MEMORANDUM

State of Alaska

PARTMENT OF ENVIRONMENTAL CONSERVATION LL SPILL RESTORATION OFFICE

TO: RPWG

DATE: September 11, 1992

FROM:

Bob Loeffler

TELE: 278-8012

FAX: 276-7178

SUBJECT:

First draft: Option Evaluation Database.

Review before meeting on THURSDAY; SEPT 17; 8:30 A.M.

Attached is a print-out of the Option Evaluation Database. Our first step is to review it to ensure that we are satisfied with the ratings.

THIS PACKAGE INCLUDES:

- 1. <u>Copy of the Rating Sheet</u> (so you remember the criteria). (You must find your own copy of the H-M-L definitions, however. If you are missing them, see me.
- 2. <u>List of Options Names and numbers.</u>
- 3. <u>First draft: Option Evaluation Database (by Resource and Service; with footnotes).</u> For each resource and service, each of the ratings given to each option is listed along with any footnotes we made. Each resource and service is on a separate page.
- 4. <u>Summary Sheet (by Option, without footnotes).</u> This summarizes the multi-page resource by grouping options together, and listing without footnotes.
- 5. <u>Comment Sheet.</u> Try to make comments using this sheet, and return it by 2:30 on Wednesday, I will collate them and pass them out to speed up the meeting. (This is an experiment. If we can get it to work, we will have to spend less time at the meeting.)

YOUR ASSIGNMENT. Our next step in this process is to ensure that RPWG is satisfied with the ratings. This review is that step. Your assignment (and you MUST choose to accept it), is to review the ratings before the meeting next Thursday, September 18th, 8:30 A.M. To speed up the meeting, please use the comment sheet, and try to have it to me by 2:30 on Wednesday. John Strand will be in Anchorage next Thursday and Friday for these meetings (he is being sent a copy of the package.)

OTHER INFORMATION.

- O The database is easy to use. It is set up so you don't need to know much about computers, databases, or even our ratings, to sort and print. We will have a quick training session on Thursday, and then people can individually sort to their heart's content.
- O We have not yet completed analysis of those services that rely on species: commercial fishing, subsistence, sport fishing, and hunting. We previously agreed that since these rely on recovery of their target species, we would rely on those ratings (except for the one option that independently targets subsistence).
- We rated only one programmatic option: education. I couldn't figure out how to computerize it, so it isn't printed.

OPTIONS RATING

		O L	110	MA CE	7 7 711	J	 	
CRITERIA								
1A. Potential to improve the rate or degree of recovery								
1B. Potential to prevent further degradation or decline								
2. Technical feasibility								
3. Degree to which proposed action benefits more than one resource or service								
4. Degree to which proposed action enhances the resource or service								
5. Potential for NO additional injury to: a. other target or nontarget resources								
b. other target or nontarget <u>services</u> 6. Potential effects of the action on human health and safety								
7. The relationship of the expected costs of the proposed action to the expected benefits								
8. Will the restoration opportunity be lost if implementation is delayed? (Y/N)								
9. Public Comments								: (5) }; (4) }

COMMENTS:

List of Option Names and Numbers

The next two pages list the option names and numbers. To computerize the options, I had to make adapt our numbering system.

- O I couldn't use letters for the suboptions (e.g., the computer does not recognize "8a", or "11b"). So Option 4 remains 4.0 (no numbering change). But Option 8a becomes 8.1; and 8b becomes 8.2; and so on.
- O Acquiring land is Number 37.0. Because we rated all of the suboptions of 37 and 38 together, Option 37a-37d (Acquire fee title), and Option 38a-38d (Acquire short of fee title) are grouped together in the database under number 37.0.
- O All special designations are included in Number 40.0. Since we rated all of the special designations together (number 6, 20, 22, and 36), I included these ratings under a new number: Special Designations, Number 40.

All other numbers are the same as before.

Code	Name of Option
1.0	Archeological site stewardship program
2.0 2.1 2.2	Increase fish and shellfish management Incease fish/shellfish management: species already with plans Increase fish/shellfish management: plans for species without them
4.0	Reduce disturbance at marine bird colonies and mammal haulout +
7.0	Increased agency field presence
8.0 8.1 8.2	Restrict/eliminate legal harvest: mammals and sea ducks temporarily restrict/close harvest educate public to voluntarily restrict harvest (sport, subsist.)
9.0 9.0	Minimize incidental take, marine birds by commercial fisheries Minimize incidental take of marine birds by commercial fisheries
10.0	Preserve archaeological sites/artifacts
11.0 11.1 11.2 11.3	Improve freshwater wild salmon spawning/rearing habitats Supplement fry production (salmon) Improve access to spawning areas (salmon) Improve spawning and rearing habitat (salmon)
12.0 12.1 12.3	New recreation facilities New backcountry recreation facilities New commercial, (lodge, visitor-center) recreation facilities
13.0	Eliminate oil from mussel beds
14.0	Accelerate recovery of upper intertidal zone
15.0 15.1 15.2	Supplment or clean marine spawning substrates Supplment intertidal substrates for herring Clean intertidal salmon spawning substrates
16.0 16.1 16.2 16.2	Restore murre productivity Enhance social stimuli (Common murre) Improve physical characteristics of nest sites (Common murre) Improve physical characteristic of murre nest sites
17.0 17.0 17.1 17.2	Predator control to aid marine birds Predator control to benefit marine birds Elminate introduced foxes (for nesting marine birds) Reduce predator access to seabird colonies
18.0 18.1 18.2 18.3	Replace fisheries opportunities by alternative salmon runs Establish additional hatchery (salmon) runs Transplant (salmon) hatchery-reared fish to depleted areas Wild egg take to establish new runs (salmon)
19.0	Update and expand Alaska's Anadromous Fish Stream Catalog
26.0	Amend Forest Practices Act

Code	Name of Option
27.0	Designate long-term Ecological Research Sites
28.0 28.1 28.2 28.3	Acquire access for sport-fishing and recreation Purchase access (title or rights) Negotiate access without purchase Negotiate "17b" easements
30.0	Test subsistence foods for hydrocarbon contamination
33.0 33.1 33.2	Public information and education program Education programs, information, and products Education: interpretive and educational facilities
34.0 34.1 34.2 34.3	Marine environmental institute New marine environmental institute Enhance an existing marine enfironmental institute Marine environmental institute: coordinate research in PWS
35.0	Acquire archaeologic artifacts from outside the spill area
37.0 37.0	Purchase private lands (fee title or less than fee title) Purchase habitat
40.0	Special Designations

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OPTION EVALUATION DATABASE

First Draft for RPWG Review September 11, 1992

The options are listed by resource and service, with each resource/service on a separate page.

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^{*} Some numbers are missing. (That is, we occasionally skip a number. So don't worry, you are not missing a page.)

Archaeology

1.0 Archeological site stewardship program

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	N/A	Н	М	L	L	Н	Н	Н	Н	Yes

1b: implementation of this outside Ak has shown greater success when enforcement is incorporated. 2: implementation outside AK has shown greater success when enforcement is incorprated. 3: may provide social benefits to local communities. 4: not enhance the physical resource, but increases knowledge base in the community.

10.0 Preserve archaeological sites/artifacts

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	N/A	М	Н	L	L	Н	Н	Н	М	Yes

3: may provide social benefits to local communities. 4: not enhance the physical resource, but increases knowledge base in the community. 8: when critical sites subject to looting or erosion ID'd, proj't should be implemented immediately.

35.0 Acquire archaeologic artifacts from outside the spill area

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	N/A	N/A	Н	L	L	М	Н	Н	L	No

1a: replacement option. 1b: replacement option. 5a: if purchase from pvt mkt, could cause black market effect. If done correctly, no problem.

Criteria Summary. 1a: Potential to improve the rate or degree of recovery. 1b: Potential to prevent further degradation or decline. 2: Technical feasibility

3: Degree to which proposed action benefits the more than one resource or service. 4: Degree to which proposed action enhances the resc or svc. 5: Potential

for NO additional injury to: other target or non-target a: resources; b: services.

7. Relationship of the expected costs of the proposed action to the expected benefits. 8. Will the restoration opportunity be lost if implementation is delayed?

Legend: H = High; M = Medium; L = Low; N/A = Not applicable; Unk = Unknown; Unp = Unproven.

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Bald eagle

26.0 Amend Forest Practices Act

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	М	М	Н	н	L	Н	L	Н	М	No

5b: affected service is forestry.

37.0 Purchase habitat

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	М	Н	Н	М	L	Н	М	Н	М	No

Prevent disturbance (sounds & some activities) nr nests.
Coastal strips or protective nest buffers. 3: Most measures
would focus on Bald eagles, but if large strips designated >1
would benefit. 5b: affected service is general development. 8:
Yes if imminent threat to some critical habitat. On
broad-scale basis, imminent threat unlikely.

40.0 Special Designations

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	М	м	н	М	L	Н	М	н	M	No

Prevent disturbance (sounds & some activities) nr nests. Apply to coastal strips or nest buffers. 3: anticipated measures focus on Bald eagles. If large strips designated, > 1 would benefit. 5b: affected service is general development.

Criteria Summary. 1a: Potential to improve the rate or degree of recovery. 1b: Potential to prevent further degradation or decline. 2: Technical feasibility

3: Degree to which proposed action benefits the more than one resource or service. 4: Degree to which proposed action enhances the resc or svc. 5: Potential
for NO additional injury to: other target or non-target a: resources; b: services. 6. Potential effects of the proposed action on human health & safety.

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Black oystercatcher

13.0 Eliminate oil from mussel beds

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8	
	М	N/A	L/U	Н	L	М	Н	Н	М	No	

1a: M becasue unproven link; but birds eat mussels, & predation higher if travel further for food. 5a: Some injury to mussel beds, but it will be minor and short-term. 8: Some evidence of recovery occuring now.

14.0 Accelerate recovery of upper intertidal zone

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	М	N/A	Unp	Н	L	М	Н	Н	М	No

37.0 Purchase habitat

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	М	М	М	Н	L	Н	М	н	L	No

Concept is to protect habitat and prevent disturbance in narrow upland strips adjacent to coast. 5b: Some coastal development may be affected or prevented. 8: Yes, if imminent threat to critical habitat.

