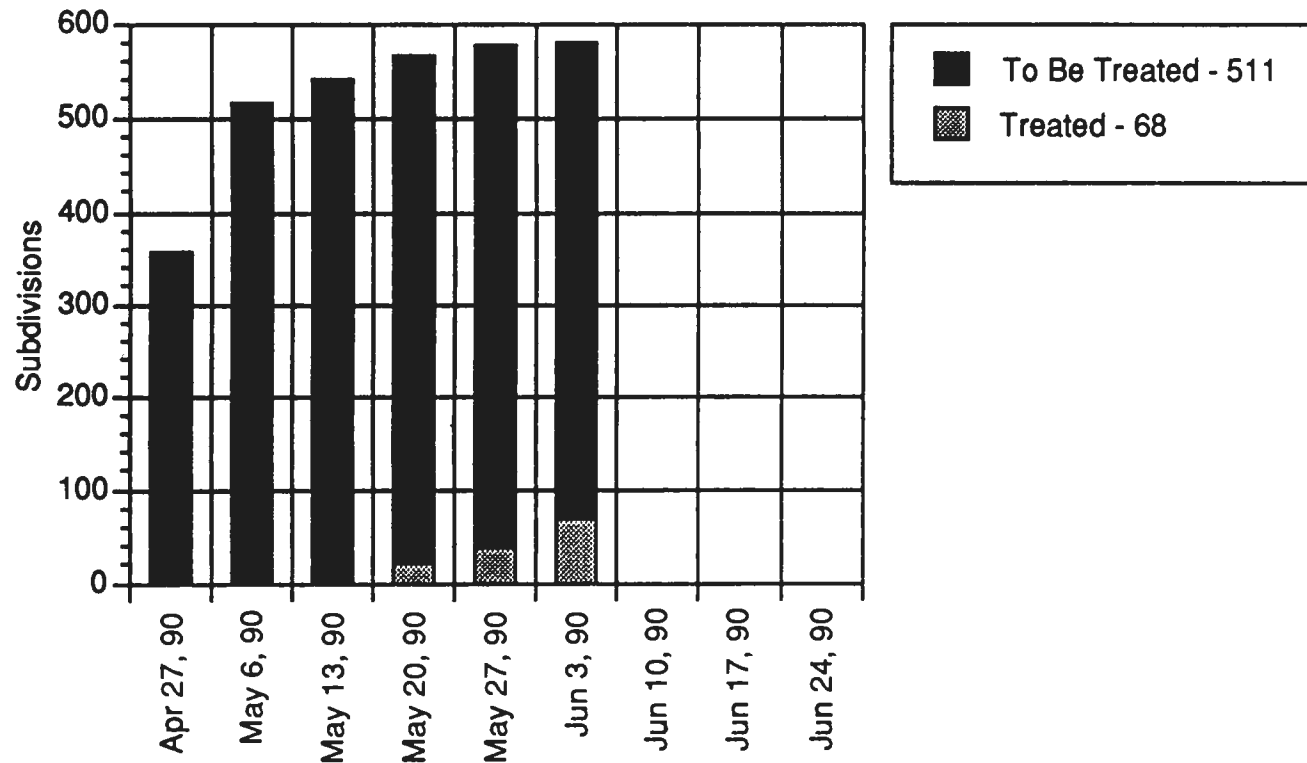


CAMEO Exxon Valdez '90

June 3, 1990



Total Area
Subdivisions Treated vs. To Be Treated



Total Subdivisions Requiring Treatment = 579



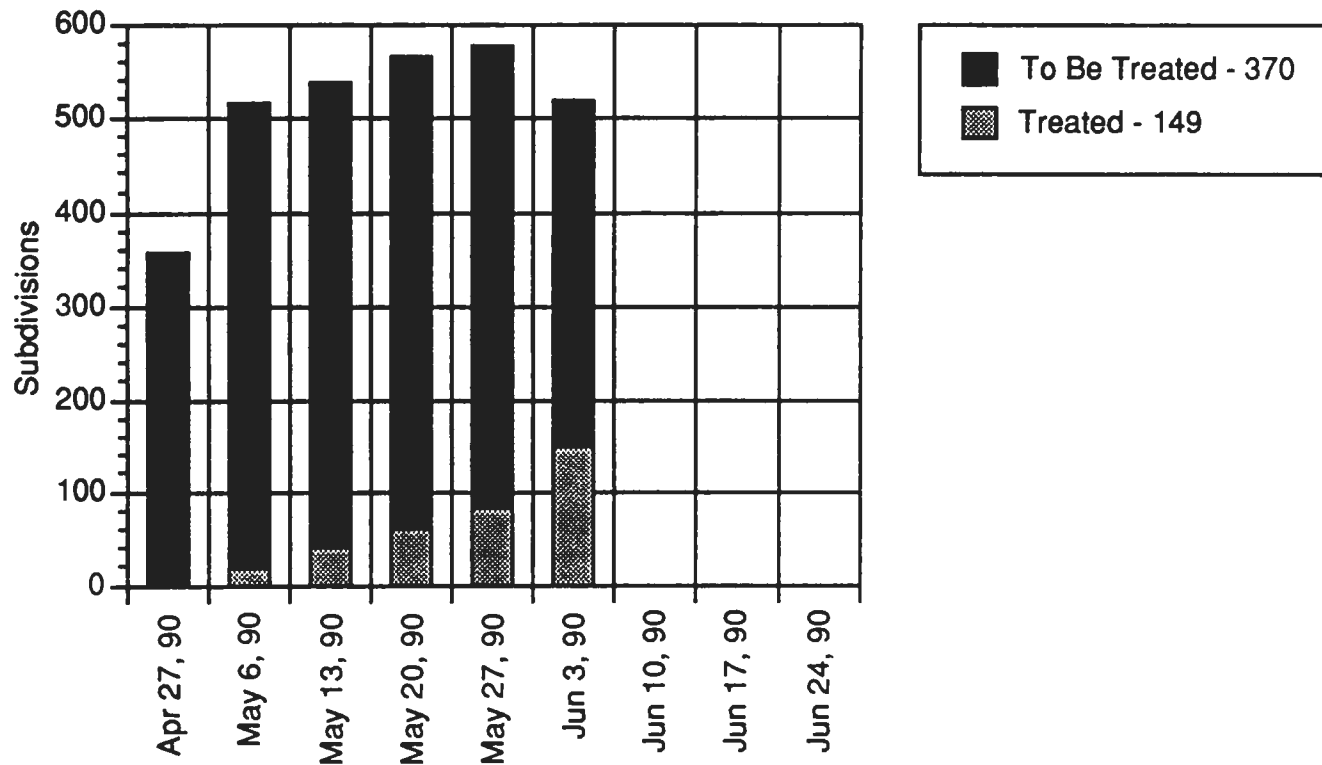
CAMEO Exxon Valdez '90

June 3, 1990



Total Area
Manual & Mechanical Treatments
Subdivisions Treated vs. To Be Treated

(Includes Manual Pickup, Tarmat Removal & Spot Washing)



Total Subdivisions Requiring Treatment = 519

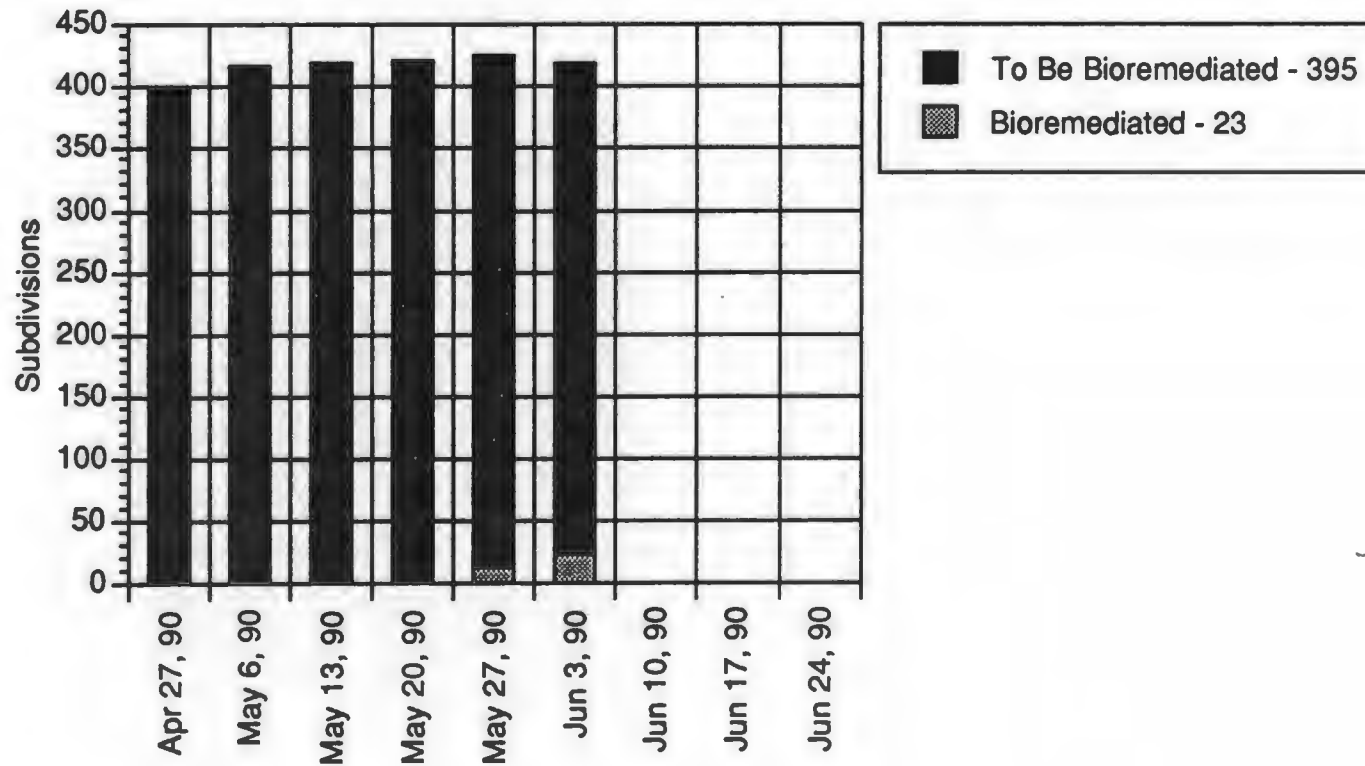


CAMEO Exxon Valdez '90

June 3, 1990



Total Area Bioremediation Treatment Treated vs. To Be Treated



Total Subdivisions Requiring Treatment = 418

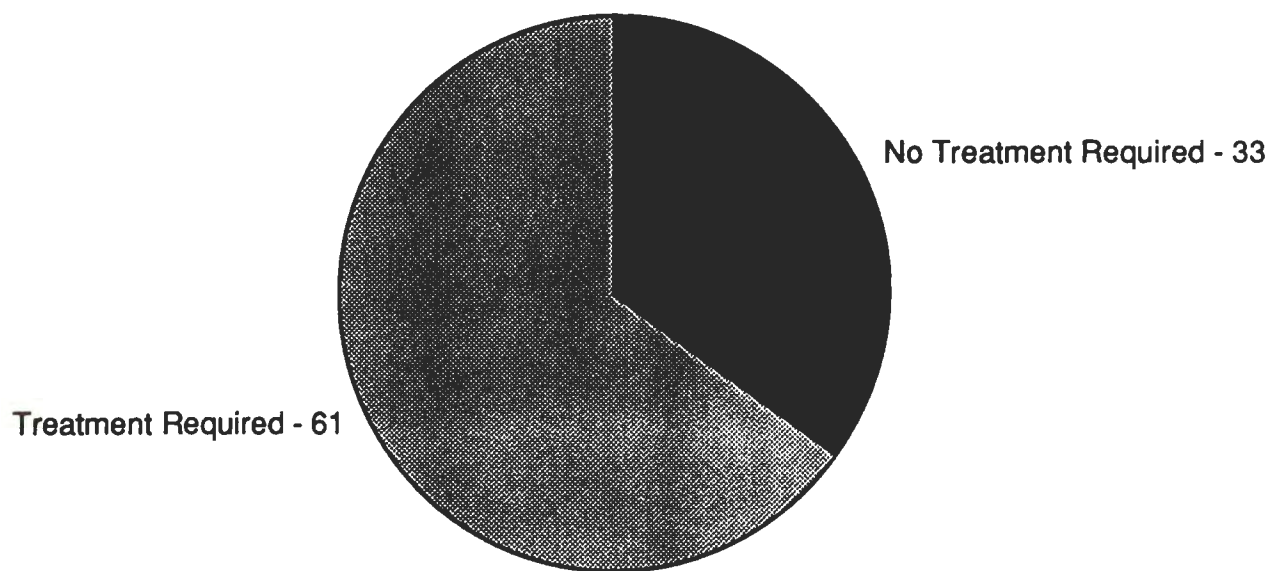


CAMEO Exxon Valdez '90

June 3, 1990



Total Area
Treatment vs. No Treatment
(Anadromous Streams)



Total Streams = 94

6-20-90

Memorandum

SUBJECT: Exxon Valdez Oil Spill Weekly Ops Meeting at FOSC Hdqtrs.

FROM: Kirsten Ballard, AOO/A

TO: Brian Ross, Restoration Planning Team Leader, AOO/A

The meeting went as follows:

DOI

- Final information on the computer generated land ownership maps has been provided. Maps should be ready for distribution soon.
- Comments on tarbat protocols have been forwarded to the appropriate agencies.
- USFWS surveys are ongoing.
- Monitors are in place on Kodiak.
- The Eagle mapping surveys with ADF&G are almost complete, as are the anadromous stream surveys.
- NPS--satisfied with cleanup on a disputed segment; cleanup is going well; questions regarding constraints regarding seabird colonies and eagles have been resolved.

USCG

- Agreement between USCG, Land Managers and the State of Alaska regarding cleanup completeness has been reached. If the degree of cleanup on site is in dispute, it is requested by the FOSC that the dispute be settled on site at the time it arises. If the dispute cannot be resolved, a Quality Assurance/Quality Control (QA/QC) team of USCG, Exxon and State of Alaska personnel will be dispatched to evaluate such disputes. The final determination of cleanup satisfaction rests with the FOSC. Demobilization of the clean up crew(s) will not occur until disputes regarding cleanup completeness are resolved.
- The fall assessment (proposed to be called "ASAP"--August Survey Assessment Program--yes another acronym!) is proposed to be completed in the Kodiak sector first. Exxon will add a second team if necessary (a helicopter team is proposed. Currently, surveys in Kodiak are done by boat because of numerous biological constraints in highly sensitive areas).
- The bioremediation team has fallen behind schedule. A third team is being brought up to play "catchup".
- A memo from the FOSC to TAG regarding the use of heavy equipment in the supra-tidal berm area has been sent. Heavy eqpt. use is considered especially necessary in the Barren Is. USFWS comment- heavy eqpt. use is authorized for an initial experiment only. If sheening is not a problem, then further use will be authorized. USCG-sheening is not anticipated to be a problem due to the weathered nature of the oil.
- Track vehicles are undergoing the approval process by TAG.

OSHA

-Has received a letter from the State regarding the use of Corexit. Cindy Cove (sic) did not elaborate on the content or position of the letter. RADM Ciancaglini made mention that all possible effort should be made to be cooperative with the State, since it is their state (relations between State DOL and OSHA have not been good).

EPA

-Waiting for the final schedule regarding the Corexit test. There have been some scheduling and approval problems.
-Jim Clark will be back 6/21 and should be able to give a Bioremediation report at next weeks Ops meeting.

NOAA

-NEBA (Net Environmental Benefit Analysis) notes are being compiled. RADM insisted on an on-time submittal. June 27 is when the final copy is due.
-Survey of the Set-aside beaches is beginning (of 9 remaining sites. There is, however, some dispute regarding 1 or 2 sites which had possibly been cleaned "by accident" or if the markers were actually placed in the wrong location).
-Corexit test on hold, waiting for the proper land manager approval.
-There seems to be some confusion regarding the use of Corexit and the oil collection efforts that will be made. There will be an effort to collect the projected pooled oil, but the amount of oil to run off the beaches will be different this year. Last year, Corexit was used with large amounts of water washing. This year, it is proposed to use the Corexit as a spot-wash and a prep for bioremediation to break up pockets of oil.
-ASAP is being put together currently. Goals, members, etc. are being lined up. RADM comment-does not want to go back to signed-off beaches based on ASAP.
-Number of segments is hoped to be reduced by eliminating segments that have trash & debris, no oil, etc.
-A geomorphologist and a biologist are not anticipated to be included on the ASAP teams, since this work has already been completed.

GENERAL DISCUSSION:

-Graphs of cleanup status were handed out and discussed (see attached).
-The Bioremediation teams are behind because: the total numbers have been changed. When the team arrives at some beaches, little or no oil is present and is not considered worth treating. Customblen is to go out to all boats (this is how I understood it) to speed the bioremediation applications.
-State of Alaska is planning to return to re-survey subdivisions that are reported to be re-oiled/re-oiling. Apparently, the sun or hydrodynamic action is bringing up sub-surface oil. This seems to be happening at beaches (such as Applegate Island, Chugach Island, etc. where such problems were anticipated). It was discussed that bioremediation squads may be brought in asap after manual cleanup to help alleviate this problem.

OF SPECIAL NOTE:

Steering Ops meeting is scheduled for 1730 hours (instead of 1900 hours) on 6/26/90. It should be a good one.



