# 13.08.01 – Reading File October 2002

## Exxon Valdez Oil Spill Trustee Council

441 W. 5th Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178



#### **MEMORANDUM**

TO:

Gina Belt, U.S. Department of Justice

Maria Lisowski, U.S. Department of Agriculture Barry Roth, U.S. Department of the Interior Alex Swiderski, Alaska Department of Law

FROM:

Molly McCammon, Executive Director

DATE:

October 31, 2002

RE:

Legal Review of Draft Work Plan for FY 03: Phase II

Attached is a spreadsheet listing the new projects that are recommended for funding as part of the FY 03 Phase II work plan (or for which a decision is deferred pending the receipt of additional information), and a copy of the Detailed Project Description and budget for each of these projects. All of the new projects under consideration are typical research projects similar to projects funded by the Trustee Council in previous years. A copy of the FY 03 Phase II Draft Work Plan, which is currently out for public review, is also attached.

You will see that we have revamped our cluster assignments to better reflect the current stage of the restoration program, which includes projects related to lingering oil and the GEM Program.

It is important that you complete your review by November 18, 2002. The Trustee Council meets to approve funding for the FY 03 Phase II work plan on November 25, and I would like to have your advice on the legal permissibility of these projects well in advance of that meeting. If you need additional information on any of the projects, please let me know as soon as possible and I will provide it to you. Thank you for your help.

Attachments:

Spreadsheet of new projects recommended for funding

DPDs and budgets for new projects recommended for funding

FY 03 Phase II Draft Work Plan

Alaska Department of Law

## NEW P ECTS RECOMMENDED BY EXECUTIVE DIRECTO R FUNDING / FY 03 DRAFT WORK PLAN: PHASE I.

		FY 03 Phil		Preliminary Rec	ommendation
Proj. No.	Project Title	Request	FY 03 Phase II	FY 04	Ommondation
030620	Lingering Oil and Predators: Pathways of Exposure and Population Status	\$243.5	\$243.5	\$30.0	Fund contingent
G 030623	PWSRCAC-EVOS Long-Term Environmental Monitoring Program	\$70.9	\$70.9	\$0.0	Fund
G 030641	ShoreZone Mapping for GEM	\$218.2	\$38.2		Fund
G 030642	Database on the Marine Invertebrate Macrofauna of Prince William Sound: An Addition to the University of Alaska Museum's ARCTOS Network	\$19.2	\$19.2	\$0.0	Fund contingent
G 030647	Investigating the Relative Roles of Natural and Shoreline Harvest in Altering the Kenai Peninsula's Rocky Intertidal	\$87.9	\$87.9	\$154.7	Fund contingent
G 030654	Surface Nutrients over the Shelf and Basin in Summer: Bottom-up Control of Ecosystem Diversity	\$37.5	\$37.5	\$43.6	Fund contingent
G 030666	Alaska Natural Geography in Shore Areas: An Initial Field Project for the Census of Marine Life	\$269.1	\$269.1	\$211.4	Fund contingent

**DRAFT** 

(LAYOUT: LawyersNewll)

## NEW P ECTS RECOMMENDED BY EXECUTIVE DIRECTO R FUNDING / FY 03 DRAFT WORK PLAN: PHASE I.

Proj. No.	Project Title	Γ	FY 03 PhII Request	FY 03 Phase II	Preliminary Rec	ommendation
G 030685	Visible Remote Sensing of the Gulf of Alaska		\$77.1	\$77.1	\$0.0	Fund contingent
G 030687	Monitoring in the Nearshore: A Process for Making Reasoned Decisions		\$90.0	\$90.0	\$0.0	Fund contingent
	Г	Total:	\$1,113.4	\$933.4	\$439.7	7

# Exxon Valdez Oil Spill Trustee Council

441 W. 5th Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178



#### **MEMORANDUM**

TO:

Sharon Kent

NOAA Procurement

FROM:

Katharine Miller

Science Coordinator

RE:

FY 03: Phase II Broad Agency Announcement #52ABNF200037

Preliminary Recommendations

DATE:

October 31,2002

A copy of the FY 2003: Phase II Draft Work Plan, which lists the proposals and draft recommendations, is enclosed. You'll note that some of the recommendations for funding are contingent on satisfaction of certain conditions, and a couple are deferred pending receipt of additional information.

Also enclosed is the following information to document the evaluation of the proposals and the Executive Director's recommendations:

- Copies of letters from the Executive Director informing proposers of the STAC and external peer reviewer assessment of the project's technical merits and the Executive Director's recommendations. Attached to each letter is the excerpt from the FY03 Draft Work Plan pertaining to the proposal.
- The STAC's comments on each BAA proposal.
- The staff review of each BAA proposal. The paragraph entitled "BAA" addresses whether the project meets threshold criteria for the BAA.
- Individual external peer review forms for each of the proposals and signed confidentiality forms.

Please let me know if you need additional information. The Trustee Council is scheduled to take action on the FY 03 Work Plan: Phase II on November 25, 2002.

Koulla **Enclosures** 

cc (w/o enclosures): Pete Hagen, NOAA

Alaska Department of Environmental Conservation Alaska Department of Law

## Exxon Valdez Oil Spill Trustee Council

441 W. 5th Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178



October 30, 2002

Sonia Batten **SAHFOS** 1 Walker Terrace. The Hoe England PL1 3BN Plymouth UNITED KINGDOM

> Project 030624 / ACPR-Based Survey to Monitor the Gulf of Alaska and Detect Ecosystem Change

### Dear Sonia:

I am writing to inform you of my preliminary recommendation that the Exxon Valdez Oil Spill Trustee Council fund Project 030624. I have enclosed a copy of my preliminary recommendation on this project, along with the Scientific and Technical Advisory Committee's recommendation on the project's technical merits. This recommendation is made for public review and may be revised before it is provided to the Trustee Council in late November.

My preliminary recommendations on all proposals for funding in FY 03 have been incorporated into the Draft Work Plan, which will be available for public review on the Trustee Council's web page (www.oilspill.state.ak.us) about October 25. If you would like a copy of the Draft Work Plan sent to you, please call or e-mail the Trustee Council Office:

> Telephone 278-8012 Toll-free in Alaska 1-800-478-7745 Toll-free outside of Alaska 1-800-283-7745 E-mail brenda hall@oilspill.state.ak.us

Following a review of any public comments received, as well as comments from the Trustee Council's Public Advisory Committee, I will make a final recommendation to the Council. Council action on the Work Plan is scheduled for November 25, 2002.

Thank you for your interest in the Trustee Council's Gulf Ecosystem Research and Monitoring (GEM) program. If you have any questions about this preliminary recommendation or the project review process, please call me or Phil Mundy, the Council's Science Director.

Sincerely,

Molly McCammon Executive Director

Enclosure

cc: Pete Hagen, NOAA Liaison

# SPREAL PIEET B: FY 03 PHASE II WORK PLAN-EXECTIVE DIRECTOR'S PRELIMINARY RECOMMENDATION

Proj.No.	Project Title	Proposer	Agency	Cont'd	Request	Recom.	FY 04 Request	Recom.
G-030624	A CPR-Based Survey to Monitor the G of Alaska and Detect Ecosystem Change	oulf S. Batten/SAHFOS  D. Welch/DFOC	NOAA	Cont'd FY 03-04	\$197.2	\$197.2	\$196.2	

#### **Project Abstract**

Plankton are a critical link in the marine food chain that respond rapidly to climate change and form the link between the atmosphere and upper trophic levels. Many important marine resources in the Gulf of Alaska are strongly influenced by changes in ocean climate. We present evidence from recent Continuous Plankton Recorder work showing that significant changes occurred in all plankton communities in the gulf, associated with the recent climate shift, and that the Continuous Plankton Recorder is an appropriate tool for detecting such changes. This project will test the Continuous Plankton Recorder as an almost real-time indicator of ecosystem change across the gulf (the Alaska Coastal Current and offshore). Ships of Opportunity are a cost-effective platform for large scale monitoring. This project builds on collaborative efforts measuring physical parameters and marine bird/mammal populations. Simultaneous data collection and synthesis will assist in determining the underlying mechanisms and aid the GEM program in devising its long-term monitoring strategy.

#### **STAC** Recommendation

This proposal addresses GEM's goals for monitoring in the ACC and offshore habitat areas. It has community involvement with the Valdez Community College. The data from this effort would be highly valuable to GEM both for better understanding these habitat areas and for identifying the key variables that need to monitored over time to detect and evaluate changes in these habitats. Fund.

#### Executive Director's Preliminary Recommendation

Fund for one year only. This proposal will continue to develop the Continuous Plankton Recorder surveys from Ships of Opportunity begun in 2000, which have significant potential as part of a long-term monitoring effort in the ACC and offshore habitats for GEM.

## Exxon Valdez Oil Spill Trustee Council

441 W. 5" Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178



October 30, 2002

Joel Cooper Cook Inlet Keeper PO Box 3269 Homer. AK 99603-3585

RE:

Project 030688 / Developing a Model Citizen Volunteer Monitoring

Component for GEM

#### Dear Joel:

I am writing to inform you of my preliminary recommendation that the Exxon Valdez Oil Spill Trustee Council not fund Project 030688. I have enclosed a copy of my preliminary recommendation on this project, along with the Scientific and Technical Advisory Committee's recommendation on the project's technical merits.

The Trustee Council received 44 proposals totaling more than \$6 million. The Council has available less than \$2 million for the FY 03 Phase II Work Plan, and it will not be possible to fund all projects proposed.

My preliminary recommendations on all proposals for funding in FY 03 have been incorporated into the Draft Work Plan, which is available for public review on the Trustee Council's web page (www.oilspill.state.ak.us). If you would like a copy of the Draft Work Plan sent to you, please call or e-mail the Trustee Council Office:

> Telephone 278-8012 Toll-free in Alaska 1-800-478-7745 Toll-free outside of Alaska 1-800-283-7745 E-mail brenda hall@oilspill.state.ak.us

Following a review of any public comments received, as well as comments from the Trustee Council's Public Advisory Committee, I will make a final recommendation to the Council. Council action on the Work Plan is scheduled for November 25, 2002.

Thank you for your interest in the Trustee Council's Gulf Ecosystem Research and

Alaska Department of Law

Monitoring (GEM) program. If you have any questions about this preliminary recommendation, please call me or Phil Mundy, the Trustee Council's Science Director.

Sincerely,

Molly McCammon
Executive Director

Enclosure

cc: Dede Bohn, USGS Liaison

## SPREA HEET B: FY 03 PHASE II WORK PLAN-EXE

### TIVE DIRECTOR'S PRELIMINARY RECOMMLIDATION

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Ph II Request	FY 03 Ph II Recom.		FY 04 Recom.
G-030688	Developing a Model Citizen Volunteer Monitoring Component for GEM	J. Cooper/Cook Inlet Keeper	NOAA	New FY 03-05	\$54.2	\$0.0	\$57.4	\$0.0

#### **Project Abstract**

As state and federal agency budgets for monitoring of public resources decline, citizens and communities are increasingly stepping in to fill an important gap in the collection of baseline data. In 1996, Cook Inlet Keeper initiated Alaska's first state- and federally-approved citizen-based monitoring program. Keeper's program has been replicated across Southcentral Alaska, and Keeper provides continued guidance and support to these partner programs. Keeper's program has already been identified as a model, and through this project, Keeper will refine this prototype of citizen-based monitoring. The end result will be a replicable program that is effective at involving citizens in detecting environmental change.

#### **STAC Recommendation**

Citizen monitoring is of interest to GEM. Cook Inlet
Keeper received funding under Project 02667 to
analyze 5 years of data from their Citizens'
Environmental Monitoring Program to determine if
the monitoring protocols and sampling design are
effective at detecting significant change in water
quality over time. Results from this project are
needed before this project can go forward and
before the value of this monitoring to the GEM
program can be assessed. Do not fund.

#### Executive Director's Preliminary Recommendation

#### Proposal Evaluation Form

Reviewer: 88 Evaluation due date: Thursday, September 26

Proposal number: 030688

Title of proposal: Developing a Model Citizen Volunteer Monitoring Component for GEM Principle Investigatgor(s): J. Cooper/Cook Inlet Keeper

Use the comments section below each question area for discussion of your rating. Use as much space as necessary, and allow the table to expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak.us no later than the end of business on Thursday, September 26. The subject line of the e-mail to me should read, "030688 review"

00000107107	
	Rating¹
1. Does the proposal provide an understanding of	
the problem, is it technically and scientifically	
sound, and will it contribute to the generation	5
and dissemination of scientific knowledge in the	
topic area?	(1-5)
Comments: This is a piece of a larger effort by Coo track record as an effective program who meets its will contribute to its scientific basis for the same	goals and objectives. This project
2. Are the methods as likely to be effective as	3
any others available in achieving the solution?	
Comments: The methods were not outlined in any deta	(1-5)
3. Can the solution be achieved with these	5
personnel for the amount of funding requested and	
within the proposed timeframe? Is it cost	(1-5)
effective?	
Comments: Budget seems reasonable for time and object reasonable for a non-profit.	ctives outlined. Overhead is
Any other comments:	
	1

A rating of 1 on question means emphatically "no," and a score of 5 means emphatically "yes"; scores of 2-4 mean "maybe." The reviewer is the best judge of the meaning of "Accurate" and "Adequate," but accurate may mean the proposal shows a clear understanding of what kind of information and research are most needed in this field at this time, and adequate may mean that the appropriate scientific literature is used to support the arguments, and/or that the proposal is well written.

Reviewer: 622

Evaluation due date: Thursday, September 26

Proposal number: 030688

Title of proposal: Developing a Model Citizen Volunteer Monitoring Component for GEM

ciple Investigatgor(s): J. Cooper/Cook Inlet Keeper

Use the comments section below each question area for discussion of your rating. Use as much space as necessary, and allow the table to expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format read.

	Rating <sup>1</sup>			
1. Does the proposal provide an understanding of				
the problem, is it technically and scientifically	_			
sound, and will it contribute to the generation	5			
and dissemination of scientific knowledge in the				
topic area?	(1-5)			
Comments: The use of community based monitoring pro				
volunteers not only provides ownership by the commun	nity, thus facilitating accurate data			
collection, but provide valuable information to scie	entists and researchers that is not			
currently available from state or federal management agencies.				
currently available from state of federal management	agencies. ,			
currently available from state of federal management	agencies. ,			
currently available from state of federal management	agencies. ,			
2. Are the methods as likely to be effective as	agencies. ,			
	1			
2. Are the methods as likely to be effective as any others available in achieving the solution?	1 (1-5)			
2. Are the methods as likely to be effective as any others available in achieving the solution?	1 (1-5)			
2. Are the methods as likely to be effective as any others available in achieving the solution?  Comments: The work proposed to be conducted is base	1 (1-5) ed entirely on the results of work			
2. Are the methods as likely to be effective as	1 (1-5) ed entirely on the results of work 3) that the project was scheduled to			
2. Are the methods as likely to be effective as any others available in achieving the solution?  Comments: The work proposed to be conducted is base conducted in FY02. However, the proposer notes (pg.	1 (1-5) ed entirely on the results of work 3) that the project was scheduled to th DEC until 3/12/02. In addition,			
2. Are the methods as likely to be effective as any others available in achieving the solution?  Comments: The work proposed to be conducted is base conducted in FY02. However, the proposer notes (pg. begin 10/1/01, but didn't get a contract in place with the proposer set of the propos	1 (1-5) ed entirely on the results of work 3) that the project was scheduled to the DEC until 3/12/02. In addition, namer due to previous commitments.			
2. Are the methods as likely to be effective as any others available in achieving the solution?  Comments: The work proposed to be conducted is base conducted in FY02. However, the proposer notes (pg. begin 10/1/01, but didn't get a contract in place withe PI was unable to conduct any work during the sum	1  (1-5) ed entirely on the results of work 3) that the project was scheduled to the DEC until 3/12/02. In addition, amer due to previous commitments. FY02 project. Proposer states the			

this is the case, project activities should start in January, 2003. I wouldn't recommend the Trustee Council starting changing start/end dates for projects. This could be a scheduling nightmare from a grants management point of view.

If the FY02 project activities were complete with results readily available for peer review, and those results warranted further work as proposed in the FY03 proposal, the methods described in the proposal are sound and would be an effective tool in developing a replicable community based monitoring program.

3. Can the solution be achieved with these	2
personnel for the amount of funding requested and	<b>4</b> ·
within the proposed timeframe? Is it cost	
effective?	(1-5)

A rating of 1 on question means emphatically "no," and a score of 5 means emphatically "yes"; scores of 2-4 mean "maybe." The reviewer is the best judge of the meaning of "Accurate" and "Adequate," but accurate may mean the proposal shows a clear understanding of what kind of information and research are most needed in this field at this time, and adequate may mean that the appropriate scientific literature is used to support the arguments, and/or that the proposal is well written.

Comments: The qualifications of the proposed personnel reflect adequate capabilities and educational background to successfully carry out project activities.

The activites listed in Years II and III (FY04 and FY05) are duplicative of FY03. Proposer does not adequately explain why this is necessary. For example, conducting a gap analysis, identifying and field testing new methods and equipment, and identifying new parameters are the main activities each year. Proposer does not explain why this duplication is necessary and should provide additional information to clarify these activities.

In addition, these annual objectives are "based on results from EVOS Project 02667." Again, without knowing the results from this project, it is difficult to assess the viability of future activities particularly when they are not clearly identified. Simply stating that the project will identify new parameters, research and identify, and field test new and improved field and lab methods does not provide sufficient information to justify continued funding. If the proposer has any idea what new parameters can be incorporated each year, they should be stated, or some idea given as to what may be explored. The same comment goes for "new and improved field and lab methods." These should be identified or some explanation given as to what problems these new methods or equipment will address.

FY03 Budget: The amount indicated for in-kind from ADEC's nonpoint source pollution program is listed as \$60,000. This is not consistent with the amount listed in the FY04 budget for FY03 in-kind. That budget indicates a figure of \$45,000. Applicant also states total cost of project is \$140,000, but it is unclear how this figure was calculated. When you add the anticipated in-kind contributions to the amount requested from EVOS, it doesn't add up. Under Commodities, applicant narrative requests \$5,000 for equipment and supplies, but the budget amount is \$3,000. In addition, none of the equipment or supplies are listed, so it is difficult to justify this expenditure.

FY04/FY05 Budgets: Both of these budgets are exactly the same, with the exception of the narrative on in-kind contributions. This begs the question, is the Trustee Council being asked to fund a project or an ongoing program? In addition, the in-kind contributions listed are for FY01, FY02 and FY03, so do not apply to FY04 or FY05. What new funding is anticipated from other sources? Funding for travel to Anchorage for the Restoration Workshop is inadequate. Applicant is requesting \$50/night for lodging and \$50/day for rental vehicle. I don't believe you can find a hotel in Anchorage for less than \$75/night during the winter months, unless there is a special rate. Again, in both the FY04 and FY05 budgets, equipment is not specifically identified, so is not a justifiable expense.

Any other comments: The discussion on TEK demonstrates the lack of understanding of this type of knowledge. TEK is not just someone who has a "long history" with an area. It is many, many years of information about the environment and subsistence resources that have been passed down from generation to generation through oral traditions. The observation of environmental changes in one's lifetime is very different than the information held by Native elders and subsistence hunters and fishers that span many lifetimes. While utilizing local knowledge in a project is valuable, TEK is a separate type of information not addressed in this proposal. I was pleased to see, however, the commitment by the proposer to utilize the Protocols for Including Indigenous Knowledge in the EVOS Restoriation Process.

Citizen-based monitoring programs are valuable and funding consideration should be given to this applicant, but only after a vastly revised proposal narrative and objective work plan is submitted.

#### Proposal Evaluation Form

Reviewer:

Evaluation due date: Thursday, September 26

'roposal number: 030688

Title of proposal: Developing a Model Citizen Volunteer Monitoring Component for GEM Principle Investigatgor(s): J. Cooper/Cook Inlet Keeper

9 9 C

Use the comments section below each question area for discussion of your rating. Use as much space as necessary, and allow the table to expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak.us no later than the end of business on Thursday, September 26. The subject line of the e-mail to me should read, "030688 review".

	Rating <sup>1</sup>
1. Does the proposal provide an understanding of	
the problem, is it technically and scientifically	7 7
sound, and will it contribute to the generation	2-3
and dissemination of scientific knowledge in the	
topic area?	(1-5)
Comments: The proposal outlines the proble	m in agenhalway, but offer
that it falls short of describing spe council will be getting for the more that it needs to be fleshed out u	iliell what the Trustee
Carrie Quilles dettries La the Amien	of I thene the impossion
that it are the feeling the	Ill and the state of the state
when it need not yellshed and a	1) more africain memorale
and anticipatel results,	
2. Are the methods as likely to be effective as	
any others available in achieving the solution?	2-3
	(1-5)
Comments: 1+1 / /	1
comments: It's hard to say, since to seems to be to answer this que	the am of the profeet
seems to be to and this	a. ti
which we are anough with full	ellor
$\nu$	_
3. Can the solution be achieved with these	, _
personnel for the amount of funding requested and	/-2
within the proposed timeframe? Is it cost	(1-5)
effective?	
Comments: This proposal strike me as	traskeralued upon .
She tiscir + Die	The same of the first
10-4 135. A requested from moster ma	a compoportion to marining
funda, but I'm hothered by the sack	of fun inflyables of
results of profe to 2667. Opel books al	inte vo haul had race tallet
sariety of experient but his listed	qualification are hard to
Any other comments: relate to the specific ne	Ist Similarly W/O Dale Bon bo
Any other comments: relate to the specific ne	John Similarly, W/O Dale Banks
Any other comments: relate to the specific ne further comments: relate to the specific ne further than listed its impossible to	lad Similarly, W/O Dale Banks lualuste his effectiveness, especias
Any other comments: relate to the specific ne first fications listed its impossible to re; historium o testing responsibilities.	land Similarly, W/O Dale Banks lualuste his effectiveness, especies
Comments: This proposal strikle me as the \$155.1 K requested seems model from funds, but I'm hothered by the lack results of project 02667. Goel foothered sometiments of experience but his bitled Any other comments: relate to the specific ne first fications listed, its impossible to be; his training a testing responsibilities.	evaluate his effectiveness, especia

Whill I support citizen monitoring wholeheartesly in concept, I believe this proposal would need to integrate the resultage Project, 02667 specifically and to more clearly define methods + objectives to larn a higher rating. I have the impression they're asking for "olysh fund" money, and they'll w/o having fully thought out the project.

A rating of 1 on question means emphatically "no," and a score of 5 means emphatically "yes"; scores of 2-4 mean "maybe." The reviewer is the best judge of the meaning of "Accurate" and "Adequate," but accurate may mean the proposal shows a clear understanding of what kind of information and research are

## Exxon Valdez Oil Spill Trustee Council

441 W. 5th Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178



October 30, 2002

Sue Mauger Cook Inlet Keeper PO Box 3269 Homer, AK 99603

RE:

Project 030672 / Downstream Effects of Sedimentation on Lower Kenai

Peninsula Salmon Streams

#### Dear Sue:

I am writing to inform you of my preliminary recommendation that the *Exxon Valdez* Oil Spill Trustee Council not fund Project 030672. I have enclosed a copy of my preliminary recommendation on this project, along with the Scientific and Technical Advisory Committee's recommendation on the project's technical merits.

The Trustee Council received 44 proposals totaling more than \$6 million. The Council has available less than \$2 million for the FY 03 Phase II Work Plan, and it will not be possible to fund all projects proposed.

My preliminary recommendations on all proposals for funding in FY 03 have been incorporated into the Draft Work Plan, which is available for public review on the Trustee Council's web page (<a href="https://www.oilspill.state.ak.us">www.oilspill.state.ak.us</a>). If you would like a copy of the Draft Work Plan sent to you, please call or e-mail the Trustee Council Office:

Telephone 278-8012
Toll-free in Alaska 1-800-478-7745
Toll-free outside of Alaska 1-800-283-7745
E-mail brenda hall@oilspill.state.ak.us

Following a review of any public comments received, as well as comments from the Trustee Council's Public Advisory Committee, I will make a final recommendation to the Council. Council action on the Work Plan is scheduled for November 25, 2002.

Thank you for your interest in the Trustee Council's Gulf Ecosystem Research and Monitoring (GEM) program. If you have any questions about this preliminary recommendation, please call me or Phil Mundy, the Trustee Council's Science Director.

Sincerely,

Molly McCammon Executive Director

**Enclosure** 

cc: Pete Hagen, NOAA Liaison

## SPRE! HEET B: FY 03 PHASE II WORK PLAN-EXE TIVE DIRECTOR'S PRELIMINARY RECOMM\_...JATION

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Ph II Request	FY 03 Ph II Recom.	FY 04 Request	FY 04 Recom.
G-030672	Downstream Effects of Sedimenta Lower Kenai Peninsula Salmon St	tion on S. Mauger/Cook Inlet Keeper reams	NOAA	New FY 03-05	\$55.7	\$0.0	\$46.2	\$0.0

#### **Project Abstract**

Increased urbanization and the accompanying changes in land use have the potential to impact ecosystem quality from the upper watershed level down to the marine environment. To improve understanding about how these factors influence change, Cook Inlet Keeper will continue to expand its monitoring of four socially, economically, and culturally important salmon streams on the lower Kenai Peninsula to address the following questions: (a) are the rates of sedimentation increasing in the lower Kenai Peninsula streams? (b) what are the sources of sedimentation? (c) is sedimentation affecting aquatic life? and (d) how can volunteers be incorporated into a wetlands monitoring program? This project will provide useful information to resource managers and will increase community involvement in the monitoring and protection of public resources.

#### **STAC** Recommendation

The proposal is directed at an important problem, and it seeks to use a strategy (community involvement) important to GEM; however, it does not establish its relation to the marine environment, nor does it show promise of establishing a long term data set on human impacts that would be scientifically defensible. Reviewers raised questions about methods, and about the lack of relation to remote sensing methods. Proposal involves sediment which is not a high priority, marine related core variable for GEM. Do not fund.

#### Executive Director's Preliminary Recommendation

Do not fund based on STAC recommendation.

#### Proposal Evaluation Form

Reviewer: 3296 Evaluation due date: Thursday, September 26

Proposal number: 030672

Title of proposal: Downstream Effects of Sedimentation on Lower Kenai Peninsula Salmon Streams Principle Investigatgor(s): S. Mauger/Cook Inlet Keeper

Use the comments section below each question area for discussion of your rating. Use as much space as necessary, and allow the table to expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak.us no later than the end of business on Thursday, September 26. The subject line of the e-mail to me should read, "030672 review".

	Rating <sup>1</sup>
1. Does the proposal provide an understanding of	
the problem, is it technically and scientifically	
sound, and will it contribute to the generation	1
and dissemination of scientific knowledge in the	
topic area?	(1-5)

A rating of 1 on question means emphatically "no," and a score of 5 means emphatically "yes"; scores of 2-4 mean "maybe." The reviewer is the best judge of the meaning of "Accurate" and "Adequate," but accurate may mean the proposal shows a clear understanding of what kind of information and research are most needed in this field at this time, and adequate may mean that the appropriate scientific literature is used to support the arguments, and/or that the proposal is well written.

Comments:1. The proposal provides a cursory understanding of the problem that is the focus of the study. The concern is about potential increases in sedimentation and changes in water quality from nonpoint sources in selected river systems on the lower Kenai River, which I would guess that this is a valid concern given the location and potential ecological, economic, and recreational importance of these rivers. The primary justification for concerns appears to come from qualitative assessments made by Alaska Dept. of Environmental Quality. No quantitative evidence is presented to port the need for the study nor is an argument developed to justify using many of the proposed techniques and measures.

It was difficult to evaluate if the proposal was technically and scientifically sound. The information presented on the techniques and methods was scant and did not provide much detail or justification. For example, on part of the proposal is to use measure indices involving aquatic macroinvertebrates as indicators of aquatic health. However, there is not evidence presented about the validity of this approach or what others have found using this approach. The sampling design (e.g., location of sampling sites, the process for selecting study sites, number of controls or "impervious" area (which were not defined), etc) was not adequately developed. (It seems to me that a better control would be a nearby pristine system.) The study would use (at least in FY03) sites that have been sampled previously as part of a monitoring program. No justification is presented for doing this. Issues such as whether the sites were initially selected in a statistically defensible manner and did they have the same geomorphic features were not addressed. As a result, the validity and applicability of results are questionable. Other than a passing comment about doing regression models to determine if sedimentation was increasing, there were no details on statistical methods for other parts of the proposed study. One of the major objectives was to identify sources of sedimentation (number 2) but there was no discussion on how this would be done. The proposal was to measure turbidity and embeddedness. No justification was presented to support using proposed measures. For example, what was rationale for 20% embeddedness as a basis for comparison?

I do not believe that this study is likely to contribute to the generation and dissemination of scientific knowledge about the effects of sedimentation on aquatic life bout relation between watershed conditions and sedimentation rates and effects. The gn of the proposed study is not rigorous or robust enough to achieve this. The lack or information about the number of years of data that are available from each system, the amount of variability in the measures, what specific measures will be used (eg., mean level, maximum value, some running average, etc.) combined with shortcomings discussed above make it difficult to believe that the results will be valid and decreases the likelihood of the results be applied more broadly. I would expect that the best that could be expected from the proposed study is the production of additional data points about turbidity and water quality for the watersheds examined.

2. Are the methods as likely to be effective as any others available in achieving the solution?	1
	(1-5)

Comments: It is very difficult to determine if the methods presented in the proposal would likely be as effective as others that are available. As stated above, the discussion on the methods for the most part was very scant. The proposed methodologies to quantify sediment levels were current state-of-the-art. However, it was difficult to tell anything about the methods for other objectives and components. Either the methodologies were not described in any detail (e.g., measures of the condition of the aquatic macroinvertebrate assemblages) or were lacking (e.g., much of the statistical analyses).

3. Can the solution be achieved with these	
	2
personnel for the amount of funding requested and	
within the proposed timeframe? Is it cost	
<del>-</del> -	(1-5)
officitive?	(1-3)
ctve:	

Comments. It is difficult for me to determine this because of the lack of information on sample sizes, statistical analysis, etc. My feeling is that more money and personnel would be needed for this study to be done properly.

Any other comments: This project has the potential to be one that would meet the objectives of the GEM program. I would encourage the applicants to consider the comments made above to develop a new proposal.

Reviewer: 2212 Evaluation due date: Thursday, September 26

Proposal number: 030672

Title of proposal: Downstream Effects of Sedimentation on Lower Kenai Peninsula Salmon Streams

iple Investigatgor(s): S. Mauger/Cook Inlet Keeper

use the comments section below each question area for discussion of your rating. Use as much space as necessary, and allow the table to expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak.us no later than the end of business on **Thursday**, **September 26**. The subject line of the e-mail to me should read, "030672 review".

	Rating¹
1. Does the proposal provide an understanding of	
the problem, is it technically and scientifically	
sound, and will it contribute to the generation	4
and dissemination of scientific knowledge in the	
topic area?	(1-5)

Comments:

The proposal does provide a fairly good general understanding of the problem. Watershed linkages do exist relating to land use, streamflow, stream habitat and water quality. How those linkages are influenced by the natural character of watersheds, basin hydrology, stream geomorphology, and climate, however, make characterization of condition and detection of change and trends sometimes very difficult. Studies intended to identify connectivity of land use impacts to aquatic environments are challenged with a host of potentially confounding factors. This study, as such, should be considered as a survey-scale investigation. Detection of a trend, based on the potential for a great deal of spatial and temporal variability, is unlikely. Also, our understanding of the specific effects of urbanization and particularly impervious surface effects on hydrologic regime and sedimentation are well-founded. Development trends in the Kenai basin make investigations such as this imperative, despite obvious limitations in our ability to detect fine-scale changes.

study is technically sound with regard to application of the main techniques prescribed. One topic outside the scope of the study, though, needs further consideration. That is, the effect on meiofauna in the hyporheic zone. Fine sediment embedding deep in streambeds can affect productivity of benthic microcrustaceans of particular importance as food for small salmonid fishes. Missing the trophic linkages to fish productivity across all freshwater life stages means that even in the absence of a measured effect in the environment, productivity may be degraded by the land use activity in question. This does not have to be addressed with the present study, but should be acknowledged in discussion of results.

One specific point regarding measurement of embeddedness and implications to invertebrate and fish productivity is that it is important to characterize the degree of embeddedness of sampled streambed sediments in addition to extent of embeddedness in sampled reaches.

Although the scope and intensity of the study may not allow statistically valid conclusions - the time period and spatial coverage are very limited and the presence of embedded sediment does not indicate causality - the results should be of value to managers and future investigators. As impervious surfaces and urbanization increase and approach thresholds for detection of aquatic impacts, baseline information may be compared to results of subsequent studies. Dissemination will depend on comprehensive reporting of study results.

2. Are the methods as likely to be effective as any others available in achieving the solution?	3
	(1-5)

A rating of 1 on question means emphatically "no," and a score of 5 means emphatically "yes"; scores of 2-4 mean "maybe." The reviewer is the best judge of the meaning of "Accurate" and "Adequate," but accurate may mean the proposal shows a clear understanding of what kind of information and research are most needed in this field at this time, and adequate may mean that the appropriate scientific literature is used to support the arguments, and/or that the proposal is well written.

#### Comments:

The methods are appropriate for the scope of the study. Macroinvertebrate indicators following ENRI's methodology are a good tool, calibrated for the area of interest, that may be applied at three scales of intensity. Volunteers can be trained in the methodology. The sampling scheme may fall short in terms of representative sites. The amount of diversity in habitats, relationship of sampling sites to sources of sediment, and the seasonal and interannual variability related to streamflow make any firm conclusions resulting from this study very difficult.

For example, to compare sedimentation effects to streamflow, and trends in flow to watershed change, seasonality in flow and long term climatic cycling should be accounted for. Investigators should also consider stratifying sampling longitudinally because of downstream changes in streambed particle sizes. Sampling within macrohabitats is complicated by local sources of sediment and channel hydraulics and should therefore also be stratified.

3. Can the solution be achieved with these	3
personnel for the amount of funding requested and	3
within the proposed timeframe? Is it cost	(2 2)
effective?	(1-5)

#### Comments:

The budget seems very frugal. Organizing and managing volunteer-based projects is difficult and requires a large time commitment. The lab work required to process macroinvertebrate samples is time intensive. From this standpoint, it makes sense that most of the costs are in personnel. However, costs for all the field and lab equipment and computers and software do not seem to be reflected in the budget. These facilities are part of the existing inventory and infrastructure of Cook Inlet Keepers?

The timeframe for the project is very short, in terms of trend detection in highly variable environments. Sedimentation rates regressed on streamflow, even when accounting for magnitude of flow and seasonality, provides only a handful of data points across the term of this study to establish a correlation. Three years of data gives only one degree of freedom for tests of significance.

If existing facilities are available, the project can be cost-effective.

Any other comments: The greatest limitation to this project is the scope and duration. Sampling is not broad enough to account for the likely variability across space and time, to allow time for effects to accumulate in the affected aquatic environments and to provide adequate data to conduct statistical tests. I encourage this study to be accomplished, but with the intent in mind to expand the scope and duration, and with the associated intent to continue monitoring streamflow to extend the hydrologic record.

ey element of the study and of watershed assessment and monitoring in general, is the streamflow gaging. The gages should be continued beyond the term of this study in order to track shifts in the hydrologic regime resulting from land use; to allow a stronger correlation to be developed between streamflow, land use, impacts to aquatic habitats and to fish populations; and to allow a correlation between the stream gages and long term gaging at other sites.

#### Suggested reading:

Carling, P.A. 1994. In-stream hydraulics and sediment transport. In: Calow, P. & Petts, G.E. (eds.) The Rivers Handbook, Volume I, pp. 101-125. Blackwell, Oxford.

Everest, F.H., et al. 1987. Fine sediment and salmonid production: a paradox. In: Salo, E.O. and Cundy, T.W. (eds.) Streamside Management: Forestry and Fishery Interactions. Univ. Wash. Cont. No. 57, pp. 98-142.

Leopold, L.B., M.G. Wolman, and J.P. Miller. 1992. Fluvial Processes in Geomorphology. Dover, New York. (p. 191)

Rabini, C.F. 1992. Habitat evaluation in a watershed context. American Fisheries Society Symposium 13:57-67.

Reed, W.B. 1991. An evaluation of the effects of changing land use on the urban flood frequency and hydrograph characteristics of Valley Creek. Amer. Water Res. Assoc. osium TPS-91-4:23-32.

underwood, A.J. 1994. Spatial and temporal problems with monitoring. In: Calow, P. & Petts, G.E. (eds.) The Rivers Handbook, Volume II, pp. 101-123. Blackwell, Oxford.

Waters, T.F. 1995. Sediment in streams: sources, biological effects, and control. Amer. Fish. Soc. Mono. 7.

Reviewer: 3501 Evaluation due date: Thursday, September 26

Proposal number: 030672

Title of proposal: Downstream Effects of Sedimentation on Lower Kenai Peninsula Salmon Streams

Principle Investigatgor(s): S. Mauger/Cook Inlet Keeper

Use the comments section below each question area for discussion of your rating. Use as much space as necessary, and allow the table to expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak.us no later than the end of business on **Thursday**, **September 26**. The subject line of the e-mail to me should read, "030672 review".

"030672 review".	
	Rating <sup>1</sup>
1. Does the proposal provide an understanding of the problem, is it technically and scientifically sound, and will it contribute to the generation and dissemination of scientific knowledge in the	2
topic area?	(1-5)
Comments: Proposal objectives are: 1) determine increasing in lower Kenai Peninsula streams, 2) ide sedimentation are, 3) assess if sedimentation is af volunteer wetlands monitoring program. Not clear is sufficient (9 sediment solids samples per year (per year, 2 macroinvertebrate & periphyton community stream). Other variables not mentioned, such as seas rainfall, cloud cover, etc. are likely very importationally to measurements at the low proposed sample for sedimentation rates may require many years of data comparison of contemporary data to a coarse time seadequate for detection. Proposed methods to identicate appear to be capable of addressing this question, remuch material is present. Phosphorous as a tracer does not appear in methods. Other tracers should a	entify what the sources of effecting aquatic life, and 4) develop a swhether the monitoring frequency is river?), 1 embeddedness sample per cructure samples (at six sites) per son, discharge volumes, relationship to ant and not appear to be adequately frequencies. Detection of changes in collection unless changes are large: eries extending back to 1998 may not be fly sources of sedimentation do not eather only provide an answer to how was identified in the introduction but

Because biological communities are likely to fluctuate from season to season and year to year for reasons other than sedimentation rate, the proposed sample frequency is unlikely to detect real changes in response to changes in sedimentation rate unless these changes are catastrophic.

2. Are the methods as likely to be effective as any others available in achieving the solution?

(1-5)

Comments: As an alternative to the proposed methods, remote monitoring equipment should be considered, preferably with multiple installations in each river to account for spatial differences within each system. This monitoring should include turbidity, temperature, flow rate, etc. With this approach, data could be collected hourly or perhaps daily, dramatically increasing the resolution of each time series. Possibly the Ninilchik River gauge already provides turbidity data, although this is not clear in the proposal. Correlation with climatic data, urban development, and other land use (e.g., agricultural, manufacturing) should be discussed.

agricultural, manaracturing, bhoura be arbeabbea.	
3. Can the solution be achieved with these	2
personnel for the amount of funding requested and	•
within the proposed timeframe? Is it cost	
effective?	(1-5)

Comments:

As proposed, goals will not likely be achieved within the proposed time frame.

A rating of 1 on question means emphatically "no," and a score of 5 means emphatically "yes"; scores of 2-4 mean "maybe." The reviewer is the best judge of the meaning of "Accurate" and "Adequate," but accurate may mean the proposal shows a clear understanding of what kind of information and research are most needed in this field at this time, and adequate may mean that the appropriate scientific literature is used to support the arguments, and/or that the proposal is well written.

## Exxon Valdez Oil Spill Trustee Council

441 W. 5" Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178



October 30, 2002

W. Scott Pegau, PhD Oregon State University, Oceanic & Atmospheric Sciences 104 Ocean Admin Bldg Corvallis, OR 97331

RF.

Project 030686 / Instrumenting Vessels of Opportunity to Collect Coastal

Oceanographic Data

#### Dear Scott:

I am writing to inform you of my preliminary recommendation that the *Exxon Valdez* Oil Spill Trustee Council not fund Project 030686. I have enclosed a copy of my preliminary recommendation on this project, along with the Scientific and Technical Advisory Committee's recommendation on the project's technical merits.

The Trustee Council received 44 proposals totaling more than \$6 million. The Council has available less than \$2 million for the FY 03 Phase II Work Plan, and it will not be possible to fund all projects proposed.

My preliminary recommendations on all proposals for funding in FY 03 have been incorporated into the Draft Work Plan, which is available for public review on the Trustee Council's web page (<a href="https://www.oilspill.state.ak.us">www.oilspill.state.ak.us</a>). If you would like a copy of the Draft Work Plan sent to you, please call or e-mail the Trustee Council Office:

Telephone
Toll-free in Alaska
Toll-free outside of Alaska
E-mail

278-8012 1-800-478-7745

1-800-283-7745

brenda hall@oilspill.state.ak.us

Following a review of any public comments received, as well as comments from the Trustee Council's Public Advisory Committee, I will make a final recommendation to the Council. Council action on the Work Plan is scheduled for November 25, 2002.

Thank you for your interest in the Trustee Council's Gulf Ecosystem Research and Monitoring (GEM) program. If you have any questions about this preliminary recommendation, please call me or Phil Mundy, the Trustee Council's Science Director.

Sincerely,

Molly McCammon Executive Director

**Enclosure** 

cc: Bill Hauser, ADF&G Liaison

## HEET B: FY 03 PHASE II WORK PLAN-EXE TIVE DIRECTOR'S PRELIMINARY RECOMMENDAT

Proj.No.	Project Title	Proposer	Agency	New or Cont'd	Request	Recom.	FY 04 Request	FY 04 Recom.
G-030686	Instrumenting Vessels of Opportunity to Collect Coastal Oceanographic Data	S. Pegau/Kachemak Bay RR	ADFG	New FY 03	\$71.6	\$0.0	\$0.0	\$0.0

#### **Project Abstract**

This project is designed to implement the findings of Project 02671/Coordinating Volunteer Vessels of Opportunity in Kachemak Bay and Lower Cook Inlet, in that it will instrument small vessels with a suitable suite of instruments for monitoring changes in the coastal oceans. The project addresses the question of how to observe natural and anthropogenic influences that affect trajectories are to be used for sampling purposes. the nearshore and Alaska Coastal Current habitats. The Considerable effort (not well described) will be project will produce instrument suites appropriate for installing on water taxis, ecological tour boats, and fishing vessels that regularly operate in the coastal waters of the Gulf of Alaska. The measurements will include temperature, salinity, fluorescence, and turbidity. These data will also be correlated with existing stationary sensors and volunteer-monitoring projects to expand spatial and temporal knowledge of water quality and mixing patterns and their relationship to the dispersal of larvae and contaminants in the region. The work will be done at the Kachemak Bay Research Reserve but will be applicable to other regions in the gulf.

#### STAC Recommendation

Vessel of opportunity programs are expected to be Do not fund based on STAC recommendation. an important means of collecting data under GEM. This proposal does not adequately discuss progress achieved under project 02671 and how the results of that project factor into the proposed activities. It needs to be made clear how boat required to explain how the oceanographic data will be used. Frequency and location of interior Kachemak Bay deployment planned for FY 03 is not clearly detailed. Do not fund.

#### **Executive Director's Preliminary Recommendation**

Proposal Evaluation Form Reviewers

3727

Evaluation due date: Thursday, September 26

Proposal number: 030686

Title of proposal: Instrumenting Vessels of Opportunity to Collect Coastal Oceanographic Data Principle Investigatgor(s): S. Pegau/Kachemak Bay RR

Use the comments section below each question area for discussion of your rating. Use as much space as necessary, and allow the table to expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak.us no later than the end of business on Thursday, September 26. The subject line of the e-mail to me should read,

"030686 review".		
	Rating <sup>1</sup>	
1. Does the proposal provide an understanding of the problem, is it technically and scientifically sound, and will it contribute to the generation and dissemination of scientific knowledge in the	<i>3.44</i>	
topic area? Comments:	(1-5)	
2. Are the methods as likely to be effective as	4	
any others available in achieving the solution?	(1-5)	
3. Can the solution be achieved with these personnel for the amount of funding requested and within the proposed timeframe? Is it cost	3.33	
effective?		
Comments:	2.6k	
Any other comments: See Attribut		

A rating of 1 on question means emphatically "no," and a score of 5 means emphatically "yes"; scores of 2-4 mean "maybe." The reviewer is the best judge of the meaning of "Accurate" and "Adequate," but accurate may mean the proposal shows a clear understanding of what kind of information and research are

#### "030686 Review"

Rate: 3.66 (I'm assuming you would rather see whole numbers [1>5] but specific questions had multiple components, so each component was given a rating. Hence, the intermediate value.)

I've struggled a little with this opportunity to review, where it was my first assignment. Having no 'comment guidelines' except an understanding to freely express my views and a paper Bob Spies shared from a reviewer (name and gender unknown) in regards to another project; I've made an effort to fairly evaluate GEM proposal 030686.

I've reservations passed the point of scientific goals, where I'd prefer to leave the science to the scientist's, but the proposal is written, I believe, in a manner that's easy to understand, so, it's adequate in that respect. The authors (express) a qualifiable need and certainly understand the Technological equipment needed to acquire a multitude of base line data set's; but Accurate may have had negative effect on a higher rating based on the geo and down stream focus. And a dash of an NRC suggestion "-to fund, in the beginning, GEM projects focused in PWS where it was hit the hardest."

I like the idea of one instrument that collect's a multitude of information; but this seems a little R&D. And maybe, in part, that's acceptable. Regardless, it's clear they wish to build suites (packages) to mount on Vessels of Opportunity (VO's) and they've shown resourcefulness by finding volunteer's. It remains a question of "Standards"; where I believed good science preferred Standards!

I'm trying to imagine bias' and where they could get folded in, without Standards. Things like:

- 1. Depth of an instrument may vary on any given vessel.
- 2. Time of year controlled by seasonal activity would leave gaps.
- 3. Even the vessel examples suggested have a tendency to randomly follow a resource that moves.

Finally, a comment about the use of at least one of these instrument in regards to sharing it between agencies, where I know ADF&G Cordova has expressed an interest (a wish) to use a CTD, more often (a verbal comment from Bob Bercilli 2001). Meaning, two things:

- 1. I'm surprised one (CTD) couldn't be borrowed, and
- 2. A research facility such as this doesn't have one, nor ADF&G Region II for that matter.

I feel any investigation of Larval Drift, if consideration is given to all living organism's, is an important consideration to Monitor. I believe information about specific species has been terribly left out of the loop, where technologies were present at the time of EVOS. (Verbal Charlie Trowbridge 1998).

I'd like to thank Phil Munday for this opportunity to participate and Bob Walker with the format instruction. This qualifies as an element of Local Involvement, but I'm not so sure if the reviewer is that qualified. But Thanks just the same.

I've sent in the confidentiality paper and wish the best of luck to the proposers.



Acting in a capacity not affiliated to any organization and will distroy all evidence as requested. I've no records of this information left on disk, harddrive and notes and communications will be distroyed as instructed.

Reviewer: 4022

Evaluation due date: Thursday, September 26

Proposal number: 030686

## Title of proposal: Instrumenting vessels of opportunity to collect coastal oceanographic data

## Principle Investigatgor(s): W. Scott Pegau / Kachemak Bay Research Reserve

Use the comments section below each question area for discussion of your rating. Use as much space as necessary, and allow the table to expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak.us no later than the end of business on Thursday, September 26. The subject line of the e-mail to me should read, "030686 review".

	Rating <sup>1</sup>					
1. Does the proposal provide an understanding of						
the problem, is it technically and scientifically						
sound, and will it contribute to the generation	(4)					
and dissemination of scientific knowledge in the						
topic area?	(1-5)					
Comments:						
I like the idea of utilizing smaller coastal vess	els for this type of monitoring. With					
the possibility of 10 transects/day being collected						
how timely will the results be forthcoming? Is th						
in real time in support of other "global" monitoring						
should be an annual written report produced. Not						
plans to continue this for more than one year? The	· · · · · · · · · · · · · · · · · · ·					
have effectively demonstrated the succes	<u> </u>					
pment on such vessels, but no follow through for maintenance, analysis/research and						
2. Are the methods as likely to be effective as	The state of the s					
any others available in achieving the solution?	(3)					
any others available in achieving the solution:						
	(1-5)					
Comments:						
I believe a basic TSG/CTD/Flourometry transect will	be valuable. Especially if this data					
has not been previously collected in this area	and that the data are domnared or					
has not been previously corrected in this area	and that the data are compared or					
integrated with other types or data souces in	the region. As stated above the					
	the region. As stated above the					
integrated with other types or data souces in possibility of collecting 10 transects/day representations.	the region. As stated above the ents a lot of data processing, rather					
integrated with other types or data souces in possibility of collecting 10 transects/day representation say one/week or even one/month.	the region. As stated above the					
integrated with other types or data souces in possibility of collecting 10 transects/day representation say one/week or even one/month.  3. Can the solution be achieved with these	the region. As stated above the ents a lot of data processing, rather					

A rating of 1 on question means emphatically "no," and a score of 5 means emphatically "yes"; scores of 2-4 mean "maybe." The reviewer is the best judge of the meaning of "Accurate" and "Adequate," but accurate may mean the proposal shows a clear understanding of what kind of information and research are most needed in this field at this time, and adequate may mean that the appropriate scientific literature is used to support the arguments, and/or that the proposal is well written.

#### Comments:

Seems a bit underfunded to me. For instance there is reference to GPS in the body of the proposal but no GPS reflected in the equipment budget section. Unless a laptop with navigation software means GPS capability. I think there should be more emphasis on data processing and analysis rather than just hardware development. There are climate quality sensor packages already available off the shelf (AXYS & WHOI) that are available but expensive. The sensor suites begin described in this proposal are of "climate" quality and should be treated as such and made available to the larger non-regional research community.

Any other comments:

Sounds like a fun project that has significant potential for success.

## Exxon Valdez Oil Spill Trustee Council

441 W. 5" Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178



October 30, 2002

Craig Downs EnVirtue Biotechnologies, Inc. 1866-C East Market Street, Suite 164 Harrisonburg, VA 22801

RE:

Project 030587 / Understanding the Cellular Processes of Recovery and

Its Utility in Oil-Spill Restoration Efforts

### Dear Craig:

I am writing to inform you of my preliminary recommendation that the *Exxon Valdez* Oil Spill Trustee Council not fund Project 030587. I have enclosed a copy of my preliminary recommendation on this project, along with the Scientific and Technical Advisory Committee's recommendation on the project's technical merits.

The Trustee Council received 44 proposals totaling more than \$6 million. The Council has available less than \$2 million for the FY 03 Phase II Work Plan, and it will not be possible to fund all projects proposed.

My preliminary recommendations on all proposals for funding in FY 03 have been incorporated into the Draft Work Plan, which is available for public review on the Trustee Council's web page (<a href="https://www.oilspill.state.ak.us">www.oilspill.state.ak.us</a>). If you would like a copy of the Draft Work Plan sent to you, please call or e-mail the Trustee Council Office:

Telephone 278-8012
Toll-free in Alaska 1-800-478-7745
Toll-free outside of Alaska 1-800-283-7745
E-mail brenda hall@oilspill.state.ak.us

Following a review of any public comments received, as well as comments from the Trustee Council's Public Advisory Committee, I will make a final recommendation to the Council. Council action on the Work Plan is scheduled for November 25, 2002.

Thank you for your interest in the Trustee Council's Gulf Ecosystem Research and Monitoring (GEM) program. If you have any questions about this preliminary recommendation, please call me or Phil Mundy, the Trustee Council's Science Director.

Sincerely,

Molly McCammon Executive Director

Enclosure

cc: Pete Hagen, NOAA Liaison

### SPREA IEET B: FY 03 PHASE II WORK PLAN-EXE

### IVE DIRECTOR'S PRELIMINARY RECOMM\_...JATION

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Ph II Request	FY 03 Ph II Recom.	FY 04 Request	FY 04 Recom.
030587	Understanding the Cellular Processes of Recovery and Its Utility in Oil-Spill	of C. Downs/EnVirtue	NOAA	New	\$186.4	\$0.0		

#### **Project Abstract**

Restoration Efforts

This project will elucidate the cellular and genomic mechanisms that affect the rate of recovery in bivalve species impacted by the oil spill. The project will (a) determine the adverse affects of a long-term oil-spill exposure on specific processes of cellular physiology and genomic integrity that could potentially impede or slow the rates of recovery in populations of Protothaca staminea and (b) determine the link between cellular-physiological condition with PAH-body burden in these two species of bivalves by characterizing these parameters in populations from sites that exhibit different levels of oil contamination. Completion of this work may provide a foundation to address questions critical to the issue of variable rates of recovery in both invertebrate and vertebrate species in oil-impacted areas. It will provide new and powerful tools to improve monitoring methodologies, as well as potentially providing valuable information for restoration efforts.

#### **STAC Recommendation**

This project was reviewed by the Lingering Oil Subcomittee and not by the full STAC. This project will apply a battery of biomarkers to determine the sublethal impact of residual oil to mollusk physiology and how exposure to residual oil might be slowing recovery of mollusks. A revised Detailed Project Description was submitted in response to peer reviewer concerns regarding proof of principal, reference to existing biomarker literature, and principal investigators' experience. This is a promising proposal. However, given the additional objectives and costs included in a related Project 030620, this project is considered lesser priority and could be done in FY 04 without any loss of information. Defer consideration until the next fiscal year.

#### **Executive Director's Preliminary Recommendation**

Do not fund based on Lingering Oil Committee's recommendation.

# Exxon Valdez Oil Spill Trustee Council

441 W. 5th Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178



October 30, 2002

Thomas C. Kline, Jr., PhD PWS Science Center PO Box 705 Cordova, AK 99574

RE:

Project 030626 / Monitoring Strategies for GEM: Habitat Biogeochemical

Connections

## Dear Tom:

I am writing to inform you of my preliminary recommendation that the *Exxon Valdez* Oil Spill Trustee Council not fund Project 030626. I have enclosed a copy of my preliminary recommendation on this project, along with the Scientific and Technical Advisory Committee's recommendation on the project's technical merits.

The Trustee Council received 44 proposals totaling more than \$6 million. The Council has available less than \$2 million for the FY 03 Phase II Work Plan, and it will not be possible to fund all projects proposed.

