Reference No.: MM-A
Date: 9/10-11/91

Attorney/Client Communication Attorney Work Product Privileged/Confidential

Evaluation of Restoration Options

Species Marbled Murrelet

Option A

Natural recovery - no action

Α.	The	results	of	any	actual	or	planned	response	actions
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- B. Technical feasibility
- C. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts
- D. Potential effects of the action on human health and safety
- E. The relationship of the expected costs of the proposed actions to the expected benefits



F.	Cost-effectiveness
н.	Consistency with applicable federal and state laws and policies
ı.	Acquisition of equivalent land for public (federal/state) management, where restoration, rehabilitation, and/or other replacement of land is not possible
J.	Degree to which proposed actions benefit more than one species, communities, or ecosystems <sup>1</sup>
Recor	mmendation
	her review
Comme	<u>ents</u>

 $<sup>^{1}\</sup>mathrm{Not}$  from NRDA regulations as currently proposed.

Reference No.: MM-B
Date: 9/10-11/91

Attorney/Client Communication

Attorney Work Product Privileged/Confidential

Evaluation of Restoration Options

Species Marbled Murrelet

Option B

Augment natural reproduction through captive breeding (as a source of eggs or young), fostering and related techniques

#### Application of Criteria

- A. The results of any actual or planned response actions
- B. Technical feasibility

Basic lack of understanding of breeding biology relating to captive breeding; highly speculative and would probably require extensive research at great cost and time

- C. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts
- D. Potential effects of the action on human health and safety
- E. The relationship of the expected costs of the proposed actions to the expected benefits

High cost for marginal return

F.	Cost-effectiveness
н.	Consistency with applicable federal and state laws and policies
ī.	Acquisition of equivalent land for public (federal/state) management, where restoration, rehabilitation, and/or other replacement of land is not possible
J. None	Degree to which proposed actions benefit more than one species, communities, or ecosystems <sup>1</sup>
<u>-</u>	mmendation
Reje	ct
Comme	<u>ents</u>

 $<sup>{}^{1}\</sup>mathrm{Not}$  from NRDA regulations as currently proposed.

Reference No.: MM-A

Attorney/Client Communication

Date: 9/10-11/91

Attorney Work Product Privileged/Confidential

Evaluation of Restoration Options

Species Marbled Murrelet

Option C

Stabilize eroded beach/supratidal habitats used by nesting birds

- A. The results of any actual or planned response actions
- B. Technical feasibility
- C. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts
- D. Potential effects of the action on human health and safety
- E. The relationship of the expected costs of the proposed actions to the expected benefits

F	Cost-effectiveness
н.	Consistency with applicable federal and state laws and policies
I.	Acquisition of equivalent land for public (federal/state) management, where restoration, rehabilitation, and/or other replacement of land is not possible
J.	Degree to which proposed actions benefit more than one species, communities, or ecosystems <sup>1</sup>
<u>Reco</u>	mmendation
N/A	
Comm	<u>ents</u>

 $<sup>^{\</sup>mathrm{I}}\mathrm{Not}$  from NRDA regulations as currently proposed.

Reference No.: MM-D

Attorney/Client Communication

Date: 9/10-11/91

Attorney Work Product Privileged/Confidential

Evaluation of Restoration Options

<u>Species</u> Marbled Murrelet

Option D

Mariculture of shellfish to supplement prey base

A. The results of any actual or planned response a	actions
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- B. Technical feasibility
- C. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts
- D. Potential effects of the action on human health and safety
- E. The relationship of the expected costs of the proposed actions to the expected benefits

F.	Cost-effectiveness
н.	Consistency with applicable federal and state laws and policies
ı.	Acquisition of equivalent land for public (federal/state) management, where restoration, rehabilitation, and/or other replacement of land is not possible
J.	Degree to which proposed actions benefit more than one species, communities, or ecosystems <sup>1</sup>
Recor	mmendation
Comme	<u>ents</u>

 $<sup>{}^{\</sup>mathrm{l}}\mathrm{Not}$  from NRDA regulations as currently proposed.

Reference No.: MM-E

Attorney/Client Communication

Date: 9/10-11/91

Attorney Work Product Privileged/Confidential

Evaluation of Restoration Options

<u>Species</u> Marbled Murrelet

Option E

Provide artificial nest sites/substrates to enhance productivity or redirect nest activities to alternative sites

### Application of Criteria

- A. The results of any actual or planned response actions
- B. Technical feasibility

Based on present understanding of nest site selections, if you already have sufficient nesting habitat, (i.e., a strand of old trees) it cannot be augmented by artificial nest sites; under current conditions no reason to suspect that nest sites are not limited in oil spill area

- C. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts
- D. Potential effects of the action on human health and safety
- E. The relationship of the expected costs of the proposed actions to the expected benefits

F.	Cost-effectiveness
н.	Consistency with applicable federal and state laws and policies
I.	Acquisition of equivalent land for public (federal/state) management, where restoration, rehabilitation, and/or other replacement of land is not possible
J.	Degree to which proposed actions benefit more than one species, communities, or ecosystems <sup>1</sup>
Reco	mmendation
Reje	ct
<u>Comm</u>	<u>ents</u>

<sup>&</sup>lt;sup>1</sup>Not from NRDA regulations as currently proposed.

Reference No.: MM-F
Date: 9/10-11/91

Attorney/Client Communication Attorney Work Product

Privileged/Confidential

Evaluation of Restoration Options

Species Marbled Murrelet

Option F (grouped with G & H)

Acquire nesting habitats and colony sites

A. '	The	results	οf	any	actual	or	planned	response	actions
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- B. Technical feasibility
- C. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts
- D. Potential effects of the action on human health and safety
- E. The relationship of the expected costs of the proposed actions to the expected benefits

F.	Cost-effectiveness		
н.	Consistency with applicable federal and st policies	tate laws	and
ı.	Acquisition of equivalent land for public management, where restoration, rehabilitareplacement of land is not possible		
J.	Degree to which proposed actions benefit a species, communities, or ecosystems 1	more than	one
Recor	ommendation		
	ther review		
Comme	<u>nents</u>		

 $<sup>{}^{\</sup>mathrm{l}}\mathrm{Not}$  from NRDA regulations as currently proposed.

Reference No.: MM-G

Attorney/Client Communication

Date: 9/10-11/91

Attorney Work Product Privileged/Confidential

Evaluation of Restoration Options

Species Marbled Murrelet

Option G (grouped with F & H)

Protect watershed areas necessary to maintain water quality and habitats that sustain the avian prey base

## Application of Criteria

A. T	he	results	of	any	actual	or	planned	response	actions
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B. Technical feasibility

C. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts

D. Potential effects of the action on human health and safety

E. The relationship of the expected costs of the proposed actions to the expected benefits

Cost-effectiveness
Consistency with applicable federal and state laws and policies
Acquisition of equivalent land for public (federal/state) management, where restoration, rehabilitation, and/or other replacement of land is not possible
Degree to which proposed actions benefit more than one species, communities, or ecosystems <sup>1</sup>
nmendation ner review
<u>ents</u>

<sup>&#</sup>x27;Not from NRDA regulations as currently proposed.

Reference No.: MM-H

Date: 9/10-11/91

Attorney/Client Communication

Attorney Work Product Privileged/Confidential

## Evaluation of Restoration Options

Species Marbled Murrelet

Option H (grouped with F & G)

Restrict logging on timbered slopes, streamsides, and coastal perimeters that serve as nesting/resting habitats

- A. The results of any actual or planned response actions
- B. Technical feasibility
- C. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts
- D. Potential effects of the action on human health and safety
- E. The relationship of the expected costs of the proposed actions to the expected benefits

F.	Cost-effectiveness
н.	Consistency with applicable federal and state laws and policies
ı.	Acquisition of equivalent land for public (federal/state) management, where restoration, rehabilitation, and/or other replacement of land is not possible
J.	Degree to which proposed actions benefit more than one species, communities, or ecosystems <sup>1</sup>
Recor	nmendation
furth	ner review
Comme	<u>ents</u>

 $<sup>^{1}\</sup>mathrm{Not}$  from NRDA regulations as currently proposed.

Reference No.: MM-I Date: 9/10-11/91

Attorney/Client Communication Attorney Work Product

Privileged/Confidential

Evaluation of Restoration Options

Species Marbled Murrelet

Option Ι

Restrict hunting and reduce illegal "taking" of eggs and adult birds

- Α. The results of any actual or planned response actions
- Technical feasibility В.
- C. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts
- Potential effects of the action on human health and safety D.
- E. The relationship of the expected costs of the proposed actions to the expected benefits

F.	Cost-effectiveness
н.	Consistency with applicable federal and state laws and policies
ı.	Acquisition of equivalent land for public (federal/state) management, where restoration, rehabilitation, and/or other replacement of land is not possible
J.	Degree to which proposed actions benefit more than one species, communities, or ecosystems <sup>1</sup>
Reco	mmendation
Comm	<u>ents</u> .

 $<sup>^{\</sup>mathrm{I}}\mathrm{Not}$  from NRDA regulations as currently proposed.

Reference No.: MM-J Date: 9/10-11/91

Attorney/Client Communication Attorney Work Product

Privileged/Confidential

Evaluation of Restoration Options

Marbled Murrelet Species

Option J

Eliminate introduced predators (e.g., foxes) from islands that are or were important for ground-nesting birds

## Application of Criteria

Α.	The	results	of	any	actual	or	planned	response	actions
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Technical feasibility В.

Potential for additional injury resulting from the proposed C. action, including long-term and indirect impacts

D. Potential effects of the action on human health and safety

Ε. The relationship of the expected costs of the proposed actions to the expected benefits

F.	Cost-effectiveness
н.	Consistency with applicable federal and state laws and policies
ı.	Acquisition of equivalent land for public (federal/state) management, where restoration, rehabilitation, and/or other replacement of land is not possible
J.	Degree to which proposed actions benefit more than one species, communities, or ecosystems <sup>1</sup>
Recor	mmendation
N/A	
Comme	<u>ents</u>

<sup>&</sup>lt;sup>1</sup>Not from NRDA regulations as currently proposed.

Reference No.: MM-K Date: 9/10-11/91

Attorney/Client Communication Attorney Work Product Privileged/Confidential

Evaluation of Restoration Options

Species Marbled Murrelet

Option K

Restrict near-shore gillnet fisheries to minimize conflicts with bird populations

### Application of Criteria

	Α.	The	results	of	any	actual	or	planned	response	actions
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B. Technical feasibility

C. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts

D. Potential effects of the action on human health and safety

E. The relationship of the expected costs of the proposed actions to the expected benefits

F.	Cost-effectiveness
н.	Consistency with applicable federal and state laws and policies
ı.	Acquisition of equivalent land for public (federal/state) management, where restoration, rehabilitation, and/or other replacement of land is not possible
J.	Degree to which proposed actions benefit more than one species, communities, or ecosystems <sup>1</sup>
Recor	nmendation
furth	ner review
Comme	<u>ents</u>

 $<sup>{}^{\</sup>mathrm{I}}\mathrm{Not}$  from NRDA regulations as currently proposed.

Reference No.: MM-L Date: 9/10-11/91

Attorney/Client Communication Attorney Work Product Privileged/Confidential

Evaluation of Restoration Options

Species Marbled Murrelet

Option L

Eliminate high-seas gillnet fisheries and the resulting incidental mortality to birds

Α.	The	results	of	any	actual	or	planned	response	actions
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- B. Technical feasibility
- C. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts
- D. Potential effects of the action on human health and safety
- E. The relationship of the expected costs of the proposed actions to the expected benefits

F.	Cost-effectiveness
н.	Consistency with applicable federal and state laws and policies
I.	Acquisition of equivalent land for public (federal/state) management, where restoration, rehabilitation, and/or other replacement of land is not possible
J.	Degree to which proposed actions benefit more than one species, communities, or ecosystems <sup>1</sup>
Reco	mmendation
N/A	
Comme	<u>ents</u>

 $<sup>{}^{\</sup>rm I}{\rm Not}$  from NRDA regulations as currently proposed.

Reference No.: MM-M Date: 9/10-11/91

Attorney/Client Communication Attorney Work Product Privileged/Confidential

Evaluation of Restoration Options

<u>Species</u>	Marbled	Murrelet

Option M

Acquire stopover/wintering habitats in the Pacific flyway

Α.	The	results	of	any	actual	or	planned	response	actions
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- B. Technical feasibility
- C. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts
- D. Potential effects of the action on human health and safety
- E. The relationship of the expected costs of the proposed actions to the expected benefits

F.	Cost-effectiveness
н.	Consistency with applicable federal and state laws and policies
ı.	Acquisition of equivalent land for public (federal/state) management, where restoration, rehabilitation, and/or other replacement of land is not possible
J.	Degree to which proposed actions benefit more than one species, communities, or ecosystems <sup>1</sup>
Reco	mmendation
	her review ?
Comm	<u>ents</u> .

<sup>&</sup>lt;sup>1</sup>Not from NRDA regulations as currently proposed.

Reference No.: MM-N Date: 9/10-11/91

Attorney/Client Communication Attorney Work Product Privileged/Confidential

Evaluation of Restoration Options

<u>Species</u>	Marbled	Murrelet

Option N

Protect wetland habitats important to migratory birds, nationally and internationally

Α.	The	results	of	anv	actual	or	planned	response	actions
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- B. Technical feasibility
- C. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts
- D. Potential effects of the action on human health and safety
- E. The relationship of the expected costs of the proposed actions to the expected benefits

F.	Cost-effectiveness			
н.	Consistency with applicable federal and state laws policies	and		
ı.	Acquisition of equivalent land for public (federal, management, where restoration, rehabilitation, and, replacement of land is not possible	state) or other		
J.	Degree to which proposed actions benefit more than species, communities, or ecosystems <sup>1</sup>	one		
Reco	mmendation			
N/A				
<u>Comments</u>				

 $<sup>{}^{1}\</sup>mathrm{Not}$  from NRDA regulations as currently proposed.

Reference No.: MM-O
Date: 9/10-11/91

Attorney/Client Communication Attorney Work Product

Privileged/Confidential

Evaluation of Restoration Options

Species Marbled Murrelet

Option 0

Minimize disturbance from tourists, fishermen, researchers, and others through public education and law enforcement

- A. The results of any actual or planned response actions
- B. Technical feasibility
- C. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts
- D. Potential effects of the action on human health and safety
- E. The relationship of the expected costs of the proposed actions to the expected benefits

F.	Cost-effectiveness
н.	Consistency with applicable federal and state laws and policies
ı.	Acquisition of equivalent land for public (federal/state) management, where restoration, rehabilitation, and/or other replacement of land is not possible
J.	Degree to which proposed actions benefit more than one species, communities, or ecosystems <sup>1</sup>
Recor	mmendation
Comme	<u>ents</u>

 $<sup>^{\</sup>mathrm{l}}\mathrm{Not}$  from NRDA regulations as currently proposed.

Reference No.: MM-P
Date: 9/10-11/91

Attorney/Client Communication Attorney Work Product Privileged/Confidential

Evaluation of Restoration Options

<u>Species</u>	Marbled	Murrelet

Option P

Conduct long-term research/monitoring program on bird populations, ecology, and prey

Α.	The	results	of	any	actual	or	planned	response	actions
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- B. Technical feasibility
- C. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts
- D. Potential effects of the action on human health and safety
- E. The relationship of the expected costs of the proposed actions to the expected benefits

F.	Cost-effectiveness		
н.	Consistency with applicable federal and state laws and policies		
I.	Acquisition of equivalent land for public (federal/state) management, where restoration, rehabilitation, and/or other replacement of land is not possible		
J.	Degree to which proposed actions benefit more than one species, communities, or ecosystems <sup>1</sup>		
Reco	mmendation		
further review			
<u>Comments</u>			

 $<sup>{}^{\</sup>mathrm{I}}\mathrm{Not}$  from NRDA regulations as currently proposed.

Reference No.: MM-Q Date: 9/10-11/91

Attorney/Client Communication Attorney Work Product Privileged/Confidential

Evaluation of Restoration Options

Species Marbled Murrelet

Option Q (new)

Enhance productivity through manipulation/social facilitation

- A. The results of any actual or planned response actions
- B. Technical feasibility
- C. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts
  - D. Potential effects of the action on human health and safety
  - E. The relationship of the expected costs of the proposed actions to the expected benefits

F.	Cost-effectiveness		
н.	Consistency with applicable federal and state laws and policies		
ı.	Acquisition of equivalent land for public (federal/state) management, where restoration, rehabilitation, and/or other replacement of land is not possible		
J.	Degree to which proposed actions benefit more than one species, communities, or ecosystems <sup>1</sup>		
	ommendation		
N/A			
Comments			

<sup>&</sup>lt;sup>1</sup>Not from NRDA regulations as currently proposed.

Reference No.: MM-R
Date: 9/10-11/91

Attorney/Client Communication Attorney Work Product Privileged/Confidential

Evaluation of Restoration Options

Species Marbled Murrelet

Option R (new)

Re-establish abandoned colonies and establish new colonies

- A. The results of any actual or planned response actions
- B. Technical feasibility
- C. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts
- D. Potential effects of the action on human health and safety
- E. The relationship of the expected costs of the proposed actions to the expected benefits

F.	Cost-effectiveness
н.	Consistency with applicable federal and state laws and policies
ı.	Acquisition of equivalent land for public (federal/state) management, where restoration, rehabilitation, and/or other replacement of land is not possible
J.	Degree to which proposed actions benefit more than one species, communities, or ecosystems <sup>1</sup>
Recon	nmendation
N/A	
Comme	ents

 $<sup>{}^{1}\</sup>mathrm{Not}$  from NRDA regulations as currently proposed.

Reference No.: MM-S Date: 9/10-11/91

Attorney/Client Communication Attorney Work Product Privileged/Confidential

Evaluation of Restoration Options

<u>Species</u>	Marbled	Murrelet

Option S (new)

Eliminate contaminated prey

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Taga	ıca	tion	ΟĪ	Crit	erıa

A. '	The	results	of	any	actual	or	planned	response	actions
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- B. Technical feasibility
- C. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts
- D. Potential effects of the action on human health and safety
- E. The relationship of the expected costs of the proposed actions to the expected benefits

F.	Cost-effectiveness
н.	Consistency with applicable federal and state laws and policies
I.	Acquisition of equivalent land for public (federal/state) management, where restoration, rehabilitation, and/or other replacement of land is not possible
J.	Degree to which proposed actions benefit more than one species, communities, or ecosystems <sup>1</sup>
Reco	mmendation
N/A	
Comme	<u>ents</u> .

 $<sup>^{1}\</sup>mathrm{Not}$  from NRDA regulations as currently proposed.

Reference No.: HS-A

Attorney/Client Communication

Date: 9/10-11/91

Attorney Work Product Privileged/Confidential

Evaluation of Restoration Options

<u>Species</u> Harbor Seal

Option A

Natural recovery - no action

A. The results of	any	actual	or	planned	response	actions
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- B. Technical feasibility
- C. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts
- D. Potential effects of the action on human health and safety
- E. The relationship of the expected costs of the proposed actions to the expected benefits

F.	Cost-effectiveness
н.	Consistency with applicable federal and state laws and policies
ı.	Acquisition of equivalent land for public (federal/state) management, where restoration, rehabilitation, and/or other replacement of land is not possible
J.	Degree to which proposed actions benefit more than one species, communities, or ecosystems <sup>1</sup>
	mmendation her review
Comme	

<sup>&#</sup>x27;Not from NRDA regulations as currently proposed.

Reference No.: HS-B Attorney/Client Communication

Date: 9/10-11/91 Attorney Work Product
Privileged/Confidential

Evaluation of Restoration Options

<u>Species</u> Harbor Seal

Option B

Supplement winter-season foods for stressed animals feeding in intertidal habitats (e.g., deer)

#### Application of Criteria

A. The results of any actual or planned response actions N/A

B. Technical feasibility

Questionable; methodology is largely untested and logistically very difficult, especially during the crucial winter season

- C. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts
- D. Potential effects of the action on human health and safety
  Dangerous for workers
- E. The relationship of the expected costs of the proposed actions to the expected benefits

Too expensive to produce and distribute prey over sufficient area to be effective

F.	Cost-effectiveness
Exor	oitant per seal
н.	Consistency with applicable federal and state laws and policies
I.	Acquisition of equivalent land for public (federal/state) management, where restoration, rehabilitation, and/or other replacement of land is not possible
J. Food	Degree to which proposed actions benefit more than one species, communities, or ecosystems <sup>1</sup> supplements could benefit non-target species
Reco	mmendation
Reje	ct
	ents is to restore habitat, not artificially supplement prey for species

 $<sup>^{\</sup>mathrm{I}}\mathrm{Not}$  from NRDA regulations as currently proposed.