CAMEO Exxon Valdez '90

June 17, 1990



Total Area
Treatment vs. No Treatment
(Subdivisions)

No Treatment Required - 431

Treatment Required - 601



Total Subdivisions = 1032



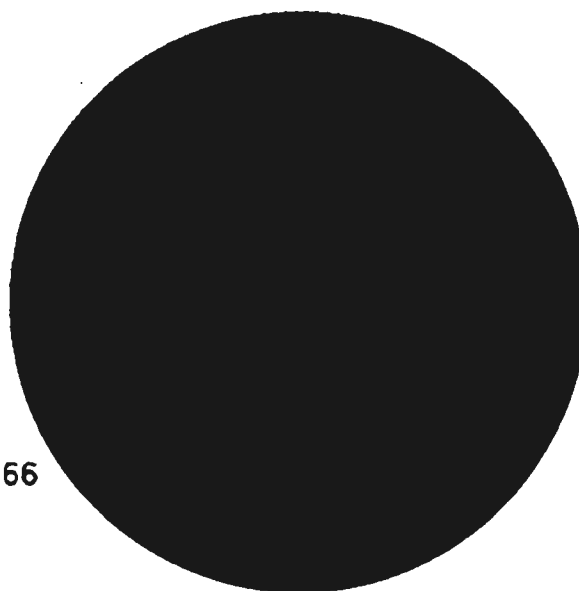
CAMEO Exxon Valdez '90

June 17, 1990



Total Area
Treatment vs. No Treatment
(Anadromous Streams)