My preliminary recommendations on all proposals for funding in FY 03 have been incorporated into the Draft Work Plan, which is available for public review on the Trustee Council's web page (<a href="https://www.oilspill.state.ak.us">www.oilspill.state.ak.us</a>). If you would like a copy of the Draft Work Plan sent to you, please call or e-mail the Trustee Council Office:

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 Toll-free outside of Alaska
 1-800-283-7745

E-mail <u>brenda hall@oilspill.state.ak.us</u>

Following a review of any public comments received, as well as comments from the Trustee Council's Public Advisory Committee, I will make a final recommendation to the Council. Council action on the Work Plan is scheduled for November 25, 2002.

Thank you for your interest in the Trustee Council's Gulf Ecosystem Research and Monitoring (GEM) program. If you have any questions about this preliminary recommendation, please call me or Phil Mundy, the Trustee Council's Science Director.

Sincerely,

Molly McCammon Executive Director

Enclosure

cc: Pete Hagen, NOAA Liaison

## HEET B: FY 03 PHASE II WORK PLAN-EXE TIVE DIRECTOR'S PRELIMINARY RECOMMEDIATION

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Ph II Request	FY 03 Ph II Recom.	FY 04 Request	FY 04 Recom.
G-030626	Monitoring Strategies for GEM: Habitat Biogeochemical Connections	T. Kline/PWSSC	NOAA	New FY 03-04	\$137.8	\$0.0	\$125.5	\$0.0

## **Project Abstract**

This project will refine monitoring strategies for estimating biogeochemical linkages among GEM habitats using natural stable isotope abundance. Because biological productivity within one GEM habitat may, in fact, be strongly dependent upon a subsidy from another habitat, it is important to incorporate these biogeochemical linkages in the GEM program as they may prove to be, in the long term, a critical ecological function for effecting ecosystem shifts. The two primary areas to be addressed are: (a) assessing long-term changes in the role of semelparous-anadromous-salmon-derived nutrients in watersheds including lotic and lentic freshwaters and inter- and subtidal areas adjacent to salmon spawning, and (b) assessing effects of long-term changes in offshore productivity and hypothesized changes in offshore subsidies upon production within the Alaska Coastal Current and coastal waters such as Prince William Sound.

## STAC Recommendation

Stable isotope analysis is expected to be important Do not fund based on STAC recommendation. to GEM. However, the measures proposed. although potentially relevant to GEM in the future. are not sufficiently well developed to serve the purposes of monitoring for biogeochemical connections. An experimental design for evaluating the relations among habitat types is not presented. Future proposals are expected to respond to peer review comments. Do not fund.

## **Executive Director's Preliminary Recommendation**

## Proposal Evaluation Form

Reviewer: 3848

date: Thursday, September 26

Evaluation due

Proposal number: 030626

Title of proposal: Monitoring Strategies for GEM: Habitat Biogeochemical Connections Principle Investigatgor(s): T. Kline/PWSSC

Use the comments section below each question area for discussion of your rating. Use as much space as necessary, and allow the table to expand to additional pages as needed. Do not worry about formatting. Email this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak.us no later than the end of business on Thursday, September 26. The subject line of the e-mail to me should read, "030626 review".

	Rating <sup>1</sup>
1. Does the proposal provide an understanding of	
the problem is it technically and scientifically	
sound, and will it contribute to the generation and	3
dissemination of scientific knowledge in the topic	
area?	(1-5)

Comments: The proposal rambles extensively, and it is hard to separate what is background and what is actually to be part of the proposed work. The broad goals are appropriate and important. However, nowhere is there a clear articulation re. how the isotope data on zooplankton and on halibut will be analyzed and the results applied to determine a response to change, especially a change in productivity. The experimental design is not tight, and appears to rely on a lot of other ongoing projects in a somewhat undefined way.

2. Are the methods as likely to be effective as any	3
others available in achieving the solution?	
	(1-5)

Comments: Stable isotope methods are an extremely powerful tool for looking at trophic relationships and sources of nutrients. The returned salmon contributions of nitrogen to lakes and nearshore sediments is a good example cited by the author. On the other hand, to try to separate zooplankton by source this way has some difficulties, since their isotopic composition can depend on the growth rate of the phytoplankton prey, which affects their composition, and selective feeding by the zooplankton, as well as import from another region. Changes in productivity can account for changes in isotopic composition only to the extent that they are accompanied by changes in the growth rate. In other words, they can be a response to population composition changes rather than to a productivity change. Since the thrust of this proposed work is not clear from the text, and I cannot figure out exactly how the results will be applied, it is difficult to say whether or not there exist any better methods. The proposal text ranges from proposing to solve the entire North Pacific Ocean climate change/regime shift issue to looking at the "black hole." Some of this cannot be achieved within its scope.

A rating of 1 on question means emphatically "no," and a score of 5 means emphatically "yes"; scores of 2-4 mean "maybe." The reviewer is the best judge of the meaning of "Accurate" and "Adequate," but accurate may mean the proposal shows a clear understanding of what kind of information and research are most needed in this field at this time, and adequate may mean that the appropriate scientific literature is used to support the arguments, and/or that the proposal is well written.

3. Can the solution be achieved with these personnel for the amount of funding requested and within the proposed timeframe? Is it cost effective?

Comments: Here, too, the work to be done is intertwined with a number of other projects, most of which are discussed in the proposal. I expect that the promised data set can be achieved with the personnel and resources. The time frame is not unreasonable. I am not sure what the solution is.

Any other comments: In a sense, I have penalized this proposal for its sloppy presentation and poor writing. There are probably some promising aspects to this work, and certainly the application of stable isotope techniques should be encouraged. If serious consideration is given to this proposal, I would recommend requesting a clearly articulated experimental/sampling design

Proposal number: 030626

Title of proposal: Monitoring Strategies for GEM: Habitat Biogeochemical Connections

Principle Investigatgor(s): T. Kline/PWSSC

Use the comments section below each question area for discussion of your rating. Use as much space as necessary, and allow the table to expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak.us no later than the end of business on **Thursday**, **September 26**. The subject line of the e-mail to me should read, "030626 review".

	Rating <sup>1</sup>
1. Does the proposal provide an understanding of the problem, is it technically and scientifically sound, and will it contribute to the generation and dissemination of scientific knowledge in the	2
topic area?	(1-5)

Comments: While the basic idea of stable isotope analysis and its application to distribution of energy among tropic levels and habitats is sound, there are problems with presentation. This proposal emphasizes salmon linkages in the abstract, introduction, and 'statement of problem', then in section IIC goes through a long list of potential projects which include other species. By section III (Objectives), the focus has shifted and no direct mention of salmon research appears, only a request to attend two salmon-related workshops. The proposer should do a better job of outlining the scope of the project up front and introducing the content of section II. While the idea of collaborating with other projects is espoused by GEM, there is a disconnect between stated goals and the specific objectives. Because of these presentation problems, a poor rating has been assigned.

2. Are the methods as likely to be effective as any others available in achieving the solution?

(1-5)

Comments: The basic question is whether biological productivity in a given habitat (e.g., intertidal) is subsidized by productivity in another (e.g., offshore), and the initial application appears to be specific to salmon. In the case of salmon, other measures may also effectively address the question, such as identification of feeding areas, mass gain, carcass retention & mass of outmigrants. Linkage between copepod productivity in ACC and PWS has apparently been established; the proposed research simply refines the data by determining when the influx takes place and re-verifies the origin. A simpler alternative to the hypothesis that the decreased growth rate halibut was due to increases in food chain length since the 1976-77 may be that less or poorer-quality food is available to halibut as a result of climatic or other habitat changes. SI data may not adequately address this alternative hypothesis.

3. Can the solution be achieved with these personnel for the amount of funding requested and within the proposed timeframe? Is it cost effective?

4

(1-5)

<sup>&</sup>lt;sup>1</sup> A rating of 1 on question means emphatically "no," and a score of 5 means emphatically "yes"; scores of 2-4 mean "maybe." The reviewer is the best judge of the meaning of "Accurate" and "Adequate," but accurate may mean the proposal shows a clear understanding of what kind of information and research are most needed in this field at this time, and adequate may mean that the appropriate scientific literature is used to support the arguments, and/or that the proposal is well written.

Com	ents:	
4		
1		
	other comments:	
1	of the acronym SIA needs improvement; sometimes it is used appropriately (stable ope analysis), but in other cases it should simply be "stable isotope."	

Reviewer: 4025 Evaluation due date: Thursday, September 26

Proposal number: 030626

Title of proposal: Monitoring Strategies for GEM: Habitat Biogeochemical Connections

Principle Investigatgor(s): T. Kline/PWSSC

Use the comments section below each question area for discussion of your rating. Use as much space as necessary, and allow the table to expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak.us no later than the end of business on **Thursday**, **September 26**. The subject line of the e-mail to me should read, "030626 review".

	Rating <sup>1</sup>
1. Does the proposal provide an understanding of	
the problem, is it technically and scientifically	
sound, and will it contribute to the generation	4
and dissemination of scientific knowledge in the	
topic area?	(1-5)

Comments: The proposal presents a reasonable understanding of the problem, the methods and rationale appear to be technically and scientifically sound, but I am not convinced it will substantially contribute to the generation and dissemination of fully sound, scientific knowledge. Further, although the author apparently proposes to use stable isotope analyses for detecting where a specific genus of zooplankton originates (p. 8, Are these copepods from PWS or GOA?), this hypothesis is not at all consistent with the objectives stated on p. 1 of the proposal. There, the author proposes to study MDN in freshwater ecosystems, among other things. And although stable isotopes are a good tool for establishing ball-park estimates of prey source, given that there are so many other species (of plankton alone) that will influence the responses detected in halibut, it is unlikely the halibut data will be conclusive. The isotope data from GOA vs. PWS should however provide useful information on their actual source habitat (although according to a statement on p. 7 last paragraph, this information has already been obtained. If this information has already been gathered (i.e., plankton source), why do this part of the isotope study? Is it simply to determine if the diapausing individuals are being displaced? Finally, the author may want to consider using sulfur isotope analysis as well

weil:	
2. Are the methods as likely to be effective as	4
any others available in achieving the solution?	
	(1-5)

Comments: The proposed methods should help substantiate other findings (i.e., source of plankton). Isotope data can be highly variable and inconclusive on their own. Combining SIAs with diet analyses can be a much more effective way of establishing food type and source, food chain length, predator-prey relationships, food web complexity, etc.

3. Can the solution be achieved with these personnel for the amount of funding requested and	4
within the proposed timeframe? Is it cost effective?	(1-5)

Comments: Isotope analyses are generally quite expensive, although the technique can provide some very useful information that can often substantiate other findings. Dr. Kline has excellent expertise in this field, so if SIAs are needed as part of a larger GEM or MDN study, he is undoubtedly an excellent choice for completing the work and interpreting the data. It appears that the work can be completed within the given timeframe and budget, but as mentioned above, the inconclusive nature of SIAs may not provide a definitive solution. Nonetheless, I believe the work in this proposal is cost-effective in that SIAs can be a useful tool to support, or not, other findings.

A rating of 1 on question means emphatically "no," and a score of 5 means emphatically "yes"; scores of 2-4 mean "maybe." The reviewer is the best judge of the meaning of "Accurate" and "Adequate," but accurate may mean the proposal shows a clear understanding of what kind of information and research are most needed in this field at this time, and adequate may mean that the appropriate scientific literature is used to support the arguments, and/or that the proposal is well written.

Any other comments: Besides the inconsistencies between the objectives and the work proposed, there were other inconsistencies/uncertainties in the text. The proposal stated there was no contractual work, but then went on to request 58.6K (35.8+22.8) for contract work. Also, (middle of p. 8) the author states that there are "isotopic differences" between PWS and GOA Neocalanus but then does not present those data and explain how the magnitude of these differences will provide enough of a contrast to show see up the food chain (especially with halibut).

# Exxon Valdez Oil Spill Trustee Council

441 W. 5" Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178



October 30, 2002

Jia Wang, PhD IARC/IMS UAF PO Box 757335 Fairbanks, AK 99775

RE:

Project 030645 / Offshore Transport of Nutrients and Larvae by

Mesoscale Eddies in the Gulf of Alaska: A Mode-Data Synthesis Study

## Dear Jia:

I am writing to inform you of my preliminary recommendation that the *Exxon Valdez* Oil Spill Trustee Council not fund Project 030645. I have enclosed a copy of my preliminary recommendation on this project, along with the Scientific and Technical Advisory Committee's recommendation on the project's technical merits.

The Trustee Council received 44 proposals totaling more than \$6 million. The Council has available less than \$2 million for the FY 03 Phase II Work Plan, and it will not be possible to fund all projects proposed.

My preliminary recommendations on all proposals for funding in FY 03 have been incorporated into the Draft Work Plan, which is available for public review on the Trustee Council's web page (<a href="https://www.oilspill.state.ak.us">www.oilspill.state.ak.us</a>). If you would like a copy of the Draft Work Plan sent to you, please call or e-mail the Trustee Council Office:

Telephone 278-8012
Toll-free in Alaska 1-800-478-7745
Toll-free outside of Alaska 1-800-283-7745
E-mail brenda hall@oilspill.state.ak.us

Following a review of any public comments received, as well as comments from the Trustee Council's Public Advisory Committee, I will make a final recommendation to the Council. Council action on the Work Plan is scheduled for November 25, 2002.

Alaska Department of Law

Thank you for your interest in the Trustee Council's Gulf Ecosystem Research and Monitoring (GEM) program. If you have any questions about this preliminary recommendation, please call me or Phil Mundy, the Trustee Council's Science Director.

Sincerely,

Molly McCammon Executive Director

**Enclosure** 

cc: Bill Hauser, ADF&G Liaison

#### SPRE! HEET B: FY 03 PHASE II WORK PLAN-EXE

## **FIVE DIRECTOR'S PRELIMINARY RECOMM**

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Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Ph II Request	FY 03 Ph II Recom.	FY 04 Request	FY 04 Recom.
G-030645	Offshore Transport of Nutrients and Larvae by Mesoscale Eddies in the Gull of Alaska: A Model-Data Synthesis Stud		ADFG	New FY 03-05	\$89.5	\$0.0	\$103.7	\$0.0

## **Project Abstract**

Under Project 02603/Implementation of an Ocean Circulation Model: A Transition from SEA to GEM, a 3-D ocean circulation model in the Gulf of Alaska has been established. The model covers the entire Gulf of Alaska, GEM is seeking offshore synthesis proposals. Do including Prince William Sound and Cook Inlet. The horizontal resolution of the model is 4'x 2' minutes (about 3.7km at 60 N). The model is forced by tides, freshwater discharge, heat flux, and wind stress derived from the National Center for Environmental Prediction. The model has produced active mesoscale eddies along the Alaska Stream/Current. This proposed project (030645) will combine this modeling work with a larvae drift model, satellite measurements, and historical hydrographic measurements in the gulf to investigate the scientific hypotheses, i.e., that mesoscale eddies enhance offshore transport of nutrients and larvae. Anticyclonic (cyclonic) eddies help depress (pump up) the nutrients below the mixed-layer, leading to less (more) nutrient supply to the eutrophic zone. Modeling and data analysis of these processes will be synthesized using satellite measurements and historical in-situ hydrographic dataset(s).

## STAC Recommendation

The proposed modeling of biological mechanisms is not specific. A more carefully focused and laid out proposal might be beneficial in the future when not fund.

## Executive Director's Preliminary Recommendation

Do not fund based on STAC recommendation.

Proposal Evaluation Form Reviewer: 4103 Evaluation due date: Thursday, September 26 Proposal number: 030645 Title of proposal: Offshore Tramsport of Nutrients and Larvae by Mesoscale Eddies in the Gulf of Alaska: A Model-Data Synthesis Study Principle Investigatgor(s): J. Wang/IARC, UAF Use the comments section below each question area for discussion of your rating. Use as much space as necessary, and allow the table to expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak.us no later than the end of business on Thursday, September 26. The subject line of the e-mail to me should read, "030645 review". Rating 1. Does the proposal provide an understanding of the problem, is it technically and scientifically sound, and will it contribute to the generation 5 -strong and dissemination of scientific knowledge in the topic area? Comments: Model examination and comparison to previously unused historical data should advance the scientific knowledge in this area. Are the methods as likely to be effective as any others available in achieving the solution? 5 -strong) Comments: Methods take advantage of existing data. Current data investigations may be enhanced by including forcing data from NOAA Data Buoys 46060, 46061, 46080, 46082, 46083, and 46084. Can the solution be achieved with these personnel for the amount of funding requested and within the proposed timeframe? Is it cost 5 -strong effective?

Comments:

Excellent cost proposal.

Proposal Evaluation Form

Reviewer: 4050 Evaluation due date: Thursday, September 26

Proposal number: 030645
Title of proposal: Offshore Transport of Nutrients and Larvae by Mesoscale Eddies in the Gulf of Alaska: A Model-Data

Synthesis Study

iple Investigatgor(s): J. Wang/IARC, UAF

Use the comments section below each question area for discussion of your rating. Use as much space as necessary, and allow the table to expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak us no later than the end of business on Thursday, September 26. The subject line of the e-mail to me should read,

"030645 review".	
	Rating <sup>1</sup>
1. Does the proposal provide an understanding of the problem, is it technically and scientifically sound, and will it contribute to the generation and dissemination of scientific knowledge in the	4
topic area?	(1-5)
Comments:	
The rationale and goals of the proposal are clear	and on target.
2. Are the methods as likely to be effective as any others available in achieving the solution?	
	3
	(1-5)
n circulation models, driven by observations to the dean integral part of the GEM project. But model-based results? We are told that the model has	t why didn't the proposal show more
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n circulation models, driven by observations to ld be an integral part of the GEM project. But model-based results? We are told that the model his km, but the only output (Fig. 4) was very low red as a constant of the solution be achieved with these personnel for the amount of funding requested and within the proposed timeframe? Is it cost effective?  Comments:  Although I do not know the PI (I am not a coastal publications suggest that he is qualified and prod 4. Does the proposal contain sufficient information on how the remote sensing	t why didn't the proposal show more as a horizontal resolution of less than solution.  4 (1-5)  modeler), his background and uctive.
n circulation models, driven by observations to ld be an integral part of the GEM project. But model-based results? We are told that the model his km, but the only output (Fig. 4) was very low results. Although I do not know the PI (I am not a coastal publications suggest that he is qualified and product of the proposal contain sufficient.	t why didn't the proposal show more as a horizontal resolution of less than solution.  4  (1-5)  modeler), his background and

A rating of 1 on question means emphatically "no," and a score of 5 means emphatically "yes"; scores of 2-4 mean "maybe." The reviewer is the best judge of the meaning of "Accurate" and "Adequate," but accurate may mean the proposal shows a clear understanding of what kind of information and research are most needed in this field at this time, and adequate may mean that the appropriate scientific literature is used to support the arguments, and/or that the proposal is well written.

### Comments:

Remote sensing is my specialty, so naturally I am prone to be more critical in this department, but it is the one area in this proposal that makes be a bit nervous. Several clues suggest that the investigators have relatively little experience:

- (1) Topex/Poseidon is spelled incorrectly--twice. This is the state-of-the-art altimeter mission that has been flying since 1992, but I get the impression that the investigators are not very familiar with it.
- (2) The Schwiderski 1980 tide model is proposed to be used at the ocean model southern boundary as a source of forcing, but this model is no longer used in the oceanographic community. It is highly inaccurate compared to modern tide models based on satellite altimetry.
- (3) Altimeter data are routinely processed into higher level products by various agencies and groups. Rather than getting altimeter data from JPL and deriving sea surface heights themselves, as proposed, the investigators could save time and effort by getting SSH analyses from others—just as they got their Figure 3 SSH analysis from the University of Colorado.
- (4) De-tiding the altimeter data to derive SSH in shallow water, as proposed, is not trivial. Dedicated coastal tide models must be used, and even then, results must be used with caution. The investigators should consult with groups that have experience in this area, such as the Bedford Institute of Oceanography or Oregon State University.
- (5) There was no mention of using satellite-derived vector winds, even though continuous coverage from scatterometers has been available for several years. Scatterometer and altimeter analyses are both available in near-real time and should be used for any project attempting to do nowcasting and forecasting.

Any	other	comments:

### Proposal Evaluation Form

Reviewer: 1025 Evaluation due date: Thursday, September 26

Proposal number: 030645

Title of proposal: Offshore Tramsport of Nutrients and Larvae by Mesoscale Eddies in the Gulf of Alaska: A Model-Data hesis Study

iple Investigatgor(s): J. Wang/IARC, UAF

Use the comments section below each question area for discussion of your rating. Use as much space as necessary, and allow the table to expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak.us no later than the end of business on Thursday, September 26. The subject line of the e-mail to me should read, "030645 review".

	Rating <sup>1</sup>
1. Does the proposal provide an understanding of	
the problem, is it technically and scientifically	
sound, and will it contribute to the generation	3
and dissemination of scientific knowledge in the	
topic area?	(1-5)

Comments: There is a very real need for nearshore (and I stress nearshore) circulation models in the Gulf of Alaska (GOA). These models are useful to researchers in a range of oceanography disciplines and would be a wise allocation of GEM funds. It is important to expand the detailed models of circulation and oceanography that were developed in PWS to the rest of the GOA, including Cook Inlet. PWS is a unique embayment in the GOA and does not represent the physical or biological conditions of the GOA as a whole. For this reason, the expansion of circulation models from PWS to the entire GOA is necessary. I think it is technically and scientifically sound to apply the model framework used in PWS to the entire GOA.

Having said all this, I have a distinct problem with this proposal and it's claim to include larvae in the model synthesis. I must be missing something somewhere in the proposal. The investigater accurately describes the historical data that will be used from the world ocean database (WOD). From the WOD website, I can see they provide data on erature, salinity, oxygen, phosphate, silicate, nitrate, pH, chlorophyll, and some kton/biomass data. But nowhere on the WOD database are larval fish data mentioned.

This is concerns me greatly. Use of physical-chemical parameters to create a nearshore circulation model would be sufficient for me to endorse funding and is a more accurate description of this proposal. However, the ambiguous source of larvae data and the claim to create an 'ocean-ecosystem model' (page 3, Model-data synthesis: assimilation) is unwarranted. The only conclusion I can draw is that the investigater intends to use biological (larvae) data from PWS and apply that data to the entire GOA. This would be very negligent and incorrect. The ecosystem of the GOA and Cook Inlet are not based on pink salmon and herring like PWS. It would be a terrible mistake to think that the biology of PWS mirrors the rest of the GOA. A review of the literature and of the biannual GOA groundfish surveys conducted by NMFS would support my argument against transferring PWS larvae and biology data to the remaining GOA.

For me to support this proposal it needs to be rewritten to exclude the claim of an 'ocean-ecosystem' model, and all claims of modeling fish larvae need to be removed. It would be sufficient to rename the model an ocean-nutrient model, and I believe this can he accomplished according to the proposal

be accomprished according to the proposar.	
2. Are the methods as likely to be effective as	2
any others available in achieving the solution?	·
	(1-5)

A rating of I on question means emphatically "no," and a score of 5 means emphatically "yes"; scores of 2-4 mean "maybe." The reviewer is the best judge of the meaning of "Accurate" and "Adequate," but accurate may mean the proposal shows a clear understanding of what kind of information and research are most needed in this field at this time, and adequate may mean that the appropriate scientific literature is used to support the arguments, and/or that the proposal is well written.

Comments: Continuing on my above comments, if the claim to incorporate larvae were removed from the proposal, then I would rate this a 4 rather than a 2. Again, I restate what a terrible error it would be to apply the larvae data from PWS to the rest of the GOA. I would not support this method.

In regards to the physical and nutrient modeling, based on the success of the PWS circulation model, these methods seem effective and appropriate. The author has experience and past success with these models. Therefore, there is no reason to question the modeling methods.

Future allocation of funds to ground-truthing the models should be considered by GEM. I assume this would be accomplished through the future monitoring goals of GEM. It is always important to remember that models are mathematically based and prone to human error; therefore, models must be ground-truthed regularly with field sampling.

3. Can the solution be achieved with these personnel for the amount of funding requested and within the proposed timeframe? Is it cost effective?

4

(1-5)

Comments: Provided the concerns listed above are addressed and the proposal is rewritten to remove larvae and biology from the model (and the term 'ocean-ecosystem model' is changed), it seems cost effective. The investigater has past experience with this type of research and presumably provides an accurate budget.

Overall, I think a ocean-nutrient model with descriptions of mesoscale eddies in the GOA would be applicable to a wide range of future research and monitoring in the GOA.

Any other comments: I want to restate my concern with the proposal's goal of creating an ocean-ecosystem model, as I don't believe this goal can be met. The proposal needs to be rewritten to accurately define what data will be used in the model. Again, I believe it is sufficient and worthwhile to fund a ocean-nutrient model without larvae data. In its current form, I do not see how the promised model will incorporate larvae unless it is uses larvae data from PWS. I want to be clear that I can not and do not endorse transferring PWS biology and fish larvae data to the rest of the GOA. PWS is a unique embayment within the GOA and in no way represents the GOA as a whole.

If my concerns are not addressed then I can not recommend funding. If my concerns are addressed, then I believe a ocean-nutrient model would be a worthwhile allocation of GEM funds. I would be willing to review a revised proposal.

Reviewer: 67

Evaluation due date: Thursday, September 26

Proposal number: 030645

Title of proposal: Offshore Tramsport of Nutrients and Larvae by Mesoscale Eddies in the Gulf of Alaska: A Model-Data thesis Study

iple Investigatgor(s): J. Wang/IARC, UAF

Use the comments section below each question area for discussion of your rating. Use as much space as necessary, and allow the table to expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak.us no later than the end of business on Thursday, September 26. The subject line of the e-mail to me should read. "030645 review".

	Rating <sup>1</sup>
1. Does the proposal provide an understanding of the problem, is it technically and scientifically sound, and will it contribute to the generation and dissemination of scientific knowledge in the	3
topic area?	(1-5)

#### Comments:

This proposal appears to be a next step in the proposer's continuing GOA modeling effort that has been pretty successful so far.

But, it really seems like 2 proposals bound in one document. The first proposal, to synthesize all of the historical oceanographic data is a good one. But, how to validate all these historical data? Has that already been done? Take values at face value? Small portential for significant deviations from true values? Measurement/calculation error much less than expected variability in data? Then - p. 8 "Time series of transects...intersecting eddies..." How many of these might there be? This seems to be important to the success of the modeling effort, thus an initial attempt perhaps should be made to identify the opportunities - they may be few, notwithstanding the large number of dots on Fig. 2.

ine second proposal is to model eddies. What is the evidence that eddies are actually important to production budgets in GOA? Anything published? Compared to other mechanisms of nutrient dynamics and particle transport, what proportion might eddie mechanics provide? In the case of eddies, is this modeling because you can rather than modeling because you should?

I am somewhat less confident than the proposer that the model, as depicted in Fig. 4, will ever be able to capture complex behavior such as the eddy chain shown in Fig. 3. Doing so will be necessary to ever evaluate the importance of eddies in the ecosystem.

I am also less confident than they are that the model will be helpful in predicting salmon and herring recruitment.

This is not to say that it won't, in regard to the 2 concerns above, but from the proposal I must take it on faith.

2. Are the methods as likely to be effective as any others available in achieving the solution?	4
	(1-5)

A rating of 1 on question means emphatically "no," and a score of 5 means emphatically "yes"; scores of 2-4 mean "maybe." The reviewer is the best judge of the meaning of "Accurate" and "Adequate," but accurate may mean the proposal shows a clear understanding of what kind of information and research are most needed in this field at this time, and adequate may mean that the appropriate scientific literature is used to support the arguments, and/or that the proposal is well written.

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This extension of the ongoing modeling project of the proposer is likely effective. But, what about first using TOPEX data, e.g., as shown in Fig. 3, and the equations of motion to calculate the potential for important onshelf/offshelf exchange before the whole modeling work is done?

3. Can the solution be achieved with these personnel for the amount of funding requested and within the proposed timeframe? Is it cost effective?

#### Comments:

This is not a terribly expensive project per year, but it is a 3-y proposal which seems like a fairly long time. Undoubtedly, it will take some effort to deal with the historical data, but much of the modeling preliminaries seem to be completed. There seems to be plenty of people supported by it to get a lot of work done in 3 years (1 half time research prof and a full time PhD student). Overkill?

Any other comments:

# Exxon Valdez Oil Spill Trustee Council

441 W. 5" Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178



October 30, 2002

A.J. Gharrett Fisheries Division, SFOS, UAF PO Box 210082 Auke Bay, AK 99821-0082

RF:

Project 030676 / Species Composition of Young-of-Year Rockfish Collected on GOA Surveys 1998-2002

Dear A.J.

I am writing to inform you of my preliminary recommendation that the *Exxon Valdez* Oil Spill Trustee Council not fund Project 030676. I have enclosed a copy of my preliminary recommendation on this project, along with the Scientific and Technical Advisory Committee's recommendation on the project's technical merits.

The Trustee Council received 44 proposals totaling more than \$6 million. The Council has available less than \$2 million for the FY 03 Phase II Work Plan, and it will not be possible to fund all projects proposed.

My preliminary recommendations on all proposals for funding in FY 03 have been incorporated into the Draft Work Plan, which is available for public review on the Trustee Council's web page (<u>www.oilspill.state.ak.us</u>). If you would like a copy of the Draft Work Plan sent to you, please call or e-mail the Trustee Council Office:

Telephone 278-8012
Toll-free in Alaska 1-800-478-7745
Toll-free outside of Alaska 1-800-283-7745
E-mail brenda hall@oilspill.state.ak.us

Following a review of any public comments received, as well as comments from the Trustee Council's Public Advisory Committee, I will make a final recommendation to the Council. Council action on the Work Plan is scheduled for November 25, 2002.

National Oceanic and Atmospheric Administration

Thank you for your interest in the Trustee Council's Gulf Ecosystem Research and Monitoring (GEM) program. If you have any questions about this preliminary recommendation, please call me or Phil Mundy, the Trustee Council's Science Director.

Sincerely,

Molly McCammon Executive Director

**Enclosure** 

cc: Bill Hauser, ADF&G Liaison

#### HEET B: FY 03 PHASE II WORK PLAN-EXE TIVE DIRECTOR'S PRELIMINARY RECOMMENDATION SPRE

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Ph II Request	FY 03 Ph II Recom.	FY 04 Request	FY 04 Recom.
G-030676	Species Composition of Young-of-Year Rockfish Collected on GOA Surveys 1998-2002	A. Gharrett/SFOS-UAF	ADFG	New FY 03-04	\$57.0	\$0.0	\$31.0	\$0.0

## **Project Abstract**

Between 1998 and 2002, many young-of-the-year rockfish were collected in the Gulf of Alaska (GOA) by NOAA personnel along several transects. Although many young rockfish species are difficult to identify from ecological monitoring. This proposal may be more morphology, most GOA species can be delineated using appropriate for other funding sources. Do not fund. mitochondrial DNA markers. This project will determine species composition from subsamples of those collections, and will attempt to identify morphological characteristics that may enable visual identification. This is an opportunity to: (a) obtain early life history information for several (unknown) rockfish species, (b) initiate an assessment program for the species composition of the rockfish in several GOA locations in different years, and (c) lay groundwork for population genetics studies to examine the genetic structure and the influences of environmental variation. The genetic analysis will be accomplished at the University of Alaska Fairbanks Juneau facility.

## STAC Recommendation

This is a good proposal from a well-qualified PI. However, the proposal does not appear to have a strong fit with the GEM program's goal of long-term

## Executive Director's Preliminary Recommendation

Do not fund based on STAC recommendation.

Reviewer: 1713 Evaluation due date: Thursday, September 26

Proposal number: 030676

Title of proposal: Species Composition of Young-of-Year Rockfish Collected on GOA Surveys 1998-2002

Principle Investigatgor(s): A. Gharrett/SFOS, UAF

Use the comments section below each question area for discussion of your rating. Use as much space as necessary, and allow the table to expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak.us no later than the end of business on **Thursday**, **September 26**. The subject line of the e-mail to me should read, "030676 review".

	Rating <sup>1</sup>
1. Does the proposal provide an understanding of the problem, is it technically and scientifically sound, and will it contribute to the generation and dissemination of scientific knowledge in the topic area?	5 (1-5)

Comments: This is a well written proposal that clearly outlines the problem (actually a rare opportunity) and gives a technically and scientifically sound approach to the work. Samples taken on previous cruises provide a unique opportunity to do very necessary basic species identifications using the most modern of techniques coupled with typical morphological analyses. The proposal gives good background and justification for the planned work. The taxonomy and early life history information is so necessary and basic for any further work on this genus in the GOA that it almost goes without saying that this work is needed. I agree with the authors that this a rare conjunction of "free" samples, a new yet proven genetic technology for doing the near impossible otherwise, and the available time of the world's expert on Sebastes taxonomy who can translate the genetic information into morphological keys for rapid identifications. The latter is not assured, but well worth trying.

2. Are the methods as likely to be effective as any others available in achieving the solution?	5
	(1-5)

Comments: A rating of 5 may be a stretch because I do not know of all other possibilites, especially the fine points of the genetic analyses. But the proposal makes a persuasive case. It is again worth noting the rare opportunity to combine free samples, a new technique, and a master taxonomist to solve a basic problem. I cannot believe that such an opportunity could have been planned from scratch as well as it is laid out in this proposal.

3. Can the solution be achieved with these personnel for the amount of funding requested and	4
within the proposed timeframe? Is it cost effective?	(1-5)

Comments: I am not very familiar with the costs of the genetic analyses, and can only trust the proponents that they can do the work for the proposed costs. The subcontract for morphological analyses is very inexpensive by consulting standards. I would say that the proposal is very cost effective, if not a downright bargain. The cruises were paid for by others, samples were archived at others' cost. That certainly has to be the biggest expense if the work were to be funded from scratch. The proponents are doing similar work now, so the potential expense for analytical equipment is bypassed. The staff are highly qualified.

Any other comments: A rare opportunity and a bargain for something badly needed for future work in the GOA. Go for it.

<sup>&</sup>lt;sup>1</sup> A rating of 1 on question means emphatically "no," and a score of 5 means emphatically "yes"; scores of 2-4 mean "maybe." The reviewer is the best judge of the meaning of "Accurate" and "Adequate," but accurate may mean the proposal shows a clear understanding of what kind of information and research are most needed in this field at this time, and adequate may mean that the appropriate scientific literature is used to support the arguments, and/or that the proposal is well written.

Proposal Evaluation Form Reviewer: 3417 Evaluation due date: Thursday, September 26 Proposal number: 030676 Title of proposal: Species Composition of Young-of-Year Rockfish Collected on GOA Surveys 1998-2002 Principle Investigatgor(s): A. Gharrett/SFOS, UAF Use the comments section below each question area for discussion of your rating. Use as much space as necessary, and allow the table to expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak.us no later than the end of business on Thursday, September 26. The subject line of the e-mail to me should read, "030676 review". Rating 1. Does the proposal provide an understanding of the problem, is it technically and scientifically 5 sound, and will it contribute to the generation and dissemination of scientific knowledge in the topic area? (1-5)Comments: The proposed study makes good use of recent collections of young-of-the-year rockfish in the Gulf of Alaska. It uses genetic analyses to identify species, then attempts to find morphological markers that might allow visual species identification. This research is necessary if further understanding of rockfish populations, distribution, and ecology is to be made. Although the primary goal of the project is to estimate species composition in the samples and to develop species identification methodology, it is also important for the authors or the Auke Bay Lab to associate the species with location of collections and associated oceanographic features. Perhaps this task is beyond the scope of the original project, but it is an important tasks to perform in the near future. 2. Are the methods as likely to be effective as any others available in achieving the solution? (1-5)omments: The methods described in the proposal are excellent. The approach takes advantage of recent genetic research that makes this project feasible. The current genetic techniques, previous genetic work with rockfish species, and the opportunistic collection of the rockfish make this project timely. Can the solution be achieved with these personnel for the amount of funding requested and within the proposed timeframe? Is it cost (1-5)

effective?
Comments:

The personnel are highly qualified to conduct this work. The budget is very reasonable and cost effective. The study takes advantage of recent rockfish collections that were bycatch for another study, thus the most expensive part of the study (vessel time at sea) is no longer an issue. The proposed timeframe is reasonable.

Any	other	comments:				
}						

<sup>..</sup> rating of 1 on question means emphatically "no," and a score of 5 means emphatically "yes"; scores of 2-4 mean "maybe." The reviewer is the best judge of the meaning of "Accurate" and "Adequate," but accurate may mean the proposal shows a clear understanding of what kind of information and research are most needed in this field at this time, and adequate may mean that the appropriate scientific literature is used to support the arguments, and/or that the proposal is well written.

# Exxon Valdez Oil Spill Trustee Council

441 W. 5th Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178



October 30, 2002

Gail Irvine, PhD USGS-BRD 1011 E Tudor Rd Anchorage, AK 99503

RE:

Project 030690 / Developing a Probability-based Design for Long-Term

Monitoring of the Nearshore: A Test Case for the Kenai Peninsula

## Dear Gail:

I am writing to inform you of my preliminary recommendation that the *Exxon Valdez* Oil Spill Trustee Council not fund Project 030690. I have enclosed a copy of my preliminary recommendation on this project, along with the Scientific and Technical Advisory Committee's recommendation on the project's technical merits.

The Trustee Council received 44 proposals totaling more than \$6 million. The Council has available less than \$2 million for the FY 03 Phase II Work Plan, and it will not be possible to fund all projects proposed.

My preliminary recommendations on all proposals for funding in FY 03 have been incorporated into the Draft Work Plan, which is available for public review on the Trustee Council's web page (<a href="https://www.oilspill.state.ak.us">www.oilspill.state.ak.us</a>). If you would like a copy of the Draft Work Plan sent to you, please call or e-mail the Trustee Council Office:

Telephone 278-8012
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Following a review of any public comments received, as well as comments from the Trustee Council's Public Advisory Committee, I will make a final recommendation to the Council. Council action on the Work Plan is scheduled for November 25, 2002.

Thank you for your interest in the Trustee Council's Gulf Ecosystem Research and Monitoring (GEM) program. If you have any questions about this preliminary recommendation, please call me or Phil Mundy, the Trustee Council's Science Director.

Sincerely,

Molly McCammon Executive Director

Enclosure

cc: Dede Bohn, USGS Liaison

## SPRE/ HEET B: FY 03 PHASE II WORK PLAN-EXE - TIVE DIRECTOR'S PRELIMINARY RECOMMENDATION

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Ph II Request	FY 03 Ph II Recom.	FY 04 Request	FY 04 Recom.
G-030690	Developing a Probability-based Design for Long-term Monitoring of the Nearshore: A Test Case for the Kenai Peninsula	G. Irvine/DOI-USGS	DOI	New FY 03-07	\$138.8	\$0.0	\$254.4	\$0.0

This project will develop a probability-based design for monitoring marine intertidal communities, with a focus on the outer Kenai Peninsula coast. The advantage of probability-based designs is that the results of the monitoring can be extended to the "universe" of similar habitat within the monitored area. This allows for broad-scale monitoring that can be conducted over the long-term to allow regional comparisons across the Gulf of Alaska. This project addresses the two main goals of the GEM program endorsed by the National Research Council: detecting change and understanding change. The outer Kenai Peninsula (and Resurrection Bay) were affected by the Exxon Valdez oil spill, have had their intertidal habitat mapped over the last two years, have pre-existing data from oil spill damage assessment studies, and have great potential for linking offshore and nearshore dynamics through comparison with long-term ocean monitoring that has occurred in Resurrection Bay.

**Project Abstract** 

## STAC Recommendation

Probability based sampling may be a protocol that GEM will want to use for long-term research. Prior to implementing a monitoring program on this basis, additional evaluation of proposed methods via peer review and a workshop on sampling methodology would be needed. Do not fund.

## Executive Director's Preliminary Recommendation

Do not fund based on STAC recommendation. Funds for a workshop on sampling methodology are included in Project 030630.

Reviewer: 3884

Proposal 030690, Irvine

1. Does the proposal provide an understanding.....

The proposal is well written and the author appears to have a clear understanding of the intertidal monitoring issue. However, one cannot tell from the proposal exactly how the work will be carried out, e.g. which habitats, which locations, how many locations, tidal heights, which organisms etc. These issues are proposed to be evaluated in Task 1. It is hard to offer specific comments when the actual study design is yet to be determined. So part of the proposed work is to design the field monitoring program "in conjunction with others". It is indicated that some EVOS workshops will be attended and I presume some discussion of how to proceed will occur. This could result in design by committee or simply lack of agreement. Who decides how to do the study? My preference would be to bring together a small group of experts plus GEM management to work out the priorities and best methods and require that the result be written up and submitted to GEM for approval. I have the sense that there is lack of agreement among potential proposers for intertidal monitoring and the author of this proposal is requesting funding to work out these thorny issues. I see two fundamental problems. One is a philosophical issue of how to do the work, e.g. PISCO model versus CHIA model. The other is how to take on a formidable task with limited funding. Presentations I have seen on the PISCO work suggest to me that it is not a viable approach. The CHIA model is better but needs modification. Without having a final study plan, I cannot determine the extent to which this work will contribute to generation and dissemination of scientific knowledge.

2. Are the methods likely to be as effective as any others available in achieving the solution?

This question is impossible to answer because the methods have not all been worked out yet and because I have not seen what other approaches are being proposed. This proposal has the potential to be more effective than a PISCO approach but it all depends upon what approach is actually used.

Under Project Design, C. Procedural Methods, I have the following comments.

- C.1. How will the proposed workshop be different than the previous ones? If this proposal is accepted, then the meeting should be a small group of experienced people that are committed to working out the best methods to make this study successful and should exclude those still having their own agenda. At present, I think there is considerable risk of decision by committee or that there is lack of concrete guidance.
- C.2. The further analyses of CHIA and Park Service data could be a very good idea but not enough information is provided to convince me that the approach is practical. What if the data simply aren't comparable due to methodology? This could be a huge statistical undertaking I suspect it might be and would like to see some comment by a

statistician interested in taking on this task. The last sentence of this section makes me wonder why even do this task. Further, I think the last sentence is incorrect in that the site selection process in C.3. seems to be to very nearly the same as used in CHIA.

C.3.-C.4. I think there are a number of problems with the approach as stated and, of course, some details are proposed to be worked out as part of the project. Creating a universe of similar length beach units is a problem. Beaches don't come that way. The CHIA study went down this path and it was a problem. The idea was to use a GIS map of habitat types overlain with degree of oiling and then letting a computer randomly pick study and control sites. The minimum segment length was 600 m – too long to study in any detail during low tides with less than an army. Most segments contained more than one habitat type. The computer chose control sites that were heavily influenced by runoff (sed., low salinity) and the study sites were productive island locations with more stable salinity, less turbid, more nutrients etc and the results of the first season showed that oil must be a positive factor because there were more organisms on the study sites than the control sites. There is no substitute for groundtruthing study sites by the people that will do the study as there was about a 40% combined error rate in the habitat and oiling categories. Starting with a single habitat type is probably a good idea as there will be many problems arise when the work actually begins.

As for the probability based design, it has some serious pitfalls (see previous para.). By selecting a single habitat, some of the problems can be addressed and some cannot unless something other than total random design is used. The CHIA studied places so depauperate in some cases that it would have been impossible to demonstrate any oiling effect. My advice is to sample only the most productive locations within a habitat type. That is where the action is and where events occur most rapidly and are, thus, more likely to be detected if they occur. One has to very carefully distinguish degree of wave exposure within habitat types. There are other issues such as deliberately sampling in a mussle band or seeking out a clam bed — neither allowed by the random process. Habitats can change along a single vertical transect, e.g. from rocky to a seagrass bed. I don't have time to cover all the issues but I have given an indication of some of the problems that don't need to be rediscovered.

The number of sites to be chosen is a real issue. Scientifically, you want a lot more than 20 or 30 to cover the length of the Kenai coast line. On the other hand, this number will present logistical and time problems let alone budget issues. Everything will be a trade off between quality of the study and acceptable costs.

I don't agree that vertical transects are better than horizontal transects, though I suspect the horizontal ones may encounter habitat shifts more often than the vertical ones. The problem with the vertical approach is the very limited number of quadrats at a tidal height relative to the high natural variability of the intertidal.

It appears that permanent transects will be used, requiring repeated measures analyses. The problem with this approach is that estimating abundances from grids etc rather than collecting introduces a large error, something on the order of a 40% underestimate of

some species. Large species may be counted more accurately but one of the problems is that the error is quite variable and not predictable form quadrat to quadrat so one cannot simply apply a correction factor. Using a 1-m swath for larger organisms is not very satisfactory either. These swaths miss large seastars, for example, more often than not. What one should do is lay out a large area and count all present within the area. An alternative would be to have a huge number of swaths.

- C.5. I think recruitment studies are interesting. They are also very difficult to do well. Also, recruitment only affects intertidal community structure in a way not understood by all. It really only determines community structure when recruitment is spotty or poor. When good recruitment results in all open habitat space filled with recruits, other factors such as space competition and predation determine final community structure. When recruitment is less than necessary to fill all available space, then recruitment dynamics may determine who is present in the resulting community, though perhaps modified by predation. The chances of relating recruitment in artificial substrates off a pier at Seward to oceanic conditions are remote. Even in a better location using natural substrate, relating recruitment to large scale oceanographic conditions is not likely sites tend to function somewhat independently, suggesting local factors are more important. The Seward waterfront is simply not a good place for this type of research. The water there is quite variable in salinity and sediment load from Exit glacier. It's a lousy place for most marine organisms and the diversity there is very low.
- D. Statistical methods. How will variability be distinguished from change? Again, there are a lot of unresolved methodology issues. What would happen if no change is detected accept that there is no change or increase sampling frequency?

As for use of similar monitoring methods in different geo regions, who will do them and how will they be made to use similar methods? Even if they agreed, how would similarity of methods be assured. This was a huge issue with CHIA having field crews in different locations trying to use the same methods. Which physical parameters will be used and how (and by whom) will they be measured. Does GAK-1 have any relevance to a barnacle at Gore Point? What about freshwater lenses?

- E. Too vague.
- F. Coordinating all of this and getting uniform methods in use will be a huge problem.

I could have written more but I don't want the review to be longer than the proposal. Intertidal studies are not easy. My comments may seem critical of this proposal but I am trying to point out some of the problems that must be dealt with, rather than bash this particular proposal. If guided correctly, this proposed work might address my concerns but one cannot tell at this stage.

3. Can the solution be achieved with these personnel and amount of funding.....

Only Irvine is given as a participant so there is no way to determine the caliber of the overall team. Re my comments on methodology, if this work is to be done on a solid scientific basis, I don't think enough personnel are included to do the field work, which means the budget is probably not high enough. I see no point in sampling too few locations with too few replicates with gross methodology too infrequently. This study, depending upon the decisions made during the project could go either way.

Finally, I have not assigned numerical rankings to these questions because I do not know how to do so with any rational basis. Too many of the critical details are left to be worked out in the future – the ones that would determine the real quality of the proposal.

Reviewer: 4029

Title of proposal: Developing a Probability-based Design for Long-term Monitoring of the Nearshore: A Test Case for the Kenai Peninsula

Principle Investigatgor(s): G. Irvine/USGS

Use the comments section below each question area for discussion of your rating. Use as much space as necessary, and allow the table to expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak.us no later than the end of business on Thursday, September 26. The subject line of the e-mail to me should read, "030690 review".

	Rating
1. Does the proposal provide an understanding of the problem, is it technically and scientifically sound, and will it contribute to the generation and dissemination of scientific knowledge in the	4
topic area?	(1-5)

Comments: A <u>correctly</u> implemented general probability sampling design for monitoring marine based communities would accomplish this task very effectively. Besides monitoric change, it could serve as a future baseline. Technical and scientific soundness, depend upon how it is implemented. Errors in application of the design could dramatically compromise it's utility.

2. Are the methods as likely to be effective as	3
any others available in achieving the solution?	(1-5)

Comments: The general approach is very good (5), but needs increased statistical expertise to be pulled off successfully. As the author correctly points out, a probability sampling plan is the best option. As currently written the range of likely outcomes is 2-4. If a more integrated team approach, outlined in 3 is taken, then I wou rate this a 5.

3. Can the solution be achieved with these	1 (5 with solution offered below)				
personnel for the amount of funding requested and within the proposed timeframe? Is it cost effective?	(1-5)				

Comments: The proposal is a massive statistical sampling plan, using the correct statistical approach, yet only has 5 weeks of budgeted statistical consulting over a 3-year period. The inadequacy of statistical resources suggests a lack of appreciation of the complexity of the task. In the course of implementing these designs that perfect statistical sampling desk-plan runs up against the reality of the field, and on the spo changes will have to be made. As currently constructed, the statistical expertise will not be there to ensure that correct changes are implemented. This massive statistical project can be fixed very easily with a co-investigator who is a professional statistician. These 50-50 co-investigations work very well, with this approach I would change my rating to 5.

Any other comments: I would not fund this project as currently written. If sampling of intertidal communities along the Kenai coast was important, then I would fund a study that used this type of design, but had a statistician and ecologist as co-investigators

# Exxon Valdez Oil Spill Trustee Council

441 W. 5th Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178



October 30, 2002

Asit Muzumder University of Victoria, Department of Biology PO Box 3020 STN CSC Victoria, B.C. V8W 3N5

Jim Edmundson ADF&G 43961 Kalifornsky Beach Road, Suite B Soldotna, AK 99669-8367

Bill Hauser ADF&G 333 Raspberry Rd. Anchorage, AK 99518

RE:

Project 030684 / Toward Sustainable Management in the Kenai River Watershed: Linking Human & Resource Development with Nutrient & Energy Pathways

Dear Asit, Jim, and Bill:

I am writing to inform you of my preliminary recommendation that the *Exxon Valdez* Oil Spill Trustee Council not fund Project 030684. I have enclosed a copy of my preliminary recommendation on this project, along with the Scientific and Technical Advisory Committee's recommendation on the project's technical merits.

The Trustee Council received 44 proposals totaling more than \$6 million. The Council has available less than \$2 million for the FY 03 Phase II Work Plan, and it will not be possible to fund all projects proposed.

My preliminary recommendations on all proposals for funding in FY 03 have been incorporated into the Draft Work Plan, which is available for public review on the Trustee Council's web page (<a href="https://www.oilspill.state.ak.us">www.oilspill.state.ak.us</a>). If you would like a copy of the Draft Work Plan sent to you, please call or e-mail the Trustee Council Office:

Telephone Toll-free in Alaska Toll-free outside of Alaska E-mail

278-8012 1-800-478-7745 1-800-283-7745 brenda\_hall@oilspill.state.ak.us

Following a review of any public comments received, as well as comments from the Trustee Council's Public Advisory Committee, I will make a final recommendation to the Council. Council action on the Work Plan is scheduled for November 25, 2002.

Thank you for your interest in the Trustee Council's Gulf Ecosystem Research and Monitoring (GEM) program. If you have any questions about this preliminary recommendation, please call me or Phil Mundy, the Trustee Council's Science Director.

Sincerely,

Molly McCammon Executive Director

**Enclosure** 

cc: Bill Hauser, ADF&G Liaison

#### **HEET B: FY 03 PHASE II WORK PLAN-EXE** SPRE! FIVE DIRECTOR'S PRELIMINARY RECOMP )ATION

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Ph II Request	FY 03 Ph II Recom.	FY 04 Request	FY 04 Recom.
G-030684	Toward Sustainable Management in the Kenai River Watershed: Linking Human & Resource Development with Nutrient & Energy Pathways	J. Edmundson/ADE&G	ADFG	New FY 03	\$89.9	\$0.0	\$0.0	\$0.0
	Project Abstract	STAC Recommendation		Ex	ecutive Director's	s Preliminary	Recomme	ndation

This project will take the larger Kenai River watershed research plan (being prepared under Project 02612/Detecting and Understanding Marine/Terrestrial Linkages in the Kenai River Watershed) and focus it through ongoing community and stakeholder involvement and agency participation into a directed and sources. A final report from project 02612 would implemented research program. Project 02612 has produced communication bulletins and a draft document, and organized workshops to foster an understanding of watershed issues and stakeholder interest and input. From this exercise we recognize the need to maintain and build this dialogue, but gain further involvement. The consensus expressed by participants in Project 02612 is that: (a) a research plan should be implemented that captures the continued involvement of local, state and federal perspectives, (b) a white paper should be developed that presents scientific issues and interests in a plan with broad political, agency and stakeholder distribution, (c) the time to maintain dialogue and interests should be extended beyond the initial research planning process, and (d) a detailed research program with management structure, specific project outlines, funding, and deliverables should be developed.

## STAC Recommendation

The proposal is not responsive to the invitation for synthesis proposals that cut across habitat types. including the watersheds. While there is support for the objectives of this project, funding for this aspect might be more appropriate for alternative funding need to be evaluated before additional GEM funding can be assessed. Do not fund.

## Executive Director's Preliminary Recommendation

Do not fund based on STAC recommendation.

Reviewer: 3026 Evaluation due date: Thursday, September 26

Proposal number: 030684

Title of proposal: Toward Sustainable Management in the Kenai River Watershed: Linking Human & Resource Development with Nutrient & Engergy Pathways

Principle Investigatgor(s): A. Mazumder/Univ. Victoria, J. Edmundson/ADF&G, W. Hauser/ADF&G

Use the comments section below each question area for discussion of your rating. Use as much space as necessary, and allow the table to expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak.us no later than the end of business on **Thursday**, **September 26**. The subject line of the e-mail to me should read, "030684 review".

	Rating <sup>1</sup>
1. Does the proposal provide an understanding of	
the problem, is it technically and scientifically	
sound, and will it contribute to the generation	4?
and dissemination of scientific knowledge in the	·
topic area?	(1-5)

Comments: Question 1 is the wrong question to pose about this project. This proposal deals with funding the planning portion of a multi-disciplinary approach on the question of marine derived nutrients, as well as educating- and soliciting ideas from- various interest groups. As a result, the proposal deals with generalities and not specific avenues of inquiry. The authors are well aware of the problems and difficulties in the Kenai River watershed. The projects that come out of this planning proposal have the potential for generating new important scientific knowledge, especially given the almost religious fervor exhibited by certain proponents of marine derived nutrients, and the scant data available. The project itself will identify what avenues of inquiry that will be most fruitful.

Previous EVOS funding has not lived up to its potential, because no overarching goals were developed, which would have guided both administrators and investigators. As a result, projects were funded based on what is sexy, and to placate certain interests. Thus, EVOS has produced small, narrowly focused bits of information, that cannot be connected with other research to answer larger questions. Being acquainted with Dr. Mazumder and his work, this looks like one step in an overall group of projects, that will answer important questions about the Kenai River watershed, and will be directly applicable to other watersheds in Central Alaska, and probably within the North Pacific.