Reference No.: HS-C Attorney/Client Communication

Date: 9/10-11/91 Attorney Work Product
Privileged/Confidential

Evaluation of Restoration Options

<u>Species</u> Harbor Seal

Option C

Translocations to augment populations within and outside of oil-spill area

## Application of Criteria

A. The results of any actual or planned response actions

Oiled seals returned to PWS with a tremendously high mortality (after release) rate and at great risk of injury to other population

B. Technical feasibility

Results very disappointing in terms of survivor ratio being very low; issue is whether habitat can sustain seals; source population unlike California for potential colonization

C. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts

Always great disease potential when you have translocation; potential impacts on source through loss of donor individuals to that population; also may reduce natural spreading

- D. Potential effects of the action on human health and safety
- E. The relationship of the expected costs of the proposed actions to the expected benefits

F. Cost-effectiveness

If mortality is high, cost-effectiveness is low; needs further study

H. Consistency with applicable federal and state laws and policies

May require permit through Marine Mammal Protection Act

- I. Acquisition of equivalent land for public (federal/state) management, where restoration, rehabilitation, and/or other replacement of land is not possible
- J. Degree to which proposed actions benefit more than one species, communities, or ecosystems<sup>1</sup>

#### Recommendation

Reject

#### Comments

Get memorandum from Kathy Frost (expert comments)

<sup>&</sup>lt;sup>1</sup>Not from NRDA regulations as currently proposed.

Reference No.: HS-D Date: 9/10-11/91

Attorney/Client Communication

Attorney Work Product
Privileged/Confidential

Evaluation of Restoration Options

Species Harbor Seal

Option D (grouped with E,F & G)

Preserve foraging habitats (e.g., mussel beds and eelgrass)

Α.	The	results	of	any	actual	or	planned	response	actions
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- B. Technical feasibility
- C. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts
- D. Potential effects of the action on human health and safety
- E. The relationship of the expected costs of the proposed actions to the expected benefits

F.	Cost-effectiveness
н.	Consistency with applicable federal and state laws and policies
ı.	Acquisition of equivalent land for public (federal/state) management, where restoration, rehabilitation, and/or other replacement of land is not possible
J.	Degree to which proposed actions benefit more than one species, communities, or ecosystems <sup>1</sup>
Reco	mmendation
furt	her review
Comm	<u>ents</u>

 $<sup>^{1}\</sup>mathrm{Not}$  from NRDA regulations as currently proposed.

Reference No.: HS-E

Attorney/Client Communication

Date: 9/10-11/91

Attorney Work Product
Privileged/Confidential

Evaluation of Restoration Options

Species Harbor Seal

Option E (grouped with D,F & G)

Acquire/protect habitats in uplands (e.g., old-growth forest), and along streamsides and coastal perimeter

- A. The results of any actual or planned response actions
- B. Technical feasibility
- C. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts
- D. Potential effects of the action on human health and safety
- E. The relationship of the expected costs of the proposed actions to the expected benefits

F.	Cost-effectiveness
н.	Consistency with applicable federal and state laws and policies
ı.	Acquisition of equivalent land for public (federal/state) management, where restoration, rehabilitation, and/or other replacement of land is not possible
J.	Degree to which proposed actions benefit more than one species, communities, or ecosystems <sup>1</sup>
Recor	mmendation
	ner review
Comme	<u>ents</u>

<sup>&#</sup>x27;Not from NRDA regulations as currently proposed.

Reference No.: HS-F
Date: 9/10-11/91

Attorney/Client Communication Attorney Work Product Privileged/Confidential

Evaluation of Restoration Options

Species Harbor Seal

Option F (grouped with D,E & G)

Acquire/protect Coastal habitats such as haulout/rookery sites, whale "rubbing" beaches, etc.

- A. The results of any actual or planned response actions
- B. Technical feasibility
- C. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts
- D. Potential effects of the action on human health and safety
- E. The relationship of the expected costs of the proposed actions to the expected benefits

F.	Cost-effectiveness
н.	Consistency with applicable federal and state laws and policies
ı.	Acquisition of equivalent land for public (federal/state) management, where restoration, rehabilitation, and/or other replacement of land is not possible
J.	Degree to which proposed actions benefit more than one species, communities, or ecosystems <sup>1</sup>
Recor	nmendation
	ner review
Comme	<u>ents</u>

 $<sup>^{\</sup>mathrm{l}}\mathrm{Not}$  from NRDA regulations as currently proposed.

Reference No.: HS-G Attorney/Client Communication

Date: 9/10-11/91

Attorney Work Product Privileged/Confidential

Evaluation of Restoration Options

Species Harbor Seal

Option G (grouped with D,E & F)

Establish new wildlife refuges, sanctuaries, and viewing areas

Α.	The	results	of	any	actual	or	planned	response	actions
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- B. Technical feasibility
- C. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts
- D. Potential effects of the action on human health and safety
- E. The relationship of the expected costs of the proposed actions to the expected benefits

F.	Cost-effectiveness
н.	Consistency with applicable federal and state laws and policies
ī.	Acquisition of equivalent land for public (federal/state) management, where restoration, rehabilitation, and/or other replacement of land is not possible
J.	Degree to which proposed actions benefit more than one species, communities, or ecosystems <sup>1</sup>
Reco	mmendation
furt	her review
Comme	<u>ents</u>

 $<sup>^{\</sup>rm l}{\rm Not}$  from NRDA regulations as currently proposed.

Reference No.: HS-H

Attorney/Client Communication

Date: 9/10-11/91

Attorney Work Product Privileged/Confidential

Evaluation of Restoration Options

<u>Species</u> Harbor Seal

Option H

Reduce marine debris and expand stranding/entanglement rescue operations

- A. The results of any actual or planned response actions
- B. Technical feasibility
- C. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts
- D. Potential effects of the action on human health and safety
- E. The relationship of the expected costs of the proposed actions to the expected benefits

F.	Cost-effectiveness
н.	Consistency with applicable federal and state laws and policies
ı.	Acquisition of equivalent land for public (federal/state) management, where restoration, rehabilitation, and/or other replacement of land is not possible
J.	Degree to which proposed actions benefit more than one species, communities, or ecosystems <sup>1</sup>
Recor	nmendation
multi	iple resources
Comme	<u>ents</u>

 $<sup>^{1}\</sup>mathrm{Not}$  from NRDA regulations as currently proposed.

Reference No.: HS-I

Attorney/Client Communication Attorney Work Product

Date: 9/10-11/91

Privileged/Confidential

Evaluation of Restoration Options

<u>Species</u> Harbor Seal

Option I

Eliminate high-sea gillnet fisheries and the resulting incidental mortality to marine mammals

- A. The results of any actual or planned response actions
- B. Technical feasibility
- C. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts
- D. Potential effects of the action on human health and safety
- E. The relationship of the expected costs of the proposed actions to the expected benefits

F.	Cost-effectiveness
н.	Consistency with applicable federal and state laws and policies
ı.	Acquisition of equivalent land for public (federal/state) management, where restoration, rehabilitation, and/or other replacement of land is not possible
J.	Degree to which proposed actions benefit more than one species, communities, or ecosystems <sup>1</sup>
Reco	mmendation
Comm	<u>ents</u>

 $<sup>^{1}\</sup>mathrm{Not}$  from NRDA regulations as currently proposed.

Reference No.: HS-J Date: 9/10-11/91 Attorney/Client Communication

Attorney Work Product Privileged/Confidential

Evaluation of Restoration Options

Species Harbor Seal

Option J

Reduce incidental loss of marine mammals by buying back limitedentry gillnet permits

## Application of Criteria

- A. The results of any actual or planned response actions
- B. Technical feasibility
- C. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts
- D. Potential effects of the action on human health and safety
- E. The relationship of the expected costs of the proposed actions to the expected benefits

Enormous cost with little biological benefit. (see Strand memo)

м « <sub>1.2.</sub> <b>Н.</b> • г. <sub>2</sub> .	Consistency with applicable federal and state laws and policies
I.	Acquisition of equivalent land for public (federal/state) management, where restoration, rehabilitation, and/or other replacement of land is not possible
J.	Degree to which proposed actions benefit more than one species, communities, or ecosystems <sup>1</sup>
<u>Reco</u> Reje	ommendation ect
	nents Strand NMFS memo

<sup>1</sup>Not from NRDA regulations as currently proposed.

Cost-effectiveness

F.

Reference No.: HS-K Attorney/Client Communication

Date: 9/10-11/91 Attorney Work Product
Privileged/Confidential

Evaluation of Restoration Options

Species Harbor Seal

Option K (grouped with L & M)

Reduce human-use impacts/conflicts through management changes (e.g., through management changes (e.g., fishing and trapping restrictions)

Α.	The	results	of	any	actual	or	planned	response	actions
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- B. Technical feasibility
- C. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts
- D. Potential effects of the action on human health and safety
- E. The relationship of the expected costs of the proposed actions to the expected benefits

F.	Cost-effectiveness
н.	Consistency with applicable federal and state laws and policies
ī.	Acquisition of equivalent land for public (federal/state) management, where restoration, rehabilitation, and/or other replacement of land is not possible
J.	Degree to which proposed actions benefit more than one species, communities, or ecosystems <sup>1</sup>
Reco	mmendation
	her review
Comm	<u>ents</u>

 $<sup>^{\</sup>mathrm{l}}\mathrm{Not}$  from NRDA regulations as currently proposed.

Reference No.: HS-L Attorney/Client Communication

Date: 9/10-11/91 Attorney Work Product
Privileged/Confidential

Evaluation of Restoration Options

<u>Species</u> Harbor Seal

Option L (grouped with K & M)

Restrict/eliminate legal harvest of marine/terrestrial mammals

- A. The results of any actual or planned response actions
- B. Technical feasibility
- C. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts
- D. Potential effects of the action on human health and safety
- E. The relationship of the expected costs of the proposed actions to the expected benefits

F.	Cost-effectiveness
н.	Consistency with applicable federal and state laws and policies
ı.	Acquisition of equivalent land for public (federal/state) management, where restoration, rehabilitation, and/or other replacement of land is not possible
J.	Degree to which proposed actions benefit more than one species, communities, or ecosystems <sup>1</sup>
	mmendation her review
Comme	<u>ents</u>

 $<sup>^{1}\</sup>mathrm{Not}$  from NRDA regulations as currently proposed.

Reference No.: HS-M Date: 9/10-11/91

Attorney/Client Communication Attorney Work Product

Privileged/Confidential

Evaluation of Restoration Options

Species Harbor Seal

Option M (grouped with K & L)

Minimize harassment and illegal shooting of marine mammals through education and law enforcement

- The results of any actual or planned response actions Α.
- В. Technical feasibility
- c. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts
- Potential effects of the action on human health and safety D.
- The relationship of the expected costs of the proposed Ε. actions to the expected benefits

F.	Cost-effectiveness
н.	Consistency with applicable federal and state laws and policies
ı.	Acquisition of equivalent land for public (federal/state) management, where restoration, rehabilitation, and/or other replacement of land is not possible
J.	Degree to which proposed actions benefit more than one species, communities, or ecosystems <sup>1</sup>
	mmendation ner review
Comme	<u>ents</u>

 $<sup>^{\</sup>mathrm{l}}\mathrm{Not}$  from NRDA regulations as currently proposed.

Reference No.: HS-N Date: 9/10-11/91

Attorney/Client Communication Attorney Work Product Privileged/Confidential

Evaluation of Restoration Options

<u>Species</u> Harbor Seal

Option N

Establish international wildlife rehabilitation/public education center

## Application of Criteria

A. The results of any actual or planned response actions

Results from release of rehabilitated seals were very disappointing

- B. Technical feasibility
- C. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts
- D. Potential effects of the action on human health and safety
- E. The relationship of the expected costs of the proposed actions to the expected benefits

F.	Cost-effectiveness
н.	Consistency with applicable federal and state laws and policies
ī.	Acquisition of equivalent land for public (federal/state) management, where restoration, rehabilitation, and/or other replacement of land is not possible
J.	Degree to which proposed actions benefit more than one species, communities, or ecosystems <sup>1</sup>
<u>Reco</u> :	mmendation
	not appear to contribute directly to the injuries from EVOS; not be considered further in this context
Comm	<u>ents</u>
	form of public education center could contribute to other oration measures; (considered under multiple resources)

<sup>&#</sup>x27;Not from NRDA regulations as currently proposed.

Reference No.: HS-0 Date: 9/10-11/91

Attorney/Client Communication Attorney Work Product

Privileged/Confidential

Evaluation of Restoration Options

Species Harbor Seal

Option 0

Conduct long-term monitoring/research program on mammal populations and ecology

- The results of any actual or planned response actions Α.
- В. Technical feasibility
- Potential for additional injury resulting from the proposed C. action, including long-term and indirect impacts
- Potential effects of the action on human health and safety D.
- The relationship of the expected costs of the proposed Ε. actions to the expected benefits

F.	Cost-effectiveness
н.	Consistency with applicable federal and state laws and policies
ı.	Acquisition of equivalent land for public (federal/state) management, where restoration, rehabilitation, and/or other replacement of land is not possible
J.	Degree to which proposed actions benefit more than one species, communities, or ecosystems <sup>1</sup>
Reco	mmendation
furt	her review
Commo	<u>ents</u>

 $<sup>^{\</sup>mathrm{l}}\mathrm{Not}$  from NRDA regulations as currently proposed.

Reference No.: HS-P
Date: 9/10-11/91

Attorney/Client Communication Attorney Work Product Privileged/Confidential

Evaluation of Restoration Options

Sı	pecies	Harbor	Seal

Option P

Eliminate sources of contaminated prey

A. T	ıe	results	of	any	actual	or	planned	response	actions
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- B. Technical feasibility
- C. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts
- D. Potential effects of the action on human health and safety
- E. The relationship of the expected costs of the proposed actions to the expected benefits

F.	Cost-effectiveness
н.	Consistency with applicable federal and state laws and policies
ı.	Acquisition of equivalent land for public (federal/state) management, where restoration, rehabilitation, and/or other replacement of land is not possible
J.	Degree to which proposed actions benefit more than one species, communities, or ecosystems <sup>1</sup>
Reco	mmendation
N/A	
Comme	<u>ents</u>

 $<sup>^{\</sup>mathrm{l}}\mathrm{Not}$  from NRDA regulations as currently proposed.

July 22, 1992

#### REFERENCE No.:

#### EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

OPTION: 1 Archaeology Resource Protection

SUBOPTION: A - Site Steward Program

#### EVALUATION CRITERIA

#### A. Effects of other response or restoration actions

Favorable; other restoration options or clean-up work may have adverse effects on archaeological resources due to possibility of increased vandalism, thus project would lessen those adverse effects;

#### B. Potential to improve the rate or degree of recovery

Favorable; these resources are not restorable, but continuing damage can be lessened and/or stopped;

#### C. Technical Feasibility

Favorable;

# D. Potential effects of the action on human health and safety

Favorable; minimal risk; volunteers will face risks normally associated with travel in boats and small aircraft; Karen suggested using a range to indicate risk involved, such as minimal or high; Ray stated that this project provides the Natives more peace of mind with regards to their past, which would have a definite affect on mental health; John stated this is true but is not sure it fits in the comments section; Sandy stated that he touched upon this issue in the text;

# E. The relationship of the expected costs of the proposed actions to the expected benefits

Favorable; a portion of funds used to implement this sub-option will go directly into local economies in the spill area; Karen stated a high amount of benefit can be obtained for a relatively low cost by using locals;

#### F. Cost-effectiveness

Favorable; significantly less expensive than hiring full-time staff to accomplish the same work;

G. Consistency with applicable federal and state laws and policies

#### Favorable;

H. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts.

Favorable; Carol raised the question of injury to the resource; Chris asked if the potential for vandalism was greater when the sites are identified to volunteers, and felt that the additional small risk should be mentioned; Karen put minimal under favorable to cover this point; Ray stated that by adequately supervising and training, this risk will be mitigated;

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

Favorable; the volunteers' appreciation for cultural resources should be enhanced;

J. Degree to which proposed action benefits more than one resource or service

Unfavorable; only benefits one resource/service;

K. Importance of starting the project within the next year

Favorable; project has already begun and must continue for several years to have a positive effect;

#### RECOMMENDATION:

Sandy felt that none of these were in a negative vein. RPWG unanimously recommended that this go forward with concurrence to Sandy's comment that no criteria were negative.

#### Comments:

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July 21, 1992

REFERENCE No.:

### EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

OPTION: 1 Archaeology Resource Protection

SUBOPTION: B - Increase the field presence of management agencies within the affected area to provide greater protection for archaeological sites and artifacts

### **EVALUATION CRITERIA**

A. Effects of other response or restoration actions

Favorable; more clean-up work may need to occur at some oiled sites;

B. Potential to improve the rate or degree of recovery

Favorable; more 'official' personnel will help slow looting, etc...

C. Technical Feasibility

Favorable;

D. Potential effects of the action on human health and safety

Favorable; Carol stated law enforcement has inherent risk; however, this is minimal.

E. The relationship of the expected costs of the proposed actions to the expected benefits

Favorable;

F. Cost-effectiveness

Favorable;

G. Consistency with applicable federal and state laws and policies

Favorable; Ray asked if there are any penalties associated with doing the enforcement;

H. Potential for additional injury resulting from the proposed

action, including long-term and indirect impacts.

## Favorable;

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

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Unfavorable;

J. Degree to which proposed action benefits more than one resource or service

Favorable; field presence will help in other option as well;

K. Importance of starting the project within the next year

Favorable; looting rate has escalated since spill

#### RECOMMENDATION:

Karen recommended going forward with this option; RPWG concurred.

# Comments:

Of all the field presence suboptions this has the greatest focus. Sandy suggested this option could be combined with site stewardship;

REFERENCE No.:

# EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

OPTION: 1 - Archaeology Resource Protection

SUBOPTION: C - Expand public education efforts

### **EVALUATION CRITERIA**

- A. Effects of other response or restoration actions
  Not applicable;
- B. Potential to improve the rate or degree of recovery

  Favorable; education will decrease tendency to loot and vandalize;
- C. Technical Feasibility

Favorable;

- D. Potential effects of the action on human health and safety None;
- E. The relationship of the expected costs of the proposed actions to the expected benefits

Favorable; often educational programs are an extremely efficient method of accomplishing things and have long-term benefits;

F. Cost-effectiveness

Favorable;

G. Consistency with applicable federal and state laws and policies

Favorable;

Low; Sandy stated people may be less inclined to disturb things if they know the history behind an artifact;

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

Favorable; would enhance appreciation of the resource;

J. Degree to which proposed action benefits more than one resource or service

Unknown; could benefit other resources, depending on how the material is structured;

K. Importance of starting the project within the next year

Unknown; the sooner it is started, the sooner a benefit is realized;

### RECOMMENDATION:

Karen recommended going forward with this suboption. RPWG concurred.

# Comments:

This suboption may be combined with other education suboptions. RPWG decided this will become a component of Option 33, the comprehensive education program. The official evaluation table is found under Option 33.

July 22, 1992

REFERENCE No.:

EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

OPTION: 2 -

SUBOPTION: A - Intensify management of fish and shellfish -those with exsiting management plans

#### EVALUATION CRITERIA

- A. Effects of other response or restoration actions Favorable;
- B. Potential to improve the rate or degree of recovery Favorable;
- C. Technical Feasibility

Favorable;

- D. Potential effects of the action on human health and safety

  Favorable; low; potential added risk to fishermen by shortened seasons;
- E. The relationship of the expected costs of the proposed actions to the expected benefits

Favorable;

F. Cost-effectiveness

Favorable;

G. Consistency with applicable federal and state laws and policies

Favorable;

# Favorable;

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

Unfavorable; if the management activities are extended beyond EVOS recovery;

J. Degree to which proposed action benefits more than one resource or service

Favorable;

K. Importance of starting the project within the next year

# RECOMMENDATION:

RPWG recommended favorable.

## EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

OPTION: 2

SUBOPTION: B - Intensify management of species

### **EVALUATION CRITERIA**

- A. Effects of other response or restoration actions Favorable;
- B. Potential to improve the rate or degree of recovery Favorable;
- C. Technical Feasibility

Favorable; more data collection will be required;

- D. Potential effects of the action on human health and safety Favorable;
- E. The relationship of the expected costs of the proposed actions to the expected benefits

Favorable;

F. Cost-effectiveness

Favorable;

G. Consistency with applicable federal and state laws and policies

Favorable;

H. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts.

Favorable; low; species with low population size could be affected

by some sampling techniques;

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

Unfavorable;

J. Degree to which proposed action benefits more than one resource or service

Favorable;

K. Importance of starting the project within the next year

## RECOMMENDATION:

RPWG recommended favorable;

REFERENCE No.:

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## EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

OPTION: 4 - Reduce disturbance at marine bird colonies and marine mammal haul-out sites and rubbing beaches

SUBOPTION: A - Educate tour- and charter-boat operators about the need for, and ways to, decrease disturbance near sensitive marine bird and mammal use areas.