No Treatment Required - 29



Treatment Required - 66

Total Streams = 95

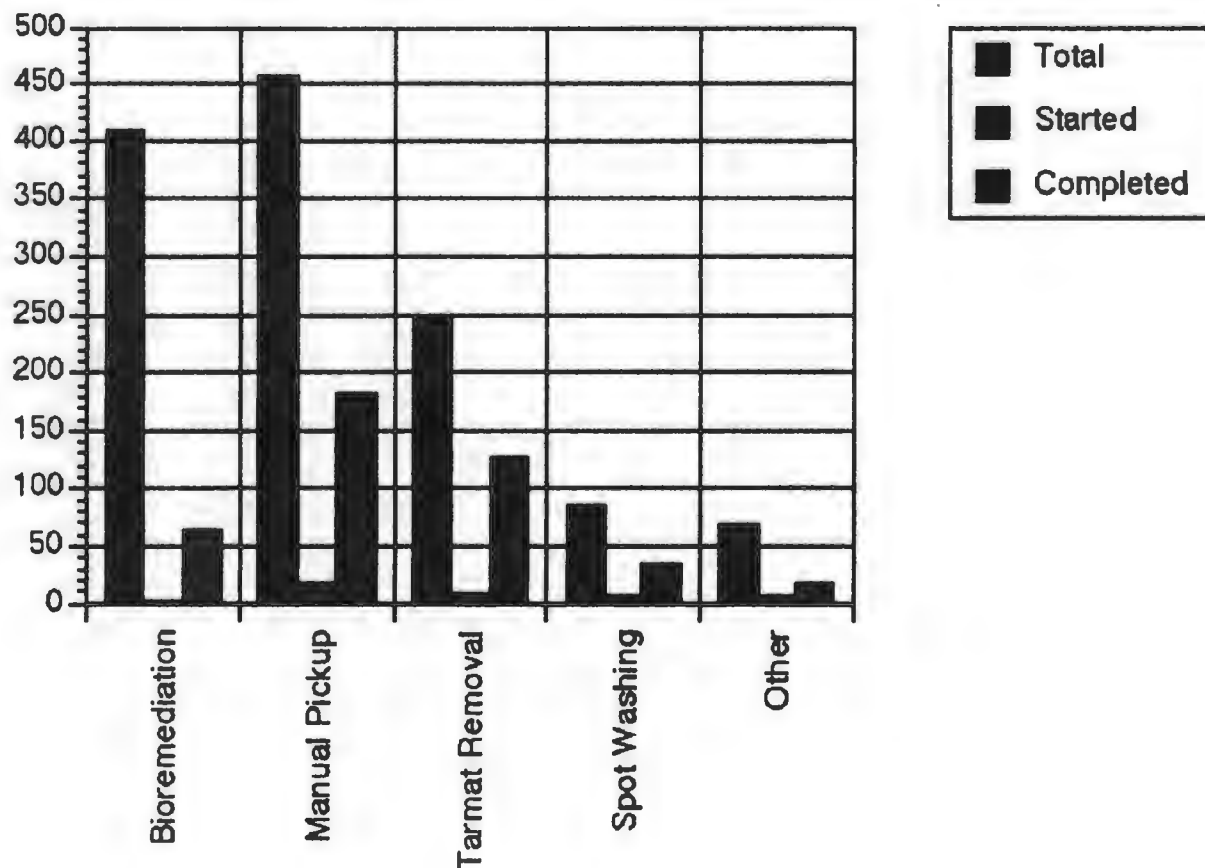


CAMEO Exxon Valdez '90

June 17, 1990



Total Area Subdivision Treatment Types

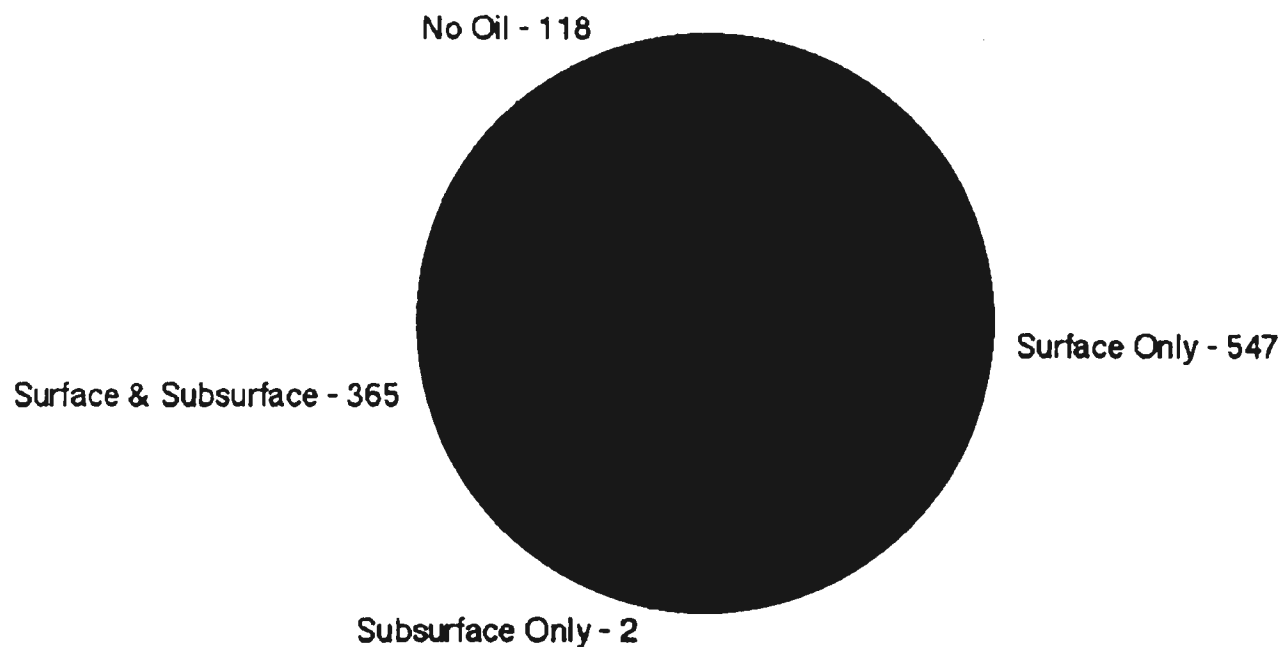




CAMEO Exxon Valdez '90
June 17, 1990



Total Area
Subdivision Oiling



Total Subdivisions = 1032

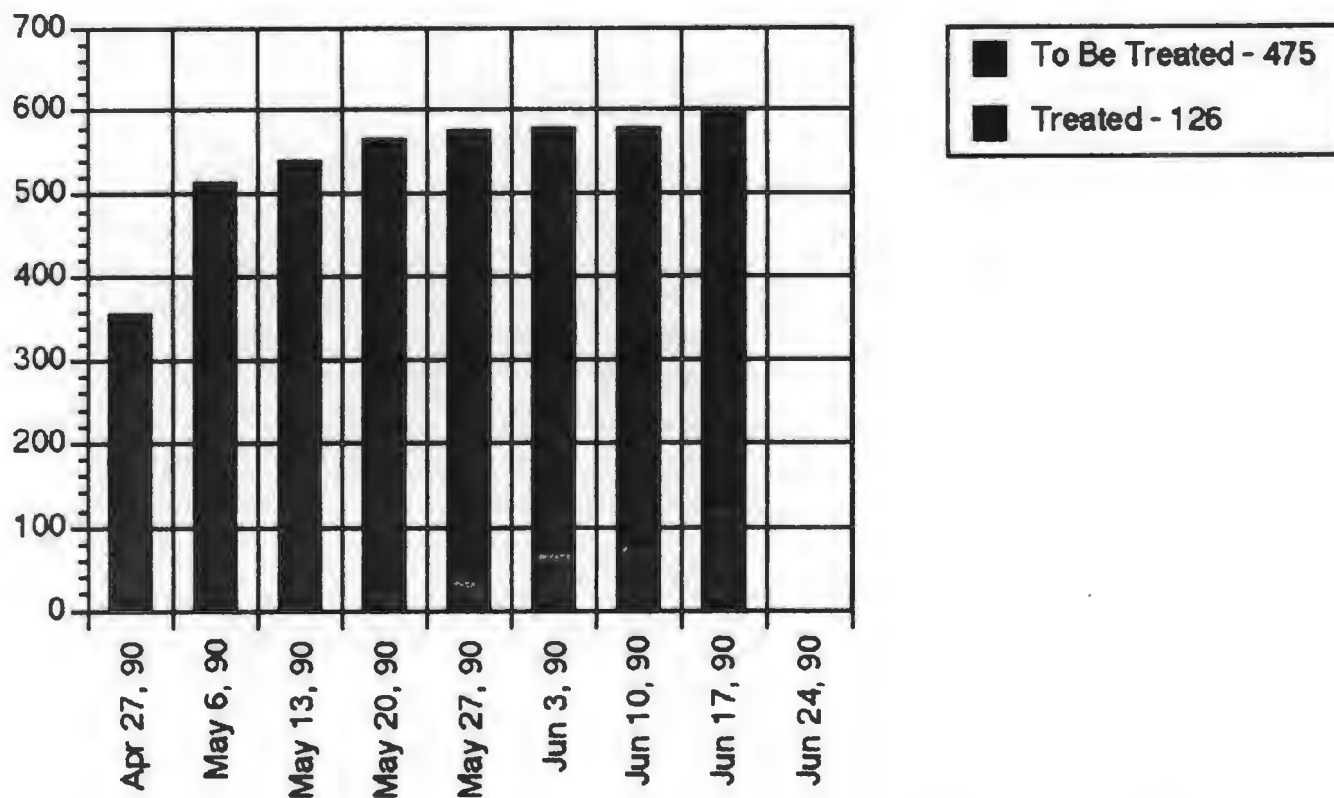


CAMEO Exxon Valdez '90

June 17, 1990



Total Area Subdivisions Treated vs. To Be Treated



Total Subdivisions Requiring Treatment = 601

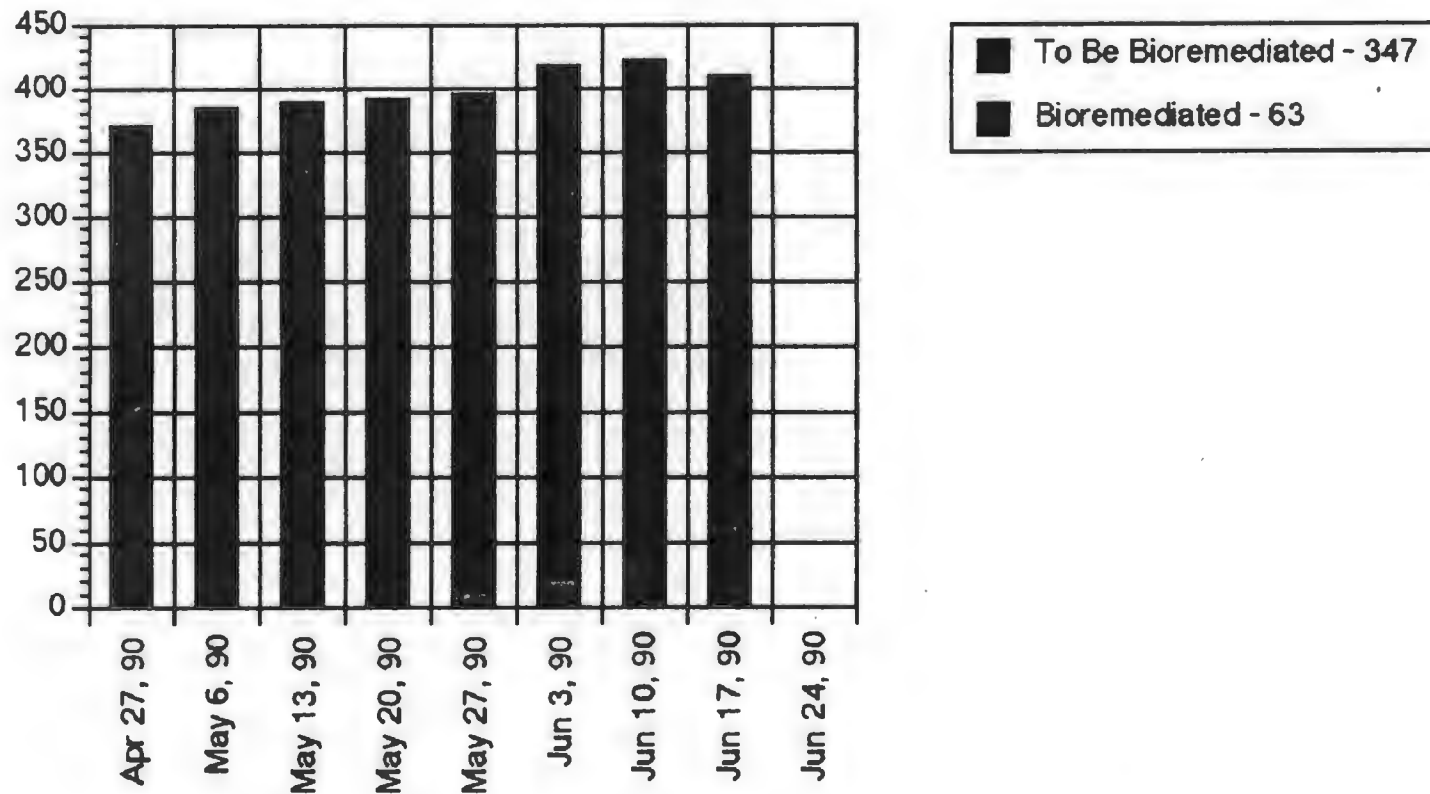


CAMEO Exxon Valdez '90

June 17, 1990



Total Area
Bioremediation Treatment
Treated vs. To Be Treated



Total Subdivisions Requiring Bioremediation = 410



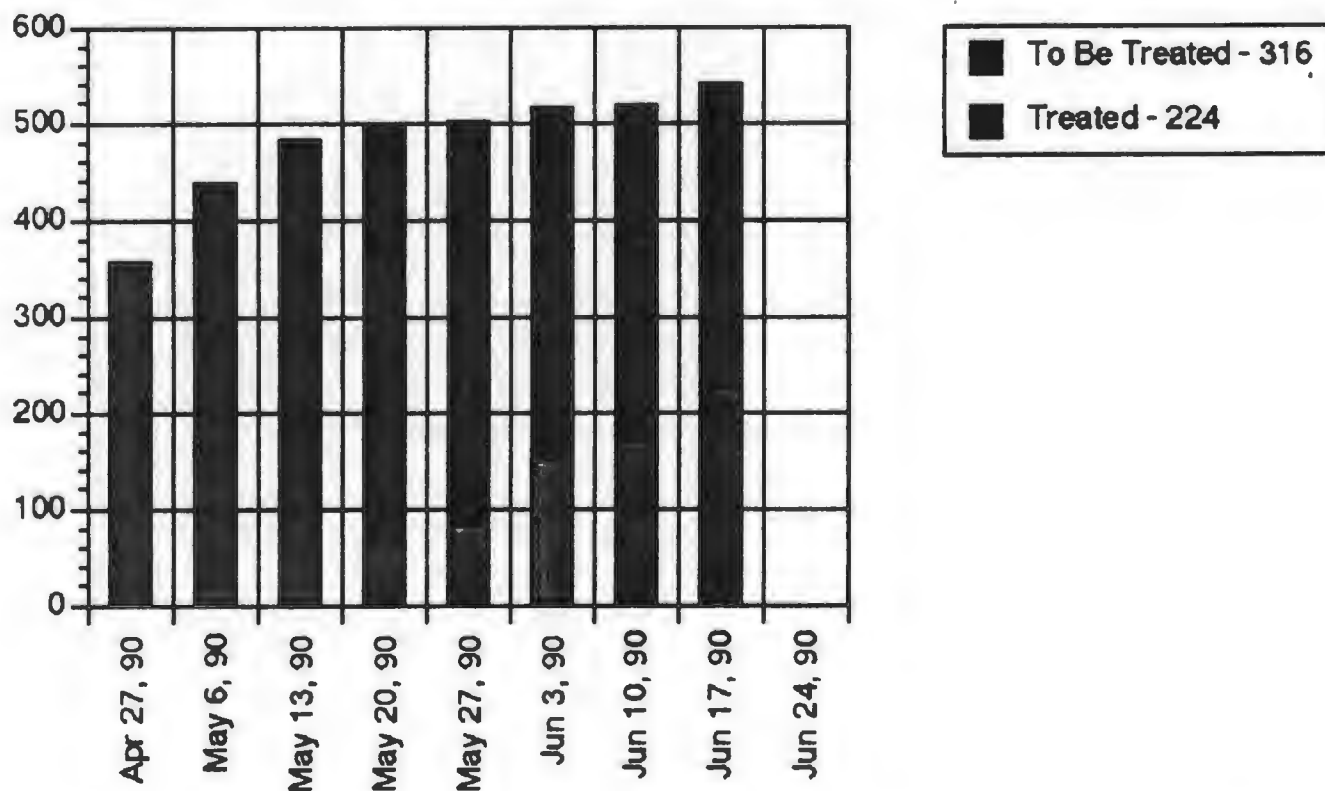
CAMEO Exxon Valdez '90

June 17, 1990



Total Area
Manual & Mechanical Treatments
Subdivisions Treated vs. To Be Treated

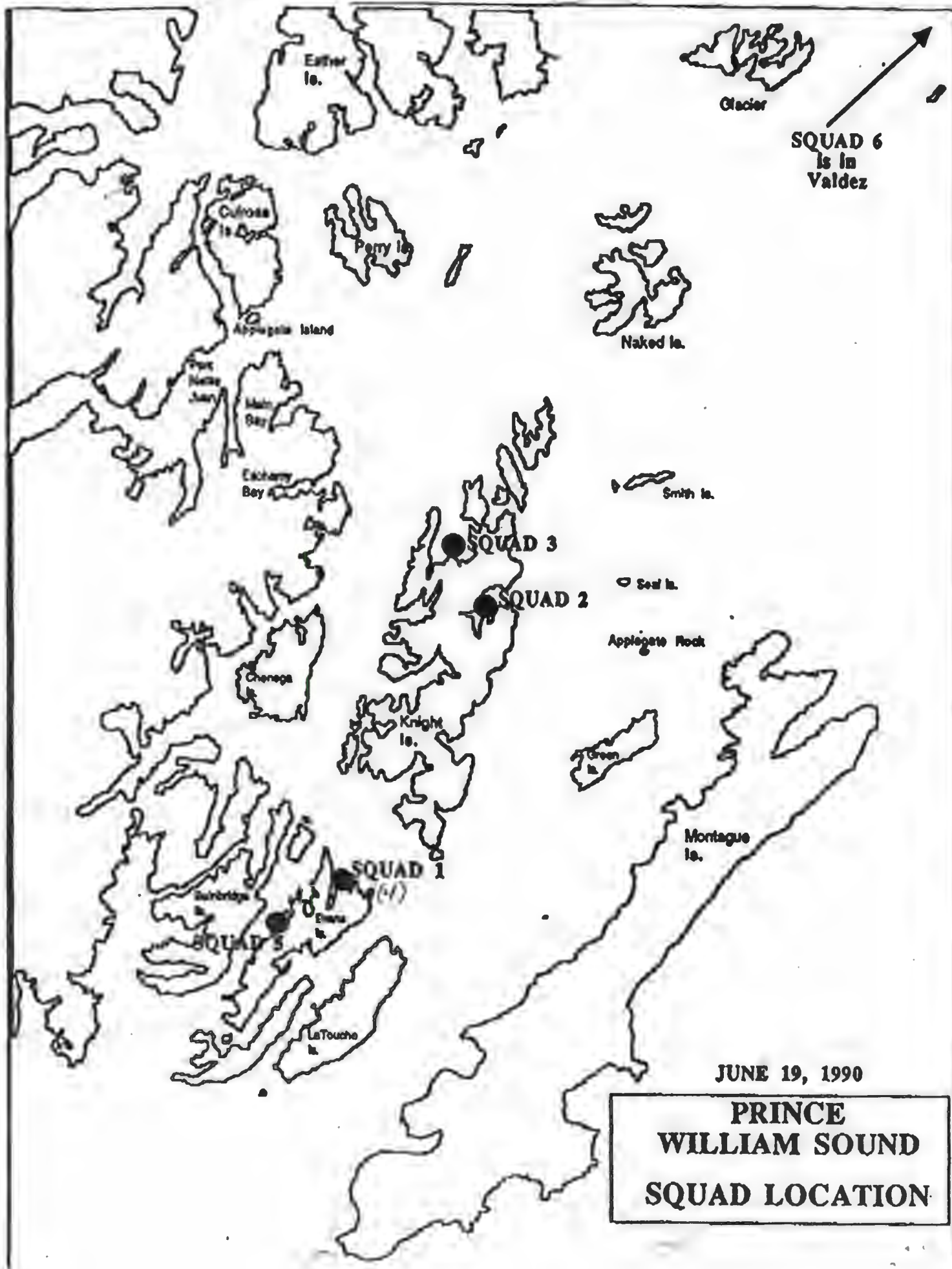
(Includes Manual Pickup, Tarmat Removal & Spot Washing)

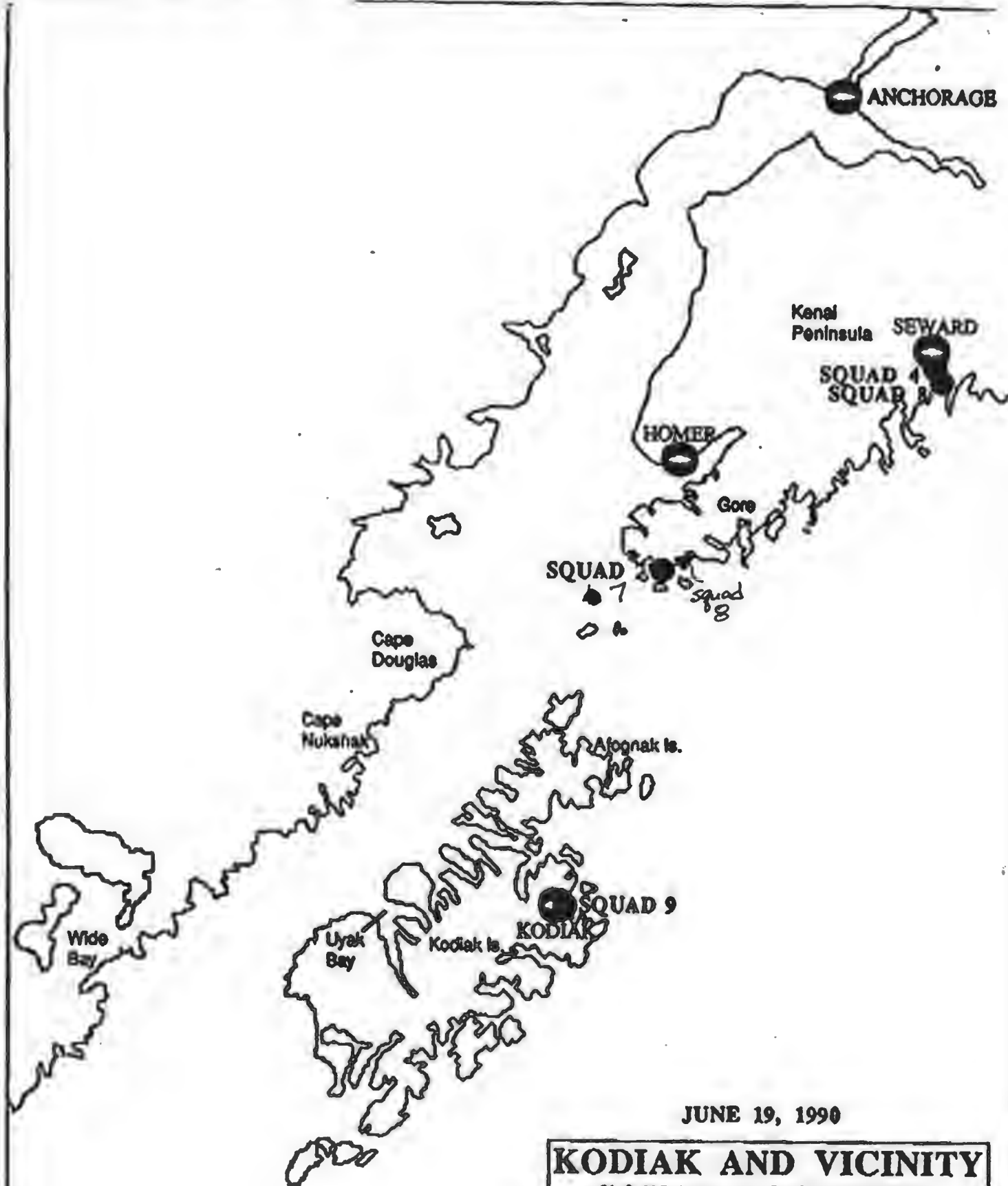


Total Subdivisions Requiring Manual Treatment = 540

19-Jun 10:19 AM	TUE	WED	THU	FRI	SAT	SUN	MON
SQUAD 1 CORINTHIAN	EV-17A (L,S)	ER-6A ER-6A (L,S)	ER-7A (L,S) ER-8A ER-8A (L,S)	BA-1B (R) BA-1C (R)	BA-1E BA-2A (R,L,S) BA-8A	GR-103A GR-103A (S)	GR-103A GR-103C
SQUAD 2 COLUMBIA	KN-136A (L) KN-26A (L)	KN-136A (L) KN-26A (L)	KN-136A (L) KN-26A (L)	KN-26A (L) KN-15A KN-24A (L)	KN-200B KN-200D	KN-211B KN-213D	KN-213B (L)
SQUAD 3 DON BOLLINGER BIO	KN-132B (L,S) KN-129A (L,S) KN-129B (L,S)	KN-132C (R,L,S) KN-200A (L,S) KN-201A (L,S)	KN-205B LN-6A LN-6A (R) LN-7A	EL-68A EL-68B (R) EL-68C (R) EL-67A	EL-68A EL-68C (R) EL-68D EL-65A	EL-65B (R) EL-65C EL-65B	EL-62A EL-62B EL-64A
SQUAD 4 ARCTIC SALVOR BIO	ER-18A EV-3A (L,S) EV-6A (L)	EV-5B (L) EV-37A (L) EV-39A (L)	PD-6A PD-2A WB-1A WB-3B (S)	WB-2A WB-2B WB-2C WB-2D	WB-6A WB-7A WB-8A (R) CB-4A	CB-4D CB-4B CB-4C	TB-4A WH-3B
SQUAD 5 ADELE CANDIES	EV-71B (L,S)	FL-4A FL-4B	MU-1A FL-4A	EV-12A (L,S) EV-14A (L,S)	LA-15B (L) LA-15C (L)	LA-16C (L) LA-21B (S)	LA-20C (L)
SQUAD 6 BEULAH CANDIES	CH-10B (L) CH-12A (L) CH-14A (R,L,S)	CH-15A (L,R) CH-16A (L) CH-20A (L)	CU-13A (S,L) CU-14A (L) CU-14A (S,L) CU-14A (S,L)	CU-15A (L) CU-17A CU-7A	EL-107A EL-107B	EL-108C EN-46A EN-46B	KN-108A (S) KN-110A KN-205B (S)
SQUAD 7 YUKON RIVER	CB-3B CB-3C	PD-6A PD-8A (R)	PD-4A PD-10A	PD-01A (R)	PD-01A (R) PD-01B (R)	PD-03A (L,S) PD-03A	NK-1A (2S)
SQUAD 8 ENSCO ATLAS	WB-1A (L,S)	WB-3B WB-3B (L,S)	TB-3A TB-3A (S)	TB-3A TB-3A (S)	TB-3A TB-3A (S)	TB-3A TB-3A (S)	TB-3A TB-3A (S)
SQUAD 9 SEA TRADER	K0921-KU008A	K0919-HB008A	K0919-HB100A	K0919-HB100A	K0909-HB008B K0909-CD008A	K0909-CD008A K0909-CD0010A	K0909-CD0011A

* SCHEDULE DEVELOPED DAILY AND IS SUBJECT TO FREQUENT CHANGE; L-LAND MANAGER R- CULTURAL RESOURCE S-ANAD STREAM





JUNE 19, 1990

**KODIAK AND VICINITY
SQUAD LOCATION**



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10

June 12, 1990

Clipboard
COPY

REPLY TO
ATTN OF:

Restoration Planning Office, A00

MEMORANDUM

SUBJECT: Technical Assistance on Restoration Planning for the
Exxon Valdez Oil Spill

FROM: Brian Ross *Brian Ross*
Restoration Planning Team Leader, A00

TO: Hal Kibby, Chief
Ecotoxicology Branch

Through: John Armstrong
Puget Sound Estuary Program, Region 10

You asked that I outline the amount of technical assistance that we would like you to be able to provide to Region 10's restoration planning efforts for the remainder of the fiscal year. As you know things are very fluid in Alaska and constantly changing, consequently the actual requests may vary somewhat from what I have outlined below. At this time, we are interested in your assistance for:

1) Approximately 1 week in late June to early July to assist in setting up a marsh cleanup/restoration project in the Bay of Isles. As you know, this project would primarily evaluate experimental clean up methods for salt marshes (where cleanup might not otherwise occur). As you, Hap Pritchard, and I discussed, we would piggy-back some restoration options on to the cleanup efforts. (I would expect that you could visit the restoration feasibility project for Fucus during this time as well, to check on its initial set up and to determine whether any fine tuning is needed.)

2) Approximately 2 weeks to assist in surveying other marshes for potential restoration actions in FY91. This survey would take a quick look at marshes throughout Prince William Sound and the Gulf of Alaska, and provide us with advice on the need for restoration either by re-planting or use of fertilizers. The timing of this trip could be any time that you think most appropriate, but I imagine it should be in late July or early August. You could combine this work with an inspection of the Bay of Isles marsh project, as well.

3) Approximately one week in late August to early September to assist in the biological sampling of the Bay of Isles marsh project. At the same time we would ask that you visit the Fucus project again to review its progress and provide advice on whether we need to consider potential restoration projects in FY91.

4) Approximately 7 to 10 days of consulting time for technical advice on a variety of restoration planning issues as they come up. We would anticipate this might involve one or two trips to Anchorage on fairly short notice.

Depending on decisions about the overall degree of EPA's involvement in restoration planning, we would also anticipate some assistance in early FY91; in particular, your involvement in further technical workshops.

Please let me know whether you can be generally available to assist us in these efforts. Of course, we realize that your actual availability will have to be determined at the time of each request.

June 12, 1990

MEMORANDUM

SUBJECT: New Exxon papers on environmental recovery of Prince William Sound

FROM: Brian D. Ross *Brian D. Ross*
Restoration Planning Team Leader, AOO

TO: John Armstrong
Puget Sound Estuary Program, Region 10

Last week, I attended a presentation at which Exxon presented two newly-printed papers they had commissioned of three scientists from the United Kingdom. The first paper, *Natural recovery of cold water marine environments after an oil spill*, was presented at the "Thirteenth Annual Arctic and Marine Oilspill Program Technical Seminar (the report does not state who held this seminar or where or when it was held). The second paper, *Environmental recovery in Prince William Sound and the Gulf of Alaska*, is called a supplement to the first paper and presents the field observations of the authors in Alaska following a two-week visit to the oil spill area this April. Both papers are dated June 1990. It is unclear whether either paper has received any scientific peer review. Both papers are attached for your reference.

These document may be of particular interest as an overview of the scientific approach Exxon is likely to take in defending any claim for restoration costs the agencies may present. Some of their key points are:

1. Hydrocarbons are natural components in the marine environment, and in any case oil not a persistent toxic compound;
2. Mortalities were small compared to natural causes or harvest-related mortality;
3. No species have been lost;
4. Scale: vast areas remain unaffected by the spill, and will serve as reservoirs of organisms to replace losses;
5. The ecosystem is constantly changing, and as long as populations after the spill remain at levels within their range of natural variability it is unnecessary to consider anything other than natural recovery;

6. Long-term impacts should be disregarded because experience from other spills indicates they will be minor and because they are difficult to prove definitively in any case;
7. "The marine environment is a lot tougher and more resilient than most people give it credit for."

Many of these arguments will sound familiar, of course. That direct mortalities may have been smaller than some sources of natural mortality does not mean that the populations should or can sustain additional stresses; that no species have been lost only means that the Endangered Species Act may not have been violated; that "vast areas" were not hit by the oil spill does not diminish the 1,000-plus miles of shoreline that were significantly oiled; and that ecosystems naturally change does not mean that any kind or degree of change is "OK" (extinctions are within the range of natural variability, but are nevertheless against the law when induced by humans!).

The definitions of "clean" and "recovery" put forth in the first paper are worth your detailed review and thought. In brief, they advance a functional definition for both: "Clean" to them does not require the complete removal of oil from the environment, but rather means no impact to overall ecosystem functioning. (Choice of scale will be the important factor here. This is an old approach with the oil industry in Alaska - as has been the case on project after project, the agencies and Exxon will likely disagree as to the appropriate scale.) "Recovery" was defined in their verbal presentation as "the re-establishment of a healthy biological community in which the plants and animals are functioning normally" (although in their view there do not have to be the same species or age structures as existed pre-spill). As you can see, both these definitions seem fairly convenient for the arguments outlined above.

June 8, 1990

MEMORANDUM

SUBJECT: Public availability of data from the Natural Resource
Damage Assessment for the Exxon-Valdez Oil Spill

FROM: Brian D. Ross *Brian D. Ross*
Restoration Planning Team Leader, AOO

TO: Conrad Kleveno
Coordinator, Alaska Restoration Task Force

The lack of public availability of data from the Natural Resource Damage Assessment (NRDA) studies for the Exxon-Valdez oil spill has been a controversial issue since soon after the NRDA studies were initiated last year. As you know, it is the position of EPA and the Trustee agencies that these data should be made available to all interested parties. This position has been stated publicly by spokespersons for these agencies on numerous occasions. It is my understanding that the NRDA information has not been released to date, despite the agencies' positions on the matter, primarily because of concerns on the part of the U.S. Department of Justice and the Alaska Department of Law.

The Restoration Planning Project has been more open to public participation than any other aspect of the NRDA process. Since late March 1990, the Restoration Planning Work group (RPWG) has held a public symposium in Anchorage and eight public scoping meetings in Alaskan communities directly affected by the oil spill. Almost without exception, the issue of access to the NRDA results has been raised at these events by members of the public. The RPWG response has been that the agencies themselves agree and would like to see the information made public, but that RPWG does not make these decisions and the issue is out of our hands.

It is safe to say that this represents the most universal public comment we have received. The public interest in the NRDA data will be documented in our upcoming restoration planning report. In the meantime, a summary of the public comments from one of our restoration scoping meetings is attached to this memo as an example for your information. As documented in this meeting summary (see its final entry), the public is not only frustrated at the lack of access to the NRDA data itself, but their ability to provide meaningful comments to RPWG on the restoration planning process is severely constrained as well.

It is my belief that the EPA, as coordinator for the restoration planning process, is in a position to lobby more vigorously for the public release of the NRDA data than might otherwise be the case. However, to be effective, any EPA recommendation along these lines should come from the policy level. If the Office of Water were to formally advance and pursue such a recommendation, it appears clear that public opinion, at least within the state of Alaska, would be in support of the agency.

ATTACHMENT

cc: A. Ewing
J. Armstrong

*Summary prepared by
Kirsten Ballard, USEPA*

Summary of Comments From the
Public Scoping Meeting Held in

DRAFT

Homer, Alaska April 18, 1990

Stan Senner, Alaska Department of Fish and Game, Sandy Rabinowich, National Park Service, and Kirsten Ballard, Environmental Protection Agency conducted the meeting, which was held at the Homer Senior Center from 7:00 pm to 9:10 pm. Fourteen people attended, including people from the State of Alaska Departments of Fish and Game, and Natural Resources, a member of the Cook Inlet Seiners Association, local fishermen, a local artist and Chairman of the Pratt Museum of Natural History, a staff member of the Alaska Maritime National Wildlife Refuge, a local shop owner, and a member of a local subsistence fisheries citizens group.