What bothers me about this proposal is that this is the type of preparatory work that GEM should be doing in house, assuming that GEM has the qualified personnel. If this proposal is approved, Dr. Mazumder and his colleagues are likely to generate good projects and avenues of enquiry: the project itself will not generate scientific findings.

2.	Are the methods as likely to be effective as	4?
any	others available in achieving the solution?	
		(1-5)
~		

Comments: Since this is a proposal for planning, question 2 is also not the proper one to ask. The researchers have a good grasp of the system, the stakeholders, and the important avenues to explore.

3. Can the solution be achieved with these personnel for the amount of funding requested and	5
within the proposed timeframe? Is it cost effective?	(1-5)

<sup>&</sup>lt;sup>1</sup> A rating of 1 on question means emphatically "no," and a score of 5 means emphatically "yes"; scores of 2-4 mean "maybe." The reviewer is the best judge of the meaning of "Accurate" and "Adequate," but accurate may mean the proposal shows a clear understanding of what kind of information and research are most needed in this field at this time, and adequate may mean that the appropriate scientific literature is used to support the arguments, and/or that the proposal is well written.

Comments: In my opinion, the researchers have done a good job of integrating various			
agencies for funds and resources in the most cost effective manner.			
other comments:			

Proposal Evaluation Form

Reviewer: 254 Evaluation due date: Thursday, September 26

Proposal number: 030684

Title of proposal: Toward Sustainable Management in the Kenai River Watershed: Linking Human & Resource Development with Nutrient & Engergy Pathways

Principle Investigatgor(s): A. Mazumder/Univ. Victoria, J. Edmundson/ADF&G, W. Hauser/ADF&G

Use the comments section below each question area for discussion of your rating. Use as much space as necessary, and allow the table to expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak.us no later than the end of business on **Thursday**, **September 26**. The subject line of the e-mail to me should read, "030684 review".

	Rating <sup>1</sup>		
1. Does the proposal provide an understanding			
of the problem, is it technically and			
scientifically sound, and will it contribute to	4		
the generation and dissemination of scientific			
knowledge in the topic area?	(1-5)		
Comments: Statement of problem was a bit shy on	describing the actual problem		
primarily being proposed to address. Demonstated			
better understanding i.e. research etc. Would be	better if anthropogenic infuences		
were expanded on, oil and gas for example was not	mentioned. Needs a better linkage		
established between the description of the proble	em and how this proposal will address		
them through well planned research. Good linkage	to GEM section.		
2. Are the methods as likely to be effective	4		
as any others available in achieving			
the solution?	(1-5)		
Comments: Good list of general objectives. Proceed	L		
being an outcome/deliverable rather than a method			
specify how emails, workshop, website or other me			
main deliverables, the research documents, using			
stakeholder involvement infered. Should list how			
primarily responsible for drafting which discipl			
workshops will maintain efficient and concentrate			
process etc.). Could be more specific.	· · · · · · · · · · · · · · · · · · ·		
3. Can the solution be achieved with these	4		
personnel for the amount of funding requested	4		
and within the proposed timeframe? Is it cost	45		
effective?	(1-5)		
Comments: Good project team with adequate resource	es and budget. Project planning and		
coordination team while broadbased and generally well represented does not include any			
Tribal and or native organization or government representatives, local Tribal			
resource/environmental professionals or Tribal TEK specialists. Proposal also does not			
indicate any plans to involve or solicit Tribal/indiginous involvement. Appears to be			
in violation of GEM TEK protocals and should be brought up to speed on this issue			
prior to funding project.			
Any other comments: This project appears to be a good example for how to bring			
mulitple stakeholders together for a comprehensive			
ecosystem. With the exception of needing more cor			
stakeholders into the process, which can be easily remedied, as well as being more			
specific in the how to part of how they will pull and place all the pieces together,			
this project will be very beneficial in assisting coordinated and collaborative			

research and monitoring for the Kenai River ecosystem and watershed.

<sup>&</sup>lt;sup>1</sup> A rating of 1 on question means emphatically "no," and a score of 5 means emphatically "yes"; scores of 2-4 mean "maybe." The reviewer is the best judge of the meaning of "Accurate" and "Adequate," but accurate may mean the proposal shows a clear understanding of what kind of information and research are most needed in this field at this time, and adequate may mean that the appropriate scientific literature is used to support the arguments, and/or that the proposal is well written.

# Exxon Valdez Oil Spill Trustee Council

441 W. 5th Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178



October 30, 2002

Villy Christensen, PhD Fisheries Centre, University of British Columbia 2204 Main Mall Vancouver, British Columbia V6T 1Z4

Thomas Okey Fisheries Centre, University of British Columbia 2204 Main Mall Vancouver, British Columbia V6T 1Z4

RE:

Project 030691 / Evaluating the Relative Roles of Environment and Fisheries in the Gulf of Alaska and Adjacent Ecosystems

Dear Villy and Thomas:

I am writing to inform you of my preliminary recommendation that the Exxon Valdez Oil Spill Trustee Council not fund Project 030691. I have enclosed a copy of my preliminary recommendation on this project, along with the Scientific and Technical Advisory Committee's recommendation on the project's technical merits.

The Trustee Council received 44 proposals totaling more than \$6 million. The Council has available less than \$2 million for the FY 03 Phase II Work Plan, and it will not be possible to fund all projects proposed.

My preliminary recommendations on all proposals for funding in FY 03 have been incorporated into the Draft Work Plan, which is available for public review on the Trustee Council's web page (www.oilspill.state.ak.us). If you would like a copy of the Draft Work Plan sent to you, please call or e-mail the Trustee Council Office:

> Telephone Toll-free in Alaska Toll-free outside of Alaska

278-8012 1-800-478-7745 1-800-283-7745

E-mail

brenda hall@oilspill.state.ak.us

Following a review of any public comments received, as well as comments from the Trustee Council's Public Advisory Committee, I will make a final recommendation to the Council. Council action on the Work Plan is scheduled for November 25, 2002.

Thank you for your interest in the Trustee Council's Gulf Ecosystem Research and Monitoring (GEM) program. If you have any questions about this preliminary recommendation, please call me or Phil Mundy, the Trustee Council's Science Director.

Sincerely,

Molly McCammon Executive Director

Enclosure

cc: Pete Hagen, NOAA Liaison

# Exxon Valdez Oil Spill Trustee Council

441 W. 5" Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178



October 30, 2002

Villy Christensen, PhD Fisheries Centre, University of British Columbia 2204 Main Mall Vancouver, British Columbia V6T 1Z4

Thomas Okev Fisheries Centre, University of British Columbia 2204 Main Mall Vancouver, British Columbia V6T 1Z4

Project 030691 / Evaluating the Relative Roles of Environment and

Fisheries in the Gulf of Alaska and Adjacent Ecosystems

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brenda hall@oilspill.state.ak.us

Alaska Department of Environmental Conservation Alaska Department of Law

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Thank you for your interest in the Trustee Council's Gulf Ecosystem Research and Monitoring (GEM) program. If you have any questions about this preliminary recommendation, please call me or Phil Mundy, the Trustee Council's Science Director.

Sincerely,

Molly McCammon Executive Director

Enclosure

cc: Pete Hagen, NOAA Liaison

## HEET B: FY 03 PHASE II WORK PLAN-EXE TIVE DIRECTOR'S PRELIMINARY RECOMMS

Proj.No.	Project Title	Proposer	Agency	Cont'd	Request	Recom.	FY 04 Request	Recom.
G-030691	Evaluating the Relative Roles of Environment and Fisheries in Gulf of Alaska and Adjacent Ecosystems	V. Christensen/UBC T. Okey/UBC	NOAA	New FY 03-04	\$144.6	\$0.0	\$47.9	\$0.0

#### **Project Abstract**

This project will coordinate ecological modeling efforts in This proposal appears to be better suited for other the Gulf of Alaska (and the Bering Sea and Aleutian Archipelago) to help distinguish the relative roles of physical, biotic, and anthropogenic factors in shaping the not responsive to the invitation, which did not invite trajectories of declining or recovering populations. Modeling research teams will be invited to a process that fund this research without having seen other will coordinate approaches and identify the relative likelihood of proposed explanations for observed biological changes. New time series analysis capabilities in the Ecopath with Ecosim modeling approach will be applied to the existing Prince William Sound model to exemplify an approach for evaluating the relative importance of hypothesized population and community shaping factors. This standardized process will then be applied to the sub-regions within which each of the teams is focused. Results of Year 1 of this modeling synthesis and coordination effort will include an up-to-date compilation of regional and local time series data, a week-long modeling workshop during Summer 2003, and mini-paper reporting of analytical results from each team.

#### STAC Recommendation

funding sources since objectives are aimed primarily at Steller sea lions. Also, the proposal is modeling proposals. It would be inappropriate to proposals in this area that may be submitted in response to a future invitation. Do not fund,

#### Executive Director's Preliminary Recommendation

Do not fund based on STAC recommendation.

Reviewer: 3723 Evaluation due date: Thursday, September 26

Proposal number: 030691

Title of proposal: Evaluating the relative roles of environment and fisheries in Gulf of Alaska and adjacent ecosystems

Principle Investigatgor(s): Dr Villy Christensen and Thomas A. Okey, Univ. of British Columbia

Use the comments section below each question area for discussion of your rating. Use as much space as necessary, and allow the table to expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak.us no later than the end of business on **Thursday**, **September 26**. The subject line of the e-mail to me should read, "030691 review".

	Rating <sup>1</sup>
1. Does the proposal provide an understanding of	
the problem, is it technically and scientifically	
sound, and will it contribute to the generation	3
and dissemination of scientific knowledge in the	
topic area?	(1-5)

Comments: The proposal provides some documentation of the problem (distinguishing the relative roles of fishing and environmental factors on declines in populations of concern in the GoA and adjacent regions), but is not sufficiently specific as to hypotheses, outside of 4 example questions related to declines of Steller sea lions (p. 7-8). Despite this lack, the proposed work (bringing together various efforts at a workshop and publishing the results) is likely to contribute to undestanding of the problem.

2. Are the methods as likely to be effective as any others available in achieving the solution?	4
	(1-5)

Comments: A sufficiently circumspect use of the Ecopath/sim/space suite of models appears to have a good chance of isolating causative factors in population changes, or at least identifying important gaps in understanding.

3. Can the solution be achieved with these personnel for the amount of funding requested and	3
within the proposed timeframe? Is it cost effective?	(1-5)

Comments: It is not clear if a solution to the problem (distinguishing between fishing and environemental factors) will be achieved, as the technical work was not well specified (specific hypotheses and the collaboration to be done). But the funding and personnel are well described and adequate for convening a workshop and for publishing the results.

Any other comments: The success of the workshop hinges on effective participation by potential collaborators. While this is likely, it is not a sure bet. Also, the proposal specifies 11 papers to be prepared for publication without listing what the titles of topics of those might be.

A rating of 1 on question means emphatically "no," and a score of 5 means emphatically "yes"; scores of 2-4 mean "maybe." The reviewer is the best judge of the meaning of "Accurate" and "Adequate," but accurate may mean the proposal shows a clear understanding of what kind of information and research are most needed in this field at this time, and adequate may mean that the appropriate scientific literature is used to support the arguments, and/or that the proposal is well written.

Reviewer: 4019 Evaluation due date: Thursday, September 26

Proposal number: 030691

Title of proposal: Evaluating the relative roles of environment and fisheries in Gulf of Alaska and adjacent ecosystems ole Investigatgor(s): Dr Villy Christensen and Thomas A. Okey, Univ. of British Columbia

expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak.us no later than the end of business on **Thursday**, **September 26**. The subject line of the e-mail to me should read, "030691 review".

	Rating <sup>1</sup>
1. Does the proposal provide an understanding of	
the problem, is it technically and scientifically	
sound, and will it contribute to the generation	4
and dissemination of scientific knowledge in the	
topic area?	(1-5)

Comments: ECOPATH w/ ECOSIM is a excellent tool for combining a lot of information about different populations within an ecosystem which is what the researchers propose to do for two Alaskan food webs. They will also coordinate among other efforts that are developing food webs in ECOPATH w/ECOSIM and publish papers on the results. These products would be a great contribution to the understanding of populations that are important for management in Alaska!

Below are a few comments that the researchers should consider when carrying out the research. 1. They should include other analyses or tools in their coordination efforts as suggested on the top of pg. 7 for comparisons and validation purposes; 2. The treatment of respiration (pp.8&9) in ECOPATH w/ECOSIM has important conceptual problems. It has a tendency to grossly overestimate actual respiration costs of a population and no place exists to directly enter respiration rates into the model. The researchers should follow the advice in their manual and check all estimated respiration rates with known rates to make sure they are realistic. Ecotrophic Efficiency is calculated in a similar o respiration and it is often an unknown in the literature so there may be a concern as well; 3. All outcomes of gaming scenarios must have some uncertainty values associated with them (probabilities, confidence intervals, etc.); 4. The comparisons across food webs are limited because the aggregation process of organisms in ECOPATH w/ ECOSIM is arbitrary. With ECOPATH w/ ECOSIM, one can effectively explore how a population is influenced by the ecosystem. However, it may not be an effective tool for analyzing ecosystems themselves as a collection of populations (in part because of the reasons mentioned above). The researchers must be cautious about interpreting results on an ecosystem level; 5. The researchers reference the null model process on pq. 11. researchers should review the paper in Ecology by Manly and Anderson (83:580-582) in regards to this procedure if they haven't already; 6. Presenting the results at a national or international conference is encouraged. Perhaps even organizing a symposium with all the various models presented could be considered; 7. Is Ecological Modelling as an appropriate forum for the collection of papers? These papers should have important management implications. The audience of Ecological Modelling is too narrow. A more widely read journal, such as Canadian Journal of Fisheries and Aquatic Sciences, may be more appropriate.

This proposal would definitely add to the knowledge of populations of concern in Alaskan aquatic ecosystems and is feasible.

aduatic ecosystems and is leasible.	
2. Are the methods as likely to be effective as any others available in achieving the solution?	4
any senses avariable in denieving the solution.	(1-5)

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Comments: There just aren't many multi-species models out there. ECOPATH w/ ECOSIM is set up to handle multiple species and organisms within an ecosystem. This modeling tool is well established and well published in the literature. V. Christensen has been developing the ECOPATH w/ ECOSIM tool for a long time and is the expert on it. The data fitting feature is perhaps the most attractive part of this tool. The proposed research is likely to be as effective as any other available and perhaps more effective than many other approaches. I liked that the researchers will engage the public in the process of model development.

One disadvantage compared to other methods is that I doubt it detect the mechanistic processes behind the population patterns. Although there are mechanisms built into ECOSIM, I am not sure if these can be directly traced back to the population patterns fitted or, if they can, that they can be verified or validated. Also, being able to fit population patterns as a result of other species/organisms populations or physical factors does not reveal exact mechanistic processes behind the population processes. I do not think that this is a great weakness of ECOPATH w/ ECOSIM or that it should have to prove mechanistic processes. A cautious interpretation of results is the point I am making. Again, having other analyses or tools would definitely help with this aspect.

3. Can the solution be achieved with these personnel for the amount of funding requested and within the proposed timeframe? Is it cost effective?

4

(1-5)

Comments: The costs seem reasonable as well as the time frame. I only question the cost of Pauly and Walters time if they have 12-month appointments at UBC (but they may not, I don't know). The time frame for actually publishing the papers may be optimistic. It has been my experience that the process of publishing a set of papers always get delayed for one reason or another.

Any other comments:

#### Proposal Evaluation Form

Reviewer: 4020 Evaluation due date: Thursday, September 26

Proposal number: 030691

Title of proposal: Evaluating the relative roles of environment and fisheries in Gulf of Alaska and adjacent ecosystems iple Investigatgor(s): Dr Villy Christensen and Thomas A. Okey, Univ. of British Columbia

expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak.us no later than the end of business on **Thursday**, **September 26**. The subject line of the e-mail to me should read, "030691 review".

	Rating <sup>1</sup>
1. Does the proposal provide an understanding of	
the problem, is it technically and scientifically	
sound, and will it contribute to the generation	3
and dissemination of scientific knowledge in the	
topic area?	(1-5)

<sup>&</sup>lt;sup>1</sup> A rating of 1 on question means emphatically "no," and a score of 5 means emphatically "yes"; scores of 2-4 mean "maybe." The reviewer is the best judge of the meaning of "Accurate" and "Adequate," but accurate may mean the proposal shows a clear understanding of what kind of information and research are most needed in this field at this time, and adequate may mean that the appropriate scientific literature is used to support the arguments, and/or that the proposal is well written.

Comments: The proposal provides a general understanding of the problem, i.e., various commercially exploited populations are decreasing in abundance while others are increasing in the northern Gulf of Alaska. However, the proposal fails to explicitly define how to pursue the problem- what are the causes for these population fluctuations in an ecosystem context. Understandably, the approach proposed recognizes the need for such ambiguity, i.e., the approach is to organize a workshop and bring together others that have recently developed ECOPATH/ECOSIM models for their corresponding ecosystems within the northern GOA and define and address the potential causes. If the proposal where only to organize a workshop, reach consensus, define issues to explore, and then explore them using the existing parameterized models and newly developed tools for the Northern Gulf of Alaska, then the proposal is adequate and is technically and scientifically sound. However, the PIs propose to do much more without the detail justification and supporting material (i.e., the ambiguity that was necessary for proposing the workshop is insufficient for justifying the research component of the proposal). In this regard, the PIs propose to develop an ECOPATH/ECOSIM model for the North East Pacific, the geographical extent of which is not explicitly defined, but appears to extend from California northward to British Columbia. Clearly, the PIs are extending the definition of the program area defined in the GEM Program Document. justification is that it is all interconnected, yet this same argument can be extended without bounds. This is not a trivial criticism as significant funds are budgeted towards this endeavor. EVOS review panel must decide whether this is acceptable in the context of the defined program. If the review panel decides that this is acceptable, I would further suggest that the PIs define and justify the model development, how it will be used, what scientific questions/hypothesis and management issues will be targeted. what are the expected outcomes, and how this will be integrated with the other models from nearby ecosystems.

Another weakness in the proposal is that the various defined ecosystems appear to be pursued in isolation of one another, despite the argument that the ecosystems are interconnected. Given that the ecosystems are, and are argued to be, interconnected, the models and model results need to be implicitly or explicitly linked. The PIs acknowledge this and state that they will address patterns across ecosystems, but never state this as an objective, nor do they address how this will be accomplished.

The underlying premise of the proposal is that patterns may be explained by single causes, through a complex series of direct and indirect interactions. To do this, the PIs proposal to use new tools in the EwE software to tease apart the multitude of potential causative factors. Here, again, it is explicitly ignored (but may be implicitly implied) that a multitude of factors could interact in a synergistic fashion to generate observed patterns. This complicates the problem, but I urge the PIs not to ignore this issue and give it some thought (if they haven't already).

It's not clear if the "Examples of approaches for testing specific hypotheses" will be pursued or not. If so, is this funded by another project (Ecosystem dynamics of steller sea lion dynamics and their prey)? If not, it would have been more fruitful to define specific hypotheses that will be addressed through the modeling exercises rather than stating what could potentially be done. This gives me the impression that the direction is not well thought out and/or the PIs are not all the familiar with the problems.

#### Other comments:

What is a "mini-paper"? This requires definition if it's considered a product. How will Type I and Type II errors be "balanced" throughout the analysis? Not clear how the fitting of time series alone will diagnose causes of the observed change when there can be a great deal of uncertainty in parametrizing the lower food web. What are the "other modeling and analytical approaches that will be invited and included in the process"? (top of page 7).

Despite my criticisms, I believe the workshop process and corresponding papers would be productive and could contribute to the generation and dissemination of scientific knowledge. However, the objective proposing to develop an EwE model for the northeast Pacific is not justified and it is uncertain if it would contribute the generation and dissemination of scientific knowledge in the northern Gulf of Alaska. If the PIs have the opportunity to rebut these comments, I urge them to provide the justification and details necessary to evaluate their model development and integration with the other models.

.2. Are the methods as likely to be effective as	3
any others available in achieving the solution?	
	(1-5)
Comments:	
refining the questions to pursue for further an pective systems; and then publishing the results workshop. This approach is just as effective, and pursuing these models in isolation. However, I am the northeastern Pacific model given that there is given for its development and little information to contribution. I am also concerned that the integral independent ecosystems will not be achieved through achieving an important part of the solution, intercent	nalysis and modeling of their s of the exercises defined in the perhaps more effective, than PIs less supportive of the development of insufficient scientific justification of evaluate its potential scientification of the model results for a the methods proposed; thus not
3. Can the solution be achieved with these personnel for the amount of funding requested and	3
within the proposed timeframe? Is it cost effective?	(1-5)
Comments:	
Evaluation of the budget is difficult without a bud however, comment on a few items. Budget is excessi necessary to develop a model for the Northeast Paci Walters and Daniel Pauly are well respected individ no documentation of their involvement in the project salaries. Travel funds are very difficult to evalu want to note non-intuitive travel: Travel from Vanc research"? Travel from Vancouver to Seattle and Na it is good to have a little flexibility in the budg viduals at the workshop (e.g., currently funded)	ve for a workshop. If the PIs feel if fic, this needs to be justified. Car wals in the field, however, there is and thus justification for their ate without justification, so I just ouver to Anchorage for "other naimo? I would also like to add that et to involve unexpected or undeclared

he proposal). One important omission in the budget was the lack of funds for the publication. I think it necessary that the PIs budget funds to pay for the publication costs of the 11 papers. This is common practice and may help alleviate the burden to publish for some contributors.

#### Any other comments:

I started the review of this proposal thinking that it is a good idea and an idea worthy of support. However, I was disappointed in that it seemed to be a proposal for a high cost workshop. Problems include: the science is not well thought out and the technical details are lacking (i.e. what are the scientific/management issues to be explicitly addressed, how will this be achieved, etc), no evidence that the time series data required for the development of North East Pacific model exists (note on page 7,  $3^{\rm rd}$ paragraph, 1st sentence the PIs state "... urged to contribute time series ...". This suggests to me that the time series data, if available, may not be available to the PIs. A letter of support from those with the time series data would have been helpful.), no evidence that the data are available for the development of the proposed ecosystem models (all trophic levels), no letters from potential participants acknowledging interest and support (Table 1), no information on how the analysis from each ecosystems will be integrated into the larger picture (note this isn't even listed as an objective despite its recognized and argued importance, but it is mentioned in a single sentence in the "Procedural Methods"), etc. I don't want to sound to harsh as I do like the workshop approach, but the proposal reads as- we will do a workshop; focus on the Gulf of Alaska, Bering Sea, the Aleutian chain, and the North East Pacific; and publish 11 papers using ECOPATH ECOSIM tools. Not much detail in the science. Such a proposal is sufficient for a workshop (with a smaller budget than proposed here) where the details can be agreed upon and pursued. However, the PIs fail to justify the additional model development proposed and the corresponding budget. This is not only critical for being able to evaluate the proposal, but is also critical given the spatial extent of the new model development appears to fall outside the "fuzzy" geographical range defined by GEM (North Gulf of Alaska).

Explanation of ratings: I gave a rating of 3 in all the above categories as I felt one part of the proposal was very good (workshop), but the other aspect of the proposal was not adequate (lacked sufficient detail to evaluate).

# Exxon Valdez Oil Spill Trustee Council

441 W. 5" Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178

October 28, 2002

Stephen Okkonen UAF. IMS PO Box 757220 Fairbanks, AK 99775

Project 030614 / Monitoring Program for Near-Surface Temperature,

Salinity, and Fluorescence in the Northern Pacific Ocean

Dear Steve:

I am writing to inform you of my preliminary recommendation that the Exxon Valdez Oil Spill Trustee Council fund Project 030614 contingent on submittal of a late report (02614) and resolution of budget questions. I have enclosed a copy of my preliminary recommendation on this project, along with the Scientific and Technical Advisory Committee's recommendation on the project's technical merits. This recommendation is made for public review and may be revised before it is provided to the Trustee Council in late November.

The Trustee Council Office estimate of the overall budget for Project 030614 is \$10,900, including agency general administration of nine percent. You should work from this number in developing a revised budget if needed. The revised budget should be prepared on the standard detailed budget forms and submitted to the Trustee Council Office, Attn: Katharine Miller, by November 12, 2002. (Please submit three paper copies and an electronic copy of the budget.) Enclosed is a list of items considered in the review of your budget which may help you prepare a revised budget.

My preliminary recommendations on all proposals for funding in FY 03 have been incorporated into the Draft Work Plan, which will be available for public review on the Trustee Council's web page (www.oilspill.state.ak.us) about October 25. If you would like a copy of the Draft Work Plan sent to you, please call or e-mail the Trustee Council Office:

> Telephone Toll-free in Alaska Toll-free outside of Alaska E-mail

278-8012 1-800-478-7745 1-800-283-7745

brenda hall@oilspill.state.ak.us

Following a review of any public comments received, as well as comments from the Trustee Council's Public Advisory Committee, I will make a final recommendation to the Council. Council action on the Work Plan is scheduled for November 25, 2002.

Thank you for your interest in the Trustee Council's Gulf Ecosystem Research and Monitoring (GEM) program. If you have any questions about this preliminary recommendation, please call me or Phil Mundy, the Trustee Council's Science Director.

Sincerely,

Molly McCammon
Executive Director

**Enclosure** 

cc: Bill Hauser, ADF&G Liaison

# SPREA IEET B: FY 03 PHASE II WORK PLAN-EXE IVE DIRECTOR'S PRELIMINARY RECOMM....ATION

decades. Fund.

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Ph II Request	FY 03 Ph II Recom.	FY 04 Request	FY 04 Recom.	,
G-030614	Monitoring Program for Near-Surface Temperature, Salinity, and Fluorescence in the Northern Pacific Ocean (FY 03 Phase II)	S. Okkonen/UAF	ADFG	Cont'd FY 03	\$10.9	\$10.9	\$0.0	\$0.0	

This project received \$18,100 under the FY 03 Phase I invitation. In general, this project is using a thermosalinograph and fluorometer, to be installed on a crude oil tanker, to acquire continuous, long-term measurements of the near-surface temperature, salinity, and fluorescence fields along the tanker route between Valdez, Alaska and Long Beach, California. The additional funds requested under Phase II will complete installation of the fluorometer (the thermosalinograph has been installed on the tanker *Polar Alaska*) and allow for several adjustments to the project objectives.

**Project Abstract** 

This is an adjustment to an existing project that is necessary to accommodate unavoidable problems with equipment and logistics. Provision of the requested funding will continue development of a body of sustained observations that are relevant to understanding and detecting changes in ecosystem

components and ecosystem processes over

**STAC Recommendation** 

Executive Director's Preliminary Recommendation

Fund, contingent on submittal of late report (02614 annual). This proposal is an adjustment to a project already funded for FY03 to accommodate problems with equipment and logistics.

## ITEMS CONSIDERED IN REVIEW OF FY 03 PHASE II BUDGETS

- 1. Completeness of budget, especially:
  - a is there a fully detailed budget form for each project year?
  - b is there general adherence to the format and content instructions?
  - c is Trustee-agency GA rate of 9% of project costs included?
- 2. Note the following:

. , .

- a matching funds, if any (amount and source)
- b requests for anything other than closeout funds in FY 04
- c indirect rate for non-Trustee-agency proposers
- 3. For continuing projects:
  - level of funding authorized in FY 02 and projection, at that time, of FY 03 budget. Items budgeted for FY 02 but not implemented should not be funded again in FY 03 unless the proposer can verify that he/she will lapse the "unused" FY 02 funds. May want to review/note FY 01 audit results.
  - b direction given by Trustee Council and/or Chief Scientist in FY 02 Final Work Plan or in subsequent review sessions (e.g., transition to agency funding, close out certain components).
  - c change in project's scope per the Chief Scientist's recommendation (i.e., elimination, revision, or addition of objectives). If a pilot project is seeking expansion, note whether there is adequate information to evaluate the pilot's success.
- 4. Personal Services: Note if number of months appears excessive, e.g. 12 mos. for a close-out and no justification provided. Also note if salary appears excessive relative to scope of work and salaries typically paid agency or university employees for the type of work.
- Travel: Must be budgeted at round-trip economy rates, and must identify name of traveler, destination, and trip purpose. Air or of traveler, destination, and trip purpose.
- 6. Annual Workshop: For PI and co-PI only, travel and per diem for up to 5 days (Jan. 13-17) -- and only if PI/co-PI not located in Anchorage.
- 7. Other EVOS Reviews/Workshops: Only workshop identified so far for FY 03 is lingering oil (Fall 2002).
- 8. Professional Conferences: One each per PI (and co-PI if appropriate) if the PI will be presenting results of his/her EVOS work or attendance at the workshop is integral to the project. Proposal must identify the conference, when and where it will be held, and the PI's role in the conference.
- 9. Manuscript Preparation: Maximum \$1,000 in page costs <u>per project</u> and maximum 1.5 months personnel time <u>per manuscript</u>. Proposal must include subject/title of manuscript, name of peer reviewed journal to which will be

submitted, and when it will be submitted. Page costs should be provided only if manuscript will actually appear in print in FY 03. Note number of manuscripts for which funding support is requested.

- 10. Report Writing: Funding for final reports only (no funds for annual reports, because annual report requirement has been reduced to a 2-page form with no analysis of results).
- 11. Equipment: Note purchases of major new equipment (at a minimum, note everything with unit cost of \$5,000 or more as this is the equipment we are required under TC procedures to track through the annual inventory).
- 12. Indirect Costs: Maintenance and operation of space (i.e., lease costs), office supplies, copying, phones, equipment maintenance and repair, vehicle leasing, software, and training are typically indirect costs (for complete list see p. 27 of Invitation). Such costs should be budgeted for separately only if they are incurred because of a specific project and documentation of the expense is maintained. The documentation must demonstrate to a financial auditor that the expense was directly attributable to the project, and was necessary and reasonable.

By agreement, University of Alaska indirect rate is 25% of all direct costs except equipment for which ownership resides with the university and subcontract costs in excess of \$25,000 (see p. 36 of Invitation for more detail).

13. Community Involvement and TEK: Note funds budgeted.

- 14. Project Management: No funds should be budgeted in the individual project budgets. For FY 03, project management funds have already been approved in Project 030250.
- 15. Other: Note additional, project-specific budget issues that may need to be addressed.

sandra/wkplan/03staffbudll2.wpd

# Exxon Valdez Oil Spill Trustee Council

441 W. 5th Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178



October 30, 2002

David Welch Dept of Fisheries & Oceans Canada Pacific Biological Station Nanaimo, British Columbia V9R 5K6 CANADA

RE:

Project 030606 / Development of Voluntary Observing Ship "Ferry Box" for

the North Pacific

### Dear David:

I am writing to inform you of my preliminary recommendation that the Exxon Valdez Oil Spill Trustee Council not fund Project 030606. I have enclosed a copy of my preliminary recommendation on this project, along with the Scientific and Technical Advisory Committee's recommendation on the project's technical merits.

The Trustee Council received 44 proposals totaling more than \$6 million. The Council has available less than \$2 million for the FY 03 Phase II Work Plan, and it will not be possible to fund all projects proposed.

My preliminary recommendations on all proposals for funding in FY 03 have been incorporated into the Draft Work Plan, which is available for public review on the Trustee Council's web page (www.oilspill.state.ak.us). If you would like a copy of the Draft Work Plan sent to you, please call or e-mail the Trustee Council Office:

> Telephone 278-8012 Toll-free in Alaska 1-800-478-7745 Toll-free outside of Alaska 1-800-283-7745

brenda hall@oilspill.state.ak.us E-mail

Following a review of any public comments received, as well as comments from the Trustee Council's Public Advisory Committee, I will make a final recommendation to the Council. Council action on the Work Plan is scheduled for November 25, 2002.

Thank you for your interest in the Trustee Council's Gulf Ecosystem Research and Monitoring (GEM) program. If you have any questions about this preliminary recommendation, please call me or Phil Mundy, the Trustee Council's Science Director.

Sincerely,

Molly McCammon Executive Director

**Enclosure** 

cc: Pete Hagen, NOAA Liaison

# SPRE, HEET B: FY 03 PHASE II WORK PLAN-EXE TIVE DIRECTOR'S PRELIMINARY RECOMMENDATION

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Ph II Request	FY 03 Ph II Recom.	FY 04 Request	FY 04 Recom.
G-030606	Development of a Voluntary Observing Ship "Ferry Box" for the North Pacific	D. Welch/DFOC	NOAA	New FY 03	\$9.8	\$0.0	\$0.0	\$0.0

#### **Project Abstract**

PICES is supporting development of a self-contained "Ferry Box" oceanographic observing system for deployment on Voluntary Observing Ship vessels, to supplement oceanographic observations being produced by the Continuous Plankton Recorder (CPR). This project will provide bridge funding for the next year to further support this program, which will result in the selection of a self-contained autonomous logging unit to provide a suite of complementary oceanographic observations to the CPR. Work for FY 03 will involve follow-on meetings to select a system and sensors and a decision to either purchase an existing system and begin deployment in the summer of 2004 or to develop a purpose-built system. The development of this system will constitute an important part of an ocean observing system for the North Pacific, and will be applicable to open-ocean commercial ships towing the CPR as well as to coastal ferry systems of Alaska and British Columbia.

#### STAC Recommendation

**Executive Director's Preliminary Recommendation** 

The need for the for this work appears to have been Do not fund based on STAC recommendation. met by preceding and parallel efforts. Previous PICES workshops have covered most aspects of this issue. The GEM program would be interested in receiving proposals in the future that would investigate the sampling design for implementing a ferry box system in the GOA. Do not fund.

Reviewer: 4022 Evaluation due date: Thursday, September 26

Proposal number: 030606

## Title of proposal: Development of a Voluntary Observing Ship "Ferry Box" for the North Pacific

## Principle Investigatgor(s): D. Welch/DFOC

Use the comments section below each question area for discussion of your rating. Use as much space as necessary, and allow the table to expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak.us no later than the end of business on Thursday, September 26. The subject line of the e-mail to me should read, "030606 review".

1. Does the proposal provide an understanding of

Rating1

1. Does the proposal provide an understanding of	
the problem, is it technically and scientifically	(4)
sound, and will it contribute to the generation	(=/
and dissemination of scientific knowledge in the	
topic area?	(1-5)
Comments:	
This type of planning meeting is critical to bring	-
choosing such a system. I would suggest that the	
be invited to participate <a href="http://www.jcommops.org/s">http://www.jcommops.org/s</a>	
the use of the international VOS community in	a coordinated fashion so as not to
overburden an already busy VOS network.	
2. Are the methods as likely to be effective as	(4)
any others available in achieving the solution?	
	(1-5)
Comments:	(2-2)
Yes, but I emphasize that there should be more interested are many agencies and institutions present specialized sampling requirements. Most of these just utilized for pure research. The operational the research requirement has departed; therefore in this scientific community not inadvertantly step of still another. This is why there must be consutilize a VOS fleet.	ently utilizing the VOS for highly requirements are "operational" and not requirement will still be there after it is very important that we as part of on other program while trying to start
3. Can the solution be achieved with these personnel for the amount of funding requested and within the proposed timeframe? Is it cost	(4)
effective?	(1-5)
L	

A rating of 1 on question means emphatically "no," and a score of 5 means emphatically "yes"; scores of 2-4 mean "maybe." The reviewer is the best judge of the meaning of "Accurate" and "Adequate," but accurate may mean the proposal shows a clear understanding of what kind of information and research are most needed in this field at this time, and adequate may mean that the appropriate scientific literature is used to support the arguments, and/or that the proposal is well written.

•		Commer	its:				i
	seems adequate to sponser fund their own travel.	this	preliminary	meeting,	especially	if	other

**i** 

Reviewer: 3863 Evaluation due date: Thursday, September 26

Proposal number: 030606

Title of proposal: Development of a Voluntary Observing Ship "Ferry Box" for the North Pacific

Principle Investigatgor(s): D. Welch/DFOC

Use the comments section below each question area for discussion of your rating. Use as much space as necessary, and allow the table to expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak.us no later than the end of business on **Thursday**, **September 26**. The subject line of the e-mail to me should read, "030606 review".

	Rating <sup>1</sup>
1. Does the proposal provide an understanding of	
the problem, is it technically and scientifically	
sound, and will it contribute to the generation	5
and dissemination of scientific knowledge in the	
topic area?	(1-5)

Comments: The use of vessels of opportunity is an extremely ecomonical way to collect data for a long term monitoring program. The author of this proposal has clearly laid out the reasons why such a program would very effectively provide baseline data covering a large extent of the Pacific Ocean.

2. Are the methods as likely to be effective as any others available in achieving the solution?	4
any deners available in denieving one belacion.	(1-5)

Comments: The results from the data collected within the "Ferry Box" will be very useful in a wide array of temporal and spatial scales and would also be very useful to a variety of scientific disciplines. I do not believe that there is a more economically effective way to accumulate the kind of comprehensive data set that the proposed surveys will generate. I do fear that the proposed instrumentation will require regular calibrations and possible servicing while at sea. The costs involved with the periodic calibrations may be prohivitely expensive to gaurantee quality data over long time periods so the final proposal for this project should make sure to include these costs into the proposed budget.

3. Can the solution be achieved with these personnel for the amount of funding requested and	5
within the proposed timeframe? Is it cost	(1-5)
effective?	(1-3)

Comments: The organization of as many researchers as possible is absolutely critical for this program to move forward and the funding requested seems to accurately reflect the expenses required over the projected timeline.

Any other comments: This is a sound proposal, one which, if funded to completion, would accelerate our understanding of the physical and biological couplings in the Gulf of Alaska and Northern Pacific Ocean. It will require a significant effort from a variety of researchers of diverse backgrounds in order to successfully operate which is the purpose of this initial proposal. During this project's first few years, I believe that the data collected may lead to many scientific breakthroughs, but the project's legacy will ultimately lie in the quality of data that is archived and made available to all. For this reason, I suggest that the data archival and timely dissemination should not be looked over in the talks which will ensue should this proposal be funded.

A rating of 1 on question means emphatically "no," and a score of 5 means emphatically "yes"; scores of 2-4 mean "maybe." The reviewer is the best judge of the meaning of "Accurate" and "Adequate," but accurate may mean the proposal shows a clear understanding of what kind of information and research are most needed in this field at this time, and adequate may mean that the appropriate scientific literature is used to support the arguments, and/or that the proposal is well written.

Reviewer: 109

Review Proposal Number 030606

Title of Proposal: Development of a voluntary observing ship "Ferry Box"

for the north Pacific.

Does the proposal provide and understanding of the problem, is it technically and scientifically sound, and will it contribute to the generation and dessemination of scientific knowledge in the topic area?

The investigators are competent and could perform the proposed tasks.

This is an inexpensive proposal that would provide funds for three meetings. The purpose of the meetings is to identify and discuss strategies for implementing ships of opportunity with a sea chest for underway sampling of oceanographic information and a CPR. The primary objective of these meetings is to gather information to write a formal proposal for EVOS.

In my opinion it would be a conflict of interest for EVOS to fund meetings of scientists with the expressed intent of writing proposals to

EVOS. Unless EVOS intends to extend this type of funding to interested parties across the nation I do not recommend funding.

#### Rating = 1

2. Are the methods likely to be effective as any others available in achieving the solution?

If EVOS did fund this proposal the meetings could be held in the U.S. where travel expenses would be far less. I question the rationale for a meeting in China.

#### Rating = 3

3. Can the solution be achieved with these personnel for the amount of funding requested and within the proposed time frame.

### Rating = 5

This is not to suggest that the idea of placing CPRs and sea chests on ships of opportunity is a bad idea. I endorse this project and I believe good science would come from the project.

Proposal Evaluation Form

Reviewer: 4042 Evaluation due date: Thursday, September 26

Proposal number: 030606

Title of proposal: Development of a Voluntary Observing Ship "Ferry Box" for the North Pacific

Principle Investigatgor(s): D. Welch/DFOC

and within the proposed timeframe? Is it cost

effective?

Use the comments section below each question area for discussion of your rating. Use as much space as necessary, and allow the table to expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak.us no later than the end of business on **Thursday**, **September 26**. The subject line of the e-mail to me should read, "030606 review".

	1
	Rating <sup>1</sup>
1. Does the proposal provide an understanding	,
of the problem, is it technically and	
scientifically sound, and will it contribute to	3
the generation and dissemination of scientific	
knowledge in the topic area?	(1-5)
Comments: This proposal tells that the interlinks	between the climatic change, the
marine pollution and ecological changes. Based of	on the reference papers, those links
are very likely to exist in the North Pacific and	the use of VOS equipped with
apparatuses such as CPR and others listed in the	appendixes are the best available
tools. This proposal is thus evaluated as techni	cally and scientifically sound. The
products will contribute to the ocean and environ	mental science if the program can be
continued decadally. However, this proposal only	refers to the references without
showing the hypothesis or snenario of the changes	that is presumed to be for the
Pacific. To make the proposal more self-contain	
schedule of this VOS program should be shown, no	
are.	• • •
2. Are the methods as likely to be effective	4
as any others available in achieving	
the solution?	(1-5)
Comments: The VOS and the measureing methods spec	
best available tool for the capability of graspin	
marine variables for long-term period. Results w	
operations, interval and duration of measurements	
automonous or mannual, and etc. This proposal doe	
because it is for the phase of seeking a 'bridge	
	lunding, to provide the ground to
discuss the acutual way.  3. Can the solution be achieved with these	
1	3
personnel for the amount of funding requested	

Comments: Use of VOSs is undoutedly cost effective compared to any other observation platform. However, to be frankly, I (reviewer) cannot evaluate for this question because this proposal shows no actual amount of funding, personnel nor time frame. The amount of \$9 in this proposal seems to be a symbolic one as a bridge funding.

(1-5)

A rating of 1 on question means emphatically "no," and a score of 5 means emphatically "yes"; scores of 2-4 mean "maybe." The reviewer is the best judge of the meaning of "Accurate" and "Adequate," but accurate may mean the proposal shows a clear understanding of what kind of information and research are most needed in this field at this time, and adequate may mean that the appropriate scientific literature is used to support the arguments, and/or that the proposal is well written.

Any Other Comments: The success of the long-term, mission oriented work such as this matter, the PI's responsibility is quite large in terms of management besides the science as was written in VIII-A. (Page 10). This proposal seems to state that some 'lead PI will take over the temporary PI. Such a 'lead PI' should be immediately defined to show the reliability.

# Exxon Valdez Oil Spill Trustee Council

441 W. 5th Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178



October 30, 2002

Randall Davis, PhD TX A&M Univ at Galveston, Marine Biology 5007 Avenue U Galveston, TX 77553

RE: Project 030638 / Mapping Subtidal Habitats in Prince William Sound

## Dear Randy:

I am writing to inform you of my preliminary recommendation that the *Exxon Valdez* Oil Spill Trustee Council not fund Project 030638. I have enclosed a copy of my preliminary recommendation on this project, along with the Scientific and Technical Advisory Committee's recommendation on the project's technical merits.

The Trustee Council received 44 proposals totaling more than \$6 million. The Council has available less than \$2 million for the FY 03 Phase II Work Plan, and it will not be possible to fund all projects proposed.

My preliminary recommendations on all proposals for funding in FY 03 have been incorporated into the Draft Work Plan, which is available for public review on the Trustee Council's web page (<a href="https://www.oilspill.state.ak.us">www.oilspill.state.ak.us</a>). If you would like a copy of the Draft Work Plan sent to you, please call or e-mail the Trustee Council Office:

Telephone 278-8012
Toll-free in Alaska 1-800-478-7745
Toll-free outside of Alaska 1-800-283-7745
E-mail brenda hall@oilspill.state.ak.us

Following a review of any public comments received, as well as comments from the Trustee Council's Public Advisory Committee, I will make a final recommendation to the Council. Council action on the Work Plan is scheduled for November 25, 2002.

Thank you for your interest in the Trustee Council's Gulf Ecosystem Research and Monitoring (GEM) program. If you have any questions about this preliminary recommendation, please call me or Phil Mundy, the Trustee Council's Science Director.

Sincerely,

Molly McCammon Executive Director

Enclosure

cc: Pete Hagen. NOAA Liaison

#### HEET B: FY 03 PHASE II WORK PLAN-EXE \_ TIVE DIRECTOR'S PRELIMINARY RECOMMENDATION SPRE

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Ph II Request	FY 03 Ph II Recom.	FY 04 Request	FY 04 Recom.
G-030638	Mapping Subtidal Habitats in Prince William Sound	R. Davis/Texas A&M	NOAA	New FY 03	\$114.9	\$0.0	\$0.0	\$0.0

### **Project Abstract**

This project will use a suite of techniques (side scan sonar, sub-bottom profiling, radioisotope geochronology, with this proposal. The commitment of PI time for and benthic community sampling) to map physical and biological habitats in subtidal (10-100 m deep) benthic communities in Simpson Bay, located in eastern Prince William Sound. Mapping subtidal habitats is an essential first step in developing the GEM nearshore monitoring program. In addition, the project will develop a conceptual model describing the intensity, frequency and types of natural processes that lead to physical disturbance in subtidal habitats and benthic communities. The GIS maps of subtidal physical and biological habitats and data on species diversity, distribution and abundance produced by this project will be used to evaluate Simpson Bay as a future long-term monitoring site that can be used to detect environmental change. In addition, the maps and data will be used to evaluate this approach at other nearshore monitoring sites.

### STAC Recommendation

There are methodological and budgetary issues this project is not evident in the budget. The method for classifying bottom types has been questioned. The process for site selection in relation to the GEM program has not been specified. Do not fund.

#### **Executive Director's Preliminary Recommendation**

Do not fund based on STAC recommendation.

Reviewer: 1838 Evaluation due date: Thursday, September 26

Proposal number: 030638

Title of proposal: Mapping Subtidal Habitats in Prince William Sound Principle Investigatgor(s): R. Davis/Texas A&M

Use the comments section below each question area for discussion of your rating. Use as much space as necessary, and allow the table to expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak.us no later than the end of business on Thursday, September 26. The subject line of the e-mail to me should read, "030638 review"

	Rating <sup>1</sup>
1. Does the proposal provide an understanding of the problem, is it technically and scientifically sound, and will it contribute to the generation and dissemination of scientific knowledge in the topic area?	I rate this work at "3" in Simpson Bay and "5" if the site is changed to North end of Montague Island or Gravina Bay
Comments: The sites that are most important to the at risk in PWS are the Zaikof Bay-Green Island-Port Island, and the Knowles Head to St Mathews Bay area expertise and technology to classifying and mapping data were made available in electronic maps to OSRI	Chalmers area of North Montague of Gravina Bay. Applying the authors these areas would be useful if this

Are the methods as likely to be effective as I rate the methods as "2" as the any others available in achieving the solution? proposal stands and "5" if video sampling is added to classify the acoustic signals of bottom type

The acoustic methods are adequate to accomplish the task but the proposed Comments: discrete sampling for classifying the bottom types is inadequate. I would ask the authors to add a towed or ROV video to help interpret bottom types observed via acoustics.

3. Can the solution be achieved with these personnel for the amount of funding requested and within the proposed timeframe? Is it cost effective?

I rate the cost-effectiveness of this work at "4" since costs are low but they maybe too low with respect to the amount of bottom classifycation work that is needed to ground truth the acoustics

This is a one month effort by three experienced individuals, and six months of Comments: graduate student support. If the authors can deliver accurate electronic maps in this time frame for this cost, I believe that it is quite efficient. I do have some concern over the use of unidentified graduate students for 2/3rds of this work. The relocation of this work to the larger areas of North Montague or Gravina Bay and the addition of video analysis will significantly increase the work effort but the products would be useful to OSRI and PWSSC. I would double the authors budget to add video and conduct the work at other sites. Also, I would ask that one full time person to be responsible for this product.

Any other comments: I like the authors expertise and their ingenuity to obtain a free charter is significant. I do not believe that the bottom types can be adequately classifyied by the proposed techniques and since this is the true benefit of having the bottom maps, I feel that the authors should be given the opportunity to add video sampling methods. If funded, I would require that the authors to make a presentation of their work at the PWSSC-OSRI to enhance research and monitoring program coordination.

A rating of 1 on question means emphatically "no," and a score of 5 means emphatically "yes"; scores of 2-4 mean "maybe." The reviewer is the best judge of the meaning of "Accurate" and "Adequate," but accurate may mean the proposal shows a clear understanding of what kind of information and research are most needed in this field at this time, and adequate may mean that the appropriate scientific literature is used to support the arguments, and/or that the proposal is well written.

### Proposal Evaluation Form

Reviewer: 48

Evaluation due date: Thursday, September 26

Proposal number: 030638

Title of proposal: Mapping Subtidal Habitats in Prince William Sound inciple Investigatgor(s): R. Davis/Texas A&M

Use the comments section below each question area for discussion of your rating. Use as much space as necessary, and allow the table to expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak.us no later than the end of business on Thursday, September 26. The subject line of the e-mail to me should read,

	Rating <sup>1</sup>
1. Does the proposal provide an understanding of	
the problem, is it technically and scientifically	
sound, and will it contribute to the generation	5
and dissemination of scientific knowledge in the	
topic area?	(1-5)
Comments: Overall I thought that the proposed sco	pe of the work, the methods and
protocols to be used and evaluated, and the objec	tives of developing baseline data sets
for long term monitoring were well stated and ext	remely appropriate in support of GEM
objectives. I view the proposed work as essentia	l to establishing long term monitoring
programs with high resolution baseline data sets	as a starting point.
2. Are the methods as likely to be effective as	5
any others available in achieving the solution?	3
any others available in achieving the solution:	
	(1-5)
Comments: Most of the techniques proposed for map	oing the physical and biological
habitats are established in the literature as being	ng relatively dependable. With this
habitats are established in the literature as being	ng relatively dependable. With this
habitats are established in the literature as being	ng relatively dependable. With this
habitats are established in the literature as being	ng relatively dependable. With this
habitats are established in the literature as being group of scientists, probablities for success are	ng relatively dependable. With this
habitats are established in the literature as beingroup of scientists, probablities for success are	ng relatively dependable. With this very high.
habitats are established in the literature as being group of scientists, probablities for success are  3. Can the solution be achieved with these	ng relatively dependable. With this
habitats are established in the literature as beingroup of scientists, probablities for success are	ng relatively dependable. With this very high.

with the proposed technologies, and the well planned logistics, the proposed objectives should be met both in terms of the products and the schedule. However, no one can fully plan for all potential weather or equipment problems that might arise in this environment.

It appears to be a very essential piece of applied research that Any other comments: will provide baseline data sets and protocols for future mapping applications in the marine environment of PWS. I srongly support funding for the proposal.

A rating of 1 on question means emphatically "no," and a score of 5 means emphatically "yes"; scores of 2-4 mean "maybe." The reviewer is the best judge of the meaning of "Accurate" and "Adequate," but accurate may mean the proposal shows a clear understanding of what kind of information and research are most needed in this field at this time, and adequate may mean that the appropriate scientific literature is used to support the arguments, and/or that the proposal is well written.

# Exxon Valdez Oil Spill Trustee Council

441 W. 5th Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178



October 30, 2002

Glenn Juday, PhD Forest Science Dept, UAF PO Box 757200 Fairbanks, AK 99775-7200

RE:

Project 030661 / Integrated biodiversity and Natural History of Green

Island: A Monitoring Udate

#### Dear Glenn:

I am writing to inform you of my preliminary recommendation that the *Exxon Valdez* Oil Spill Trustee Council not fund Project 030661. I have enclosed a copy of my preliminary recommendation on this project, along with the Scientific and Technical Advisory Committee's recommendation on the project's technical merits.

The Trustee Council received 44 proposals totaling more than \$6 million. The Council has available less than \$2 million for the FY 03 Phase II Work Plan, and it will not be possible to fund all projects proposed.

My preliminary recommendations on all proposals for funding in FY 03 have been incorporated into the Draft Work Plan, which is available for public review on the Trustee Council's web page (<u>www.oilspill.state.ak.us</u>). If you would like a copy of the Draft Work Plan sent to you, please call or e-mail the Trustee Council Office:

Telephone 278-8012
Toll-free in Alaska 1-800-478-7745
Toll-free outside of Alaska 1-800-283-7745
E-mail brenda hall@oilspill.state.ak.us

Following a review of any public comments received, as well as comments from the Trustee Council's Public Advisory Committee, I will make a final recommendation to the Council. Council action on the Work Plan is scheduled for November 25, 2002.

Thank you for your interest in the Trustee Council's Gulf Ecosystem Research and Monitoring (GEM) program. If you have any questions about this preliminary recommendation, please call me or Phil Mundy, the Trustee Council's Science Director.

Sincerely,

Molly McCammon Executive Director

**Enclosure** 

cc: Bill Hauser, ADF&G Liaison

#### **DATION** SPRE! HEET B: FY 03 PHASE II WORK PLAN-EXE **FIVE DIRECTOR'S PRELIMINARY RECOMM**

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Ph II Request	FY 03 Ph II Recom.	FY 04 Request	FY 04 Recom.
G-030661	Integrated Biodiversity and Natural History of Green Island: A Monitoring Update	G. Juday/UAF	ADFG	New FY 03	\$149.0	\$0.0	\$0.0	\$0.0

## **Project Abstract**

Green Island is an established Forest Service Research Green Island is an established U.S. Forest Service Do not fund based on STAC recommendation. Natural Area (RNA) within the North Montague Island biological "hot spot" ranked as "highest priority" for conservation. The Exxon Valdez oil spill occurred during as "highest priority" for conservation. This proposal the process of RNA documentation and imposed costs on the University of Alaska Fairbanks and the US Forest funding from USFS. It appears to duplicate some Service for analysis of damage and continued RNA suitability of the site. This project will update forest, shoreline, and intertidal monitoring plots, increase the depth of biodiversity documentation of this center of diversity, and publish a well-illustrated, in-depth report describing environmental and biodiversity features of the area. The publication will be the fifth in the Alaska RNA series, and will draw upon site documentation/monitoring in 1986, 1989, 1990, 1997, and 2003. The RNA report is a synthesis that will provide a reference so that the public and current and future users of the RNA can better understand the interacting watershed/marine /physical and plant/animal components of the area.

## STAC Recommendation

(USFS) Research Natural Area (RNA) within the North Montague Island biological "hot spot" ranked would be stronger if there were partnering and/or activities that USFS is already doing. Do not fund.

## Executive Director's Preliminary Recommendation

Reviewer: 3822 Evaluation due date: Thursday, September 26

Proposal number: 030661

Title of proposal: Integrated Biodiversity and Natural History of Green Island: A Monitoring Update

Principle Investigatgor(s): G. Juday/UAF

Use the comments section below each question area for discussion of your rating. Use as much space as necessary, and allow the table to expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak.us no later than the end of business on **Thursday**, **September 26**. The subject line of the e-mail to me should read, "030661 review".