40.0 Special Designations

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	М	М	М	Н	L	Н	М	Н	М	No

Concept is to protect habitat and prevent disturbance in narrow upland strips along the coast. 5b: development along the coast may be affected or prevented.

Criteria Summary. 1a: Potential to improve the rate or degree of recovery. 1b: Potential to prevent further degradation or decline. 2: Technical feasibility
3: Degree to which proposed action benefits the more than one resource or service. 4: Degree to which proposed action enhances the resc or svc. 5: Potential
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Brown bear

8.0 Restrict/eliminate legal harvest: mammals and sea ducks

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	L	М	н	L	М	Н	м	н	м	No

H M H M No 5b: affected resource is hunting.

13.0 Eliminate oil from mussel beds

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	Unk	Unk	Н	Н	L	М	Н	Н	Unk	No

1a: extent of injury is unknown, so this linkage is uncertain.1b: extent of injury is unknown, so this linkage is uncertain.5a: there may be some mortality to mussels, themselves.Expected to minor and short-term.

37.0 Purchase habitat

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
•	N/A	Н	Н	Н	L	Н	L	Н	М	No

Concept is threatened critical areas and broad-scale purchase of bear habitat. 3: would have to be applied on a broad-scale basis which covers concentrated sites used by bears. 5b: affected resource is forestry and other developed uses. 8: Yes, if imminent threat to critical habitat; on broad scale basis, imminent threat unlikely.

40.0 Special Designations

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	L	L	М	М	L	н	М	Н	М	No

Concept: broad apln of sensitive mgmt to protect bear habitat (greater than existing agency mgmt). 3: Assumes that enabling legislation focuses on brown bears. 5b: Affected service is potentially most developed uses.

Criteria Summary. 1a: Potential to improve the rate or degree of recovery. 1b: Potential to prevent further degradation or decline. 2: Technical feasibility
3: Degree to which proposed action benefits the more than one resource or service. 4: Degree to which proposed action enhances the resc or svc. 5: Potential
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Coastal habitat: intertidal

13.0 Eliminate oil from mussel beds

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	М	N/A	Н	Н	L	М	н	Н	M	Yes

M N/A H H L M H H M Yes 1a: Assume that mussel beds are great improvement for small area; if oil in dissaggregated beds = L. 2: H for cleaning mussel BEDS. If oil in dissaggregated mussels, then L 5a: could impact the intertidal community itself. 7: if oil in dissaggregated mussels, then L.

14.0 Accelerate recovery of upper intertidal zone

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	М	N/A	Unp	Н	L	Н	Н	Н	М	No

15.2 Clean intertidal salmon spawning substrates

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	L	N/A	Н	Н	L	Н	Н	Н	L	No

1a: there are a few areas (two?) where this would be very helpful i.e., where L is incorrect rating.

Criteria Summary. 1a: Potential to improve the rate or degree of recovery. 1b: Potential to prevent further degradation or decline. 2: Technical feasibility

3: Degree to which proposed action benefits the more than one resource or service. 4: Degree to which proposed action enhances the resc or svc. 5: Potential

for NO additional injury to: other target or non-target a: resources; b: services.

7. Relationship of the expected costs of the proposed action to the expected benefits. 8. Will the restoration opportunity be lost if implementation is delayed?

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Common murre

4.0 Reduce disturbance at marine bird colonies and mammal haulout +

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	М	L	Н	М	L	н	М	Н	Н	Yes

1a: Unsure of level of disturbance. If level is high, then rating should be H. 5b: affected resource is tourism and commercial fishing.

16.1 Enhance social stimuli (Common murre)

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	Н	Н	М	L	L	М	Н	м	Н	Yes

Yes 1a: Project assumes that social stimuli creates synchronization among the breeding population. 5a: affected resource is murres and other breeders. If feas attempt fails impacts 1 yr only.

16.2 Improve physical characteristics of nest sites (Common murre)

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
		М								

3: Includes different projects not difficult to implement, but broadscale success is questionable. 5a: potentially affected resource is murres.

17.2 Reduce predator access to seabird colonies

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	М	L	М	М	L	М	Н	Н	М	No

1a: Do not do this project is breeding is not synchronized. 2: Not considering public disapproval. 5a: potentially affected resource is murres.

37.0 Purchase habitat

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	М	L	Н	М	L	Н	Н	Н	L	No

Gull rock is the only known breeding area in private hands. No threat known. 8: Yes, if imminent threat. Gull Rock only known privately owned breeding area. No threat known.

40.0 Special Designations

cirteria.	14	-	_	-	-	Н	-			No
Criteria:	10	16	2	7	1	50	5h	4	7	0

Concept is ability to regulate boating disturbance and shooting (halibut) near breeding colonies. Current level of disturbance is unknown. If it is high, then criteria should be upgraded to H. 5b: affected resource is tourism and commercial fishing. 7: If level of disturbance is not significant, then rating should be changed to L.

Criteria Summary. 1a: Potential to improve the rate or degree of recovery. 1b: Potential to prevent further degradation or decline. 2: Technical feasibility
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Cutthroat trout

2.1 Incease fish/shellfish management: species already with plans

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8	
	М	М	Н	L	L	Н	М	Н	М	Yes	5b: sport-fishing could be temporarily curtailed.

11.0 Improve freshwater wild salmon spawning/rearing habitats

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	М	N/A	Н	М	М	Н	Н	Н	М	No

14.0 Accelerate recovery of upper intertidal zone

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	Н	N/A	Yes	Н	L	Н	Н	Н	М	No

19.0 Update and expand Alaska's Anadromous Fish Stream Catalog

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	L	М	Н	Н	L	Н	Н	Н	М	No

26.0 Amend Forest Practices Act

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	L	L	Н	Н	L	Н	L	н	L	No

5b: affected service is timber harvest.

37.0 Purchase habitat

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	L	L	Н	Н	L	Н	М	Н	L	No

Concept is purchase of buffers along streams. 5b: affected service is timber harvest. 8: Yes, if imminent threat.

40.0 Special Designations

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	L	L	Н	Н	L	н	м	Н	м	No

Concept is upland stream protection. 5b: affected service is forestry and potentially other developed uses of riparian areas.

Criteria Summary. 1a: Potential to improve the rate or degree of recovery. 1b: Potential to prevent further degradation or decline. 2: Technical feasibility
3: Degree to which proposed action benefits the more than one resource or service. 4: Degree to which proposed action enhances the resc or svc. 5: Potential
for NO additional injury to: other target or non-target a: resources; b: services. 6. Potential effects of the proposed action on human health & safety.
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Dolly varden trout

2.1 Incease fish/shellfish management: species already with plans

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8	
	М	м	н	L	L	н	м	н	м	Yes	

M M H L L H M H M Yes 5b: sport-fishing could be temporarily curtailed.

14.0 Accelerate recovery of upper intertidal zone

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	Н	N/A	Yes	Н	L	Н	Н	Н	м	No

19.0 Update and expand Alaska's Anadromous Fish Stream Catalog

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	L	М	Н	Н	L	Н	Н	Н	М	No

26.0 Amend Forest Practices Act

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	L	L	Н	Н	L	Н	L	Н	L	No

5b: affected service is timber harvest.

37.0 Purchase habitat

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	L	L	Н	Н	L	Н	М	Н	L	No

Concept is purchase of buffers along streams. 5b: affected service is timber harvest. Yes, if imminent threat.

40.0 Special Designations

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	L	L	Н	Н	L	Н	М	Н	М	No

 Concept is upland stream protection. 5b: affected service is forestry and potentially other developed uses of riparian areas.

Criteria Summary. 1a: Potential to improve the rate or degree of recovery. 1b: Potential to prevent further degradation or decline. 2: Technical feasibility
3: Degree to which proposed action benefits the more than one resource or service. 4: Degree to which proposed action enhances the resc or svc. 5: Potential
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Harbor seals

4.0 Reduce disturbance at marine bird colonies and mammal haulout +

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	Н	N/A	Н	L	L	Н	М	Н	н	Yes

5b: commerc'l tourism & recreat'n may be affected. Rating may be upgraded depending on restrictions.

8.1 temporarily restrict/close harvest

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	Н	Н	Н	М	L	Н	L	М	М	No

5b: affected service is subsistence hunting. 8: Rating is No because of other opportunities to achieve the same results (8.2) without the cost.

8.2 educate public to voluntarily restrict harvest (sport, subsist.)

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	Н	Н	М	L	L	н	М	М	М	Yes

Note that crit #6 might be changed to H (need to check with group). 5b: affected resource is subsistence hunting.

40.0 Special Designations

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	Н	Н	Н	Н	L	Н	М	Н	н	Yes

Management tool needed is ability to control boat traffic, etc around haul-outs and pupping area. 5b: affected resource is commercial tourism and recreation (restricted near haulouts, etc.)

Criteria Summary. 1a: Potential to improve the rate or degree of recovery. 1b: Potential to prevent further degradation or decline. 2: Technical feasibility

3: Degree to which proposed action benefits the more than one resource or service. 4: Degree to which proposed action enhances the resc or svc. 5: Potential
for NO additional injury to: other target or non-target a: resources; b: services. 6. Potential effects of the proposed action on human health & safety.

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Harlequin ducks

8.1 temporarily restrict/close harvest

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	М	М	Н	L	L	Н	М	Н	М	Yes

1a: Hunting pressure is low, but it could still hae a moderate effect. 5b: affected service is hunting

8.2 educate public to voluntarily restrict harvest (sport, subsist.)

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	М	М	м	L	L	н	М	Н	L	Yes

5b: affected service is hunting.

13.0 Eliminate oil from mussel beds

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	Н	N/A	Unp	Н	L	М	Н	Н	М	Yes

1a: linkage is still being determined. H assumes linkage is true. Need to check with Karen/Group. Is this L, Unk, or H? 5a: Possible short-term affects to the mussel beds themselves.

26.0 Amend Forest Practices Act

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	М	Н	Н	Н	L	Н	L	Н	М	No

2: precedent is set; however, political realities make this unlikely. 5b: affected service is forestry.

37.0 Purchase habitat

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	М	Н	Н	н	L	Н	М	Н	L	No

Concept is purchase of riparian nesting habitat. 5b: affected service is forestry. 8: If imminent threat, then Yes.