Summaries of comments, questions and suggestions made by participants:

-The need for in-the-field research/monitoring vessels was expressed. It was suggested that this type of vessel could combine research, recovery and restoration and at the same time take steps to lessen impacts of a future oil spill.

-It was suggested that funds should be allocated for oceanographic research by enhancing existing facilities. This could be combined with enhancing or creating educational institutions and public ocean information centers (in conjunction with oil spill response centers).

-Long Term Ecological Research sites should be identified. This is a program sponsored by the National Science Foundation. Funds should be obtained to support on-going research at these sites.

-A system to guarantee funding for assessing the damage oil pollution imposes on the environment. This could be in conjunction with or in addition to a fund to continue research into the effects of EVOS. With the increase in tanker traffic, further research into cleanup techniques was discussed as applicable to inevitable future spills.

-A satellite communications system for research vessels was proposed. If such a system were in place, research/response vessels could be directed ASAP to remote spills.

-Expanding public education regarding oil spills. This could be accomplished by hiring a contractor to go to local schools for education and/or supporting museum exhibits throughout state and nation. These could be combined with another educational program to give people a sense of personal responsibility about energy use.

-Concern was raised regarding the areas which were impacted

by oil, then by cleanup efforts, and now possibly further cleanup. Further disturbances of isolated areas should not be encouraged. This may need to be combined with management options to reduce impacts. It was suggested that baseline data should be gathered now before projected increases in people use that the spill area will receive as a result of the spill. This data could be used regarding recreation so that good management decisions could be made to help ensure good visitor experience. Ways to minimize further impact should be explored--e.g. expansion of existing facilities rather than construction of new facilities or creation of further bureaucracy.

-This acquisition of timber rights was discussed at length. Ideas included:

- Buy up a 300+ foot buffer zone around streams and areas visible from the coast, etc. in areas which are selected for logging to reduce environmental and visual impact.

- Support tree planting efforts (construction of a new nursery/expansion of existing facilities, labor, etc.) in areas which have already been logged or which will be logged for restoration.

- Buy up in-holdings or timber rights which are within State and Federal protected areas (parks, refuges, etc.).

- Buy up Net Operating Losses (NOL) timber rights.

- Support a change in the law to prevent further sale of NOLs to protect areas.

-Several ideas regarding the enhancement of fishery resources in impacted areas were expressed. These included the construction of new salmon hatcheries. It was also suggested that rather than impacting the wilderness further, support for the expansion of existing hatcheries was a better way to enhance the fishery resource while minimizing recreational/aesthetic impact. In areas where wild stocks have been impacted, it was suggested that rather than changing the stock in those streams, available enhancement techniques for stream and stock enhancement should be used to expand/restore wild stocks without replacing them with hatchery stocks.

- Support/implement fisheries studies 9&10 from NRDA, which have been cancelled or discontinued.

- Support special cleanups in especially pristine areas was suggested as a restoration project. These cleanups would use techniques which have been demonstrated to minimize the impact on the beaches and enhance natural or enhanced restoration.

Acquisition of new lands came under favorable discussion. Among the ideas presented:

- To restore the wilderness experience, new, unspoiled areas must be acquired.
- Acquire seabird colonies currently in private holdings. This helps birds and creates public education opportunities.
- Protect timbered slopes to protect marbled murrelet nesting areas.
- Acquire habitat for migratory birds along the Pacific flyway, such as wetlands in California, and possibly monies to work out an international effort to protect habitat in South American countries. The idea of spending dollars outside of Alaska was met with initial objection until it was discussed that if the birds that we spend millions of dollars to restore here do not have a place to winter over, then the dollars here could be spent in vain. The participants then concurred that this could be an appropriate project.
- Support further studies to expand knowledge of other migratory birds to provide information regarding other wetlands/habitat for protection/acquisition.
- Review all sea lion and seabird colonies with respect to land status, the ultimate goal being acquisition or protection of these areas.
- Review Middleton Island for consolidation and acquisition.
- The concern regarding the need for future and long term studies was recurrent. Some say that the need for long term studies on the effects of EVOS has already been established. After "the thrill is gone" from this spill, the participants expressed concern that necessary studies would no longer be funded. The idea to establish a trust fund and manage it so that monies are perpetually available for funding research, restoration, recovery, acquisition and enhancement projects was met with enthusiasm by the participants.
- Cleanup as it relates to restoration was discussed at length. It was suggested that cleanup should be studied on an experimental basis, money for local research on cleanup and restoration techniques, and support for the development of an informational repository for cleanup technologies developed during this and other spills to avoid the "re-invention of the wheel". It was pointed out that such projects must be related to the restoration process.

-Plastics problem is synergistic with the oil, especially in low-energy areas. The plastics remain a persistent problem and tend to collect oil. It was suggested that areas could be restored by cleaning up plastics (nets, line, floats and other assorted flotsam). This could be combined with the support of solid waste options to cut down/eliminate debris at sea.

-The recent placement of sea lions on the threatened species list brought several ideas under discussion. Fisheries and tour boat operations will be feeling and impact. It was suggested that restoration funds should support studies to establish the amount of impact fishing and oil has had on sea lions. Funds could also be used to support research to identify the cause(s) of the sea lion's decline before establishing restoration procedures.

-The concept of removing introduced predators at bird rookeries to enhance recovery of these colonies (replacement) was met with a favorable response and supported by participants. Introduced predator elimination has been documented as a successful operation (literature available).

-It was suggested that previously logged/deforested areas could be reforested or replaced (planting) or new areas acquired/protected (e.g. Afognak Island).

-The participants seem unanimous in their frustration regarding the inaccessibility of NRDA results. Concern that potential restoration projects or need could possibly be overlooked was expressed. Participants felt they could not evaluate all subjects (cleanup, damage assessment, and restoration, among others) without the whole picture available.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10

June 7, 1990

REPLY TO
ATTN OF:

AOO/RPO

MEMORANDUM

SUBJECT: Outline for Restoration Planning Report

FROM: Restoration Planning Work Group

TO: Management Team

We are transmitting for your information the outline for our Restoration Planning Report. Currently, Restoration Planning Work Group members are actively drafting various sections of this report in accordance with ideas set out in this outline. If there are any substantive suggestions, please contact us as soon as possible.

We are working to forward a complete draft of the report itself to you during the last week of June. We will be requesting your timely review of the entire document at that time.

DRAFT DRAFT DRAFT

Outline for Restoration Planning Report

6/7/90 VERSION

Page 1

This page shows an overall outline for the Restoration Planning Report. Detailed outlines of each chapter are presented on the following pages.

- I. Executive Summary (if length justifies)**
- II. Introduction**
- III. Public Participation Activities**
 - Public Symposium Summary
 - Public Scoping Meetings
- IV. Summary of April, 1990 Technical Workshop**
- V. Literature Review**
- VI. 1990 Feasibility Studies**
- VII. Development of Restoration Options/Alternatives**
- VIII. Future and Ongoing Restoration Planning**
- IX. Appendices**

DRAFT DRAFT DRAFT

Outline for Restoration Planning Report

6/7/90 VERSION

Page 2

I. EXECUTIVE SUMMARY (if necessary)

Make-up of this Restoration Planning report

II. INTRODUCTION

(Purpose of document, contents, and structure of report)

- A. The Exxon-Valdez Oil Spill
- B. Relationship between clean-up, N.R. Damage Assessment, and restoration (incl. definition of restoration, and CWA/CERCLA discussion)
- C. The Restoration Planning Work Group
 - Ecosystem approach to restoration planning(Philosophy & structure of RPWG)

III. PUBLIC PARTICIPATION ACTIVITIES

- A. Introduction
 - Emphasis on public participation/commenting opportunities
- B. Synthesis of March 25, 26 Public Symposium
 - Purpose
 - Presentations (Review/synthesis of major concepts presented)
 - Synthesis of public comments received at symposium
- C. Summary of April/May, 1990 Local Public Scoping Meetings
 - Purpose and summary of RPWG opening presentation & agenda (describes trilogy)
 - Comments received in each community (organize by trilogy)
- D. Other public comments received
 - Narrative summary

DRAFT DRAFT DRAFT

Outline for Restoration Planning Report

6/7/90 VERSION

Page 3

IV. SUMMARY OF APRIL 1990 TECHNICAL WORKSHOP (sanitized)

- A. Purpose (reason for NRDA results at this workshop not being open to public)
- B. Participation
- C. Outcome
 - Identification of information needs with respect to restoration (straight list, no reference to NRDA association, note that it is not a complete list)
 - Potential restoration ideas/approaches and 1990 feasibility study proposals developed

V. LITERATURE REVIEW

- A. Purpose
 - Call for public recommendations on further lit. to review
- B. Current status
 - Databases/keywords searched
 - Initial screening done; pertinent references being acquired (Biblio in Appendix)
 - Description of review process with respect to identification of restoration techniques, feasibility studies, and general applicability in Alaska
 - Availability of Phase I Literature Review Report (as closing remark)

VI. 1990 FEASIBILITY STUDIES

- A. Introduction/Purpose
 - Relationship to overall ecosystem approach to restoration planning
 - Expectation of increased emphasis on F.S. projects in 1991
 - General factors used in selecting 1990 projects
 - Brief description of individual 1990 feasibility studies (reference to SOYB)
 - How results will be used/public availability of results (? - awaiting response from Management Team)

DRAFT DRAFT DRAFT

Outline for Restoration Planning Report

6/7/90 VERSION

Page 4

VII. DEVELOPMENT OF RESTORATION OPTIONS/ALTERNATIVES [AND DECISION KEY]

A. Introduction

- Present CERCLA requirements, range of options including no action and options that reflect varying rates of recovery, management options, and acquisition (consider technical availability of technique, net benefit)

VIII. FUTURE AND ONGOING RESTORATION PLANNING

A. Introduction (explain long term goal of "Restoration Plan" and state process is still ongoing)

B. Public participation

- Continuing opportunities for public participation/outreach (brief general discussion)

C. Technical Work (ongoing)

- Peer review process for design/results of technical studies
- Ongoing feasibility studies

F. Development of ultimate restoration plan

IX. APPENDICES

A. Symposium agenda

B. Bibliography: most relevant references from initial lit. search

C. RPWG membership

May 30, 1990

MEMORANDUM

SUBJECT: Justification for the typing chairs I purchased in early May:

FROM:  Brian Ross, Restoration Planning Office

TO: Gene Burton, AOO/A

As you recall, I had asked you at the end of April about this. We (the Oil Spill Restoration Planning Office) had just received our initial computer work stations at the time, and needed two additional secretarial-type chairs for them right away (lack of appropriate chairs in the office was seriously limiting productivity on the new equipment). I asked whether I could purchase chairs directly from a local vendor. You said that direct purchase was appropriate as long as the total price was within our limits for petty cash (\$150.00 at the time).

I was out of the office for TQM training in Seattle from May 1 - 4, returning on Friday night May 4. I purchased two appropriate chairs over the weekend at the Price Savers outlet in Anchorage (where the price, \$59.95 each as I recall, was considerably cheaper than the local office furniture stores for the comparable item). It was not until I arrived back in the office on Monday, May 7, that I received your memo to the AOO staff, dated May 2 (when I had been in training in Seattle), regarding a new purchasing policy that was taking effect immediately. That new policy required all purchases to be pre-approved through the Region 10 finance office. Of course, by that time, I had already purchased the chairs based on our previous conversation.

Since your May 2 memo, the Region 10 policy has changed again, allowing purchases up to \$50.00 without pre-approval from the Regional Office. Whether this latest iteration represents the final word on the overall policy, I have no idea. Nevertheless, I suppose that the real issue is whether the purchase of the chairs was in accordance with the policy in place at the time the purchase was made. In hindsight, it was not, since it occurred after your May 2 memo advising of the new policy. However, I argue that the purchase was in fact in accord with what I knew to be the purchase policy in place at the time. It seems to me that the Regional Office should be willing to allow some leeway when making relatively radical and sudden policy shifts, especially with respect to such changes filtering down to everyone in a field office 1,500 miles away! In any event, the chairs are now "used" and cannot be returned. If Finance is unwilling to reconsider their disapproval of this purchase, I will immediately remove "my" chairs and initiate paperwork for a purchase order for two new ones. The time involved for both AOO staff and the finance office to process this new order will almost certainly exceed the \$120.00 value of the existing chairs. In addition, it is a good bet that the new chairs will cost the Government more than this amount directly. Finally, let's not forget the reduced productivity that will ensue in the interim as my staff tries to type standing up or kneeling on the floor, while we wait for new chairs to be ordered and shipped. This is certainly TQM in action!

437 E Street, Suite 301
Anchorage, Alaska 99501
(907) 271-2461
FAH: (907) 271-2467

Oil Spill Restoration Planning Office

TO: GENE

OFFICE/PHONE: _____

FROM: BRIAN

DATE: 5-30-90

PAGES (incl. cover): 2

~~GENE~~
MESSAGES:

PLEASE NOTE : THIS IS MY
"FOR THE RECORD" FRUSTRATION WITH FINANCE,
IT IS NOT IN ANY WAY DIRECTED AT
YOU, GENE! ~~USE~~ USE IT AS YOU WANT!

BRIAN

MEMORANDUM

SUBJECT: Exxon Valdez Oil Spill Weekly Ops Meeting at FOSC Headquarters.

5/30/90

FROM: Kirsten Ballard, AOO/A 

TO: Brian Ross, Restoration Planning Team Leader, AOO/A

The meeting was brief this week. Items discussed were as follows:

USCG:

- Sent a letter to Exxon requesting that the Seward and Kodiak areas be completed by early July, Homer by late July/early August. This is to allow a maximum amount of time to be devoted to PWS to work on "chronic problems" (see attachments). Finishing work in Seward, Homer and Kodiak will also allow the assessments scheduled to begin August 15 to proceed ASAP.
- Ushagat island is being worked on today, 5/30/90. There is concern about some bird nesting colonies at the end of the segment, but if the segment is not worked when weather permits, in addition to pushing the time window, this segment may not receive the treatment it needs.
- Treatment is expected to begin in Kodiak in the next 7-10 days
- The comments are in regarding bioremediation in areas where tar mat removal has been completed. It has been decided that it would be best if the Monitors assess when Customblen will be applied in these areas. This change-over in the decision making process is currently under way (meeting(s) scheduled for 6/1). It is hoped that this will speed the completion of the work orders, and the treatment process in general.
- They are currently about 50 subdivisions behind in the work orders. Most of these are anadramous streams.
- A SAT group will be sent out to assess segments where the supra-tidal area was covered with snow during the spring beach walk.
- The balloons as wildlife deterrents do not seem to be terribly effective. Balloons with rattles is the next step. Some members volunteered to stay on the beach with bonfires and refreshments to deter the wildlife until the critical toxic period passed.

DOI

- The multi-agency/corporate (USCG, BIA, Exxon, misc. Native Corps., etc.) MOA regarding how cultural resources will be protected, as directed by section 106 of the Historic Preservation Act, has been signed. This agreement has been in the works since before the spill.
- Updated computer maps referring to land manager/owner status have been forwarded to the FOSC.
- Comments from the various bureaus regarding the application of Corexit continue to come in. A response from the RRT as to whether or not Corexit application will proceed is due on June 4.
- A TAG resolution meeting was held with NOAA last Thursday.
- Eagle survey in Kamishak was completed
- NPS processed 12 ANADSCAT segments last week, which brings the to-date total to 65.
- BIA is working on permits for treatment for four segments which are native allotments.

EPA

- Inipol Monitoring Program- Preliminary results are in regarding the toxicity of the ammonia in the water. Ammonia concentrations are apparently peaking at 19 hours after treatment. No effects have been measured on oyster larvae subjected to water samples taken from various areas. Toxicity remained low even in areas where the Customblen was mistakenly applied at 5 times the prescribed concentration (contact Rod Parrish at 271-2461 for more details).

NMFS

There has been a slight misunderstanding regarding treatment in seal haul out areas. Secondary haul out areas, when there are no seal present, are OK'd for treatment. NMFS should be checked with first, however, to clarify secondary status.

IN GENERAL:

- Al Kegler from ADEC was present. There was no report.
- NOAA had no report.
- RADM Ciancaglini will be back in town on the 4th or 5th of June.

MAILING ADDRESS:

U.S. Department
of Transportation

United States
Coast Guard



Federal On Scene
Coordinator
U. S. Coast Guard

Key Bank Bldg.
601 W 5th Ave.
Suite 500
Anchorage, AK
99501
(907) 277-3833

16465
25 May 90

Mr. Otto Harrison, General Manager
Exxon Company, U.S.A.
P.O. Box 196601
Anchorage, AK 99519-6601

Dear Mr. Harrison:

During the past three weeks, I have seen a variety of oiling conditions throughout the operating area with members of your staff. Based upon these trips and a review of signed work orders, I believe the work which needs to be done in both Seward and Kodiak can be accomplished by early July. Work orders in the Homer area can be finished by late July/early August. This will then leave us with approximately 45 days to focus in Prince William Sound with adequate resources to work on chronic problems.

In developing your work schedules, please plan to finish at the times I mentioned. If you would like to discuss this in greater detail, I am always available.

Sincerely,

D. ZAWADZKI
Captain, U. S. Coast Guard
Chief of Staff
Federal On Scene Coordinator
By direction

Copy: Randy Bayliss, ADEC
Gary Hayden, ADEC

U.S. Department
of Transportation

United States
Coast Guard



Federal On Scene
Coordinator
U. S. Coast Guard

MAILING ADDRESS:

Key Bank Bldg.
601 W 5th Ave.
Suite 500
Anchorage, AK
99501
(907) 277-3833

16465
26 May 90

Mr. Otto Harrison
Exxon Company, U.S.A.
P.O. Box 196601
Anchorage, AK 99519-6601

Dear Mr. Harrison:

During a joint USCG/EXXON/ADEC tour of Prince William Sound cleanup sites, all parties agreed that two additional pieces of equipment are needed. First, storm berm relocation and mechanical tilling prior to bioremediation of selected subdivisions requires a large tracked vehicle(s) to accomplish the results efficiently. We have been informed that the earliest a large tracked vehicle will be available is June 15 which is too late. Second, a two pack hot water flush system can also be used in selected subdivisions to remove large area pooled mousse accumulated in sediments where spot washing is indicated. The Landa units are proving to be inefficient in removing pooled mousse from sediments, but are effective where the oil is located on bedrock, boulders or logs.