	Rating'
1. Does the proposal provide an understanding of the problem, is it technically and scientifically sound, and will it contribute to the generation and dissemination of scientific knowledge in the	Overall, 3. If the statement is broken into its 3 component parts: 3, 2, and 4.
topic area?	(1-5)
Comments: The author provides sound rationale for	selecting Green Island as an

Comments: The author provides sound rationale for selecting Green Island as an intensively monitored site, however he doesn't make clear whether he is starting the monitoring effort or simply preparing for future monitoring. While the CVs of the contributors document their technical expertise, the proposal doesn't adequately convey said expertise to the reader. I've seen some of the other RNA reports and they do provide a wide variety of detailed information, with plenty of figures and photos, in a reader-friendly format.

2. Are the methods as likely to be effective as	2
any others available in achieving the solution?	
	(1-5)

Comments: One of the biggest pitfalls of monitoring programs is to begin amassing data without the long-term plan (e.g. methods, frequency of sampling, intensity of sampling, preliminary power analyses regarding ability to detect change) already in place.

Consequently, early data is rendered anecdotal by the eventual development of long-term plans. I see the need for a larger monitoring framework to be developed before individual sites can be studied. In this case, many of the species, habitat types, and communities even, are already known to exist in that part of the Sound, so perhaps work can be postponed until the GEM monitoring plans are developed. Some of the historical data from Green Island should certainly play a role in the development of the plans, so that it remains useful (e.g. pre-earthquake data mentioned in the proposal). The terrestrial work mentioned falls outside my area of expertise, but I would think that the monitoring issues would be the same as for the marine environment.

3. Can the solution be achieved with these personnel for the amount of funding requested and within the proposed timeframe? Is it cost effective?

Overall, 3.5. If the statement is broken into its 3 component parts:

3, 5, and 2.

(1-5)

Comments: This project can be achieved with the funds requested, however I have reservations in that perhaps it could be achieved with less. The Foster contract is not adequately fleshed out, perhaps a more detailed budget would explain why it takes 16.8K for a report on invertebrates at a few sites. The Hansen contract seems even more excessive. I realize that overhead costs are unavoidable, but I don't think the PI would spend 3.5 months working exclusively on a report chapter. I also balk at the laptop/software, and communication costs (isn't comunication included in overhead?). These reflect my personal biases, as I am unfamiliar with the Trustee Council's idea on appropriate requests.

Perhaps the most pressing issue regarding the funding of this proposal is that I feel it falls under research and monitoring that should be done by other agencies and combined with the core GEM program. The Green Island RNA work is a Forest Service project begun prior to the oilspill and should be funded accordingly.

A rating of 1 on question means emphatically "no," and a score of 5 means emphatically "yes"; scores of 2-4 mean "maybe." The reviewer is the best judge of the meaning of "Accurate" and "Adequate," but accurate may mean the proposal shows a clear understanding of what kind of information and research are most needed in this field at this time, and adequate may mean that the appropriate scientific literature is used to support the arguments, and/or that the proposal is well written.

'In other comments: Green Island is undoubtably an important area in Prince William Sound. The Green Island RNA site might be a good choice for a GEM long term monitoring site, or not. I think GEM should identify core sites and develop monitoring protocols before funding site specific work. Perhaps the contract portions of this project should be funded in the future if the RNA winds up being a key location. The RNA synthesis report should be done, but, as mentioned previously, with founder agency funds.

#### Proposal Evaluation Form

Reviewer: 3747 Evaluation due date: Thursday, September 26

Proposal number: 030661

Title of proposal: Integrated Biodiversity and Natural History of Green Island: A Monitoring Update

Principle Investigatgor(s): G. Juday/UAF

Use the comments section below each question area for discussion of your rating. Use as much space as necessary, and allow the table to expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak.us no later than the end of business on Thursday, September 26. The subject line of the e-mail to me should read, "030661 review".

	Rating <sup>1</sup>
1. Does the proposal provide an understanding of	
the problem, is it technically and scientifically	
sound, and will it contribute to the generation	4
and dissemination of scientific knowledge in the	
topic area?	(1-5)

Comments: According to the Forest Service Manual (FSM 4063), Research Natural Areas (RNA's) are lands designated for such purposes as maintaining biological diversity, conducting non-manipulative research, monitoring baseline conditions, and fostering education. The proposed work well serves the last three of these purposes: 1) By characterizing the biophysical features of the area, the work may help stimulate future research in the Green Island area. The information would help prospective researchers identify the spectrum of research opportunities available in the area; 2) The monitoring of forest and shoreline plots and transects as proposed will be invaluable towards understanding the relationship of climatic changes on vegetation dynamics (forest) and in tracking recovery since the 1989 oil spill (shoreline); and 3) The publication of the RNA report proposed would be a valuable addition to the educational literature describing features of natural areas within Alaska.

2. Are the methods as likely to be effective as any others available in achieving the solution?	4
	(1-5)

Comments: The forest and shoreline methods are consistent with those used in the PI's earlier work in the area. Maintaining this consistency is desirable. Further, the tree ring work proposed is consistent with accepted dendroclimatological techniques and should provide statistically credible insights on tree growth and past climates at Green Island. The methodology for the studies on marine algae and invertebrates appears likely to effectively and efficiently expand the description of biodiversity features in the marine areas adjacent to the RNA.

3. Can the solution be achieved with these	4
personnel for the amount of funding requested and within the proposed timeframe? Is it cost	
effective?	(1-5)

A rating of 1 on question means emphatically "no," and a score of 5 means emphatically "yes"; scores of 2-4 mean "maybe." The reviewer is the best judge of the meaning of "Accurate" and "Adequate," but accurate may mean the proposal shows a clear understanding of what kind of information and research are most needed in this field at this time, and adequate may mean that the appropriate scientific literature is used to support the arguments, and/or that the proposal is well written.

Comments: The personnel identified are all highly qualified to conduct the proposed work. All have on site or Prince William Sound experience with the methods proposed. The timeframe and proposed budget appears realistic and cost effective.

#### other comments:

Since the proposed work will characterize features of both upland and nearshore habitats, it may provide valuable baseline information for futures studies examining the linkage between terrestrial and marine systems.

Items for which I have concern/disagreement with the proposal are:

- In many places in the proposal, biodiversity features present below mean high tide are included as "occurring at Green Island RNA". The USDA Forest Service designation of the Green Island RNA sets the lower boundary of the RNA as mean high tide. Therefore, subtidal communities and organisms that do not occur above mean high tide SHOULD NOT be referred to as occurring in the RNA.
- Table 1 equates Designated Wilderness with RNA. Such is not the case; Congress designates Wilderness while RNA is a USDA Forest Service administrative designation (the level of authority of the two designations is different). Further, management objectives/allowed activities differ between Wilderness and RNA. The two designations should not be equated.
- On page 9 there is reference to a Forest Service fund match to provide Foster and Hansen's logistical support. To my knowledge, no such match from the USDA Forest Service has been finalized/established.
- On page 18 there is reference to Green Island RNA including portions of Green Island and all of Little Green Island. I suggest this reference be expanded to include The Needle (since The Needle is also part of the RNA).

verall assessment is that the proposed work would be a valuable contribution to our knowledge of biological diversity within Alaska.

Reviewer: 3862 Evaluation due date: Thursday, September 26

Proposal number: 030661

Title of proposal: Integrated Biodiversity and Natural History of Green Island: A Monitoring Update

Principle Investigatgor(s): G. Juday/UAF

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	Rating <sup>1</sup>
1. Does the proposal provide an understanding of	
the problem, is it technically and scientifically	
sound, and will it contribute to the generation	3
and dissemination of scientific knowledge in the	
topic area?	(1-5)

Comments:

In the Need for the Project section of this proposal, the authors state that the Green Island RNA can provide a record of pre-spill intertidal life; is an area dedicated to monitoring the long-term recovery from the oil spill, and; is a site sutiable for detailed studies of the linkage between terrestrial and marine ecosystems on small islands. Of these, only the third seems to truly be identified in the proposal. There is little discussion of how the studies can provide oil spill recovery information through the study design. I have doubts that with the low number of sites and replicability on each site, that oil spill effects could truly be teased out from other natural variability. However, to be fair to the authors, they list only the following three as the purpose of this specific project:

- Synthesize and interpret the results of previous RNA work at Green Island...
- · Intensify and extend the documentation of biodiversity resources at Green Island...
- Re-monitor and interpret forest plots, and collect tree-rings from older trees...

Given the above three goals, this project provides the background and arguments that justify the value of the data to be obtained. A synthesis of the data obtained from their past visits to these island plots, as well as the data obtained from their future visits, would provide potentially invaluable data for determining whether these sites should or could be integrated into a long-term GEM nearshore program, and whether their methods of linking upland and nearshore habitats should be adopted as a goal of the nearshore GEM. I question, though, whether the statistical power exists within this study to do any comparisons of upland and interidal habitats: the proposers state that for the intertidal transect data "sample sizes are low enough that [only] simple mean and variance comparisons will be made" so I wonder how they will be able to statistically compare the results from the forest plots with those from the interitdal habitats.

If the goals outlined in the proposal are met, I believe that the data for these specific sites would contribute to our scientific knowledge of the topic area (watershed and nearshore areas).

nearshore areas,.	
2. Are the methods as likely to be effective as	3
any others available in achieving the solution?	
	(1-5)

<sup>&</sup>lt;sup>1</sup> A rating of 1 on question means emphatically "no," and a score of 5 means emphatically "yes"; scores of 2-4 mean "maybe." The reviewer is the best judge of the meaning of "Accurate" and "Adequate," but accurate may mean the proposal shows a clear understanding of what kind of information and research are most needed in this field at this time, and adequate may mean that the appropriate scientific literature is used to support the arguments, and/or that the proposal is well written.

Comments: This question is difficult to answer, because whether this project is "as likely to be effective as any others available" is really at the heart of the whole GEM nearshore program's on-going debate; a nearshore program design has not been finalized that identifies exactly what we're trying to achieve with any method... It is my understanding that there is still significant work to be done this winter on defining what/where/how/when we will monitor nearshore areas for GEM, although there was agreement some projects to move forward this year. This project is probably as effective as er methods in achieving the specific solution(s) (solution? Do you mean objectives?) that are identified in this proposal, but I'm not sure that it is the most effective way of achieving the solution (objective) of the nearshore GEM.

There are significant overlaps, though, of this proposed project with some of the needs of the EVOS Trustees identified in the RFP and the proposers have done a good job of describing those in Section II.B. Rationale/Link to Restoration. In addition, there has been some agreement or consensus among nearshore planners on where we should move forward (identified in the Nearshore Planning Document "Detecting and understanding Change in Nearshore Environments: Planning for Habitat Mapping in the Gulf of Alaska") and this proposed project can be tied to some of those. The Nearshore Planning Document recognized a "need for mapping of geomorphology, biological habitats (e.g. mussel, eelgrass, kelp beds and major biotic assemblages), and biological "hotspots"..." This proposal gives strong support for identifying this area as a biological hotspot and references the report "Prince William Sound: Biological Hot Spots Workshop Report" which did identify an area incorporating Green Island as one the the highest priority areas.

I have no doubts that the taxonomic methods used by these researchers will be as affective as any in producing biodiversity data for those sites identified. However, how well the biodiversity at those sites would reflect those types of habitats, etc...have not been answered. I also do not have a feel for how representative these areas could be as a NaGISA site. I would recommend that if this project moved forward, the PIs be required to coordinate with Dr. Konar on her proposed project #G-030666 "Alaska Natural Geography in Shore Areas; An initial field project fo the Census of Marine Life" and that discussions take place to determine whether the intertidal sampling could correlate with those used for Carl Schoch's High Resolution Mapping of the Intertidal and Shallow

idal Shores in Kachemak Bay . The methods described in this proposal limit the rtidal sampling to a 3 meter vertical swath along a length of the intertidal zone, which means that a significant portion of the intertidal zone is missed.

3. Can the solution be achieved with these personnel for the amount of funding requested and within the proposed timeframe? Is it cost effective?

(1-5)

Comments: I believe that the project personnel encompass the range of expertise required to carry out the goals of the project; forest research, intertidal invertebrates, and intertidal algae. These scientists have extensive experience in Alaska and, specifically, in this particular project area. Looking at the budgets, I think the proposed costs are fair and, in some cases, seem too low for what is required of the researcher (e.g. Nora's budget seems low for what would be required for her to fulfill the tasks outlined in the proposal; it is also difficult to determine exactly how her time is to be allocated for the project based on the way her portion of the subcontracted budget is presented.)

The total project budget is, unfortuantely, increased by having to calculate overhead on overhead (UAF overhead on subcontract to U of O total which already has overhead factored in). However, for the most part, the added overhead is only 5% for a significant portion of that budget.

Overall, the budget seems reasonable to update the data with revisits to the plots and to compile the information into an integrated report that includes biodiversity data.

#### Any other comments:

I wish that the scientists had more closely tied their proposal to the specifics identified in the Nearshore Planning Document. Although the specifics of a nearshore plan were not agreed upon at the Nearshore Planning Meeting last spring, there was significant discussion regarding the use of low angle rocky benches as one type of habitat I couldn't tell from the proposal whether any of the intertidal sites represent a low-angle rocky bench. Also, since a major focus of the proposal was for biodiversity determinations, it would have been nice to see a stronger effort to ensure that data gathering methods coordinate with those of the NaGISA and with the high resolution mapping project in Kachemak Bay. The Green Island sites might be considered for inclusion in the final GEM Nearshore Plan, especially if the sampling methods can be modified to fulfill the overall GEM goals, without harming the data needs for the RNA.

Ultimately, I believe that this proposed project shows potential as a way to begin understanding the links between terrestrial and nearshore areas, and potentially links to larger oceanographic/weather patterns. However, I think that it may be premature to determine whether these sites should be a permanent part of the GEM program. As a standalone project, it could provide the data that could be used to determine whether this approach (i.e. linking terrestrial or upland habitats to nearshore enviornments via tree ring data) should or could be a part of the long-term nearshore plan and whether the habitats included in the study could be representative of those identified as part of the long-term nearshore plan.

# Exxon Valdez Oil Spill Trustee Council

441 W. 5" Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178



October 30, 2002

Kenneth Brooks 664 Old Eaglemount Road Port Townsend, WA 98368-9774

Jeff Hetrick PO Box 7 Moose Pass, AK 99631

Patty Brown-Schwalenberg Chugach Regional Resources Commission 4201 Tudor Centre Dr., Suite 300 Anchorage, AK 99508

RE: Project 030632 / Investigations into the Decline of Razor Clams in the Cordova Area

Dear Jeff, Ken, and Patty:

I am writing to inform you of my preliminary recommendation that the *Exxon Valdez* Oil Spill Trustee Council not fund Project 030932. I have enclosed a copy of my preliminary recommendation on this project, along with the Scientific and Technical Advisory Committee's recommendation on the project's technical merits.

The Trustee Council received 44 proposals totaling more than \$6 million. The Council has available less than \$2 million for the FY 03 Phase II Work Plan, and it will not be possible to fund all projects proposed.

My preliminary recommendations on all proposals for funding in FY 03 have been incorporated into the Draft Work Plan, which is available for public review on the Trustee Council's web page (<u>www.oilspill.state.ak.us</u>). If you would like a copy of the Draft Work Plan sent to you, please call or e-mail the Trustee Council Office:

Telephone Toll-free in Alaska Toll-free outside of Alaska E-mail 278-8012 1-800-478-7745 1-800-283-7745

brenda hall@oilspill.state.ak.us

Following a review of any public comments received, as well as comments from the Trustee Council's Public Advisory Committee, I will make a final recommendation to the Council. Council action on the Work Plan is scheduled for November 25, 2002.

Thank you for your interest in the Trustee Council's Gulf Ecosystem Research and Monitoring (GEM) program. If you have any questions about this preliminary recommendation, please call me or Phil Mundy, the Trustee Council's Science Director.

Sincerely,

Molly Mceammon Executive Director

Enclosure

cc: Pete Hagen, NOAA Liaison

Mely Mc Camm

## SPREA HEET B: FY 03 PHASE II WORK PLAN-EXE TIVE DIRECTOR'S PRELIMINARY RECOMM\_...DATION

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Ph II Request	FY 03 Ph II Recom.	FY 04 Request	FY 04 Recom.
G-030632	Investigations into the Decline of Razor Clams in the Cordova Area	K. Brooks/CRRC J. Hetrick/CRRC	NOAA	New FY 03	\$214.2	\$0.0	\$0.0	\$0.0

## P. Brown-Schwalenberg/CRRC

## **Project Abstract**

Razor clam (*Siliqua patula*) stocks in the Orca Inlet /Copper River Delta area of Prince William Sound have declined to the point where they no longer have commercial value and only a limited subsistence/recreational value. The 1964 earthquake did not have as much of an immediate impact on razor clams as it did on other local clam species, but may be having a residual impact. Other factors include a long-term increase in ambient water temperature and disease. Over-fishing does not appear to be a factor. This project will investigate the possible causes of the decline, describe the current local habitat and environment, and discuss what it means for the future of this once valuable resource.

## STAC Recommendation

The proposal has strong community involvement, however the reviewers had concerns about the scientific approach. There is concern that the study design will not answer the questions posed. Cooperation with science partners (such as PWS Science Center and UAF) to implement a broader ecosystem level approach would be more appropriate for funding under the GEM program. Do not fund.

## **Executive Director's Preliminary Recommendation**

Do not fund based on STAC recommendation.

## Proposal Evaluation Form

Reviewer: 912 Evaluation due date: Thursday, September 26

Proposal number: 030632

Title of proposal: Investigations into the Decline of Razor Clams in the Cordova Area iple Investigatgor(s): K. Brooks, J. Hetrick/CRRC, P. Brown-Schwalenberg/CRRC

Use the comments section below each question area for discussion of your rating. Use as much space as necessary, and allow the table to expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak.us no later than the end of business on **Thursday**, **September 26**. The subject line of the e-mail to me should read, "030632 review".

030032 TeVIEW .	Rating
1. Does the proposal provide an understanding of the problem,	
is it technically and scientifically sound, and will it contribute	
to the generation and dissemination of scientific knowledge in	
the topic area?	2.5
Comments: The proposal is strong in some regards (establishin	•
local community) but will not assess many factors that could we	<u> </u>
example, the physiological and reproductive condition of the cla	· · · · · · · · · · · · · · · · · · ·
a combination of traditional approaches and the application of a	<u>-</u>
stress responses or stress responses associated with particular str	· · · · · · · · · · · · · · · · · · ·
comprehensively assess (and subsequently mitigate) status of cla	ams and causes of the decline without a decent
understanding of the condition of the clams.	
2. Are the methods as likely to be effective as any others	
available in achieving the solution?	
	2.0
Comments:	
3. Can the solution be achieved with these personnel for the	
amount of funding requested and within the proposed	
timeframe? Is it cost effective?	2.0
Comments: The personnel are fine for the work being done; I ju	
would produce much better insights. The costs seem pretty high	
mound produce macro court margines. The court beam provey mag	
A 1 1 1 C 4 C 4 C	1 1'
Any other comments: A good proposal for creation of certain	<u> </u>
condition/status of clams more fully, it would be improved. I su	aggest rating the proposal as faccept with
reservations."	

<sup>&</sup>lt;sup>1</sup> A rating of 1 on question means emphatically "no," and a score of 5 means emphatically "yes"; scores of 2-4 mean "maybe." The reviewer is the best judge of the meaning of "Accurate" and "Adequate," but accurate may mean the proposal shows a clear understanding of what kind of information and research are most needed in this field at this time, and adequate may mean that the appropriate scientific literature is used to support the arguments, and/or that the proposal is well written.

Reviewer: 333 Evaluation due date: Thursday, September 26

Proposal number: 030632

Title of proposal: Investigations into the Decline of Razor Clams in the Cordova Area iple Investigatgor(s): K. Brooks, J. Hetrick/CRRC, P. Brown-Schwalenberg/CRRC

Use the comments section below each question area for discussion of your rating. Use as much space as necessary, and allow the table to expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak.us no later than the end of business on **Thursday, September 26**. The subject line of the e-mail to me should read, "030632 review".

	Rating <sup>1</sup>
1. Does the proposal provide an understanding of	
the problem, is it technically and scientifically sound, and will it contribute to the generation	2
and dissemination of scientific knowledge in the	
topic area?	(1-5)

Comments: The proposal notes anecdotal evidence of a decline in the abundance of razor clams in the Orca Inlet/Copper River Delta area of Prince William Sound. The prospects of conducting a contemporary stock assessment provides a potential means to document the decline. However, under the Statistical Methods section (particularly item 1), it is apparent that the proposers have not investigated the quality of Nickerson's data to determine with certainty their ability to make statistically valid comparisons. The quality and quantity of pre-1964 clam density data is knowable. Lacking this basic legwork in advance, there is risk that valid before/after comparisons are impossible, even if a valid stock assessment is conducted in this project. Also, the inclusion of a literature search as the first objective is almost unthinkable, as this should have been completed prior to proposal writing. This demonstrates a lack of preparation, and raises concerns about ability of the investigators to successfully complete the project. Aside from mention of Nickerson's (1975) work, the proposers appear to be unaware of the body of published work already conducted on razor clam assessments in the Pacific Northwest and Alaska. Further, although the proposed methods seem resonable, there is no cited ence that they have been applied successfully elsewhere in peer-reviewed literature.

Are the methods as likely to be effective as any others available in achieving the solution?

(1-5)

Comments: Methods are proposed separately for each of the four objectives. Objective 1 should be deleted. In general, field sampling methods for clams and substrates under objective 2 appear reasonable. However, the report fails to contrast the methods proposed here with those applied applied successfully in razor clam assessments elsewhere, such as Alaska (e.g., Szarzi 1991, Nickerson 1975), British Columbia (Schlechte 1995) and Washington (Hoffmann et al. 1996). Without setting the proposed methods in the context of those used successfully elsewhere, it is difficult to evaluate the merits of the proposed methods. Regarding estimation of abundance, the Introduction suggests that these estimates will be "rough" and indeed no analytical methods are provided for abundance estimation. It is indicated that all sampled clams (all species) will be retained alive and/or frozen for shipment and analysis. The proposal does not indicate why all clams are needed nor the analyses to be completed. Under statistical methods, it indicates that age data will be collected, but it is hard to imagine that every clam of every species will be aged. In any case, no methods are reported for age determination. It is not clear why some clams must be shipped live out of state (permits are required here). For objective 3, the proposers have not provided ample evidence that they will be able to make statistically valid comparisons of current clam densities with historical estimates (comment also raised in #1, above). Also under this objective, the cause of the apparent decline is not determinable from the methods proposed. For objective 4, it is stated that "infauna should be identified to the lowest taxa practicable - generally to species." However, the expected taxa and the ability to achieve this level of identification are not mentioned in the proposal. A little background research would have helped.

<sup>&</sup>lt;sup>1</sup> A rating of 1 on question means emphatically "no," and a score of 5 means emphatically "yes"; scores of 2-4 mean "maybe." The reviewer is the best judge of the meaning of "Accurate" and "Adequate," but accurate may mean the proposal shows a clear understanding of what kind of information and research are most needed in this field at this time, and adequate may mean that the appropriate scientific literature is used to support the arguments, and/or that the proposal is well written.

3. Can the solution be achieved with these personnel for the amount of funding requested and	2		
within the proposed timeframe? Is it cost effective?	(1-5)		
Comments: Lacking a literature review, including a contrast of proposed methods with those applied successfully elsewhere (including sample size determinations), it is ficult to evaluate the cost-effectiveness of this proposal. The principal investigator are to have good background relevant to the sediment sampling portion of the project. However, project personnel appear to have no prior experience with stock assessments nor razor clam research. None of the investigators have published in the peer-reviewed literature.			
Any other comments:			

# Exxon Valdez Oil Spill Trustee Council

441 W. 5th Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178



October 30, 2002

Jia Wang, PhD IARC/IMS UAF PO Box 757335 Fairbanks, AK 99775

RE: Project 030603 / Workshop on Integrating the Gulf of Alaska Ocean

Circulation Modeling and Observations

## Dear Jia:

I am writing to inform you of my preliminary recommendation that the *Exxon Valdez* Oil Spill Trustee Council not fund Project 030603. I have enclosed a copy of my preliminary recommendation on this project, along with the Scientific and Technical Advisory Committee's recommendation on the project's technical merits.

The Trustee Council received 44 proposals totaling more than \$6 million. The Council has available less than \$2 million for the FY 03 Phase II Work Plan, and it will not be possible to fund all projects proposed.

My preliminary recommendations on all proposals for funding in FY 03 have been incorporated into the Draft Work Plan, which is available for public review on the Trustee Council's web page (<a href="https://www.oilspill.state.ak.us">www.oilspill.state.ak.us</a>). If you would like a copy of the Draft Work Plan sent to you, please call or e-mail the Trustee Council Office:

Telephone 278-8012
Toll-free in Alaska 1-800-478-7745
Toll-free outside of Alaska 1-800-283-7745
E-mail brenda hall@oilspill.state.ak.us

Following a review of any public comments received, as well as comments from the Trustee Council's Public Advisory Committee, I will make a final recommendation to the Council. Council action on the Work Plan is scheduled for November 25, 2002.

Alaska Department of Law

Thank you for your interest in the Trustee Council's Gulf Ecosystem Research and Monitoring (GEM) program. If you have any questions about this preliminary recommendation, please call me or Phil Mundy, the Trustee Council's Science Director.

Sincerely,

Molly McCammon Executive Director

Enclosure

cc: Bill Hauser, ADF&G Liaison

#### SPRE4 HEET B: FY 03 PHASE II WORK PLAN-EXE

## **TIVE DIRECTOR'S PRELIMINARY RECOMM DIATION**

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Ph II Request	FY 03 Ph II Recom.	FY 04 Request	FY 04 Recom.
G-030603	Workshop on Integrating the Gulf of Alaska Ocean Circulation Modeling and Observations	J. Wang/IARC-UAF	ADFG	Cont'd FY 03	\$79.8	\$0.0	\$0.0	\$0.0

## **Project Abstract**

In FY 02, this project established a 3-D ocean circulation. It is not appropriate for GEM to support the model in the Gulf of Alaska (GOA) to lay a foundation for advanced, data-assimilating models of advection the GEM program. The GEM program will couple the ocean circulation model to a hydrological model and an ecosystem model. So far, a research direction in ocean modeling in the GEM science plan has not been decided. We clearly realize that a research plan for ocean modeling should be our priority. Thus, this project will hold a workshop bringing together modelers and observationalists who worked and are working on the gulf problems. We will include several groups: US Global Ocean Ecosystem Dynamics (GLOBEC) scientists, Canadian GLOBEC scientists, Japanese GLOBEC and International Arctic Research Center/Frontier Research System for Global Change IARC/FRSGC scientists, Russian scientists, UAF scientists, and principal investigators related to this subject.

## STAC Recommendation

for the entire North Pacific as proposed for discussion at the workshop. Proposal appears to go beyond GEM geography and leaves open questions of how the necessary interdisciplinary cooperation will be achieved. Do not fund.

## **Executive Director's Preliminary Recommendation**

Do not fund based on STAC recommendation.

Reviewer: 1541 Evaluation due date: Thursday, September 26

Proposal number: 030603

Title of proposal: Workshop on Integrating the Gulf of Alaska Ocean Circulation Modeling and Observations

iple Investigatgor(s): J. Wang/IARC-UAF

expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak.us no later than the end of business on **Thursday**, **September 26**. The subject line of the e-mail to me should read, "030603 review".

1. Does the proposal provide an understanding of the problem, is it technically and scientifically sound, and will it contribute to the generation and dissemination of scientific knowledge in the topic area?	2 (1-5)
	(1-5)
Comments: The proposers are apparently slated to do the a research vision from outside groups of physical ocean proposal to hold a workshop and not a research proposal scientific problem or provide an understanding of one. for collaboration to share ideas. The proposed workshot the dissemination, if not generation, of scientific knows benefits of the workshop would be greater if specific and if sessions were charged with reaching a consensus modeling can best address those questions.	an modelers. Perhaps because this and the proposal does not pose a the implied "problem" is a need top would undoubtedly contribute to towledge in this topic area. The research questions were formulated,

2. Are the methods as likely to be effective as any others available in achieving the solution? (1-5)

Comments: The workshop may be an effective solution to defining ocean modeling research priorities, but only if this planning is integrated with efforts to model higher trophic levels. Planning a modeling approach is best conducted with a well-defined research tion. For example, "how do ocean circulation patterns influence the exposure of es or other organisms to coastal oil spills?" The research interests of this group seem to be in the area of basic oceanography and climate change, which is less relevant to the Trustee Council than understanding the interactions between the physical ocean environment and biota. Therefore, it would be a good idea for the workshop to include researchers who have experience in predicting the movements of marine organisms in response to ocean gradients.

3. Can the solution be achieved with these	А
personnel for the amount of funding requested and	7
within the proposed timeframe? Is it cost	(4, 7)
effective?	(1-5)

Comments: The funding requested for the workshop appears reasonable.

<sup>&</sup>lt;sup>1</sup> A rating of 1 on question means emphatically "no," and a score of 5 means emphatically "yes"; scores of 2-4 mean "maybe." The reviewer is the best judge of the meaning of "Accurate" and "Adequate," but accurate may mean the proposal shows a clear understanding of what kind of information and research are most needed in this field at this time, and adequate may mean that the appropriate scientific literature is used to support the arguments, and/or that the proposal is well written.

Any other comments:

As an animal/fish modeler, my opinion is that a spatially explicit approach to numerical modeling of ocean circulation does not necessarilly offer the best foundation for describing the locations or movements of fishes and other marine organisms. The precision gained in describing spatial dynamics in the physical environment is trivial a compared to the huge uncertainty in biotic responses. My bias would be to emphasize

nore difficult problem of understanding and modeling animal behavior in relation to physical gradients, rather than funding detailed physical modeling. Even predicting the spread of oil in a particular place in great spatial detail is probably not critical to understanding ecological consequences. In my opinion, simpler functional/empirical approaches may be more useful than brute-force spatially-explicit linkages between physical and biological models. For example, the ocean models might best be tailored to do a good job of predicting patterns in the shifting locations of plankton concentrations and thermal isoclines, and other features that serve as important cues to guide the movements of marine organisms.

These review questions are not really appropriate for a proposal to hold a workshop.

Reviewer: 3993

Evaluation due date: Thursday, September 26

Proposal number: 030603

Title of proposal: Workshop on Integrating the Gulf of Alaska Ocean Circulation

Modeling and Observations

Principle Investigatgor(s): J. Wang/IARC-UAF

Use the comments section below each question area for discussion of your rating. Use as much space as necessary, and allow the table to expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak.us no later than the end of business on Thursday, September 26. The subject line of the e-mail to me should read, 030603 review.

1. Does the proposal provide an understanding of the problem, is it technically and scientifically sound, and will it contribute to the generation and dissemination of scientific knowledge in the topic area?

#### Score 3:

Comments: While the proposed workshop would probably be of value to the scientists which attend (by fostering communication and opportunities for collaboration), it is unclear just how much benefit it would provide to GEM. The ocean modeling to be carried out by GEM is already outlined in the GEM Program Document, and the plan therein seems sound. For the workshop to be effective, it would need to produce specific guidelines on requirements for setting up a viable ocean nowcast/forecast system. But it sounds like such a system is more-or-less ready to go. In particular, a 3-D ocean model (POM) has apparently been selected. On the other hand, there are issues that the workshop could usefully address, e.g., the most efficient mix of initial and boundary conditions that should be used to force an ocean model for the northern GOA.

2. Are the methods as likely to be effective as any others available in achieving the solution?

Score: 3

Comments: In this reviewer's opinion, the issues mentioned above related to forcing the ocean model, might be best addressed once the modeling system is running in quasi-operational mode. In other words, rather than trying to anticipate potential limitations and problems, the modeling group should begin operations and have development efforts take place in parallel. For example, the workshop would presumably include discussion of the relative merits of improved initial conditions from platforms such as CODARs and moorings versus improved boundary conditions such as high-resolution coastal winds, but much of this discussion might be more academic than anything else. In addition, there are regular meetings of ocean modelers on the subject of model improvement, in general, and this workshop need not duplicate that kind of meeting. That being said, if the workshop serves to educate the scientists that will be involved in overseeing the operation and development of the modeling system (and encourages other scientists to be involved in the interpretation of its results), then it might be funds well-spent.

3. Can the solution be achieved with these personnel for the amount of funding requested and within the proposed timeframe? Is it cost effective?

Score: 3

Comments: The cost of staging the workshop is not that great and the subject is important enough to GEM to deserve consideration. If this workshop is staged, the most valuable result for GEM will be its set of recommendations. These recommendations must be specific and detailed to do much good.

Any other comments:

# Exxon Valdez Oil Spill Trustee Council

441 W. 5" Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178



October 30, 2002

Gayle Hansen OSU, Hatfield Marine Science Ctr 2030 S. Marine Science Dr Newport, OR 97365

RF:

Project 030683 / Seaweeds of Southcentral Alaska Thumbnail Guide,

Images, and Distribution Maps

## Dear Gayle:

I am writing to inform you of my preliminary recommendation that the *Exxon Valdez* Oil Spill Trustee Council not fund Project 030683. I have enclosed a copy of my preliminary recommendation on this project, along with the Scientific and Technical Advisory Committee's recommendation on the project's technical merits.

The Trustee Council received 44 proposals totaling more than \$6 million. The Council has available less than \$2 million for the FY 03 Phase II Work Plan, and it will not be possible to fund all projects proposed.

My preliminary recommendations on all proposals for funding in FY 03 have been incorporated into the Draft Work Plan, which is available for public review on the Trustee Council's web page (<u>www.oilspill.state.ak.us</u>). If you would like a copy of the Draft Work Plan sent to you, please call or e-mail the Trustee Council Office:

Telephone 278-8012
Toll-free in Alaska 1-800-478-7745
Toll-free outside of Alaska 1-800-283-7745
E-mail brenda hall@oilsp

E-mail <u>brenda\_hall@oilspill.state.ak.us</u>

Following a review of any public comments received, as well as comments from the Trustee Council's Public Advisory Committee, I will make a final recommendation to the Council. Council action on the Work Plan is scheduled for November 25, 2002.

Thank you for your interest in the Trustee Council's Gulf Ecosystem Research and Monitoring (GEM) program. If you have any questions about this preliminary recommendation, please call me or Phil Mundy, the Trustee Council's Science Director.

Sincerely,

Molly McCammon Executive Director

**Enclosure** 

cc: Pete Hagen, NOAA Liaison

Mely M. Cammo

## HEET B: FY 03 PHASE II WORK PLAN-EXE TIVE DIRECTOR'S PRELIMINARY RECOMMS

Proj.No.	Project Title	Proposer	Agency	Cont'd	Request	Recom.	Request	Recom.
G-030683	Seaweeds of Southcentral Alaska: Thumbnail Guide, Images, and Distribution Maps	G. Hansen/OSU	NOAA	New FY 03-04	\$33.5	\$0.0	\$49.8	\$0.0

## **Project Abstract**

This project will produce a Web-based guide to seaweeds in Southcentral Alaska that will include images of the species and maps of their distributions in the oil spill area. The images and data will be obtained from the EVOS/Project CH1A and RCAC/NIS algal voucher collections (10,442 specimens) currently held in program document identifies a Web strategy for Juneau and in Newport where the research will be carried out. Images will be obtained via photographing and scanning the specimens, and maps will be produced from specimen label data incorporated into Arc-Explorer. To facilitate species identifications, the searchable website will include a thumbnail-guide-to-form following the example of Druehl (2000). As a Web product, the data will be both archivable and updatable. The guide will provide valuable baseline data on the distribution of the species and will improve the quality of environmental monitoring by assisting with identification and helping to standardize the nomenclature of these frequently difficult-to-identify species.

## STAC Recommendation

The PIs are well qualified with seaweed identification, however the proposal does not identify how the proposed Website would be developed and by whom. The audience for the product needs to be better defined. The GEM data dissemination, and it is not clear that the proposal can meet the objectives of this strategy. This type of product may be relevant to GEM in the future, but making commitments to a Web-based atlas at this time seems premature. Do not fund.

## Executive Director's Preliminary Recommendation

EV 02 DE 11 EV 02 DE 11 EV 04

Do not fund based on STAC recommendation.

### Proposal Evaluation Form

Reviewer: 3817	Evaluation due date: Thursday, September 20
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Proposal number: 030683

Title of proposal: Seaweeds of Southcentral Alaska: Thumbnail Guide, Images, and Distribution Maps

Principle Investigatgor(s): G. Hansen/OSU

Ose the comments section below each question area for discussion of your rating. Use as much space as necessary, and allow the table to expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak.us no later than the end of business on **Thursday**, **September 26**. The subject line of the e-mail to me should read, "030683 review".

	Rating <sup>1</sup>	
1. Does the proposal provide an understanding of		
the problem, is it technically and scientifically		
sound, and will it contribute to the generation	4	
and dissemination of scientific knowledge in the		
topic area?	(1-5)	

### Comments:

This project will provide a valuable web-based guide to identifying marine algae in South-Central Alaska. As such, it will provide useful information for researchers working on algae in this geographic region.

2. Are the methods as likely to be effective as	3
any others available in achieving the solution?	
	(1-5)

## Comments:

Publication (in paper) of this material would be more helpful, especially for use in the field, and would serve as a better archive for this information. Paper publication is icipated in FY05, but perhaps would be better to do in combination with the web-based of proposed here.

3. Can the solution be achieved with these personnel for the amount of funding requested and	3
within the proposed timeframe? Is it cost effective?	(1-5)

#### Comments:

None of the proposed project personnel demonstrate any experience with web-design. As all of the algal collections and taxonomy have already been completed, it seems that a larger portion of the funds for this project should be spent on web programmers and web design experts.

Another major concern is where this web site will be hosted. It is essential for the host to guarantee long-term (10 years or more) accessibility to this site in order for this project to serve its intended purpose. Perhaps GEM could host this site and provide its continued maintenance (a significant consideration which is only lightly addressed here).

It is unclear why compound microscope repair is necessary to complete this project.

Any other comments:

A rating of 1 on question means emphatically "no," and a score of 5 means emphatically "yes"; scores of 2-4 mean "maybe." The reviewer is the best judge of the meaning of "Accurate" and "Adequate," but accurate may mean the proposal shows a clear understanding of what kind of information and research are most needed in this field at this time, and adequate may mean that the appropriate scientific literature is used to support the arguments, and/or that the proposal is well written.

## Proposal Evaluation Form

Reviewer: 4031 Thursday, September 26 Evaluation due date:

Proposal number: 030683

Title of proposal: Seaweeds of Southcentral Alaska: Thumbnail Guide, Images, and Distribution

Maps

Principle Investigatgor(s): G. Hansen/OSU

Use the comments section below each question area for discussion of your rating. Use as much space as necessary, and allow the table to expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak.us no later than the end of business on

Thursday, September 26. The subject line of the e-mail to me should read, "030683 review".

	Rating <sup>1</sup>
1. Does the proposal provide an understanding of the problem, is it technically and scientifically sound, and will it contribute to the generation and dissemination of scientific knowledge in the topic area?	3 (1-5)

Comments: Proposal 030683, to provide a WEB based identification guide to the seaweeds of southcentral Alaska, is a fine idea. The proposal is scientifically sound. The PI clearly has the materials and expertise with the algae. The proposal does not document that the PI or other personnel have experience mounting a WEB-based project such as this one, nor is it documented that they have sought advice from others with such experience. This project, if done well, will be a significant asset to all those working on seaweeds in Alaska. The budget is fine. The timeline is ambitious given the track record of the PI.

2. Are the methods as likely to be effective as any others	4
available in achieving the solution?	(1.5)
	(1-5)

Comments: The method to document the seaweed flora, specifically photographing herbarium specimens, will work for species that have macroscopically distinctive morphologies. For many species whose macroscopic morphologies are not distinctive or whose range of morphology overlaps with that of other species, photographs of anatomy will be essential for identification, and the PI has provided for this. AS the PI mentions, documenting the range of morphologies is important, esp. when novices are relying on photographs to identify a species. What would also be very useful for many species would be in situ habitat photographs, and this is not mentioned in the proposal. Having observed another project documenting land plants, using similar methods of photographing herbarium specimens, it is attention to the detail work in photography and subsequent manipulation of the images that determines the quality of the final project. The two example maps with specimens illustrated look fine.

3. Can the solution be achieved with these personnel for the amount of funding requested and within the proposed	2
timeframe? Is it cost effective?	(1-5)

A rating of 1 on question means emphatically "no," and a score of 5 means emphatically "yes"; scores of 2-4 mean "maybe."

The reviewer is the best judge of the meaning of "Accurate" and "Adequate," but accurate may mean the proposal shows a clear understanding of what kind of information and research are most needed in this field at this time, and adequate may mean that the appropriate scientific literature is used to support the arguments, and/or that the proposal is well written.

Any other comments:			

## Exxon Valdez Oil Spill Trustee Council

441 W. 5th Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178



October 30, 2002

Dale Kiefer System Science Applications, Inc. 121 Via Pasqual Renondo Beach, CA 90277

Carl Schoch, PhD Kachemak Bay Estuarine Research Reserve 2181 Kachemak Dr. Homer, AK 99603

RE: Project 030679 / A Prototype Geographic Information System for GEM

## Dear Dale and Carl:

I am writing to inform you of my preliminary recommendation that the *Exxon Valdez* Oil Spill Trustee Council not fund Project 030679. I have enclosed a copy of my preliminary recommendation on this project, along with the Scientific and Technical Advisory Committee's recommendation on the project's technical merits.

The Trustee Council received 44 proposals totaling more than \$6 million. The Council has available less than \$2 million for the FY 03 Phase II Work Plan, and it will not be possible to fund all projects proposed.

My preliminary recommendations on all proposals for funding in FY 03 have been incorporated into the Draft Work Plan, which is available for public review on the Trustee Council's web page (<u>www.oilspill.state.ak.us</u>). If you would like a copy of the Draft Work Plan sent to you, please call or e-mail the Trustee Council Office:

Telephone 278-8012
Toll-free in Alaska 1-800-478-7745
Toll-free outside of Alaska 1-800-283-7745

E-mail <u>brenda hall@oilspill.state.ak.us</u>

Following a review of any public comments received, as well as comments from the Trustee Council's Public Advisory Committee, I will make a final recommendation to the Council. Council action on the Work Plan is scheduled for November 25, 2002.

Thank you for your interest in the Trustee Council's Gulf Ecosystem Research and Monitoring (GEM) program. If you have any questions about this preliminary recommendation, please call me or Phil Mundy, the Trustee Council's Science Director.

Sincerely,

Molly McCammon
Executive Director

Enclosure

cc: Pete Hagen, NOAA Liaison

#### SPREA HEET B: FY 03 PHASE II WORK PLAN-EXE IVE DIRECTOR'S PRELIMINARY RECOMM ATION

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Ph II Request	FY 03 Ph II Recom.	FY 04 Request	FY 04 Recom.	
G-030679	A Prototype Geographic Information System for GEM	D. Kiefer/SSAI C. Schoch/Kachemak Bay RR	NOAA	New FY 03	\$88.0	\$0.0	\$0.0	\$0.0	

## **Project Abstract**

This project will develop a prototype coastal information system for the Gulf of Alaska, focusing on Kachemak Bay as a pilot application. The information system will archive, analyze, and distribute information on ecological specific needs before GEM will be prepared to conditions in the watershed and shoreline, as well as coastal and offshore waters of Kachemak Bay. The system will address the problem of integrating such multivariate data that has been collected on differing spatial and temporal scales. It will also provide GIS tools to analyze, visualize, and disseminate information on relationships of conditions at each of four spatial scales. The goal is to develop a system that will lead to better understanding of the effects of climatic variability and anthropogenic activity upon the coastal ecosystem of Kachemak Bay and to provide a prototype system that is needed to support monitoring and research in the GEM program.

## STAC Recommendation

This proposal identifies what may be an important requirement for the GEM program. However, the data management subcommittee needs to identify acquire such a system. Do not fund.

## **Executive Director's Preliminary Recommendation**

Do not fund based on STAC recommendation.

### Proposal Evaluation Form

Reviewer: 771 Evaluation due date: Thursday, September 26

Proposal number: 030679

Title of proposal: A Prototype Geographic Information System for GEM iple Investigatgor(s): D. Kiefer/SSAI, C. Schoch/Kachemak Bay RR

Use the comments section below each question area for discussion of your rating. Use as much space as necessary, and allow the table to expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak.us no later than the end of business on **Thursday**, **September 26**. The subject line of the e-mail to me should read, "030679 review".

	Rating <sup>1</sup>
1. Does the proposal provide an understanding of the problem, is it technically and scientifically sound, and will it contribute to the generation	5
and dissemination of scientific knowledge in the topic area?	(1-5)

### Comments:

A prototype GIS for GEM is very much needed and Kachemak Bay would be an excellent site. The two principal investigators and supporting staff are highly qualified for this project. This is the right idea and the right people, but, I believe, the wrong software. (See below.)

<sup>&</sup>lt;sup>1</sup> A rating of 1 on question means emphatically "no," and a score of 5 means emphatically "yes"; scores of 2-4 mean "maybe." The reviewer is the best judge of the meaning of "Accurate" and "Adequate," but accurate may mean the proposal shows a clear understanding of what kind of information and research are most needed in this field at this time, and adequate may mean that the appropriate scientific literature is used to support the arguments, and/or that the proposal is well written.

2. Are the methods as likely to be effective as any others available in achieving the solution?

(1-5)

Comments:

success of this project is critically dependent on the performance of the GIS soluware that will be used to import, integrate, analyze, model, display, and disseminate the many disparate datasets that pertain, initially, in this prototype, to Kachemak Bay, and ultimately, to the entire scope of the GEM program. This is a lot to ask, especially of what the proposers describe as a "new" product. The product is EASy (Environmental Analysis System), developed by System Science Applications, Inc. of Redondo Beach, CA. It is a "geographic information system that has been specifically designed for marine applications".

Let me say up front that prior to reading this proposal I had never heard of EASy, much less used it, so my comments regarding it are based solely on what I could glean from the proposal, from searching the Internet, and from 20 or so years of experience in the field of GIS. The System Science Applications, Inc. web site (www.systemscienceapp.com)lists 17 projects on which SSA has collaborated in the areas of Information and Resources Management, Water Quality Assessment, Environmental Modeling, and Marine Engineering. Five of these projects involved the deployment of a GIS, roughly similar to what is proposed here, while in the remaining projects SSA provided modeling and analysis support. Since Internet accessibility is a important component of this proposal, I attempted to access Web sites relating to these five projects, as well as to the two sites given as examples in the proposal and two additional sites suggested by the SSA Web administrator. Of these nine sites, three had viewable maps. The others were either not accessible or had no graphic depiction of data. Of the three sites with maps, only one, the Gulf of Maine Biogeographic Information System (GMBIS) at http://cephbase.biology.dal.ca/gmbis/aconscripts/groundfishsurveymap1.html allowed the user to interactively select and view data. This site provides a nice interface for selecting the datasets to display and some choice of display options. Once the map is

rated, however, the user can make no other changes without going back to the set-up. In contrast, there are a number of Internet mapping products that allow panning and zooming, adding and subtracting data layers, changing symbology, querying, and other functionality while directly viewing and interacting with the map itself. Compared to these products the GMBIS maps are rather primitive. Since the GMBIS maps are quite small I found it especially disappointing that I could not zoom in for a closer look at the data. On the other hand, one feature of GMBIS that I especially like (though I did not test it) is the ability to plot one's own local data on top of the GMBIS data.

I was unable find any examples of the more sophisticated graphic functionality of EASy as described in the section entitled <u>Examples of Applications</u>. Although not stated in the proposal, my guess is that these functions are available only on the local host and are not available over the Internet.

Lifecycle management is an important issue with all software, especially something intended for such broad and long-term use as the GEM program. As computer technology advances it is critical that the GIS software used for GEM keeps up with the state-of-the-art. New releases, on-going technical support, documentation, and training will all be necessary. I have reservations about the ability of such a young and small company as SSA to pull this off over the long haul. Futhermore, the ease with which the GIS software can be installed, maintained, updated, and customized will determine it's viability in the years ahead. The Trustee Council should not put itself in the position of having to depend solely on SSA (or any other vendor) for software enhancements. This hazard is reduced by acquiring software with a high degree of off-the-shelf functionality and flexibility, which can be customized by programmers using standard programming languages, without the need of unpublished, proprietary information from the vendor.

From the project descriptions on the Internet, it appears to me that each of SSA's omers has been delivered a highly customized product. This is not a good sign. When omes to long-term software, an off-the-shelf product is preferable.

In summary, my concerns about EASy software are as follows:

- 1. It is a relatively new product. Can it really do all that will be asked of it?
- There seem to be very few Web sites using EASy software and these have less functionality than is provided by other available products.
- 3. SSA is a young and small company. Will they be able to provide support and keep up with the state-of-the-art over the long haul?
- 4. EASy software seems to be custom-made rather than off-the-shelf. This implies that it will be difficult to modify and may require the participation of the vendor.

3. Can the solution be achieved with these	1
personnel for the amount of funding requested and	1
within the proposed timeframe? Is it cost	()
effective?	(1-5)

Comments:

excive 1, to collect historical environmental data and information for the Kachemak Bay watershed and related coastal and off shore areas, is allocated 2.5 months (1 person). More than 18 different data sources are listed, many of which have multiple datasets. The data will be found in different formats and differing units, with varying resolutions, accuracies, nomenclature, disclosure requirements, etc. Some of it will be poorly documented. Most will include errors and inconsistencies. To collect all of these datasets, to edit and document them, and to reformat or otherwise prepare them for importation into one self-consistent database will be an enormous undertaking that will require far more than 2.5 months.

Objective 2, to import all data and information into a GIS, is allocated 3 months of one person's time and approximately 0.5 months of another's. In addition to the actual import process, this objective includes the database design and the development or modification or import routines. The amount of effort required depends a great deal on the amount of variation in the data types to be imported and the degree to which the data has been prepared. 3.5 person-months could be an adequate amount of time if the data is well-prepared, but with only 2.5 months for data acquisition and prep this is unlikely.

Objective 3, to incorporate modeling tools and statistical methods in the GIS, is allocated 1 month for a modeler/statistician and, presumably, 1 month for a programmer. The description of this objective implies that these tools are not built into the GIS, but will have to be added. Once incorporated, they will be used, according to the Statistical Methods section of the proposal, to perform a number of statistical analyses, time series analyses, spatial analyses, and at least two types of modeling. To complete all of this, especially using a new system and newly acquired data, in just two personhs, seems optimistic.

Objective 4, to provide training and conduct a workshop, has not been budgeted any time. There is no mention of a manual or other documentation. For a complex system such as this, written documentation is essential and will take some time to prepare.

Objective 5, to perform installation and testing, has not been budgeted any time. For a system this complex, installation and testing could easily take a week or more.

In summary, I believe that the proposed solution cannot be achieved within the proposed timeframe.

## Any other comments:

One the two principal investigators of this proposal is a partner in the company which will be contracted to provide software and services. Thus, he has a financial interest in using software developed by this company rather than considering other commercially available software.

There is no line item associated with the cost of the software. There is no mention as to whether or not source code will be included, nor is there any mention of licensing or usage restrictions.

Reviewer: 4

Evaluation due date: Thursday, September 26

Proposal number: 030679

Title of proposal: A Prototype Geographic Information System for GEM iple Investigatgor(s): D. Kiefer/SSAI, C. Schoch/Kachemak Bay RR

Use the comments section below each question area for discussion of your rating. Use as much space as necessary, and allow the table to expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak.us no later than the end of business on **Thursday, September 26**. The subject line of the e-mail to me should read, "030679 review".

	Rating <sup>1</sup>
1. Does the proposal provide an understanding of	
the problem, is it technically and scientifically	
sound, and will it contribute to the generation	4
and dissemination of scientific knowledge in the	
topic area?	(1-5)

Comments: As noted on System Science Applications web site, they have provided assistance to a number of well-respected organizations, and what is available on public web sites is impressive. The proposal seems well written, and the authors understand well the subject matter.

2. Are the methods as likely to be effective as	2
any others available in achieving the solution?	
	(1-5)

Comments: This is difficult to consider as no assessment of alternatives have been provided. I'm afraid that this is a solution looking for a problem. Not that this may not be the solution, but the "problem" has not been identified. Also, the prototype may work for the needs of Kachemak Bay, but it is unclear how extensible this would be to the area covered by GEM. Once the problem has been identified, other solutions could be compared.

3. Can the solution be achieved with these personnel for the amount of funding requested and	2
within the proposed timeframe? Is it cost effective?	(1-5)

Comments: Contractor personnel cost seem high. I also wonder about getting this all done the time frame identified (March-September 2003). This is presented as a prototype, and only covers the cost of software development. Identified items only include salaries and travel; it is not clear how the software is to be purchased, unless this is coming from matching funds. The necessary server is not included in the cost, nor the communications infrastructure needed for public access. Note is made under C. Statistical Methods that other modeling tools and statistical methods will be explored, but I question this given the modeler/statistican resources (1 month) made available.

Any other comments: I would prefer a "go slow" approach where the needs of the GEM program in this area have been identified first, and then possible solutions explored. I question if potential clients wishing CDs will get more than pure data (i.e., not software application) on the CD. Also, a database of any magnitude would exceed the capabilities of Access utilized through ODBC, and a true client-server DBMS will be required.

<sup>&</sup>lt;sup>1</sup> A rating of 1 on question means emphatically "no," and a score of 5 means emphatically "yes"; scores of 2-4 mean "maybe." The reviewer is the best judge of the meaning of "Accurate" and "Adequate," but accurate may mean the proposal shows a clear understanding of what kind of information and research are most needed in this field at this time, and adequate may mean that the appropriate scientific literature is used to support the arguments, and/or that the proposal is well written.

### Exxon Valdez Oil Spill Trustee Council

441 W. 5th Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178



October 30, 2002

Dovalee Dorsett Baylor University, Dept of Info Systems PO Box 98005 Waco, TX 76708

RE:

Project 030665 / Toward Cost Effective Data Acquisition Using Adaptive

Sampling and Integrating Information Strategies

#### Dear Dovalee:

I am writing to inform you of my preliminary recommendation that the *Exxon Valdez* Oil Spill Trustee Council not fund Project 030665. I have enclosed a copy of my preliminary recommendation on this project, along with the Scientific and Technical Advisory Committee's recommendation on the project's technical merits.