40.0 Special Designations

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	М	М	Н	Н	L	Н	м	Н	М	No

Concept is designated protected buffers around breeding areas. 5b: impact to logging would be minimal; restrictions are riparian only + public land.

Criteria Summary. 1a: Potential to improve the rate or degree of recovery. 1b: Potential to prevent further degradation or decline. 2: Technical feasibility

3: Degree to which proposed action benefits the more than one resource or service. 4: Degree to which proposed action enhances the resc or svc. 5: Potential
for NO additional injury to: other target or non-target a: resources; b: services. 6. Potential effects of the proposed action on human health & safety.

7. Relationship of the expected costs of the proposed action to the expected benefits. 8. Will the restoration opportunity be lost if implementation is delayed?

Legend: H = High; M = Medium; L = Low; N/A = Not applicable; Unk = Unknown; Unp = Unproven.

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Herring

2.1 Incease fish/shellfish management: species already with plans

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	Unk	Unk	н	L	М	Н	М	Н	L	No

Option would first fund significant research into the species.

1a: population level injury is equivocal; therefore, recovery may not be needed. 1b: population level injury is equivocal. 4: Rating depends on specific mgmt action adopted; could be H. 5b: developed use in subtidal is affected; could be H depending on mgmt action. Benefits are unknown, but indications are less than outstanding.

15.1 Supplment intertidal substrates for herring

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	Unk	Unk	М	Н	М	Н	Н	Н	М	No

1a: population level injury is equivocal. 1b: population level injury is equivocal. 3: benefits are unknown, but indications are less than outstanding.

40.0 Special Designations

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	N/A	Unk	Н	Н	L	Н	L	Н	М	No

Concept is more protective management. Bob thinks evaluation is error because mgmt tools exist now. 1b: population level injury is equivocal. 5b: any shoreline development affected.

Criteria Summary. 1a: Potential to improve the rate or degree of recovery. 1b: Potential to prevent further degradation or decline. 2: Technical feasibility
3: Degree to which proposed action benefits the more than one resource or service. 4: Degree to which proposed action enhances the resc or svc. 5: Potential
for NO additional injury to: other target or non-target a: resources; b: services. 6. Potential effects of the proposed action on human health & safety.
7. Relationship of the expected costs of the proposed action to the expected benefits. 8. Will the restoration opportunity be lost if implementation is delayed?
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Killer whale

4.0 Reduce disturbance at marine bird colonies and mammal haulout +

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	N/A	М	М	М	L	Н	М	н	М	No

Concept is buffer zone to prevent disturbance around rubbing beaches. 1a: if there is current disburbance preventing use of rubbing beaches, then should be rated. 1b: rating assumes potential for increased disturbance. 5b: affected services are commercial fishing, tourism and recreation.

40.0 Special Designations

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	N/A	М	М	М	L	Н	М	Н	М	No

Buffer zone to control boat traffic etc, within Marine Sanct. or other designation. 1a: if current disturbance preventing use of rubbing beach, this should be rated. 1b: this assumes the potential for increased disturbance. 5b: affected services are commercial fishing, tourism, and recreation.

Criteria Summary. 1a: Potential to improve the rate or degree of recovery. 1b: Potential to prevent further degradation or decline. 2: Technical feasibility

3: Degree to which proposed action benefits the more than one resource or service. 4: Degree to which proposed action enhances the resc or svc. 5: Potential
for NO additional injury to: other target or non-target a: resources; b: services. 6. Potential effects of the proposed action on human health & safety.

7. Relationship of the expected costs of the proposed action to the expected benefits. 8. Will the restoration opportunity be lost if implementation is delayed?

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Marbled murrelet

9.0 Minimize incidental take of marine birds by commercial fisheries

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	l L	L	M	M	L	Н	L	Н	L	No

L No This is a study/feasibility option. 1a: lack data on amount of incidental take. If significant, rating could be M. 1b: lack data on amount of incidental take. If significant, rating could be M. 5b: techniques to decrease mortality may have an adverse affect on commercial fishing. 7: lack data on amount of incidental take. If significant, rating could be M.

17.1 Elminate introduced foxes (for nesting marine birds)

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	Н	N/A	Н	н	N/A	Н	Н	Н	Н	No

Replacement option for all marine seabirds (Doesn't increase the murrelet pop.) 1a: this rating is meant to mean that this is an effective replacement option. 1b: N/A because its replacement. 4: Option is replacement (though would enhance non-murrelet species relative to pre-spill levels). 5a: Foxes are not part of the ecosystem (eliminating them not an injury to resources).

37.0 Purchase habitat

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	М	М	Н	Н	L	Н	L	Н	L	No

Purchase of large amounts of nesting habitat once we know where it is & how much will be affected. 5b: Timber harvest or other large-scale habitat conversions. 8: Yes, if imminent threat.

40.0 Special Designations

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	М	М	Н	Н	L	Н	L	Н	L	No

Concept of the designation. No disturbance during nesting or of habitat anytime. 5b: Development on public land such as timber harvest resulting large-scale habitat conversion.

Criteria Summary. 1a: Potential to improve the rate or degree of recovery. 1b: Potential to prevent further degradation or decline. 2: Technical feasibility
3: Degree to which proposed action benefits the more than one resource or service. 4: Degree to which proposed action enhances the resc or svc. 5: Potential
for NO additional injury to: other target or non-target a: resources; b: services. 6. Potential effects of the proposed action on human health & safety.
7. Relationship of the expected costs of the proposed action to the expected benefits. 8. Will the restoration opportunity be lost if implementation is delayed?
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Pigeon guillemot

17.2 Reduce predator access to seabird colonies

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	М	N/A	М	L	М	н	Н	Н	М	No

37.0 Purchase habitat

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	L	М	М	Н	L	Н	М	Н	L	No

Concept is purchase of strips along coastlines. 5b: potentially affected services include any shoreline developed uses. 8: Yes, if imminent threat.

40.0 Special Designations

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	L	М	М	Н	L	Н	М	Н	М	No

Concept is protection of habitat along coastlines. 1b: Most activities would probably not affect Pigeon guillemots. 5b: affected resource is coastal development. Upland protection along coastline for this specie.

Criteria Summary. 1a: Potential to improve the rate or degree of recovery. 1b: Potential to prevent further degradation or decline. 2: Technical feasibility
3: Degree to which proposed action benefits the more than one resource or service. 4: Degree to which proposed action enhances the resc or svc. 5: Potential
for NO additional injury to: other target or non-target a: resources; b: services. 6. Potential effects of the proposed action on human health & safety.
7. Relationship of the expected costs of the proposed action to the expected benefits. 8. Will the restoration opportunity be lost if implementation is delayed?
Legend: H = High; M = Medium; L = Low; N/A = Not applicable; Unk = Unknown; Unp = Unproven.

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Pink salmon

2.1 Incease fish/shellfish management: species already with plans

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	Н	Н	М	Н	L	Н	М	н	М	Yes

5b: could require short-term affect to commercial fishing (for long-term gain). 8: Yes assumes different streams are different stocks. If straying made that false, then No.

11.0 Improve freshwater wild salmon spawning/rearing habitats

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	Н	Н	Н	Н	н	Н	н	Н	М	Yes

5a: H assumes population only taken to pre-spill. Enhancement could have effects. 8: Yes assumes different streams are different stock. If straying made that false, then No.

15.2 Clean intertidal salmon spawning substrates

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	L	L	М	Н	L	М	Н	н	L	Yes

1a: May be some locations where cleaning worthwhile (where H or M), but it is generally L. 1b: May be some locations where cleaning worthwhile (where H or M), but it is generally L. 5a: cleaning produces some injury.

18.1 Establish additional hatchery (salmon) runs

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	L	L	Н	Н	Н	L	L	Н	L	No

5a: potential to hurt wild runs (and not create change them to hatchery genetic stock). 5b: potential to hurt services that rely on the nature of wild runs being separate genetic stock.

18.2 Transplant (salmon) hatchery-reared fish to depleted areas

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	L	L	Н	н	Н	L	L	Н	L	No

5a: potential to hurt wild runs (and not create change them to hatchery genetic stock). 5b: potential to hurt services that rely on the nature of wild runs being separate genetic stock.

18.3 Wild egg take to establish new runs (salmon)

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
Control of the Contro	М	М	Н	Н	Н	L	Н	Н	М	No

This is an enhancement/replacement option. 5a: difficult to manage to avoid impact on wild stocks.

19.0 Update and expand Alaska's Anadromous Fish Stream Catalog

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	L	М	н	Н	L	Н	н	Н	М	No

26.0 Amend Forest Practices Act

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	L	L	Н	Н	L	Н	L	Н	L	No

5b: affected resource is forestry.

37.0 Purchase habitat

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	L	М	Н	Н	L	Н	М	Н	М	No

Purchase of additional buffers along anadromous streams and coastal intertidal spawning. 5b: affected service is any developed use near anadromous streams and coastal intertidal areas. 8: Yes, if imminent threat.

40.0 Special Designations

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	L	L	Н	Н	L	Н	М	н	М	No

Concept is stream protection extending to public uplands and around intertidal spawning. 5b: affected services are developed uses in riparian zones and along shorelines.

Criteria Summary. 1a: Potential to improve the rate or degree of recovery. 1b: Potential to prevent further degradation or decline. 2: Technical feasibility

3: Degree to which proposed action benefits the more than one resource or service. 4: Degree to which proposed action enhances the resc or svc. 5: Potential
for NO additional injury to: other target or non-target a: resources; b: services.

7. Relationship of the expected costs of the proposed action to the expected benefits. 8. Will the restoration opportunity be lost if implementation is delayed?

Legend: H, = High; M = Medium; L = Low; N/A = Not applicable; Unk = Unknown; Unp = Unproven.

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Recreation: backcountry developed

12.1 New backcountry recreation facilities

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	N/A	L	Н	М	М	М	L	Н	М	No

1a: assume land-use impacts taken account of in siting and permitting. 1b: hardening over-used areas can prevent resource damage. 5a: M because of service to surrounding area. 5b: affected resource is wild, non-developed recreation.