Please take the necessary steps to make this equipment available in Prince William Sound as soon as practical. If you have any questions, I or my staff will discuss these issues.

Sincerely,

D. ZAWADZKI
Captain, U. S. Coast Guard
Chief of Staff
Federal On Scene Coordinator
By direction

Copy: Randy Bayliss

TO:

[REDACTED]
H.O. Jahns

FROM:

R. Parrish
J.R. Clark

RP
JRC

Date: 5/29/90

Preliminary results from the Inipol and Customblen treatment of Site KN 135A show that (1) ammonia concentrations peaked in the water sample collected for toxicity tests 19 hours after treatment and (2) no significant toxicity to oyster larvae was measured in any water sample tested.

Ammonia concentrations in seawater samples assayed at the toxicity testing laboratory in Tiburon, CA, increased from approximately 0.2 parts per million pretreatment to approximately 1.2 parts per million in the sample collected 19 hours after treatment. Concentrations of ammonia in the next two samples (32 and 57 hours post-treatment) decreased to background, or approximately 0.2 parts per million. These concentrations will be compared with ammonia measured in samples collected for characterization of ammonia at the field site.

Toxicity tests with oyster larvae and water samples collected before treatment and 1, 7, 19, 32, and 57 hours post-treatment revealed no toxicity; no significant mortality occurred nor was any aberrant development noted. Because ammonia concentrations reached their peak at 19 hours and because ammonia is the most probable cause of acute toxicity resulting from fertilizer applications, no adverse effect is expected in the remaining water sample (82 hours post-treatment).

cc. R.C. Prince
P.H. Pritchard
J. Lindstrom

-4 vessels are in PWS, 3 in Kenai district, 1 biorcmediation vessel is in training "today" (5/17).

Dept. of Interior

-4 segments have time constraints for work order completion in Kodiak zone. These may be done by helicopter.

-It was suggested that since there are only 3 segments/shorelines to be completed in the Seward zone, that Nat. Park Service could provide the monitoring for "everyone" there.

-Resolution on 10 segments (regarding cultural resources) and the associated addendum's continues to be worked on.

-Permit application requirements are being mandated down to BIA, NPS, etc.

-OAS certification requirement for Exxon leased planes has been waived for DOI employees.

NOAA

-Is looking into maintaining weather stations over this next winter in PWS and elsewhere. This may be the only source of winter storm information that will be available for some areas.

-Net environmental benefit analysis (NBEA) team is trying to get out to PWS today. Yesterday (5/16) weather was bad.

-Samples of oil from north and south Knight Island were obtained (when was not stated) and are undergoing NBEA and toxicity evaluation currently.

-Chapter 6 of volume 5 regarding the bioassay study of Corexit 9580 has been received by RADM Ciancaglini. NOAA promised to have the review of this completed by the end of today. Use of Corexit will still have to go through the RRT, who is meeting Monday, May 21.

OSHA

-Went to Seward with state Dept. of Labor to inspect vessels for worker safety. Apparently, the state just "milled around".

-The state has now requested beach monitors, similar to those DEC has on site. This request has been denied - 311k funds are not appropriate for DOL beach monitors. DOL has/will be requested to work something out within the state departments.

-Use of respirators during the application of Inipol has been deemed optional. Health sampling last year indicated that the highest amount of butoxy ethanol measured was 3 ppm. OSHA allowable limit is 25 ppm.

USFS

-Chief was out in the sound this last week.

-Green Island looks much improved.

-USFS is waiting for BIA approval on some of its lands.

-A guidance document as to how to amend work plans on the spot as it relates to cultural resources is expected to be to the RADM by the end of the week.

In General:

-Since the Ops Steering Committee meeting does not seem to be drawing the public it was intended to (see memo RE: Steering Ops mtg of 5/8/90), RADM Ciancaglini suggested that if the turnout is similar on 5/22/90, that the meeting time be changed to 1600, 1700 or 1800 hours.

-Possibly the last ISCC meeting was this last 5/15. This will be discussed further.

-NTSB's final report regarding EVOS should be out this next week.

-Captain. Hazelwood's trail begins in Long Beach, CA next Monday, 5/21/90.

Memorandum

Subject: Exxon Valdez Oil Spill Operations meeting, 5/17/90

To: Brian Ross AOO/A

From: Kirsten Ballard AOO/A

Items discussed at the Operations meeting are as follows:

USCG

-RADM Ciancaglini asked if anyone from the state was present, no one responded. He mentioned that the state had been invited to re-join the meetings.

-169 miles of beach has been reported as unsurveyed. This was explained as being the difference of portions of segment lengths being unsurveyed. The total amount surveyed as it relates to the data base creates the difference (10 or 15 feet along the beaches here and there has added up). It has not been determined whether or not the data base will be adjusted or if these portions will be re-done.

-71 segments remain to be assessed. Most of these are in Kodiak.

-Type of oiling present as of May 13 is as follows:

SUBDIVISIONS:

- 2 have subsurface oil only.
- 349 have surface and subsurface oiling.
- 479 have surface oil only.
- 188 have no oil.

Of these subdivisions, 408 have No Treatment Recommended. 540 have treatment requested. This includes any type of treatment (tarmat removal, bioremediation, etc.)

-In PWS, approximately 30+ segments have been completed (work order completed, subject to re-assessment. Also see below). These segments have been primarily completed by tarmat removal/manual removal.

-The *Dan Dollinger* is being outfitted in Seward for bioremediation. First application on KM-124 is expected on 5/18/90 in the am.

-The subject of semantics, and how "completed" will be interpreted by the public in reference to beach cleanup was discussed at length. The USCG considers a segment "completed" when the work order has been met. A completed segment is subject to re-assessment, beginning August 15 (ideally). It was decided that a caveat would be added to the public handouts to explain that a beach is subject to re-assessment and is not necessarily finished when the work order is fulfilled and the segment is designated as "completed".

-The work schedule, as published (for the purpose of land manager oversight, etc.), is about 4-5 days accurate. Updates can be available twice daily.

STATE OF ALASKA

STEVE COWPER, GOVERNOR

DEPARTMENT OF FISH AND GAME

COPY

Oil Spill Restoration Planning Office
437 "E" Street, Suite 301
Anchorage, Alaska 99501
(907) 271-2462

10 May 1990

Mike Hayden, Coordinator
Oil Spill Damage Assessment,
Response, and Restoration
Alaska Department of Environmental Conservation
P.O. Box 0
Juneau, Alaska 99811-1800

Dear Mr. Hayden:

Several weeks back Doug Redburn advised me that you were taking over his Restoration Planning Work Group responsibilities on behalf of the Department of Environmental Conservation. Seven agencies, including DEC, are members of the work group.

Although I have begun to send things to your attention, we should meet to brief you on the activities of the Restoration Planning Work Group and discuss DEC's interests and participation. This is a rather timely matter, because I am responsible for developing a Reimbursable Services Agreement between our respective agencies that could provide FY 1991 support for DEC restoration activities.

Please give me a call at your earliest convenience to discuss a meeting. If you have travel scheduled to Anchorage in the near future, perhaps that would be a good chance to connect. The enclosed brochure will help bring you up to speed on our plans and process.

Sincerely,



Stanley E. Senner
Restoration Scientist

cc: Doug Redburn



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10

May 8, 1990

REPLY TO
ATTN OF:

MEMORANDUM

SUBJECT: Weekly Ops Meeting at USCG FOSC Headquarters

FROM: Kirsten Ballard

TO: Brian Ross

The following is a summary of the proceedings of the above mentioned meeting:

Department of the Interior

- DEC has applied for permits for radio repeaters on DOI managed lands
- They are continuing the Land Manager Identification process. This has turned out to be a very complex task.
- Fish and Wildlife Service is working with Exxon to place a USF&WS biologist in the sound to identify sensitive wildlife areas as they are encountered.
- Mention was made that it appears that a preference is being given to federal agencies regarding the use of bioremediation.

USCG

- If a land manager says no to the use of Inipol, USCG is assuming that the use of custom blend is alright.
- Land manager status of the intertidal zone is recognized as AK DNR. Exceptions may possibly be granted to native lands.
- Implied joint ownership (as with Chugach natives and cultural resources and the USFS) will be taken into consideration as to the land manager status position recognized.
- The Admiral will review all previously segments he signed off for the use of Inipol based on the above.
- Land manager monitors (LMM) on board cleanup (c/u) vessels is presenting a logistics problem. Adm. Ciangalini stated that if a LMM wants/needs to be present for their segment(s), and their segment constitutes only 1 or 2 days of the 2 week work schedule of the c/u vessel, that this person would be "stuck" on the vessel for the duration. He therefore proposed that since aircraft would be out to a vessel 2-4 times a week, that the LMM's come along for a spot check. An alternative was

since aircraft would be out to a vessel 2-4 times a week, that the LMM's come along for a spot check. An alternative was proposed from a participant that instead of just spot checking, that these 2-4 times a week aircraft visits be used to change out LMM's instead. The issue remains unresolved at this meeting. Adm. asked the participants to "trust the system".

- In addition, in places where 2 or more land managers manage a section of beach, it was suggested that these land managers get together and designate one LMM. This proposal was met favorably. It is assumed that this will take place.
- The question of "why is it difficult this year to designate a vessel for LMM's?". The admiral pointed out that to do so may not be an appropriate use of 311K funds, but that he would have it looked into. The NPS representative insisted that such a vessel should be designated so at least the NPS could fulfill its congressional mandate to protect NPS lands, and that the permits to access NPS lands would be violated if a NPS monitor and/or a LMM was not present during the application of bioremediation. The admiral requested to see the mandate NPS was referring to, and pointed out that the intent to comply with the permit(s) was there. Example given: that if weather precludes the placement of a LMM on site, operations should not be stopped/delayed. NPS stated that it was difficult to have confidence since many agreements for notification, etc. have not been adhered to.
- The Army Corps of Engineers will have to get involved in the proposed rock washing technique proposed by the state.
- Kodiak is creating a problem by continually submitting "priority segments" for SAT which does not adhere to the March 1 deadline the Admiral issued for the submission of these segments. A phase III and IV SAT is planned for Kodiak.
- No phase III or IV is planned for Kenai.

USFS

- USFS Chief to come to Anchorage. This is an in-house trip. However, he will be flying over PWS, weather permitting.
- Minerals Management Service will be bringing a group of about 27 people to fly into PWS.
- Exxon has applied for permits to work in/on USFS managed lands

- DNR has applied for a permit to test a "separate technology which is outside the spill" on Knight Island. This permit will be denied.
- Rock washing, as proposed by the St. of Ak. is to become an issue. USFS has numerous apprehensions regarding the use of placer mining rock washing in the National Forest. Testing and the potential effects on undiscovered cultural resources are two concerns. All agencies present concurred that rock washing would probably go through the same decision making process as bioremediation.
- The beneficial analysis will continue into rockwashing (NOAA included). The benefit of the oil recovered by rock washing is seriously questioned. The push by the state for rock washing is perceived as a change in attitude and is difficult to grasp.

OSHA

- State of Alaska will be denied access to Federally approved c/u vessels. St of Ak has admitted outright that inspections of c/u vessels is motivated by purely political reasons.

NOAA

- NOAA is impressed by Exxon's efforts towards the subsistence fisheries
- A 1-2 month turnaround is expected for the data from the subsistence fisheries to be analyzed.
- The rockwashing benefit analysis is ongoing. Report is expected by mid-June.
- John Knost (sic), NOAA Administrator is planning a trip to PWS on 5/9/90, weather permitting.
- The halibut tested appear clean for the opening on 5/2.

EPA

- ORD is in town today, and was in Fairbanks yesterday at the request of DEC to discuss with panels of scientists the decision on bioremediation.
- EPA continues to work with the state to work on a comprehensive monitoring plan by the end of the week.

* attachments-handouts from meeting.

INITIAL WORK SCHEDULE

MAY 1 – MAY 15

<u>SQUAD</u>	<u>LOCATION</u>	<u>MANUAL PICKUP</u>	<u>TARMAT REMOVAL</u>	<u>SPOT WASHING</u>	<u>TILLING</u>
1	EL010-A	X	X	X	X
1	IN032-A	X	X		
1	KN0102-A	X	X		X
2	KN0115-A		X		
2	KN0116-A	X			
2	KN0117-A	X	X		
2	KN0119-A	X			
2	KN0141-A	X	X		X
2	KN0141-B				
2	KN0301-A	X			
2	KN0301-B	X			
3	SE041-A	X		X	X
4	GR001B-B	X			
4	KN0016-A	X			
4	LS060-A	X			
5	MA002-A		X		X
5	MA003-A	X			
5	NJ001-A	X			
6	BA002-A	X	X		
6	EV051-A	X			X
6	FL001-A	X	X		
6	LA038-A		X		
7	KN0506-A	X			
7	KN0508-A		X		X
8	DA001-A	X	X		X

CLEANUP VESSEL STATUS (AS OF 0700 02MAY90)

TEAM #/NAME	LOCATION/MONITOR	DEPLOYMENT	CLEAN UP	CREW CH
(1) M/V CORINTHIAN	SEWARD (MK3 GAMBLE) S-82	4 MAY P.M.	PWS-UPPER LOWER PASS	WHITTIER
(2) M/V YUKON RIVER	U/W (BM3 SYLVESTER) S-76	1 MAY P.M. U/W	HERRING BAY	WHITTIER
(3) M/V DON BOLLINGER	U/W (PSC SHIELDS) S-91	1 MAY A.M. U/W	RESURRECTION BAY	SEWARD
(4) M/V ARCTIC SALVOR	SEWARD (AEC VANDERPELS) S-68	4 MAY	PWS	SEWARD
(5) M/V ADELE CANDIES	U/W (MST1 RAINSFORD) S-66	1 MAY A.M. U/W	E/R NELLIE JUAN	VALDEZ
(6) M/V BEULAH CANDIES	U/W (MST3 MALAY) S-62	1 MAY A.M. U/W	E/R SHELTER BAY	VALDEZ
(7) M/V PACIFIC SEAHORSE	SEWARD (PS3 SCHULTZ) S-60	5 MAY A.M.	*PWS (GOA) LATER	SEWARD
(8) ENSCO ATLAS	U/W (SK1 HUBBARD) S-81	1 MAY P.M. U/W	NUKA BAY	SEWARD
(14) HELO	HOMER (CWO DREHER)	ANAD-KOKIAK	} <i>Drill doing Surveys</i>	
(15) HELO	HOMER (CWO McMAHON)	ANAD-KODIAK		

SSAT DAILY PROGRESS REPORT - 4/30/90

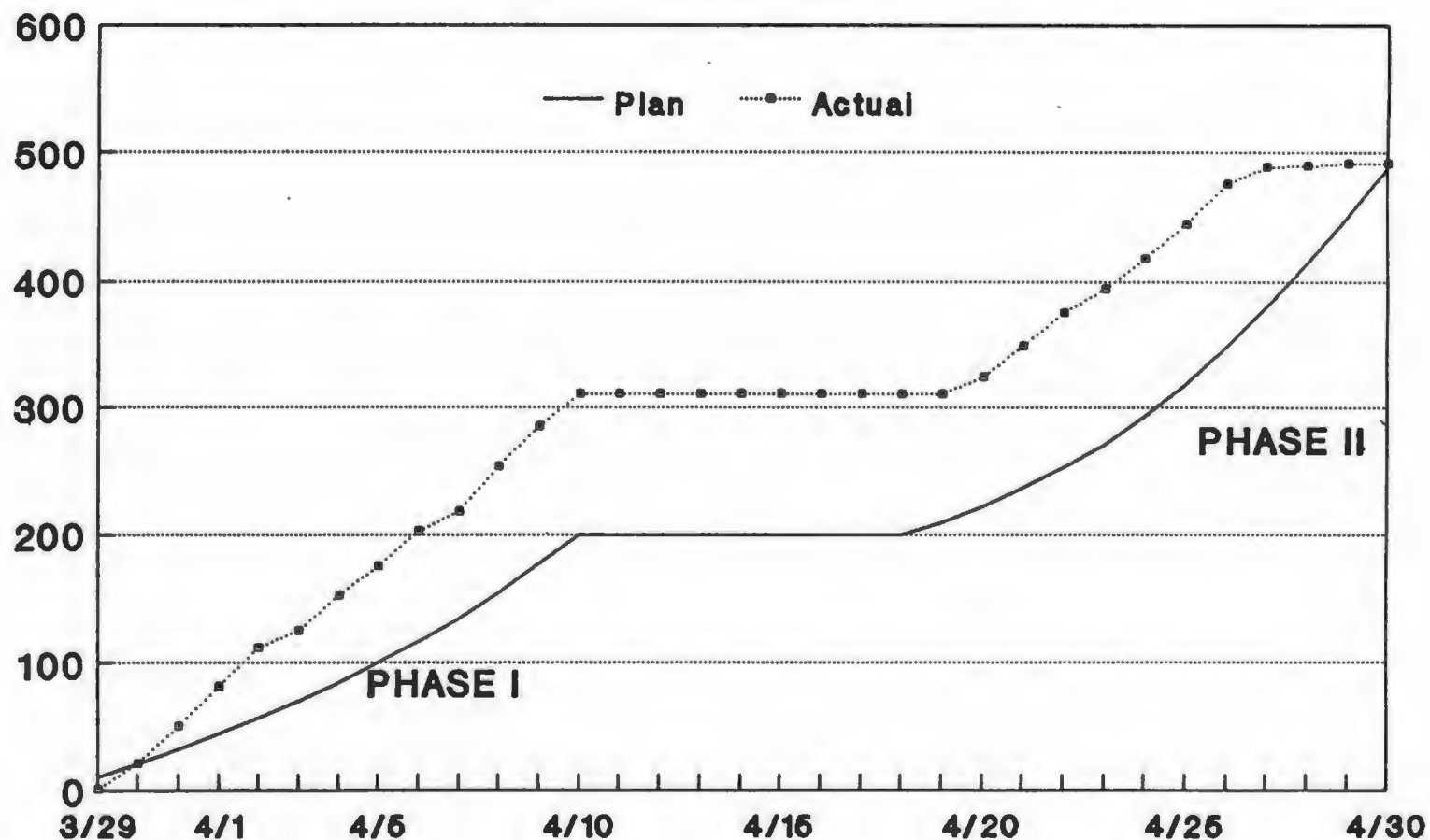
	PWS ACTUAL	PWS PLAN	KENAI ACTUAL	KENAI PLAN	KODIAK ACTUAL	KODIAK PLAN	TOTAL ACTUAL	TOTAL PLAN
NO. SEGMENTS ASSESSED	492	488	115	106	67	78	674	672
SEGMENTS THIS PERIOD	0	38	7	11	0	10	7	59
PHASE I & II TARGET		488		106		78		672