The Trustee Council received 44 proposals totaling more than \$6 million. The Council has available less than \$2 million for the FY 03 Phase II Work Plan, and it will not be possible to fund all projects proposed.

My preliminary recommendations on all proposals for funding in FY 03 have been incorporated into the Draft Work Plan, which is available for public review on the Trustee Council's web page (<u>www.oilspill.state.ak.us</u>). If you would like a copy of the Draft Work Plan sent to you, please call or e-mail the Trustee Council Office:

Telephone 278-8012
Toll-free in Alaska 1-800-478-7745
Toll-free outside of Alaska 1-800-283-7745

E-mail <u>brenda\_hall@oilspill.state.ak.us</u>

Following a review of any public comments received, as well as comments from the Trustee Council's Public Advisory Committee, I will make a final recommendation to the Council. Council action on the Work Plan is scheduled for November 25, 2002.

Thank you for your interest in the Trustee Council's Gulf Ecosystem Research and Monitoring (GEM) program. If you have any questions about this preliminary recommendation, please call me or Phil Mundy, the Trustee Council's Science Director.

Sincerely,

Welly Mc Camm

Molly McCammon Executive Director

Enclosure

cc: Pete Hagen, NOAA Liaison

#### EET B: FY 03 PHASE II WORK PLAN-EXE SPREAL

#### IVE DIRECTOR'S PRELIMINARY RECOMMI

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	D	Danam	

**ATION** 

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Ph II Request	FY 03 Ph II Recom.	FY 04 Request	FY 04 Recom.
G-030665	Toward Cost Effective Data Acquisition Using Adaptive Sampling and Integrating Information Strategies		NOAA	New FY 03-04	\$53.5	\$0.0	\$55.0	\$0.0

#### **Project Abstract**

Adaptive sampling methods will be designed and documented to enhance cost effective data collection methods. Traditional statistical sampling designs of experiments at sea involve a random or systematic sampling approach that is not the most efficient method of collecting data that occurs in clusters. A more efficient method is that of adaptive sampling, which seeks to first locate clusters and then sample in a grid around the cluster. In a second phase, to be submitted in FY 04, statistical methods of integrating and combining data from different sources will be determined and documented for further efficient data utilization once the samples have been collected.

#### **STAC** Recommendation

Adaptive sampling may be a viable methodology to Do not fund based on STAC recommendation. Funds achieve GEM goals. Recommend the PI team with for a sampling workshop are including in Project other projects to apply the adaptive sampling methodology to a specific GEM activity. In addition, a workshop exploring sampling methodology should be held this year. Pls should be urged to participate. Do not fund.

#### Executive Director's Preliminary Recommendation

030630.

Reviewer: 2323 Evaluation due date: Thursday, September 26

Proposal number: 030665

Title of proposal: Toward Cost Effective Data Acquisition Using Adaptive Sampling and Integrating Information

riple Investigatgor(s): D. Dorsett/Baylor Univ.

Use the comments section below each question area for discussion of your rating. Use as much space as necessary, and allow the table to expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak.us no later than the end of business on **Thursday**, **September 26**. The subject line of the e-mail to me should read, "030665 review".

	Rating <sup>1</sup>
1. Does the proposal provide an understanding of	
the problem, is it technically and scientifically	
sound, and will it contribute to the generation	4
and dissemination of scientific knowledge in the	
topic area?	(1-5)

Comments: There are two phases to this proposal. Phase one seeks to provide methods for collecting open water data using a combination of currently accepted methods (random and stratified transects) and adaptive sampling of clusters. Phase two seeks methods for integrating data collected by a variety of methods. It focuses on providing statistical analyses.

The proposal appears well thought out and based on experience in Alaskan marine waters populations monitoring. Although by necessity, details are few.

Both phases may provide alternatives to current techniques used in wide variety of marine and pelagic lake studies. Further, it has application to a variety of survey types. The product, a manual of protocols for sample design, may also be of use in the general topic area.

Are the methods as likely to be effective as others available in achieving the solution?	4
	(1-5)

Comments: phase one requires the capability to identify the patten of clusters using currently used techniques and additional effort to identify the nature of the clusters. Survey time saved cannot be predicted, but there is likely to be an increase in the accuracy of the results.

Authors have access to data sets which allow testing of the developed methods. No details are given, but the authors intend to examine the efficiency and power of developed methods relative to standard practices.

developed methods relative to standard practices.					
3. Can the solution be achieved with these	4				
personnel for the amount of funding requested and	•				
within the proposed timeframe? Is it cost	(7. 5)				
effective?	(1-5)				

Comments: Twenty man months of effort each year appears more than adequate for the proposed work. Additional costs are negligable.

Any other comments: Although this work is directed at marine applications, it may also be applicable to freshwater lakes where researchers currently estimate sockeye salmon fry population size.

A rating of 1 on question means emphatically "no," and a score of 5 means emphatically "yes"; scores of 2-4 mean "maybe." The reviewer is the best judge of the meaning of "Accurate" and "Adequate," but accurate may mean the proposal shows a clear understanding of what kind of information and research are most needed in this field at this time, and adequate may mean that the appropriate scientific literature is used to support the arguments, and/or that the proposal is well written.

#### Proposal Evaluation Form

Reviewer: 2489 Evaluation due date: Thursday, September 26

Proposal number: 030665

Title of proposal: Toward Cost Effective Data Acquisition Using Adaptive Sampling and Integrating Information

iple Investigatgor(s): D. Dorsett/Baylor Univ.

Use the comments section below each question area for discussion of your rating. Use as much space as necessary, and allow the table to expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak.us no later than the end of business on **Thursday**, **September 26**. The subject line of the e-mail to me should read, "030665 review".

	Rating <sup>1</sup>
1. Does the proposal provide an understanding of the problem, is it technically and scientifically sound, and will it contribute to the generation and dissemination of scientific knowledge in the	3
topic area?	(1-5)
Comments: Adaptive sampling is a more efficient way	

Comments: Adaptive sampling is a more efficient way to estimate the abundance of birds, schooling fishes, and the occurrence of other things that cluster. The proposal does an acceptable job of explaining the adaptive-sampling problem, and demonstrating an understanding of how adaptive sampling can contribute to the goals of the GEM project. The proposers could have been more specific about methodological contributions that they will make.

2. Are the methods as likely to be effective as any others available in achieving the solution?	4
	(1-5)

Comments: Adaptive sampling is the best way to achieve the proposer's objective of increasing the design-based efficiency of the sampling. They seem to have the expertise, and experience to master these techniques. However, it is hard to see what the proposers are intending to add to the existing knowledge base.

3. Can the solution be achieved with these personnel for the amount of funding requested and	2
within the proposed timeframe? Is it cost effective?	(1-5)

Comments: The objectives seem a little vague. Because adaptive sampling methods are well described in textbooks, scientific papers, and technical reports it should be easy to "compare the precision and power" adaptive sampling plan to traditional plans, and to develop a manual.

Any other comments: A number of technical problems hold back the use of adaptive sampling plans: stopping rules, multivariate problems, competing objectives, and so on. The proposers seemed to miss an opportunity to try and name very specific problems that they will try and tackle.

A rating of 1 on question means emphatically "no," and a score of 5 means emphatically "yes"; scores of 2-4 mean "maybe." The reviewer is the best judge of the meaning of "Accurate" and "Adequate," but accurate may mean the proposal shows a clear understanding of what kind of information and research are most needed in this field at this time, and adequate may mean that the appropriate scientific literature is used to support the arguments, and/or that the proposal is well written.

# Exxon Valdez Oil Spill Trustee Council

441 W. 5th Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178



October 30, 2002

Shari L Vaughan, PhD PWS Science Center PO Box 705 Cordova, AK 99574

Christopher N.K. Mooers OPEL/RSMAS, University of Miami 4600 Rickenbacker Causeway Miami, FL 33149-1098

RE: Project 030658 / Numerical Simulation of Processes Controlling the

Exchange Between Prince William Sound and the Alaskan Shelf

#### Dear Shari and Chris:

I am writing to inform you of my preliminary recommendation that the *Exxon Valdez* Oil Spill Trustee Council not fund Project 030658. I have enclosed a copy of my preliminary recommendation on this project, along with the Scientific and Technical Advisory Committee's recommendation on the project's technical merits.

The Trustee Council received 44 proposals totaling more than \$6 million. The Council has available less than \$2 million for the FY 03 Phase II Work Plan, and it will not be possible to fund all projects proposed.

My preliminary recommendations on all proposals for funding in FY 03 have been incorporated into the Draft Work Plan, which is available for public review on the Trustee Council's web page (<u>www.oilspill.state.ak.us</u>). If you would like a copy of the Draft Work Plan sent to you, please call or e-mail the Trustee Council Office:

Telephone
Toll-free in Alaska
Toll-free outside of Alaska
E-mail

278-8012 1-800-478-7745 1-800-283-7745

brenda hall@oilspill.state.ak.us

Following a review of any public comments received, as well as comments from the Trustee Council's Public Advisory Committee, I will make a final recommendation to the Council. Council action on the Work Plan is scheduled for November 25, 2002.

Thank you for your interest in the Trustee Council's Gulf Ecosystem Research and Monitoring (GEM) program. If you have any questions about this preliminary recommendation, please call me or Phil Mundy, the Trustee Council's Science Director.

Sincerely,

Molly McCammon Executive Director

**Enclosure** 

cc: Pete Hagen, NOAA Liaison

#### SPREA HEET B: FY 03 PHASE II WORK PLAN-EXE IVE DIRECTOR'S PRELIMINARY RECOMM......)ATION

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Ph II Request	FY 03 Ph II Recom.	FY 04 Request	FY 04 Recom.
G-030658	Numerical Simulation of Processes Controlling the Exchange Between Prince William Sound and the Alaskan Shelf	S. Vaughan/PWSSC C. Mooers/Univ. Miami	NOAA	New FY 03-04	\$207.9	\$0.0	\$190.6	\$0.0

Important exchanges of waters, dissolved substances, particulate matter, floatables, and biota occur between Prince Willam Sound and the Alaskan Shelf. These exchanges are controlled by several processes: e.g., the identified for the GEM program. It would be seasonal cycles in atmospheric forcing, oceanic density stratification, and the Alaska Coastal Current (ACC), and seen other proposals in this area. Do not fund. their interannual variability; the response to weekly weather system cycles (including coastal upwelling and downwelling and coastally trapped waves); tidal currents; and mesoscale fronts and eddies due to dynamical instabilities of the ACC. Using a mesoscale-resolving numerical ocean circulation model for the Northern Gulf of Alaska (including Prince William Sound), together with realistic bottom topography and atmospheric forcing, exchanges (over a broad range of scales) through Hinchinbrook Entrance and Montague Strait will be characterized from simulations conducted through several seasonal cycles. The results will be validated, in part, by the EVOS-sponsored ADCP (Acoustic Doppler Current Profiler) moored in Hinchinbrook Entrance (Project /552), and their implications for designing physical and ecological monitoring strategies for GEM will be summarized.

Project Abstract

#### **STAC** Recommendation

This proposal addresses questions of interest, however it is not responsive to the invitation. Modeling approaches and needs have not yet been inappropriate to fund this research without having

Executive Director's Preliminary Recommendation

Do not fund based on STAC recommendation.

#### Proposal Evaluation Form

Reviewer: 4047 Evaluation due date: Thursday, September 26

Proposal number: 030658

Title of proposal: Numerical Simulation of Processes Controlling the Exchange Between Prince William Sound and the kan Shelf

iple Investigatgor(s): S. Vaughan/PWSSC, C. Mooers/Univ. Miami

Use the comments section below each question area for discussion of your rating. Use as much space as necessary, and allow the table to expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak.us no later than the end of business on **Thursday**, **September 26**. The subject line of the e-mail to me should read, "030658 review".

	Rating <sup>1</sup>
1. Does the proposal provide an understanding of the problem, is it technically and scientifically	
sound, and will it contribute to the generation and dissemination of scientific knowledge in the	3.5
topic area?	(1-5)

Comments: This should be an interesting and important modeling project and it should give us a better understanding of the exchange between PWS and the continental shelf. However, the proposal does not indicate what data is available (or if little is available, what strategy would be taken) for specifying the boundary conditions along the open boundaries of the model. Especially at interannual timescales, information concerning the variability of the Alaskan Coastal Current system (and possibly the larger Alaskan Gyre system) would be crucial.

2. Are the methods as likely to be effective as	5
any others available in achieving the solution?	
	(1-5)

Comments: The modeling approach is good, and combined with all available observations it should be effective in improving the understanding of the exchange between PWS and Alaskan Shelf.

3. Can the solution be achieved with these personnel for the amount of funding requested and	4
within the proposed timeframe? Is it cost effective?	(1-5)

Comments: The P.I.s have right credentials and the project is cost-effective; again, availability of information concerning external marine conditions will be the main limiting factor in achieving the objectives proposed.

#### Any other comments:

This project would greatly benefit from interaction with marine scientists and climatologists from the Pacific Northwest, who are involved in active research projects concerning interannual variability in marine conditions and fisheries resources in the northeastern Pacific region. There is a model of Alaskan Gyre/Coastal Current system run at NOAA-PMEL (I believe), which may be able to supply needed external boundary conditions for the Extended Prince William Sound model.

<sup>&</sup>lt;sup>1</sup> A rating of 1 on question means emphatically "no," and a score of 5 means emphatically "yes"; scores of 2-4 mean "maybe." The reviewer is the best judge of the meaning of "Accurate" and "Adequate," but accurate may mean the proposal shows a clear understanding of what kind of information and research are most needed in this field at this time, and adequate may mean that the appropriate scientific literature is used to support the arguments, and/or that the proposal is well written.

availation que date: a nursaby, September 20

Proposal number: 030658
Title of proposal: Numerical Simulation of Processes Controlling the Exchange Between Prince William Sound and the Alaskan Shelf
Principle Investigatgor(s): S. Vaughan/PWSSC, C. Mooers/Univ. Miami

Use the comments section below each question area for discussion of your rating. Use as much space as necessary, and allow the table to expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak.us no later than the end of business on Thursday, September 26. The subject line of the e-mail to me should read, "030658 review"

Rating <sup>1</sup> 1. Does the proposal provide an understanding of	
I have the proposal provide an understanding of	
1. DAES 110 Brahanes brasse ou amentarisment of	
the problem, is it technically and scientifically   5	
sound, and will it contribute to the generation	
and dissemination of scientific knowledge in the	
topic area?	
Comvn€n⊤s:	····
	_
The proposal has an important purpose that should	be
pursued.	
,	
2. Are the methods as likely to be effective as	
any others available in achieving the solution?	
(1-5)	
Comments:	
G-11-13-12-1	
The second secon	
The proposer has the necessary tools to accomplish	the
proposed task.	
•	
3. Can the solution be achieved with these	
narroanel for the amount of funding requested and	
Lurchin the proposed timeframe? Is it cost	
effective? (1-5)	
Comments:	
Colineria 2:	
·	
More may be better, but the request seems to be re-	
red may be better, but the request seems to be re-	asonable
Any other comments:	

A rating of I on question means emphatically "no," and a score of 5 means emphatically "yes"; scores of 2-4 mean "maybe." The reviewer is the best judge of the meaning

# Exxon Valdez Oil Spill Trustee Council

441 W. 5" Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178



October 28, 2002

Mary Anne Bishop, PhD **PWSSC** PO Box 705 Cordova, AK 99574-0705

> RE: Project 030635 / Trophic Dynamics of Intertidal Soft-sediment

Communities: Interaction between Bottom-up and Top-down Process

### Dear Mary Anne:

I am writing to inform you of my preliminary recommendation that the Exxon Valdez Oil Spill Trustee Council defer a decision on funding Project 030635 a revised proposal and budget that responds to peer review concerns and budget questions are submitted and reviewed. I have enclosed a copy of my preliminary recommendation on this project, along with a summary of the Scientific and Technical Advisory Committee's recommendation on the project's technical merits. This recommendation is made for public review and may be revised before it is provided to the Trustee Council in late November.

My preliminary recommendations on all proposals for funding in FY 03 have been incorporated into the Draft Work Plan, which will be available for public review on the Trustee Council's web page (www.oilspill.state.ak.us) about October 25. If you would like a copy of the Draft Work Plan sent to you, please call or e-mail the Trustee Council Office:

> Telephone 278-8012 Toll-free in Alaska 1-800-478-7745 Toll-free outside of Alaska 1-800-283-7745

E-mail brenda hall@oilspill.state.ak.us

Following a review of any public comments received, including comments from the Trustee Council's Public Advisory Committee, I will make a final recommendation to the Council. Council action on all but deferred projects is scheduled for November 25, 2002. Council action on deferred projects is expected in December 2002 or January 2003. A revised proposal and budget should be submitted by December 1, 2002.

Thank you for your interest in the Trustee Council's Gulf Ecosystem Research and Monitoring (GEM) program. If you have any questions about this preliminary recommendation or the project review process, please call me or Phil Mundy, the Council's Science Director.

Sincerely,

Molly McCammon Executive Director

**Enclosure** 

cc: Pete Hagen, NOAA Liaison

### SPREA IEET B: FY 03 PHASE II WORK PLAN-EXE

### **IVE DIRECTOR'S PRELIMINARY RECOMM**

ATION

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Ph II Request	FY 03 Ph II Recom.	FY 04 Request	FY 04 Recom.
G-030635	Trophic Dynamics of Intertidal Soft-sediment Communities: Interaction Between Bottom-up and Top-down Processes	M. Bishop/PWSSC	NOAA	New FY 03-05	\$205.4		\$184.5	

#### **Project Abstract**

Vast expanses of intertidal sand/mudflats serve as a critical link in the food web of nearshore communities along the southcentral Alaska coastline. The rich abundance of benthic invertebrates residing within the sediments of intertidal flats and the large network of subtidal channels that bisect these flats provide a significant prey resource for numerous species of fish, crabs, birds, and marine mammals. One of the largest expanses of intertidal sand/mudflats occurs in the Copper River Delta and eastern Prince William Sound (Orca Inlet). This project will conduct a large-scale field study that examines the physical/chemical and biological factors that limit and/or regulate invertebrate community dynamics. The largely "bottom-up" approach proposed (physical/chemical parameters phytoplantkon/epibenthic production - invertebrate production) is balanced by the largely "top-down" focus of a companion project funded by the Prince William Sound Oil Spill Recovery Institute that examines predator dynamics and assesses their role in invertebrate community dynamics.

#### STAC Recommendation

The proposal is well written in good scientific form. The PI and team are well qualified to do this work. The Copper River Delta is an important area, and this work could lead to a long-term monitoring strategy for GEM. Peer reviewers raised concerns about the experimental design and logistic issues that need to be addressed. PIs are encouraged to resubmit a proposal that addresses the peer reviewer concerns. Defer.

#### Executive Director's Preliminary Recommendation

Defer, pending submittal and review of substantially revised proposal that addresses peer review concerns about the experimental design and logistics issues and with reduced budget.

#### ITEMS CONSIDERED IN REVIEW OF FY 03 PHASE II BUDGETS

- 1. Completeness of budget, especially:
  - a is there a fully detailed budget form for each project year?
  - b is there general adherence to the format and content instructions?
  - c is Trustee-agency GA rate of 9% of project costs included?
- 2. Note the following:
  - matching funds, if any (amount and source) \$30 × 100 0SRI
  - b requests for anything other than closeout funds in FY 04
  - c indirect rate for non-Trustee-agency proposers
- 3. For continuing projects:
  - level of funding authorized in FY 02 and projection, at that time, of FY 03 budget. Items budgeted for FY 02 but not implemented should not be funded again in FY 03 unless the proposer can verify that he/she will lapse the "unused" FY 02 funds. May want to review/note FY 01 audit results.
  - b direction given by Trustee Council and/or Chief Scientist in FY 02 Final Work Plan or in subsequent review sessions (e.g., transition to agency funding, close out certain components).
  - c change in project's scope per the Chief Scientist's recommendation (i.e., elimination, revision, or addition of objectives). If a pilot project is seeking expansion, note whether there is adequate information to evaluate the pilot's success.
- 4. Personal Services: Note if number of months appears excessive, e.g. 12 mos. for a close-out and no justification provided. Also note if salary appears excessive relative to scope of work and salaries typically paid agency or university employees for the type of work.
- Travel: Must be budgeted at round-trip economy rates, and must identify name of traveler, destination, and trip purpose. Delete towel by technical
  - 6. Annual Workshop: For PI and co-PI only, travel and per diem for up to 5 days (Jan. 13-17) -- and only if PI/co-PI not located in Anchorage.
- 7. Other EVOS Reviews/Workshops: Only workshop identified so far for FY 03 is lingering oil (Fall 2002).
  - 8. Professional Conferences: One each per PI (and co-PI if appropriate) if the PI will be presenting results of his/her EVOS work or attendance at the workshop is integral to the project. Proposal must identify the conference, when and where it will be held, and the PI's role in the conference.
  - 9. Manuscript Preparation: Maximum \$1,000 in page costs <u>per project</u> and maximum 1.5 months personnel time <u>per manuscript</u>. Proposal must include subject/title of manuscript, name of peer reviewed journal to which will be

submitted, and when it will be submitted. Page costs should be provided only if manuscript will actually appear in print in FY 03. Note number of manuscripts for which funding support is requested.

- Report Writing: Funding for final reports only (no funds for annual reports, because annual report requirement has been reduced to a 2-page form with no analysis of results). Costs for annual report preparation 500000 be deleted report report is 2-page lectronic form.
  - 11. Equipment: Note purchases of major new equipment (at a minimum, note everything with unit cost of \$5,000 or more as this is the equipment we are required under TC procedures to track through the annual inventory).
  - 12. Indirect Costs: Maintenance and operation of space (i.e., lease costs), office supplies, copying, phones, equipment maintenance and repair, vehicle leasing, software, and training are typically indirect costs (for complete list see p. 27 of Invitation). Such costs should be budgeted for separately only if they are incurred because of a specific project and documentation of the expense is maintained. The documentation must demonstrate to a financial auditor that the expense was directly attributable to the project, and was necessary and reasonable.

By agreement, University of Alaska indirect rate is 25% of all direct costs except equipment for which ownership resides with the university and subcontract costs in excess of \$25,000 (see p. 36 of Invitation for more detail).

- 13. Community Involvement and TEK: Note funds budgeted.
- 14. Project Management: No funds should be budgeted in the individual project budgets. For FY 03, project management funds have already been approved in Project 030250.
- Overal budget seems nigh. Reluce

### EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL PROJECT BUDGET

		Proposed	Section 12				
Budget Category:		FY 05					
						1.00	
Personnel		\$37,000.0			<b>Electric</b>		
Travel		\$2,973.0					
Contractual		\$43,600.0					
Commodities		\$700.0			12.00	4 1	
Equipment		\$0.0					
Subtotal		\$84,273.0					
Indirect		\$14,076.4					7.1
Project Total		\$98,349.4					
•							
Other Funds	anticipated OSRI	\$99,990.0		1		T	

#### Comments:

Close-out monies

joint project with Dr. Sean Powers, Assistant Professor of Dept. Fisheries at Univ. South Alabama, & Sr. Scientist at Dauphin Island Sea Lab funding leveraged with \$99,990 from Prince William Sound Oil Spill Recovery Institute that funds "top-down" portion of study MTID estimated at 28% pending FY03 IDC proposal submission. 3rd year excludes U of S. Alabama from IDC Formula as per MTDC rules. Personnel time for Bishop includes 3.0 months for preparation of 2 manuscripts for publication (1.5 mo ea).

FY05

Prepared:8/30/02

Project Number: G-030635 (FY 05)

Project Title: Trophic dynamics of intertidal soft-sediment communities: interaction between bottom-up & top-down

processes

Name: Prince William Sound Science Center

FORM 4A NON-TRUSTEE SUMMARY

## EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL PROJECT BUDGET

Personnel Costs:			Months	Monthly		Personnel
Name	Description		Budgeted	Costs	Overtime	Sum
M.A. Bishop	Principal Investigator		4.0	7500.0		30,000.0
Research Technician	Research Technician		2.0	3500.0	•	7,000.0
						0.0
						0.0
						0.0
						0.0
		1				0.0
						0.0
						0.0
						0.0
				110000		0.0
	Subtotal		6.0	11000.0	0.0	الاختمالية والمستعدد المتسمسينية المعادر مسرور ومستعم
			<del></del>		sonnel Total	\$37,000.0
Travel Costs:		Ticket	Round	Total	Daily	Travel
Description		Price	Trips	Days	Per Diem	Sum
Cordova to Anchorage - EVOS Workshop, January		325.0	1	4	162.0	973.0
American Ornithologists Union meeting (location st	ill undecided)	1000.0	1	5	200.0	2,000.0
						0.0
						0.0
						0.0
						0.0
				1		0.0
				ł		0.0
						0.0
			<u>_</u>			0.0
					Travel Total	\$2,973.0

**FY05** 

Prepared:8/30/02

Project Number:

Project Title: Trophic dynamics of intertidal soft-sediment communities: interaction between bottom-up & top-down

processes

Name: Prince William Sound Science Center

FORM 4B Personnel & Travel DETAIL

## EXXON VALDEZ OIL STILL TRUSTEE COUNCIL PROJECT BUDGET

Contractual Costs:	Contract
Description	Sum
Univ. S. Alabama Dauphin Island Marine Lab, Co-Pl Powers	34,000.0
C. Pete Peterson, consultant (.75 mo)	6,000.0
network costs (based on \$100/mo x staff months)	600.0
vessel charters to remove CTDs & moorings, 2 charters @ \$800 ea	1,600.0
page charges (2 @ \$500/ea)	1,000.0
phone/fax/and copying charges (\$100/mo @ 4 mo)	400.0
Contractual Total	\$43,600.0
Commodities Costs:	Commodity
Description	Sum
final report copies	300.0
office supplies, computer cd & diskettes	100.0
sampling & lab supplies	300.0
Commodities Total	\$700.0

**FY05** 

Prepared: 8/30/02

Project Number:

Project Title: Trophic dynamics of intertidal soft-sediment communities: interaction between bottom-up & top-down

processes

Name: Prince William Sound Science Center

FORM 4B Contractual & Commodities DETAIL

### EXXON VALDEZ OIL \_ TRUSTEE COUNCIL PROJECT BUDGET

New Equipment Purchases:	Number	Unit	Equipment
Description	of Units	Price	Sum
			0.0
	<u> </u>		0.0
			0.0
			0.0
			0.0
		İ	0.0
			0.0
			0.0
			0.0
			0.0
			0.0
			0.0
La disease contenses and a suitement number of with on D	Now East	ipment Total	0.0 \$0.0
Indicate replacement equipment purchases with an R.	New Equ	Number	φυ.υ
Existing Equipment Usage:  Description		of Units	
Computers & software (PWSSC 1, Univ. S. Alabama 2)		3	
CTD Univ. S. Alabama (2)		2	
Laboratory - Prince William Sound Science Center	ŀ	1	
Laboratory - Dauphin Island Sea Lab, Univ. S. Alabama		·   1	
Safety equipment - Prince William Sound Science Center & Univ. S. Alabama		2	
CHN Analyzer - Univ. S. Alabama		1	
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**FY05** 

Prepared:8/30/02

Project Number:

Project Title: Trophic dynamics of intertidal soft-sediment communities: interaction between bottom-up & top-down

processes

Name: Prince William Sound Science Center

FORM 4B Equipment DETAIL Reviewer: 4036 Evaluation due date: Thursday, September 26

Proposal number: 030635

Title of proposal: Trophic Dynamics of Intertidal Soft-sediment Communities: Interaction Between Bottom-up and Top-Processes

ple Investigatgor(s): M. Bishop/PWSSC

Use the comments section below each question area for discussion of your rating. Use as much space as necessary, and allow the table to expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak.us no later than the end of business on Thursday, September 26. The subject line of the e-mail to me should read, "030635 review".

030033 review .				
	Rating <sup>1</sup>			
1. Does the proposal provide an understanding of the problem, is it technically and scientifically sound, and will it contribute to the generation and dissemination of scientific knowledge in the	3			
topic area?	(1-5)			
Comments: The aim of proposal is unique and will serve for better understanding of ecological characteristics that GEM targets. Especially focusing both "bottom-up" physico-chemical parateters as well as "top-down" predation pressure on structuring of macrobenthic is good point of view. However, some potential important factors are overlooked in the proposal. For example, ecological role of zooplankton, benthic microbes and meiofauna are completely missing.				
2. Are the methods as likely to be effective as any others available in achieving the solution?  (1-5)				
Comments: Methods are generally speaking adequate tresearch proposed. The reviewer however thinks information essential to evaluate primary production of all thresheld the Chl.a abundance, nutrient concentration etc. Defined and PON was not found, and the reviewer can not	rmation of light intensity is see group of organisms in addition to escription for measuring quantity of			

meter.

3. Can the solution be achieved with these	4
personnel for the amount of funding requested and	Ŧ
within the proposed timeframe? Is it cost	
effective?	(1-5)

Comments: The publications of PIs are judged not so sufficient as that the reviewer is convinced that they can achieve the solution by theirselves. However, consulting with Prof. Petersen should be valuable enough to overcome this weakness. Proposed funding seems adequate and cost effective. I think they need insurance for longterm mooring of CTDs in a rough winter Alaskan waters.

Any other comments: Statistical analysis etc. are well designed. The reviewer recommend to find collaboration with e.g. zooplankton biologist, meiobenthologists and microbiologists to make the program comprehensive enough to understand the ecosystem, because the secondary production of the organisms listed above are considered much larger than macroinvertebrates, and for bottom-up approach, such information is indispensable.

A rating of 1 on question means emphatically "no," and a score of 5 means emphatically "yes"; scores of 2-4 mean "maybe." The reviewer is the best judge of the meaning of "Accurate" and "Adequate," but accurate may mean the proposal shows a clear understanding of what kind of information and research are most needed in this field at this time, and adequate may mean that the appropriate scientific literature is used to support the arguments, and/or that the proposal is well written.

Reviewer: 4021

Evaluation due date: Thursday, September 26

Proposal number: 030635

Title of proposal: Trophic Dynamics of Intertidal Soft-sediment Communities: Interaction Between Bottom-up and Topn Processes

iple Investigatgor(s): M. Bishop/PWSSC

Use the comments section below each question area for discussion of your rating. Use as much space as necessary, and allow the table to expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak.us no later than the end of business on **Thursday**, **September 26**. The subject line of the e-mail to me should read, "030635 review".

	Rating <sup>1</sup>
1. Does the proposal provide an understanding of	
the problem, is it technically and scientifically	
sound, and will it contribute to the generation	4
and dissemination of scientific knowledge in the	
topic area?	(1-5)

Comments: The description of the problem is clear with well-formed hypotheses and a solid approach to collecting data. While the proposed work is not novel, I agree strongly that long-term baseline data are critical to measuring effects of disturbance in an environment. If this area is truly at risk, there is great value in having multi-season, multi-year data for the habitat in its "undisturbed" condition. The data collected (particularly for the experimental portion of the study), could contribute to our understanding of soft-bottom communities.

My questions about the study are minor and concern descriptions of individual experiments.

- 1. In Objective 1 (pg 10), it states that there will be 4 sites with 3 transects per height, 3 tidal heights per transect and 3 plots per tidal height. That suggests that e will be 108 samples (4x3x3x3). The text states that only 36 samples will be taken. asn't clear what the sampling plan actually is (perhaps this is just a problem in mition of plots). The number of samples has important consequences for power of the analysis and the cost of the work.
- 2. In the same experiment, it is stated that the length vs. ash-free dry weight will be measured for all benthic invertebrates. It isn't clear whether this is really "all invertebrates" or just bivalves.
- 3. In Objective 2, there is no clear justification for the dates of sampling. Does the unequal timing of samples related to some seasonal pattern? What is the justification for this number of samples taken at these times? Will it be sufficient to document any patterns in the environment?
- 4. One of the primary hypotheses of the proposal is that primary production and benthic invertebrate production are tightly coupled. This hypothesis is treated in Objective 2, but the description is inadequate to determine what is actually going to be done. What nutrients will be used? What is the replication going to be? How long with the bins be out? How will responses be measured? Much of this appears dependent on a first-year pilot study, but it is hard to assess the value of these experiments (which treat one of the major hypotheses) without more information.
- 5. The Statistical Methods describes a number of ANOVA tests with post-hoc contrasts. There are potentially an enormous number of tests planned. Presumably the authors have considered error rates and the effects of multiple tests.

2.	Are the methods as likely to be effective as others available in achieving the solution?	4
		(1-5)

A rating of 1 on question means emphatically "no," and a score of 5 means emphatically "yes"; scores of 2-4 mean "maybe." The reviewer is the best judge of the meaning of "Accurate" and "Adequate," but accurate may mean the proposal shows a clear understanding of what kind of information and research are most needed in this field at this time, and adequate may mean that the appropriate scientific literature is used to support the arguments, and/or that the proposal is well written.

Comments:				
<b>'</b>				
Most of the proposed sampling methods are standard for studies of soft-bottom				
communities. The approachs are, therefore, solid and the results should be direct				
comparable to other studies. My only reason for not giving this a 5 is that there				
lequate methods information to judge whether the nutrient enrichment experiment	s will			
er the questions posed in that portion of the study.				
3. Can the solution be achieved with these				
personnel for the amount of funding requested and				
within the proposed timeframe? Is it cost				
effective?				
Comments:				
The PI's are very qualified to do this work. There is good knowledge of local				
environments, strong experience in the ecology of marine benthic communities and a	good			
experimental/statistical base. The coordination of the sampling effort with on-go	ing			
PWSSC-UNC work is a good way to leverage funds to achieve more with available resources.				
Any other comments:				
Any other commences.				

Reviewer: 565 Evaluation due date: Thursday, September 26

Proposal number: 030635

Title of proposal: Trophic Dynamics of Intertidal Soft-sediment Communities: Interaction Between Bottom-up and Top-1 Processes

ple Investigatgor(s): M. Bishop/PWSSC

Use the comments section below each question area for discussion of your rating. Use as much space as necessary, and allow the table to expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak.us no later than the end of business on **Thursday**, **September 26**. The subject line of the e-mail to me should read, "030635 review".

	Rating <sup>1</sup>
1. Does the proposal provide an understanding of	
the problem, is it technically and scientifically	
sound, and will it contribute to the generation	2
and dissemination of scientific knowledge in the	
topic area?	(1-5)

Comments: The ideas of the proposal are certainly important and overall, the proposal addresses some key areas for GEM. The concept of "bottom-up" processess needs to be further developed so that it is evident why this proposal is necessary. The chemical analytical methods seem to be in order. I do feel however, that the sampling plans and experimental designs are problematic.

- 1) Pre-existing differences in sediments appear uncontrolled for in Macoma experiment. Bin, mesh, and undrained water are uncontrolled sources of variation (see Obj. 2).
- 2) To use cluster analysis to define hypotheses for ANOVA greatly reduces the inferential strength of the study the hypotheses should be defined a priori.
- 3) It appears that the study has pseudoreplication (transects are not replicates for conclusions of the whole area) there seems to be no real replication (random selection of mudflats from the frame of all mudflats in eastern PWS) (see Obj. 1).
- 1) The Macoma experiment is not completely described, so I can't determine if there will be enough degrees of freedom for a 3-way ANOVA (especially if there are random factors). More importantly, how can it be said that a 3-way ANOVA is to be used when the actual hypotheses aren't even defined (points # 2 and 10)! Note that cores and plots are subsamples, not replicates. Where does site fit in the 3-way ANOVA? Is that going to be a fourth factor? A 4-way ANOVA?
- 5) Isn't Macoma a surface deposit feeder? It isn't clear how placing nutrients in the top 2 cm of sediments relates to understanding PWS trophic dynamics via Macoma. What do the investigators consider as nutrients, why isn't that stated, and how do the nutrients relate to the carbon sources that Macoma normally utilizes?
- 6) It appears that the monitoring of physical measurements, primary production, and the Macoma experiment may not be linked.
- 7) Three transects will be not enough to describe associations of infauna to abiotic factors as proposed for Objective 1. The number of transects should be determined by the scale of change in the gradients it would be much more than 3.
- 8) How about amphipods? They are also surface feeding organisms and prey items. One cannot study one organism and make conclusions about "trophic dynamics" for the whole system (which seems to be a possibility here).
- 9) It seems like a component missing in Obj. 1 is the temporal change in Macoma densities. Two sampling periods aren't enough to address this. The question from this is what is the magnitude of seasonal variation and how large an influence is summer predation in comparison? Sampling in September will show a decrease due to predation and summer mortality due to higher temps, etc., so how will the study separate these things?

A rating of I on question means emphatically "no," and a score of 5 means emphatically "yes"; scores of 2-4 mean "maybe." The reviewer is the best judge of the meaning of "Accurate" and "Adequate," but accurate may mean the proposal shows a clear understanding of what kind of information and research are most needed in this field at this time, and adequate may mean that the appropriate scientific literature is used to support the arguments, and/or that the proposal is well written.

- 10) How will the Macoma experiment "allow specific tests of mechanisms hypothesized to structure communities"? I disagree with that claim as it expands beyond the inferential scope of the experiment. State specific mechanisms and potential hypotheses.
  - 11) SNK tests have been shown to have an "indeterminate error rate" and authors have recommended against using them. (See Day and Quinn, 1989, Comparisons of Treatments afer and analyis of variance in ecology, Ecological Mongraphs, 59, 433-463.) Thought should be given to planned comparisons.
  - 12) How were trasnect locations intended to be located? Transects exist at three sites, were those selected via random numbers or statistically haphazardly?

2.			methods			to	be	eff	ective	as
any	other	rs a	available	in	achiev	/inc	, th	ne s	solution	1?

2

(1-5)

Comments: The methods related to sample handling and analytical approaches seem reasonable. The studies proposed are pretty simple and may be hampered by the problems discussed above. The investigators place a lot of emphasis on hypothesis testing but this is a situation where ecologically significant results are probably best presented as effects sizes, rates, etc. I think that low true replication, fixed sampling locations, and confounding influences reduce the effectiveness of this proposal. It seems that lab studies would be much more effective at demonstrating growth of Macoma than the field experiment proposed for which it is going to be difficult to control extraneous and confounding factors. Additionally, although frequently done in observational studies, the associations between abiotic factors and faunal abundance cannot be considered as cause and effect and predictions may not even be justified.

Since the title and objectives of the proposal discuss bottom-up processes, and seek to "establish and quantify linkages between the prey community and predators", a more complex approach is probably required. Benthic respriation maybe? Most investigators of benthic coupling include isotope methods. The proposal focuses one one clam (one part of the prey community) in Obj. 2 but I don't see the proposal as a whole well describing the "bottom-up" part nor documenting "trophic dynamics" of the soft sediments.

Can the solution be achieved with these onnel for the amount of funding requested and within the proposed timeframe? Is it cost effective?

3

(1-5)

Comments: The work actually proposed can be completed in the timeframe allowed and the funding seems okay. However, I don't think that the solutions for the problems proposed in the introduction can be answered in this proposal and I don't think this is cost effective for those issues. A number of statements in the proposal are larger than the work actually to be done. For instance, Pg. 7, prediction 3, is about production of benthic invertebrates but only M. balthica is studied. The study will use correlative work to develop predictions and I don't think that will be as useful as suggested, particularly given the lack of replication - there only are four fixed sites to be sampled. Thus, I'm not convinced that meaningful solutions can be reached with the proposed work. Certainly, an important part of the solution may be answered by this study but trophic dynamics are far more than determining changes along gradients and growth of Macoma.

Any other comments: Apparently, some data for Objective 1 is already available from the PWSSC-UNC studies of 2000-2002 so what is different about this study? It isn't going to be helpful to just use ANOVA or multivariate methods to show that Macoma abundance is different between transects - what is going to come from this that is different than work already done? The comment in the introduction that the low percentage of organic carbon in the Delta sediments implies a tight coupling of production and infaunal assemblages and that might not be correct as sediment factors (high inputs of glacial flour) may be driving the low percent carbon. It has been shown elsewhere that glacial sediments can be impermeable to organic carbon. The investigators need to show that unused carbon can actually accumulate in these sediments in the absence of consumers first before reaching this conclusion. Given hypotheses are extremely general and should be specific. For ple, for Objective 2, "We hypothesize that spatial and temporal patterns of

uction of benthic invertebrates are tighly linked with patterns of primary production". There is only one clam considered so the hypothesis really is something like "Nutrient levels influence growth of M. balthica, the major prey resource of mudflats in eastern Prince William Sound".

I think that the underlying thoughts behind this proposal are excellent and the work pould be an important contribution. At minimum, there are a number of areas where the text needs further clarification and refinement. Particular attention needs to be given to explaining the experimental and statistical methods.

Reviewer: 4043

Evaluation due date: Thursday, September 26

Proposal number: 030635

of proposal: Trophic Dynamics of Intertidal Soft-sediment Communities: Interaction Between Bottom-up and Topn Processes

runciple Investigatgor(s): M. Bishop/PWSSC

Use the comments section below each question area for discussion of your rating. Use as much space as necessary, and allow the table to expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak.us no later than the end of business on **Thursday**, **September 26**. The subject line of the e-mail to me should read, "030635 review".

	Rating <sup>1</sup>	
1. Does the proposal provide an understanding of		
the problem, is it technically and scientifically	_	
sound, and will it contribute to the generation	3	
and dissemination of scientific knowledge in the		
topic area?	(1-5)	
Commonts		

Comments:

The authors propose to expand upon an existing research program examining correlations between selected physical factors and infaunal distributions as well as the role of predation in controlling infaunal communities in the Copper River Delta region. In particular, they propose to expand this program by incorporating potential impacts of bottom-up factors in structuring this community as well as expanding their correlations between community parameters and physical factors. As the authors correctly point out, there is increasing interest in the impact of both bottom-up and top-down factors in structuring communities and incorporation of both

cesses, including their interactive effects, would significantly rease our understanding of benthic dynamics in this region. However, I have several concerns about the problem as summarized. First, there is considerable literature on top-down and bottom-up interactions in softsediment infaunal communities. The authors fail to reference many of these recent papers that would seem important to the broader interpretation of their potential results and design of their project. Second, I have concerns about the methodology (see below) that may affect the overall scientific contribution of the study. Third, an important aspect of topdown and bottom-up factors is the degree to which they may interact. The correlative studies proposed here do not target this interactive aspect and the experiment proposed also has some potential methodological flaws. Finally, correlations between grain size, temperature, and salinity with infaunal community patterns have been demonstrated for over 50 years. Is objective 1 of this proposal simply to provide details of this expected relationship for a particular system?

2. Are the methods as likely to be effective as any others available in achieving the solution?	3
	(1-5)

A rating of 1 on question means emphatically "no," and a score of 5 means emphatically "yes"; scores of 2-4 mean "maybe." The reviewer is the best judge of the meaning of "Accurate" and "Adequate," but accurate may mean the proposal shows a clear understanding of what kind of information and research are most needed in this field at this time, and adequate may mean that the appropriate scientific literature is used to support the arguments, and/or that the proposal is well written.

### Comments:

- I have several concerns about the methodological approach as proposed:
- 1. For objective 1 the authors propose to take only nine (3 per transect)
  15 cm diameter cores per tidal height per site and only 3 transects per
  ite to characterize general community patterns. Given the wellmemonstrated small-scale variability in infaunal community patterns
  over scales of meters as well as over time, I question whether this
  level of replication is sufficient. Initial data showing variability in
  faunal abundances over scales of 10's to 100's of meters would be
  useful in justifying this seemingly low sample size.
- 2. For objective 1 the methodological design appears to be primarily correlative in nature. I am concerned about the possibility for spurious relationships based on such an approach.
- 3. For water column chlorophyll levels, the authors propose to take 2 samples per site (for given depth zones) during 6 time periods. Water column chlorophyll varies over small spatial scales and temporally with variations in water flow, turbidity, resuspension, temperature, salinity, and current dynamics. I believe the replication will be too low in space and time to sufficiently characterize this aspect of production.
- 4. I have similar concerns about benthic microalgae and porewater nutrients as I do with water column chlorophyll. As with water column measures, many studies have indicated small-scale variability in benthic microalgae and the level of replication proposed here (n=2 per site/tidal level combination X 3 transects??) is much less than generally used in other studies (not cited here!). Moreover, the uthors suggest a possible relationship between infaunal abundances and cicroalgae production. As such, there may be interactive effects that will not be discernable from simple correlations of biomass. Experimental enhancement or measures of actual productivity are needed (see below for comments on the proposed experiment).
- 5. The authors propose a simple experiment to examine effects of nutrient enhancement on a selected bivalve. The experiment proposed involves removal of sediment and then replacement within a bin. This will have severe disturbance effects that may be apparent for months after placement and may affect responses to nutrient additions. Also, nutrients will apparently be added in solution. To be an appropriate test of community responses to general nutrient enhancement, nutrient enhancement should be continual and not a pulsed addition and should not be subject to rapid dilution as is likely with solution additions. Moreover, the authors do not describe what disturbance controls they will use or the full range of response variables they may measure. I also question including only one infauna taxa if the community normally includes a mix of taxa (as suggested in the previous discussion). In general, this is experiment lacks important details needed to critically assess its potential success.

Can the solution be achieved with these	
sonnel for the amount of funding requested	and
within the proposed timeframe? Is it cost	
effective?	

The funds requested seem appropriate for the proposed research, though I think the time frame may be a bit rushed. Greater replication on more targeted factors would seem appropriate.					
other comments:					

Comments:

# Exxon Valdez Oil Spill Trustee Council

441 W. 5th Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178



October 28, 2002

Robert Foy, PhD UAF/IMS/SFOS 118 Trident Way Kodiak, AK 99615

RE:

Project 030682 / Nearshore Fisheries Habitat Assessment in Kodiak

**Embayments** 

#### Dear Bob:

I am writing to inform you of my preliminary recommendation that the Exxon Valdez Oil Spill Trustee Council defer a decision on funding Project 030682 until a revised proposal and budget that respond to peer review concerns are submitted and reviewed. I have enclosed a copy of my preliminary recommendation on this project, along with a summary of the Scientific and Technical Advisory Committee's recommendation on the project's technical merits. This recommendation is made for public review and may be revised before it is provided to the Trustee Council in late November.

My preliminary recommendations on all proposals for funding in FY 03 have been incorporated into the Draft Work Plan, which will be available for public review on the Trustee Council's web page (www.oilspill.state.ak.us) about October 25. If you would like a copy of the Draft Work Plan sent to you, please call or e-mail the Trustee Council Office:

> Telephone 278-8012 Toll-free in Alaska 1-800-478-7745 Toll-free outside of Alaska 1-800-283-7745

E-mail brenda hall@oilspill.state.ak.us

Following a review of any public comments received, including comments from the Trustee Council's Public Advisory Committee. I will make a final recommendation to the Council. Council action on all but deferred projects is scheduled for November 25, 2002. Council action on deferred projects is expected in December 2002 or January 2003. A revised proposal and budget should be submitted by December 1, 2002.

Thank you for your interest in the Trustee Council's Gulf Ecosystem Research and

Monitoring (GEM) program. If you have any questions about this preliminary recommendation or the project review process, please call me or Phil Mundy, the Council's Science Director.

Sincerely,

Molly McCammon Executive Director

Enclosure

cc: Bill Hauser, ADF&G Liaison

#### **EET B: FY 03 PHASE II WORK PLAN-EXE**( IVE DIRECTOR'S PRELIMINARY RECOMME SPREAL ATION

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Ph II Request	FY 03 Ph II Recom.	FY 04 Request	FY 04 Recom.
G-030682	Nearshore Fisheries Habitat Assessment in Kodiak Embayments	R. Foy/FITC	ADFG	New FY 03	\$345.4		\$0.0	

#### **Project Abstract**

This project will initiate a broadscale study to assess the forage fish use and relative hydrography of nearshore habitat around Kodiak Island. This study will develop a monitoring program to efficiently assess seasonal fish biomass and their habitat in multiple bays on Kodiak Island. This pilot study will be used to focus future studies on areas that are most important for fish biomass assessment. These data will be important for defining essential habitat of fish species as well as determining the availability of prey for upper trophic levels such as marine mammals and sea birds. A series essential to decide on an appropriate monitoring of vessel and aerial surveys to cover the entire island will strategy for this region. Defer. be conducted in May, June, July and August 2003. Hydroacoustic and digital image assessments will be made to calculate relative biomass estimates and relate them to habitat type and structure. This data will be useful for baseline management issues as well as upper trophic level studies.

#### STAC Recommendation

The proposal does not adequately define the sampling methodology and clearly demonstrate how this work differs from work being performed under other funding sources. The GEM workshops on the nearshore habitat type identified the need for a geographically distributed network of sites that would include nearshore monitoring in the Kodiak area. Funding would require a revised proposal addressing peer reviewer comments and incorporating results from ongoing studies that are

#### **Executive Director's Preliminary Recommendation**

Defer pending submittal and review of revised proposal that is reduced in scope and focuses on 1 or 2 bays. PI needs to respond to peer reviewer comments.

#### ITEMS CONSIDERED IN REVIEW OF FY 03 PHASE II BUDGETS

- 1. Completeness of budget, especially:
  - a is there a fully detailed budget form for each project year?
  - b is there general adherence to the format and content instructions?
  - c is Trustee-agency GA rate of 9% of project costs included?
- 2. Note the following:
  - a matching funds, if any (amount and source)
  - b requests for anything other than closeout funds in FY 04
  - c indirect rate for non-Trustee-agency proposers
- 3. For continuing projects:
  - a level of funding authorized in FY 02 and projection, at that time, of FY 03 budget. Items budgeted for FY 02 but not implemented should not be funded again in FY 03 unless the proposer can verify that he/she will lapse the "unused" FY 02 funds. May want to review/note FY 01 audit results.
  - b direction given by Trustee Council and/or Chief Scientist in FY 02 Final Work Plan or in subsequent review sessions (e.g., transition to agency funding, close out certain components).
  - c change in project's scope per the Chief Scientist's recommendation (i.e., elimination, revision, or addition of objectives). If a pilot project is seeking expansion, note whether there is adequate information to evaluate the pilot's success.
- 4. Personal Services: Note if number of months appears excessive, e.g. 12 mos. for a close-out and no justification provided. Also note if salary appears excessive relative to scope of work and salaries typically paid agency or university employees for the type of work.
- 5. Travel: Must be budgeted at round-trip economy rates, and must identify name of traveler, destination, and trip purpose.
- 6. Annual Workshop: For PI and co-PI only, travel and per diem for up to 5 days (Jan. 13-17) -- and only if PI/co-PI not located in Anchorage.
- 7. Other EVOS Reviews/Workshops: Only workshop identified so far for FY 03 is lingering oil (Fall 2002).
- 8. Professional Conferences: One each per PI (and co-PI if appropriate) if the PI will be presenting results of his/her EVOS work or attendance at the workshop is integral to the project. Proposal must identify the conference, when and where it will be held, and the PI's role in the conference.
- 9. Manuscript Preparation: Maximum \$1,000 in page costs <u>per project</u> and maximum 1.5 months personnel time <u>per manuscript</u>. Proposal must include subject/title of manuscript, name of peer reviewed journal to which will be

submitted, and when it will be submitted. Page costs should be provided only if manuscript will actually appear in print in FY 03. Note number of manuscripts for which funding support is requested.

- Report Writing: Funding for final reports only (no funds for annual reports, because annual report requirement has been reduced to a 2-page form with no analysis of results).
- 11. Equipment: Note purchases of major new equipment (at a minimum, note everything with unit cost of \$5,000 or more as this is the equipment we are required under TC procedures to track through the annual inventory).
- 12. Indirect Costs: Maintenance and operation of space (i.e., lease costs), office supplies, copying, phones, equipment maintenance and repair, vehicle leasing, software, and training are typically indirect costs (for complete list see p. 27 of Invitation). Such costs should be budgeted for separately only if they are incurred because of a specific project and documentation of the expense is maintained. The documentation must demonstrate to a financial auditor that the expense was directly attributable to the project, and was necessary and reasonable.

By agreement, University of Alaska indirect rate is 25% of all direct costs except equipment for which ownership resides with the university and subcontract costs in excess of \$25,000 (see p. 36 of Invitation for more detail).

- 13. Community Involvement and TEK: Note funds budgeted.
- 14. Project Management: No funds should be budgeted in the individual project budgets. For FY 03, project management funds have already been approved in Project 030250.

15. Other: Note additional, project-specific budget issues that may need to be addressed.

Reduced budget in line with vevised scope of project. Reviewer: 2590 Evaluation due date: Thursday, September 26

Proposal number: 030682

Title of proposal: Nearshore Fisheries Habitat Assessment in Kodiak Embayments

ple Investigatgor(s): R. Foy/FITC

Use the comments section below each question area for discussion of your rating. Use as much space as necessary, and allow the table to expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak.us no later than the end of business on **Thursday**, **September 26**. The subject line of the e-mail to me should read, "030682 review".

	Rating <sup>1</sup>				
1. Does the proposal provide an understanding of					
the problem, is it technically and scientifically					
sound, and will it contribute to the generation	3.5				
and dissemination of scientific knowledge in the					
topic area?	(1-5)				
Comments: The proposal seeks to address critical que	stions regarding fish habitat and				
important juvenile and forage fish community structure. There are enormous practical					
benefits for the fishing industry and resource managers to be gained by such a study. The					
scientific benefits are potentially great. While I believe that the fundamental goals of					
this proposal are excellent, I have problems with the sampling approach. These are not					
well described in the proposal. I also believe that a more focussed approach is required in order to correctly determine the relevant time and space scales - which is a					
<u>-</u>	<del>-</del>				
fundamental objective of this program (see next). D	elineation of these scales CANNOT be				
attained by broad scale surveys.					
2. Are the methods as likely to be effective as	3				
any others available in achieving the solution?					
	(1-5)				

A rating of 1 on question means emphatically "no," and a score of 5 means emphatically "yes"; scores of 2-4 mean "maybe." The reviewer is the best judge of the meaning of "Accurate" and "Adequate," but accurate may mean the proposal shows a clear understanding of what kind of information and research are most needed in this field at this time, and adequate may mean that the appropriate scientific literature is used to support the arguments, and/or that the proposal is well written.

Comments: My biggest problem with this proposal is the sampling design. The proposers plate that all bays around Kodiak will be sampled during 10-day periods. (It is not clear how many surveys are to be conducted. However, I have no idea where the proposed stations (pertains to the spatial scales that can be assessed) and how the stations are to be selected (purely random or based on prior information). Moreover there is an excellent ibility that the time scale (seasonal) could be seriously aliased by tidal and/or er period phenomena - this has happened frequently in these sorts of studies I am described. The tides could be significant in some regions around Kodiak and it is does not seem, based on the proposed sampling scheme that fish movements associated with tides can be discriminated from seasonal displacements. A similar concern can be made for time periods associated with the passage of storms etc. I really like this proposal and would like to see it funded in some form. My suggestion is that for the same amount of money the PIs focus on only a couple of bays and that they increase their spatial and temproal

The PI states that he will do a CTD cast at each station - but it is not clear what constitutes a station. Is it a trawling site? How many stations/bay? It would have helped to have had some maps shwoing the sampling design.