12.3 New commercial, (lodge, visitor-center) recreation facilities

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	N/A	N/A	Н	М	Н	L	Н	Н	М	No

Concept is fuel facilities, lodge, etc. 1a: Assume land-use impacts taken account in siting & permit process. Replacement, therefore n/a. 1b: replacement; therefore, n/a. 5a: long-term impact is disturbance, but assume proper mgmt therefore not severe. 5b: not evaluating land-use impacts. Assume area already designated for use.

28.0 Acquire access for sport-fishing and recreation

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	М	Н	Н	М	М	М	Н	Н	М	No

8: If imminent threat, then Yes. Yes for "17b" easements because conveyance is immenent threat.

37.0 Purchase habitat

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	N/A	Н	Н	Н	Н	Н	L	Н	М	No

Concept is large-scale purchase of an area (or inholding that affects large area). 5b: affected service would be potential developed uses. 8: Yes, if imminent threat.

40.0 Special Designations

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	N/A	N/A	Н	Н	L	Н	L	Н	М	No

Large-scale protective designation for upland, tideland, and water (or inholding affecting an area). 1a: replacement option, therefore n/a. (Replacement for injured perception). 1b: replacement option, therefore n/a. 5b: most potential development affected.

Criteria Summary. 1a: Potential to improve the rate or degree of recovery. 1b: Potential to prevent further degradation or decline. 2: Technical feasibility

3: Degree to which proposed action benefits the more than one resource or service. 4: Degree to which proposed action enhances the resc or svc. 5: Potential for NO additional injury to: other target or non-target a: resources; b: services. 6. Potential effects of the proposed action on human health & safety.

7. Relationship of the expected costs of the proposed action to the expected benefits. 8. Will the restoration opportunity be lost if implementation is delayed?

Legend: H = High; M = Medium; L = Low; N/A = Not applicable; Unk = Unknown; Unp = Unproven.

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Recreation: concentrated

33.1 Education programs, information, and products

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
VIOLENCE DE LA CONTRACTION DEL CONTRACTION DE LA	N/A	N/A	н	L	N/A	Н	Н	н	М	No

Assume visitor-center type dypment on highway, in town, or elsewhere already designated for the use. 1a: replacement option, therefore n/a. 1b: replacement option, therefore n/a. 4: replacement option, therefore n/a. 5b: assumes development located on highway, in town, or elsewhere already designated for the use.

34.0 Marine environmental institute

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	N/A	N/A	н	М	N/A	Н	Н	м	М	No

Assume visitor-center type dvpment on highway, in town, or elsewhere already designated for the use. 1a: replacement option; therefore n/a. 1b: replacement option; therefore n/a. 3: M because of research benefits. 4: replacement option; therefore, n/a. 5b: assumes on higway, in town, or elsewhere already designated.

Criteria Summary. 1a: Potential to improve the rate or degree of recovery. 1b: Potential to prevent further degradation or decline. 2: Technical feasibility

3: Degree to which proposed action benefits the more than one resource or service. 4: Degree to which proposed action enhances the resc or svc. 5: Potential
for NO additional injury to: other target or non-target a: resources; b: services. 6. Potential effects of the proposed action on human health & safety.

7. Relationship of the expected costs of the proposed action to the expected benefits. 8. Will the restoration opportunity be lost if implementation is delayed?

Legend: N = High; M = Medium; L = Low; N/A = Not applicable; Unk = Unknown; Unp = Unproven.

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Recreation: undeveloped

37.0 Purchase habitat

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	N/A	Н	Н	Н	Н	Н	L	н	M	No

Concept is purchase of large area (or an inholding affecting area) to protect wilderness qualities. 5b: affected service is potential developed uses. Yes if imminent threat.

40.0 Special Designations

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	N/A	Н	Н	Н	L	Н	L	Н	М	No

Concept is large-scale designation protecting wilderness qualities. 5b: affected service is any potential developed use. 7: high indirect costs. Yes if imminent threat.

Criteria Summary. 1a: Potential to improve the rate or degree of recovery. 1b: Potential to prevent further degradation or decline. 2: Technical feasibility

3: Degree to which proposed action benefits the more than one resource or service. 4: Degree to which proposed action enhances the resc or svc. 5: Potential
for NO additional injury to: other target or non-target a: resources; b: services.

7. Relationship of the expected costs of the proposed action to the expected benefits. 8. Will the restoration opportunity be lost if implementation is delayed?
Legend: H = High; M = Medium; L = Low; N/A = Not applicable; Unk = Unknown; Unp = Unproven.

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River otter

8.1 temporarily restrict/close harvest

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	н	Н	н	L	М	Н	М	Н	Н	Yes

5b: Assume restrictions to subsistence hunting short-term, but may cause sig. loss to some folks.

13.0 Eliminate oil from mussel beds

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	Н	Н	Н	Н	L	М	Н	Н	М	Yes

1a: linkage is still being determined. H rating assumes linknage. 5a: possible short-term harm to the mussels themselves.

14.0 Accelerate recovery of upper intertidal zone

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	Unk	Unk	Yes	Н	L	н	Н	Н	Unk	Yes

1a: Need to call PI for info. 1b: Need to call PI for info. 7: need to call PI for info.

37.0 Purchase habitat

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	N/A	М	Н	Н	L	Н	М	Н	М	No

Concept is large-scale purchases of strips of stream-side and coastal habitat. 5b: affected services include any development of stream-side or coastal areas. 8: Rating is No, because of large scale purchases. Large-scale imminent threat unlikely.

40.0 Special Designations

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	N/A	L	Н	Н	L	Н	М	Н	М	No

Concept is protection of a strip of streamside and coastal habitat (coastal is most important). 5b: affected resource is any potential development along streams or coast.

Criteria Summary. 1a: Potential to improve the rate or degree of recovery. 1b: Potential to prevent further degradation or decline. 2: Technical feasibility
3: Degree to which proposed action benefits the more than one resource or service. 4: Degree to which proposed action enhances the resc or svc. 5: Potential
for NO additional injury to: other target or non-target a: resources; b: services. 6. Potential effects of the proposed action on human health & safety.
7. Relationship of the expected costs of the proposed action to the expected benefits. 8. Will the restoration opportunity be lost if implementation is delayed?
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Rockfish

2.2 Increase fish/shellfish management: plans for species without them

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	Unk	Unk	н	М	L	Н	М	н	Unk	Yes

1a: we don't know the degree of impact to the population. 1b: comm. fishing increased tenfold pre-spill. But unknown whether overfishing is occuring. 5b: if population declining. Mgmt could decrease comm fishing harvest. (was low-level pre-spill). 8: Suspect (but no data) that comm fishing pressure unsustainable. If so, then Yes. If not = No.

Criteria Summary. 1a: Potential to improve the rate or degree of recovery. 1b: Potential to prevent further degradation or decline. 2: Technical feasibility

3: Degree to which proposed action benefits the more than one resource or service. 4: Degree to which proposed action enhances the resc or svc. 5: Potential
for NO additional injury to: other target or non-target a: resources; b: services. 6. Potential effects of the proposed action on human health & safety.

7. Relationship of the expected costs of the proposed action to the expected benefits. 8. Will the restoration opportunity be lost if implementation is delayed?

Legend: H = High; M = Medium; L = Low; N/A = Not applicable; Unk = Unknown; Unp = Unproven.

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Sea otter

4.0 Reduce disturbance at marine bird colonies and mammal haulout +

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	L	L	м	L	L	Н	М	н	L	No

1a: for sea otters, these exist in enough locations that implementation difficult and uncertain. 1b: in addition to 1a, unsure if disturbance causes significant (population level) effects. 2: because of dispursed nature of haul-outs, etc, implementation would produce mixed results. 5b: affected resources are tourism, commercial fishing, and recreation.

8.1 temporarily restrict/close harvest

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	L	L	М	L	L	н	L	Н	L	No

Unsure if otter population depleted per definition under MMPA. If not, option doesn't apply. 1a: unsure about the amount of harvest (however, information indicates small). 1b: unsure about the amount of harvest (however, information indicates small). 5b: affected resource is subsistence hunting.

8.2 educate public to voluntarily restrict harvest (sport, subsist.)

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	L	L	М	L	L	Н	М	Н	М	No

 $5b\colon$ this option includes voluntary restrictions on subsistence hunting.

13.0 Eliminate oil from mussel beds

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	Н	Н	Н	Н	L	М	Н	Н	н	Yes

1a: linkage unproven; thus rating speculative. If significant oil fm disaggregated mussels, then L. 1b: assumes linkage exists & oil consumed is from mussels in beds. If not, then L. Based on preliminary results of feasibility study. 5a: potentially, the mussels themselves could be adversely affected. Based on assumption pop delining (or post-weaning mortality means it will do so). If not, then No.

40.0 Special Designations

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	L	L	М	L	L	Н	М	н	М	No

Management tool sought is ability to regulate boat traffic, etc nr haul-outs & concentration areas. 5b: affected services are commercial fishing, tourism, and recreation.

Criteria Summary. 1a: Potential to improve the rate or degree of recovery. 1b: Potential to prevent further degradation or decline. 2: Technical feasibility

3: Degree to which proposed action benefits the more than one resource or service. 4: Degree to which proposed action enhances the resc or svc. 5: Potential for NO additional injury to: other target or non-target a: resources; b: services. 6. Potential effects of the proposed action on human health & safety.

7. Relationship of the expected costs of the proposed action to the expected benefits. 8. Will the restoration opportunity be lost if implementation is delayed?

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Sockeye salmon

2.1 Incease fish/shellfish management: species already with plans

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8	
	Н	Н	М	Н	L	Н	Н	Н	Н	Yes	

Would include research to separate stock before nearing spawning streams. 2: mixed results have been obtained for stock separat'n and mgmt. 5b: assume increased knowledge and mgmt would redirect fisheries; rather than close the fishery.

11.0 Improve freshwater wild salmon spawning/rearing habitats

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	Н	Н	Н	Н	М	Н	Н	Н	Н	Yes

18.1 Establish additional hatchery (salmon) runs

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	М	N/A	Н	Н	М	М	Н	Н	М	No

3: M, because it protects only a moderate portion of the existing resource. 5a: could be impacts to existing fisheries. 5b: assume land-use impacts are taken care of in the siting and permitting process.