### **EVALUATION CRITERIA**

A. Effects of other response or restoration actions

Favorable; may be an important companion to feasibility studies which involve decoys or other activities which would be disturbed by the public;

B. Potential to improve the rate or degree of recovery

Favorable; good compliance could be accomplished by some public relations work; example: fisherman at Barrens;

C. Technical Feasibility

Favorable;

- D. Potential effects of the action on human health and safety Favorable;
- E. The relationship of the expected costs of the proposed actions to the expected benefits

Favorable;

F. Cost-effectiveness

Favorable;

G. Consistency with applicable federal and state laws and policies

Favorable;

H. Potential for additional injury resulting from the proposed

Low;

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

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Favorable; education provides better understanding of resource;

J. Degree to which proposed action benefits more than one resource or service

Favorable;

K. Importance of starting the project within the next year

Favorable; Chris suggested leaving this as favorable until ranking is done;

### RECOMMENDATION:

RPWG has decided this will become a component of Option 33, the comprehensive education program. Official evaluation table is found under Option 33.

# EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

OPTION: 4

SUBOPTION: B - Increase the field presence of Trustee agencies to provide greater enforcement of Federal and State laws designed to reduce disturbance

#### **EVALUATION CRITERIA**

A. Effects of other response or restoration actions

Favorable; especially when law enforcement is linked to other resources and services;

- B. Potential to improve the rate or degree of recovery Favorable;
- C. Technical Feasibility

Favorable;

- D. Potential effects of the action on human health and safety Favorable; minimal risks;
- E. The relationship of the expected costs of the proposed actions to the expected benefits

Unfavorable; locations were scattered; however, if combined with protection of other resources, it may be a cost effective action;

F. Cost-effectiveness

Unknown; until additional information is received;

G. Consistency with applicable federal and state laws and policies

Favorable;

Favorable; low

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

Unfavorable; no enhancement expected;

J. Degree to which proposed action benefits more than one resource or service

Favorable;

K. Importance of starting the project within the next year

Urgency is unknown; John stated it would relate to the severity of the injury to the resource;

## RECOMMENDATION:

Karen recommended that if combined with other law enforcement needs, this suboption should go ahead. RPWG concurred.

REFERENCE No.:

### EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

**OPTION:** 5 - Reduce harvest by redirecting sport fishing pressure

SUBOPTION: B - Use public education to encourage conservation for sport-fishing.

## **EVALUATION CRITERIA**

A. Effects of other response or restoration actions

Favorable; best if done with 5A;

B. Potential to improve the rate or degree of recovery

Favorable;

C. Technical Feasibility

Favorable;

- D. Potential effects of the action on human health and safety None;
- E. The relationship of the expected costs of the proposed actions to the expected benefits

Favorable; difficult to get anglers to accept and adopt catch and release;

F. Cost-effectiveness

Favorable; only cost effective if combined with other educational options;

G. Consistency with applicable federal and state laws and policies

Favorable;

Favorable; low

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

Favorable; enhances understanding

J. Degree to which proposed action benefits more than one resource or service

Favorable;

K. Importance of starting the project within the next year Unfavorable;

### RECOMMENDATION:

Karen recommended favorable. RPWG concurred.

# Comments:

Combine with 1C, 4A, 5B, 7A into 33

REFERENCE No.:

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# EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

OPTION: 6 - Designate a portion of the Chugach National Forest as a National Recreation Area or Wilderness

SUBOPTION: A - Designate the Nellie-Juan College Fjord Wilderness Study Area as Wilderness

#### **EVALUATION CRITERIA**

A. Effects of other response or restoration actions

Favorable; ANILCA specifically allows for some "actions" within wilderness;

B. Potential to improve the rate or degree of recovery

Favorable; congressional action provides for favorable management of injured resources and services;

C. Technical Feasibility

Favorable; requires act of Congress;

- D. Potential effects of the action on human health and safety
  None, except mental health;
- E. The relationship of the expected costs of the proposed actions to the expected benefits

Favorable;

F. Cost-effectiveness

Favorable;

G. Consistency with applicable federal and state laws and policies

Favorable;

# Favorable;

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

### Favorable;

J. Degree to which proposed action benefits more than one resource or service

Favorable; highly favorable when protection of natural habitat and services is important;

K. Importance of starting the project within the next year
Unknown; process is already underway;

## **RECOMMENDATION:**

Ray recommended favorable. RPWG concurred.

REFERENCE No.:

### EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

OPTION: 6 - Designate a portion of the Chugach National Forest as a National Recreation Area or Wilderness

SUBOPTION:B - Designate a portion of the Chugach National Forest in the Prince William Sound area as a National Recreation Area

#### EVALUATION CRITERIA

A. Effects of other response or restoration actions

Favorable; careful siting and development of restoration facilities will be necessary to ensure this option does not cause adverse affects;

B. Potential to improve the rate or degree of recovery

Favorable; for recreation

C. Technical Feasibility

Favorable; requires congressional action

D. Potential effects of the action on human health and safety Favorable; low;

E. The relationship of the expected costs of the proposed actions to the expected benefits

Favorable; helps design and control development in an area

F. Cost-effectiveness

Favorable;

G. Consistency with applicable federal and state laws and policies

Favorable; requires congressional action

H. Potential for additional injury resulting from the proposed

action, including long-term and indirect impacts.

Favorable; low; doing the action carefully will ensure there isn't additional injury; enabling legislation would guide the development to ensure avoidance of conflict

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

Favorable; a national recreation area will primarily enhance the service

J. Degree to which proposed action benefits more than one resource or service

Favorable; helps define the parameters for management within a national forest; NRA inherently maintains the landscape which also potentially provides benefit to multiple species and other services;

K. Importance of starting the project within the next year

Unknown; not important under the current management strategy;

#### RECOMMENDATION:

Ray recommended that this option move ahead. RPWG concurred.

REFERENCE No.:

## EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

**OPTION:** 7 - Increase management in parks, refuges and forests

SUBOPTION: A - Educate public about minimizing their impacts on recovering resources

### **EVALUATION CRITERIA**

A. Effects of other response or restoration actions

Unknown; this could be accomplished by Option 33;

B. Potential to improve the rate or degree of recovery

Favorable; moderate;

C. Technical Feasibility

Favorable;

- D. Potential effects of the action on human health and safety Favorable; minimal;
- E. The relationship of the expected costs of the proposed actions to the expected benefits

Unknown;

F. Cost-effectiveness

Unknown;

G. Consistency with applicable federal and state laws and policies

Favorable;

H. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts.

Favorable;

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

Favorable;

J. Degree to which proposed action benefits more than one resource or service

Favorable;

K. Importance of starting the project within the next year

Unfavorable; not necessary although some public education needs to begin promptly;

#### RECOMMENDATION:

RPWG decided this will become a component of Option 33, the comprehensive education program. Official evaluation table is found under Option 33.

## Comments:

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REFERENCE No.:

# EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

OPTION: 7 - Increase management in parks, refuges and forests

SUBOPTION: B - Increase the field presence of management agencies within the affected area

### **EVALUATION CRITERIA**

- A. Effects of other response or restoration actions
- Favorable; if new designations or regulations are made;
- B. Potential to improve the rate or degree of recovery Favorable; depending on the above;
- C. Technical Feasibility

Favorable;

- D. Potential effects of the action on human health and safety Favorable;
- E. The relationship of the expected costs of the proposed actions to the expected benefits

Favorable;

F. Cost-effectiveness

Favorable;

G. Consistency with applicable federal and state laws and policies

Favorable;

H. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts.

Unfavorable;

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

Unknown;

J. Degree to which proposed action benefits more than one resource or service

Favorable;

K. Importance of starting the project within the next year

Unknown

### RECOMMENDATION:

1B, 4B, 7B, 35B will be combined as one option under field presence as a new 7. Option 7A will be combined into Option 33 with 1C, 4A, and 5B.

### Comments:

Increase field presence within spill area not within parks, refuges and forests. Ray suggested developing an interagency law enforcement agreement for jurisdiction. Carol suggested changing the suboption title to: Increase field presence within the spill area to protect archaeological sites and other resources. Carol stated we cannot prioritize the importance of state parks at this point; however, Sandy disagreed. Ray stated it might help to have increased field presence in several areas. It was decided to change the title to: Increase protection of archaeological sites and important wildlife areas.

REFERENCE No.:

## EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

OPTION: 8 - Restrict or eliminate legal harvest of marine and terrestrial mammals and sea ducks

SUBOPTION: A - Temporarily restrict or close harvests of injured species in the oil spill area

Note: Cathy's evaluation sheet was divided for several species.

### EVALUATION CRITERIA

A. Effects of other response or restoration actions

Favorable; along with 8B;

B. Potential to improve the rate or degree of recovery

Favorable, for harlequin ducks; all other species unknown because not enough is known on the subsistence harvest; a closure would help river otters; harvest information patchy for some species; however, it is potentially beneficial;

C. Technical Feasibility

Favorable;

- D. Potential effects of the action on human health and safety Favorable; minimal
- E. The relationship of the expected costs of the proposed actions to the expected benefits

Favorable, if benefits are realized;

F. Cost-effectiveness

Favorable;

G. Consistency with applicable federal and state laws and policies

Favorable;

H. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts.

Favorable; subsistence harvest has potential injury for short term; Chris suggested differentiating what needs to be done state vs. federal regarding bag limits as it applies to subsistence;

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

Favorable; low degree for some species;

J. Degree to which proposed action benefits more than one resource or service

Unfavorable; each implementation action only benefits a single service or resource;

K. Importance of starting the project within the next year

Unknown; has already been started for Harlequin Ducks and River Otters in certain areas; others unknown;

#### RECOMMENDATION:

Cathy recommended variable by species. RPWG recommends carrying forward.

## Comments:

Tatitlek has reduced their take of harbor seals due to concern for meat and population.

REFERENCE No.:

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## EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

- OPTION: 8 Restrict or eliminate legal harvest of marine and terrestrial mammals and sea ducks
- SUBOPTION: B Encourage voluntary reductions of subsistence, commercial and sport harvest levels

#### **EVALUATION CRITERIA**

- A. Effects of other response or restoration actions Unknown;
- B. Potential to improve the rate or degree of recovery Favorable;
- C. Technical Feasibility

Favorable;

- D. Potential effects of the action on human health and safety

  Low; problems to people whose diets consist primarily of subsistence foods;
- E. The relationship of the expected costs of the proposed actions to the expected benefits

Favorable;

F. Cost-effectiveness

Favorable;

G. Consistency with applicable federal and state laws and policies

Favorable;

Favorable; potential for short-term adverse affects on subsistence opportunities through voluntary closure;

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

Favorable;

J. Degree to which proposed action benefits more than one resource or service

Favorable; multiple species but each implementation action only benefits a single resource or service;

K. Importance of starting the project within the next year Unknown;

### RECOMMENDATION:

Karen recommends carrying forward. RPWG concurred.

REFERENCE No.:

## EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

OPTION: 9 - Minimize incidental take of marine birds by commercial fisheries

SUBOPTION: A -

Note: No form available; this option deleted;

### EVALUATION CRITERIA

- A. Effects of other response or restoration actions
- B. Potential to improve the rate or degree of recovery
- C. Technical Feasibility
- D. Potential effects of the action on human health and safety
- E. The relationship of the expected costs of the proposed actions to the expected benefits
- F. Cost-effectiveness
- G. Consistency with applicable federal and state laws and policies
- H. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts.

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

J. Degree to which proposed action benefits more than one resource or service

K. Importance of starting the project within the next year

RECOMMENDATION:

Comments:

REFERENCE No.:

## EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

OPTION: 9 - Minimize incidental take of marine birds by commercial fisheries

SUBOPTION: B - Develop new technology or strategies for reducing encounters

## EVALUATION CRITERIA

- A. Effects of other response or restoration actions
- Unknown; possible conflict with redirecting commercial fisheries;
- B. Potential to improve the rate or degree of recovery

Favorable; if the incidental catch is determined to be significant;

C. Technical Feasibility

Favorable; has been implemented in other areas;

- D. Potential effects of the action on human health and safety Favorable;
- E. The relationship of the expected costs of the proposed actions to the expected benefits

Unknown; could help resource but hamper fisheries

F. Cost-effectiveness

Unknown;

G. Consistency with applicable federal and state laws and policies

Favorable;

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

Unknown;

J. Degree to which proposed action benefits more than one resource or service

Favorable; could benefit multiple bird species

K. Importance of starting the project within the next year

Favorable; need long lead time to document extent of problem first

### RECOMMENDATION:

Karen Oakley's recommendation is favorable. RPWG concurred.

REFERENCE No.:

## EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

**OPTION:** 10 - Preservation of archaeological sites and artifacts

SUBOPTION:

#### **EVALUATION CRITERIA**

A. Effects of other response or restoration actions

Unfavorable; other response actions could lead to additional injury including looting and vandalism; however, this project would lessen those effects;

B. Potential to improve the rate or degree of recovery

Favorable; these resources are not fully restorable, but continuing injury can be lessened or stopped;

C. Technical Feasibility

Favorable;

D. Potential effects of the action on human health and safety

Favorable; low; archaeologists will face risks normally associated with their field work;

E. The relationship of the expected costs of the proposed actions to the expected benefits

Favorable;

F. Cost-effectiveness

Favorable, over the long run;

G. Consistency with applicable federal and state laws and policies

Favorable;

Favorable; no potential for additional injury if done by competent people using state of the art approaches;

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

Favorable; develops increased knowledge and appreciation of the resource;

J. Degree to which proposed action benefits more than one resource or service

Unfavorable;

K. Importance of starting the project within the next year

Favorable; project delay could result in additional injury;

### **RECOMMENDATION:**

Sandy recommended favorable. RPWG concurred.

July 22, 1992

#### REFERENCE No.:

EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

OPTION: 11

- SUBOPTION: A Supplement fry production using such methods as egg boxes and net pens for fry rearing
  - B Improve access to spawning areas (e.g., fish passes, remove instream barriers)
  - C Improve spawning and rearing habitat (e.g., create spawning channels, add woody debris, improve substrates, lake fertilization, reduce siltation rates)

### EVALUATION CRITERIA

- A. Effects of other response or restoration actions Favorable;
- B. Potential to improve the rate or degree of recovery Favorable;
- C. Technical Feasibility

Favorable;

- D. Potential effects of the action on human health and safety Favorable; none;
- E. The relationship of the expected costs of the proposed actions to the expected benefits

Favorable;

F. Cost-effectiveness

Favorable;

G. Consistency with applicable federal and state laws and

policies

Favorable;

H. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts.

Favorable; low; small construction impacts, potential overloading early marine stage carrying capacity;

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

Favorable;

J. Degree to which proposed action benefits more than one resource or service

Favorable;

K. Importance of starting the project within the next year

#### RECOMMENDATION:

RPWG recommended favorable.

July 21, 1992 REFERENCE No.:

## EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

**OPTION:** 12 - Creation of new recreation facilities through replacement or construction

SUBOPTION: A

#### **EVALUATION CRITERIA**

A. Effects of other response or restoration actions

Favorable; siting should be complimentary;

B. Potential to improve the rate or degree of recovery

Favorable; potential to enhance recovery;

C. Technical Feasibility

Favorable;

- D. Potential effects of the action on human health and safety Favorable;
- E. The relationship of the expected costs of the proposed actions to the expected benefits

Unknown; over the long-term, it would be beneficial; some census information is being gathered by the Forest Service this summer;

F. Cost-effectiveness

Favorable;

G. Consistency with applicable federal and state laws and policies

Favorable;

H. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts.

Favorable - long term; unfavorable - short term; could be short-term injury of archaeological sites; increased recreation could cause additional injury to other resources; careful siting is

imperative;

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

Favorable;

J. Degree to which proposed action benefits more than one resource or service

Unfavorable; only benefits one resource or service; John stated that if you make the distinction between different recreational forms, it would be marked favorable;

K. Importance of starting the project within the next year

Favorable; planning and site information is important to avoid sensitive areas;

### RECOMMENDATION:

Ray recommended favorable. RPWG concurred.

### Comments:

12B is not materially different from 12A so was not drafted as different.

REFERENCE No.:

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## EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

OPTION: 13 - Eliminate sources of persistent contamination from oiled mussel beds

SUBOPTION:

### EVALUATION CRITERIA

- A. Effects of other response or restoration actions
  Favorable; not applicable or no anticipated effects;
- B. Potential to improve the rate or degree of recovery

  Favorable; particularly for higher vertebrates (birds/otters)
- C. Technical Feasibility

Unknown; still unproven;

- D. Potential effects of the action on human health and safety Favorable; low; risks are minimal for workers;
- E. The relationship of the expected costs of the proposed actions to the expected benefits

Unknown;

F. Cost-effectiveness

Unknown;

G. Consistency with applicable federal and state laws and policies

Favorable; obtain required permits from DEC and ADF&G;

H. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts.

Unfavorable; for NEPA review, some injury may be involved with

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

Favorable; has potential to help restore higher vertebrates (birds/otters)

J. Degree to which proposed action benefits more than one resource or service

Favorable;

K. Importance of starting the project within the next year

Favorable; critical to define extent of contamination in first year;

### RECOMMENDATION:

John recommended favorable. RPWG concurred.

REFERENCE No.:

## EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

OPTION: 14 - Accelerate Recovery of Upper Intertidal Zone

SUBOPTION:

#### **EVALUATION CRITERIA**

A. Effects of other response or restoration actions

Unknown; other clean-up and Option 13 may have an adverse affect locally;

B. Potential to improve the rate or degree of recovery

Favorable;

C. Technical Feasibility

Unknown; most proposed techniques are unproven;

- D. Potential effects of the action on human health and safety
  Favorable; low; risks are minimal for workers
- E. The relationship of the expected costs of the proposed actions to the expected benefits

Unknown; although unknown, potential is significant in either direction depending on the implementation action;

F. Cost-effectiveness

Unknown;

G. Consistency with applicable federal and state laws and policies

Favorable; permits obtained from DEC, ADF&G;

H. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts.

Favorable; not likely; not easily quantified;

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

Unknown; Mark suggested that some legal guidance may be needed for what is meant by "enhance" in the settlement. John stated that the settlement language should be adopted for RPWG use. Enhance means beyond pre-spill conditions. All prior options may need to be revisited to determine how enhance was interpreted.

J. Degree to which proposed action benefits more than one resource or service

Favorable; potential is there that many intertidal organisms will be enhanced;

K. Importance of starting the project within the next year

Favorable; delay will prolong intertidal recovery;

#### RECOMMENDATION:

John recommended favorable. RPWG concurred.

#### REFERENCE No.:

## EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

OPTION: 15 - Supplement intertidal substrates for spawning herring

## SUBOPTION:

Note: Ken Chalk - add 13b

### **EVALUATION CRITERIA**

- A. Effects of other response or restoration actions
- B. Potential to improve the rate or degree of recovery
- C. Technical Feasibility
- D. Potential effects of the action on human health and safety
- E. The relationship of the expected costs of the proposed actions to the expected benefits
- F. Cost-effectiveness
- G. Consistency with applicable federal and state laws and policies
- H. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts.

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- I. Degree to which proposed action enhances the resource or service
- J. Degree to which proposed action benefits more than one resource or service
- K. Importance of starting the project within the next year

**RECOMMENDATION:** 

## EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

OPTION: 15

SUBOPTION: A - Supplement herring spawning substrate

Note: Need to re-write and evaluate

#### EVALUATION CRITERIA

- A. Effects of other response or restoration actions
- B. Potential to improve the rate or degree of recovery
- C. Technical Feasibility
- D. Potential effects of the action on human health and safety
- E. The relationship of the expected costs of the proposed actions to the expected benefits
- F. Cost-effectiveness
- G. Consistency with applicable federal and state laws and policies
- H. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts.

- I. Degree to which proposed action enhances the resource or service
- J. Degree to which proposed action benefits more than one resource or service
- K. Importance of starting the project within the next year

RECOMMENDATION:

### REFERENCE No.:

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## EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

**OPTION:** 16 - Test feasibility of enhancing murre productivity

SUBOPTION: A - Test the feasibility of enhancing murre productivity through increased social stimuli

SUBOPTION: B - Test the feasibility of improving the physical characteristics of nest sites to increase murre productivity

#### EVALUATION CRITERIA

A. Effects of other response or restoration actions

Favorable; other education and enforcement options would be compatible to minimize disturbance;

B. Potential to improve the rate or degree of recovery

Favorable; good potential but not proven in Alaska;

C. Technical Feasibility

Favorable;

- D. Potential effects of the action on human health and safety
  Unfavorable; dangerous work;
- E. The relationship of the expected costs of the proposed actions to the expected benefits

Unknown; good, if it works;

F. Cost-effectiveness

Favorable; probably good;

G. Consistency with applicable federal and state laws and policies

Favorable;

H. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts.