#### Other concerns:

sampling within these regions.

Any attempt to relate physical property distributions to fish distributions requires sampling of the physical parameters on the same scale as the fish. This could be difficult within the budget provided. However, I suggest that some consideration be given to continuous underway sampling of T and S at least at the surface in conjunction with the CTDs. (This woould require towing a CTD, installing one in the vessel's seachest not necessarily trivial.) Alternatively, a few CTD sections should be run in each bay that sample at very high spatial resolution - say 2 km at most and possibly at 1 km. These sections should be occupied repeatedly over a tidal cycle with the hydroacoustics survey. Are there significant changes in T and S structure and fish distribution associated with the tidal cycle? If not then this time scale can be eliminated as important for this particular section of the bay. If not, then the results provide tant information on how the sampling needs to be performed in the future in order to ss whether or not distributions change due to factors other than tides. Similar arguments can be made with respect to changes following storm events. I do not think we can achieve an understanding of the ecosystem without first understanding the importance of small scale phenomena as these set the sampling scales. This study could make an invaluable contribution to fisheries oceanography and GEM by defining these scales. If it turns out that broad scale surveys of the sort envisioned (but not well articulated here) work then great, but I don't think we know that until we've identified the relevant and irrelevant scales.

Mention is made of measuring productivity using a CTD. I don't know how this is done. Perhaps the Pis will have a fluorometer on the CTD? However, the fluorometer measures chlorophyll concentrations (biomass) and needs to be calibrated with in-situ measurements of chlorophyll in order to determine absolute biomass. Biomass is a concentration, but not a rate so this is not a measure of primary production.

I was surprised that the Pis focused on primary production rather than zooplankton. Are these fish eating phyto-plankton or zooplankton? If the latter, then why is there no concurrent zooplankton sampling? Perhaps there are budget issues involved, but it seems to me that some simple. Inexpensive measure of zooplankton concentrations should be carried out (settling volume at the very least?)

Finally on p.8 the milestones say sampling will be conducted in May, June, July, and August, but just below that they say only May and June  $(2^{nd}$  quarter) and no reference to July and August.

3. Can the solution be achieved with these	5
nnel for the amount of funding requested and	J
v n the proposed timeframe? Is it cost	4
errective?	(1-5)

Comments: Foy is a hard-working, careful, and excellent scientist. He has the skill and experience necessary to complete this project. His interaction with other projects will certainly enhance the value of this program. The project is cost-effective and I think that the time-frame is realistic even for the suggested change in approach.

other comments: I recommend funding with a revised sampling protocol. The sampling protocol should focus on 2 or 3 dissimilar bays (in terms of bottom topography, tidal condition, if known,, exposure to the shelf, etc.) with these sampled heavily in space and time throughout the May through August time frame. The results of such an effort can then be applied to developing a highly valuable monitoring program for the Kodiak area.

Comments on Project No. G-030682

1. Does the proposal provide an understanding of the problem, is it technically and scientifically sound, and will it contribute to the generation and dissemination of scientific knowledge in the topic area?

Rating: 4

See comments below.

2. Are the methods as likely to be effective as any other available in achieving the solution?

Rating: 3

See comments below.

3. Can the solution be achieved with these personnel for the amount of funding requested and within the proposed timeframe? Is it cost effective?

Rating: 3

See comments below.

#### General Comments

- 1. The proposal seems to have been quickly put together with very little internal review. In the Abstract alone I found two obvious grammatical errors. In situations such as this, this reviewer tends to wonder if this is reflects the quality of the research and reporting as well.
- 2. I feel there must be a much better discussion of how this research meets the EVOS mission objections. If this proposal is to provide data for better fisheries management, then it is incumbent upon the proposers to convince this reviewer that there is a process in place that will allow this data to be utilized by the cognizant management agencies.
- 3. Image processing is non-trivial and is not thought through as well as I would like.
- 4. Can the proposers provide a map of Kodiak that shows the areas where they propose to collect data?

# Specific Comments

- 1. Page 1, first paragraph. In the introduction there is a discussion of the need for this data to better manage the commercial herring and Pollock fisheries. Although I found the arguments being made for collection of this data somewhat compelling, I was left wondering if the fisheries managers have cited the need for this data in their management process. Later in the proposal (page 8, top of page) it says "The Alaska Department of Fish and Game has also expressed interest in collaborating with the current assessment of herring biomass in some of the bays around Kodiak." After reading this, I was left feeling that the coordination with ADF&G was rather weak. There was no supporting letters, nothing that indicated the ADF&G saw this data set as being a fundamental missing element in their management plan, and no further elaboration on how this data was going to be utilized by ADF&G.
- 2. Page 1, first paragraph. What is a sufficient baseline for the proposed data collection? Is a single year of data collection sufficient? Or, does this need to be done each year? If it must be done annually, then how will this be funded for the years beyond the proposed effort? Later, on Page 5, Section B, there is further discussion of the need to create a baseline that can be used to assess the impact of climatic variations on fish population and density. But, again, the length and frequency of the collection of this baseline should be specified and it is not.
- 3. Page 1, second paragraph. I am familiar with the work of Foy and Brown and have a great deal of respect for their research. I am aware of several data collection efforts that they have been involved with that have been funded under NPMR and SSLRI, using hydroacoustics, trawl surveys, and Lidar. I felt that the relationship between this research, and other efforts that they have participated within the Kodiak and Central Gulf region and the proposed effort should have been explained in greater detail.

- 4. Page 2, last paragraph, third sentence. I was completely confused by the following sentence: "The potential impact to harvesters and other trophic levels of not understanding this information comes in three forms." Not only was I having difficulty understanding what was being said, but I could not locate the third "form."
- 5. Page 3, last paragraph, it is stated "The second potential impact to the ecosystem of not understanding the role of forage fish in the nearshore environment is the effect of legislative action that enforces strict regulations affecting fish availability due to a lack of data currently available." I was completely confused by this statement. Legislative actions are not enforcement actions. Why is enforcement of regulations bad? How is the collection of the proposed data going to be introduced into the existing process?
- 6. Page 6, Section B. The use of a 38 kHz sonar is questionable in a shallow water environment. Lower frequencies such as this tend to be more effective in deeper hydroacoustic surveys. The use of a 7 degree transducer is possibly too narrow as well. Later in the proposal (Page 7, Section C), a second frequency is mentioned when calibration procedures are mentioned. However, it is not clear if the 120 kHz transducer will be used. In this reviewer's opinion, the higher frequency would be more ideal for the size of fish that are being ensonified.
- 7. Page 6, Section B. Are permits required for this work? I did not see a mention of this in the proposal and feel this should be addressed.
- 8. Page 6, Last Paragraph. The use of the digital camera to collect data appeared to have some value, but I was troubled by the description of how this data will be processed and what information is expected from this aerial data. It is stated "The spectral characteristics of pixels covering fish schools and sea birds will be determined and an algorithm created to identify all pixels with these characteristics as well as pixel groupings, shape characteristics, spectral density, and geographic locations of identified pixels." Although this aspect of the data collection effort is made to sound rather straightforward, it is not. There is a tremendous amount of difficulty in acquiring and properly processing the aerial data to provide any level of useful information. Even with a tool as comprehensive as ERDAS, the vagaries of collecting imagery of fish schools with varying lighting and water conditions makes this portion of the effort fraught with difficulties. Furthermore, the scientist that is identified with this work is Dr. Martin Montes, yet there is no vitae included in the proposal that could help this reviewer determine if he is qualified to perform the algorithm development and image processing.
- 9. Page 6, Last paragraph. There is a mention of an extensive data set that was collected over several years in the Prince William Sound. I would have liked to seen a more detailed discussion of how this work was of benefit to the herring fishery and management in that area. I would expect that this work would serve as a model for what is being proposed in Kodiak, however this discussion was missing.
- 10. Page 6, Last paragraph. Is the data collection system already built that will bring together GPS readings, altitude, attitude, and the other data elements described with the imagery?
- 11. Page 7, First paragraph. It is stated, "The pixel values are summed to provide an estimate of total abundance and length-weight relationship can be used to convert to biomass." This relative index causes me some concern. How can a two-dimensional view of a three-dimensional object (a fish school) provide enough information to accomplish even a relative abundance estimate? Is there any prior work that can be identified, published or otherwise, that can substantiate this approach?

### Summary

• I believe this proposal has some merit, but there are too many issues left open for this reviewer to feel comfortable with a recommendation for funding. If there was an opportunity for the proposers to consider the comments included herein and provide a modified proposal, I would like the opportunity to reconsider this decision and revisit the ratings that have been given.

441 W. 5" Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178

October 28, 2002

John Harper Coastal & Ocean Resources Inc. 214-9865 W. Saanich Rd. Sidney, BC V8L 5Y8

RE: Project 030641 / ShoreZone Mapping for GEM

Dear John:

I am writing to inform you of my preliminary recommendation that the *Exxon Valdez* Oil Spill Trustee Council fund Project 030641 contingent a revised proposal and budget that respond to the peer review recommendations. I have enclosed a copy of my preliminary recommendation on this project, along with the Scientific and Technical Advisory Committee's recommendation on the project's technical merits. This recommendation is made for public review and may be revised before it is provided to the Trustee Council in late November.

The Trustee Council Office estimate of the overall budget for Project 030641 is for something less than \$35,000 in your original proposal, including agency general administration of nine percent. You should work from this number in developing your revised budget. The revised budget should be prepared on the standard detailed budget forms and submitted along with a revised proposal to the Trustee Council Office, Attn: Katharine Miller, by **November 12, 2002.** (Please submit three paper copies and an electronic copy of the proposal and budget.) Enclosed is a list of items considered in the review of your budget which may help you prepare a revised budget.

My preliminary recommendations on all proposals for funding in FY 03 have been incorporated into the Draft Work Plan, which will be available for public review on the Trustee Council's web page (<a href="https://www.oilspill.state.ak.us">www.oilspill.state.ak.us</a>) about October 25. If you would like a copy of the Draft Work Plan sent to you, please call or e-mail the Trustee Council Office:

Telephone 278-8012
Toll-free in Alaska 1-800-478-7745
Toll-free outside of Alaska 1-800-283-7745

E-mail brenda hall@oilspill.state.ak.us

Following a review of any public comments received, as well as comments from the Trustee Council's Public Advisory Committee, I will make a final recommendation to the Council. Council action on the Work Plan is scheduled for November 25, 2002.

Thank you for your interest in the Trustee Council's Gulf Ecosystem Research and Monitoring (GEM) program. If you have any questions about this preliminary recommendation, please call me or Phil Mundy, the Trustee Council's Science Director.

Sincerely,

Molly McCammon
Executive Director

Enclosure

cc: Pete Hagen, NOAA Liaison

#### **IEET B: FY 03 PHASE II WORK PLAN-EXE SPREA**

# IVE DIRECTOR'S PRELIMINARY RECOMM ATION

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Ph II Request	FY 03 Ph II Recom.		FY 04 Recom.
G-030641	ShoreZone Mapping for GEM	J. Harper/ COR, Inc.	NOAA	New FY 03-06	\$218.2	\$38.2	\$390.0	

### **Project Abstract**

This project will conduct reconnaissance coastal mapping of all GEM regions. All of the shoreline within GEM will be imaged and mapped. The first phase of the initiative will be to develop an Alaska ShoreZone Mapping Protocol, based on the BC-Washington protocol but incorporating special components for Alaska; a user workshop is included as part of the protocol development. Aerial Video Imagery (AVI) will be the protocol and present it at a workshop to collected during the lowest tides of the year and will be used as the primary data source for intertidal and shallow subtidal mapping. Eight six-day AVI surveys (est. 12,800 km of shoreline) are proposed for GEM funding; supplemental funding may be available from other sources (NPS, SERVS, PWSRCAC). ShoreZone mapping will follow the Alaska ShoreZone Mapping Protocol, which is included as part of this project. The mapping data will provide a consistent, regional characterization of the physical and biological shore-zone features throughout the GEM area. This mapping data is used by state and federal agencies for regional planning and development of derivative models. Non-governmental organizations have routinely used the ShoreZone data for public awareness campaigns and Marine Protected Area planning.

### STAC Recommendation

It is not clear at this point whether mapping the entire coastline of the GEM area is the best use of GEM resources. Additional information is needed to determine how this proposal fits into mapping activities by other agencies and programs and the potential for partnering.

Recommend that funding be provided to develop evaluate the utility of the ShoreZone mapping and other mapping options as a long-term monitoring activity.

#### Executive Director's Preliminary Recommendation

Fund reduced based on STAC recommendation. PI should participate in a coastal mapping workshop to be held in spring 03 to evaluate the utility of the ShoreZone mapping and other mapping options as a proposed long-term monitoring activity.

# ITEMS CONSIDERED IN REVIEW OF FY 03 PHASE II BUDGETS

- 1. Completeness of budget, especially:
  - a is there a fully detailed budget form for each project year?
  - b is there general adherence to the format and content instructions?
  - c is Trustee-agency GA rate of 9% of project costs included?
- 2. Note the following:
  - a matching funds, if any (amount and source)
  - b requests for anything other than closeout funds in FY 04
  - c indirect rate for non-Trustee-agency proposers
- 3. For continuing projects:
  - a level of funding authorized in FY 02 and projection, at that time, of FY 03 budget. Items budgeted for FY 02 but not implemented should not be funded again in FY 03 unless the proposer can verify that he/she will lapse the "unused" FY 02 funds. May want to review/note FY 01 audit results.
  - direction given by Trustee Council and/or Chief Scientist in FY 02 Final Work Plan or in subsequent review sessions (e.g., transition to agency funding, close out certain components).
  - c change in project's scope per the Chief Scientist's recommendation (i.e., elimination, revision, or addition of objectives). If a pilot project is seeking expansion, note whether there is adequate information to evaluate the pilot's success.
- 4. Personal Services: Note if number of months appears excessive, e.g. 12 mos. for a close-out and no justification provided. Also note if salary appears excessive relative to scope of work and salaries typically paid agency or university employees for the type of work.
- Travel: Must be budgeted at round-trip economy rates, and must identify name of traveler, destination, and trip purpose.
  - 6. Annual Workshop: For PI and co-PI only, travel and per diem for up to 5 days (Jan. 13-17) -- and only if PI/co-PI not located in Anchorage.
  - 7. Other EVOS Reviews/Workshops: Only workshop identified so far for FY 03 is lingering oil (Fall 2002).
  - 8. Professional Conferences: One each per PI (and co-PI if appropriate) if the PI will be presenting results of his/her EVOS work or attendance at the workshop is integral to the project. Proposal must identify the conference, when and where it will be held, and the PI's role in the conference.
  - 9. Manuscript Preparation: Maximum \$1,000 in page costs <u>per project</u> and maximum 1.5 months personnel time <u>per manuscript</u>. Proposal must include subject/title of manuscript, name of peer reviewed journal to which will be

submitted, and when it will be submitted. Page costs should be provided only if manuscript will actually appear in print in FY 03. Note number of manuscripts for which funding support is requested.

- Report Writing: Funding for final reports only (no funds for annual reports, because annual report requirement has been reduced to a 2-page form with no analysis of results).
- 11. Equipment: Note purchases of major new equipment (at a minimum, note everything with unit cost of \$5,000 or more as this is the equipment we are required under TC procedures to track through the annual inventory).
- 12. Indirect Costs: Maintenance and operation of space (i.e., lease costs), office supplies, copying, phones, equipment maintenance and repair, vehicle leasing, software, and training are typically indirect costs (for complete list see p. 27 of Invitation). Such costs should be budgeted for separately only if they are incurred because of a specific project and documentation of the expense is maintained. The documentation must demonstrate to a financial auditor that the expense was directly attributable to the project, and was necessary and reasonable.

By agreement, University of Alaska indirect rate is 25% of all direct costs except equipment for which ownership resides with the university and subcontract costs in excess of \$25,000 (see p. 36 of Invitation for more detail).

- 13. Community Involvement and TEK: Note funds budgeted.
- 14. Project Management: No funds should be budgeted in the individual project budgets. For FY 03, project management funds have already been approved in Project 030250.
- Other: Note additional, project-specific budget issues that may need to be addressed.

Need revised budget per reduced suspe og project.

441 W. 5" Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178



October 28, 2002

Jennifer Ruesink, PhD Dept of Zoology, University of Washington PO Box 351800 Seattle, WA 98195-1800

> Project 030647 / Investigating the Relative Roles of Natural and Shoreline RE:

Harvest in Altering the Kenai Peninsula's Rocky Intertidal

# Dear Jennifer:

I am writing to inform you of my preliminary recommendation that the Exxon Valdez Oil Spill Trustee Council fund Project 030647 contingent on resolution of budget questions. I have enclosed a copy of my preliminary recommendation on this project, along with the Scientific and Technical Advisory Committee's recommendation on the project's technical merits. This recommendation is made for public review and may be revised before it is provided to the Trustee Council in late November.

If the budget is revised it should be prepared on the standard detailed budget forms and submitted to the Trustee Council Office, Attn: Katharine Miller, by November 12, 2002. (Please submit three paper copies and an electronic copy.) Enclosed is a list of items considered in the review of your budget which may help you prepare a revised budget.

My preliminary recommendations on all proposals for funding in FY 03 have been incorporated into the Draft Work Plan, which will be available for public review on the Trustee Council's web page (www.oilspill.state.ak.us) about October 25. If you would like a copy of the Draft Work Plan sent to you, please call or e-mail the Trustee Council Office:

> Telephone 278-8012 Toll-free in Alaska 1-800-478-7745 Toll-free outside of Alaska 1-800-283-7745

brenda hall@oilspill.state.ak.us E-mail

Following a review of any public comments received, as well as comments from the Trustee Council's Public Advisory Committee. I will make a final recommendation to the Council. Council action on the Work Plan is scheduled for November 25, 2002.

Thank you for your interest in the Trustee Council's Gulf Ecosystem Research and Monitoring (GEM) program. If you have any questions about this preliminary recommendation, please call me or Phil Mundy, the Trustee Council's Science Director.

Sincerely,

Molly McCammon
Executive Director

**Enclosure** 

cc: Pete Hagen, NOAA Liaison

Bill Hauser, ADF&G Liaison

#### SPREA **IEET B: FY 03 PHASE II WORK PLAN-EXF**

# IVE DIRECTOR'S PRELIMINARY RECOMM ATION

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Ph II Request	FY 03 Ph II Recom.	FY 04 Request	FY 04 Recom.
G-030647	Investigating the Relative Roles of Natural and Shoreline Harvest in Altering the Kenai Peninsula's Rocky Intertidal	J. Ruesink/UW	NOAA	New FY 03-04	\$87.9	\$87.9	\$66.8	\$154.7

#### **Project Abstract**

The rocky shores of the outer Kenai Peninsula are the home of three Sugpiag native villages where the black chiton, Katharina tunicata, remains an important traditional subsistence food source. This benthic invertebrate is also a competitively dominant herbivore known to have dramatic impacts on the structure, dynamics and diversity of the rocky intertidal. In collaboration with tribal members, this project will evaluate the relative roles of natural factors (predation, grazing and natural variability) and anthropogenic impacts (Katharina harvest) in altering intertidal community structure. The project addresses the core GEM hypothesis of human versus natural impacts on the structure and productivity of coastal ecosystems. It will also provide two field seasons (2003 and 2004) of valuable baseline monitoring in the intertidal zone that could be continued in the future. Local tribes will be involved in both developing and carrying out research which will match the GEM commitment to community based science.

### STAC Recommendation

Proposal is focused on involvement by local communities in obtaining quantifiable research results. Results are expected to contribute to Project will provide information on how to study the Products would also provide GEM planning with effects of subsistence harvest in the nearshore environments. In the process, the project would also provide comparative data between human and natural influences on species distribution. Fund.

#### Executive Director's Preliminary Recommendation

Fund based on STAC recommendation (check whether BAA or RSA with ADFG). This proposal would investigate changes in rocky intertidal areas by focusing development of GEM in the nearshore habitat type. on the black chiton, an important subsistence resource, information on measuring human impacts in the nearshore.

# ITEMS CONSIDERED IN REVIEW OF FY 03 PHASE II BUDGETS

- 1. Completeness of budget, especially:
  - a is there a fully detailed budget form for each project year?
  - b is there general adherence to the format and content instructions?
  - c is Trustee-agency GA rate of 9% of project costs included?
- 2. Note the following:
  - a matching funds, if any (amount and source)
  - b requests for anything other than closeout funds in FY 04
  - c indirect rate for non-Trustee-agency proposers
- 3. For continuing projects:
  - a level of funding authorized in FY 02 and projection, at that time, of FY 03 budget. Items budgeted for FY 02 but not implemented should not be funded again in FY 03 unless the proposer can verify that he/she will lapse the "unused" FY 02 funds. May want to review/note FY 01 audit results.
  - b direction given by Trustee Council and/or Chief Scientist in FY 02 Final Work Plan or in subsequent review sessions (e.g., transition to agency funding, close out certain components).
  - c change in project's scope per the Chief Scientist's recommendation (i.e., elimination, revision, or addition of objectives). If a pilot project is seeking expansion, note whether there is adequate information to evaluate the pilot's success.
- 4. Personal Services: Note if number of months appears excessive, e.g. 12 mos. for a close-out and no justification provided. Also note if salary appears excessive relative to scope of work and salaries typically paid agency or university employees for the type of work.
- 5. Travel: Must be budgeted at round-trip economy rates, and must identify name of traveler, destination, and trip purpose.
- 6. Annual Workshop: For PI and co-PI only, travel and per diem for up to 5 days (Jan. 13-17) -- and only if PI/co-PI not located in Anchorage.
- 7. Other EVOS Reviews/Workshops: Only workshop identified so far for FY 03 is lingering oil (Fall 2002).
- 8. Professional Conferences: One each per PI (and co-PI if appropriate) if the PI will be presenting results of his/her EVOS work or attendance at the workshop is integral to the project. Proposal must identify the conference, when and where it will be held, and the PI's role in the conference.
- 9. Manuscript Preparation: Maximum \$1,000 in page costs <u>per project</u> and maximum 1.5 months personnel time <u>per manuscript</u>. Proposal must include subject/title of manuscript, name of peer reviewed journal to which will be

Page costs limited to . Kedar accordingly.

submitted, and when it will be submitted. Page costs should be provided only if manuscript will actually appear in print in FY 03. Note number of manuscripts for which funding support is requested.

- 10. Report Writing: Funding for final reports only (no funds for annual reports, because annual report requirement has been reduced to a 2-page form with no analysis of results).
- 11. Equipment: Note purchases of major new equipment (at a minimum, note everything with unit cost of \$5,000 or more as this is the equipment we are required under TC procedures to track through the annual inventory).
- 12. Indirect Costs: Maintenance and operation of space (i.e., lease costs), office supplies, copying, phones, equipment maintenance and repair, vehicle leasing, software, and training are typically indirect costs (for complete list see p. 27 of Invitation). Such costs should be budgeted for separately only if they are incurred because of a specific project and documentation of the expense is maintained. The documentation must demonstrate to a financial auditor that the expense was directly attributable to the project, and was necessary and reasonable.

By agreement, University of Alaska indirect rate is 25% of all direct costs except equipment for which ownership resides with the university and subcontract costs in excess of \$25,000 (see p. 36 of Invitation for more detail).

- 13. Community Involvement and TEK: Note funds budgeted.
- 14. Project Management: No funds should be budgeted in the individual project budgets. For FY 03, project management funds have already been approved in Project 030250.
- Other: Note additional, project-specific budget issues that may need to be addressed.

sandra/wkplan/03staffbudll2.wpd

441 W. 5" Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178



October 28, 2002

Phyllis J. Stabeno, PhD NMFS/NOAA Pacific Marine Environmental Lab 7600 Sand Point Way, NE Seattle, WA 98115

Calvin W. Mordy JISAO/NOAA/PMEL & University of Washington 7600 Sand Point Way, NE Seattle, WA 98115

RE: Project 030654 / Surface Nutrients over the Shelf and Basin in Summer:

Bottom-up Control of Ecosystem Diversity

# Dear Phyllis and Calvin:

I am writing to inform you of my preliminary recommendation that the *Exxon Valdez* Oil Spill Trustee Council fund Project 030654 contingent on resolution of budget questions. I have enclosed a copy of my preliminary recommendation on this project, along with the Scientific and Technical Advisory Committee's recommendation on the project's technical merits. This recommendation is made for public review and may be revised before it is provided to the Trustee Council in late November.

If needed, a revised budget should be prepared on the standard detailed budget forms and submitted to the Trustee Council Office, Attn: Katharine Miller, by **November 12**, **2002.** (Please submit three paper copies and an electronic copy of the budget.) Enclosed is a list of items considered in the review of your budget which may help you prepare a revised budget.

My preliminary recommendations on all proposals for funding in FY 03 have been incorporated into the Draft Work Plan, which will be available for public review on the Trustee Council's web page (<a href="https://www.oilspill.state.ak.us">www.oilspill.state.ak.us</a>) about October 25. If you would like a copy of the Draft Work Plan sent to you, please call or e-mail the Trustee Council Office:

Telephone Toll-free in Alaska Toll-free outside of Alaska E-mail

278-8012 1-800-478-7745 1-800-283-7745 brenda hall@oilspill.state.ak.us

Following a review of any public comments received, as well as comments from the Trustee Council's Public Advisory Committee, I will make a final recommendation to the Council. Council action on the Work Plan is scheduled for November 25, 2002.

Thank you for your interest in the Trustee Council's Gulf Ecosystem Research and Monitoring (GEM) program. If you have any questions about this preliminary recommendation, please call me or Phil Mundy, the Trustee Council's Science Director.

Sincerely,

Molly McCammon Executive Director

**Enclosure** 

cc: Pete Hagen, NOAA Liaison

# SPREA HEET B: FY 03 PHASE II WORK PLAN-EXE

# IVE DIRECTOR'S PRELIMINARY RECOMM\_...JATION

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Ph II Request	FY 03 Ph II Recom.	FY 04 Request	FY 04 Recom.
G-030654	Surface Nutrients over the Shelf and Basin in Summer: Bottom-up Control of Ecosystem Diversity	P. Stabeno/NOAA-PMEL C. Mordy/NOAA-PMEL	NOAA	New FY 03-04	\$37.5	\$37.5	\$43.6	\$43.6

### **Project Abstract**

The goal of this project is to better understand the extraordinary variability of nutrients (spatial, interannual and decadal) and factors controlling nearshore communities and zooplankton and juvenile salmon distributions in the northern Gulf of Alaska. The project will monitor nitrate over the shelf and basin. Underway samples will be collected as part of the NMFS-OCC/GLOBEC salmon survey in July/August of 2003 and 2004. This survey includes a transit across the central gulf and ten cross-shelf oceanographic and juvenile salmon transects from Yakutat to Kodiak Island. This will be the broadest nutrient survey of the northern gulf. Nutrient maps will be used to support NPZ (nutrient/phytoplankton/zooplankton) models and satellite-derived models of nitrate and new production, to examine mechanisms of nutrient supply such as mixing over banks and transport up submarine canyons, and to assist resource management of salmon and other commercially important species. GEM funding in 2003 is crucial as this is GLOBEC's final intensive field season.

### STAC Recommendation

Information on the role of surface nutrients in productivity in the GOA would be valuable information for GEM planning. Results are expected to be relevant to understanding how to address GEM in the Alaska Coastal Current habitat type. This proposal takes advantage of an opportunity to partner with an existing data collection effort for a relatively modest cost. Fund.

#### Executive Director's Preliminary Recommendation

Fund based on STAC recommendation, contingent on resolution of budget questions.

# ITEMS CONSIDERED IN REVIEW OF FY 03 PHASE II BUDGETS

- 1. Completeness of budget, especially:
  - a is there a fully detailed budget form for each project year?
  - b is there general adherence to the format and content instructions?
  - c is Trustee-agency GA rate of 9% of project costs included?
- 2. Note the following:
  - a matching funds, if any (amount and source)
  - b requests for anything other than closeout funds in FY 04
  - c indirect rate for non-Trustee-agency proposers
- 3. For continuing projects:
  - a level of funding authorized in FY 02 and projection, at that time, of FY 03 budget. Items budgeted for FY 02 but not implemented should not be funded again in FY 03 unless the proposer can verify that he/she will lapse the "unused" FY 02 funds. May want to review/note FY 01 audit results.
  - b direction given by Trustee Council and/or Chief Scientist in FY 02 Final Work Plan or in subsequent review sessions (e.g., transition to agency funding, close out certain components).
  - c change in project's scope per the Chief Scientist's recommendation (i.e., elimination, revision, or addition of objectives). If a pilot project is seeking expansion, note whether there is adequate information to evaluate the pilot's success.
- 4. Personal Services: Note if number of months appears excessive, e.g. 12 mos. for a close-out and no justification provided. Also note if salary appears excessive relative to scope of work and salaries typically paid agency or university employees for the type of work.
- Travel: Must be budgeted at round-trip economy rates, and must identify name of traveler, destination, and trip purpose. \$1.8 for Swale-Anch seems exessions for swale-Anch seems exessions.
  - 6. Annual Workshop: For PI and co-PI only, travel and per diem for up to 5 days (Jan. 13-17) -- and only if PI/co-PI not located in Anchorage.
  - 7. Other EVOS Reviews/Workshops: Only workshop identified so far for FY 03 is lingering oil (Fall 2002).
  - 8. Professional Conferences: One each per PI (and co-PI if appropriate) if the PI will be presenting results of his/her EVOS work or attendance at the workshop is integral to the project. Proposal must identify the conference, when and where it will be held, and the PI's role in the conference.
  - 9. Manuscript Preparation: Maximum \$1,000 in page costs <u>per project</u> and maximum 1.5 months personnel time <u>per manuscript</u>. Proposal must include subject/title of manuscript, name of peer reviewed journal to which will be

submitted, and when it will be submitted. Page costs should be provided only if manuscript will actually appear in print in FY 03. Note number of manuscripts for which funding support is requested.

- 10. Report Writing: Funding for final reports only (no funds for annual reports, because annual report requirement has been reduced to a 2-page form with no analysis of results).
- 11. Equipment: Note purchases of major new equipment (at a minimum, note everything with unit cost of \$5,000 or more as this is the equipment we are required under TC procedures to track through the annual inventory).
- 12. Indirect Costs: Maintenance and operation of space (i.e., lease costs), office supplies, copying, phones, equipment maintenance and repair, vehicle leasing, software, and training are typically indirect costs (for complete list see p. 27 of Invitation). Such costs should be budgeted for separately only if they are incurred because of a specific project and documentation of the expense is maintained. The documentation must demonstrate to a financial auditor that the expense was directly attributable to the project, and was necessary and reasonable.

By agreement, University of Alaska indirect rate is 25% of all direct costs except equipment for which ownership resides with the university and subcontract costs in excess of \$25,000 (see p. 36 of Invitation for more detail).

- 13. Community Involvement and TEK: Note funds budgeted.
- 14. Project Management: No funds should be budgeted in the individual project budgets. For FY 03, project management funds have already been approved in Project 030250.
- Other: Note additional, project-specific budget issues that may need to be addressed.

  No need for BAA. Funds can go directly to NOAA.

441 W. 5th Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178



October 29, 2002

Patty Brown-Schwalenberg, Chugach Regional Resources Commission 4201 Tudor Centre Dr., Suite 300 Anchorage, AK 99508

RE: Project 030052 / Tribal Natural Resource Stewardship and Meaningful

Tribal Involvement in GEM

Dear Patty:

I am writing to inform you of my preliminary recommendation that the *Exxon Valdez* Oil Spill Trustee Council defer a decision on funding Project 030052 until staff and peer reviewers have had the opportunity to review the revised proposal and draft tribal natural resource plans recently submitted. I have enclosed a copy of my preliminary recommendation on this project. This recommendation is made for public review and may be revised before it is provided to the Trustee Council in late November.

My preliminary recommendations on all proposals for funding in FY 03 have been incorporated into the Draft Work Plan, which will be available for public review on the Trustee Council's web page (<u>www.oilspill.state.ak.us</u>) about October 25. If you would like a copy of the Draft Work Plan sent to you, please call or e-mail the Trustee Council Office:

Telephone 278-8012
Toll-free in Alaska 1-800-478-7745
Toll-free outside of Alaska 1-800-283-7745

E-mail <u>brenda\_hall@oilspill.state.ak.us</u>

Following a review of any public comments received, including comments from the Trustee Council's Public Advisory Committee, I will make a final recommendation to the Council. I anticipate a final review of your proposal in the next 2-3 weeks.

Alaska Department of Law

Thank you for your interest in the Trustee Council's Gulf Ecosystem Research and Monitoring (GEM) program. If you have any questions about this preliminary recommendation or the project review process, please call me or Phil Mundy, the Council's Science Director.

Sincerely,

Molly McCammon
Executive Director

Enclosure

cc: Bill Hauser, ADF& G Liaison

# SPREAD EET B: FY 03 PHASE II WORK PLAN-EXEC



Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Ph II Request	FY 03 Ph II Recom.	FY 04 Request	FY 04 Recom.
G-030052	Tribal Natural Resource Stewardship and Meaningful Tribal Involvement in GEM	P. Brown-Schwalenberg/CRRC	ADFG	Cont'd	\$169.6			<del></del>

#### **Project Abstract**

In FY 03, this project will focus on four objectives: (a) establishing Core Action Plans for the Tribal Natural Resource Plans being developed in FY 02, (b) identifying priority regional and community-specific research and monitoring issues and concerns and fitting them to community-based research and monitoring activities, especially those related to GEM, (c) conducting a "Wisdomkeeper Series" for discussing and recommendation. sharing research and monitoring issues with selected biologists, scientists, elders, and traditional knowledge experts, and (d) developing pilot community-based research and monitoring projects for potential implementation in FY 04. Communities involved in the project are Tatitlek, Chenega Bay, Port Graham, Nanwalek, Cordova/Eyak, Seward/Qutekcak, Seldovia, Valdez, Kodiak Island Region/Ouzinkie, and the Alaska Peninsula Region/Chignik Lake.

#### STAC Recommendation

This proposal was not reviewed by the STAC because the revised Detailed Project Description was not received by the time the STAC met. The Tribal Natural Resource Plans scheduled for completion in FY 02 from this project recently were submitted but have not yet been reviewed by peer reviewers or the Trustee Council. No recommendation.

#### Executive Director's Preliminary Recommendation

Defer. Interim funding of \$30,100 was provided in Phase I. Tribal Natural Resource Plans and revised Detailed Project Descriptions and Budgets with new proposed objectives for Phase II have only recently been received and not yet reviewed. Recommendation is deferred pending those reviews. The overall goal of this project-community involvement and development of local stewardship capacity-is a priority of the Trustee Council and an essential component of GEM.

441 W. 5" Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178



October 28, 2002

Shari L Vaughan, PhD **PWS Science Center** PO Box 705 Cordova, AK 99574

> RE: Project 030552 / GEM: Exchange between Prince William Sound and the

Gulf of Alaska

### Dear Shari:

I am writing to inform you of my preliminary recommendation that the Exxon Valdez Oil Spill Trustee Council defer a decision on funding Project 030552 until a revised proposal that addresses peer review concerns is submitted and reviewed. I have enclosed a copy of my preliminary recommendation on this project, along with a summary of the Scientific and Technical Advisory Committee's recommendation on the project's technical merits. This recommendation is made for public review and may be revised before it is provided to the Trustee Council in late November.

My preliminary recommendations on all proposals for funding in FY 03 have been incorporated into the Draft Work Plan, which will be available for public review on the Trustee Council's web page (www.oilspill.state.ak.us) about October 25. If you would like a copy of the Draft Work Plan sent to you, please call or e-mail the Trustee Council Office:

> Telephone 278-8012 Toll-free in Alaska 1-800-478-7745 Toll-free outside of Alaska 1-800-283-7745

E-mail brenda hall@oilspill.state.ak.us

Following a review of any public comments received, including comments from the Trustee Council's Public Advisory Committee, I will make a final recommendation to the Council. Council action on all but deferred projects is scheduled for November 25, 2002. Council action on deferred projects is expected in December 2002 or January 2003. A revised proposal should be submitted to the Trustee Council by December 1, 2002.

Thank you for your interest in the Trustee Council's Gulf Ecosystem Research and Monitoring (GEM) program. If you have any questions about this preliminary

State Trustees

recommendation or the project review process, please call me or Phil Mundy, the Council's Science Director.

Sincerely,

Molly McCammon
Executive Director

Enclosure

cc: Pete Hagen, NOAA Liaison

# SPREA IEET B: FY 03 PHASE II WORK PLAN-EXE IVE DIRECTOR'S PRELIMINARY RECOMM\_\_\_ATION

Proj.No.	Project Title	Proposer	Lead Agency	New or Cont'd	FY 03 Ph II Request	FY 03 Ph II Recom.	FY 04 Request	FY 04 Recom.
G-030552	Exchange Between Prince William Sound and the Gulf of Alaska	S. Vaughan/PWSSC	NOAA	Cont'd FY 03-04	\$106.5		\$110.9	

#### **Project Abstract**

One of the least understood physical processes that influence the biological components of Prince William Sound (PWS) is the exchange between the northern Gulf of Alaska (GOA) and the sound. This project will document the seasonal and interannual variability in water mass exchange between PWS and the adjacent GOA at Hinchinbrook Entrance, and identify mechanisms governing this exchange. This project will continue deployment of an upward-looking ADCP (Acoustic Doppler Current Profiler) mooring in Hinchinbrook Entrance to create time series of velocities spanning two years. The mooring will be equipped with a CTD (conductivity temperature versus depth) to create a time series of deep temperature (T) and salinity (S). To identify the dominant factors that govern PWS/GOA exchange, the mooring velocity and deep T/S time series will be combined with meteorological time series. numerical circulation model simulations, and physical data collected under previous and existing research programs in PWS and the GOA.

#### STAC Recommendation

Information on flows between PWS and the northern GOA is important to the GEM program. However, there is concern that this proposal will not provide the data required to characterize this flow. The ADCP needs to be deployed for 12 months, with data collected several times each year. A sampling strategy to measure the movement of water in the surface layer needs to be presented. Do not fund this particular proposal.

### Executive Director's Preliminary Recommendation

Defer pending submission and review of revised proposal that addresses STAC concerns.

# ITEMS CONSIDERED IN REVIEW OF FY 03 PHASE II BUDGETS

- Completeness of budget, especially: 1.
  - is there a fully detailed budget form for each project year?
  - b is there general adherence to the format and content instructions?
  - is Trustee-agency GA rate of 9% of project costs included? С
- 2. Note the following:
  - matching funds, if any (amount and source) but no source identified requests for anything other than closeout funds in FY 04
    - indirect rate for non-Trustee-agency proposers С
- 3. For continuing projects:
  - level of funding authorized in FY 02 and projection, at that time, of FY 03 budget. Items budgeted for FY 02 but not implemented should not be funded again in FY 03 unless the proposer can verify that he/she will lapse the "unused" FY 02 funds. May want to review/note FY 01 audit results.
  - b direction given by Trustee Council and/or Chief Scientist in FY 02 Final Work Plan or in subsequent review sessions (e.g., transition to agency funding, close out certain components).
  - change in project's scope per the Chief Scientist's recommendation (i.e., С elimination, revision, or addition of objectives). If a pilot project is seeking expansion, note whether there is adequate information to evaluate the pilot's success.
- Personal Services: Note if number of months appears excessive, e.g. 12 mos. for a close-out and no justification provided. Also note if salary appears excessive relative to scope of work and salaries typically paid agency or university employees for the type of work.
- Travel: Must be budgeted at round-trip economy rates, and must identify name M: (E) of traveler, destination, and trip purpose. Why additional
- 6. Annual Workshop: For PI and co-PI only, travel and per diem for up to 5 days (Jan. 13-17) -- and only if Pl/co-Pl not located in Anchorage.
- 7. Other EVOS Reviews/Workshops: Only workshop identified so far for FY 03 is lingering oil (Fall 2002).
- 8. Professional Conferences: One each per PI (and co-PI if appropriate) if the PI will be presenting results of his/her EVOS work or attendance at the workshop is integral to the project. Proposal must identify the conference, when and where it will be held, and the PI's role in the conference.
- 9. Manuscript Preparation: Maximum \$1,000 in page costs per project and maximum 1.5 months personnel time per manuscript. Proposal must include subject/title of manuscript, name of peer reviewed journal to which will be

submitted, and when it will be submitted. Page costs should be provided only if manuscript will actually appear in print in FY 03. Note number of manuscripts for which funding support is requested.

- Report Writing: Funding for final reports only (no funds for annual reports, because annual report requirement has been reduced to a 2-page form with no analysis of results).
- 11. Equipment: Note purchases of major new equipment (at a minimum, note everything with unit cost of \$5,000 or more as this is the equipment we are required under TC procedures to track through the annual inventory).
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By agreement, University of Alaska indirect rate is 25% of all direct costs except equipment for which ownership resides with the university and subcontract costs in excess of \$25,000 (see p. 36 of Invitation for more detail).

- 13. Community Involvement and TEK: Note funds budgeted.
- 14. Project Management: No funds should be budgeted in the individual project budgets. For FY 03, project management funds have already been approved in Project 030250.
- 15. Other: Note additional, project-specific budget issues that may need to be addressed.

sandra/wkplan/03staffbudll2.wpd

Reviewer: 19

**EVOS PROPOSAL REVIEW** 

(Trustee Council Use Only)

<u>Project No.</u> G-030552

<u>Date Received</u> 9/3/02

Project Title:

GEM: Exchange between Prince William Sound and the Gulf of Alaska.

Submitted Under the Broad Agency Announcement.

Project Period:

FY 03-FY 04

Proposer:

Shari L. Vaughan, Ph.D.

# NEED FOR THE PROJECT

I felt the proposer had weak arguments as to the usefulness of the information obtained through this project. Ostensibly, the data collected in FY03 and FY04 would be used to validate a circulation model for PWS. However, seasonal data on flows were collected for 1978, 1995 – 7, and 2000 – 01 and on T/S in 2000-01. Are these data sufficient for validation without collecting new data? Obviously, some validation of the NFS model has already occurred, so what would these new data provide that the old did not? More of the same? If so, how much validation is enough before the model can be "trusted"?

As to flows alone, the proposer states:

"It is not clear if the flow structure transitions observed in June, September and January occur each year (with some difference in timing), or if there are true interannual variations."

From the proposer's descriptions of these data, transitions appeared at least grossly regular to my untrained eye. Also, if September is a possible month of transition, why pull the equipment at that time? How can this project find anomalies in flow patterns when the equipment is out of the water during times of expected transition?

This proposal would be improved greatly with:

- 1) some explanation as to why new data are needed to validate the circulation model;
- 2) some description of the pertinent workings of the model, enough to demonstrate the sensitivity of the model to these data relative to other data (if any) used to validate the model;
- 3) an explanation why <u>not</u> collecting data during a period of potential transition won't compromise validation of the model; and.
- 4) an explanation why data collected in this proposed project would complement, not replicate data that will be collected in a project already funded by OSRI NFS through FY04.

Review 9/9/02 Page 1

### PROJECT DESIGN

Since I'm not a physical oceanographer and since the proposed project is a continuation of past work, I'm inclined to believe that the data will be competently collected if the proposal is funded.

# **SCHEDULE**

Schedule is missing when data will be used to validate circulation model.

### RESPONSIVENESS TO KEY TRUSTEE COUNCIL STRATEGIES

The proposer needs to be more forthright. No TEK is involved in this project, nor is there any community involvement. Still, data from this project (if needed) could be indirectly very useful for the reasons given.

# PRINCIPAL INVESTIGATOR QUALIFICATIONS

Judging from the information given in the proposal, I believe that the principal investigator is more that capable of successfully collecting, reporting, and analyzing the data as proposed.

### BUDGET

The budget appears inflated to me. Approximately 100k for two years to collect data with equipment already in hand seems high. The overhead of 26% is worrisome, but that's probably because my organization usually charges considerably less. Assigning 4 months of the principal investigator's time to this project seems excessive. Considering the nature of the project, about a quarter to a half the proposed time for the investigator seems more appropriate, especially with 4 months of technician time funded as well. I presume that the technician would "capture", edit, and report data and working summaries as part of "data acquisition and analysis, (and) contribut(ing) to journal publications". Cutting the investigator's time back to one month would save about 34 k a year; cutting back to two months would save about 23 k per year. The "hint" that extra funds would be requested in FY05 to finish the report writing is also troublesome.

Review 9/9/02 Page 2

Proposal Evaluation Form

Reviewer: 3628 Evaluation due date: Thursday, September 26

Proposal number: 030552

Title of proposal: Exchange Between Prince William Sound and the Gulf of Alaska iple Investigatgor(s): S. Vaughan/PWSSC

the comments section below each question area for discussion of your rating. Use as much space as necessary, and allow the table to expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak.us no later than the end of business on Thursday, September 26. The subject line of the e-mail to me should read, "030552 review".

	Rating <sup>1</sup>
1. Does the proposal provide an understanding of the problem, is it technically and scientifically sound, and will it contribute to the generation and dissemination of scientific knowledge in the topic area?	4 (1-5)

Comments: Vaughan proposes to redeploy an ADCP/CTD mooring at an exchange point between Prince William Sound. Clearly the physical setting must be understood in order to understand the biological processes, and I assume that the existence of this funding source indicates an overall strong interest in understanding these cycles in this particular region. The proposed mooring has been deployed with useful and interesting

Its in past years. Therefore the investigator has demonstrated ability to carry out proposed observational program. The failure of the instruments in one deployment was mentioned, but not the reason, or the measures taken to reduce this risk in the subsequent deployment in FY01, which was apparently fully successful. A general idea of the seasonal structure of the exchange has been formed, with clear and large year-to-year variability in details. The proposed mooring is part of a larger program, including numerical modeling and numerous shipboard surveys which presumably provide larger-scale context, specifically and hopefully providing the full layer structure apparent in the ADCP observations.

I rated this aspect of the proposal as "4" rather than "5" because it is basically presented as "this is a critical time series for determining what is going on in this region", with which I agree, but which falls a bit short. I would have expected to see at least some basic hypothesis about what causes the change in structure, particularly since the measurements are to be paired with a numerical modeling study, in which I assume the whole region will be modeled and for which I assume broader knowledge/observations of the processes will be required. From the description, with deep inflow/shallow outflow in the summer, a reversal to deep outflow/shallow inflow in the fall, and complete mixing in the late winter, I assume that there are vigorous diabatic processes inside PWS that create the changes in stratification. I would think that understanding these along with observing the actual exchange (which is critical) would lead to much more complete understanding of the cycle.

I also wonder if the tidal component itself, which has apparently been filtered out in the analyses, could accomplish important exchange between the shelf and sound. Tidal transports are known to be extremely important, and even dominant, in some exchange regions along the subpolar N. Pacific margins, but I don't have an idea from this osal of the size of the tidal flows. Certainly the low-passed flows that have ady been observed and that are reported in the proposal are exceedingly strong, and the effore might be responsible for most of the exchange.

I also have questions about the cross-channel structure of the exchange - I am not familiar with the region, and so do not know how representative the flow at this mooring site would be of the complete cross-section of exchange.

I would also have liked to see some more discussion of what is expected to be seen at the CTD. I understand that it is not possible to moor a CTD in the upper part of the water column, so that measurements can only be made in the lower part of what is apparently a 2-layer structure most of the year. So there must be closely coordinated augmentation of the measurements so that the layered structure is understood in terms of water properties.

2. Are the methods as likely to be effective as any others available in achieving the solution?	5
	(1-5)

Comments. Nothing can replace a time series. This particular site has shown structures

Comments: It seems very reasonable.

Any other comments: All of the comments above notwithstanding, I rate this proposal very highly. It may be that the requirements of the proposal structure itself permit only just enough information to be conveyed to convince the reviewers that the project is feasible.

Proposal Evaluation Form

Leviewer: 4103

Proposal number: 030552

Evaluation due date: Thursday, September 26

Title of proposal: Exchange Between Prince William Sound and the Gulf of Alaska ple Investigatgor(s): S. Vaughan/PWSSC

ne comments section below each question area for discussion of your rating. Use as much space as necessary, and allow the table to expand to additional pages as needed. Do not worry about formatting. E-mail this document as an attachment in Word or WordPerfect format to gem@oilspill.state.ak.us no later than the end of business on **Thursday, September 26**. The subject line of the e-mail to me should read,

"030552 review".	
	Rating
1. Does the proposal provide an understanding of the problem, is it technically and scientifically sound, and will it contribute to the generation and dissemination of scientific knowledge in the topic area?	5 -strong
Comments: Continued deployment of the ADCP mooring in Hinchin contribute to scientific knowledge in this area.	brook Entrance should greatly
2. Are the methods as likely to be effective as any others available in achieving the solution?	
	5 -strong
Comments: Excellent choice of instrumentation for the investi	gation.
3. Can the solution be achieved with these personnel for the amount of funding requested and within the proposed timeframe? Is it cost effective?	5 -strong
Comments: Excellent cost proposal. Appears to be an excellen be gained.	t value for the knowledge that will
other comments:	
I would fund this proposal.	

<sup>&</sup>lt;sup>1</sup> A rating of I on question means emphatically "no," and a score of 5 means emphatically "yes"; scores of 2-4 mean "maybe." The reviewer is the best judge of the meaning of "Accurate" and "Adequate," but accurate may mean the proposal shows a clear understanding of what kind of information and research are most needed in this field at this time, and adequate may mean that the appropriate scientific literature is used to support the arguments, and/or that the proposal is well written.

Comments: Vaughan proposes to redeploy an ADCP/CTD mooring at an exchange point between Prince William Sound. Clearly the physical setting must be understood in order to understand the biological processes, and I assume that the existence of this funding source indicates an overall strong interest in understanding these cycles in this particular region. The proposed mooring has been deployed with useful and interesting

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2. Are the methods as likely to be	effective as	<u>r</u>	5
any others available in achieving t			
		(1-5)	

Comments: Nothing can replace a time series. This particular site has shown structures with major seasonal changes, and with major year-to-year changes in the timing of these changes, and so maintaining a mooring in the exchange region would seem central to any general modeling/understanding of processes within PWS. If anything, there might be an argument for additional moored time series, but I assume that Vaughan has carefully considered the siting of the mooring and the usefulness of a single point. The augmentation with shipboard profiling is essential however, to getting the full structure.

Can the solution be achieved with these sonnel for the amount of funding requested and	5
within the proposed timeframe? Is it cost effective?	(1-5)

441 W. 5th Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178

October 31, 2002



Lisa Podobinski 2088 Greenbrier Street Maplewood, MN 55117

Dear Ms. Podobinski:

Thank you for your October 24 letter. I am responding on behalf of Michele Brown, who is one of the Trustees with the *Exxon Valdez* Oil Spill Trustee Council and is Commissioner of the Alaska Department of Environmental Conservation.

You seem to have mistaken our organization for the Exxon Corp. The Trustee Council is actually the government organization entrusted with restoration of the injury resulting from the 1989 oil spill.

I am enclosing a copy of our 2002 annual report.

Sincerely,

Molly McCammon Executive Director

Enclosure

cc: Michele Brown, Commissioner

Alaska Dept. of Environmental Conservation



2088 Greenbrier Street Maplewood, MN 55117 October 24, 2002

Exxon Valdez Oil Spills Trustee Council Ms. Michelle Brown 441 West Fifth Avenue Suite 500 Anchroage, AK 99501

Dear Ms. Brown:

I am a concerned citizen about the effects of oil spills on aquatic and land animals. The hazardous oil spill of your company, Exxon Valdez, left many creatures in great danger as to whether or not they would survive.

Ten years after the spill, there are still creatures that have not fully recovered and the majority of them will probably die. It is a known fact that about a third of the creatures affected by oil spills in that specific area will die. How do we protect our environment from this happening in the future? Why is it that we still insist on drilling and damaging the ocean when we have other ways to import it? Why must we demolish the precise oceans and the creatures that rely on them for eating, breeding, and migration movements?

Thank you for taking your time to read my concerns and I am looking forward to receiving your comments.

Sincerely yours,

Lisa Podobinski

441 W. 5th Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178

# **MEMORANDUM**

TO:

Peter Hagen

**NOAA** 

FROM:

Executive Director

RE:

Authorization – Project 030625

Prince William Sound Isotope Ecology Synthesis

DATE:

October 28, 2002

The purpose of this memorandum is to formally authorize work to proceed on Project 030625/Prince William Sound Isotope Ecology Synthesis. The work must be performed consistent with the Detailed Project Description and revised budget dated August 6, 2002.

441 W. 5th Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178

#### **MEMORANDUM**



Peter Hagen

NOAA

FROM:

Executive Director

RE:

Authorization – Project 030575

Designing a Community Involvement/Community-Based Monitoring Plan

for GEM-Phase I

DATE:

October 23, 2002

The purpose of this memorandum is to formally authorize work to proceed on Project 030575/Designing a Community Involvement/Community-Based Monitoring Plan for GEM-Phase I. The work must be performed consistent with the Detailed Project Description and revised budget dated August 6, 2002.

441 W. 5th Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178



#### **MEMORANDUM**

TO:

Judith E. Bittner

State Historic Preservation Officer

Alaska Department of Natural Resources

FROM:

Molly-McQammon

Executive Director

RE:

Project 99154: Authorization to Approve the Proposed Contract

between Chugachmiut and the Chenega Bay IRA Council for a

Local Display Facility in Chenega Bay

Project 99154: Authorization to Proceed with Design of a Local

Display Facility in Chenega Bay

DATE:

October 22, 2002

On May 15, 2001, I authorized you to proceed with the Chenega Bay IRA's proposal for a local display facility in Chenega Bay provided the following conditions are met:

- 1. Recommendations in Chugachmiut's Local Display Facilities Solicitation and Selection Report, dated May 1, 2001, are satisfied, and
- 2. The proposal is not changed substantially to avoid adverse impacts on historic or archaeological resources.

With regard to the Chenega Bay proposal, Chugachmiut's *Local Display Facilities Solicitation and Selection Report* recommended that the applicant evaluate the archaeological requirements for the site in question, the grant amount be reduced to \$175,000, and that the business plan describe equipment, furnishings and funding for long-term operation and maintenance.