18.2 Transplant (salmon) hatchery-reared fish to depleted areas

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	Н	Н	Н	Н	L	Н	Н	Н	М	Yes

18.3 Wild egg take to establish new runs (salmon)

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	М	N/A	н	Н	М	М	Н	н	М	No

M No 5a: potential impacts to existing fisheries. 5b: assumes that land-use impacts taken care of in siting and permitting process.

19.0 Update and expand Alaska's Anadromous Fish Stream Catalog

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	L	M	Н	Н	L	Н	Н	Н	М	No

Criteria Summary. 1a: Potential to improve the rate or degree of recovery. 1b: Potential to prevent further degradation or decline. 2: Technical feasibility
3: Degree to which proposed action benefits the more than one resource or service. 4: Degree to which proposed action enhances the resc or svc. 5: Potential
for NO additional injury to: other target or non-target a: resources; b: services. 6. Potential effects of the proposed action on human health & safety.
7. Relationship of the expected costs of the proposed action to the expected benefits. 8. Will the restoration opportunity be lost if implementation is delayed?
Legend: H = High; M = Medium; L = Low; N/A = Not applicable; Unk = Unknown; Unp = Unproven.

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Evaluation of Options by Resource: DRAFT for RPWG Review Amend Forest Practices Act

26.0

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	L	L	Н	Н	L	Н	L	Н	L	No

5b: affected service are the timber harvest companies and

37.0 Purchase habitat

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
COLUMN TO THE TAXABLE PARTY OF THE PARTY OF	М	М	Н	Н	L	н	М	Н	М	No

Concept is purchase of upland riparian habitat. 8: If imminent threat, then Yes.

Special Designations

Criteria:	1a	1b	b 2 3 4 5a 5b	6	7	8				
	L	L	Н	Н	L	н	м	Н	М	No

Concept is upland stream protection. (Remember, its for public land.)

Criteria Summary. 1a: Potential to improve the rate or degree of recovery. 1b: Potential to prevent further degradation or decline. 2: Technical feasibility 3: Degree to which proposed action benefits the more than one resource or service. 4: Degree to which proposed action enhances the resc or svc. 5: Potential for NO additional injury to: other target or non-target a: resources; b: services. 6. Potential effects of the proposed action on human health & safety. 7. Relationship of the expected costs of the proposed action to the expected benefits. 8. Will the restoration opportunity be lost if implementation is delayed? Legend: H = High; M = Medium; L = Low; N/A = Not applicable; Unk = Unknown; Unp = Unproven. Date Printed: 09/11/92 ; Page 28

Wilderness/intrinsic values

37.0 Purchase habitat

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	Н	Н	н	Н	Н	Н	L	н	М	No

Concept is purchase of large area (or inholding affecting one) to protect wilderness qualities. 5b: affected services are any potential developed uses. Yes if imminent threat.

40.0 Special Designations

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	Н	H.	Н	Н	н	н	L	Н	М	No

Concept is large-scale designation protecting wilderness qualities. 5b: affected services are potential developed uses. Not necessarily low for NPS land.

Criteria Summary. 1a: Potential to improve the rate or degree of recovery. 1b: Potential to prevent further degradation or decline. 2: Technical feasibility

* 3: Degree to which proposed action benefits the more than one resource or service. 4: Degree to which proposed action enhances the resc or svc. 5: Potential for NO additional injury to: other target or non-target a: resources; b: services. 6. Potential effects of the proposed action on human health & safety.

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			*

Resource or Service	Option					Crit	eria				ė
		1a	1b	2	3	4	5a	5b	6	7	8
Archaeology	1.0 Archeological site stewardship program	N/A	Н	M	L	L	Н	Н	Н	Н	Yes
Cutthroat trout Dolly varden trout Herring Pink salmon Sockeye salmon	 2.1 Incease fish/shellfish management: species already with plans 	M M Unk H	M M Unk H	H H H M	L L H H	L M L	H H H	M M M M	H H H H	M M L M	Yes Yes No Yes Yes
Rockfish	2.2 Increase fish/shellfish management: plans for species without th	Unk	Unk	Н	M	L	Н	М	Н	Unk	Yes
Common murre Harbor seals Killer whale Sea otter	M H N/A L	L N/A M L	H H M	M L M L	L L L	H H H	M M M	H H H	H H M L	Yes Yes No No	
Brown bear	8.0 Restrict/eliminate legal harvest: mammals and sea ducks	L	М	Н	L	М	Н	М	Н	М	No
Harbor seals Harlequin ducks River otter Sea otter	8.1 temporarily restrict/close harvest 8.1 temporarily restrict/close harvest 8.1 temporarily restrict/close harvest 8.1 temporarily restrict/close harvest	H M H L	H M. H L	H H H	M L L	L M L	H H H	L M M L	M H H	M M H L	No Yes Yes
Harbor seals Harlequin ducks Sea otter	8.2 educate public to voluntarily restrict harvest (sport, subsist.)8.2 educate public to voluntarily restrict harvest (sport, subsist.)8.2 educate public to voluntarily restrict harvest (sport, subsist.)	H M L	H M L	M M M	L L	L L L	H	M M M	M H H	M . L M	Yes Yes
Marbled murrelet	9.0 Minimize incidental take of marine birds by commercial fisheries	L	L	М	М	L	Н	L	Н	L	No
Archaeology	10.0 Preserve archaeological sites/artifacts	N/A	М	H-	L	L	н	Н	Н	М	Yes
Cutthroat trout Pink salmon Sockeye salmon	11.0 Improve freshwater wild salmon spawning/rearing habitats 11.0 Improve freshwater wild salmon spawning/rearing habitats 11.0 Improve freshwater wild salmon spawning/rearing habitats	M H	N/A H H	H H	M H H	M H M	H - H	H	H H H	M M H	No Yes Yes
Recreation: backcountry developed	12.1 New backcountry recreation facilities	N/A	L	Н	М	М	М	L	Н	М	No
Recreation: backcountry developed	12.3 New commercial, (lodge, visitor-center) recreation facilities	N/A	N/A	Н	M	Н	L	Н	Н	М	No
Black oystercatcher Brown bear Coastal habitat: intertidal Harlequin ducks River otter Sea otter	13.0 Eliminate oil from mussel beds	М	N/A Unk N/A N/A H	H	H	L L L L	M M M M	H H H H	H H H H	M Unk M M M	No No Yes Yes Yes
Black oystercatcher Coastal habitat: intertidal	14.0 Accelerate recovery of upper intertidal zone 14.0 Accelerate recovery of upper intertidal zone	M M	N/A N/A		1225	L L	M H	H	H	M M	No No

Criteria Summary. 1a: Potential to improve the rate or degree of recovery. 1b: Potential to prevent further degradation or decline. 2: Technical feasibility
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Evaluation of Options by Resource: DRAFT for RPWG Review

Resource or Service	Option .					Crite	eria				
Cutthroat trout Dolly varden trout River otter	14.0 Accelerate recovery of upper intertidal zone 14.0 Accelerate recovery of upper intertidal zone 14.0 Accelerate recovery of upper intertidal zone	1a H H Unk	1b N/A N/A Unk	Yes Yes	Н	4 L L	5a H H H	5b H H H	6 H H	7 M M Unk	No No Yes
Herring	15.1 Supplment intertidal substrates for herring	Unk	Unk	М	Н	М	H .	Н	Н	М	No
Coastal habitat: intertidal Pink salmon	15.2 Clean intertidal salmon spawning substrates 15.2 Clean intertidal salmon spawning substrates	L L	N/A L	H M	H	L L	H M	H	H	L L	No Yes
Common murre	16.1 Enhance social stimuli (Common murre)	Н	Н	М	L	L	М	Н	М	Н	Yes
Common murre	16.2 Improve physical characteristics of nest sites (Common murre)	М	М	L	L	L	М	Н	М	Н	Yes
Marbled murrelet	17.1 Elminate introduced foxes (for nesting marine birds)	Н	N/A	Н	Н	N/A	Н	Н	Н	Н	No
Common murre Pigeon guillemot	17.2 Reduce predator access to seabird colonies 17.2 Reduce predator access to seabird colonies	M M	L N/A	M M	M L	L M	M H	H	H	M M	No No
Pink salmon Sockeye salmon	18.1 Establish additional hatchery (salmon) runs 18.1 Establish additional hatchery (salmon) runs	L M	L N/A	H	H	H	L M	L H	H	L M	No No
Pink salmon Sockeye salmon	18.2 Transplant (salmon) hatchery-reared fish to depleted areas 18.2 Transplant (salmon) hatchery-reared fish to depleted areas	L H	L	H	H	H	L H	L H	H	L M	No Yes
Pink salmon Sockeye salmon	18.3 Wild egg take to establish new runs (salmon) 18.3 Wild egg take to establish new runs (salmon)	M M	M N/A	H	H	H	L M	H	H	M M	No No
Cutthroat trout Dolly varden trout Pink salmon Sockeye salmon	19.0 Update and expand Alaska's Anadromous Fish Stream Catalog 19.0 Update and expand Alaska's Anadromous Fish Stream Catalog 19.0 Update and expand Alaska's Anadromous Fish Stream Catalog 19.0 Update and expand Alaska's Anadromous Fish Stream Catalog	L L L	M M M	H H H	H H H	L L L	H H H	H H H	H H H	M M M	No No No
Bald eagle Cutthroat trout Dolly varden trout Harlequin ducks Pink salmon Sockeye salmon	26.0 Amend Forest Practices Act	M L M L	M L H L	H H H H	H H H H		H H H		H H H H	M L M L	No No No No No
Recreation: backcountry developed	28.0 Acquire access for sport-fishing and recreation	М	Н	Н	М	М	М	Н	Н	М	No
Recreation: concentrated	33.1 Education programs, information, and products	N/A	N/A	н	L	N/A	Н	Н	Н	М	No
Recreation: concentrated	34.0 Marine environmental institute	N/A	N/A	н	М	N/A	Н	Н	М	М	No
Archaeology	35.0 Acquire archaeologic artifacts from outside the spill area	N/A	N/A	н	L	L	М	Н	Н	L	No
Bald eagle	37.0 Purchase habitat	м	Н	Н	М	L	Н	м	Н	м	No