OILING LENGTHS IN MILES				
	PWS	KENAI	KODIAK	TOTAL
WIDE:	12.5	0.9	0.3	13.7
MODERATE:	27.2	2.9	1.0	31.1
NARROW:	45.5	6.4	2.1	54.0
VERY LIGHT:	154.5	34.9	13.7	203.1
NO OIL:	403.3	86.4	63.4	553.1
TOTAL:	643.0	131.5	80.5	855.0
NO. SEGMENTS INCLUDED:	462	63	54	579

COMMENTS:

SSAT PROGRESS SUMMARY - 4/30/90

PWS SEGMENTS

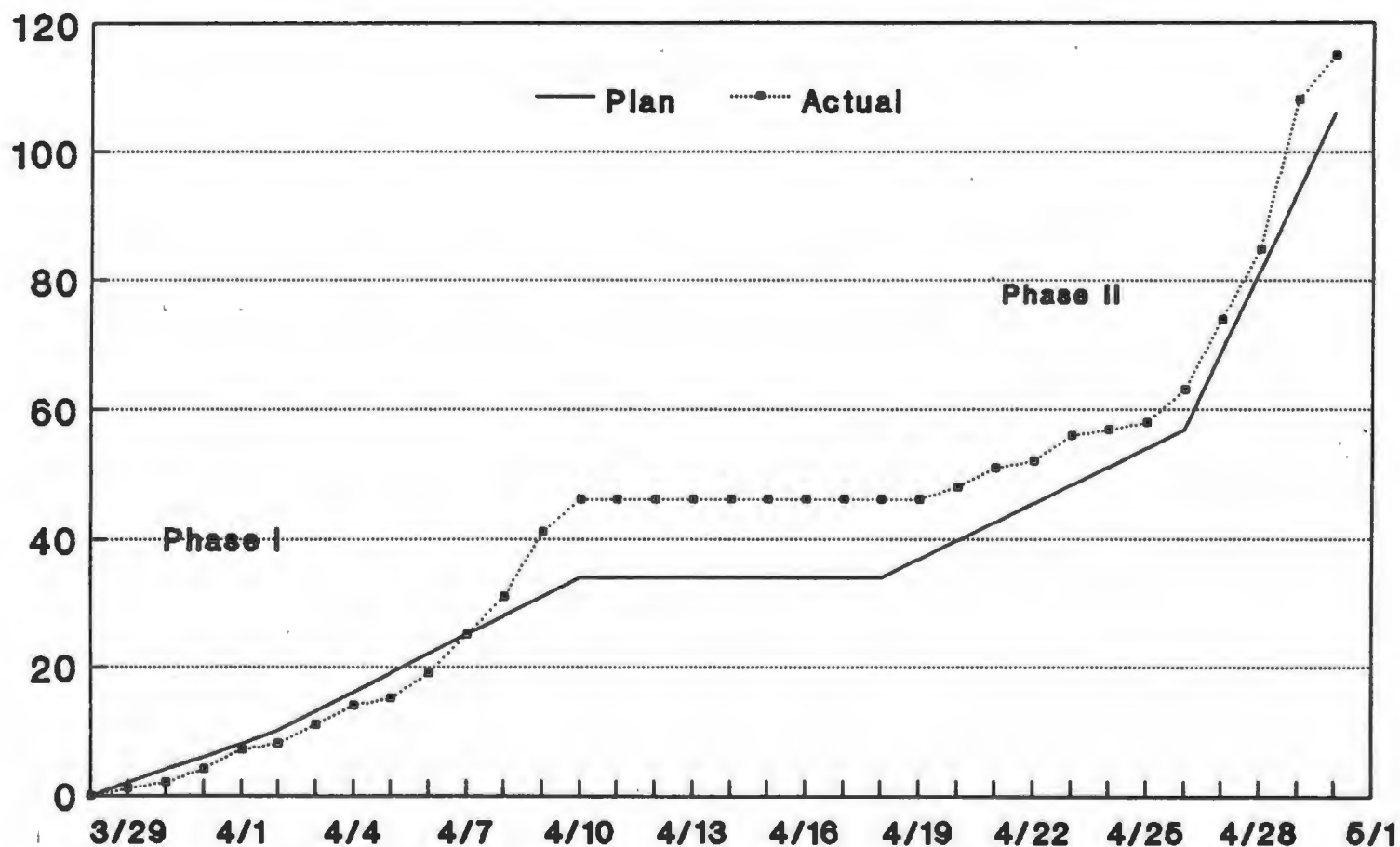


488 Segments to be surveyed
Based on reports received by 5PM on 4/30

Phase I - 16 teams
Phase II - 14 teams

SSAT PROGRESS SUMMARY - 4/30/90

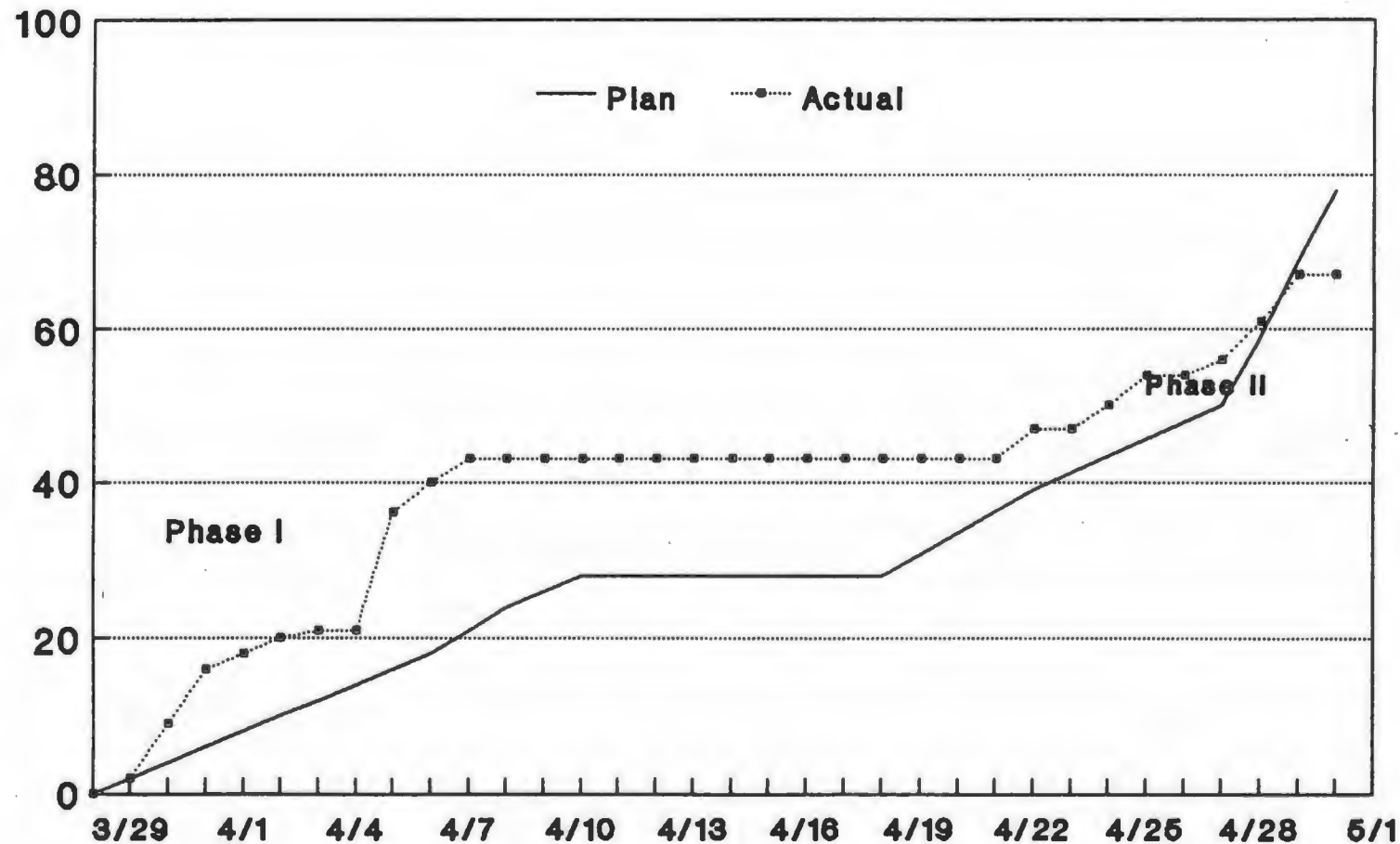
KENAI PENINSULA SEGMENTS



106 Segments In Phase 1 and 2
Based on reports received by 5PM on 4/30

SSAT PROGRESS SUMMARY - 4/30/90

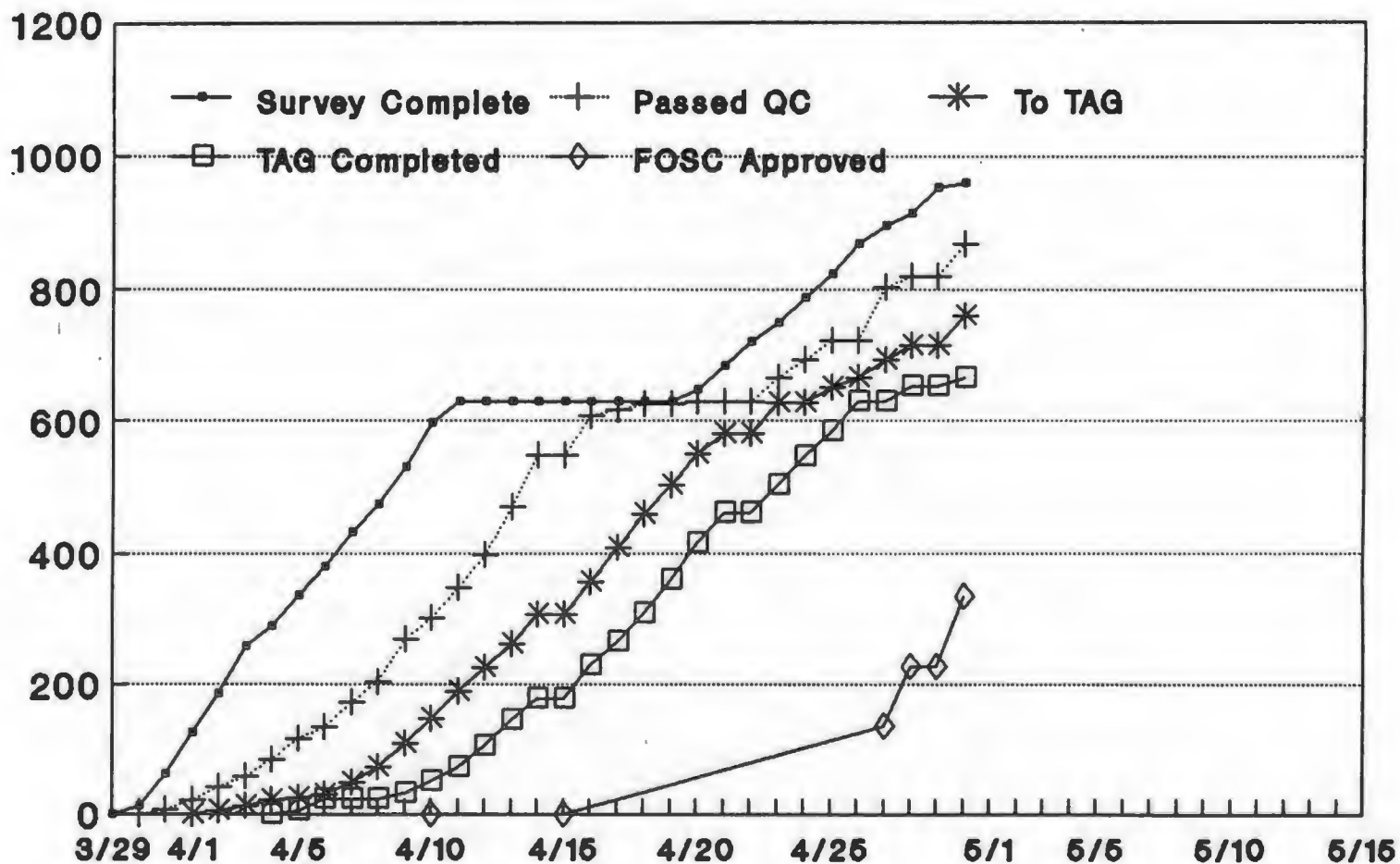
KODIAK & ALASKA PENINSULA SEGMENTS



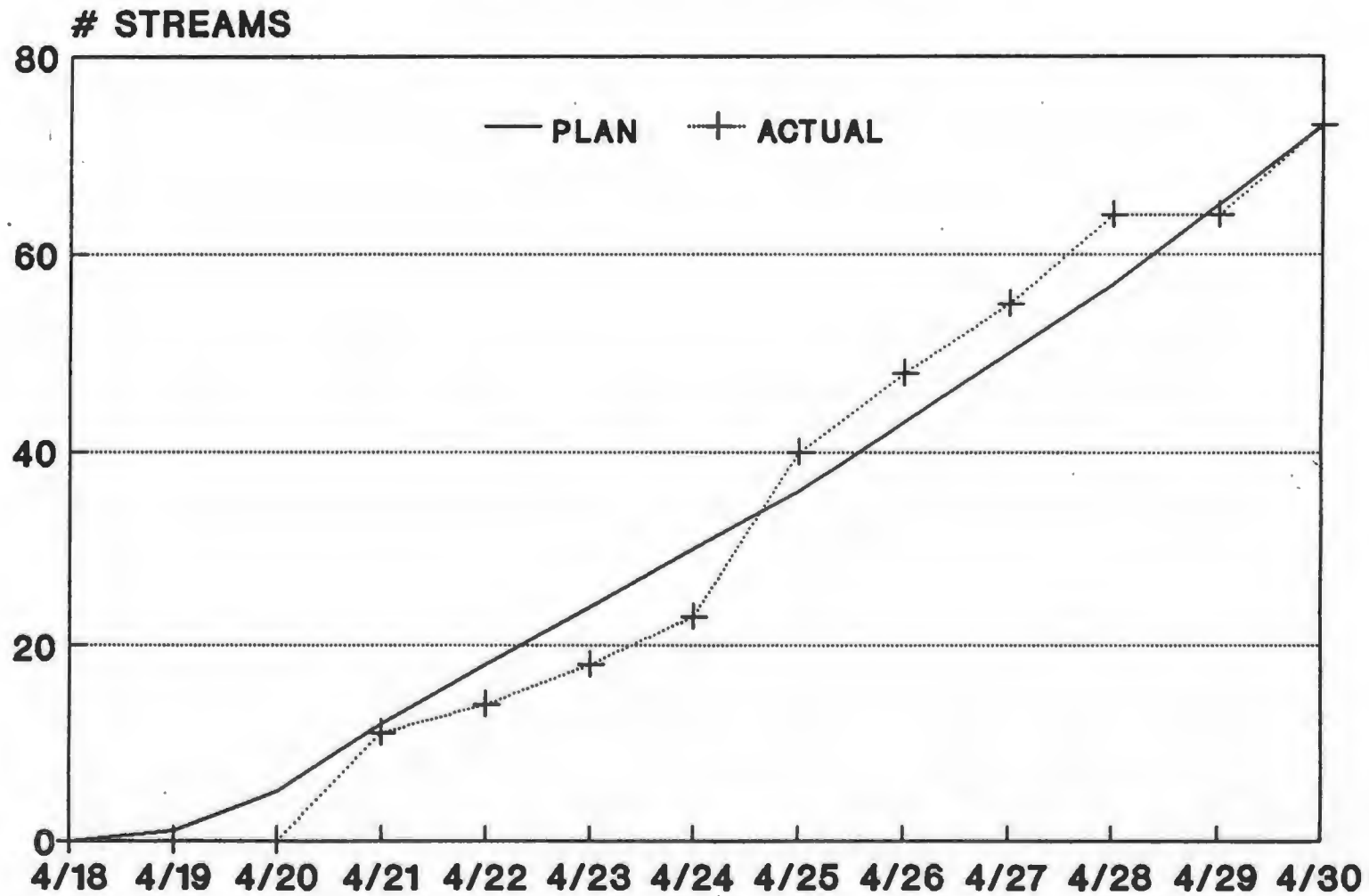
78 Total Segments in Phases 1 and 2
Based on reports received by 5PM on 4/30