On October 14, 2002, you received a draft subcontract between Chugachmiut and the Chenega IRA Council for development of a local Display Facility. In accordance with Appendix B, Section 3.1.5, of the grant agreement between the Alaska Department of Natural Resources and Chugachmiut, Inc., executed on October 14, 1999, I authorize you to approve the draft contract. Furthermore, in

accordance with Appendix B, Section 3.2.1, I authorize you to proceed with the design of the local display facility provided the design is consistent with the concept design in the Chenega IRA Council's proposal.

For the following reasons, I find that all requirements for this approval have been met:

- 1. Lora Johnson visited the site of the proposed facility and, in a letter dated October 1, 2002, reported her initial finding that the proposed facility will not adversely affect the archaeological or historical resources of the area;
- 2. The grant amount has been reduced from \$200,000 to \$175,000; and
- 3. The proposed contract requires that the facility design will specify equipment and furnishings and the business plan will identify funding for long-term operation and maintenance; and
- 4. The proposal has not changed substantially since it was submitted on March 15, 2001.

\*\*\*\*\*\*\*\*\*\* TX REPORT \*\*\*\*\*\*\*

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# Exxon Valdez Oil Spill Trustee Council

441 W. 5th Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178



#### **MEMORANDUM**

TO:

Judith E. Bittner

State Historic Preservation Officer

Alaska Department of Natural Resources

FROM:

Molly McGampag

Executive Director

RE:

Project 99154: Authorization to Approve the Proposed Contract

between Chugachmiut and the Chenega Bay IRA Council for a

Local Display Facility in Chenega Bay

Project 99154: Authorization to Proceed with Design of a Local

Display Facility in Chenega Bay

DATE:

October 22, 2002

On May 15, 2001, I authorized you to proceed with the Chenega Bay IRA's proposal for a local display facility in Chenega Bay provided the following conditions are met:

- 1. Recommendations in Chugachmiut's Local Display Facilities Solicitation and Selection Report, dated May 1, 2001, are satisfied, and
- 2. The proposal is not changed substantially to avoid adverse impacts on historic or archaeological resources.

441 W. 5th Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178



#### **MEMORANDUM**

TO:

Judith E. Bittner

State Historic Preservation Officer

Alaska Department of Natural Resources

FROM:

Molly McCammen

Executive Director

RE:

Project 99154: Authorization to Proceed with Phase III,

Construction, for the Proposed Local Display Facility in Seward

DATE:

October 22, 2002

Qutekcak Native Tribe has completed design documents for a local display facility. The facility will be located in a new tribal office and cultural center in Seward. In accordance with Appendix B, Section 3.3.1, of the grant agreement between the Alaska Department of Natural Resources and Chugachmiut, Inc., I authorize you to proceed with Phase III, Construction, for the proposed local display facility in Seward subject to the following condition:

Prior to construction, Chugachmiut must submit to you a written description of how it intends to address concerns about overhead plumbing and heating pipes in the secure storage area. (See the letter dated October 15, 2002, from Elizabeth Knight, Senior Curator, National Park Service.) To preserve collections in the secure storage area, the plumbing should be below ground. However, if it is not possible or practical to redesign the plumbing and heating pipes in the secured storage area, then the operation and maintenance plan for the facility should reflect vigilance in maintaining pipes and preparation for water or water and glycol discharges.

For the following reasons, I find that all requirements for this approval have been met:

1. The proposed local display facility satisfies the requirements of the National Environmental Policy Act (NEPA) according to a letter from Dave Gibbons to me on September 5, 2001;

- 2. In a letter dated October 15, 2002, Elizabeth Knight, Senior Curator, National Park Service, stated that the design appears to satisfy applicable federal regulations (36 C.F.R., Part 79), but also expressed concerns about overhead plumbing and heating pipes in the secure storage area;
- 3. The business plan and financial guarantee from Qutekcak Native Tribe (Resolution 01-06) are satisfactory to assure completion of the local display facility and its successful operation for not less than 20 years; and
- 4. Chugachmiut has completed the Local Display Facility Training Program.

TRANSMISSION OK

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### Exxon Valdez Oil Spill Trustee Council

441 W. 5th Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178

#### **MEMORANDUM**

TO:

Judith E. Bittner

State Historic Preservation Officer

Alaska Department of Natural Resources

FROM:

Molly McCammen

Executive Director

RE:

Project 99154: Authorization to Proceed with Phase III.

Construction, for the Proposed Local Display Facility in Seward

DATE:

October 22, 2002

Qutekcak Native Tribe has completed design documents for a local display facility. The facility will be located in a new tribal office and cultural center in Seward. In accordance with Appendix B, Section 3.3.1, of the grant agreement between the Alaska Department of Natural Resources and Chugachmiut, Inc., I authorize you to proceed with Phase III, Construction, for the proposed local display facility in Seward subject to the following condition:

Prior to construction, Chugachmiut must submit to you a written description of how it intends to address concerns about overhead plumbing and heating pipes in the secure storage area. (See the letter dated October 15, 2002, from Elizabeth Knight, Senior Curator, National Park Service.) To preserve collections in the secure storage area, the plumbing should be below ground. However, if it is not possible or

441 W. 5" Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178

#### **MEMORANDUM**

TO:

Peter Hagen

NOAA

FROM:

Molly McCommon

Executive Director

RE:

Authorization - Project 030574

Assessment of Bivalve Recovery on Treated Mixed-Soft Beaches in

Prince William Sound

DATE:

October 15, 2002

The purpose of this memorandum is to formally authorize work to proceed on Project 030574/Assessment of Bivalve Recovery on Treated Mixed-Soft Beaches in Prince William Sound. The work must be performed consistent with the Detailed Project Description and revised budget dated August 6, 2002.

441 W. 5" Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178

October 14, 2002



Dr. Clarence Pautzke North Pacific Research Board 441 West 5<sup>th</sup> Avenue, Suite 500 Anchorage, Alaska 99501-2340

Dear Dr. Pautzke:

I am writing in support of the nomination of Dr. Robert (Bob) Spies to the Science Panel for the North Pacific Research Board. Dr. Spies has served as the Chief Scientist for the Exxon Valdez Oil Spill Trustee Council since the Trustee Council's inception in 1991, and before that, as advisor to the state trustees since shortly after the spill occurred. He continues to be the lead scientist for the lingering oil portion of the EVOS program.

Over time, the EVOS research program has developed from targeted, species-specific projects addressing direct oil spill injury, to restoration that is more ecological in perspective. Dr. Spies has been a key proponent of that transition, one that led directly to development of the Gulf of Alaska Ecosystem Monitoring and Research Program – or GEM. Dr. Spies participated extensively in development of the GEM science background (a major scientific synthesis of the state of knowledge in the Gulf of Alaska), in the GEM conceptual foundation, and in the key GEM components and strategies.

I believe Dr. Spies would make a good addition to your panel for the following reasons:

- 1. He is a big thinker. Although his expertise is in toxicology and benthic ecology, he has an extremely broad base of knowledge in multiple disciplines and has the ability to think ecologically.
- 2. He works well in a group setting.
- 3. He has extensive experience in both the Gulf of Alaska and other parts of the Pacific Ocean.
- 4. He knows how to focus the discussion on issues and proposals, ask questions, and make tough recommendations.
- 5. He has an excellent reputation among a variety of entities and is well connected to other larger ecological programs such as CalFed and CalCofi.
- 6. He reliably meets deadlines for comments and attends meetings.

You would not go wrong by having Dr. Spies as one of your leading science advisors.

Sincerely,

Molly McCammon Executive Director

441 W. 5th Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178

#### **MEMORANDUM**

TO:

Bill Hauser

ADF&G

FROM:

Molly McQummon

Executive Director

RE:

Authorization - Project 030190

Construction of a Linkage Map for the Pink Salmon Genome

DATE:

October 9, 2002

The purpose of this memorandum is to formally authorize work to proceed on Project 030190/Construction of a Linkage Map for the Pink Salmon Genome. The work must be performed consistent with the Detailed Project Description and the revised budget dated August 6, 2002.

441 W. 5th Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178

### MEMORANDUM

TO:

Bill Hauser

ADF&G

FROM:

Molly McCammon

Executive Director

RE:

Authorization - Project 030558

Harbor Seal Recovery: Application of New Technologies for Monitoring

Health

DATE:

October 9, 2002

The purpose of this memorandum is to formally authorize work to proceed on Project 030558/Harbor Seal Recovery: Application of New Technologies for Monitoring Health. The work must be performed consistent with the Detailed Project Description and revised budget dated August 6, 2002.

441 W. 5th Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178

#### **MEMORANDUM**



Peter Hagen

NOAA

FROM:

Molly McGammon

Executive Director

RE:

Authorization – Project 030607

Geographic Information Systems (GIS) Map of Water Quality Monitoring

Sites across the Gulf of Alaska

DATE:

October 9, 2002

The purpose of this memorandum is to formally authorize work to proceed on Project 030607/Geographic Information Systems (GIS) Map of Water Quality Monitoring Sites across the Gulf of Alaska. The work must be performed consistent with the Detailed Project Description and revised budget dated August 6, 2002.

Alaska Department of Law

U.S. Department of Agriculture National Oceanic and Atmospheric Administration

441 W. 5th Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178

#### **MEMORANDUM**

TO:

Peter Hagen

NOAA

FROM:

Molly Ma Garannon

Executive Director

RE:

Authorization - Project 030636

Management Applications: Commercial Fishing

DATE:

October 9, 2002

The purpose of this memorandum is to formally authorize work to proceed on Project 030636/Management Applications: Commercial Fishing. The work must be performed consistent with the Detailed Project Description and revised budget dated August 6, 2002.

441 W. 5" Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178

#### MEMORANDUM



Bill Hauser

ADF&G

FROM:

RE:

Authorization – Project 030649

Reconstructing Sockeye Populations in the Gulf of Alaska over the Last

Several Thousand Years

DATE:

October 9, 2002

The purpose of this memorandum is to formally authorize work to proceed on Project 030649/ Reconstructing Sockeye Populations in the Gulf of Alaska over the Last Several Thousand Years. The work must be performed consistent with the Detailed Project Description and revised budget dated August 6, 2002.

441 W. 5th Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178



October 4, 2002

Gary Thomas, Executive Director Prince William Sound Science Center P.O. Box 705 Cordova, Alaska 99574

Dear Gary:

Nine months have passed since I wrote you requesting a joint discussion on a number of items of interest to both the Science Center and the Trustee Council. A copy of that letter is enclosed to refresh your memory. Although we talked briefly at the Science Center's board meeting last June, I have not heard from you on the substance of these issues. Given your new position with the University of Miami, I am especially concerned that these issues be resolved as soon as possible.

There are two issues that must get resolved quickly: the disposition of equipment and software purchased by the Trustee Council and located at the PWSSC offices in Cordova, and disposition of data, computer programs, and processed reports funded by the Trustee Council.

Regarding the equipment issue, I am enclosing a list of all the equipment purchased by the Trustee Council for projects accomplished through the PWSSC. Under new procedures adopted by the Trustee Council in July, 2002, all equipment with an original cost under \$5000 remain with the acquiring agency – in this case, the National Marine Fisheries Service. The agency has the discretion, if their regulations allow, to transfer title of this equipment to the contractor. Items with an original cost more than \$5000 remain with the acquiring agency on behalf of the Trustee Council. Again, the agency has the discretion to transfer title of this equipment to the contractor if it is not needed for another Trustee Council-funded project.

I am prepared to resolve the lingering issue over equipment by approving the transfer of title from NMFS to the PWSSC immediately upon the resolution of our second lingering issue –the disposition of data and data products funded by the Trustee Council.

The Trustee Council's Data Systems Manager, Bob Walker, has reviewed the files and reports related to PWSSC projects, which were mostly part of the Sound Ecosystem Assessment (SEA) suite of projects, and prepared the attached accounting of data produced by the SEA project and the PWSSC. Clearly the SEA project recognized the

importance of cataloging data and making them available to SEA investigators, and, following that, to the public at large. The SEA DataWeb was the cornerstone of that effort. The Trustee Council wishes to follow through with this goal to ensure that the results of their \$26 million investment become accessible to the public and to current and future researchers.

If the PWSSC has these data, we would like to acquire them for future use. If researchers or other locations need to be approached in order to access and acquire the data, we request that the PWSSC grant whatever access permissions it retains and are necessary to access these data.

If the SEA DataWeb could be made accessible to the Trustee Council office over the internet, this may be the most efficient means of acquiring data and its documentation. If the DataWeb is not available, FTP access for bulk file transfer would be acceptable, although additional follow-up would be necessary for full documentation of the data and retrieval of metadata information from the INFORMIX database. If it would be best for Trustee Council staff to make a trip to the PWSSC office in Cordova, consult with your staff, and connect to your network with a laptop computer for file transfers, this can be done.

I would appreciate your identification of the appropriate means of access, and a date in the immediate future access can be provided. With the equipment and data issues resolved, I believe we can move forward with pursuing projects and data acquisition that meet the missions of both our organizations.

I look forward to hearing from you in the near future.

Sincerely,

Molly McCammon

**Executive Director** 

Cc: Pete Hagen, NMFS

**PWSSC Board of Directors** 

Maley Mc Cemm

Phil Mundy Bob Spies Bob Walker

Joe Banta, PWSRCAC

441 W. 5th Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178

#### MEMORANDUM

TO:

Molly McCammon

Park **Executive Director** 

FROM:

Bob Walker

Data Systems Manager

RE:

Trustee Council funded data at Prince William Sound Science Center

DATE:

October 4, 2002

The 1996 and 1997 SEA Project 320J annual reports provide quite a bit of detail about the SEA database and development to the SEA DataWeb. These reports identify that the DataWeb was accessible via the worldwide web to SEA researchers in locations outside of Cordova. Information was stored in metadata records that could be queried, and in HDR and ASCII format files that stored observation information and could be downloaded (1996 annual report, page 6-1-40).

The annual reports also document the nature of this information. The 1996 annual report (page 6-1-30) identified that the focus of that year's efforts was on four datasets: the CTD, Zooplankton and ADCP (Acoustic Doppler current profiler) datasets and the metadata needed to index these. The report identified that these were available through the Query Service portion of the DataWeb. At that time, the inventory of datasets available through query services included the CTD dataset from 94 through 96, the ADCP dataset from 94 and 95, and the Zooplankton dataset for 1994 (page 6-1-31).

The 1997 annual report identified that two new SEA datasets were ingested into the SEA DataWeb: echo acoustic data on herring abundance was ingested over the summer, and predator fish data was ingested in the fall (page 7-54). Note was made that the echo acoustic and predator fish data were available under Query Services as datasets (page 7-56). Also, the CTD and zooplankton datasets were augmented with data from the recent field season. Note was made that the ocean circulation data were reformatted into the HDF scientific file format and were made available to various SEA researchers (page 7-55). Bathymetry data was also reformatted and converted to allow creation of contour maps of the Sound. This data apparently is available in ArcInfo format, and could be used with the Arc procedures TIN and GRID (page 7-82).

This data would be valuable to other researchers and could be made available by the Trustee Council. If data are available for other years and their acquisition was funded as part of 1994-1998 SEA project funds, the Trustee Council should acquire them and make them available.

In addition to core data, associated "look up" tables would be needed. This information would include cruise history, zooplankton species, and station instrument lists. In addition, any information documenting the quality control/quality assurance procedures for accepting data into the DataWeb would be valuable in the understanding and assessment of the data.

In addition to the DataWeb, SEA component projects also identify several other data sets, and it is not clear if these were made part of the DataWeb, or contacts with individual researchers or institutions in which the data is housed would be necessary.

For example, the final reports for SEA component projects note the following:

98320E - Juvenile Salmon Predation. Catches of various fish species in several types of nets, lengths and weights of fish, stomach contents of fish, recoveries of tagged juvenile salmon, zooplankton density and species composition estimated from nets, ocean temperature and salinity measurements, light intensity measurements. The final report indicates that data are available in R:base format directly from Mark Willette ADF&G.

98320H - The Role of Zooplankton. Counts and biomass by species, composites of species, and for higher taxonomic categories by time, data and location from 1994-1997 as part of the formal SEA data base. The final report indicates that data are in flat file format accessible through the Advanced Visualizaton Laboratory (AVL), University of Maryland, from the Prince William Sound Sciences Center, and from the INGRESS data base at the Institute of Marine Science, University of Alaska Fairbanks. Custodians were identified as Dr. Charles Falkenberg (AVL) and Dr. Ken Coyle (IMS).

94-98320I - Stable Isotopes as Food-Web Tracers. The final report for this component indicates that data are published in various scientific manuscripts in the form of tables, figures and an appendix. Would these be available in electronic format from the PWSSC?

99302R - Biophysical Modeling and Remote Sensing. One- and three-dimensional models of coupled upper layer (100 meters) physical, phytoplankton, and zooplankton dynamics in Prince William Sound. In the final report, Jia Wang acknowledged support from the International Arctic Research Center-Frontier Research System for Global Change (IARC-FRSGC) for providing the computer power. The 1996 annual report (page 10-7) notes that at that time AVHRR SST images were made available to PWSSC in CD-ROM format for use by PWSSC SEA investigators.

99320T - Juvenile Herring Growth and Habitats; Traditional Ecological Knowledge. Spatial distribution (acoustic and aerial) of herring and other species of fishes captured, length frequencies of herring, herring stomach contents, zooplankton collections, CTD and larval fish data. Local knowledge observations of herring in PWS and the Kenai Peninsula are in ArcView 3.1. Information from each observation includes the range of years, location, method, verification and frequency. The final report indicates that data are available from Brenda Norcross, Evelyn Brown or Michele Frandsen.

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Retix 4810 LAN Bridge

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\$1,950,00 ADFG/oil assess

\$1,950.00 Orca Cannery

EVOS/DATA 11/17/94

EVOS/DATA 11/17/94

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142 SG 2000 SSB radio	75651573	EVOS/DATA			Orca Challenger	1	
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162X Aquashuttle w/plankton counter, shielded antenna cable	138/2330/007	EVOS/DATA			Orca Storage	1	,
378 Aquashuttle OPC-2D deck unit	DEC014	EVOS/DATA			Orca Cannery	1	
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388B Trakker 120 MB (Shelton)	H1325129A	EVOS/DATA			PWSSC/Seaocear	2	
388C Trakker 120 MB (Jenny)	H1325188A	EVOS/DATA			Allen/Cordova	1	
405 HP Aptrex Xterminal	C45R52029	EVOS/DATA		\$3,823.00	PWSSC/Seaocear		
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413B APC Back UPS Pro 650	895097284919	EVOS/DATA			PWSSC/Kline	1	
435 Retix RX7222 Multiport Router	082067	EVOS/DATA			ADFG/Greg's off	1	
468 Bernoulli 230MB drive		EVOS/DATA			PWSSC/Seafish	1	
469 Serial X-terminal (Vince)	41117	EVOS/DATA		\$1,210.00	Patrick/Cordova	1	
472 Databrick, 66AC, PCMCIA option, plus extras	J298901/50-119159-RD	EVOS/DATA	10/30/95 -		Applegate Rocks	1	value includes upgrades: listed PO's plus 97SEAD-
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10536	Sportster V-34 external modern	0008390040235338	EVOS/DATA		1	PWSSC/Network	1	value incl. w/iterm #469
10549	Seagate 15150N 4GB harddrive (Vince)	21620	EVOS/DATA			PWSSC/Seadata	1	
10550	Seagate 15150N 4GB harddrive (Ravi)	21621	EVOS/DATA	6/24/96	\$1,480.00	Univ. of Maryla	1	
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10604	Seagate 9.1GB hard drive w/enclosure (Abot)	LM285200	EVOS/DATA		\$1,187.00	PWSSC/Seafish	1	*******
10005	Seagate 9.1GB hard drive (Abot in above enclosure)	LM420401	EVOS/DATA			PWSSC/Seafish	1	7717
10606 A 10619	lomega zip drive 100 MB		EVOSIDATA	5/21/98	\$326,00	Gary?	1	معمد المعمد المع
10007.4 ±	Magnavox Innovision 17" monitor	MA60H3013450	EVOS/DATA	5/21/98	\$523.00	PWSSC/Seadala	1	
10619	Cr10x-1m data logger	***	EVOS/DATA	6/11/98	\$1,346.00	Applegate Rocks	1	used w/weather station
10036	Gateway 2000 PC	2503933		8/31/94	\$3,305.00	PWSSC/Conf Roc	1	upgraded to a 200 mHz Pentium ; current value ab
10037A	Gateway 17" Crystal Scan monitor (Loren)	MH1934129419		8/31/94	l	Orca Cannery	1	value inc. w/#36 Gateway 2000
10043	Compaq Contura 3/20 laptop (Steve)	7231HCF21066	EVOS/FISH	9/28/92	\$1,806.42	PWSSC/Seadata	1	
10068	Power Macinjosh 8100/80AV (Steve)	SXB43610B1HO	EVOS/FISH-	12/14/94	\$6,534.00	PWSSC/Conf. Rm	1	upgraded with a 4gb harddrive and 72 mb ram
.9	Apple MultipleScan 17 Display	S144321Q1XX	EVOS/FISH	12/14/94	\$1,000.00	PWSSC/Lab	1	
8	Pinnacle REO-650 read/write optical	D-4294	EVOS/FISH	5/9/94	\$3,100.00	PWSSC/Seadala	4	
10118	Ferrups FE 700 UPS, Grizzly	FE700V01521	<b>EVOS/FISH</b>	5/17/94	\$1,260.42	PWSSC/Seadata	1	rebuilt requiring substantial expenditure
Ю119	Ferrups FE 700 UPS, Sebastes (Vince)	FE700V01522	EVOS/FISH	5/17/94	\$1,260.42	PWSSC/Seadata	1	rebuilt regulring substantial expenditure
10120	Ferrups FE 700 UPS	FE700V01523	EVOS/FISH	5/17/94	\$1,260.42	PWSSC/Seaocear	1	rebuilt requiring substantial expenditure
10143	Orca Challenger, including electronics	CG Doc# 69722	EVOS/FISH	1	\$45,603.00	B Float Old Ha	1	upgrade in 1995 added \$5600 value to original val
10178	102 analog echo sounder: 200/420 kHz	102-89-025	EVOS/FISH	5/9/94	\$18,000.00	Orca Cannery	1	on loan from Biosonics until DT5000 systems fully
Ю179	ESP computer card	ESP-012	EVOS/FISH	5/9/94	\$12,000 00	Orca Cannery	1	on loan from Biosonics until DT5000 systems fully
10180	ESP computer card	ESP-066	EVOS/FISH	5/9/94	\$12,000.00	Orca Cannery	1	on loan from Biosonics until DT5000 systems fully
10181	ESP computer card	ESP-037	<b>EVOS/FISH</b>	5/9/94	\$12,000.00	Orca Cannery		on loan from Biosonics until DT5000 systems fully
10182	ESP computer card	ESP-038		5/9/94	\$12,000.00	Orca Cannery	1	on loan from Biosonics until DT5000 systems fully
10183	102 analog transducer: 420 kHz	09-420-0615-024B		5/9/94		Orca Cannery	1 1	on loan from Biosonics until DT5000 systems fully
Ю186	102 analog transducer: 200 kHz	20-200-0615-005	EVOS/FISH	5/9/94	\$5,000.00	Orca Cannery	1	on loan from Biosonics until DT5000 systems fully
	Mod 111 chart recorder	111-89-052		5/9/94		Orca Cannery	3	on loan from Biosonics until DT5000 systems fully
	Mod 111 chart recorder	111-89-048		5/9/94	\$7,960.00	Orca Cannery		on loan from Biosonics until DT5000 systems fully
	Mod 171 tape recorder IF	171-84-06		5/9/94	\$3,975.00	Orca Cannery		on loan from Biosonics until DT5000 systems fully
	Mod 171 lape recorder IF	171-85-028		5/9/94	\$3,976.00	Orca Cannery		on loan from Biosonics until DT5000 systems fully
	Bio Fin towed body 8' - "Rubber duck"	BF-92-002	EVOS/FISH	5/9/94	\$5,600.00	Orca Storage	1 1	•
	Bio Fin lowed body 4' - "Frisco"	BF-94-014		7/11/94	\$1,655.00	Orca Storage ·	, 1	
	Bio Fin lowed body 4' - "Billy"	SB-01	EVOS/FISH	5/9/94	\$3,000,00	Orca Cannery	i	
	Bio Map II (software): 2 sets (2\$5,000 each	1		5/9/94		PWSSC/Seafish	; l	
	Compac 486C PC "marine dawg"	8223HBC20004	EVOS/FISH	7/11/94		Orca Cannery	il	
	Nec Laptop 486/50c w/ethernet adapter "ostrich"	171048005611		12/5/94		PWSSC/Thomas	, I	upgraded 10/20/97: \$228, 99SEAF-09
	Nec Laptop 486/50c w/ethernet adapter "giraffe"	1710 48010074		12/5/94		PWSSC/Seafish		uporaded 10/20/97: \$228, 99SEAF-09
	50' signal cable	141-94-865		4/28/95		Orca Cannery	1 1	
0216X	101 analog transducer cable - 100*	141-94-861		7/11/94		Orca Cannery	, 1	
	Oscilloscope HP 546018	3409A00200	EVOS/FISH			Orca Cannery	, 1	
	Sony CCD-VX3 camcorder w/ parts	1004048		5/24/94		PWSSC/Seafish	i I	
	manif when the contribution of all bounds	1.33.33.3			,			

12/18/98

Friday, December 18, 1998 EVOSINV98						Page 4		
B. Code	Item	Serial Number	Owner	Date Acq.	· Value	Location	Con	Comments
00247	Magellan 15203 Chartmate GPS w/charts	4051623	EVOS/FISH	7/7/94		Orca Challenger	2	doesn't work well - will send in for repairs
00279	Horita FP-50 time code generator w/adapters, cable	GR 400950		6/1/94	\$1,685.00	PWSSC/Seafish	1	
00280	Radio shack portable 5" TV with AC, DC adapters	016144		9/2/94	\$300.00	PWSSC/Seafish	1	• •
00380	Honda EG2500 Generator	engine#3419633	EVOS/FISH	4/26/95	\$1,172.00	Orca Challenger	1	••
00381	Johnson 1995 200 hp outboard	03900511	EVOS/FISH	4/21/95		Orca Challenger	1	
00382	Johnson 1995 200 hp outboard	03877213	EVOS/FISH	4/21/95	\$6,395.00	Orca Challenger	1	
00385	Sun SparcStation 20 (Marmot) (Jay)	543F0839	EVOS/FISH	11/2/95	\$16,520.00	PWSSC/Seafish	1	
	Seagete ST15150N 4GB hard drive (Jay)	21073	EVQS/FISH	10/6/95	\$1,488.00	PWSSC/Seafish	1	Supplemental Control Control Control Control
	Sun monitor 20", Eagle	9537FC0011	EVOS/FISH			PWSSC/Seaocean		value inc. w/#385 Sun SparcStation 20
00389	Sony CCD-TR400 Camcorder	48833	EVOS/FISH	4/21/95	\$1,583;94	PWSSC/Conf. Rm	1	1
	Nikon N6006 35mm Camera, wilens, tripd	3051070	EVOS/FISH	4/21/95	\$1,514. <del>0</del> 0	PWSSC/Conf. Rm Biosonics	1	includes 60mm macro, 28mm wa, 70-210 telepho
	DT6000/5000 transducer: 120 kHz	018-S.SPWS-120-6X15-00	EVOS/FISH .	5/9/94	1873F	Biosonics	1	value inc. w/#432 "2xducer
	DT6000/5000 transducer: 4/20 kHz	DT8-S.SPWS-420-6X15-00	EVOS/FISH	5/9/94	700.00	Biosonics	3	sent to Biosonics for repair 8/98; value inc. w/#432
	DT5000 transducer: 720 kHz	DT5-S.SPWS-720-3X8-001	EVOS/FISH	5/9/94		Orca Cannery	3	value inc. w/#462 "3xducer"
	DT5000 transducer: 420 kHz	DT5-S.SPWS-420-3X8-001	EVOS/FISH	5/9/94			2	value inc. wi#462 "3xducer"
	DT5000 transducer: 1000 kHz	DT5-S.SPWS-1000-3X8-00	EVOS/FISH	5/9/94			3	value.inc. wi#462 ."3xducer"
	DECEMBER 41 14-14 and and and and and and and and and and	DT4000-95-024	EVOS/FISH	8/31/95	\$14,978.00		4	returned to Biosonics - didn't do job
	DT4000 transducer cable - 100'	141-95-957		8/31/95	\$2,000.00	Orca Cannery	1	
	DT4000 transducer cable - 100	DT\$-45-70-6X15-1		8/31/95	\$10,000,00		4	returned to Bionsonics - didn't do job
	DT6000/5000 sounder: 120-430: "2 xducer"	DT6-PWS-96-001		5/9/94		Orca Cannery	2	1
	APC Smart UPS 1250 VA	59035862503		4/27/95		Orca Cannery	1	[
)00433		700BDD/A		8/30/95		PWSSC/Net Stora	1	
	Retix RX7102 One Port Router	30637	EVOS/FISH	10/11/95		PWSSC/Seadata	1	İ
30436	Lasergraphics Film Printer	082061	EVOS/FISH	8/30/95		PWSSC/Network	1	
)0437	Relix RX7222 Multiport Router	082001	EVOS/FISH	10/28/95		Orca Storage	1	<b>1</b>
)0439	Workstation w/fume hood	1	EVOS/FISH	10/28/95		Orca Storage	1	į.
)0440	Workstation w/fume hood	3210352	EVOS/FISH	8/10/94	\$3 035.70	PWSSC/Accounting	1	<b>!</b>
)0459	Canon notejet 486 laptop w/printer	DT5000-PWS-95-0001	EVOS/FISH	5/9/94		Orca Cannery	3	Value includes transducers, cables
	DT5000 sounder: 420-720-1000 "3xducer"	ESP-019	EVOS/FISH	W 31.54		Orca Cannery	3	on loan from Biosonics
10463	ESP computer card	E3P-019	EVOS/FISH	4/3/95		Orca Storage	3	in very bad shape
10475	Quicksilver 11 ft. inflatable boat	·	EVOS/FISH	4/20/95		PWSSC/Seafish	1	
10476	Bernoufii 230MB drive (Jay)	1		4/25/95		Orca Cannery	1	Į.
	Bernoulli 230MB drive	DT4 D4/000 00 00/451 004		10/30/96		Orca Storage	3	NOAA donated unit, we paid for upgrade
	OT38 kHz transducer, split beam	10,11,110,000,010,111,111,111,111,111,1	EVOS/FISH			Orca Cannery	3	
	DT38 kHz sounder	DT-4000-96-048	EVOS/FISH	11/14/96	\$12,000.75	PWSSC/Thomas	ĭ	1
	HP Laser Jet printer 5P 6PPM	SUSHB100115	EVOS/FISH	7/27/96	⇒1,3 <del>1</del> 3.40	Biosonics	l:	sent in for repair 8/98; value inc. w/#462 "3xducer"
	DT5000 transducer cable - 100' -	141-94-875	EVOS/FISH	5/9/94	*** *** ***		l:	Serie in tor repair
0585	DT38 khZ transducer cable	141-96-1087		1 1/14/96	\$2,000.00	Orca Cannery PWSSC/Bunkhous	l;	į.
0441	Film processor, Jobo Autolab ATL-1000			9/29/95	<b>34</b> ,030.03	PWSSC/Kline	1	1
0527	Minolta quickscan 35mm film scanner	57501914	EVOS/KLIIN		\$323.00	Kline/Cordova	ľ	
0484	DUI TLS self-donning drysuit		EVOS/KLINE		\$1,300.00	DIMECOLOUAR	i .	
`S10	Industrial Wig-L-Bug tissue amalgamator	6-0715	EVOS/KLINE	4/1/96	\$1,250.95	PWSSC/Lab	l'	1
1	Pump - 5.6 cmf		<b>EVOS/KLINE</b>		\$2,303.94	PWSSC/Lab	I.	
18.	lomega Zip Drive w/6 cartridges & caddy, (Kline)	LDe620F02U	EVOS/KLINE			PWSSC/Kilne	l'	Į.
)520A	Macintosh PowerBook Duo2300c (John)	NH6106D57Y	<b>EVOS/KLINE</b>		\$3,704.55	PWSSC/Seaocear	1	
1520B	Macintosh DuoDock II Plus (John)	TF5390EA572	EVOS/KLINE	11/6/96	\$499 00	PWSSC/Seaocean	1	

riday December 18, 1998

ADCP deck interface unit

ADCP deck interface unit

TI Pentium 5000E laptop

Monitor, 17" Sony (64khz)

Acoustic Release, Model 8242

Seagate ST15150N 4GB hard drive, Onerka (Loren)

SBE 26 tide and wave gauge w/Seagauge mounting fixtures 2611568-0122

SBE 28 tide and wave gauge w/Seagauge mounting fixtures 2611568-0123

B Code

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00156X 30157

00158 0159A

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00169X 10170X

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cember 18, 1998	EVOSINV98				Page 5		
ltem ltem	Serial Number	Owner	Date Acq.	Value	Location	Con	Comments
	CJ60645P39X	EVOS/KLINE	11/6/96		PWSSC/Seaocean		
APC Back-UPS 400	PB9703440913	<b>EVOS/KLINE</b>	9/9/97		PWSSC/Seaccear		
TI Travelmate 4000E laptop 486sx 75Mhz	13738401418	EVOS/OCEA			PWSSC/Seaocear		broken; needs new harddrive
TI Travelmate 4000E laptop 488sx 75Mhz	13738404258	EVOS/OCEA	7/15/94	\$6,114.31	PWSSC/Seaocear	2	works intermitently - needs new screen switch?
Compag Contura 486si laptop (Steve)	7408HDJ35040	EVOS/OCEA		\$1,829.00	PWSSC/Seadata	4	
Digital DEC CPU 590 desktop computer (Shelton)	KA437DUAL8	EVOS/OCEA		\$7,148.81	Orca Cannery	!	- La - La - La - Carital DEC comouler
DEC/MAG Inn Division (Shelton)	MH1934295754	EVOS/OCEA			PWSSC/Seaocear	]]	value inc. w/#71A Digital DEC computer
ADCP current profiling V-fin w/100m cable	1093011	EVOS/OCEA!			Orca Cannery	!	20 10 10 10 10 10 10 10 10 10 10 10 10 10
100 m towing cable (came with V-fin)		EVOSIOCEA		43,000 DO		4	includes 14"shieve, slip-ring ashibly, davit, Roches
CTD does not winch withhit \$ 900 m conducting cable !!	ŠTW-1008 1	EVOSIOCEA		\$21,200.00	Orca Storage	!	includes 200 m. low cable and slip ring assembly
Aquashuttle deep sea winch wiparts & cable Cable, 400m nonconducting, Rochester	ية. ب	EVOSIOCEA	5/31/94	\$19,000.00	Orca Cannery	1	on cable spool - galvanized steel
Cable, 400m nonconducting, Rochester	4.42	EVOS/OCEA	5/31/94	37,650.00	0,000,000	3	not functional; needs to be sent to Chelsea for repa
Aquiapack (CTD, fluorometer)	CTD-107/2300/025	EVOS/OCEA	5/26/94			1	HOT IDINOUGHAN, HEEGS to be some to discount
ADCP 150 KHz towing cable assembly		EVOS/OCEA			0.000.0.000	Ľ	
ADCP 140' tow cable		EVOS/OCEA			Orca Storage	1:	age to the same of
I I dillot don'this had biretot integer in teason	5349FRXD	EVOS/OCEA			UAF/MoRoy	1;	
Troom, broadent, too mist, or angious members.	1307	EVOS/OCEA			Orca Canneiy	li .	1
ADCP: continental shelf, 150kHz - DR	1306	EVOS/OCEA	8/31/94		Cion Comicis	ľ	
900 lb. anchor, chains		EVOS/OCEA			Orca Cannery	l:	big orange M&M
MSI mooring for ADCP w/mounting bracket		EVOS/OCEA			Orca Cannery	l'a	outside of Port office
ADCP HERO shore station quadpod	·	EVOS/OCEA			Orca Storage	l:	outside of Port Office
I i dilacado i ilipadi pa i il i conti anti	016683	EVOS/OCEA			Orca Cannery	1	pressure sensor purchases (\$4000), SBE 16 donal
LODE to the condition disident or become a course.	164855-0826	EVOS/OCEA			Orca Cannery	l:	pressure sensor purchases (\$4000), SBE 16 donal
I COC 10 to tandens as Siden in brossers a server.	164855-0827	EVOS/OCEA			Orca Cannery	1	pressure sensor damaged; end cap/senior guard or
loop is	164855-0828	EVOS/OCEA			Orca Cannery	3	pressure sensor damaged, end cap serior guard or
1000.10	164855-0829	EVOS/OCEA			Orca Cannery	1	pressure sensor damaged; end cap/senior guard or
1006 10	164944-0837	EVOS/OCEA			Orca Cannery	3	pressure sensor damaged, end capacinor govern
SBE 19 SEACAT profiler w/data cable, pump (SN16479) &c	199456-1629	EVOS/OCEA			Orca Cannery	Ľ	original lost by UAF - this is replacement they bough
SBE 19-03 Seacat profiler		EVOS/OCEA			Orca Cannery	1	includes 12 1 liter Niskin bottles
SBE 32 Rosette Carousel with cage	*	EVOS/OCEA			Orca Cannery	!!	Includes 12 1 liter Niskin bolbes
I a C C 10 1 D 10 20 1 C C C C C C C C C C C C C C C C C C	130348	EVOS/OCEA			Orca Cannery	11	1
SBE 9plus 911 CTD	09P9456-0356	EVOS/OCEA			Orca Cannery	!!	
	11P9456-0343	EVOS/OCEA			Orca Cannery	!!	
	1H002039	EVOS/OCEA			Orca Cannery	11	
Aquapack deck interface unit w/6 pin interface cable	140/2350/022	EVOS/OCEA		\$2,175.00	Orca Cannery	1	1
Sun SparcStation 20, Husky (Shari)	544F0438	EVOS/OCEA	11/2/95	\$8,986.90	PWSSC/Vaughan		La company of the com
Sun monitor 20", Husky (Shari)	9537FC0009	EVOS/OCEA	11/2/95		PWSSC/Vaughan	!!	value inc. w/#402 Sun SparcStation 20

\$1,435.00 PWSSC/Seaccean 1

\$5,172.00 PWSSC/Seaocear 1

\$975.00 PWSSC/Seaocear

\$7,000.00 Orca Cannery

\$7,000.00 Orca Cannery

\$4,310,001 Orca Cannery

\$4,310,00 Orca Cannery

\$6,000.00 Orca Cannery



doesn't work - will be sent in for repairs

EVOS/OCEA 10/6/95

EVOS/OCEA 9/19/95

EVOS/OCEA 9/19/95

EVOS/OCEA 8/31/94

EVOS/OCEA 8/31/94

EVOS/OCEA 10/6/95

EVOS/OCEA 8/31/95

FVOS/OCEA 9/30/95

m iday, Dec	ember 18, 1998	EVOSINV98				Page 6		
B. Code	ltem	Serial Number	Owner	Date Acq.	Value	Location	Con	Comments
0442	Acoustic Release, model 8242	16204	EVOS/OCEA	5/17/95	\$8,000.00	Orca Cannery	1	
<sup>1</sup> 10443 ;; ;:	Acoustic Release, model 8242	16205	EVOS/OCEAL	5/17/95	\$6,000.00	Orca Cannery	1	
10446	Weather station	v 16	EVOS/OCEA!	9/13/95	\$2,000.00	Applegate Rocks	1	value of basic station; wind monitor/data logger liste
10446B	CR10 data logger	1	EVOS/OCEA	9/13/95	. \$1,300.00		1	sent out for recalibration: due back late 12/98
0448	TSUR Uplink receiver w/radio direction finder		EVOS/OCEAL	5/23/95	\$7,726.53	Orca Cannery	1	<b>'</b>
	Drifter, ClearSat-15 WOCE/TOGA		EVOS/OCEA	12/8/95	\$4,071.00	Orca Storage	3	antenna broken
0451	Drifter, ClearSat-15 WOCE/TOGA		EVOS/OCEA	12/8/95	\$4,071.00	Orca Storage	2 :	antenna damaged
	Drifter, ClearSat-15 WOCE/TOGA		EVOS/OCEA	12/8/95	\$4,071.00	Port Bainbridge ii	1	at sea
0529	MK-12 computer board (software) for launcher	9617013	EVOS/OCEA	11/20/96	\$1,995.00	PWSSC/Seaocean	1,	
0537	Apple Laserwriter 12/640 PS		EVOS/OCEA		31,839.00	PWSSC/Bunkhous	传筝"	##
20610	t	i ted fact at	EVOS/OCEA	4/24/98	-\$2,224.00	Orca Cannery	*****	- Appell
0611	Lagrangian Williersver drifter	- 4 4 4 4	EVOS/OCEA	4/24/98	#62,224.00	Orca Cannery ·樂·	44	<b>₽</b> # * * * * * * * * * * * * * * * * * *
0612	Lagrangian WOCE/SVP drifter	2.7	EVOS/OCEAL	4/24/98		Orca Cannery	1	
<sup>7</sup> 0613	Lagrangian WOCE/SVP drifter	į.	EVOS/OCEA	4/24/98	\$2,224.00	Orca Cannery	1	
.0614	Lagrangian WOCE/SVP drifter		EVOS/OCEA	4/24/98	\$2,224,00	Orca Cannery	1	
	Lagrangian WOCE/SVP drifter	)	EVOS/OCEA	4/24/98	\$2,224,00	diffling at sea	1 .	at sea: may not be recovered:
0616	Lagrangian WOCE/SVP drifter		EVOS/OCEA	4724798	\$2,224,00	driting at sea	1	at sea: may not be recovered
7	Legrangian WOCE/SVP drifter	1	EVOS/OCEA		\$2,224.00	drfting at sea	1	at sea: may not be recovered
,	Lagrangian WOCE/SVP drifter	1	EVOS/OCEA			diffing at sea	1	at sea: may not be recovered
	VR60 hydrophone receiver			5/8/96		PWSSC/Seafish	1	l '
	Bogen camera tripod w/mini-fluid head		EVOS/PRED			PWSSC/Seafish	1	

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### Exxon Valdez Oil Spill Trustee Council

441 W. 5" Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178

December 26, 2001



Gary Thomas, Executive Director Prince William Sound Science Center P.O. Box 705 Cordova, Alaska 99574

Dear Dr. Thomas:

As you know, the Trustee Council is in transition from a program that primarily addresses status and restoration of individual species and services damaged in the 1989 oil spill, to a broader range of restoration actions that address the status of species and services within the context of the physical and ecological processes that sustain them. The Trustee Council anticipates adopting the new program - the Gulf Ecosystem Monitoring or GEM - in the summer of 2002 after final review of the draft by the National Research Council. During the time remaining before program adoption, I am inviting you to join me in examining the current relationship and mutual interests of the Prince William Sound Science Center and the Trustee Council. I would like to explore the opportunities for cooperation and collaboration between our organizations, and to ask your help in developing an agenda and schedule for establishing a new partnership between the Council and the Science Center.

To kick the discussions off, I've outlined the items of immediate interest to the Trustee Council below. Would you please review and comment on the proposed items?

- 1. Disposition of equipment and software purchased by the Trustee Council which is now located at and held by the Science Center.
- 2. Disposition of data, computer programs, processed reports and other intellectual property funded by the Trustee Council.
- 3. Coordination and cooperation on current and pending projects.
- 4. Measuring movement of water (direction and volume) through Hinchinbrook Entrance.
- 5. Biological and physical data acquisition needs in Prince William Sound and adjacent waters in the short- and long-term.

Thank you for your consideration. I look forward to working with you as we enter an exciting period of growth and transition in marine science in the northern Gulf of Alaska.

Sincerely,

**Executive Director** 

cc: **PWSSC Board of Directors** 

Phil Mundy

Bob Spies
Joe Banta, PWSRCAC

441 W. 5th Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178 October 3, 2002



The Honorable Ted Stevens United States Senate 522 Hart Senate Office Building Washington, D.C. 20510

Dear Senator Stevens:

We are organizing a major scientific symposium to be held in Anchorage January 13-17, 2003. This week-long series of talks, panels and work sessions is sponsored by all the major research entities in the Gulf of Alaska and the Bering Sea and will bring together many of these researchers for the first time to present their results to the public. The symposium will highlight the collaboration and coordination that has blossomed through your support of Steller sea lion investigations, the North Pacific Research Board, the GLOBEC program (largely funded by the National Science Foundation and NOAA), and the EVOS Trustee Council's research program.

We would be extremely pleased to have you address the group. You will note that in the attached draft agenda, we have scheduled you for the luncheon speech on Monday, January 13. The greatest attendance by scientists and non-scientists will be on January 13 and 14, however, we would be pleased if you could address the group at any time that is convenient with your schedule.

If you have any questions, please don't hesitate to contact one of us.

Sincerely,

Molly McCammon Executive Director

Exxon Valdez Oil Spill Trustee Council

Zlarence Pautzke

**Executive Director** 

North Pacific Research Board

Enclosures:

Agenda

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# Exxon Valdez Oil Spill Trustee Council

441 W. 5th Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178 October 3, 2002



The Honorable Ted Stevens United States Senate 522 Hart Senate Office Building Washington, D.C. 20510

Dear Senator Stevens:

We are organizing a major scientific symposium to be held in Anchorage January 13-17, 2003. This week-long series of talks, panels and work sessions is sponsored by all the major research entities in the Gulf of Alaska and the Bering Sea and will bring together many of these researchers for the first time to present their results to the public. The symposium will highlight the collaboration and coordination that has blossomed through your support of Steller sea lion investigations, the North Pacific Research Board, the GLOBEC program (largely funded by the National Science Foundation and NOAA), and the EVOS Trustee Council's research program.

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Molly Mcdammon Executive Director

Clarence Pautzke
Executive Director

441 W. 5<sup>th</sup> Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178 October 3, 2002



Admiral Conrad Lautenbacher Administrator National Oceanic and Atmospheric Administration 14<sup>th</sup> Street & Constitution Avenue, NW HCHB Room 5128 Washington, D.C. 20230

#### Dear Admiral Lautenbacher:

We are organizing a major scientific symposium to be held in Anchorage January 13-17, 2003. This week-long series of talks, panels and work sessions is sponsored by all the major research entities in the Gulf of Alaska and the Bering Sea and will bring together many of these researchers for the first time to present their results to the public. The symposium will highlight the collaboration and coordination that has developed among the Steller sea lion investigations, the North Pacific Research Board, the GLOBEC program (largely funded by the National Science Foundation and NOAA), and the EVOS Trustee Council's research program.

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Sincerely,

Molly McCammon Executive Director

Exxon Valdez Oil Spill Trustee Council

Enclosures: Agenda

Flyer

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Cc:

David Russell Matt Paxton David Benton Drue Pearce Jim Balsiger Bill Hines

Federal Trustees

U.S. Department of the Interior U.S. Department of Agriculture National Oceanic and Atmospheric Administration

State Trustees
Alaska Department of Fish and Game
Alaska Department of Environmental Conservation
Alaska Department of Law

larence Pautzke

Executive Director

North Pacific Research Board

**EVOS** 

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# Exxon Valdez Oil Spill Trustee Council

441 W. 5th Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178

October 3, 2002



Admiral Conrad Lautenbacher Administrator National Oceanic and Atmospheric Administration 14<sup>th</sup> Street & Constitution Avenue, NW HCHB Room 5128 Washington, D.C. 20230

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If you have any questions, please don't hesitate to contact one of us.

Sincerely,

Moley Mc Canmon

Clarence Pautzke

# in the Northeast Pacific: Science for Resource Dependent Communities

# JANUARY 13-17, 2003 HOTEL CAPTAIN COOK Anchorage, AK

### JOINT SCIENTIFIC SYMPOSIUM:

Eccon Valdez Oil Spill Trustee Council

**GLOBEC - Northeast Pacific Program** 

Steller Sea Lion Investigations

North Pacific Research Board

North Pacific Marine Research Institute

Agenda and registration information available at www.oilspill.state.ak.us

# 2003 SYMPOSIUM MARINE SCIENCES IN THE NORTHEAST PACIFIC: Science for Resource Dependent Communities

Joint with GEM/EVOS, GLOBEC NEP-GOA Program, NMFS Steller Sea Lion Investigations, NPRB, NPMRI, Pollock Conservation Cooperative Research Center

January 13-17, 2003 Anchorage, AK Hotel Captain Cook

Who should attend: EVOS/GEM, GLOBEC, SSLI, NPRB, NPMRI, PCCRC principal investigators, subsistence users, recreational and commercial harvesters, commercial processors, educators, naturalists, environmentalists, coastal community residents.

Plenary sessions (400) and SSLI concurrent sessions (200) are in Fore Deck Lunches and reception (350) in Mid and Aft Decks GLOBEC concurrent sessions (100) in Endeavor Room EVOS/NPRB concurrent sessions (100) in Adventure Room

#### DAY ONE: Monday, January 13

#### Plenary session

7:30 – 8:30 am	Registration
8:30 – 9:00	Welcome, introductory remarks, Hal Batchelder (GLOBEC), Lowell Fritz (SSLI), Molly McCammon (EVOS Trustee Council) and Clarence Pautzke (NPRB)
9 – 9:45	Order and chaos: the physical structure of the Gulf of Alaska shelf/slope ecosystem, <i>Thomas Weingartner (University of Alaska Fairbanks)</i> GLOBEC
9:45 – 10:30	Planktonic processes in the coastal Gulf of Alaska: interconnections with weather, ocean conditions, and salmon production, Suzanne Strom (Western Washington University) GLOBEC
10:30 - 11:00	Break
11:00 – 11:45	Dancing with Mother Nature: the search for mechanisms in pink salmon production ecology - a Prince William Sound case history, <i>Ted Cooney</i> EVOS

11:45 – 12:30	Bottom-up and top-down processes in ecosystem management, Douglas Demaster (Alaska Fisheries Science Center) SSLI
12:30 – 1:30	Lunch provided – keynote address by the Honorable Ted Stevens (invited)
1:30 – 2:15	Juvenile salmon migrations along the continental shelf in the Gulf of Alaska, Jack Helle (National Marine Fisheries Service) GLOBEC
2:15 – 3:00	From physics to fish: the global climate connection to the Gulf of Alaska ecosystem, Franklin Schwing (Pacific Marine Environmental Laboratory) GLOBEC
3:00 – 3:30	Break
3:30 – 4:15	The intersection of science, management and uncertainty in the recovery of Steller sea lions, Robert Small (Alaska Dept of Fish and Game) SSLI
4:15 – 5:00	Past and present fluctuations in fish stocks: what do they mean for management today, <i>Bruce Finney (University of Alaska Fairbansk)</i> EVOS/GEM (invited)
5:00 - 7:30	Reception and poster session

### DAY TWO: January 14, 2003

### Plenary session

7:30 - 8:00	Registration continues
8:00 - 8:45	Monitoring changes in fisheries production: using vessels of opportunity, David Welch (Canadian Dept of Fisheries & Oceanography) GEM/NPRB
8:45 – 9:30	Conducting marine research in a resource-dependent community: the role of outreach, Kate Wynne (Fisheries Industrial Technology Center) SSLI
9:30 - 10:00	Break
10:00 – noon	Concurrent sessions, talks and panels GLOBEC SSLI GEM/EVOS/NPRB/NPMRI

12:00 – 1:30	Lunch provided, keynote address by Admiral Conrad Lautenbacher, NOAA Administrator (invited)
1:30 – 3:00	Concurrent sessions continue GLOBEC SSLI GEM/EVOS/NPRB/NPMRI
3:00 – 3:30	Break/snacks provided
3:30 – 5:00	Concurrent sessions continue GLOBEC SSLI GEM/EVOS/NPRB/NPMRI

### DAY THREE: January 15, 2003

8:00 – 10:00	Concurrent sessions continue GLOBEC SSLI GEM/EVOS/NPRB/NPMRI
10:00 - 10:30	Break
10:30 – 12:00	Concurrent sessions continue GLOBEC SSLI GEM/EVOS/NPRB/NPMRI
12:00 – 1:30	Lunch provided, Keynote address: Canada's Coasts Under Stress, Rosemary Ommer (University of Victoria) GLOBEC FOCUS 4
1:30 – 3:00	Concurrent sessions continue GLOBEC SSLI GEM/EVOS/NPRB/NPMRI
3:00 – 3:30	Break/snacks provided
3:30 – 5:00	Concurrent sessions continue GLOBEC SSLI GEM/EVOS/NPRB/NPMRI

#### Additional breakout rooms available for GLOBEC (Quadrant and Voyager)

#### DAY FOUR: January 16, 2003

8:00 – 10:00	Concurrent sessions continue GLOBEC SSLI GEM/EVOS/NPRB/NPMRI
10:00 - 10:30	Break
10:30 – 12:00	Concurrent sessions continue GLOBEC SSLI GEM/EVOS/NPRB/NPMRI
12:00 – 1:00	Lunch provided, speaker?
1:00 – 3:00	Concurrent sessions continue GLOBEC SSLI GEM/EVOS/NPRB/NPMRI
3:00 - 3:30	Break/snacks provided
3:30 – 5:00	Concurrent sessions continue GLOBEC

SSLI

Additional breakout rooms available for GLOBEC (Quadrant and Voyager)

GEM/EVOS/NPRB/NPMRI

#### DAY FIVE: January 17, 2003

8:00 – 10:00	Concurrent sessions continue GLOBEC SSLI GEM/EVOS/NPRB/NPMRI
10:00 – 10:30	Break
10:30 – 12:00	Concurrent sessions continue GLOBEC SSLI GEM/EVOS/NPRB/NPMRI

12:00 – 1:00 Lunch own

GLOBEC and GEM/NPRB adjourn

1:00 – 5:30 SSLI work session (Quadrant)

441 W. 5th Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178

October 12, 2002



Thomas Sullivan Jr. 4551 Montrose Circle Anchorage, AK 99502

On behalf of the Exxon Valdez Oil Spill Trustee Council, thank you for applying for consideration as a Data Management subcommittee member. The Trustee Council met on October 29 and again on November 4 to discuss the makeup and membership of the various subcommittees.

It was most difficult to select from among the list of highly qualified nominees. Unfortunately, only a few slots were available, and your name was not selected at this time.

We hope that we can keep your nomination on file, and call upon you if vacancies occur or for participation in future review sessions.

We look forward to working with you in the future.

Sincerely,

Executive Director

441 W. 5th Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178

October 12, 2002



Paul Moersdorf National Data Buoy Center 1100 Balch Blvd. Stennis Space Center, Mississippi 39529

Dear Paul:

On behalf of the Exxon Valdez Oil Spill Trustee Council, thank you for applying for consideration as a Data Management subcommittee member. The Trustee Council met on October 29 and again on November 4 to discuss the makeup and membership of the various subcommittees.