Criteria Summary. 1a: Potential to improve the rate or degree of recovery. 1b: Potential to prevent further degradation or decline. 2: Technical feasibility

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Evaluation of Options by Resource: DRAFT for RPWG Review

Resource or Service	Option					Crit	eria	1			
		1a	1b	2	3	4	5a	5b	6	7	T
Black oystercatcher	37.0 Purchase habitat	М	М	M	H	L	Н	М	H	L	N
Brown bear	37.0 Purchase habitat	N/A	Н	Н	н	L	Н	L	Н	M	N
Common murre	37.0 Purchase habitat	М	L	н	M	L	H	Н	Н	L	N
Cutthroat trout	37.0 Purchase habitat	L	L	H	Н	L	H	М	Н	l٤	N
Dolly varden trout	37.0 Purchase habitat	L	L	Н	Н	L	Н	M	Н	L	N
Harlequin ducks	37.0 Purchase habitat	М	H	H	Н	L	Н	M	Н	L	IN
Marbled murrelet	37.0 Purchase habitat	М	М	H	H	L	Н	L	H	L	IN
Pigeon guillemot	37.0 Purchase habitat	L	м	М	l H	L	Н	М	н	L	IN
Pink salmon	37.0 Purchase habitat	lι	М	H	Н	L	l H	M	H.	M	N
Recreation: backcountry developed	37.0 Purchase habitat	N/A	H	н	Н	H	H	L	Н	М	N
Recreation: undeveloped	37.0 Purchase habitat	N/A	H:	l H	Н	H	Н	L	Н	M	IN
River otter	37.0 Purchase habitat	N/A		H	Н	L	Н	М	Н	М	IN
Sockeye salmon	37.0 Purchase habitat		М	H	Н	L	Н	M	Н	М	N
Wilderness/intrinsic values	37.0 Purchase habitat		Н	Н	H	Н	Н	L	Н	М	N
Bald eagle	40.0 Special Designations	 м	М	Н	М	L	Н	М	Н	M	N
Black oystercatcher	40.0 Special Designations	M	M.	M	H	L	Н	M	н	M	N
Brown bear	40.0 Special Designations	L	L	М	М	L	Н	M	Н	М	N
Common murre	40.0 Special Designations	М	L	H	M	H	H	M	H	H	N
Cutthroat trout	40.0 Special Designations	L	L	Н	Н	L	H	M	Н	М	þ
Dolly varden trout	40.0 Special Designations	L	L	Н	H	L	Н	M	H	M	١
Harbor seals	40.0 Special Designations	Н	H	Н	H	L	H	M	Н	H	۱)
Harlequin ducks	40.0 Special Designations	M	M	[H	H	L	(H	M	H	M	Į.
Herring	40.0 Special Designations	N/A	Unk	H	H	L	Н	L	H	M	
Killer whale	40.0 Special Designations	N/A	M	M	M	L	H	M	H	M	۱
Marbled murrelet	40.0 Special Designations	М	M	Н	H	L	H	L	H	L	1
Pigeon guillemot	40.0 Special Designations	L.	M	M	H	L	H	M	H	M	- 1
Pink salmon	40.0 Special Designations	L	L	Н	H	L	H	M	{H	M	- { }
Recreation: backcountry developed	40.0 Special Designations	N/A	N/A	Н	Н	L	H	L	H	M	١,
Recreation: undeveloped	40.0 Special Designations	N/A	H	H	Н	L	Н	L	H	М	
River otter	40.0 Special Designations	N/A	L	Н	Н	L	Н	M	H	M	
Sea otter	40.0 Special Designations	L	L	М	L	L	H	М	Н	М	h
Sockeye salmon	40.0 Special Designations	L	L	Н	H	L	H	M]H	M	١
Wilderness/intrinsic values	40.0 Special Designations	Н	H	H	H	Н	Н	L	H	M	١

Criteria Summary. 1a: Potential to improve the rate or degree of recovery. 1b: Potential to prevent further degradation or decline. 2: Technical feasibility
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Comment Sheet for RPWG meeting

concerning review of Option Evaluation Database
Thursday Sept 18, 8:30 A.M

	Thursday	Sept 10, 0.30 A.M
NIABATT.		
NAME:		

Comments on a rating or footnote (if you need more of these, xerox some. If you have general comments, put them on the back.)

Resource or Service	Opt'n No.	Existing Rating	Proposed Rating	Proposed Change to footnote (if any)	Reasons for Suggestion
				*	
				,	
,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,					

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ode	Name of Option	Public Comment
1.	Archeological site stewardship program	N
	Stewards lack control and credentials to properly function.	
2.	Increase fish and shellfish management	P
	More NRDA needed; quality assurance (shellfish); enhancement, need to	know more about clam injury
2.1	Incease fish/shellfish management: species already with plans	P
	Salmon, Herring	
2.2	Increase fish/shellfish management: for species without plans	P
	Clams, Spot Shrimp	
4.	Reduce disturbance at marine bird colonies and mammal haulout	P
	Buffers, increase knowledge of injury to Harbor Seals, Sea Lions, Mur	rres
7.	Increased agency field presence	М
	Coordinate an interagency effort, not an oil spill responsibility, no increase mgmt., mgmt. facilities not built with oil spill money, moni	eed more monitoring of activities, redefine agency mgmt.,
8.	Restrict/eliminate legal harvest: mammals and sea ducks	м
	Leave wildlife alone; mgmt of human activities and species for habita	at protection

de	Name of Option	Public Comment	
8.1	temporarily restrict/close harvest	P	
	Reference comment which insinuated sport fishing restrictions	night be appropriate	
8.2	educate public to voluntarily restrict harvest (sport, subsist.)	NC	
9.	Minimize incidental take, marine birds by commercial fisheries	NC	
10.	Preserve archaeological sites/artifacts	P	TERRITOR ST. T. C.
	Correct focus, provide protection, assess damages		
11.	Improve freshwater wild salmon spawning/rearing habitats Emphasize wild stock over other populations, enhance habitat f	P or spawning	
11.1	Supplement fry production (salmon)	P	
	Only if wild stocks		
11.2	Improve access to spawning areas (salmon)	N	
	Avoid manipulation without studies of effects		
11.3	Improve spawning and rearing habitat (salmon)	м	
d	Wild stocks only, avoid manipulation of habitat		

de	Name of Option	Public Comment
12.	New recreation facilities	N
	Changes in recreation levels will be enhancement, concerned about wilderness and recreation values, build only if it decreases neg	at building monuments to spill, new facilities may compromise gative impacts
12.1	New backcountry recreation facilities	N
	Opposes construction of intrusive new facilities, money not used	for backcountry facilities
12.2	New commercial, (lodge, visitor-center) recreation facilities	N
	Opposes construction of parks, hotels, etc., associated faciliti	es are inappropriate, protect from resorts
13.	Eliminate oil from mussel beds	P
	Exxon should do it, should be cleaned	
14.	Accelerate recovery of upper intertidal zone	Р
	Key to food chain	
15.	Supplement or clean marine spawning substrates	P
	For wild salmon stocks only	
15.1	Supplement intertidal substrates for herring	P
	Herring studies needed	

ode	Name of Option	Public Comment	
15.2	Clean intertidal salmon spawning substrates	Р	
	Chum, wild pink salmon stocks		
1.6	Restore murre productivity	NC	
16.	Restore murre productivity	NC	
16.2	Improve physical characteristics of nest sites (Common murre)	NC	
	-		
16.3	Enhance social stimuli (Common murre)	NC NC	.,
17.	Predator control to benefit marine birds		<u>,</u>
17.	Predator control to benefit marine pirgs		
17.1	Elminate introduced foxes (for nesting marine birds)	P	
	Makes sense		
17.2	Reduce predator access to seabird colonies	NC	
18.	Poplace fichering emperturities by elementing allowed		
10.	Replace fisheries opportunities by alternative salmon runs	М	
	See comments in 18.1-18.3		
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de	Name of Option	Public Comment	
18.1	Establish additional hatchery (salmon) runs	М	
	Establish new salmon runs, enhance habitat for spawning, concerned over estimate	s of artificial p	populations
18.2	Transplant (salmon) hatchery-reared fish to depleted areas	N	
	Don't introduce more hatching stocks (Pinks), no new hatcheries		
18.3	Wild egg take to establish new runs (salmon)	P	
	Egg take to maintain wild stocks, protect wild stocks		
19.	Update and expand Alaska's Anadromous Fish Stream Catalog	NC	
26.	Amend Forest Practices Act	NC	
27.	Designate long-term Ecological Research Sites	NC	
	Research in general is mentioned in comments, specific sites are not indicated		
28.	Acquire access for sport-fishing and recreation	P	
	Acquire land important to services		
	Purchase access (title or rights)	P	
28.1			

	Name of Option	Public Comment
8.2	Negotiate access without purchase	NC
	Conservation easements (not an "access" easement as generally	perceived but could be used to provide access)
28.3	Assert "17b" easements	NC
70		No.
30.	Test subsistence foods for hydrocarbon contamination	NC
33.	Public information and education program	P
	Use manay for receased to understand effects of smill manage	
	resource materials in schools	and interpret restoration options, educate youth by having
		and interpret restoration options, educate youth by having
33.1		and interpret restoration options, educate youth by having
33.1	resource materials in schools	P
	resource materials in schools Education programs, information, and products Include information on restoration process, access to data imp	P
33.1	Education programs, information, and products Include information on restoration process, access to data imp	P Portant M
	Education programs, information, and products Include information on restoration process, access to data imp	P portant M agency facilities, schools and student information needed, science
33.2	Education programs, information, and products Include information on restoration process, access to data imp Education: interpretive and educational facilities KANA facility, know sources for information availability, use center, concerned about availability of archaeological resources.	P portant M agency facilities, schools and student information needed, science ses
	Education programs, information, and products Include information on restoration process, access to data imp Education: interpretive and educational facilities KANA facility, know sources for information availability, use	P portant M agency facilities, schools and student information needed, science ses