Favorable; adverse long-term effects are unlikely; some potential for short-term effects;

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

Unfavorable;

J. Degree to which proposed action benefits more than one resource or service

Unfavorable; closely targeted to murres;

K. Importance of starting the project within the next year

Favorable; species was severely injured and opportunity is lost once synchronizing is begun;

### RECOMMENDATION:

Karen recommended favorable. RPWG concurred.

REFERENCE No.:

EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

OPTION: 16 - Test feasibility of enhancing murre productivity

SUBOPTION: C - Test the feasibility of reducing predators at depleted murre colonies

Note: 16C becomes 17B

### **EVALUATION CRITERIA**

A. Effects of other response or restoration actions

Favorable;

B. Potential to improve the rate or degree of recovery

Favorable;

C. Technical Feasibility

Unknown; techniques exist but may not be practical; difficulty with public relations;

- D. Potential effects of the action on human health and safety Unfavorable; dangerous work;
- E. The relationship of the expected costs of the proposed actions to the expected benefits

Unknown; good, if it works;

F. Cost-effectiveness

Favorable;

G. Consistency with applicable federal and state laws and policies

Favorable; research use of poison

H. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts.

Unfavorable; short-term adverse effects to predators and

scavengers;

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

Unfavorable;

J. Degree to which proposed action benefits more than one resource or service

Favorable;

K. Importance of starting the project within the next year

Favorable; species was severely injured and opportunity is lost once synchronizing is begun;

### **RECOMMENDATION:**

Karen recommended favorable; RPWG recommendation withheld until more information is received on technical feasibility;

REFERENCE No.:

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EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

OPTION: 17 -

SUBOPTION: A - Eliminate introduced foxes from islands important to nesting marine birds

### EVALUATION CRITERIA

- A. Effects of other response or restoration actions Favorable;
- B. Potential to improve the rate or degree of recovery Favorable;
- C. Technical Feasibility

Favorable;

- D. Potential effects of the action on human health and safety
  Unfavorable; dangerous work;
- E. The relationship of the expected costs of the proposed actions to the expected benefits

Favorable; great increase of birds;

F. Cost-effectiveness

Unknown; registering poisons would be expensive

G. Consistency with applicable federal and state laws and policies

Favorable; additional registering of toxicants would improve ability to eradicate foxes;

H. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts.

Unfavorable; other species may be poisoned or trapped;

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

Favorable;

J. Degree to which proposed action benefits more than one resource or service

Favorable; multiple bird species;

K. Importance of starting the project within the next year

Favorable but not necessary;

### RECOMMENDATION:

Carol recommended favorable. RPWG concurred.

### REFERENCE No.:

# EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

OPTION: 18 - Replace fisheries harvest opportunities by establishing alternative salmon runs

SUBOPTION: A - Establish additional hatchery runs

### **EVALUATION CRITERIA**

A. Effects of other response or restoration actions

Favorable; would compliment redirecting commercial fishing pressure;

- B. Potential to improve the rate or degree of recovery Favorable;
- C. Technical Feasibility

Favorable; some questions about maintaining temporal separation;

- D. Potential effects of the action on human health and safety Favorable;
- E. The relationship of the expected costs of the proposed actions to the expected benefits

Unknown; would depend on timing and alternative;

F. Cost-effectiveness

Unknown; market value will change this greatly;

G. Consistency with applicable federal and state laws and policies

Favorable;

H. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts.

Unfavorable; especially related to straying, genetics, disease, competition;

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

Unknown;

J. Degree to which proposed action benefits more than one resource or service

Favorable;

K. Importance of starting the project within the next year

### **RECOMMENDATION:**

RPWG recommended withholding recommendation until additional technical information is received.

July 22, 1992

REFERENCE No.:

## EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

**OPTION:** 18 - Replace fisheries harvest opportunities by establishing alternative salmon runs

SUBOPTION: B - Transplant hatchery reared fish to depleted areas

#### **EVALUATION CRITERIA**

A. Effects of other response or restoration actions

Favorable; specifically tied to Options 11 and 15, which would open new areas;

- B. Potential to improve the rate or degree of recovery Favorable;
- C. Technical Feasibility

Favorable; hatchery runs may lose their fitness/heartiness over the years;

- D. Potential effects of the action on human health and safety Favorable;
- E. The relationship of the expected costs of the proposed actions to the expected benefits

Unknown; currently don't have enough information to understand this relationship; natural recolonization may be hampered;

F. Cost-effectiveness

Unknown;

G. Consistency with applicable federal and state laws and policies

Favorable;

H. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts.

Unfavorable;

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

Favorable; placing fish in vacant areas;

J. Degree to which proposed action benefits more than one resource or service

Favorable; putting more energy into system may benefit ecosystem;

K. Importance of starting the project within the next year

### RECOMMENDATION:

RPWG recommended withholding recommendation until additional technical information is received.

July 22, 1992

REFERENCE No.:

## EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

OPTION: 18 - Replace fisheries harvest opportunities by establishing alternative salmon runs

SUBOPTION: C - Use wild egg takes from non-injured streams to establish new runs

### **EVALUATION CRITERIA**

- A. Effects of other response or restoration actions Favorable;
- B. Potential to improve the rate or degree of recovery Favorable;
- C. Technical Feasibility

Favorable;

- D. Potential effects of the action on human health and safety Favorable; none;
- E. The relationship of the expected costs of the proposed actions to the expected benefits

Unknown; further information needed;

F. Cost-effectiveness

Unknown;

G. Consistency with applicable federal and state laws and policies

Favorable;

H. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts.

Unfavorable; competition possible in early marine stage; disease; genetic diversity;

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

Favorable;

J. Degree to which proposed action benefits more than one resource or service

Favorable;

K. Importance of starting the project within the next year

### RECOMMENDATION:

RPWG recommended favorable.

REFERENCE No.:

# EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

OPTION: 19 - Update and expand the state's anadromous stream catalogue

SUBOPTION:

### **EVALUATION CRITERIA**

A. Effects of other response or restoration actions

Favorable; survey information would be helpful in TC decisions on habitat acquisition;

B. Potential to improve the rate or degree of recovery

Favorable;

C. Technical Feasibility

Favorable; could entail surveying large areas;

D. Potential effects of the action on human health and safety

Favorable; low; entails field surveys with helicopters

E. The relationship of the expected costs of the proposed actions to the expected benefits

Favorable;

F. Cost-effectiveness

Favorable;

G. Consistency with applicable federal and state laws and policies

Favorable; will require some cooperative management;

H. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts.

Favorable; low potential for additional injury;

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

Unfavorable;

J. Degree to which proposed action benefits more than one resource or service

Favorable;

K. Importance of starting the project within the next year

Favorable;

## RECOMMENDATION:

Chris recommended favorable. RPWG concurred.

## EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

OPTION: 20 - Coordinate state and federal management areas throughout the spill

SUBOPTION: A - Amend AK Coastal Management Act

### **EVALUATION CRITERIA**

- A. Effects of other response or restoration actions Favorable;
- B. Potential to improve the rate or degree of recovery Unknown; existing regulations need to be assessed;
- C. Technical Feasibility

Favorable;

- D. Potential effects of the action on human health and safety Favorable; low
- E. The relationship of the expected costs of the proposed actions to the expected benefits

Unknown; implementation costs unknown;

F. Cost-effectiveness

Unknown;

G. Consistency with applicable federal and state laws and policies

Favorable; implementation could require modification of existing management policies;

H. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts.

Favorable;

Favorable;

J. Degree to which proposed action benefits more than one resource or service

Favorable;

K. Importance of starting the project within the next year

Favorable;

## RECOMMENDATION:

Chris recommended favorable. RPWG concurred.

REFERENCE No.:

# EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

**OPTION:** 20 - Coordinate state and federal management areas throughout the spill

SUBOPTION: B - Amend State/Federal Management Plans

Note: Add 22E

### **EVALUATION CRITERIA**

- A. Effects of other response or restoration actions Favorable;
- B. Potential to improve the rate or degree of recovery Favorable, but applies only to public lands;
- C. Technical Feasibility

Favorable; requires large scale cooperation;

- D. Potential effects of the action on human health and safety Favorable;
- E. The relationship of the expected costs of the proposed actions to the expected benefits

Favorable; relatively low cost option;

F. Cost-effectiveness

Favorable;

G. Consistency with applicable federal and state laws and policies

Favorable;

H. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts.

Favorable;

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

Favorable;

J. Degree to which proposed action benefits more than one resource or service

Favorable;

K. Importance of starting the project within the next year

Favorable;

### RECOMMENDATION:

Chris recommended favorable. RPWG concurred.

REFERENCE No.:

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## EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

**OPTION:** 20 - Coordinate state and federal management areas throughout the spill

SUBOPTION: C - Legislative action to designate management area

Note: Old 20C deleted; the new 20C is old 29

### EVALUATION CRITERIA

- A. Effects of other response or restoration actions Favorable;
- B. Potential to improve the rate or degree of recovery Favorable;
- C. Technical Feasibility

Unknown; possible local agency jurisdiction problems; potential for too much beauracracy;

- D. Potential effects of the action on human health and safety Favorable; none;
- E. The relationship of the expected costs of the proposed actions to the expected benefits

Unfavorable; extended costs with legislative actions;

F. Cost-effectiveness

Unfavorable;

G. Consistency with applicable federal and state laws and policies

Unknown; could conflict with previous protective legislation (e.g. ANILCA);

H. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts.

Favorable;

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

Favorable;

J. Degree to which proposed action benefits more than one resource or service

Favorable;

K. Importance of starting the project within the next year

Favorable;

## RECOMMENDATION:

Chris recommended deleting. RPWG concurred.

# Comments:

Based on unknown technical feasibility and the likelihood that it would have to go through extended legislative process, opportunity for implementing this is uncertain.

REFERENCE No.:

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## EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

**OPTION:** 21 - Acquire tidelands

SUBOPTION: A - Acquisition of fee title to privately or municipally owned tidelands

SUBOPTION: B - Enhance protection of privately or municipally owned tidelands without acquisition of fee title

Note: 21A&B become part of 37

#### **EVALUATION CRITERIA**

A. Effects of other response or restoration actions

Favorable; could be combined with other acquisition options;

B. Potential to improve the rate or degree of recovery

Favorable; recovery enhanced in only a few areas - most tidelands are public;

C. Technical Feasibility

Favorable;

- D. Potential effects of the action on human health and safety Favorable;
- E. The relationship of the expected costs of the proposed actions to the expected benefits

Favorable; in applicable areas;

F. Cost-effectiveness

Favorable;

G. Consistency with applicable federal and state laws and policies

Favorable;

H. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts.

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Favorable;

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

Favorable;

J. Degree to which proposed action benefits more than one resource or service

Favorable;

K. Importance of starting the project within the next year

Favorable; imminent threat to Valdez Duck Flats and Homer Spit suggests that acquisition protection begin immediately;

### **RECOMMENDATION:**

Chris recommended favorable but low priority. RPWG concurred.

REFERENCE No.:

# EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

**OPTION:** 22 - Designate protected marine areas

SUBOPTION: A - Designate new Alaska state parks

Note: Moved to Option 6, add 27A&B

### **EVALUATION CRITERIA**

A. Effects of other response or restoration actions

Favorable; could be combined with other acquisition options;

B. Potential to improve the rate or degree of recovery

Favorable; for recreation but not resources;

C. Technical Feasibility

Favorable;

- D. Potential effects of the action on human health and safety Favorable;
- E. The relationship of the expected costs of the proposed actions to the expected benefits

Favorable; funds for agency management of areas will be necessary;

F. Cost-effectiveness

Favorable;

G. Consistency with applicable federal and state laws and policies

Favorable;

H. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts.

Favorable and unfavorable; variable - additional public use could injure resources or refocus pressures;

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

Favorable;

J. Degree to which proposed action benefits more than one resource or service

Unfavorable; only targeting recreational services;

K. Importance of starting the project within the next year

Favorable;

### RECOMMENDATION:

Chris recommended favorable and site parks away from injured resources. RPWG concurred.

#### REFERENCE No.:

## EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

**OPTION:** 22 - Designate protected marine areas

SUBOPTION: B - Designate new ADF&G special areas

## EVALUATION CRITERIA

A. Effects of other response or restoration actions

Favorable; could be combined with acquisition options;

B. Potential to improve the rate or degree of recovery

Favorable;

C. Technical Feasibility

Favorable; done on a regular basis;

- D. Potential effects of the action on human health and safety Favorable;
- E. The relationship of the expected costs of the proposed actions to the expected benefits

Favorable; will have to designate management funds;

F. Cost-effectiveness

Favorable;

G. Consistency with applicable federal and state laws and policies

Favorable;

H. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts.

Favorable;

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

Favorable;

J. Degree to which proposed action benefits more than one resource or service

Favorable; special areas are focused on more than one resource;

K. Importance of starting the project within the next year Favorable;

## RECOMMENDATION:

Chris recommended favorable. RPWG concurred.

REFERENCE No.:

## EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

OPTION: 22 - Designate protected marine areas

SUBOPTION: C - Designate national marine sanctuaries

### **EVALUATION CRITERIA**

A. Effects of other response or restoration actions

Favorable; designation of a marine sanctuary can be complimentary to the restoration of many marine resources;

B. Potential to improve the rate or degree of recovery

Favorable; coordinated management and research for marine areas should enhance the opportunity for recovery;

C. Technical Feasibility

Favorable; establishment of a marine sanctuary is technically feasible; currently the governor's office has expressed opposition to establishing a marine sanctuary;

D. Potential effects of the action on human health and safety

Favorable; none anticipated;

E. The relationship of the expected costs of the proposed actions to the expected benefits

Favorable; typically, marine sanctuaries are funded by congressional appropriation and should have little to no effect on use of restoration funds;

F. Cost-effectiveness

Favorable; if a marine sanctuary is designated, funding may come through congressional appropriation; thus, little to no impact would be made on settlement funds;

G. Consistency with applicable federal and state laws and policies

H. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts.

Favorable;

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

Favorable;

J. Degree to which proposed action benefits more than one resource or service

Favorable;

K. Importance of starting the project within the next year Favorable;

### RECOMMENDATION:

Sandy recommended favorable. RPWG concurred.

## REFERENCE No.:

'n

## EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

OPTION: 22 - Designate protected marine areas

SUBOPTION: D - Designate national estuarine reserves

Note: 27A&B becomes 22D

## EVALUATION CRITERIA

- A. Effects of other response or restoration actions
- B. Potential to improve the rate or degree of recovery
- C. Technical Feasibility
- D. Potential effects of the action on human health and safety
- E. The relationship of the expected costs of the proposed actions to the expected benefits
- F. Cost-effectiveness
- G. Consistency with applicable federal and state laws and policies
- H. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts.

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

J. Degree to which proposed action benefits more than one resource or service

K. Importance of starting the project within the next year

RECOMMENDATION:

Comments:

REFERENCE No.:

# EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

**OPTION:** 23 - Acquire marine bird and mammal habitats

SUBOPTION: A - Acquisition of fee title to privately owned marine mammal and bird habitats

SUBOPTION: B - Enhance protection of privately owned coastal habitats without acquisition of fee title

Note: 23A moved to 37 (acquire fee title); 23B moved to 38 (acquire non-fee protection)

#### EVALUATION CRITERIA

A. Effects of other response or restoration actions

Favorable; could be combined with other acquisition options;

- B. Potential to improve the rate or degree of recovery Favorable;
- C. Technical Feasibility

Favorable; (suboption A may take longer to implement than B)

- D. Potential effects of the action on human health and safety Favorable;
- E. The relationship of the expected costs of the proposed actions to the expected benefits

Favorable; (incorporating into already existing management structure, but may need additional funding for management)

F. Cost-effectiveness

Favorable;

G. Consistency with applicable federal and state laws and policies

Favorable;

H. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts.

Favorable; but some potential injury to some services through more restrictive regulations (some activities like hunting etc... may still occur depending on the mandates of the refuge)

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

Favorable; (although ownership may change the duration of enhanced protection)

J. Degree to which proposed action benefits more than one resource or service

Favorable;

K. Importance of starting the project within the next year

Favorable;

## RECOMMENDATION:

RPWG recommended favorable;

#### REFERENCE No.:

## EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

OPTION: 24 - Acquire and protect inholdings within state and federal areas

SUBOPTION: A - Acquisition of fee title to inholdings

SUBOPTION: B - Enhance protection of inholdings without acquisition of fee title

Note: 24A moved to 37; 24B moved to 38;

### **EVALUATION CRITERIA**

- A. Effects of other response or restoration actions Favorable;
- B. Potential to improve the rate or degree of recovery Favorable;
- C. Technical Feasibility

Favorable; suboption A may take longer than B to implement;

- D. Potential effects of the action on human health and safety Favorable;
- E. The relationship of the expected costs of the proposed actions to the expected benefits

Favorable;

F. Cost-effectiveness

Favorable;

G. Consistency with applicable federal and state laws and policies

## Favorable;

H. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts.

Favorable; potential exists for impact on services;

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

Favorable; more so for suboption A than B;

J. Degree to which proposed action benefits more than one resource or service

Favorable;

K. Importance of starting the project within the next year

Favorable;

### RECOMMENDATION:

RPWG recommended favorable.

REFERENCE No.:

# EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

**OPTION:** 25 - Acquire upland forests and watersheds

SUBOPTION: A - Acquisition of fee title to privately owned uplands

SUBOPTION: B - Enhance protection of privately or municipally owned tidelands without acquisition of fee title

Note: 25A moved to 37; 25B moved to 38;

### EVALUATION CRITERIA

- A. Effects of other response or restoration actions

  Favorable; could combine with other acquisition options;
- B. Potential to improve the rate or degree of recovery Favorable;
- C. Technical Feasibility

Favorable; suboption A may take longer than B;

- D. Potential effects of the action on human health and safety Favorable;
- E. The relationship of the expected costs of the proposed actions to the expected benefits

Favorable;

F. Cost-effectiveness

Favorable;

G. Consistency with applicable federal and state laws and policies

Favorable;

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H. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts.

Favorable; potential exists for impact on services;

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

Favorable; more so for suboption A than B.

J. Degree to which proposed action benefits more than one resource or service

Favorable;

K. Importance of starting the project within the next year

Favorable;

## RECOMMENDATION:

RPWG recommended favorable.

#### REFERENCE No.:

## EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

OPTION: 26 - Extend buffer strips adjacent to anadromous streams

SUBOPTION: A - Acquisition of fee title to buffer strips

SUBOPTION: B - Expand anadromous stream buffers without acquisition of fee title

Note: 26A combined into 25A and moved to 37; 26B moved to 38;

### **EVALUATION CRITERIA**

A. Effects of other response or restoration actions

Unfavorable for A; favorable for B; A should be combined with other acquisition options to become favorable;

B. Potential to improve the rate or degree of recovery

Favorable;

C. Technical Feasibility

Favorable:

- D. Potential effects of the action on human health and safety Favorable;
- E. The relationship of the expected costs of the proposed actions to the expected benefits

Favorable; additional funding for increased management may be needed;

F. Cost-effectiveness

Favorable; if suboption A were included it might be unfavorable;

G. Consistency with applicable federal and state laws and policies

Favorable;

H. Potential for additional injury resulting from the proposed

action, including long-term and indirect impacts.

Favorable;

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

Favorable; provides enhanced protection;

J. Degree to which proposed action benefits more than one resource or service

Favorable;

K. Importance of starting the project within the next year

Favorable;

## RECOMMENDATION:

Chris recommended favorable - should be combined with other acquisition options. RPWG concurred.

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July 21, 1992

REFERENCE No.:

# EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

**OPTION:** 26 - Extend buffer strips adjacent to anadromous streams

SUBOPTION: C - Amend State Forest Practices Act

### **EVALUATION CRITERIA**

- A. Effects of other response or restoration actions Favorable;
- B. Potential to improve the rate or degree of recovery

Unknown; variable, since reopening act to amendment could result in undesirable changes;

C. Technical Feasibility

Favorable; highly contentious issue;

- D. Potential effects of the action on human health and safety Favorable;
- E. The relationship of the expected costs of the proposed actions to the expected benefits

Favorable; low-cost option;

F. Cost-effectiveness

Favorable;

G. Consistency with applicable federal and state laws and policies

Favorable;

H. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts.

Unknown; variable;

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

Unknown; if successful, would enhance protection and could allow for refocused management;

J. Degree to which proposed action benefits more than one resource or service

Favorable; if amendment is favorable;

K. Importance of starting the project within the next year
Unfavorable;

## **RECOMMENDATION:**

Chris recommended favorable. RPWG concurred.