SUBDIVISION APPROVAL STATUS

APRIL 30, 1990

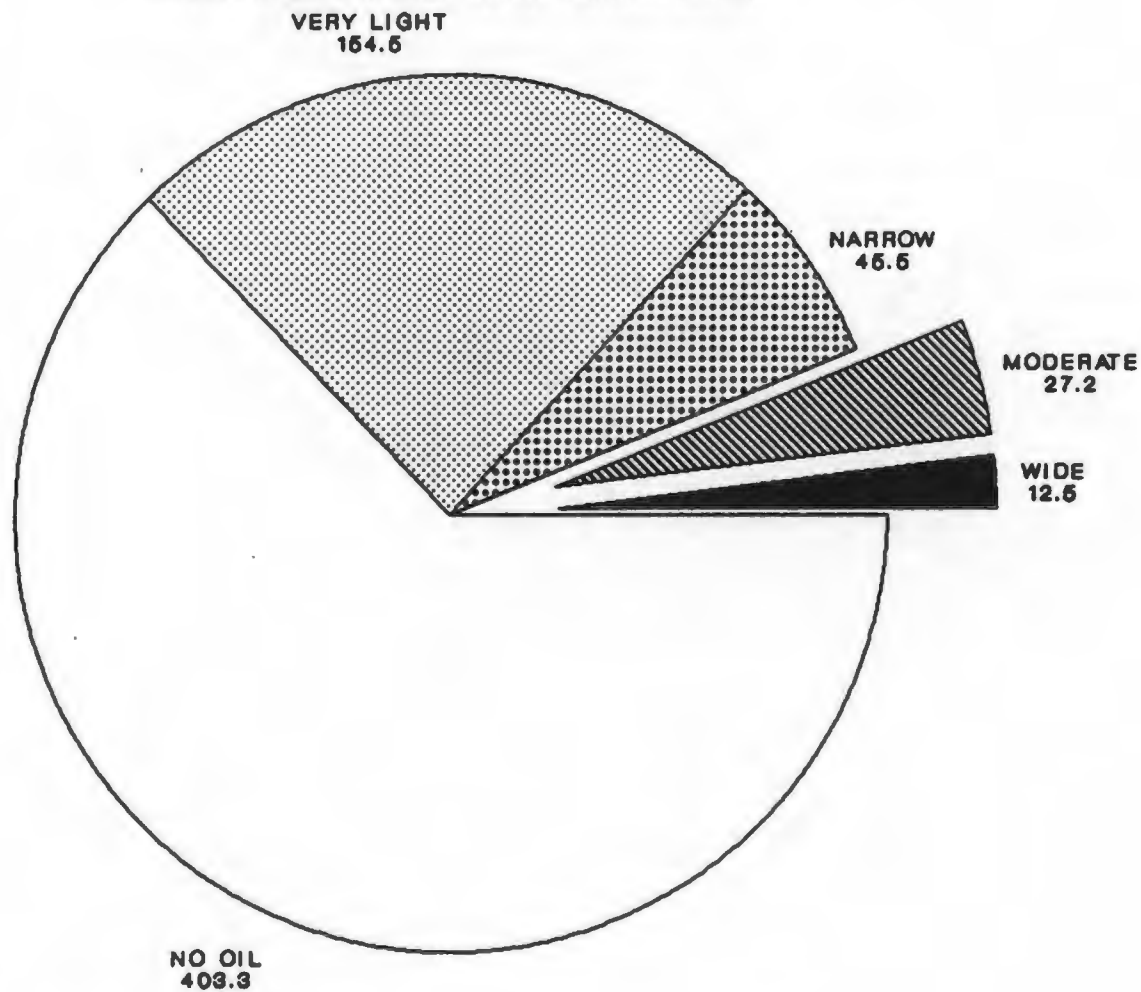


ANADSCAT



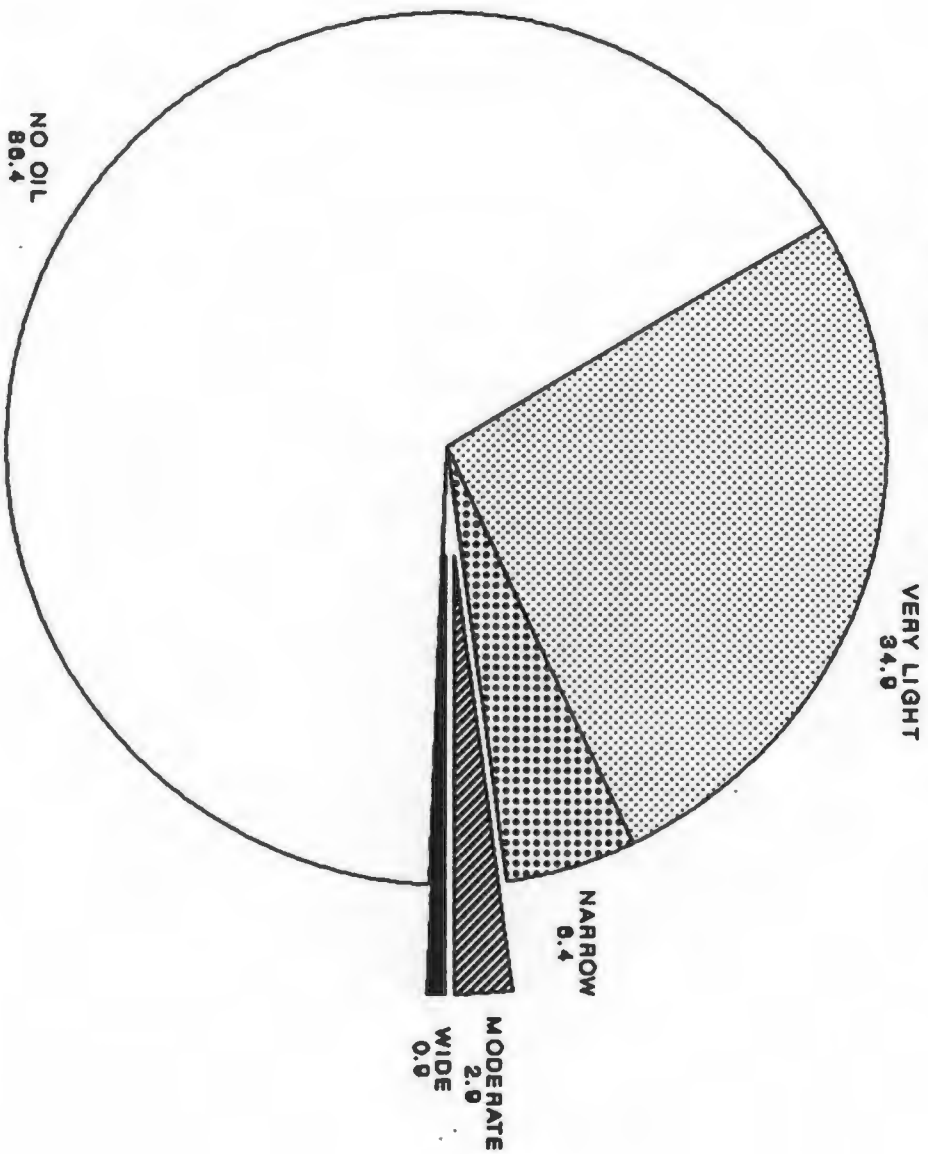
Based on reports received by 5PM on 4/30

PWS SURFACE OILING LENGTHS IN MILES



4/30/90 - 643.0 MILES IN 462 SEGMENTS

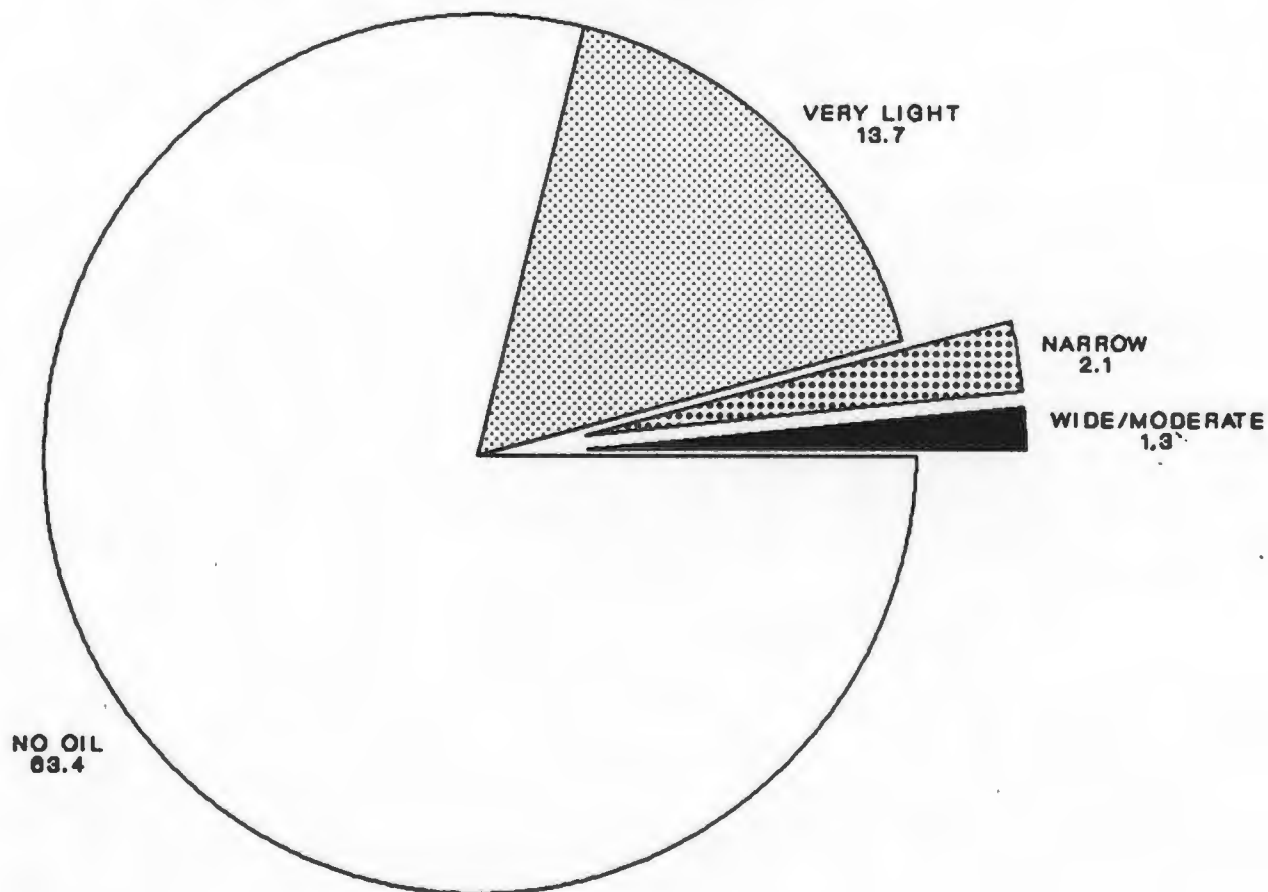
KENAI SURFACE OILING LENGTHS IN MILES



4/30/90 - 131.6 MILES IN 63 SEGMENTS

KODIAK SURFACE OILING

LENGTHS IN MILES



4/30/90 - 80.5 MILES IN 54 SEGMENTS

BK

Memorandum

Subject: Exxon Valdez Oil Spill Cleanup:
Ops Steering Committee Meeting, 5/8/90

To: Brian Ross, AAO/A

From: Kirsten Ballard AOO/A

Opening remarks were given by Captain Zawadzki regarding the proceedings of the meeting to come. Items presented and discussed are as follows:

Spring Shoreline Assessment

Exxon

- In Prince William Sound, 492 segments have been visited this spring representing 684.5 miles. Surveys in PWS were completed on April 26, 1990.
- In Kenai, 105 segments have been surveyed representing 246.8 miles. Surveys in Kenai were completed on April 29, 1990.
- In Kodiak, 84 segments representing 130.6 miles have been completed as of May 7, 1990. Surveys are on-going and are continuing into phases III and IV. (also see memo of May 8, 1990 re: Ops meeting of May 2, 1990 and attachments)
- ANADSCAT, is a special assessment team comprised of fisheries biologists, land managers (if available) and other specialist(s). This team surveyed anadramous streams which were reported as having oil contamination previously. This team conducted detailed assessments of anadramous streams to provide information regarding the degree of oiling and make recommendations regarding cleanup requirements. More surveys are expected to be performed in Kodiak.
- Classifications regarding the degree of of oiling are difficult this year according to Exxon. The oil is patchy, scattered and is different in its physical properties this year.
- All surveys were performed in areas where oiling was present last year or "could have occured" up until spring.
- Surveys include observations regarding boom, bags, debris, etc. that may have been left behind after the cleanup effort last year.
- Questions regarding TAG, mobilization of cleanup crews, degrees of oiling and oil in ANADSCAT areas were fielded by Exxon.

Bioremediation

Exxon

- Bioremediation is to be applied to selected sites, with all conditions as imposed by the state and the USCG through the TAG process to be met.
- Guidelines for the application of bioremediation compounds are to be out on Monday, May 14.
- There were no questions for Exxon.

Department of Environmental Conservation

- Randy Bayliss expressed his satisfaction and pride in the public meetings held regarding bioremediation. These meetings completed the public review process and helped the DEC make its recommendations and decisions regarding bioremediation.
- Cooperation between all parties involved in the decision making and planning process is going well.
- Confidence in the process of decision making being followed was expressed.
- There were no questions for Mr. Bayliss.

1990 Clean-Up Activity

Exxon

- 8 squads are currently working in PWS or Kenai on cleanup. There are 10 to 15 people per squad.
- There has not been a firm date set for the start of work in the Kodiak zone. Presumably, this is because the SSAT has not been completed yet.
- Questions to clarify the above were answered by Exxon.

USCG

- Presented color transparencies of the pie charts in the NOAA/USCG handout (attached).
- Miles vs. Segments vs. Subdivisions were compared regarding the difference in the relative size of oiled vs. unoiled areas in the charts.
- Graphic displays of types of treatment and amount cleaned were presented and compared. Types of treatment include: bioremediation, manual cleanup, no treatment recommended (NTR), boom deployed, etc. (see attached NOAA/USCG Slides handout).
- There were no questions for the USCG.

Substance Sampling

NOAA

- Shellfish and fish sampled from subtidal areas were sampled. The results are just in, and continue to come in. Levels of contamination from the oiled areas show very low levels of contamination. The exception is the shellfish which were sampled from very heavily impacted areas. All fin-fish sampled to date show levels of contamination "well below" any level of concern.
- Marine mammals were sampled by NMFS. Harbor seals and sea lions sampled showed levels of contamination ranging from about 3/10 ppb to 7 ppb from various tissue samples (muscle, liver, kidney, etc.).
- Deer was sampled by Alaska Dept. of Fish and Game. Results were not available.
- Questions regarding bile samples from pollack were presented, but were not able to be answered definitively.

Fisheries and Surveillance Studies

Exxon

- A successful commercial fishery season is expected. Aerial surveillance flights (with DEC accompaniment, upon occasion) have shown that there is little to be concerned about regarding fisheries this season.
- Daily sheen survey flights are being performed in PWS, weather permitting.
- The number of sheens seems to be decreasing, despite the warmer weather we've been seeing this spring (it was not mentioned, however, whether or not this may be attributable to the current cycle of decreasing tides).
- Joint shoreline surveys are being performed (with commercial fisheries in mind, this is apparently separate from SSAT) with ADF&G. The western part of the sound is "pretty much done".
- The recent herring opening in PWS went well with no reported problems. The herring opening continues in Kodiak, and Homer is on a 24 hour notice for the Kamishak opening.
- A 2 day tar-ball study was performed in Upper Cook Inlet (UCI) with ADF&G, the Kenai Peninsula Borough and the USCG, after reports were received regarding possible tar-balls. Nothing worth sampling was found. Further studies are planned.
- Questions were fielded by Exxon

Closing Remarks

Rear Admiral Ciancaglini

- Summed up the meeting.
- Cooperation between agencies and the decision making process appear to be good.
- Admitted full responsibility for the problems in the sound (I'm not exactly sure what he meant by this. Apparently some beaches were treated without the land manager present and/or without being signed off by RADM Ciancaglini, so the rumor goes).
- Asked if any members of the general public were present. One person raised their hand.
- Answered questions- there is no way that a PWS oil spill preparedness test will be performed this year.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 10

April 13, 1990

REPLY TO
ATTN OF:

AOO/A

MEMORANDUM

SUBJECT: Public Scoping Meetings: Environmental Restoration for the
Exxon-Valdez Oil Spill

FROM: Brian D. Ross *Brian D. Ross*
Restoration Planning Work Group

TO: Alaska Congressional Delegation

Attached please find information about public scoping meetings that the interagency Restoration Planning Work Group will be conducting next week in several Alaskan communities directly affected by the Exxon Valdez oil spill. The purpose of these public meetings is to provide local citizens with the chance to express their ideas about restoration needs and opportunities, and to answer any questions about the restoration planning process. These initial public meetings are following on the heels of a public Restoration Symposium that the workgroup held in Anchorage on March 26-27, 1990 (just after the first anniversary of the spill).

The attached information includes:

- A schedule of times and locations for the various public meetings;
- Copies of announcements running in the local newspapers;
- Copies of information sheets that will be passed out to everyone attending the meetings.

Public service announcements about the meetings are also being aired by local public radio stations. In addition, a four page information flier explaining the restoration planning process will be handed out. Unfortunately, it was still at the printers at the time this package was prepared for you; copies will be provided to your Anchorage offices next week.

If there are any questions about the current public activities being conducted by the Restoration Planning Work Group, or about the restoration planning process in general, please contact us at the Oil Spill Restoration Planning Office, 437 E. Street, Suite 301, Anchorage, Alaska 99501, (907) 271-5083.

Attachments

Oil Spill Restoration Planning Office¹

PUBLIC SCOPING MEETINGS

Purpose: To invite comments and suggestions from the public about environmental restoration projects following the Exxon Valdez oil spill.

Schedule:

All meetings will be held in the evening, 7 to 10 p.m.

<u>City & Date</u>	<u>Location</u>	<u>Staff Members</u>
April 16th Seward	Institute of Marine Sciences	Frankie Pillifant, ADNR Brian Ross, USEPA Gary Ahlstrand, USDOI Dave Gibbons, USDOA
April 17th Kenai/ Soldotna	Central Peninsula Sports Ctr	Frankie Pillifant, ADNR Brian Ross, USEPA
Cordova	Mt. Eccles Middle School	Judi Maxwell, ADFG Gary Ahlstrand, USDOI
April 18th Valdez	Council Chambers	Judi Maxwell, ADFG Gary Ahlstrand, USDOI
Homer	Homer Senior Center	Stan Senner, ADFG Gregg Erickson, ADFG Sandy Rabinowitch, USDOI
April 19th Kodiak	Kodiak High School	Stan Senner, ADFG Gregg Erickson, ADFG Sandy Rabinowitch, USDOI
April 20th Whittier	Begich Towers	Stan Senner, ADFG Conrad Kleveno, USEPA

¹Sponsored by the Alaska departments of Fish and Game, Natural Resources, and Environmental Conservation and the United States departments of the Interior, Commerce, and Agriculture and the Environmental Protection Agency.

Introduction: Restoration of the Environment Following the Exxon-Valdez Oil Spill

A broad variety of environmental restoration projects and activities may be appropriate following the Exxon-Valdez oil spill. Under Federal law, funds available for environmental restoration are to be used to **restore, replace, or acquire the equivalent of injured natural resources**. The Alaska departments of Fish and Game, Natural Resources, and Environmental Conservation, the Federal departments of Agriculture, Commerce, and Interior, and the U.S. Environmental Protection Agency are carrying out a restoration planning project to identify and report on restoration alternatives.

"Restoration" includes direct attempts to return an injured resource to its baseline condition or function. An example would be to rehabilitate an oiled marsh ecosystem by augmenting natural plant and animal populations (after removal of the oil).

"Replacement" includes substitution of a new resource for an injured resource. An example is to use hatchery/aquaculture techniques to establish an entirely new fishery stock in lieu of one that had been severely damaged.