e i	Name of Option	Public Comment				
34.1	New marine environmental institute					
	Seward, Seldovia, Kodiak, Homer					
34.2	Enhance an existing marine environmental institute	P ·				
	Cordova, Kodiak (not an institute but could collaborate with exis	ting institutions)				
34.3	Marine environmental institute: coordinate research in PWS	P				
	Need is there, several options for facility location, whole ecosy	stem needs recognition, laboratory services needed in spill				
35.	Acquire archaeologic artifacts from outside the spill area	м				
35.	Acquire archaeologic artifacts from outside the spill area KANA offer from Smithsonian and Russia, acquisition with oil spil					
37.	·					
	KANA offer from Smithsonian and Russia, acquisition with oil spil	l money absurd, Kodiak facility could be built P small scale, preserve remaining timber, habitat acquisition				
	KANA offer from Smithsonian and Russia, acquisition with oil spil Purchase habitat Acquire protection soon, buying timber rights bad idea except on	l money absurd, Kodiak facility could be built P small scale, preserve remaining timber, habitat acquisition				
37.	KANA offer from Smithsonian and Russia, acquisition with oil spil Purchase habitat Acquire protection soon, buying timber rights bad idea except on definition too narrow, 70, 80, 90% of money to be used to buy hab	P small scale, preserve remaining timber, habitat acquisition itat, use imminent threat analysis P Kodiak NWR, and Chugach NF, acquire lands throughout Sound,				
37.	Purchase habitat Acquire protection soon, buying timber rights bad idea except on definition too narrow, 70, 80, 90% of money to be used to buy hab Purchase private lands (fee title or less than fee title) Should occur but not be exclusive focus, inholding in Katmai NP,	P small scale, preserve remaining timber, habitat acquisition itat, use imminent threat analysis P Kodiak NWR, and Chugach NF, acquire lands throughout Sound,				

ode	Name of Option	Public Comment
40.2	Coordinate Agency Management within the spill area	Р
	Include USFS, increase management in parks and refuges	
40.201	Amend Alaska Coastal Zone Management Act	P
	Preserve wilderness shorelines	
40.202	Amend Coastal District Plans; Add AMSA's	NC
	-	
40.203	Amend state and federal land management plans	P
	Preserve wildlife in ancient forests	
40.204	Develop state and federal MOA's for restoration	NC
40.22	Designate protected marine areas	P
	Statements indicate a desire to protect marine areas through de	signation, preserve wilderness shorelines
40.221	National Marine Sanctuary	P
	Develop a NMS in PWS	
40.222	Estuarine Research Reserve	NC
•		

ode	Name of Option	Public Comment
40.223	Research Natural Area	NC ·
40.223	research natural Area	nc ·
	• .	
40.224	ADF&G Special Area	NC
40.36	Redesignate portions of federal land as wilderness	М
	Wilderness reduces management options, Chugach NF should go to w wilderness should be purchased as a replacement, preserve wilder	ilderness, enhancements shouldn't compromise wilderness, ness
40.361	USFWS Refuges as wilderness	NC NC
/0.7/2		
40.362	Chugach National Forest	P
	Chugach NF should go to wilderness	
40.363	National Park Service Units as wilderness	NC
	-	
40.6	Redesignate public lands for recreational uses	М
	Enhancements shouldn't compromise recreation values, concern about	ut creating new recreational sites
		· · · · · · · · · · · · · · · · · · ·

Code	Name of Option	Public Comment
40.61	Redesignate portion of Chugach NF as Nat'l Recreation Area	Р
	Do it	
40.62	Redesignate state land as State Park or State Marine Park	NC

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RESTORATION PLANNING WORK GROUP SEPTEMBER 17, 1992 10:00 A.M.

Attendees:

Bob Loeffler
Mark Fraker
Karen Klinge
John Strand
Sandy Rabinowitch
Ray Thompson
Chris Swenson
Art Weiner
Carol Gorbics

The following items were distributed:

September 11, 1992 Memo Re: First Draft: Evaluation Database General Comments on Options Evaluation Database List of Option Names and Numbers Option Evaluation Database Comment Sheet for RPWG Meeting

Evaluation Database

Bob led the discussion of the general comments on the options evaluation database. His expectation is that there will be some agreement on the ratings at the end of the day. Carol stated that we were not always consistent with why N/A was used. It was decided to review all N/A ratings for consistency.

Carol stated that it is necessary to have the criteria in front of you when rating, because the rating could not be done intuitively. Bob stated this is not a stand alone review document but would require either a verbal or written explanation. Carol suggested writing up the criteria explanation. Bob stated an injury summary will have to be written. Karen suggested having a one liner in the database which will trigger the group's memory of why a rating was assigned. Carol suggested expanding the footnote section for the one liner. Karen suggested each member keep track of his species and write the footnote. The resource or service was assigned as follows:

Archaeology - Sandy
Bald Eagles - Carol
Black Oystercatcher - Karen
Brown Bear - Sandy
Coastal Habitat - Art
Common Murre - Carol
Cutthroat Trout - John
Dolly Varden - John

Harbor Seal - Mark
Harlequin Duck - Mark
Herring - John
Killer Whale - Karen
Marbled Murrelet - Karen
Pigeon Guillemot - Carol
Pink Salmon - Chris
Recreation (3) - Ray
River Otter - Mark
Rock Fish - Chris
Sea Otter - Carol
Sockeye Salmon - Chris
Wilderness - Sandy

FOOTNOTES FOR N/A

Black Oystercatcher - continuing injury possibly associated with contaminated food

Coastal Habitat - it is assumed that the status of the mussel beds is either stable or not applicable.

Cutthroat Trout - the option focuses on restoration. It is assumed that the status of the population is recovering.

Dolly Varden - (same as Cutthroat Trout)

Harbor Seals - the definition focuses on restoration and not degradation or decline.

Harlequin Ducks - 13.0 is changed to High. Potential for linkage is high.

Herring - there is no ongoing disturbance; not applicable if there is no ongoing disturbance.

Killer Whale - at this time, there is no disturbance.

Marbled Murrelet - this is replacement (should be duplicated for all marine birds).

Pigeon Guillemot - could improve and help recovery but predation is not increasing; predation is not a factor created by the oil spill; focus on restoration and not degradation or decline.

Recreation (backcountry developed) - this is replacement; replacing use with a different use location site. Carol stated that 12.1 (1b) is not applicable. Chris expressed concern regarding the recreation rating because it does not reflect clearly the injury. Sandy agreed there is a need for further clarification. 40.0 (1b) should be rated High.

Recreation (concentrated) - acquisition of equivalent resource.

River Otter - no ongoing disturbance.

Sockeye Salmon - not applicable unless there is an ongoing disturbance.

General Comments

Murres - Karen agreed with Bob's comments that Murres - 16.1 and 16.2 should be High.

Bob agreed with Karen's comments to duplicate 17.1 (Marbled Murrelet) under Common Murres and Pigeon Guillemots.

Karen agreed with Chris that opening legislation to amendment in any political context can lead to mixed results. Karen stated that if we do this it might not be consistent. Bob stated that our science should not be modified on the basis of what the legislature could do.

Sea Otters should be High for Criteria 3 in Option 40.

Carol questioned why variable ratings were used.

Carol suggested communicating with the Habitat Protection Group regarding the significant overlap between the work being done by their group and RPWG. Bob stated that he will talk with Marty regarding this. Sandy stated there is a need to articulate in writing who is doing what so there are clear expectations. Karen stated that it seems the Habitat Work Group is working more on how do you do it and less on what are you doing it for.

COMMENT SHEET

Archaeology (1.0-1b) - The group disagreed with Art. You are trying to put people closer to the problem but you are not trying to target everything. High potential for preventing degradation of sites. (leave High). (35-4) - This is a replacement option (change to N/A).

Bald Eagle (26) - Should not be rated with the Forest Practices Act. If you could change FPA, then you would benefit. The group agreed to change this to N/A.

Black Oystercatcher (13.0-2) - add that if disaggregated mussels are the source of the problem, then it would be rated differently. (37)(40) - delete "prevented" from 5b.

Brown Bears (13.0-1a&b) - Karen stated these should be evaluated based on what we expect it to be. Bob stated that Low is the best you can do. There is debate over whether bears are injured. If

bears are injured, it comes from injury to the intertidal area. Bob agreed to add Karen's footnote: Linkage is unknown but if positive, the potential to improve recovery is low because of large home ranges of bears and dispersal of mussels. Therefore, small improvement for small portion. 1a and 1b are changed to Low.

Coastal Habitat (40) - This should be rated and will cover the ability of special designations to minimize disturbance in the intertidal area such as subsistence use and sport fishing. This was rated as follows:

1a. Potential to improve the rate or degree of recovery Low; the level of activity is small relative to the injured area 1b. Potential to protect the area from further degradation.

2. Technical feasibility High

 Degree to which proposed action benefits more than one re source or service

High; by definition

4. Degree to which proposed action enhances the resource or service

Low

5a. Potential for no additional injury to:
-other target or non-target resources

Hiqh

5b. -other target or non-target services Low

6. Potential effects of the proposed action on human health and safety

High

7. Relationship of the expected costs of the proposed action to the expected benefits

Medium

8. Will the restoration opportunity be lost if implementation is delayed

No

Murres - (9.0) - This should be rated. (16-1a&b) - Carol felt this was not likely to affect a significant portion of the population. It was agreed to rate this medium. (17.2-1a) - Carol suggested changing the footnote to: predator control may help synchronizing. Art suggested starring this until peer review of la. Karen stated it should Bob suggested changing this footnote. remain Medium and eliminate the footnote. (40-1a&b) suggested this should be Medium because the disturbance of the Murres decreases productivity; the group concurred. Murre (37-1b) - Art stated that the purchase of privately owned colonies outside of the oil-affected area could prevent further decline in species la&b are Medium. The footnote should be rewritten to change the Gull Rock statement.

Cutthroat Trout (14.0-1a) - Karen stated we assume there is a positive link between Fucus and Cutthroat Trout prey and cover. Fixing Fucus will help. 1a is Medium. (Everything for Cutthroat Trout should be duplicated for Dolly Varden).

Dolly Varden (37)(40)-1a&b) - Ray questioned why this was rated Low. Art states that this option is to prevent exacerbation of the injury.

Harbor Seals (8.1) - Karen's footnote was added: Concept is to declare population depleted under MMPA.

Harlequin Duck (8.2) - Bob stated education to stop hunting is an odd option and perhaps should be rated only for subsistence. Karen questioned the footnote for special designation. Bob stated that it needs to be reworded.