REFERENCE No.:

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EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

OPTION: 28 - Acquire access to sport-fishing recreational areas

SUBOPTION: A - Acquisition of fee title

SUBOPTION: B - Acquire access without purchase of fee title

#### EVALUATION CRITERIA

A. Effects of other response or restoration actions

Favorable; could be combined with other acquisition options;

- B. Potential to improve the rate or degree of recovery
- Favorable;
- C. Technical Feasibility

Favorable;

- D. Potential effects of the action on human health and safety Favorable;
- E. The relationship of the expected costs of the proposed actions to the expected benefits

Favorable;

F. Cost-effectiveness

Favorable;

G. Consistency with applicable federal and state laws and policies

Favorable;

H. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts.

Unknown; variable - increased access could either injure resources or refocus use;

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

Favorable;

J. Degree to which proposed action benefits more than one resource or service

Unfavorable; primary focus on sport/recreational uses;

K. Importance of starting the project within the next year

Favorable;

#### RECOMMENDATION:

Chris recommend favorable, but site access points so as to minimize pressures on injured resources. RPWG concurred.

## Comments:

Suboption C will be evaluated once the write up is received.

## REFERENCE No.:

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## EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

OPTION: 27 - Designate and protect "benchmark" monitoring sites

SUBOPTION: A - Designate national estuarine research reserve site

Note: 27A will be combined with 22

## **EVALUATION CRITERIA**

A. Effects of other response or restoration actions

Favorable;

B. Potential to improve the rate or degree of recovery

Favorable; NERRS allows for recreation activity, as well as added protection measures;

C. Technical Feasibility

Favorable; 18 or 19 have been established since the inception of the program;

- D. Potential effects of the action on human health and safety Favorable;
- E. The relationship of the expected costs of the proposed actions to the expected benefits

Favorable; cost would not be very much; additional funding for research may be included;

F. Cost-effectiveness

Favorable;

G. Consistency with applicable federal and state laws and policies

Favorable;

H. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts.

Favorable;

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

Favorable;

J. Degree to which proposed action benefits more than one resource or service

Favorable;

K. Importance of starting the project within the next year

Favorable;

#### RECOMMENDATION:

John recommended favorable. RPWG concurred.

### Comments:

John thinks it a good idea to support adoption of one or more of these designations, but the reality is that they are all "face value designations". They would not, therefore, likely receive a great deal of support from some state bureaucrats. For this matter, we may want to explore some of the "state" designations that would afford comparable opportunities (e.g. refuge, special management areas). To some degree this is covered in option 22A and also option 20A&B.

REFERENCE No.:

# EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

OPTION: 27 - Designate and protect "benchmark" monitoring sites

SUBOPTION: B - Designate research natural area(s)

Note: 27B moved to 22

## **EVALUATION CRITERIA**

- A. Effects of other response or restoration actions Favorable;
- B. Potential to improve the rate or degree of recovery Favorable;
- C. Technical Feasibility

Favorable;

D. Potential effects of the action on human health and safety

Favorable;

E. The relationship of the expected costs of the proposed actions to the expected benefits

Favorable;

F. Cost-effectiveness

Favorable;

G. Consistency with applicable federal and state laws and policies

Favorable;

H. Potential for additional injury resulting from the proposed

Favorable;

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

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Favorable;

J. Degree to which proposed action benefits more than one resource or service

Favorable;

K. Importance of starting the project within the next year

Favorable;

## RECOMMENDATION:

John recommended favorable. RPWG concurred.

REFERENCE No.:

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# EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

OPTION: 27 - Designate and protect "benchmark" monitoring sites

SUBOPTION: C - Selection of Long-term Ecological Research Site(s)

Note: 27C will be left as an existing Suboption in 27

#### **EVALUATION CRITERIA**

- A. Effects of other response or restoration actions
  Favorable; compatible with monitoring
- B. Potential to improve the rate or degree of recovery Favorable;
- C. Technical Feasibility

Favorable;

- D. Potential effects of the action on human health and safety Favorable;
- E. The relationship of the expected costs of the proposed actions to the expected benefits

Favorable; NSF would not require matching funds in addition to what is provided;

F. Cost-effectiveness

Favorable;

G. Consistency with applicable federal and state laws and policies

Favorable;

H. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts.

Favorable;

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

Unfavorable; does not provide additional protection;

J. Degree to which proposed action benefits more than one resource or service

Favorable;

K. Importance of starting the project within the next year Favorable;

### RECOMMENDATION:

John recommended favorable. RPWG concurred and combined with 22.

# Comments:

Karen stated LTER's primary functions are to instigate research.

# EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

OPTION: 29 - Establish or extend buffer zones for nesting birds

SUBOPTION: A - Recommend implementation of special agency

management practices

Note: 29A moved to 20C

### EVALUATION CRITERIA

A. Effects of other response or restoration actions

Favorable;

B. Potential to improve the rate or degree of recovery

Favorable;

C. Technical Feasibility

Favorable;

- D. Potential effects of the action on human health and safety Favorable;
- E. The relationship of the expected costs of the proposed actions to the expected benefits

Favorable;

F. Cost-effectiveness

Favorable;

G. Consistency with applicable federal and state laws and policies

Favorable;

H. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts.

Favorable;

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

Favorable;

J. Degree to which proposed action benefits more than one resource or service

Favorable;

K. Importance of starting the project within the next year

Favorable;

## RECOMMENDATION:

Carol recommended favorable. RPWG concurred.

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July 21, 1992

REFERENCE No.:

# EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

OPTION: 30 - Test subsistence foods for hydrocarbon contamination

SUBOPTION:

#### **EVALUATION CRITERIA**

- A. Effects of other response or restoration actions
  Favorable; goes hand in hand with the education option;
- B. Potential to improve the rate or degree of recovery Favorable;
- C. Technical Feasibility

Favorable;

- D. Potential effects of the action on human health and safety Favorable;
- E. The relationship of the expected costs of the proposed actions to the expected benefits

Favorable;

F. Cost-effectiveness

Favorable;

G. Consistency with applicable federal and state laws and policies

Favorable;

H. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts.

Unfavorable; increased subsistence harvest could hamper the recovery of some species;

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

Unfavorable;

J. Degree to which proposed action benefits more than one resource or service

Unfavorable;

K. Importance of starting the project within the next year

Favorable; decreased subsistence use is a continuing injury.

## RECOMMENDATION:

Karen recommended favorable. RPWG concurred.

REFERENCE No.:

# EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

OPTION: 31 - Develop comprehensive restoration monitoring program

SUBOPTION:

## **EVALUATION CRITERIA**

- A. Effects of other response or restoration actions
- Favorable; no affects contemplated;
- B. Potential to improve the rate or degree of recovery

Favorable; can't do without monitoring restoration;

C. Technical Feasibility

Favorable; techniques are available;

- D. Potential effects of the action on human health and safety Favorable; none; risks are minimal;
- E. The relationship of the expected costs of the proposed actions to the expected benefits

Favorable;

F. Cost-effectiveness

Favorable;

G. Consistency with applicable federal and state laws and policies

Favorable; permits are available from DEC, ADF&G;

H. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts.

Favorable;

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

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Unfavorable; can't measure efficacy of restoration without monitoring;

J. Degree to which proposed action benefits more than one resource or service

Favorable; if designed properly;

K. Importance of starting the project within the next year

Favorable; opportunities would be lost if monitoring is not implemented next year;

# RECOMMENDATION:

John recommended favorable. RPWG concurred.

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July 21, 1992

REFERENCE No.:

EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

OPTION: 32 - Endow a fund to support restoration activities

SUBOPTION:

# **EVALUATION CRITERIA**

- A. Effects of other response or restoration actions
  Unknown; depends on how the endowment is set up and administered;
- B. Potential to improve the rate or degree of recovery Favorable;
- C. Technical Feasibility

Unknown; sounds easy but may not be;

- D. Potential effects of the action on human health and safety Favorable;
- E. The relationship of the expected costs of the proposed actions to the expected benefits

Favorable;

F. Cost-effectiveness

Favorable;

G. Consistency with applicable federal and state laws and policies

Unknown;

H. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts.

Unfavorable; may delay other critical restoration activities;

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

Favorable;

J. Degree to which proposed action benefits more than one resource or service

Favorable;

K. Importance of starting the project within the next year

Favorable;

## **RECOMMENDATION:**

RPWG recommended favorable.

# Comments:

This option will be forwarded to the Endowment Working Group for review.

REFERENCE No.:

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# EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

OPTION: 33 - Develop integrated public information and education program

SUBOPTION: A - Develop program to provide and distribute up-dated information, and educational products

Note: Add 1C, 4A, 5B, 7A to 33A

## **EVALUATION CRITERIA**

- A. Effects of other response or restoration actions Favorable;
- B. Potential to improve the rate or degree of recovery Favorable;
- C. Technical Feasibility

Favorable;

- D. Potential effects of the action on human health and safety Favorable;
- E. The relationship of the expected costs of the proposed actions to the expected benefits

Favorable; may be difficult to get anglers to adopt catch and release; education programs are often cost effective and have long-term benefits;

F. Cost-effectiveness

Favorable;

G. Consistency with applicable federal and state laws and policies

Favorable;

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H. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts.

Favorable;

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

Favorable;

J. Degree to which proposed action benefits more than one resource or service

Favorable;

K. Importance of starting the project within the next year

Favorable;

RECOMMENDATION:

Sandy recommended favorable. RPWG concurred.

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EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

OPTION: 34 - Establish a marine environmental institute

SUBOPTION:

#### EVALUATION CRITERIA

- A. Effects of other response or restoration actions Unknown;
- B. Potential to improve the rate or degree of recovery Favorable;
- C. Technical Feasibility

Favorable;

- D. Potential effects of the action on human health and safety Favorable;
- E. The relationship of the expected costs of the proposed actions to the expected benefits

Unknown;

F. Cost-effectiveness

Unknown;

G. Consistency with applicable federal and state laws and policies

Favorable;

H. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts.

Favorable;

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

Favorable;

J. Degree to which proposed action benefits more than one resource or service

Favorable;

K. Importance of starting the project within the next year
Unfavorable;

## **RECOMMENDATION:**

Art recommended favorable. RPWG concurred.

EVALUATION OF RESTORATION OPTIONS/SUBOPTIONS

OPTION: 35 -

SUBOPTION: A - Replacement of archaeological artifacts

### **EVALUATION CRITERIA**

A. Effects of other response or restoration actions

Unfavorable; could promote additional looting that is trying to be decreased by other options;

B. Potential to improve the rate or degree of recovery

Favorable;

C. Technical Feasibility

Favorable;

- D. Potential effects of the action on human health and safety Favorable;
- E. The relationship of the expected costs of the proposed actions to the expected benefits

Unknown;

F. Cost-effectiveness

Unknown;

G. Consistency with applicable federal and state laws and policies

Unknown;

H. Potential for additional injury resulting from the proposed action, including long-term and indirect impacts.

Unfavorable; could increase incidents of looting because people may

perceive the opportunity for profiteering;

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

Favorable;

J. Degree to which proposed action benefits more than one resource or service

Unfavorable;

K. Importance of starting the project within the next year
Unfavorable;

## RECOMMENDATION:

RPWG recommended reject.

October 1, 1992 Author: Sanford Rabinowitch

OPTION #1 Archaeology Resource Protection

APPROACH CATEGORY Management of Human Uses

INJURED RESOURCES AND SERVICES Archaeological sites and
artifacts

#### SUMMARY

Summary should not sound like a specific project. Karen doesn't think the carbon 14 procedure belongs in this option; should be captured in Option 10.

SUBOPTION A - Site Seward Program

TARGET RESOURCES AND SERVICES

DESCRIPTION

Should state that people have expressed interest to be brought in.

IMPLEMENTATION ACTIONS

TIME NEEDED TO IMPLEMENT

MEANS TO IMPROVE RECOVERY

PROTECTION AND MANAGEMENT UNDER EXISTING LAWS

RELATIONSHIPS WITH EXISTING/PLANNED USES OR MANAGEMENT

TECHNICAL FEASIBILITY

POTENTIAL TO IMPROVE RECOVERY OF ENHANCE THE RESOURCE/SERVICE

INDIRECT EFFECTS

RELATIONSHIP TO OTHER EVOS RESPONSE/RESTORATION ACTIONS

OTHER OPTIONS THAT COULD ACHIEVE THIS SAME OBJECTIVE

#### LEGAL CONSIDERATIONS

The information under additional/new legislation or regulatory actions should be standardized. Should note only what is needed to implement option. Legislation needed may be a new option. New suboption could be to amend CERCLA to include archaeological resources.

### MEANS TO EVALUATE SUCCESS

#### REPRESENTATIVE COSTS

This is a specific project which is spill-wide. The cost represents one year. Need to decide if cost is annual or life span of the project. Karen stated the first year's cost may be greater because it changes from one year to the next. John stated we may want to have cost estimates for the life of the plan. This suboption appears to be for the life of the settlement. Sandy stated the reason this was increased by the Trustees is because they were convinced there was vandalism. Sandy questioned when is restoration achieved if vandalism decreases. Carol stated Dave has added some other budget categories and we should be uniform with those.

### ADDITIONAL INFORMATION NEEDED

#### CITATIONS

June 9, 1992

**SUBOPTION** B - Increase the field presence of management agencies within the affected area to provide greater protection for archaeological sites and artifacts.

Author: Karen Klinge

TARGET RESOURCES AND SERVICES Archaeological sites and artifacts

#### DESCRIPTION

There are three other suboptions which focus on field presences. Karen felt they should be combined.

## IMPLEMENTATION ACTIONS

Ray suggested adding state and federal to the statement on hiring and equipping additional staff.

### TIME NEEDED TO IMPLEMENT

Chris suggested mentioning DNR's role. Sandy suggested that the Trustees look into training for appropriate state employees.

MEANS TO IMPROVE RECOVERY

PROTECTION AND MANAGEMENT UNDER EXISTING LAWS

RELATIONSHIPS WITH EXISTING/PLANNED USES OR MANAGEMENT

TECHNICAL FEASIBILITY

POTENTIAL TO IMPROVE RECOVERY OF ENHANCE THE RESOURCE/SERVICE

INDIRECT EFFECTS

RELATIONSHIP TO OTHER EVOS RESPONSE/RESTORATION ACTIONS

Ray suggested mentioning that this suboption specifically supports the stewardship program. Karen asked if site stewards have the ability to make arrests. Sandy stated that they do not because they would put themselves at risk.

OTHER OPTIONS THAT COULD ACHIEVE THIS SAME OBJECTIVE

LEGAL CONSIDERATIONS

MEANS TO EVALUATE SUCCESS

REPRESENTATIVE COSTS

Sandy stated that there is a project budget for this suboption. The cost includes training for having the ability to make arrests. Karen did the FTE by area and not agency. Karen requested a list of all the managers that need to be included.

ADDITIONAL INFORMATION NEEDED

CITATIONS

June 9, 1992 Author: Karen Klinge

SUBOPTION C - Expand public education efforts

TARGET RESOURCES AND SERVICES Archaeological sites and artifacts

DESCRIPTION

IMPLEMENTATION ACTIONS

TIME NEEDED TO IMPLEMENT

MEANS TO IMPROVE RECOVERY

PROTECTION AND MANAGEMENT UNDER EXISTING LAWS

RELATIONSHIPS WITH EXISTING/PLANNED USES OR MANAGEMENT

TECHNICAL FEASIBILITY

POTENTIAL TO IMPROVE RECOVERY OF ENHANCE THE RESOURCE/SERVICE

INDIRECT EFFECTS

RELATIONSHIP TO OTHER EVOS RESPONSE/RESTORATION ACTIONS

OTHER OPTIONS THAT COULD ACHIEVE THIS SAME OBJECTIVE

LEGAL CONSIDERATIONS

MEANS TO EVALUATE SUCCESS

REPRESENTATIVE COSTS

ADDITIONAL INFORMATION NEEDED

CITATIONS

October 1, 1992 Author: Karen Klinge

**OPTION** 4 - Reduce disturbance at marine bird colonies and marine mammal haul-out sites and rubbing beaches.

APPROACH CATEGORY Management of Human Uses

INJURED RESOURCES AND SERVICES Common and thick-billed murres, harlequin ducks, sea otters, harbor seals and killer whales.

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TARGET RESOURCES AND SERVICES

DESCRIPTION

IMPLEMENTATION ACTIONS

TIME NEEDED TO IMPLEMENT

MEANS TO IMPROVE RECOVERY

PROTECTION AND MANAGEMENT UNDER EXISTING LAWS

RELATIONSHIPS WITH EXISTING/PLANNED USES OR MANAGEMENT

TECHNICAL FEASIBILITY

POTENTIAL TO IMPROVE RECOVERY OF ENHANCE THE RESOURCE/SERVICE

Need to speak with Cathy Frost regarding haulout.

INDIRECT EFFECTS

RELATIONSHIP TO OTHER EVOS RESPONSE/RESTORATION ACTIONS

OTHER OPTIONS THAT COULD ACHIEVE THIS SAME OBJECTIVE

LEGAL CONSIDERATIONS

MEANS TO EVALUATE SUCCESS

REPRESENTATIVE COSTS

Should be expanded to at least what was in the last one.

ADDITIONAL INFORMATION NEEDED

CITATIONS

October 1, 1992 Author: Karen Klinge

SUBOPTION B Increase the field presence of Trustee agencies to provide greater enforcement of Federal and State laws designed to reduced disturbance.

TARGET RESOURCES AND SERVICES

DESCRIPTION

IMPLEMENTATION ACTIONS

TIME NEEDED TO IMPLEMENT

MEANS TO IMPROVE RECOVERY

PROTECTION AND MANAGEMENT UNDER EXISTING LAWS

RELATIONSHIPS WITH EXISTING/PLANNED USES OR MANAGEMENT

TECHNICAL FEASIBILITY

POTENTIAL TO IMPROVE RECOVERY OF ENHANCE THE RESOURCE/SERVICE

INDIRECT EFFECTS

RELATIONSHIP TO OTHER EVOS RESPONSE/RESTORATION ACTIONS

OTHER OPTIONS THAT COULD ACHIEVE THIS SAME OBJECTIVE

LEGAL CONSIDERATIONS

Chris recommended calling the troopers for additional information.

MEANS TO EVALUATE SUCCESS

REPRESENTATIVE COSTS

# ADDITIONAL INFORMATION NEEDED

October 1, 1992 Author: Karen Klinge

OPTION 4

APPROACH CATEGORY

INJURED RESOURCES AND SERVICES

SUMMARY

**SUBOPTION** C - Establish or expand designated buffer zones to reduce disturbance at marine mammal haul-out sites and rubbing beaches and at breeding colonies of marine birds.

TARGET RESOURCES AND SERVICES

DESCRIPTION

This suboption establishes buffer zones through regulation.

IMPLEMENTATION ACTIONS

TIME NEEDED TO IMPLEMENT

Unknown

MEANS TO IMPROVE RECOVERY

PROTECTION AND MANAGEMENT UNDER EXISTING LAWS

RELATIONSHIPS WITH EXISTING/PLANNED USES OR MANAGEMENT

TECHNICAL FEASIBILITY

POTENTIAL TO IMPROVE RECOVERY OF ENHANCE THE RESOURCE/SERVICE

INDIRECT EFFECTS

RELATIONSHIP TO OTHER EVOS RESPONSE/RESTORATION ACTIONS

OTHER OPTIONS THAT COULD ACHIEVE THIS SAME OBJECTIVE

LEGAL CONSIDERATIONS

# MEANS TO EVALUATE SUCCESS

REPRESENTATIVE COSTS

ADDITIONAL INFORMATION NEEDED

October 1, 1992 Author: Karen Klinge

**OPTION** 5

APPROACH CATEGORY

INJURED RESOURCES AND SERVICES

SUMMARY

**SUBOPTION** B - Use public education to encourage conservation for sport-fishing.

TARGET RESOURCES AND SERVICES

DESCRIPTION

Salmon was added.

IMPLEMENTATION ACTIONS

TIME NEEDED TO IMPLEMENT

MEANS TO IMPROVE RECOVERY

PROTECTION AND MANAGEMENT UNDER EXISTING LAWS

RELATIONSHIPS WITH EXISTING/PLANNED USES OR MANAGEMENT

TECHNICAL FEASIBILITY

POTENTIAL TO IMPROVE RECOVERY OF ENHANCE THE RESOURCE/SERVICE

INDIRECT EFFECTS

RELATIONSHIP TO OTHER EVOS RESPONSE/RESTORATION ACTIONS

OTHER OPTIONS THAT COULD ACHIEVE THIS SAME OBJECTIVE

LEGAL CONSIDERATIONS

## MEANS TO EVALUATE SUCCESS

#### REPRESENTATIVE COSTS

Costs would need to be increased for user group involvement. Costs include expanding existing educational tools.