"Acquisition of equivalent resources" means to purchase or otherwise protect other resources that are similar or related to the injured resource in terms of ecological value, functions, or services provided. For example, one could purchase undamaged and unprotected wildlife habitats as alternatives to direct restoration of injured habitats. Equivalent resources need not be confined to the direct spill area.

The interagency Restoration Planning Work Group has initiated a series of public activities including this Restoration Symposium, several public Scoping Meetings in communities directly affected by the oil spill, and a world-wide review of scientific literature. These activities are the first steps in restoration planning. The process is largely without precedent and it is expected to be long, complicated, and probably controversial. Public comments and ideas are encouraged throughout this process.

An interim report on the restoration planning project is expected to be available for public distribution in July, 1990.

**RESTORATION PLANNING
WORK GROUP MEMBERS**

Gary Ahlstrand (907) 257-2564
Alaska Regional Office (907) 257-2510 (fax)
National Parks Service
2525 Gambell, Room 107
Anchorage, AK 99503

Dave Gibbons (907) 586-7918
US Forest Service (907) 586-7840 (fax)
PO Box 21628
Juneau, AK 99802

Judi Maxwell (907) 465-4120
Oil Spill Impact Assessment (907) 586-9612 (fax)
and Restoration Division
Alaska Department of Fish and Game
PO Box 3-2000
Juneau, AK 99802

Byron Morris (907) 789-6600
NOAA/NMFS (907) 789-6608 (fax)
PO Box 210029
Auke Bay, AK 99821

Frankie Pillifant (907) 762-2295
Oil Spill Project Coordination (907) 762-2290 (fax)
Office
Alaska Department of Natural Resources
PO Box 107005
Anchorage, AK 99510-7005

Doug Redburn (907) 465-2653
Water Quality Management (907) 465-2082 (fax)
Alaska Department of Environmental
Conservation
PO Box 0
Juneau, AK 99811-1800

Brian Ross (907) 271-2464
US Environmental Protection (907) 271-2467 (fax)
Agency
Oil Spill Restoration Planning Office
437 E Street, Suite 301
Anchorage, AK 99501

Stan Senner (907) 271-2462
Alaska Department of Fish (907) 271-2467 (fax)
and Game
Oil Spill Restoration Planning Office
437 E Street, Suite 301
Anchorage, AK 99501

OIL SPILL RESTORATION COMMENTS

Use this form for any comments you would like to have considered during the Restoration Planning process, or for any ideas you have about how aspects of the environment that may have been affected by the Exxon-Valdez oil spill might be restored. Turn in at the sign-in table, or return the form with your comments to the Restoration Planning Work Group, 437 E Street, Suite 301, Anchorage, Alaska 99501. Attach additional sheets if necessary.

Please fill in your name and mailing address if you would like to receive future mailings about Restoration Planning for the Exxon-Valdez oil spill.

Public Meeting

**OIL SPILL
RESTORATION**

What should be done to help Alaska's resources recover from the impacts of the Exxon-Valdez oil spill? State and Federal agency representatives will be in your town to get your ideas about how to restore oil-damaged resources in Prince William Sound and the Gulf of Alaska.

DATE: Tuesday, April 17th

TIME: 7 p.m. - 10 p.m.

LOCATION: Central Peninsula
Sports Center, Sports Arena Rd.,
off K Beach Rd.

*For more information, call the
Oil Spill Restoration Planning Office
in Anchorage at 271-2461.*

AO-10-104

K/s

Public Meeting
OIL SPILL
RESTORATION

What should be done to help Alaska's resources recover from the impacts of the Exxon-Valdez oil spill? State and Federal agency representatives will be in your town to get your ideas about how to restore oil-damaged resources in Prince William Sound and the Gulf of Alaska.

DATE: Monday, April 16th

TIME: 7 p.m. - 10 p.m.

**LOCATION: 101 Railway Ave.
Institute of Marine Science, Seward**

*For more information, call the
Oil Spill Restoration Planning Office
in Anchorage at 271-2461.*

AO-18-197

Public Meeting
OIL SPILL
RESTORATION

What should be done to help Alaska's resources recover from the impacts of the Exxon-Valdez oil spill? State and Federal agency representatives will be in your town to get your ideas about how to restore oil-damaged resources in Prince William Sound and the Gulf of Alaska.

DATE: Friday, April 20th

TIME: 7 p.m. - 10 p.m.

**LOCATION: Begich Tower
(Kitti-wake Room) Kenai Street**

*For more information, call the
Oil Spill Restoration Planning Office
in Anchorage at 271-2461.*

Public Meeting

OIL SPILL RESTORATION

What should be done to help Alaska's resources recover from the impacts of the Exxon-Valdez oil spill? State and Federal agency representatives will be in your town to get your ideas about how to restore oil-damaged resources in Prince William Sound and the Gulf of Alaska.

DATE: Wednesday, April 18th

TIME: 7 p.m. - 10 p.m.

LOCATION: Council Chambers
(downtown Valdez, behind City Hall)

*For more information, call the
Oil Spill Restoration Planning Office
in Anchorage at 271-2461.*

AO-10-103

Post-It™ brand fax transmittal memo 7671

of pages •

1

To <i>Kirstin</i>	From <i>Pat</i>
Co.	Co. <i>DNR/O&P</i>
Dept.	Phone # <i>762-2295</i>
Fax # <i>271-2467</i>	Fax #

Public Meeting

**OIL SPILL
RESTORATION**

What should be done to help Alaska's resources recover from the impacts of the Exxon-Valdez oil spill? State and Federal agency representatives will be in your town to get your ideas about how to restore oil-damaged resources in Prince William Sound and the Gulf of Alaska.

DATE: Thursday, April 19th

TIME: 7 p.m. - 10 p.m.

**LOCATION: 722 Mill Bay Road
Kodiak H.S. Auditorium**

*For more information, call the
Oil Spill Restoration Planning Office
in Anchorage at 271-2461.*

AO-10-105

Public Meeting
**OIL SPILL
RESTORATION**

What should be done to help Alaska's resources recover from the impacts of the Exxon-Valdez oil spill? State and Federal agency representatives will be in your town to get your ideas about how to restore oil-damaged resources in Prince William Sound and the Gulf of Alaska.

DATE: Wednesday, April 18th

TIME: 7 p.m. - 10 p.m.

LOCATION: 3935 Svedlund
Homer Senior Center

*For more information, call the
Oil Spill Restoration Planning Office
in Anchorage at 271-2461.*

AO-10-100

Public Meeting

**OIL SPILL
RESTORATION**

What should be done to help Alaska's resources recover from the impacts of the Exxon-Valdez oil spill? State and Federal agency representatives will be in your town to get your ideas about how to restore oil-damaged resources in Prince William Sound and the Gulf of Alaska.

DATE: Tuesday, April 17th

TIME: 7 p.m. - 10 p.m.

LOCATION: 2nd and A Street
Middle School Cafeteria (Mt. Eccles)

*For more information, call the
Oil Spill Restoration Planning Office
in Anchorage at 271-2461.*

AS-10-104

Cordova



U.S. ENVIRONMENTAL PROTECTION AGENCY
REGION 10
ALASKA OPERATIONS OFFICE
ROOM 537, FEDERAL BUILDING
222 W. 7TH AVENUE, #19
ANCHORAGE, ALASKA 99513
January 26, 1990

REPLY TO
ATTN OF:

A00/A

Captain D.E. Bodron, USCG
Co-Chair Alaska Regional Response Team
Commander, Coast Guard District Seventeen (M)
17th Coast Guard District
P.O. Box 3-5000
Juneau, AK 99802-1217

Dear Captain Bodron:

I have reviewed your letter of January 2, 1990 outlining the Coast Guard's general approach for 1990 Exxon Valdez cleanup activities and requesting Regional Response Team (RRT) member agencies to identify their roles in the Federal Response effort. For planning purposes I anticipate that EPA will continue to play a support role to the FOSC dealing with cleanup techniques involving chemical and biological additives, waste management and disposal, and the termination of cleanup (how clean is clean). The level of effort provided in 1990 will be essentially the same as last years or perhaps slightly less if conditions warrant, i.e., approximately two people dedicated full time during the active season(not including the EPA Bioremediation Research Team).

Based upon last years experience and your objectives and goals for next year I anticipate agency involvement with the following issues:

Cleanup techniques involving chemical agents and biological additives covered by subpart "H" of the National Contingency Plan:

Last year EPA was involved in the design and implementation of tests required to evaluate the safety and effectiveness of chemical cleaners. Personnel representing my office provided the necessary liaison between EPA's bioremediation research team and the FOSC, SSC, RRT, State and associated committees. In view of the continuing issues surrounding the use of these products, I anticipate that EPA's presence, and participation during continuing field trials, and meetings will be required to provide a basis for EPA concurrence or non-concurrence with a use/no use decision at the RRT level.

Waste Management and Disposal:

Problems involving the collection, storage, treatment, and disposal of oily wastes, (including cleanup materials, oily water, tainted fish, marine vegetation and debris) and sewage produced by cleanup personnel plagued the overall response effort last year. Some issues were quickly resolved and some still persist today. The following sub categories of waste management are identified to clarify EPA's role, position and future involvement.

Solid Waste Landfilling:

The oily wastes produced by primary cleanup activities are classified as solid waste not hazardous waste. The Alaska Department of Environmental Conservation (ADEC) has primary jurisdiction and authority within the State to regulate the land disposal of solid waste.

Incineration/Open Burning:

The State of Alaska has delegated authority to enforce Clean Air Act provisions. Incineration of oily wastes does not require a Federal hazardous waste treatment permit (the waste is not hazardous under the Federal definition) but does require a permit for air emissions. Because of the agency's expertise and Clean Air Act oversight responsibilities, the EPA provided technical assistance to ADEC last year and will respond to future State requests for assistance. Should an incineration method of waste disposal be used that results in the generation of a regulated hazardous waste, then EPA permits may be required for the disposal of that waste.

Disposal of Sewage Effluent at Sea:

Last year EPA issued a permit for a floating sewage lagoon barge to supplement the capabilities of shoreside sewage treatment plants. A National Pollution Discharge Elimination System (NPDES) permit is required for such activities. EPA must receive a certification from the State of Alaska indicating that the states water quality criteria are met. Thus the permit requires both EPA and ADEC action. If Exxon is planning to use this barge or similar means to dispose of sewage, the Agency should be notified early on to allow time for permitting.

Disposal of Oily Water by Treatment and Discharge to US Waters:

Last year EPA and the State reviewed and approved proposals for treatment and disposal of certain oily waters from skimming vessels, storage vessels and runoff waters from storage sites. These waters were taken to Alyeska's Ballast Water Treatment facility which operates under the requirements of a NPDES permit. If this method of waste treatment/disposal is to be used again, EPA and the ADEC approval will be needed.

Ocean Dumping of Oiled Wastes:

Last year there were a series of proposals involving the disposal of oily waste debris including oiled fucus (popweed) at sea. EPA was unable to concur with these proposals with the exception of petroleum tainted fish. The Ocean Disposal Act and the Clean Water Act are intended to prevent pollution of marine waters and specifically prohibit the disposal of oil at sea. While regulations allow for deviations during an emergency situation (i.e. sinking of a disabled and leaking vessel headed for shore) the containment and removal of spill debris after the discharge occurs does fit the definition of an emergency, regardless of the economic consequences associated with alternate disposal. In view of the need to pick up remaining oiled debris, we request that this legal constraint receive wide dissemination to all those involved in formulating disposal plans and strategies for the 1990 cleanup effort.

Disposal of Petroleum Tainted Fish Catches:

Last year EPA approved the disposal of fish caught and condemned because of petroleum tainting. Under the conditions of an existing general NPDES seafood processing permit, condemned fish were allowed to be ground up and discharged offshore. Although this option drew criticism from environmental and fishing groups, we believed that trace amounts of oil which were significant for marketability and human consumption, posed no significant risk to the environment when disposed of in accordance with the permit requirements. Exxon will need to provide updated information regarding vessels and locations to the agency when planning for this possibility.

In summing up the waste management issue, I recommend that you encourage Exxon to formulate specific plans for waste treatment and disposal early on, to address the types of oil and oil contaminated debris likely to be generated during 1990 cleanup activities. The earlier updated plans are formulated and circulated for review, the better the chances are for resolving problems that may arise and avoiding delays in cleanup operations.

How Clean is Clean:

I anticipate that deciding when to terminate treatment on a beach by beach basis will be the most challenging and difficult decisions for the FOSC and RRT to address this upcoming year. Although the FOSC bears the final responsibility for deciding when to terminate the federal response, I expect that he will look to RRT member agencies to provide input into his decision. Recognizing that these decisions will be driven by a range of factors, (limitations of cleanup technology, evaluation of detrimental side effects associated with those techniques, flexibility of standards as applied to critical habitats, recreational and subsistence use areas, consideration of social, and economic concerns), agencies providing input through the various forums will need accurate information on the conditions of the shorelines and progress of the cleanup. I suggest that this will involve periodic visits to treatment areas.

Anticipated Personnel Involvement:

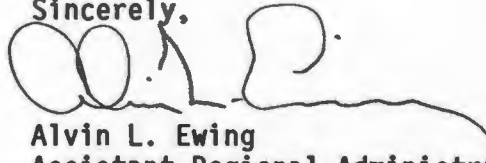
The level of EPA effort provided either on scene, or in Alaska, will be similar to that of 1989. Last year there were two individuals from this office assigned to Valdez, (the center of operations for the FOSC, Exxon, and State). An additional position was utilized in Anchorage to facilitate intra and inter agency communication. The exact number of individuals required to represent EPA in the role and activities previously identified will depend significantly upon the location and structure of the multi-agency organization established to support the FOSC's response. If the majority of meetings occur in Anchorage, agency participation might be more effectively coordinated with fewer people. However, some form of logistical support to provide occasional field trips designed to keep decision makers in touch with field conditions seems appropriate. EPA prefers that the activity center this year be in Anchorage. The Agency will request reimbursement from the 311(k) fund for travel, per diem, and lodging costs of personnel directly involved in this effort.

I hope this provides you with an adequate indication of our potential requests for reimbursement. As plans firm up for this years activities, I will be able to be more specific regarding EPA needs.

In summary, the EPA's is committed to full participation in the Federal Response Mechanism. The bioremediation project initiated by EPA's Office of Research and Development in cooperation with Exxon will continue. The Alaska Operations Office will coordinate the Agency's statutory authority and responsibilities guided by the principles contained in the National and Regional Contingency Plan.

I appreciate the opportunity to provide you with this information and look forward to hearing your thoughts on EPA's role and continued involvement with the spill. I would especially like to know if there are any expectations or needs of the agency that you or the FOSC require which have not been mentioned. Carl Lautenberger is my primary point of contact and can be reached at 271-5083.

Sincerely,

A handwritten signature in dark ink, appearing to read 'Alvin L. Ewing', with a long, sweeping horizontal line extending to the right.

Alvin L. Ewing
Assistant Regional Administrator
U.S. EPA, Alaska Operations Office

cc: Robie G. Russell, Regional Administrator
J. Everts, Region 10 SRES (HW-093)
HQ Offices

December 8, 1989

AOO/A

Weekly Significant Issues Report

Brian D. Ross 
Oil Spill Restoration Planning Team Leader

Alvin L. Ewing
Assistant Regional Administrator

COMPLETED ISSUES

none

UPCOMING/ONGOING ISSUES

***OIL SPILL DATA REPOSITORIES - Ross (271-5083)**

- B. Ross attended briefing with NRDA Management Team about the National Park Service's Investigation into effects of Exxon Valdez oil spill to NPS lands
- Kenai Fjords, Katmai, & Lake Clark National Parks and Aniakchak National Monument have been studied
- NPS's information will eventually be consolidated with the Central Data Repository being set up by DOJ - (see below)

***OIL SPILL DATA REPOSITORIES, CONT. - Ross (271-5083)**

- DOJ contractors have acquired office space in Anchorage for Federal NRDA activities including a Central Data Repository
- office will include a public access area, conference rooms, a secured data repository, and limited office space for all involved agencies

*****BIOREMEDIATION PLANNING - Ross (271-5083)**

- B. Ross to attend "Alaska Bioremediation Clean-up Research Planning Workshop" in Washington, D.C.
- workshop to focus on results of the summer's work, and development of next summer's work plan

OUTREACH

None

TRAVEL

- B. Ross - Washington D.C. 12/12-16

December 6, 1989

MEMORANDUM

Subject: Notes for RA's Speech

To: Mike L^dingard, Air Section, Region 10

From: Brian Ross, AOO/A

Brian Ross

*AK- Sent this
For Robner
Speech to
"Energy 90" in
Vancouver, B.C.
(to be given 12-7)*

EXXON-VALDEZ Oil Spill Update

The March 24, 1989 grounding of the Exxon-Valdez resulted in the largest oil spill in U.S. history. Nearly 11 million gallons of Prudhoe Bay crude oil leaked into the pristine waters of Prince William Sound, heavily oiling over 1,000 miles of shorelines as far as 500 miles from the site of the accident. Exxon ultimately employed several thousand workers, hundreds of boats, and dozens of aircraft to help in their cleanup effort. At this time, winter storms are doing much ^{to} remove additional oil from exposed shorelines, and some areas may not need further active cleanup come Spring. However, the many protected shorelines that are not exposed to heavy winter weather are remaining relatively unchanged, and will most likely require more attention.

EPA was involved throughout the initial cleanup activities this past summer, helping to advise the Coast Guard and the State of Alaska about appropriate cleanup technologies. In addition, EPA's Office of Research and Development initiated a Bioremediation project to demonstrate the effectiveness of applying nutrients (fertilizers) to shorelines to enhance and accelerate naturally present oil-degrading bacteria. EPA's investigations showed that oil-degrading bacteria were surprisingly active in the sub-arctic conditions of the area, and "bioremediated" shorelines appear to be getting cleaner quicker than shorelines that have merely been washed. EPA is continuing to monitor the fertilized shorelines this winter, and is gearing up for the possibility of an expanded effort this coming summer. EPA has also been charged by President Bush to coordinate planning activities for the restoration of the areas and habitats affected by the oil spill. We have set up offices in Alaska and Washington, D.C. to carry out this task, and will be working closely with State and federal resource agencies in the months ahead. It is our intent, jointly, to identify positive steps that can be taken to accelerate restoration. We anticipate carrying-out a number of pilot projects this summer to help identify what approaches look most promising.