Herring (2.1-4) - Bob questioned how management could be High on enhancement and why not for other fish species. He stated he is now satisfied with the way it is.

Killer Whale (40-4) - Art questioned whether there are any known rubbing beaches. John stated there are known rubbing beaches within PWS.

Marbled Murrelet (17.1-5a) - Carol suggested deleting the footnote as it was not what she intended. Carol suggested adding the following footnote: Foxes were introduced for the fur-farming industry and are continuing to decimate bird populations. (9.0) Carol suggested deleting "this is a feasibility study option." It is a feasibility option and so much more.

Pink Salmon (2.1-1a&b) - Art stated population level injury has not been documented. Karen stated that this was rated assuming there is injury. (17.1-5b) - Bob questioned if this rating is consistent with our philosophy. Bob suggested adding the footnote to revisit after injury summary is done. Art stated that Spies stated there is not a population level injury. Art suggested leaving the question of rating open until peer review. Carol stated that she wants in writing for documentation purposes the basis for Spies' statement. Bob stated if there is population injury, this will be High and if not, it will be Low.

River Otter - Art stated the population level injury has not been documented. (8.1-1a&b) should be Low. (14-2) - Yes is changed to Unproven. (8.1) - Karen suggested adding that we assume trapping restrictions would be short term. (8.1-4) - Bob questioned how managing them can be enhancement. It was changed to Low.

Rockfish (2.2-8) - John suggested changing the footnote to: Suspect that Rockfish population will not continue to tolerate current level of exploitation. Sea Otters (8.2-1a&b) - Carol suggested changing this to Unknown. Karen agreed that Unknown may be accurate because we are not sure what the subsistence level is. This is something that could be changed through education. Karen suggested adding the following footnote: May need to be upgraded if subsistence harvest is higher.

Sockeye Salmon (18.1-3) - The footnote is deleted. (18.2-1a) -John questioned how this approach could be more successful than 18.1. He doesn't see the difference in terms of what you can gain. 18.2-la&b are changed to Medium. Cutthroat Trout should be changed to Medium also. One option is the ability to restore a stream and the other is the entire population. (37-1a) - John questioned what basis the decision was made to rate this Medium. Karen stated the problem is upland habitat. For Cutthroat Trout and Dolly Varden, injury is related to intertidal status. Purchasing upland will not For sockeye salmon, the injury is tied to improve recovery. overescapement. It is more related to where the injury occurs. The injury for Cutthroat Trout occurs during time spent in marine (37-1a) is not applicable unless there is ongoing disturbance. The same would apply for Dolly Varden.

Sockeye (11-1a) - John stated there appears to be a problem of consistency with Dolly Varden and Cutthroat Trout. John suggested adding the following footnote: The basis of the injury is the lack of proper rearing habitat for the Sockeye. (18.2-5a) - Art stated there is a potential impact of hatchery fish on wild stocks. Bob suggested adding the following footnote: Assume that the initial stock was from that depleted area.

Wilderness (37)(40)-1a) - Art stated that the perception of pristine wilderness is forever and irretrievably lost for the oil - affected area. Karen suggested adding that this is a replacement option. Bob stated this is a definition problem. Karen stated that 1a is probably not applicable. The injury to perception can't be repaired beyond pre-spill.

ASSIGNMENTS

The footnotes should be written and given to Bob by Tuesday. Karen and Carol will deal with Murres (9). The ratings will be turned in along with the notes. RPWG needs to discuss how the public comments database will be used. Ray stated RPWG needs to discuss whether a comment reflects a wide opinion of the general public's perception. Ward will give an overview of the computer system. Art stated that several members will need time to review the three RFP's. Bob stated the public should be kept informed of the monitoring plan to assess the amount of money to be spent on monitoring.

RPWG will reconvene on 9/18 at 9:30. Meeting adjourned at 4:25.

RESTORATION PLANNING WORK GROUP SEPTEMBER 18, 1992 10:00 A.M.

Attendees:

Bob Loeffler
Mark Fraker
Karen Klinge
John Strand
Sandy Rabinowitch
Ray Thompson
Chris Swenson
Art Weiner
Carol Gorbics

The following items were distributed:

Request for Proposals - Technical Writer/Editor Database Printout (Public Comment)

The following agenda items were discussed:

Public Comment

Ray discussed the process for including the public comments into the evaluation database. A fairly simplistic version of the comments was used. NC means no significant comments or no com-The initial list of 30 issues with all the comments that were not taken forward were reviewed to develop the rating scale. The comments are very general; some come directly from the issues document and some are paraphrased. Art questioned if the comments Ray stated they were not from the supplement were included. included in this round. These comments only relate to the options. Art stated that some of these comments are substantial and should be factored in some way. Ray stated for this exercise we just need a general sense of whether there is interest in pursuing these Art was concerned that these comments don't get lost because of the level of effort involved and should be part of the package of public comments. Ray stated these comments would help in the development of alternatives and how an option might be used. Art stated these comments should be acknowledged. In the subsequent analysis of alternatives, these comments will be included. Bob stated that this is relative to numbers of comments, and it should be noted if it is less than 2 or greater than 10. stated that RPWG had a discussion on whether a comment represents one person or an organization and it was decided to identify the issues qualitatively and not quantitatively. Ray did not take out the specifics of each comment numerically. Karen questioned how this information will be used and wondered if there were enough comments to make a valid contribution. Ray stated the value comes from what the comment is. Bob asked if the comments give guidance.

Ray stated we may want to pull the specifics out of the comments. Karen stated that when writing alternatives, we could refer to comments either positive or negative, indicating mixed comments. Art questioned who is reviewing comments as they come in now. Bob stated that this becomes part of the general influence base, and it may not be necessary to develop a formal process. John stated that this information will be captured in a chapter in the Restoration Plan and possibly in the option summary. Ray stated that Pam Miller's comments were very thorough. Art disagreed with Bob's approach because the settlement specifically addresses meaningful public comment. Bob stated that the way you address the public is in the product. If you create an internal paper trail the public never sees, the public will not care. Art stated that the comments should be analyzed. Ray stated that people are generally focusing on a variety of different things and the character of the comments is not changing very much. Ray stated that a good idea of the public's concerns were documented during the scoping process. will discuss with LJ if anything is being done with comments from the Trustee Council meetings. Art stated that some effort must be made to make the public comments more meaningful. Karen suggested this analysis is possibly something for the Public Participation Work Group. Art will speak with Marty regarding the possibility of their group extracting the public comments. Karen suggested a column in the database which shows the sorts. Bob stated that the database should remain as an internal document. Bob suggested noting the number of comments in another column. Art stated this goes back to if a comment represents one person or a group. questioned how the numbers will be used. Bob stated that numbers indicate how strongly a comment was supported. John stated we need to add to the database if there are any comments on universal options such as monitoring, education and endowment. Bob requested fleshing out 34.1 for the suggested sites for new marine environmental institute. Ray stated that if comments were not fairly blatant, he did not put words in their mouth. "G" or "I" will be used to denote group or individual comments.

DATABASE REVIEW

Ward will give RPWG an overview of the database functions later today.

SCHEDULING

John suggested that RPWG could possibly meet on Monday to discuss scheduling.

WRITER/EDITOR

The Resource Review Board will meet on the 28th. John provided copies of the RFP. John will obtain the number of responses to the RFP from Terri Bristow.

ASSIGNMENTS

The options were assigned as follows:

Sandy Chris/John	1.0 Archeological site stewardship program2.0 Increase fish and shellfish management2.1 Increase fish and shellfish management; species already with plans2.2 Increase fish and shellfish management; plans
Karen	for species without them 4.0 Reduce disturbance at marine bird colonies and mammal haulout
Ray Carol/Karen	7.0 Increased agency field presence8.0 Restrict/eliminate legal harvest: mammals and sea ducks
	8.1 Temporarily restrict/close harvest8.2 Educate public to voluntarily restrict harvest (sport, subsistence)
Carol	9.0 Minimize incidental take of marine birds by commercial fisheries
Sandy Chris/John	<pre>10.0 Preserve archaeological sites/artifacts 11.0 Improve freshwater wild salmon spawning/rearing habitats 11.1 Supplement from production (salmon)</pre>
	11.1 Supplement fry production (salmon) 11.2 Improve access to spawning areas (salmon) 11.3 Improve spawning and rearing habitat (salmon)
Bob	12.0 New recreation facilities 12.1 New backcountry recreation facilities 12.3 New commercial, (lodge) recreation facilities
Art/John	13.0 Eliminate oil from mussel beds 14.0 Accelerate recovery of upper intertidal zone
John	15.0 Supplement or clean marine spawning substrates 15.1 Supplement intertidal substrates for herring 15.2 Clean intertidal salmon spawning substrates
Karen	16.0 Restore murre productivity 16.1 Enhance social stimuli (common murre) 16.2 Improve physical characteristics of nest sites (common murre)
Carol/Karen	17.0 Predator control to benefit marine birds 17.1 Eliminate introduced foxes (for nesting marine birds)
Chris/John	17.2 Reduce predator access to seabird colonies 18.0 Replace fisheries opportunities by alternative salmon runs
	18.1 Establish additional hatchery (salmon) runs 18.2 Transplant (salmon) hatchery-reared fish to depleted areas
Chris	18.3 Wild egg take to establish new runs (salmon) 19.0 Update and expand Alaska's anadromous Fish Stream Catalog
John	26.0 Amend Forest Practices Act 27.0 Designate long-term Ecological Research Sites

Bob	28.0 Acquire access for sport-fishing and recreation
	28.1 Purchase access (title or rights)
	28.2 Negotiate access without purchase
	28.3 Negotiate "17b" easements
Karen	30.0 Test subsistence foods for hydrocarbon contami- nation
	33.0 Public information and education program
	33.1 Education programs, information, and products
Ray/Sandy	33.2 Education: interpretive and educational
	facilities
Art	34.0 Marine environmental institute
	34.1 New marine environmental institute
	34.2 Enhance an existing marine environmental institute
Sandy	35.0 Acquire archaeological artifacts from outside
	the spill area
Art	37.0 Purchase private lands (fee title or less than
	fee title)
Sandy/Chris	40.0 Special Designations