# ADDITIONAL INFORMATION NEEDED

October 1, 1992 Author: Ray Thompson

OPTION 6 - Designate a Portion of the Chugach National Forest as a National Recreation Area or Wilderness

APPROACH CATEGORY Management of Human Uses

INJURED RESOURCES AND SERVICES

SUMMARY

SUBOPTION A - Designate the Nellie Juan-College Fjord Wilderness Study Area as Wilderness.

TARGET RESOURCES AND SERVICES

DESCRIPTION

Ray suggested separating areas that have some status and those that don't and expanding this option to include both Park Service and Forest Service.

IMPLEMENTATION ACTIONS

Sandy recommended adding "EVOS Trustee Council to recommend movement on appropriate legislation."

TIME NEEDED TO IMPLEMENT

MEANS TO IMPROVE RECOVERY

PROTECTION AND MANAGEMENT UNDER EXISTING LAWS

RELATIONSHIPS WITH EXISTING/PLANNED USES OR MANAGEMENT

TECHNICAL FEASIBILITY

POTENTIAL TO IMPROVE RECOVERY OF ENHANCE THE RESOURCE/SERVICE

INDIRECT EFFECTS

RELATIONSHIP TO OTHER EVOS RESPONSE/RESTORATION ACTIONS

OTHER OPTIONS THAT COULD ACHIEVE THIS SAME OBJECTIVE

LEGAL CONSIDERATIONS

MEANS TO EVALUATE SUCCESS

REPRESENTATIVE COSTS

ADDITIONAL INFORMATION NEEDED

October 1, 1992 Author: Ray Thompson

OPTION 6

APPROACH CATEGORY

INJURED RESOURCES AND SERVICES

SUMMARY

**SUBOPTION** B - Designate a portion of the Chugach National Forest in the Prince William Sound area as a National Recreation Area.

TARGET RESOURCES AND SERVICES

DESCRIPTION

Sandy stated that Katmai is a park and not a monument.

IMPLEMENTATION ACTIONS

Sandy suggested working up language stating that it is better to enhance than to hinder. Karen stated adding something regarding the direction of the enabling legislation that would highlight the need. Ray suggested adding some of the comments under a category of enabling legislation. Carol suggested deleting aguaculture.

TIME NEEDED TO IMPLEMENT

MEANS TO IMPROVE RECOVERY

Karen suggested deleting the first sentence.

PROTECTION AND MANAGEMENT UNDER EXISTING LAWS

Chris suggested putting something under the management plan that would include other allowed uses.

RELATIONSHIPS WITH EXISTING/PLANNED USES OR MANAGEMENT

TECHNICAL FEASIBILITY

Should be NRA not wilderness in the first sentence.

POTENTIAL TO IMPROVE RECOVERY OF ENHANCE THE RESOURCE/SERVICE

INDIRECT EFFECTS

RELATIONSHIP TO OTHER EVOS RESPONSE/RESTORATION ACTIONS

OTHER OPTIONS THAT COULD ACHIEVE THIS SAME OBJECTIVE

LEGAL CONSIDERATIONS

MEANS TO EVALUATE SUCCESS

REPRESENTATIVE COSTS

Doesn't have any input back yet on costs.

ADDITIONAL INFORMATION NEEDED

October 1, 1992 Author: Karen Klinge

**OPTION** 7

APPROACH CATEGORY

INJURED RESOURCES AND SERVICES

Sandy suggested adding artifacts. Karen recommended deleting 7A and combining with the comprehensive education option.

SUMMARY

SUBOPTION A

TARGET RESOURCES AND SERVICES

Sandy suggested adding artifacts.

DESCRIPTION

IMPLEMENTATION ACTIONS

TIME NEEDED TO IMPLEMENT

MEANS TO IMPROVE RECOVERY

PROTECTION AND MANAGEMENT UNDER EXISTING LAWS

RELATIONSHIPS WITH EXISTING/PLANNED USES OR MANAGEMENT

TECHNICAL FEASIBILITY

POTENTIAL TO IMPROVE RECOVERY OF ENHANCE THE RESOURCE/SERVICE

INDIRECT EFFECTS

RELATIONSHIP TO OTHER EVOS RESPONSE/RESTORATION ACTIONS

OTHER OPTIONS THAT COULD ACHIEVE THIS SAME OBJECTIVE

LEGAL CONSIDERATIONS

MEANS TO EVALUATE SUCCESS

REPRESENTATIVE COSTS

ADDITIONAL INFORMATION NEEDED

October 1, 1992 Author: Karen Klinge

OPTION 7

APPROACH CATEGORY

INJURED RESOURCES AND SERVICES

SUMMARY

SUBOPTION B

TARGET RESOURCES AND SERVICES

DESCRIPTION

IMPLEMENTATION ACTIONS

TIME NEEDED TO IMPLEMENT

MEANS TO IMPROVE RECOVERY

PROTECTION AND MANAGEMENT UNDER EXISTING LAWS

RELATIONSHIPS WITH EXISTING/PLANNED USES OR MANAGEMENT

TECHNICAL FEASIBILITY

POTENTIAL TO IMPROVE RECOVERY OF ENHANCE THE RESOURCE/SERVICE

INDIRECT EFFECTS

RELATIONSHIP TO OTHER EVOS RESPONSE/RESTORATION ACTIONS

OTHER OPTIONS THAT COULD ACHIEVE THIS SAME OBJECTIVE

LEGAL CONSIDERATIONS

MEANS TO EVALUATE SUCCESS

# REPRESENTATIVE COSTS

ADDITIONAL INFORMATION NEEDED

October 1, 1992 Author: Catherine Berg

OPTION 8

APPROACH CATEGORY

INJURED RESOURCES AND SERVICES

SUMMARY

Chris suggested stating that state and private land is managed by Fish and Game. Sandy stated the summary was excessively long and should be summarized down.

SUBOPTION A

TARGET RESOURCES AND SERVICES

DESCRIPTION

IMPLEMENTATION ACTIONS

Fish and Game does not close or limit, but the State Boards of Games and Fish does.

TIME NEEDED TO IMPLEMENT

MEANS TO IMPROVE RECOVERY

PROTECTION AND MANAGEMENT UNDER EXISTING LAWS

RELATIONSHIPS WITH EXISTING/PLANNED USES OR MANAGEMENT

TECHNICAL FEASIBILITY

POTENTIAL TO IMPROVE RECOVERY OF ENHANCE THE RESOURCE/SERVICE

INDIRECT EFFECTS

RELATIONSHIP TO OTHER EVOS RESPONSE/RESTORATION ACTIONS

OTHER OPTIONS THAT COULD ACHIEVE THIS SAME OBJECTIVE

## LEGAL CONSIDERATIONS

NOAA/NMFS would be involved related to harbor seals. Chris suggested changing injured species to sea ducks rather than harlequin ducks.

MEANS TO EVALUATE SUCCESS

REPRESENTATIVE COSTS

ADDITIONAL INFORMATION NEEDED

October 1, 1992 Author: Karen Klinge

OPTION 8

APPROACH CATEGORY

INJURED RESOURCES AND SERVICES

SUMMARY

**SUBOPTION** B

TARGET RESOURCES AND SERVICES

DESCRIPTION

It was suggested to change the title to encourage voluntary reductions of subsistence, commercial and sport harvest levels (drop educate public). Carol suggested adding sea ducks to the title. Karen stated the greatest benefit will come from the subsistence aspect and proposed changing the title. John suggested broadening out a few of the sections.

IMPLEMENTATION ACTIONS

TIME NEEDED TO IMPLEMENT

MEANS TO IMPROVE RECOVERY

PROTECTION AND MANAGEMENT UNDER EXISTING LAWS

Should be state and private lands.

RELATIONSHIPS WITH EXISTING/PLANNED USES OR MANAGEMENT

TECHNICAL FEASIBILITY

POTENTIAL TO IMPROVE RECOVERY OF ENHANCE THE RESOURCE/SERVICE

INDIRECT EFFECTS

RELATIONSHIP TO OTHER EVOS RESPONSE/RESTORATION ACTIONS

OTHER OPTIONS THAT COULD ACHIEVE THIS SAME OBJECTIVE

LEGAL CONSIDERATIONS

MEANS TO EVALUATE SUCCESS

REPRESENTATIVE COSTS

ADDITIONAL INFORMATION NEEDED

October 1, 1992 Author: Ken Chalk

**OPTION** 9 - Minimize incidental take of marine birds by commercial fisheries.

APPROACH CATEGORY Management of Human Uses

INJURED RESOURCES AND SERVICES Marine birds

SUMMARY

SUBOPTION

TARGET RESOURCES AND SERVICES

DESCRIPTION

#### IMPLEMENTATION ACTIONS

Mark suggested the following three phases: 1) with available information develop a population modeling exercise, 2) develop experimentation of what would work and the cost 3) might include an EIS as an implementation action. Carol suggested using the first three actions as phases and the remainder as bullets.

TIME NEEDED TO IMPLEMENT

MEANS TO IMPROVE RECOVERY

PROTECTION AND MANAGEMENT UNDER EXISTING LAWS

RELATIONSHIPS WITH EXISTING/PLANNED USES OR MANAGEMENT

TECHNICAL FEASIBILITY

POTENTIAL TO IMPROVE RECOVERY OF ENHANCE THE RESOURCE/SERVICE

INDIRECT EFFECTS

RELATIONSHIP TO OTHER EVOS RESPONSE/RESTORATION ACTIONS

OTHER OPTIONS THAT COULD ACHIEVE THIS SAME OBJECTIVE

# LEGAL CONSIDERATIONS

EIS

MEANS TO EVALUATE SUCCESS

REPRESENTATIVE COSTS

ADDITIONAL INFORMATION NEEDED

October 1, 1992 Author: Karen Oakley

**OPTION** 9 - Minimize incidental take of marine birds by commercial fisheries.

APPROACH CATEGORY Management of Human Uses

INJURED RESOURCES AND SERVICES Marine birds

SUMMARY

SUBOPTION

TARGET RESOURCES AND SERVICES

DESCRIPTION

IMPLEMENTATION ACTIONS

TIME NEEDED TO IMPLEMENT

MEANS TO IMPROVE RECOVERY

PROTECTION AND MANAGEMENT UNDER EXISTING LAWS

RELATIONSHIPS WITH EXISTING/PLANNED USES OR MANAGEMENT

TECHNICAL FEASIBILITY

POTENTIAL TO IMPROVE RECOVERY OF ENHANCE THE RESOURCE/SERVICE

INDIRECT EFFECTS

RELATIONSHIP TO OTHER EVOS RESPONSE/RESTORATION ACTIONS

OTHER OPTIONS THAT COULD ACHIEVE THIS SAME OBJECTIVE

LEGAL CONSIDERATIONS

MEANS TO EVALUATE SUCCESS

## REPRESENTATIVE COSTS

Mark suggested rethinking what the cost would be for the research advisory council.

# ADDITIONAL INFORMATION NEEDED

October 1, 1992 Author: Sanford P. Rabinowitch

OPTION 10 - Preservation of archaeological sites and artifacts

APPROACH CATEGORY Manipulation of Resources

INJURED RESOURCES AND SERVICES Archaeological sites and
artifacts

SUMMARY

Some editing is necessary to the examples of what needs to be done.

SUBOPTION

TARGET RESOURCES AND SERVICES

DESCRIPTION

IMPLEMENTATION ACTIONS

TIME NEEDED TO IMPLEMENT

MEANS TO IMPROVE RECOVERY

PROTECTION AND MANAGEMENT UNDER EXISTING LAWS

RELATIONSHIPS WITH EXISTING/PLANNED USES OR MANAGEMENT

TECHNICAL FEASIBILITY

POTENTIAL TO IMPROVE RECOVERY OF ENHANCE THE RESOURCE/SERVICE

Karen suggested discussing examples of the type of erosion work that might need to be done. John suggested these could be added under implementation actions.

INDIRECT EFFECTS

RELATIONSHIP TO OTHER EVOS RESPONSE/RESTORATION ACTIONS

Sentence needs to be completed.

OTHER OPTIONS THAT COULD ACHIEVE THIS SAME OBJECTIVE

## LEGAL CONSIDERATIONS

## MEANS TO EVALUATE SUCCESS

Mark stated that the peer review system used previously could also be used now.

## REPRESENTATIVE COSTS

ADDITIONAL INFORMATION NEEDED

October 1, 1992

Author:

OPTION 11

APPROACH CATEGORY

INJURED RESOURCES AND SERVICES

SUMMARY

SUBOPTION

TARGET RESOURCES AND SERVICES

DESCRIPTION

IMPLEMENTATION ACTIONS

TIME NEEDED TO IMPLEMENT

MEANS TO IMPROVE RECOVERY

PROTECTION AND MANAGEMENT UNDER EXISTING LAWS

RELATIONSHIPS WITH EXISTING/PLANNED USES OR MANAGEMENT

TECHNICAL FEASIBILITY

POTENTIAL TO IMPROVE RECOVERY OF ENHANCE THE RESOURCE/SERVICE

INDIRECT EFFECTS

RELATIONSHIP TO OTHER EVOS RESPONSE/RESTORATION ACTIONS

OTHER OPTIONS THAT COULD ACHIEVE THIS SAME OBJECTIVE

LEGAL CONSIDERATIONS

MEANS TO EVALUATE SUCCESS

## REPRESENTATIVE COSTS

# ADDITIONAL INFORMATION NEEDED

October 1, 1992 Author: Ray Thompson

OPTION 12

APPROACH CATEGORY Manipulation of Resources

INJURED RESOURCES AND SERVICES

SUMMARY

SUBOPTION

TARGET RESOURCES AND SERVICES

DESCRIPTION

Karen suggested discussing the perception that recreation was damaged rather than a general discussion of the oil spill injury. Some examples could go under potential for improvement. Karen also suggested working on the cultural resources statement because of the controversy. Karen also suggested adding more information on backcountry sites. Chris suggested reflecting construction as enhancement and not restoration. Ray will scale this option to small development and opportunities.

#### IMPLEMENTATION ACTIONS

Mark suggested clarifying what vendors include. Karen suggested stating that the first two paragraphs should be under the relationship to other options and is also covered under the education/information campaign. Karen suggested adding "coordinate with education based programs to develop a recreational guide." Chris suggested emphasizing consideration of site. Karen suggested discussing restoring vegetation around backcountry sites.

TIME NEEDED TO IMPLEMENT

MEANS TO IMPROVE RECOVERY

PROTECTION AND MANAGEMENT UNDER EXISTING LAWS

Chris suggested that restoring vegetation could be discussed under the management heading.

RELATIONSHIPS WITH EXISTING/PLANNED USES OR MANAGEMENT

TECHNICAL FEASIBILITY

POTENTIAL TO IMPROVE RECOVERY OF ENHANCE THE RESOURCE/SERVICE

INDIRECT EFFECTS

RELATIONSHIP TO OTHER EVOS RESPONSE/RESTORATION ACTIONS

OTHER OPTIONS THAT COULD ACHIEVE THIS SAME OBJECTIVE

LEGAL CONSIDERATIONS

MEANS TO EVALUATE SUCCESS

REPRESENTATIVE COSTS

ADDITIONAL INFORMATION NEEDED

October 1, 1992 Author: John Strand

**OPTION** 13 - Eliminate sources of persistent contamination from mussel beds.

APPROACH CATEGORY Manipulation of resources

INJURED RESOURCES AND SERVICES

#### SUMMARY

Option 13 title changed to above. Needs a summary for the revised title. Option 15 will be replace, rehabilitate or supplement spawning substrates important for intertidal and subtidal species. This will provide some of the data but not all the data to determine possible linkages of oiled mussel beds to harlequin ducks, oystercatchers, juvenile sea otters, juvenile and adult river otters, and other organisms.

#### SUBOPTION

TARGET RESOURCES AND SERVICES

DESCRIPTION

#### IMPLEMENTATION ACTIONS

Carol suggested adding a third implementation action.

#### TIME NEEDED TO IMPLEMENT

John will see if the time can be accelerated.

#### MEANS TO IMPROVE RECOVERY

Mark suggested explaining the concept of stripping. John further suggested adding that this technique is being done this summer.

PROTECTION AND MANAGEMENT UNDER EXISTING LAWS

RELATIONSHIPS WITH EXISTING/PLANNED USES OR MANAGEMENT

TECHNICAL FEASIBILITY

POTENTIAL TO IMPROVE RECOVERY OF ENHANCE THE RESOURCE/SERVICE

INDIRECT EFFECTS

RELATIONSHIP TO OTHER EVOS RESPONSE/RESTORATION ACTIONS

Eliminate first sentence.

OTHER OPTIONS THAT COULD ACHIEVE THIS SAME OBJECTIVE

LEGAL CONSIDERATIONS

MEANS TO EVALUATE SUCCESS

#### REPRESENTATIVE COSTS

30 to 50 sites in PWS and another 5 sites in the remainder of the oiled area. Mark suggested footnoting that these are estimated costs for the stripping technique and other approaches.

ADDITIONAL INFORMATION NEEDED

October 1, 1992 Author: John Strand

**OPTION** 14 - Accelerate Recovery of Upper Intertidal Zone

APPROACH CATEGORY Manipulation of Resources

INJURED RESOURCES AND SERVICES

SUMMARY

SUBOPTION

TARGET RESOURCES AND SERVICES

DESCRIPTION

Chris stated that Options 13 and 14 read like project proposals and there has been criticism of this in the past. John will attempt to make this more generic and give some possible examples so that it doesn't appear to be a pre-conceived project. John will also add a component on the ecological importance of Fucus in the upper intertidal zone. Mark pointed out that this is not a feasibility study as was stated.

IMPLEMENTATION ACTIONS

Carol suggested adding assess the need as 1.

TIME NEEDED TO IMPLEMENT

MEANS TO IMPROVE RECOVERY

PROTECTION AND MANAGEMENT UNDER EXISTING LAWS

RELATIONSHIPS WITH EXISTING/PLANNED USES OR MANAGEMENT

TECHNICAL FEASIBILITY

POTENTIAL TO IMPROVE RECOVERY OF ENHANCE THE RESOURCE/SERVICE

INDIRECT EFFECTS

RELATIONSHIP TO OTHER EVOS RESPONSE/RESTORATION ACTIONS

## OTHER OPTIONS THAT COULD ACHIEVE THIS SAME OBJECTIVE

## LEGAL CONSIDERATIONS

May require permits from Fish and Game for plant transport.

MEANS TO EVALUATE SUCCESS

REPRESENTATIVE COSTS

ADDITIONAL INFORMATION NEEDED

October 1, 1992

Author:

OPTION 15 - Replace, rehabilitate or supplement spawning substrates important for intertidal and subtidal species.

APPROACH CATEGORY

INJURED RESOURCES AND SERVICES

SUMMARY

SUBOPTION

TARGET RESOURCES AND SERVICES

DESCRIPTION

IMPLEMENTATION ACTIONS

TIME NEEDED TO IMPLEMENT

MEANS TO IMPROVE RECOVERY

PROTECTION AND MANAGEMENT UNDER EXISTING LAWS

RELATIONSHIPS WITH EXISTING/PLANNED USES OR MANAGEMENT

TECHNICAL FEASIBILITY

POTENTIAL TO IMPROVE RECOVERY OF ENHANCE THE RESOURCE/SERVICE

INDIRECT EFFECTS

RELATIONSHIP TO OTHER EVOS RESPONSE/RESTORATION ACTIONS

OTHER OPTIONS THAT COULD ACHIEVE THIS SAME OBJECTIVE

LEGAL CONSIDERATIONS

MEANS TO EVALUATE SUCCESS

# REPRESENTATIVE COSTS

# ADDITIONAL INFORMATION NEEDED

October 1, 1992 Author: Karen Klinge

**OPTION** 16 - Restore Murre Productivity

APPROACH CATEGORY Manipulation of Resources

INJURED RESOURCES AND SERVICES Common Murres

SUMMARY

**SUBOPTION** A - Test the feasibility of enhancing murre productivity through increased social stimuli.

TARGET RESOURCES AND SERVICES Common Murres

DESCRIPTION

IMPLEMENTATION ACTIONS

TIME NEEDED TO IMPLEMENT

MEANS TO IMPROVE RECOVERY

PROTECTION AND MANAGEMENT UNDER EXISTING LAWS

RELATIONSHIPS WITH EXISTING/PLANNED USES OR MANAGEMENT

TECHNICAL FEASIBILITY

POTENTIAL TO IMPROVE RECOVERY OF ENHANCE THE RESOURCE/SERVICE

Mark stated there are two potential risks 1) action not working and 2) doing damage.

INDIRECT EFFECTS

Ray suggested examining the effects of equipment on other species or predators.

RELATIONSHIP TO OTHER EVOS RESPONSE/RESTORATION ACTIONS

OTHER OPTIONS THAT COULD ACHIEVE THIS SAME OBJECTIVE

## LEGAL CONSIDERATIONS

Ray stated some type of NEPA document might have to be written showing the impacts.

MEANS TO EVALUATE SUCCESS

REPRESENTATIVE COSTS

ADDITIONAL INFORMATION NEEDED

October 1, 1992 Author: Karen Klinge

OPTION

APPROACH CATEGORY

INJURED RESOURCES AND SERVICES

SUMMARY

SUBOPTION B - Test the feasibility of improving the physical characteristics of nest sites to increase murre productivity.

TARGET RESOURCES AND SERVICES Common and thick-billed murres

DESCRIPTION

### IMPLEMENTATION ACTIONS

Karen suggested adding that if this is successful, there needs to be a management plan developed for implementing this option on a broader scale. Carol stated that Bob Spies feels chick transplant should be added back into this option.

TIME NEEDED TO IMPLEMENT

MEANS TO IMPROVE RECOVERY

PROTECTION AND MANAGEMENT UNDER EXISTING LAWS

RELATIONSHIPS WITH EXISTING/PLANNED USES OR MANAGEMENT

TECHNICAL FEASIBILITY

POTENTIAL TO IMPROVE RECOVERY OF ENHANCE THE RESOURCE/SERVICE

INDIRECT EFFECTS

RELATIONSHIP TO OTHER EVOS RESPONSE/RESTORATION ACTIONS

OTHER OPTIONS THAT COULD ACHIEVE THIS SAME OBJECTIVE

LEGAL CONSIDERATIONS

MEANS TO EVALUATE SUCCESS

REPRESENTATIVE COSTS

ADDITIONAL INFORMATION NEEDED

October 1, 1992 Author: Karen Klinge

OPTION 17

APPROACH CATEGORY

INJURED RESOURCES AND SERVICES

SUMMARY

**SUBOPTION** B - Test the feasibility of reducing predators at depleted murre colonies.

TARGET RESOURCES AND SERVICES Common and thick-billed murres

DESCRIPTION

Previously 16C.

IMPLEMENTATION ACTIONS

TIME NEEDED TO IMPLEMENT

MEANS TO IMPROVE RECOVERY

PROTECTION AND MANAGEMENT UNDER EXISTING LAWS

RELATIONSHIPS WITH EXISTING/PLANNED USES OR MANAGEMENT

TECHNICAL FEASIBILITY

John stated that shooting is not a viable option; Karen will expand this section.

POTENTIAL TO IMPROVE RECOVERY OF ENHANCE THE RESOURCE/SERVICE

INDIRECT EFFECTS

RELATIONSHIP TO OTHER EVOS RESPONSE/RESTORATION ACTIONS

OTHER OPTIONS THAT COULD ACHIEVE THIS SAME OBJECTIVE

## LEGAL CONSIDERATIONS

NEPA Compliance - Ray stated that on controversial issues, decisions have to be made on the activity. USFWS permit needed for predator removal.

MEANS TO EVALUATE SUCCESS

REPRESENTATIVE COSTS

ADDITIONAL INFORMATION NEEDED

October 1, 1992 Author: Karen Klinge/Carol Gorbics

**OPTION** 17 - Increase productivity and survival of marine birds through predator control

APPROACH CATEGORY Manipulation of Resources

INJURED RESOURCES AND SERVICES Marine Birds

SUMMARY

Carol stated there is incredible potential for increasing bird populations. Chris stated that this option reads too much like a project.

SUBOPTION

TARGET RESOURCES AND SERVICES

DESCRIPTION

IMPLEMENTATION ACTIONS

TIME NEEDED TO IMPLEMENT

MEANS TO IMPROVE RECOVERY

PROTECTION AND MANAGEMENT UNDER EXISTING LAWS

RELATIONSHIPS WITH EXISTING/PLANNED USES OR MANAGEMENT

TECHNICAL FEASIBILITY

POTENTIAL TO IMPROVE RECOVERY OF ENHANCE THE RESOURCE/SERVICE

INDIRECT EFFECTS

RELATIONSHIP TO OTHER EVOS RESPONSE/RESTORATION ACTIONS

OTHER OPTIONS THAT COULD ACHIEVE THIS SAME OBJECTIVE

LEGAL CONSIDERATIONS

MEANS TO EVALUATE SUCCESS

REPRESENTATIVE COSTS

ADDITIONAL INFORMATION NEEDED

October 1, 1992

Author:

OPTION 23A

APPROACH CATEGORY

INJURED RESOURCES AND SERVICES

SUMMARY

SUBOPTION

Acquire marine bird and mammal habitats

TARGET RESOURCES AND SERVICES

DESCRIPTION

IMPLEMENTATION ACTIONS

TIME NEEDED TO IMPLEMENT

MEANS TO IMPROVE RECOVERY

PROTECTION AND MANAGEMENT UNDER EXISTING LAWS

RELATIONSHIPS WITH EXISTING/PLANNED USES OR MANAGEMENT

In order to provide protection from water based disturbances cooperation with other agencies (probably state) would need to be gained. Some dispute about the ownership of near-shore waters needs to be settled.

TECHNICAL FEASIBILITY

POTENTIAL TO IMPROVE RECOVERY OF ENHANCE THE RESOURCE/SERVICE

INDIRECT EFFECTS

RELATIONSHIP TO OTHER EVOS RESPONSE/RESTORATION ACTIONS

OTHER OPTIONS THAT COULD ACHIEVE THIS SAME OBJECTIVE

LEGAL CONSIDERATIONS

MEANS TO EVALUATE SUCCESS

REPRESENTATIVE COSTS

ADDITIONAL INFORMATION NEEDED

October 1, 1992

Author:

OPTION 23b

APPROACH CATEGORY

INJURED RESOURCES AND SERVICES

SUMMARY

SUBOPTION See 23a and 21.

TARGET RESOURCES AND SERVICES

DESCRIPTION

IMPLEMENTATION ACTIONS

TIME NEEDED TO IMPLEMENT

MEANS TO IMPROVE RECOVERY

PROTECTION AND MANAGEMENT UNDER EXISTING LAWS

RELATIONSHIPS WITH EXISTING/PLANNED USES OR MANAGEMENT

TECHNICAL FEASIBILITY

POTENTIAL TO IMPROVE RECOVERY OF ENHANCE THE RESOURCE/SERVICE

INDIRECT EFFECTS

RELATIONSHIP TO OTHER EVOS RESPONSE/RESTORATION ACTIONS

OTHER OPTIONS THAT COULD ACHIEVE THIS SAME OBJECTIVE

LEGAL CONSIDERATIONS

MEANS TO EVALUATE SUCCESS

REPRESENTATIVE COSTS

ADDITIONAL INFORMATION NEEDED

October 1, 1992

Author:

OPTION 24 Acquire and protect inholdings within state and federal areas (new title )

APPROACH CATEGORY

INJURED RESOURCES AND SERVICES

SUMMARY

SUBOPTION

TARGET RESOURCES AND SERVICES

DESCRIPTION

IMPLEMENTATION ACTIONS

TIME NEEDED TO IMPLEMENT

MEANS TO IMPROVE RECOVERY

PROTECTION AND MANAGEMENT UNDER EXISTING LAWS

RELATIONSHIPS WITH EXISTING/PLANNED USES OR MANAGEMENT

TECHNICAL FEASIBILITY

POTENTIAL TO IMPROVE RECOVERY OF ENHANCE THE RESOURCE/SERVICE

INDIRECT EFFECTS

RELATIONSHIP TO OTHER EVOS RESPONSE/RESTORATION ACTIONS

OTHER OPTIONS THAT COULD ACHIEVE THIS SAME OBJECTIVE

LEGAL CONSIDERATIONS

## MEANS TO EVALUATE SUCCESS

REPRESENTATIVE COSTS

ADDITIONAL INFORMATION NEEDED

October 1, 1992

Author:

**OPTION** 25 Acquire upland forests and watersheds

APPROACH CATEGORY

INJURED RESOURCES AND SERVICES

SUMMARY

SUBOPTION Both A and B

TARGET RESOURCES AND SERVICES

DESCRIPTION

This option deals with private areas that may be adjacent to undesignated federal or state lands (like BLM or state undesignated lands) or parcels within private land that may be offered for acquisition (and then we could decide if it goes to State or Federal and under whose management).

IMPLEMENTATION ACTIONS

Karen suggested we need some statement of the need to assess what protection is appropriate for the acquired land and which management agency is most appropriate.

TIME NEEDED TO IMPLEMENT

MEANS TO IMPROVE RECOVERY

PROTECTION AND MANAGEMENT UNDER EXISTING LAWS

RELATIONSHIPS WITH EXISTING/PLANNED USES OR MANAGEMENT

TECHNICAL FEASIBILITY

POTENTIAL TO IMPROVE RECOVERY OF ENHANCE THE RESOURCE/SERVICE

INDIRECT EFFECTS

RELATIONSHIP TO OTHER EVOS RESPONSE/RESTORATION ACTIONS

## OTHER OPTIONS THAT COULD ACHIEVE THIS SAME OBJECTIVE

LEGAL CONSIDERATIONS

MEANS TO EVALUATE SUCCESS

REPRESENTATIVE COSTS

# ADDITIONAL INFORMATION NEEDED

Need to expand this to reflect some of the information in the supplement to the framework document.

RESOURCE OR SERVICE: Subtidal

DATE: 3 Sept 92

OPTIONS RATING 15A CRITERIA 1A. Potential to improve the rate or degree of recovery 1B. Potential to prevent further degradation or decline 2. Technical feasibility 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: la. other target or nontarget resources b. other target or nontarget services 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

COMMENTS:

COMMENTS:
There are no valid options to evaluate of this time.

(Large scale designation professing witherness qualifies)

RESOURCE OR SERVICE: Wilderness

OPTIONS RATING

DATE: 9/2/92

			O.F.	TTOL	AA GI	T T11/	,	 	1	
CRITERIA	20,22 6,36	37/38								
1A. Potential to improve the rate or degree of recovery	WH	H								
1B. Potential to prevent further degradation or decline	H	H								
2. Technical feasibility	H	H							į.	
3. Degree to which proposed action benefits more than one resource or service	H	14					*			
4. Degree to which proposed action enhances the resource or service	H	H								
5. Potential for NO additional injury to: a. other target or nontarget resources b. other target or nontarget services	H L	H L								
6. Potential effects of the action on human health and safety	H	1+								
7. The relationship of the expected costs of the proposed action to the expected benefits	M	M								
8. Will the restoration opportunity be lost if implementation is delayed? (Y/N)	N	N®								
9. Public Comments										

COMMENTS:

(2) imminent threat excluded

1) Not necessarily for Ms areas and hachemal Bay

Wilderness - both impression of wilderness (prishne) and ability to effect the recovery of oil related injury (e.g. Kartmai)

RESOURCE/SERVICE:							DAT	E:	
TRACKING CRITERIA	2a	Hose	18A	188	18c	19	20,12 36	26	37, 38
8. Degree to which proposed action enhances the resource or service									
9. Will the restoration opportunity be lost if implementation of the option is delayed?	1	7	1)	多人	M	N	N	N	
10. Public comments									

COMMENTS:

Ounless Here is an imment threat.

RESOURCE OR SERVICE: Sockeye Salmon			OP	TIO	NS RA	TING	}	DAT	TE: 28	? A.	19 '9z
CRITERIA	20	ء,ط,م[[	18A	18b	18c		j9		20,27. 36,6	26	37,38
1. Potential to improve the rate or degree of recovery	H.W	11_	M	<u>H</u> H	M		LM		L. L	L	M
2. Technical feasibility	M	H	Н	Н.	1-1		H		H	1+	i+
3: Degree to which proposed action benefits more than one resource or service	Ĥ	H	H	H.	Н		Н		H.	H	H
4. Measurement of results ENHANCEMENT	Ŀ	M	Μ	1	M		L		Ĺ	Ļ	L
5. Potential for NO additional injury to:  * * other target or nontarget resources	H	j+	M	H	M		Н		H	H	'H
* other target or nontarget services	HO	1-1	H. (3)	H	H		Н		<b>N</b>	<u>l</u> .	M
6. Potential effects of the action on human health and safety	H	H	H	<b>i</b> -	14		1+		H	H	H
7. The relationship of the expected costs of the proposed action to the expected benefits	Н	H	M	M	M		M		M	L	M



O mixed results are have been obtained for stock separation and management of a specific fish stock when complicated by commercial Fosheries.

De assume than increased knowledge a management would be used to redirect commercial Fisheries rather than clasures which is the current capability. (b) we assume that landuse impacts are later core of in permitting process

Evaluation of Options by Resource Resource or Service Restoration Option Sea otter Reduce disturbance at marine bird colonies and mammal haulout + 4.0 Criteria: |1a/ 5b: affected resources are tourism, commercial fishing, and recreation. temporarily restrict/close harvest Kelp Criteria: 1a many sea offers are horrested No | 5b: affected resource is subsistence hunting. educate public to voluntarily restrict harvest (sport, subsist.) Criteria: 1a 5b: this option includes voluntary restrictions on subsistence hunting. Eliminate oil from mussel beds Criteria: 1a: Linkage is unproven; therefore this rating is somewhat speculative. 5a: potentially, the muscles themselves could be adversely affected. Mussels Date Printed: 09/0 Legend: H = High; M = Medium; L = Low; N/A = Not applicable; Unk = Unknown; lant'us til not opt'n not apply,

H. que l'asomniac musel cavet

# Evaluation of Options by Resource

Resource or Service	Restoration Option

# Sea otters

# 40.0 Special Designations

Criteria:	1a	1b	2	3	4	5a	5b	6	7	8
	L	L	D	A	L	Н	K	Н	K	No
			M	ا			M		M	

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

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

Date Printed: 09/08/92

profes ... fre

M

RESOURCE OR SERVICE: Sea Offer

of the proposed action to the expected

benefits

OPTIONS RATING 8a 20,22, 4 86 CRITERIA 1. Potential to improve the rate or degree of recovery 2. Technical feasibility M H 3. Degree to which proposed action benefits more than one resource or service 4. Measurement of results M H 5. Potential for NO additional injury to: \* other target or nontarget resources M \* \* other target or nontarget services 6. Potential effects of the action on H H human health and safety 7. The relationship of the expected costs

See rutes that Barbara made - linkage is unpraver

20-22 conceptually lumping all & special designation - vessel disturbance

Commercial fishing

development

enforcement

Favorite sea ofter approx

8 a 8k

DATE: 20 Aug 192

H L

Ld

\_

resource/service: Sea Offer

DATE: 20 Aug '92

TRACKING CRITERIA	4	80	86	13	20-22		
8. Degree to which proposed action enhances the resource or service	No	No	No	No	Yes		
9. Will the restoration opportunity be lost if implementation of the option is delayed?	No	No	No	No	No		
10. Public comments							
COMMENTS:							
					•		
to problem. The control of the contr							
ing the set of the set							

TNO

DATE: 9/8/92

OPTIONS RATING

	OPTIONS RATING
CRITERIA	26
1A. Potential to improve the rate or degree of recovery	Uwk
1B. Potential to prevent further degradation or decline	hoya
2. Technical feasibility	H
3. Degree to which proposed action benefits more than one resource or service	M
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 services	H 收費 <sup>3</sup>
6. Potential effects of the action on human health and safety	H
7. The relationship of the expected costs of the proposed action to the expected benefits	lake
8. Will the restoration opportunity be lost if implementation is delayed? (Y/N)	24
9. Public Comments	

COMMENTS:

I don't know of import to for.

7. Undersom; paking Plofold. Potential to

3. See of & Comm book fishers were at a low level pre-spill, a pointing out of exploitation not sustainable 4. Lote I seem do that when the

### OPTIONS RATING

CRITERIA	8a	13a	14	3614	87,38		
1A. Potential to improve the rate or degree of recovery	Н	H	Ϋ́	A	N/A		
1B. Potential to prevent further degradation or decline	Н	H	u*	L	M		
2. Technical feasibility	H	Н	Y	H	H		
3. Degree to which proposed action benefits more than one resource or service	L.	H	H	1+	17		
4. Degree to which proposed action enhances the resource or service	M	L	L	L	Ĺ.		
5. Potential for NO additional injury to: a. other target or nontarget <u>resources</u>	H	M	H	Н	H		
b. other target or nontarget <u>services</u>	M	H	H	M	M		
6. Potential effects of the action on human health and safety	   H	H	H	H	H:		
7. The relationship of the expected costs of the proposed action to the expected benefits	Н	M	u	M	M		
8. Will the restoration opportunity be lost if implementation is delayed? (Y/N)	Y	Y	7	N	Nev		
9. Public Comments							

Due assume that the restrictions would be short-termed but it may cause sign. loss to some individuals.

\* need to call P.I. For infose (Jim Fato, Terry Boyer)

RESOURCE OR SERVICE: Mondeveloped backcountry recreation

RESOURCE OR SERVICE: Mondeveloped backcountry reco	-eation	7	OP	TIOL	IS RA	TING	}	! '9z		
CRITERIA	SDA	37/18								
1A. Potential to improve the rate or degree of recovery	1/A	X								
1B. Potential to prevent further degradation or decline	1+	17								
2. Technical feasibility	H	H								
3. Degree to which proposed action benefits more than one resource or service	H	14								
4. Degree to which proposed action enhances the resource or service	L	H								
Potential for NO additional injury to: a. other target or nontarget <u>resources</u>	H	14			·					
b. other target or nontarget services	L	L								
6. Potential effects of the action on human health and safety	H	11								I
7. The relationship of the expected costs of the proposed action to the expected benefits	M	M								
8. Will the restoration opportunity be lost if implementation is delayed? (Y/N)	NO	No								
9. Public Comments										

9: Public Comments

COMMENTS:

Unless imminent threat

(2) High indirect costs.

RESOURCE OR SERVICE: Recreation (concentrated development) Book.

	U	w poor	OP	TIOI	IS RA	TING	1	 	
CRITERIA	33b	34							
1A. Potential to improve the rate or degree of recovery	AM	N/A'							
1B. Potential to prevent further degradation or decline	N/A	ŊA'					-		
2. Technical feasibility	H	H							
3. Degree to which proposed action benefits more than one resource or service	L.	M							
4. Degree to which proposed action enhances the resource or service	N/A	NA'							
5. Potential for NO additional injury to: a. other target or nontarget <u>resources</u>	++	Н							
b. other target or nontarget services	1+	Н							
6. Potential effects of the action on human health and safety	H	4							
7. The relationship of the expected costs of the proposed action to the expected benefits	H	M							
8. Will the restoration opportunity be lost if implementation is delayed? (Y/N)	m	N							
9. Public Comments									

This is replacement.

\* Assuming on highways, towns or other developed areas.

2. Assumes Use 5(a) footnote to Bob. L.

DATE:

Pirk Salmor

RESOURCE OR SERVICE:

	QPTIC	ONS RA	TING	3			26		
20	11%	153	Ba	185	180	SPA	<b>3</b> A	37	19
H	H	72	4	10	M	L	L	L	<u>_</u>
H	H	15	1	93	4	L.	L	M	M
M	H	M	H	ą	H	H	H	H	#
H	H	H	H		#	1	H	4	H
L	H	4	H		H		Ĺ	1	L.
H,	H3	MERCE	PL7		78	H	1	H	H
M	H	H	17		H	M	L	M	H
H	H	H	H		H	H	H	H	4
M	Con la constitution de la consti	L	L		M	M	L	M	M
y	XZ	l.Y	N	1	N	N	N	N	1
								:	
	HHMHLHM	2a 11% H H H H H H H H H H H H H H H H H H H	2a 11% 153 H H H L M H H H L H H L M H H	20 11% 15380 H H L L L M H M H H H H H H H L H M H L H	2a 11% 1538a 185  H H H L L Sae  M H H H H H  L H  H H L H  H H L H  H H L H	20 11% 53 Ba 185 186  H H L L M  M H H H H H  H H H H H  H H H H  H H H H  H H H H  H H H H  H H H H  H H H  H H  H H H  H	20 11% 153 Ba 185 186 SPA  H H L L M L  M H H H H H  H H H H H  H H H H  H H H H  H H H  H	20 11% 153 Ba 185 186 SPA ON  H H H L S M L L  M H H H H H H  H H H H H H  H H H H H  H H H H  H H H H  H H H  H H H  H H H  H H H  H	H H L M L L L M H H H H H H H H H H H H H H H H H H H

M' = Shot - term effect for let gain.

2 = board in presumption that diff streams = diff stocker but may be already too late cause of genetic motion I/50, then No.

3- H # assumes only taken to pre-spill. > Enh could have somets.

EL grolly set 10. Couple of place maple worthold 6. Cleaning = some injury. Hand the wild fish provide being breld I fotential to hunt wild runs (E sport-fish)

8. could be tickled to hat weld stocke

And the state of the

DATE: 27 Aug '92

### OPTIONS RATING

		OLII	OND KMII	110		
CRITERIA	農176	20, 24. 36	37,380			
i. Potential to improve the rate or degree of recovery	M	L 20(1)	L			
2. Technical feasibility	N/A M	MO	M. M.			
3. Degree to which proposed action benefits more than one resource or service	L.	H	H			
4. Measurement of results ENHANCEMENT	M	L	L.			
5. Potential for NO additional injury to: * other target or nontarget resources	H	H.	ii			
* other target or nontarget services		M®	M			
6. Potential effects of the action on human health and safety	H	H	H			
7. The relationship of the expected costs of the proposed action to the expected benefits	M	M			·	

COMMENTS:

Omost activities probably would not affect PIGU's

Exprotection of uplands would probably only include a buffer along coastlines if locused on MGU's.

DATE: 27 Aug '92

RESOURCE/SERVICE: liquen guillemots					DATE: 2
	176	20, 22 3 t	37,38	T	
8. Degree to which proposed action enhances the resource or service					
TRACKING CRITERIA  8. Degree to which proposed action enhances the resource or service  9. Will the restoration opportunity be lost if implementation of the option is delayed?  10. Public comments  COMMENTS:	N	N	N		
10. Public comments					

RESOURCE OR SERVICE: Marbled morrelet

DATE: 20 Aug 192

			OF	1101	AA GF	T T 74 C	3	 	V	
CRITERIA	9	17		20,22 136	37,38					
1. Potential to improve the rate or degree of recovery	7	Н		M	m					
2. Technical feasibility	Н	Н		H	H					
3. Degree to which proposed action benefits more than one resource or service	۷	H		1+	1+					
4. Measurement of results	H	H		L	L					
5. Potential for NO additional injury to: * other target or nontarget resources	事件	H		Н	H					
* other target or nontarget services	L ?	Н		1	L					
6. Potential effects of the action on human health and safety	Н	H		H	H	6				
7. The relationship of the expected costs of the proposed action to the expected benefits	L	H		M	L					

COMMENTS:

Special designations: no alterations to habitat
reduced disturbance during breeding

RESOURCE/SERVICE:						DATE:			
TRACKING CRITERIA	9	17	20, 23, 36	37,38		·			
8. Degree to which proposed action enhances the resource or service	y	10	N	N					
TRACKING CRITERIA  8. Degree to which proposed action enhances the resource or service  9. Will the restoration opportunity be lost if implementation of the option is delayed?  10. Public comments	N	N	N	YIF	ent				
10. Public comments									

Progresea prinds

RESOURCE OR SERVICE: Marbled Mulelo

OPTIONS RATING

DATE: 3/20/92

			105	1101	NS/ RA	1 111	7	 	<u> </u>	
CRITERIA	4	8		17	SDA	W				
1: Potential to improve the rate or degree of recovery	Not	1		H	M	M				
2. Technical feasibility	apply	H		H	H					
3. Degree to which proposed action benefits more than one resource or service	They breed	7		机	H	H				
4. Measurement of results	upland	4		H	_	L				
5. Potential for NO additional injury to: * other target or nontarget resources		H		JA.	) H	<i>:</i>				
* other target or nontarget services		<u> </u>		け	<u>_</u>	L_				
6. Potential effects of the action on human health and safety	$\left  \begin{array}{c} \\ \end{array} \right  t$	4		H	4	H	_			
7. The relationship of the expected costs of the proposed action to the expected benefits	#	£ 2		44	M	上份				

COMMENTS

\* if did eliminate neght - time = 14
if not, then Man L Carob

\* if night-time Ding is elem = L

if not, not of year > M

3 Here: we're taking suc most, adverty affect

( Foxes not part of ecogystem

7

# OPTIONS RATING

		OPTIONS	RATING		
CRITERIA	4	22320			
1A. Potential to improve the rate or degree of recovery	N/A	N/A			
1B. Potential to prevent further degradation or decline	M	M			
2. Technical feasibility	M	M			
3. Degree to which proposed action benefits more than one resource or service	M				
4. Degree to which proposed action enhances the resource or service	L	L			
5. Potential for NO additional injury to: a. other target or nontarget resources	H	H			
b. other target or nontarget services	移M	4499			
6. Potential effects of the action on human health and safety	<b>湖</b> H	H			
7. The relationship of the expected costs of the proposed action to the expected benefits	M	M			i
8. Will the restoration opportunity be lost if implementation is delayed? (Y/N)	N	N			
9. Public Comments					

COMMENTS:

This assumes the potential For increased listurbance.

Other assumes the potential For increased listurbance that is prenenting their use, then this should be rated.

Other assumes the potential For increased listurbance that is prenenting their use, then this should be rated.

Other assumes the potential For increased listurbance.

\$ 1.72×1.5		O.P	TIONS RA	TING			
CRITERIA	20	15a	SPA				
1A. Potential to improve the rate or degree of recovery	u	iλ <sup>©</sup>	NA				
1B. Potential to prevent further degradation or decline	u	u	u				
2. Technical feasibility	H	M	H				
3. Degree to which proposed action benefits more than one resource or service	L	1-1	Н				
4. Degree to which proposed action enhances the resource or service	ME	M	L				
5. Potential for NO additional injury to: a. other target or nontarget resources b. other target or nontarget services	H	H	H				
6. Potential effects of the action on human health and safety	H	I.t	I H				
7. The relationship of the expected costs of the proposed action to the expected benefits	B L	M <sup>(3)</sup>	M				
8. Will the restoration opportunity be lost if implementation is delayed? (Y/N)	N	N	N				
9. Public Comments							

# COMMENTS:

Oppulation level injury is equivocal

Deponds on the specific management action - could be High

(3) Benefits are unknown but an indications are less than outstanding.

The Evaluating increased concurrent permiting authority - Bob thinks that fucluating this is an error because the night took already exist.

DATE: 27 Aug '92

OPTIONS RA	$\Gamma$	'ING
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			<u> </u>	TIONS KATI			
CRITERIA	8 <sub>A</sub>	88	13	20, 22 36	26	37, 38	
1. Potential to improve the rate or degree of recovery	M		17 (C)	W(3)	M	M	or in the second se
2. Technical feasibility				m.	H		
2. Technical leasibility		M	4/4	H	H	H	
3. Degree to which proposed action benefits more than one resource or service	L	L	Н	I-i I	14	H	
4. Measurement of results ENHANCEMENT	BL	L	ساً		L	L	
5. Potential for NO additional injury to: * other target or nontarget resources	H	Н	М.	H	H	H	
* other target or nontarget services	M	M	H	Ma	L	M	
5: Potential effects of the action on human health and safety	H	Н	H	H	14		
The relationship of the expected costs of the proposed action to the expected benefits	m	L	M	M.	M	M	

Offunding pressure is low, but it could still have a moderate effect

D'Linkage is still being proven, once proven (if positive) then 3 Based on the hypothesis that disturbance is a factor in the reproductive Failure mpacts to logging would be minimal because restrictions would only apply to represent creas, and there is limited development plenned in EVOS area on public lands

@ pecedent is set, however political realities make his unlikely.

# RESOURCE/SERVICE:

DATE:

TRACKING CRITERIA	\$A	86	13		20, L2 36		26	37,38	
8. Degree to which proposed action enhances the resource or service						,			
9. Will the restoration opportunity be lost if implementation of the option is delayed?	Y	Y	4		2		N	4	İ
10. Public comments									
COMMENTS:				**************************************					

RESOURCE OR SERVICE: Harbor Seals

RESOURCE OR SERVICE: Harbor Seals		41.				DATE:	2/ 1700	1. / -
		7	OP	TIONS RATI	NG		z Se	t 192
CRITERIA	4	8a	86	36 36				
1. Potential to improve the rate or degree	H	14.	H	Ä				
of recovery	N/A	14	Н	Н				
2. Technical feasibility	H	H	M	i+				
3. Degree to which proposed action benefits more than one resource or service	1*	M	L	14				
4. Measurement of results ENHANCEMENT	L	L	L	4				
5. Potential for NO additional injury to: * other target or nontarget resources	H	H	H	H				
* other target or nontarget services	MO	)	M	M				
6. Potential effects of the action on human health and safety	Н	M	M	H				
7. The relationship of the expected costs of the proposed action to the expected benefits	1	M	M	H				

DIMPO 27 Aug 192

COMMENTS:

等以外等的事人推出了人名西班拉克 人名英格兰 医动物 医人名英格兰人姓氏克里特 医外丛 医外丛

\*Confirm with Mark Fraker (temporal separation?) okang O However, it and be upgraded depending on level of restrictions

TRACKING CRITERIA	4	80	86	29,22 36					
8. Degree to which proposed action enhances the resource or service									
9. Will the restoration opportunity be lost if implementation of the option is delayed?	1	17	Y	1					
10. Public comments									
ONO because of other opportunities to ach	Jeve	Hes	iome re	18 Ulfs (	(8b)	udho	J-He	Cook.	

]	ESOURCE/SERVICE:	T_				Zo, zz		T	DAT	E :	
	TRACKING CRITERIA	20	11	14	19	366	26	3 7,3s			
	8. Degree to which proposed action enhances the resource or service			,							
	9. Will the restoration opportunity be lost if implementation of the option is delayed?	7	N	N	N	N	N	N			
	10. Public comments										

COMMENTS:

RESOURCE OR SERVICE: Telly Varden

RESOURCE OR SERVICE: Polly Varden		A,B.	OP	TION	IS RA	ring	1	DAT	'E: 2	8 Au	9 '92
CRITERIA	20	11	14	19	36,6		26	37,38			
1. Potential to improve the rate or degree of recovery	-M -	M WA	Ha.	<u>L</u>			4	7			
2. Technical feasibility	H	Н	Yes	H	#		+	#-			
3. Degree to which proposed action benefits more than one resource or service	L	m	#	Н	Н		H	+			
4. Measurement of results ENHANCEMENT	L	M	L	2_	_		۷	1			
5. Potential for NO additional injury to: * other target or nontarget resources	H	it	)+	H	#		H	H			
* other target or nontarget services	m	14	1+	H	m		L	M			
6. Potential effects of the action on human health and safety	H	Н	Н	1+,	H		H	H			
7. The relationship of the expected costs of the proposed action to the expected benefits	M	M	M	m	M		Ł	2			

١٧,٩		. ,
i	OPTIONS	RATING

RESOURCE OR SERVICE: Cutthroat trout		A, B, C	OP	TIOL	IS RA	TING		DATE: 2	28 Aug '9
CRITERIA	29	ĬĬ	14	19	36,6		26	37,3	38
1. Potential to improve the rate or degree of recovery	M-	MNA	H. N/A	L.	L 1		L	L	
2. Technical feasibility	H	Н	Yes	Н	Н		1+	Н	
3 Degree to which proposed action benefits more than one resource or service	L	M	H	1+	H		Н	H	
4. Measurement of results ENHANCEMENT	L	M	1	L,	Ĺ		L	L	
5. Potential for NO additional injury to: * other target or nontarget resources	H.	H	H	H	14.		H	H.	
* other target or nontarget services	M	H	H	H	M		L	M	
6. Potential effects of the action on human health and safety	H	H	H	H	H		H	1+1	
7. The relationship of the expected costs of the proposed action to the expected benefits	M	M	M	m	m		14	1_	

<sup>1)</sup> the are assuming a postive link between Focus and the prey for CTT as well as caver

. statuturatus.									
RESOURCE/SERVICE:								DATE	:
TRACKING CRITERIA	20	il	14	19	36,6	2	6	37.38	
Degree to which proposed action enhances the resource or service									
9. Will the restoration opportunity be lost if implementation of the option is delayed?	7	N	N	N	in	7	)	N	
10. Public comments									

COMMENTS:

RESOURCE OR SERVICE: Common Murres

DATE: 25 Aug 192

<u> </u>		O.F.	1101	AN CK	LING		<u> </u>
CRITERIA	4	16a	16B	176	20, 24 36	37,38	
1. Potential to improve the rate or degree of recovery	(1) AS	H	Μ	M	M	M	;
2. Technical feasibility	H	M	LB	M' (5)	\H	H	
3. Degree to which proposed action benefits more than one resource or service	M	L	L	M.	M	m	
4. Measurement of results	H	H	H	H	H	1	;
5. Potential for NO additional injury to: * other target or nontarget resources	H	M	M	M	H		
* other target or nontarget services	M	H	H	H	M	H	÷
6. Potential effects of the action on human health and safety	H	2 数	Μ	H	H	+	. :
7. The relationship of the expected costs of the proposed action to the expected benefits	H	H	H	M	<b>H</b> (7)	L	

This assumes that social stimuli creates synchronreation among the beeding population.

IF the Feasibility study fails and creates disturbances to the murre colonies it would be stopped, with negative impacts only lasting the one year (short term)

3. Many different projects to which would not be difficult to implement, but ouccess is guestionable.

(5) Not considering public disapproval

(6) Cornert disturbance here is unknown, if it is etermined to be high then this should be upgreated to High.

RESOURCE/SERVICE: Common Murres

DATE: 25 Aug 192

TRACKING CRITERIA	4	16A	16B	176	20,26 36	Ż	37,38	
8. Degree to which proposed action enhances the resource or service	N	N	N	N	N		N	· ·
9. Will the restoration opportunity be lost if implementation of the option is delayed?	Y	7	4	N	N		1)	
10. Public comments								:

COMMENTS:

6) Would want until ofter colonies are synchronized.

## OPTIONS RATING

		OF	TIONS K		<u> </u>	 	 
CRITERIA	13	14	15 Ł		德泉		
1A. Potential to improve the rate or degree of recovery	MO	M.	L <sup>(3)</sup>				
1B. Potential to prevent further degradation or decline	NА	NA	ήA				
2: Technical feasibility	14	u.	H				
3. Degree to which proposed action benefits more than one resource or service	H	H.	H				
4. Degree to which proposed action enhances the resource or service	L	Ŀ	Ĺ				
5. Potential for NO additional injury to: a. other target or nontarget <u>resources</u>	М	14	1.1+				
b. other target or nontarget <u>services</u>	Н	H·	14				
6. Potential effects of the action on human health and safety	ił	H	H				
7. The relationship of the expected costs of the proposed action to the expected benefits	iM	M	\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\	-			
8. Will the restoration opportunity be lost if implementation is delayed? (Y/N)	Y	N	2				
9. Public Comments							

OASsuming that deaning mussel beds constitutes an small portion of the intertidal; however the phential for improvement over a large area is Low because of the inability to clean widely dispursed low density COMMENTS: mussel communities.

This would be Low if the insomniac mussels have a substantial amount of oil

Fan 12?) along whose this would be a good throw to do. In told to lated down whos)

		DATE:	2.7	Aug	92
		DETH.	-	'' (//	مار مارا
OPTIONS	RATTNG	*	2	Sort	92

		OP.	TIONS RA	TING	2 Sept 1
CRITERIA	8	70, <b>22</b>	13	37,38	
1. Potential to improve the rate or degree of recovery	<u>L</u>	L   L	U.E	N/A.	
2. Technical feasibility	H-	M	H	H	
3. Degree to which proposed action benefits more than one resource or service	レー	M	H	H	
4. Measurement of results ENHANCEMENT	M.	L	L	L,	
5. Potential for NO additional injury to: * other target or nontarget resources	H-	H	M	1+	
* other target or nontarget services	M	M	·	L	
6. Potential effects of the action on human health and safety	H -	H	1	H	
7. The relationship of the expected costs of the proposed action to the expected benefits	m	L	u	M	
COMMENTS:	K)	N	Ŋ	N <sup>4</sup>	

Dissuming that the enabling legislation Gousses on brown bears.

Experient of injury is unknown so this Integer is uncertain

(3) a would have to applied on a broad scale basis which cover concentration outes used by bears.

(3) if miniment threat to critical habitet it would be a important to implement quickly, but on a broad scale application, it is low.

RESOURCE OR SERVICE: Black Oysteratche

.of the proposed action to the expected

DATE: 27 Aug '92 OPTIONS RATING

			- 01	TIONS	KAT	LING	·	 	
CRITERIA	13	14	36	<b>3</b> 7d 38d					
1. Potential to improve the rate or degree	MO	M	M	m					
of recovery	JN/A	NYA	M	M					
2. Technical feasibility	4/4	1/4	M	M					
3. Degree to which proposed action benefits more than one resource or service	H	H	i4	H .					
4. Measurement of results ENHANCEMENT	L	L	L	L					
5. Potential for NO additional injury to: * other target or nontarget resources	M	M	H	1-1					
* other target or nontarget services	14	1+	費M	M		_			
6. Potential effects of the action on human health and safety	H	14	H	1+					
7. The relationship of the expected costs	M	:00	~^	,					

benefits

Explential is medium because link is somewhat unknown however we know that mussels and impets are eater and that predation is higher if the birds have to travel Farther for food.

RESOURCE/SERVICE: Black Oystercatchers

DATE: 27 Aug '92

TRACKING CRITERIA	13	14	20,22 36	37d 38d					
8. Degree to which proposed action enhances the resource or service								,	
9. Will the restoration opportunity be lost if implementation of the option is delayed?	Na	N	N	N		·			
10. Public comments									

COMMENTS:

Oseme outdence of recovery occurring now

RESOURCE OR SERVICE: Bald exples

RESOURCE OR SERVICE: Bald exples		OPT	IONS RATING	DATE:	27 Aug. '9
CRITERIA	20,22	26	37,38		
1. Potential to improve the rate or degree of recovery	M	M(b)	M		
.2. Technical feasibility	14.	H	14		
3. Degree to which proposed action benefits more than one resource or service	M	H	M.C.		
4. Measurement of results ENHANCEMENT	L	L	4		
5. Potential for NO additional injury to: * other target or nontarget resources	1-1	H	H		
% * other target or nontarget services	M	L	M		
Potential effects of the action on human health and safety	<b>)</b> +	Н	H		
7. The relationship of the expected costs of the proposed action to the expected benefits	M	M	M		

Wirnest anticipated protective measures were would focus on Bold eagles, but if large strips were dosignated more than one would be benefited

 RESOURCE/SERVICE:					DAT:	E:	
TRACKING CRITERIA	20,22 26	26	37,38				
8. Degree to which proposed action enhances the resource or service							
9. Will the restoration opportunity be lost if implementation of the option is delayed?	N	1	N				
10. Public comments							

COMMENTS:

# OPTIONS RATING

			<u> </u>	TIONS K	77 711		 	
CRITERIA	1		10	35				
1A. Potential to improve the rate or degree of recovery	NA	٨	J/A	N/A				
1B. Potential to prevent further degradation or decline	H	ſ	M.	NA	3			
2. Technical feasibility	M		H.	H				
3. Degree to which proposed action benefits more than one resource or service	L		L.	L				
4. Degree to which proposed action enhances the resource or service	3 L		(3) L	L				
5. Potential for NO additional injury to: a. other target or nontarget <u>resources</u>	H		H	M®				
b. other target or nontarget services	Н		It	Н.		i i		
6. Potential effects of the action on human health and safety	Н		H	H.				
7. The relationship of the expected costs of the proposed action to the expected benefits	Н		M	L.				
8. Will the restoration opportunity be lost if implementation is delayed? (Y/N)	Y		y (4)	N				
9. Public Comments								

# COMMENTS:

D'Implementation of this in other places has shown greater success when law enforcement is incorporated.

@ May provide social beiefits to local communities.

Does increase our browledge base of local cromeological history.

The looking is according at a high without the implemented annediately.

This is a real sement assect

The correctly, and not offering to purchase there shouldn't be a problem, but

RESOURCE OR SERVICE: Revention

back-country developed,

DATE: 9/2/92

			- 7	TIOND K			 	
CRITERIA	^	12/1)	IZC	28		37,38		
of recovery	20,22	N/A	NA	M		M		
1B. Potential to prevent further degradation or decline	NA	L	NA	14		H		
2. Technical feasibility	H	4	H	1-1		H		
3. Degree to which proposed action benefits more than one resource or service	H	\$ M	#m	**	1	H		
4. Degree to which proposed action enhances the resource or service	梅	M	H	M		H		
5. Potential for NO additional injury to:     a. other target or nontarget resources     b. other target or nontarget services	H L	m L	L <sup>3</sup>	M		H		
6. Potential effects of the action on human health and safety	М	H	#	H		H		
7. The relationship of the expected costs of the proposed action to the expected benefits	M	M	M	M		M		
8. Will the restoration opportunity be lost if implementation is delayed? (Y/N)	N	N	N	NO	)	M		
9. Public Comments								

COMMENTS:

see Bibs fratnotes

Handening over used areas can prevent resource damage (concentrate use)

(5) 18°C may be called with a Yes

3 long-term impacts, but they may not be severe (see disturbance to marine manifes)

- Kwen to be tie breaker

That oralizating land use impacts - assume the area