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We look forward to working with you in the future.

Sincerely,

Molly McCammon Executive Director

P.S. I know that Phis Mundy falked to you about this I last week. We greatly oppnents you got to welp in other ways.

Under you to welp in which to weeting you.

Westing you.

441 W. 5" Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178

October 12, 2002



Scott Chapal J.W. Jones Ecological Research Center Rt. 2 Box 2324 Newton, GA 39870

Dear Scott:

On behalf of the Exxon Valdez Oil Spill Trustee Council, thank you for applying for consideration as a Data Management subcommittee member. The Trustee Council met on October 29 and again on November 4 to discuss the makeup and membership of the various subcommittees.

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Sincerely,

Molly McCammon **Executive Director** 

441 W. 5th Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178

October 12, 2002



Matthew Jones
National Center for Ecological Analysis and Synthesis
University of California Santa Barbara
735 State St., Suite 300
Santa Barbara, CA 93101

Dear Matthew:

On behalf of the *Exxon Valdez* Oil Spill Trustee Council, thank you for applying for consideration as a Data Management subcommittee member. The Trustee Council met on October 29 and again on November 4 to discuss the makeup and membership of the various subcommittees.

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We look forward to working with you in the future.

Sincerely,

Molly McCammon Executive Director

#### **MEMORANDUM**

TO:

Craig Tillery

Regina Belt

FROM:

Debbie Hennigh Debbie Henni

Administrative Manager

DATE:

October 2, 2002

SUBJ:

Court Notice - Third Joint Notice from the Investment Fund

The purpose of this memorandum is to request that the Alaska Department of Law and the United States Department of Justice notify the United States District Court of our intent to expend the following funds (\$456,000) from the EVOS Habitat Investment Sub-Fund:

Description	Total Amount
USFWS	\$165,000.00
KAP 2042 small parcel \$15,000	
Koniag Bridge Easement Payment \$150,000	
ADNR – small parcels	\$291,000.00
KEN 294 \$78,000	
PWS 06 \$100,000	
KEN 309 \$113,000	
Total Disbursement Amount from the EVOS	\$456,000.00
Habitat Investment Sub-Fund	

There has not been a Trustee Council meeting since the last court notice, filed on August 23, 2002.

#### Attached are the following documents:

- 1. Resolution dated July 5, 2000 for KAP 2042. When I researched the court notice notebook, I did not find this resolution as an attachment to the Court Request # 45 which was filed in August 2000.
- 2. Resolution 01-10, dated May 3, 2001 for KEN 294. Resolution 01-10 was Attachment C to May 3, 2001 meeting notes in Court Notice # 7 (filed May 11, 2001) from settlement account monies pervious disbursed, Attachment A, pages 115-118.
- Resolution 01-13, dated August 6, 2001 for PWS 06. Resolution 01-13 was
   Attachment D to August 6, 2001 meeting notes, in Court Notice # 1 from Joint
   Investment Fund (filed August 31,2001), Attachment B, pages 16-19. Also,
   Resolution 01-03, dated December 4, 2000 which was filed in Court Notice # 5 (filed
   December 13, 2000), Attachment B, pages 31-35.
- 4. Resolution 02-05, dated February 25, 2002 for KEN 309. Resolution 02-05 was filed in Court Notice # 11 (filed April 3, 2002), Attachment B, pages 25-34.
- 5. Resolution 01-08, dated January 16, 2001. Resolution 01-08 was filed in Court Notice # 6 (filed February 25, 2001), Attachment A, pages 32-48. The Master Koniag Agreement was too long to file so insert a placeholder page (page 43) stating the reason it was not included.
- 6. Executive Director's certification of compliance with the terms and conditions of the Trustee Council's resolutions concerning all small parcel resolutions, dated October 2, 2002.

If you have any questions or need additional materials, please let me know and I'll be glad to get them for you.

# RESOLUTION OF THE EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL REGARDING CERTAIN KODIAK ISLAND BOROUGH AND ADDITIONAL 10-ACRE PARCELS

We, the undersigned, duly authorized members of the Exxon Valdez Oil Spill Trustee Council ("Trustee Council"), after extensive review and after consideration of the views of the public, find as follows:

- 1.a. In its resolution of December 11, 1995, the Council agreed to provide funding of up to \$1,000,000 for the acquisition of lands held by the Kodiak Island Borough at key waterfront locations along Uyak Bay within the Kodiak National Wildlife Refuge as a result of forfeitures for tax delinquency. On June 8, 1998, the Council by motion designated these inholdings as parcels meriting special consideration by virtue of their location within the boundaries of a large parcel of land purchased from Koniag Inc. with Council funding.
- b. In its motion of June 8, 1998, the Council also agreed to authorize funding of up to \$645,000 from the previously dedicated \$1,000,000 for the purchase of privately owned approximately 10-acre parcels conveyed by the Larsen Bay Tribal Council to tribal members. This motion designated these inholdings as parcels meriting special consideration by virtue of their location within and adjacent to the boundaries of a large parcel acquisition of land purchased from Koniag, Inc. with Council funding.
- c. Subject to funding by the Council, the present owners of certain parcels formerly conveyed by the Tribal Council to various of its members, and the U.S. Fish and Wildlife Service are negotiating agreements to sell and purchase, respectively, 46 such parcels. These parcels and their respective approved appraised values are identified as follows:

v			Parcel Owner	Legal Description Twp, Rng, Sec-Lot	Size	Appraised Value
		1.089	Christensen, Randy	31S, 28W, 05-02	8.13 acres	13,000
		2008	Kodiak Island Bor.	30S, 28W, 20-05	9.80 acres	12,000
		2009	Kodiak Island Bor.	30S, 28W, 28-04	9.85 acres	16,000
		2010	Kodiak Island Bor.	30S, 28W, 28-08	4.68 acres	16,000
		2011	Kodiak Island Bor.	30S, 28W, 30-02	13.44 acres	18,000
		2012	Kodiak Island Bor.	31S, 28W, 05-11	10.00 acres	9,000
		2013	Kodiak Island Bor.	31S, 28W, 20-01	10.00 acres	18,000
		2014	Kodiak Island Bor.	31S, 28W, 29-02	10.38 acres	19,000
		2015	Kodiak Island Bor.	31S, 28W, 29-06	11.06 acres	12,000
		2016	Kodiak Island Bor.	32S, 28W, 19-01	6.00 acres	18,000
		2017	Kodiak Island Bor.	32S, 29W, 13-05	7.85 acres	18,000
		2019	Christensen, Randy	30S, 28W, 28-02	10.00 acres	12,000
		2020	Aga, Brad	30S, 28W, 28-05	11.67 acres	22,000
		2022	Stager, Fredrick	31S, 28W, 05-04	10.25 acres	21,000
		2035	Kaneshiro, Stanley	30S, 28W, 28-01	~10 acres	8,000
		2036	Penkusky, James	30S, 28W, 18-07	~10 acres	22,000
		2037	Smith, Leslie	31S, 28W, 32-02	~10 acres	12,000
		2038	Johnson, Glen	31S, 29W, 22-02	~10 acres	18,000
		2039	Penwarden, Richard	31S, 29W, 22-04	~10 acres	18,000
\		2040	Abston, Patricia	30S, 28W, 19-02	~10 acres	11,000
		2041	Lorance, Dexter	30S, 28W, 18-x	~10 acres	11,500
		2042	Abston, David	30S, 28W, 19-14	~10 acres	15,000
		2043	Jager, Russell	30S, 30W, 34-07	~10 acres	12,000
		2044	Antonsen, Julie	30S, 30W, 26-03	~10 acres	22,800
		2045	Antonsen, Julie	30S, 30W, 35-01	~10 acres	incl above
		2046	Abston, Virginia	30S, 28W, 19-03	~10 acres	15,000
		2047	Becker, et al	30S, 28W, 18-13	~10 acres	17,000
		2048	Kodiak Island Bor.	31S, 29W, 03-01	~10 acres	12,000
		2049	Kodiak Island Bor.	31S, 29W, 15-02	~10 acres	12,000
		2050	Kodiak Island Bor.	31S, 29W, 22-01	~10 acres	11,000
		2051	Kodiak Island Bor.	31S, 29W, 22-05	~10 acres	16,000
		2052	Kodiak Island Bor.	30S, 28W, 18-10	~10 acres	15,000
		2053	Kodiak Island Bor.	30S, 28W, 19-06	~10 acres	9,000
		2054	Kodiak Island Bor.	30S, 28W, 19-09	~10 acres	9,000
		2055	Kodiak Island Bor.	30S, 28W, 20-01	~10 acres	18,000
		2056	Kodiak Island Bor.	30S, 30W, 34-06	~10 acres	12,000
		2057	Kodiak Island Bor.	30S, 30W, 34-02	~10 acres	14,000
		2058	Kodiak Island Bor.	30S, 30W, 34-09	~10 acres	17,000
		2059	Kodiak Island Bor.	30S, 30W, 34-05	~10 acres	12,000
•						
* ,						

2060	Glenn, Fred	30S, 28W, 19-07	~10 acres	17,000
2061	Danilesky, Pete	31S, 29W, 10-01	~10 acres	22,000
2062	Johnson, Darlene	31S, 28W, 5-x	~10 acres	11,500
2063	Johnson, Janissa	30S, 30W, 26-01	10 acres	10,500
2064	Johnson, Noreen	30S, 30W, 26-02	10 acres	10,500
2065	Patricia Hester	31S, 28, 32-05	~10 acres	13,500
2066	Johnson, Jackie	30S, 30W, 35-02	~10 acres	11,500
46 Parcels			453 acres	\$659,800

- d. Appraisals totaling \$659,800 for these 46 parcels comprising about 453 acres have been approved by the State and federal review appraisers.
- e. As set forth in Attachment A, if acquired, these parcels have attributes which will restore, replace, enhance and rehabilitate injured natural resources and the services provided by those natural resources, including providing habitat for bird species for which significant injury resulting from the spill has been documented, providing key marine access for subsistence and recreational uses on the surrounding public lands.
- 2. Existing laws and regulations, including but not limited to the Alaska Forest Practices Act, the Anadromous Fish Protection Act, the Clean Water Act, the Alaska Coastal Management Act, the Bald Eagle Protection Act and the Marine Mammals Protection Act, are intended, under normal circumstances, to protect resources from serious adverse affects from logging and other development activities. However, restoration, replacement and enhancement of resources injured by the Exxon Valdez oil spill present a unique situation. Without passing on the adequacy or inadequacy of existing law and regulation to protect natural resources and service, biologists, scientists and other resource specialists agree that, in their best professional judgment, protection of habitat in the spill affected area to levels above and beyond that provided by existing law and regulation will have a beneficial effect on the recovery of injured resources and lost or diminished services provided by these resources;
  - 3. There has been widespread public support for the protection of small parcels; and
- 4. The purchase of small parcels is an appropriate means to restore a portion of the injured resources and services in the oil spill area.

THEREFORE, we resolve to provide funds for the United States Fish and Wildlife Service to offer to purchase and, if the offer is accepted, to purchase all of each seller's rights and interests in the 46 parcels pursuant to the following conditions:

- (a) the amount of funds (hereinafter referred to as the "Purchase Price") to be provided by the Trustee Council to the United States shall be the final approved appraised value of the respective parcels, as identified above, totaling \$659,800;
- (b) authorization for funding for any of the foregoing acquisitions shall terminate if the respective purchase agreement is not executed by June 30, 2001;
  - (c) disbursement of these funds by the District Court;
- (d) a title search satisfactory to the United States and the State of Alaska is completed by the acquiring government and the Seller is willing and able to convey fee simple title by warranty deed, or by limited warranty deed acceptable to the U.S. Department of Justice and the Alaska Department of Law;
- (e) no timber harvesting, road development or any alteration of the land is to be initiated on the land without the express agreement of the acquiring government prior to purchase;
- (f) a hazardous materials survey satisfactory to the United States and the State of Alaska is completed;
  - (g) compliance with the National Environmental Policy Act; and
- (h) a conservation easement satisfactory to the U.S. Departments of Justice and the Interior and the Alaska Department of Law shall be conveyed by the seller to the State of Alaska.

It is the intent of the Trustee Council that any facilities or other development on the foregoing small parcels after acquisition shall be of limited impact and in keeping with the goals of restoration and that there shall be no commercial timber harvest nor any other commercial use of the small parcels excepting such limited commercial use as may be consistent with applicable state or federal law and the goals of restoration to prespill conditions of any natural resource injured, lost, or destroyed as a result of the EVOS and the services provided by that resource or replacement or substitution for the injured, lost or destroyed resources and affected services as described in the Memorandum of Agreement and Consent Decree between the United States and the State of Alaska entered August 28, 1991 ("MOA") and the Restoration Plan as approved by the Trustee Council ("Restoration Plan").

By unanimous consent and upon execution of various of the purchase agreements and

written notice from the United States Fish and Wildlife Service and the Executive Director that the terms and conditions set forth herein and in the purchase agreements have been satisfied, we request the Alaska Department of Law and the Assistant Attorney General of the Environment and Natural Resources Division of the U.S. Department of Justice to petition the District Court or to take such other steps as may be necessary for withdrawal of the Purchase Price for the 46 above referenced parcels from the District Court Registry account or any other outside account established as a result of the Governments' settlement to be paid at the time of closing. These amounts represent the only amounts due under this resolution to the Sellers by the United States from the joint trust funds and no additional amounts or interest are herein authorized to be paid to the Sellers from such joint funds.

Dated this 5th day in July, 2000, in Anchorage, Alaska.

**DAVE GIBBONS** 

Trustee Representative

Alaska Region

USDA Forest Service

ABRUCE M. BOTELHO

Attorney General

State of Alaska

MARILYN HEIMAN

Special Assistant to the Secretary

for Alaska

U.S. Department of the Interior

JAMES W. BAESIGER

Director, Alaska Region

National Marine Fisheries Service

FRANK RUE

Commissioner

Alaska Department of

Fish and Game

MICHELE BROWN

Commissioner

Alaska Department of

**Environmental Conservation** 

## RESOLUTION OF THE EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL REGARDING SMALL PARCEL KEN 294

We, the undersigned, duly authorized members of the Exxon Valdez Oil Spill Trustee Council ("Council"), after extensive review and after consideration of the views of the public, find as follows:

- 1. The Conservation Fund has purchased the Elliott small parcel, KEN 294, in anticipation that it will sell the parcel to the State of Alaska for \$78,000;
- 2. An appraisal of the parcel approved by the state review appraiser, determined that the fair market value of the parcel is \$78,000;
- As set forth in Attachment A, Restoration Benefits Report for KEN 294, if acquired, this 3. small parcel has attributes which will restore, replace, enhance and rehabilitate injured natural resources and the services provided by those natural resources, including important habitat for several species of fish and wildlife for which significant injury resulting from the spill has been documented. Acquisition of this small parcel will assure protection of approximately 19.84 acres including approximately 1,282 feet of linear shoreline along the Anchor River. The parcel contains riparian and upland habitats of varying slope that support vegetative species such as, willow, alder, spruce, birch and cottonwood trees. These terrestrial habitats provide structure to the riverbank and cover for the river, thereby protecting streambed substrates and the hydrological properties most important to high quality fish habitat. The river corridor in this area provides habitat essential to the production of Pacific salmon, steelhead trout and anadromous Dolly Varden. This section is particularly important to rearing juvenile fish of all species throughout the year, and over wintering adult steelhead trout and Dolly Varden, as well as spawning chinook salmon. This area also serves as a major migratory corridor each year for thousands of adults of all species attempting to reach upstream spawning grounds. In sum, this parcel is considered to possess fish habitat of exceptional quality important to the life cycle requirements of all fish species indigenous to the Anchor River.
  - 4. Existing laws and regulations, including but not limited to the Alaska Forest Practices Act,

the Alaska Anadromous Fish Protection Act, the Clean Water Act, the Alaska Coastal Management Act, the Bald Eagle Protection Act and the Marine Mammal Protection Act, are intended, under normal circumstances, to protect resources from serious adverse effects from activities on the lands. However, restoration, replacement and enhancement of resources injured by Exxon Valdez oil spill ("EVOS") present a unique situation. Without passing judgment on the adequacy or inadequacy of existing law and regulations to protect resources, scientists and other resource specialists agree that, in their best professional judgment, protection of habitat in the spill area to levels above and beyond that provided by existing laws and regulations will have a beneficial effect on recovery of injured resources and lost or diminished services provided by these resources;

- 5. There has been widespread public support for the acquisition of lands within Alaska as well as on a national basis;
- 6. The purchase of this parcel is an appropriate means to restore a portion of the injured resources and services in the oil spill area. Acquisition of this parcel is consistent with the Final Restoration Plan;
- 7. The purchase of small parcels is an appropriate means to restore a portion of the injured resources and services in the oil spill area.

THEREFORE, we resolve to provide funds for the State of Alaska to purchase all the seller's rights and interests in the small parcel KEN 294 and to provide funds necessary for closing costs recommended by the Executive Director of the Trustee Council ("Executive Director"), and approved by the Trustee Council and pursuant to the following conditions:

- (a) the amount of funds (hereinafter referred to as the "Purchase Price") to be provided by the Trustee Council to the State of Alaska shall be seventy-eight thousand dollars (\$78,000) for small parcel KEN 294;
- (b) authorization for funding for any acquisition described in the foregoing paragraph shall terminate if a purchase agreement is not executed by September 1, 2002;

- (c) filing by the United States Department of Justice and the Alaska Department of Law of a notice, as required by the Third Amended Order for Deposit and Transfer of Settlement Proceeds, of the proposed expenditure with the United States District Court for the District of Alaska and with the Investment Fund established by the Trustee Council within the Alaska Department of Revenue, Division of the Treasury ("Investment Fund"), and transfer of the necessary monies from the Investment Fund to the State of Alaska Department of Natural Resources;
- (d) a title search satisfactory to the State of Alaska and the United States is completed, and the seller is willing and able to convey fee simple title by warranty deed;
- (e) no timber harvesting, road development or any alteration of the land will be initiated on the land without the express agreement of the State of Alaska and the United States prior to purchase;
- (f) a hazardous materials survey satisfactory to the State of Alaska and United States is completed;
  - (g) compliance with the National Environmental Policy Act; and
- (h) a conservation easement on parcel KEN 294 shall be conveyed to the United States which must be satisfactory in form and substance to the United States and the State of Alaska Department of Law.

It is the intent of the Trustee Council that the above referenced conservation easement will provide that any facilities or other development on the foregoing small parcel shall be of limited impact and in keeping with the goals of restoration, that there shall be no commercial use except as may be consistent with applicable state or federal law and the goals of restoration to prespill conditions of any natural resource injured, lost, or destroyed as a result of the EVOS, and the services provided by that resource or replacement or substitution for the injured, lost or destroyed resources and affected services, as described in the Memorandum of Agreement and Consent Decree between the United States and the State of Alaska entered August 28, 1991 and the Restoration Plan as approved by the Trustee Council.

By unanimous consent, following execution of the purchase agreement between the seller and the State of Alaska and written notice from the Executive Director that the terms and conditions set

forth herein and in the purchase agreement have been satisfied, we request the Alaska Department of Law and the Assistant Attorney General of the Environment and Natural Resources Division of the United States Department of Justice to take such steps as may be necessary for withdrawal of the Purchase Price for the above-referenced parcel from the appropriate account designated by the Executive Director.

Such amount represents the only amount due under this resolution to the sellers by the State of Alaska to be funded from the joint settlement funds, and no additional amounts or interest are herein authorized to be paid to the sellers from such joint funds.

Approved by the Council at its meeting of May 3, 2001 held in Juneau and Anchorage, Alaska, as affirmed by our signatures affixed below:

DAVE GIBBONS

Supervisor, Chugach National Forest

**USDA** Forest Service

CRAIG TILLERY

Assistant Attorney General

State of Alaska

DAVID B. ALLEN

Alaska Regional Director,

U.S. Fish and Wildlife Service

U.S. Department of the Interior

Director, Alaska Region

National Marine Fisheries Service

FRANK RUE

Commissioner

Alaska Department of

Fish and Game

MICHELE BROWN

Commissioner

Alaska Department of

**Environmental Conservation** 

Attachments:

Attachment A - Restoration Benefits Report

Attachment B - Vicinity Map

#### Attachment A: Benefits Report KEN 294, Elliott Parcel

Acreage: 19.84 acres

Sponsor: ADF&G

Appraised Value: \$78,000

Location:

The parcel is locate at Mile 160 of the Sterling Highway, approximately 3 miles south of

Anchor Point, Anchor Point, Alaska and is intersected by the Anchor River.

Parcel Description. The parcel is mostly level with the Anchor River bisecting it in a generally east west direction. The parcel contains riparian and upland habitats of varying slope that support vegetative species such as, willow, alder, spruce, birch and cottonwood trees. Natural drainages meander through the parcel and keep some areas relatively wet, providing evidence that some of these areas are likely locations of former riverbed.

Restoration Benefits. These terrestrial habitats provide structure to the riverbank and cover for the river. thereby protecting streambed substrates and the hydrological properties most important to high quality fish habitat. The river corridor in this area provides habitat essential to the production of Pacific salmon, steelhead trout and anadromous Dolly Varden. This section is particularly important to rearing juvenile fish of all species throughout the year, and over wintering adult steelhead trout and Dolly Varden, as well as spawning chinook salmon. This area also serves as a major migratory corridor each year for thousands of adults of all species attempting to reach upstream spawning grounds. Additionally, maintenance of quality habitat at Anchor River is important to anadromous Dolly Varden throughout the Lower Kenai Peninsula. Tagging studies have demonstrated that spawning and rearing Anchor River Dolly Varden are highly migratory and contribute to populations that inhabit Deep Creek, Ninilchik River, and other Kachemak Bay tributaries. In sum, this section is considered to currently possess fish habitat of exceptional quality that is important to the life cycle requirements of all fish species indigenous to the Anchor River. The fish species mentioned above support fisheries that are important to the Kenai Peninsula. The Anchor River supports an average of approximately 28,000 angler days of fishing effort each year. The parcels being considered are adjacent to or near the Sterling Highway and therefore possess high recreational value. Population growth and changes in land use activities on the Lower Kenai Peninsula has lead to increased stream-side development. Consequently, the overall value of these parcels on the Anchor River are important to maintaining quality fish habitat and recreational opportunity on the Kenai Peninsula.

In addition to fish values, the subject property was recently discussed by the Moose Mitigation Trust as a priority for acquisition because of it's value to wildlife, especially moose.

The Anchor River provides important habitat for several species of wildlife. Waterfowl like Mallards, Harlequins, mergansers and teal all use the Anchor River. Most if not all wildlife that occur on the lower peninsula utilize this riparian area. Mink, river otter, and beaver are common residents of this area. Black and brown bears migrate through in search of salmon or other foods. Generally the dense understory provide secure cover for travel and protection from human disturbance.

Moose occur throughout the region and especially in the riparian areas year round. During spring, summer and fall moose utilize riparian areas for feeding, rearing young and thermal protection from hot summer days. During winter moose concentrate to the riparian areas because of the available browse and relatively lower snow depth. During winters with deep snow moose tend to congregate in higher densities on the lower

stretches of this river. For example, in 1992 a late winter survey showed that this section of river contained over 14 moose per square mile.

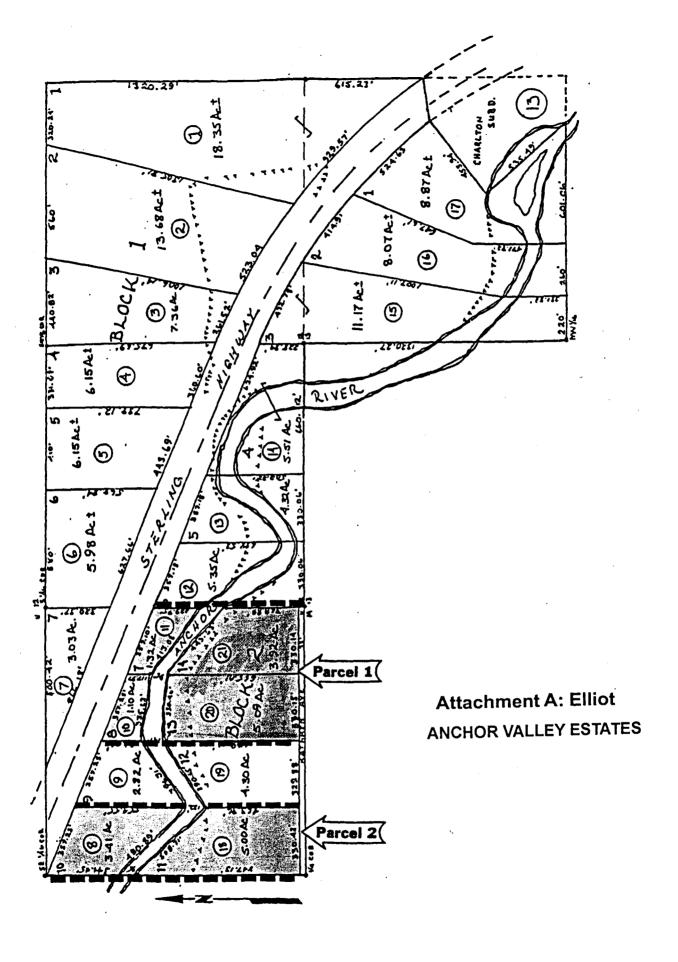
The Department of Fish and Game places a high value on this parcels for public access. On the South Fork of the Anchor River, small private parcels comprise nearly all of the land from the vicinity of the North and South Forks confluence at approximately MP 157 on the Sterling Highway upstream to about MP 164.

Potential Threats. The parcel is already subdivided and has potential for residential/recreational use. The appeal of the parcel is enhanced by its Anchor River frontage in an area popular for dolly varden and steelhead sportfishing.

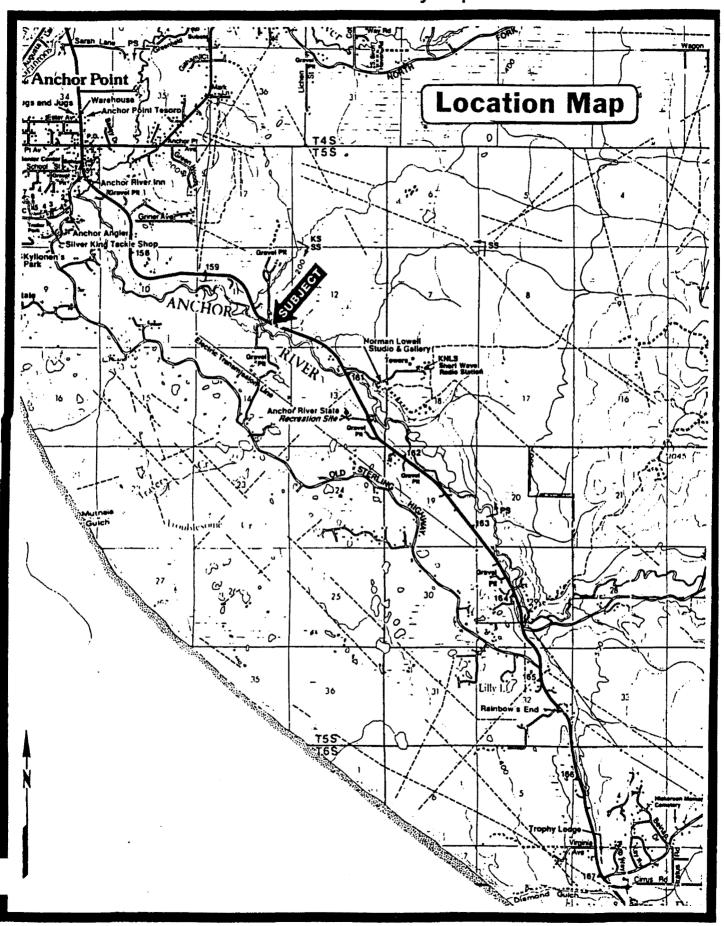
Appraised Value. The appraised value of this parcel is \$78,000. The parcel is currently part of a subdivision and includes 6 subdivided lots. The highest and best use of these lots is speculative holding, combined vacant, for future sale or development as economic conditions dictate feasible.

**Proposed Management.** The purpose of acquisition is to preserve and protect in perpetuity the ecological, natural, physical and scenic values of the subject property for the benefit of fish and wildlife resources and services that were injured in the *Exxon Valdez* oil spill. ADF&G will manage this parcel. The parcel will probably be classified Habitat/Public Recreation Land."

Public Comment. Support for acquisition of this parcel was expressed by representatives of Trout Unlimited, Alaska Fly Fishers, and the Alaska Sportfishing Association citing concerns regarding access in this stretch of the river.



**Attachment B: Vicinity Map** 



# RESOLUTION OF THE EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL REGARDING VALDEZ DUCK FLATS SMALL PARCEL PWS 06

We, the undersigned, duly authorized members of the Exxon Valdez Oil Spill ("EVOS") Trustee Council ("Council"), after extensive review and after consideration of the views of the public, find as follows:

- 1. The owners of one of the Valdez Duck Flats small parcels, PWS 06, have indicated an interest in selling approximately 20 acres of PWS 06 (PWS 06 is 24.68 acres in size) as described in Attachment A (hereinafter the "Property") to the State of Alaska as part of the Council's program for restoration of natural resources and services that were injured as a result of the EVOS.
- 2. An appraisal approved by state and federal review appraisers estimates the fee simple fair market value of the 20 acres in PWS 06 to be \$100,000.
- 3. As set forth in Attachment A (Restoration Benefits Report), and as described in the Final Report for Restoration Project 97230 Conceptual Plan for the Valdez Duck Flats, the Valdez Duck Flats have attributes that will restore, replace, enhance, and rehabilitate injured natural resources, and the services provided by those natural resources, including important habitat for several species of fish and wildlife for which significant injury resulting from the spill has been documented. The Duck Flats are important habitat for a large number of out-migrating pink salmon in Port Valdez and spawning populations occur in a small stream that flows through the parcel. Harbor seals and sea otters are known to feed in the Duck Flats, and mid- to lower-intertidal habitats at the mouth of the flats support mussels, which were heavily impacted by the

EVOS and constitute an important food source for several other species that were injured by the spill including harlequin ducks and black oystercatchers.

- 4. Existing laws and regulations including, but not limited to, the Alaska Forest Practices Act, the Alaska Anadromous Fish Protection Act, the Clean Water Act, the Alaska Coastal Management Act, the Bald Eagle Protection Act and the Marine Mammal Protection Act, are intended under normal circumstances to protect resources from serious adverse effects associated with human activities. However, restoration, replacement and enhancement of resources injured by the EVOS present a unique situation. Without passing judgment on the adequacy or inadequacy of existing laws and regulations to protect resources, scientists and other resource specialists agree that, in their best professional judgment, protection of habitat in the spill area beyond that provided by existing laws and regulations will have a beneficial effect on the recovery of injured resources and lost or diminished services provided by those resources.
  - 5. There is widespread public support for the acquisition of this parcel.
- 6. Purchase of this parcel is an appropriate means to restore a portion of the injured resources and services in the spill area. Acquisition of this parcel is consistent with the Restoration Plan and Final Environmental Impact Statement.
- 7. The purchase of small parcels is an appropriate means to restore a portion of the injured resources and services in the spill area.

THEREFORE, we resolve to provide funds for the State of Alaska to purchase all of the seller's rights and interests in the Property and to provide funds necessary for closing costs recommended by the Executive Director of the Council ("Executive Director") and approved by the Trustee Council, pursuant to the following conditions:

- (a) the amount of funds to be provided by the Trustee Council to the State of Alaska shall be one hundred thousand dollars (\$100,000) for the Property;
- (b) authorization for funding for any acquisition described in the foregoing paragraph shall terminate if a purchase agreement is not signed by June 21, 2001;
- (c) completion of a title search satisfactory to the State of Alaska and the United States, and the seller is willing and able to convey fee simple title by general warranty deed;
- (d) no timber harvesting, road development or alteration of the land will be initiated by the seller prior to the purchase without the express agreement of the State of Alaska and the United States;
- (e) completion of a hazardous materials survey satisfactory to the State of Alaska and the United States;
  - (f) compliance with the National Environmental Policy Act; and
- (g) a conservation easement for parcel PWS 06, satisfactory in form and substance to the United States and the State of Alaska, shall be conveyed to the United States. It is the intent of the Council that, except as described below, any facilities or other development on the foregoing small parcel shall be of limited impact and keeping with the goals of restoration and that there shall be no commercial timber harvest nor any other commercial use of the small parcel excepting such limited commercial use as may be consistent with applicable state or federal law and the goals of restoration to pre-spill conditions or any natural resource injured, lost or destroyed as a result of the EVOS and the services provided by that resource or replacement or substitution for the injured, lost or destroyed resources and affected services as described in the Memorandum of Agreement and Consent Decree between the United States and the State of

Alaska entered August 28, 1991 and the Restoration Plan as approved by the Trustee Council.

The conservation easement will provide for perpetual protection of the area and recreational development consistent with the Conceptual Plan for the Valdez Duck Flats.

By unanimous consent, following execution of the purchase agreement between the seller and the United States and certification by the Executive Director that the terms and conditions set forth herein and in the purchase agreement, we request the Alaska Department of Law and the Assistant Attorney General of the Environment and Natural Resources Division of the United States Department of Justice to take such steps as may be necessary for withdrawal of the Purchase Price for the above-referenced parcel from the appropriate account designated by the Executive Director.

Such amount represents the only amount due under this resolution to the sellers by the State of Alaska to be funded from the joint trust funds, and no additional amounts or interest are herein authorized to be paid to the sellers from such joint funds.

Approved by the Council at its meeting of December 4, 2000 held in Anchorage, Alaska, as affirmed by our signatures affixed below:

DAVE GIBBONS

Alaska Region

USDA Forest Service

CRAIGAILLERY

Assistant Attorney General

State of Alaska

MARILYN HEIMAN Special Assistant to the Secretary for Alaska

U.S. Department of the Interior

JAMES BALSIGER
Director, Alaska Region
National Marine Fisheries

Service

FRANK RUE Commissioner

Alaska Department of

Fish and Game

MICHELE BROWN

Commissioner

Alaska Department of

**Environmental Conservation** 

## RESOLUTION OF THE EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL REGARDING VALDEZ DUCK FLATS SMALL PARCEL PWS 06

We, the undersigned, duly authorized members of the Exxon Valdez Oil Spill (EVOS) Trustee Council (Council), after extensive review and after consideration of the views of the public, find as follows:

- 1. On December 4, 2000, the Council resolved to provide funds for the State of Alaska to purchase all of the seller's rights and interests in the small parcel PWS 06, consisting of 24.68 acres, and to provide funds necessary for closing costs recommended by the Executive Director of the Council (Executive Director) and approved by the Council, subject to certain conditions.

  One of the conditions was that a purchase agreement had to be executed by June 21, 2001. The seller is the University of Alaska (University).
- 2. Although the University has agreed to sell the land to the State for the price in the Council's resolution of December 4, 2000 (\$100,000) and the State expects to be able to complete the acquisition, a purchase agreement was not executed prior to June 21, 2001 as required by the Council's December 4, 2000 resolution.
- 3. For all of the reasons detailed in the Council's resolution of December 4, 2000, the Council continues to find that the purchase of PWS 06 is an appropriate means to restore a portion of the injured resources and services in the spill area.

THEREFORE, we resolve to provide funds for the United States to purchase all of the seller's rights and interests in the small parcel PWS 06 and to provide funds necessary for closing costs recommended by the Executive Director and approved by the Council, pursuant to the following

conditions:

- (A) the amount of funds to be provided by the Trustee Council to the State of Alaska or the United States shall be one hundred thousand dollars (\$100,000) for small parcel PWS 06;
- (B) authorization for funding for any acquisition described in the foregoing paragraph shall terminate if a purchase agreement is not executed by September 1, 2002;
- (C) completion of a title search satisfactory to the State of Alaska and the United States and the seller is willing and able to convey fee simple title by a deed acceptable to the State of Alaska;
- (D) no timber harvest, road development or alteration of the land will be initiated by the seller prior to the purchase without the express agreement of the State of Alaska and the United States;
- (E) completion of a hazardous materials survey satisfactory to the State of Alaska and the United States;
  - (F) compliance with the National Environmental Policy Act; and
- (G) a conservation easement on parcel PWS 06, satisfactory in form and substance to the United States and the State of Alaska Department of Law, shall be conveyed by the seller to the United States.

It is the intent of the Council that, except as described below, any facilities or other development on the foregoing small parcel shall be of limited impact and in keeping with the goals of restoration and that there shall be no commercial timber harvest nor any other commercial use of the small parcel except such limited commercial use as may be consistent with applicable state or federal law and the goals of restoration to pre-spill conditions of any natural resource injured,

lost or destroyed as a result of the EVOS and the services provided by that resource or replacement or substitution for the injured, lost or destroyed resources and affected resources as described in the Memorandum of Agreement and Consent Decree between the United States and the State of Alaska entered August 28, 1991 and the Restoration Plan approved by the Council.

By unanimous consent, following execution of the purchase agreement between the seller and the State of Alaska and written notice from the Executive Director that the terms and conditions set forth herein and the purchase agreement have been satisfied, we request the Alaska Department of Law and the Assistant Attorney General of the Environment and Natural Resources Division of the United States Department of Justice to take such steps as may be necessary for withdrawal of the purchase price for the above-referenced parcel from the appropriate account designated by the Executive Director.

Such amount represents the only amount due under this resolution to the sellers by the State of Alaska to be funded from the joint trust funds, and no additional amounts or interest are herein authorized to be paid to the sellers from such joint funds.

Approved by the Council at its meeting of August 6, 2001 held in Anchorage, Alaska, as affirmed by our signatures affixed below:

DAVE GIBBONS

Supervisor, Chugach National Forest

**USDA** Forest Service

CRAIG TILLERY

Assistant Attorney General

State of Alaska

DAVID B. ALLEN

Alaska Regional Director,

U.S. Fish and Wildlife Service

U.S. Department of the Interior

JAMES BALSIGER

Director, Alaska Region

National Marine Fisheries Service

FRANK RUE

Commissioner

Alaska Department of

Fish and Game

MICHELE BROWN

Commissioner

Alaska Department of

**Environmental Conservation** 

## RESOLUTION OF THE EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL REGARDING KEN 309

We, the undersigned, duly authorized members of the Exxon Valdez Oil Spill Trustee Council ("Council"), after extensive review and after consideration of the views of the public, find as follows:

- 1. The Conservation Fund has purchased the Ninilchik small parcel, KEN 309, in anticipation that it will sell the parcel to the State of Alaska for \$113,000;
- 2. An appraisal of the parcel approved by the federal review appraiser determined that the fair market value of the parcel is \$113,000;
- 3. As set forth in Attachment A, Restoration Benefits Report for KEN 309, if acquired, this small parcel has attributes which will restore, replace, enhance and rehabilitate injured natural resources and the services provided by those natural resources, including important habitat for several species of fish and wildlife for which significant injury resulting from the spill has been documented. Acquisition of this small parcel will assure protection of approximately 4.2 acres including approximately 800 feet of linear shoreline along each bank of the Ninilchik River. The parcel supports a popular king salmon fishery each spring and Dolly Varden, silver salmon and steelhead fisheries later in the season. In addition, harlequin ducks, mergansers, mink, otter, black and brown bears, and moose utilize this area as well. The parcel is important to the sport fishing and tourism industries, both of which were impacted by the *Exxon Valdez* Oil Spill ("EVOS").
- 4. Existing laws and regulations, including but not limited to the Alaska Forest Practices

  Act, the Alaska Anadromous Fish Protection Act, the Clean Water Act, the Alaska Coastal

Management Act, the Bald Eagle Protection Act and the Marine Mammal Protection Act, are intended, under normal circumstances, to protect resources from serious adverse effects from activities on the lands. However, restoration, replacement and enhancement of resources injured by the EVOS present a unique situation. Without passing judgment on the adequacy or inadequacy of existing law and regulations to protect resources, scientists and other resource specialists agree that, in their best professional judgment, protection of habitat in the spill area to levels above and beyond that provided by existing laws and regulations will have a beneficial effect on recovery of injured resources and lost or diminished services provided by these resources;

- 5. There has been widespread public support for the acquisition of lands within Alaska as well as on a national basis;
- 6. The purchase of this parcel is an appropriate means to restore a portion of the injured resources and services in the oil spill area. Acquisition of this parcel is consistent with the Final Restoration Plan.

THEREFORE, we resolve to provide funds for the State of Alaska to purchase all the seller's rights and interests in the small parcel KEN 309 and to provide funds necessary for closing costs recommended by the Executive Director of the Trustee Council ("Executive Director") and approved by the Trustee Council and pursuant to the following conditions:

- (a) the amount of funds (hereinafter referred to as the "Purchase Price") to be provided by the Trustee Council to the State of Alaska shall be one hundred thirteen thousand dollars (\$113,000) for small parcel KEN 309;
- (b) authorization for funding for any acquisition described in the foregoing paragraph shall terminate if a purchase agreement is not executed by September 30, 2002;

- of a notice, as required by the Third Amended Order for Deposit and Transfer of Settlement Proceeds, of the proposed expenditure with the United States District Court for the District of Alaska and, if necessary, with the Investment Fund established by the Trustee Council within the Alaska Department of Revenue, Division of the Treasury ("Investment Fund") and transfer of the necessary monies from the appropriate account designated by the Executive Director;
- (d) a title search satisfactory to the State of Alaska and the United States is completed, and the seller is willing and able to convey fee simple title by warranty deed;
- (e) no timber harvesting, road development or any alteration of the land will be initiated on the land without the express agreement of the State of Alaska and the United States prior to purchase;
- (f) a hazardous materials survey satisfactory to the State of Alaska and United States is completed;
  - (g) compliance with the National Environmental Policy Act; and
- (h) a conservation easement on parcel KEN 309 shall be conveyed to the United States which must be satisfactory in form and substance to the United States and the State of Alaska Department of Law.

It is the intent of the Trustee Council that the above referenced conservation easement will provide that any facilities or other development on the foregoing small parcel shall be of limited impact and in keeping with the goals of restoration, that there shall be no commercial use except as may be consistent with applicable state or federal law and the goals of restoration to prespill conditions of any natural resource injured, lost, or destroyed as a result of the EVOS, and the

services provided by that resource or replacement or substitution for the injured, lost or destroyed resources and affected services, as described in the Memorandum of Agreement and Consent Decree between the United States and the State of Alaska entered August 28, 1991 and the Restoration Plan as approved by the Trustee Council.

By unanimous consent, following execution of the purchase agreement between the seller and the State of Alaska and written notice from the Executive Director that the terms and conditions set forth herein and in the purchase agreement have been satisfied, we request the Alaska Department of Law and the Assistant Attorney General of the Environment and Natural Resources Division of the United States Department of Justice to take such steps as may be necessary for withdrawal of the Purchase Price for the above-referenced parcel from the appropriate account designated by the Executive Director.

Such amount represents the only amount due under this resolution to the sellers by the State of Alaska to be funded from the joint settlement funds, and no additional amounts or interest are herein authorized to be paid to the sellers from such joint funds.

Approved by the Council at its meeting of February 25, 2002 held in Anchorage, Alaska, as affirmed by our signatures affixed below:

DAVE GIBBONS

Forest Supervisor

Forest Service Alaska Region US Department of Agriculture

I rue llearie

DRUE PEARCE

Senior Advisor to the Secretary

for Alaskan Affairs

U.S. Department of the Interior

FRANK RUE

Commissioner

Alaska Department of

Fish and Game

CRAIG THE RY

Assistant Attorney General

State of Alaska

JAMES/BALSIGER

Administrator, Alaska Region

National Marine Fisheries Service

MICHELE BROWN

Commissioner

Alaska Department of

**Environmental Conservation** 

Attachment A - Restoration Benefits Report

## **Attachment A**

Resolution 02-05 Small parcel – KEN 309

## **KEN 309: Icicle Seafoods**

Acreage: 4.17 acres, 18 lots

Sponsor: ADNR & ADF&G Appraised Value: \$113,000

Owner: The Conservation Fund (former owner Icicle Seafoods, Inc.)

Location: Mission Avenue, near intersection with Sterling Highway, Ninilchik, AK. Legal Description: Lots 1 – 11, 15 – 19, 21 & 22, Block 8, Ninilchik Townsite.

Parcel Description. This collection of small parcels, including 18 platted lots, is downstream and immediately adjacent to a large parcel owned by the Alaska Department of Fish and Game. The ADF&G parcel is located mostly on the downstream side of the Sterling Highway bridge. These lots border, or are near the Ninilchik River, one of south central Alaska's most important sportfishing rivers. These lots are part of the original Ninilchik Townsite subdivision, with roads and lots platted with no logical relationship to the terrain. Some small lots within this batch of parcels straddle the Ninilchik River, or may be nearly entirely occupied by the river, while the platted roads do not have any logical possibility for reasonable construction without extensive fill and bridge construction. The parcel is subject to periodic flooding during high water events such as fall rainstorms, and is generally wet and brushy. The parcel contains approximately 1,600 linear feet of shoreline.

The lands are characterized by their river valley riparian habitat, with willows, scattered spruce and small cottonwoods and other floodplain vegetation. Wildlife species that commonly use this area include harlequin ducks, mergansers, mink, otter, black and brown bears, and moose. This is an important winter feeding area for moose and often 8-12 moose can be counted in or near the subject property on a winter day. During the early summer, harlequin ducks are commonly viewed in the downstream portion of this property, and the other wildlife species can be seen occasionally throughout the year.

Restoration Benefits. The public has used this area of the Ninilchik River for decades, while pursuing the popular king salmon fishery each spring, and later in the season for Dolly Varden, silver salmon and steelhead angling. Although private land, the landowners have never posted this land and most anglers are not aware that the land is not publicly owned. Anglers primarily access this parcel on foot, following traditional fishing access trails along the river banks. There is no development on the land at this time.

The Ninilchik River supports an enhanced hatchery-supported and native run of king salmon, providing outstanding sport fishing opportunities for anglers. It is one of the finest bank-accessible sport fisheries for king salmon on the Kenai Peninsula, and is extremely popular and productive. The area owned by Icicle Seafoods supports a great deal of the angler activity on this river as the fishing is particularly productive here.

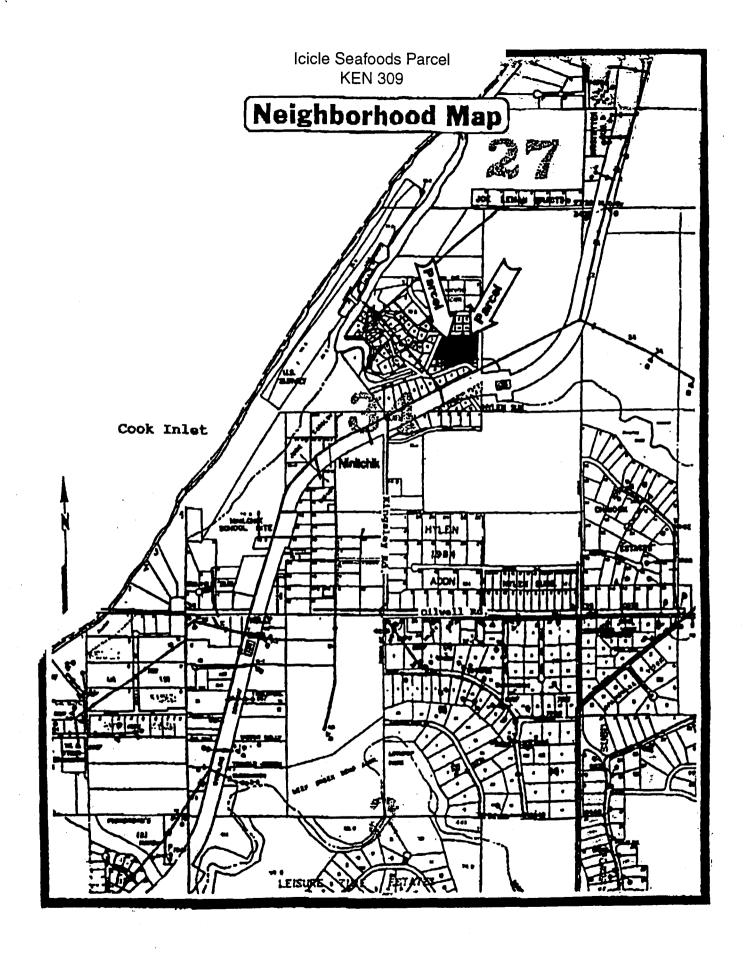
Support of the sportfishing industry is the most important basis of the Ninilchik community's economy. A large number of businesses cater to anglers, and include B &

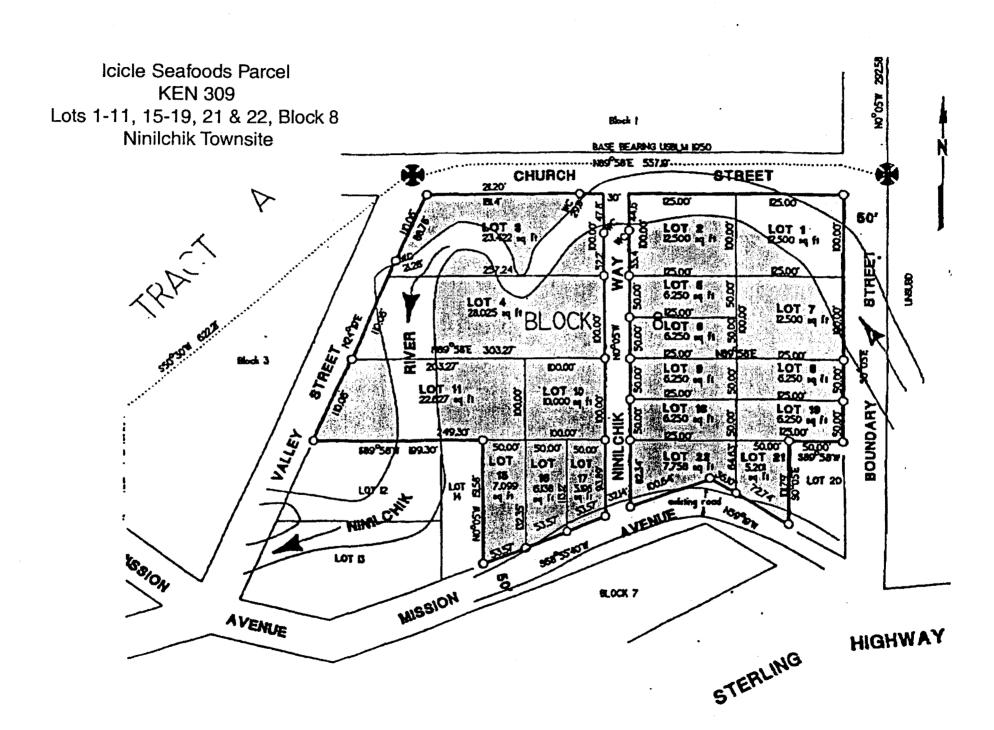
B's, lodges, restaurants and cafes, taxidermy shops and other retail businesses. These businesses depend upon having predictable fishing destinations available for prospective clients and customers. The Icicle Seafood parcel provides one of the important destinations that support the area's tourism economy.

Should the parcels be sold as individual lots or as a bulk sale to another private property owner, the public could lose forever one of Alaska's premier king salmon sportfishing locations. The loss of access to the public would be significant enough, but a sale would also mean that a sensitive riparian section of the Ninilchik River would be subject to development pressures. This could result in the deterioration of important riparian fish habitat, loss of important winter moose feeding habitat, loss of harlequin duck nesting and rearing habitat. Social conflicts with the new owners and anglers wishing to continue to fish traditional fishing holes would emerge and tax local and state government. Acquisition of this parcel would protect approximately 1,600 linear feet of shoreline, important riparian habitat.

Appraised Value. \$113,000, sold as a single cash transaction.

**Proposed Management.** ADF&G will manage the parcel in a manner consistent with its management of the adjacent parcel and will maintain public access to the river and protect riparian habitat.





## RESOLUTION OF THE EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL

WHEREAS the *Exxon Valdez* Oil Spill Trustee Council ("Trustee Council"), at its January 4, 2001 meeting by resolution 01-05 did offer to enter into a long-term agreement with Koniag, Inc. for the protection of certain lands on Kodiak Island; and

WHEREAS the Board of Directors of Koniag, Inc, has by its resolution dated January 12, 2001, generally accepted that offer but has requested certain provisions in a form different than that previously approved by the Trustee Council; and

WHEREAS the Trustee Council now wishes to respond to those requested changes and to reach a long term agreement, does hereby rescind such January 4, 2001 resolution and we, the undersigned, duly authorized members of the Trustee Council, after extensive review and after consideration of the views of the public, find as follows:

- 1. In accordance with the Trustee Council Resolution of December 2, 1994, the United States, acting through the U.S. Fish and Wildlife Service, Department of the Interior ("Service" and "Department," respectively) and Koniag, Inc. ("Koniag"), have completed the fee purchases of certain lands and interests in lands within the Kodiak National Wildlife Refuge ("Refuge").
- 2. Consistent with the foregoing Resolution, the United States also received from Koniag the Non-Development Easements covering certain other lands within the Refuge for the term expiring December 2, 2001, and the State of Alaska ("State") received from Koniag an Access and Use Easement for those lands for the same period. The purpose of the foregoing easements was to protect the key resources

on certain lands owned by Koniag, primarily within the Karluk and Sturgeon River drainages, while the parties sought to reach a long term agreement to protect this key habitat.

- 3. Negotiators for the Trustee Council and Koniag have now reached a tentative agreement, subject to review, ratification and approval of their principals, the Trustee Council and the Koniag Board of Directors, respectively, covering the surface estate of the lands generally depicted on the maps at Attachment A hereto (the "Lands") and totaling approximately 57,900 acres. This tentative agreement will, if implemented, provide long-term protection and opportunities for restoration of natural resources and services that were injured by the *Exxon Valdez* oil spill. The tentative agreement, which is set forth at Attachment B, includes the various exhibits thereto (the tentative agreement and attachments thereto are hereafter referred to as the "Agreement").
- 4. The Lands were selected and conveyed to Koniag or its predecessors pursuant to the Alaska Native Claims Settlement Act. The subsurface rights associated with the Lands are held by the United States of America ("United States").
- 5. The Lands are within the oil spill area as defined by the Trustee Council in the Final Restoration Plan approved November 2, 1994.
- 6. The Lands include important habitat for various species of fish and wildlife for which significant injury resulting from the spill has been documented through the Trustee Council's habitat benefits analysis. This analysis has indicated that these lands have high value for the restoration of such injured natural resources as sockeye salmon, pink salmon, Dolly Varden, Pacific herring, black oystercatcher, bald eagles, harbor seals, harlequin ducks, intertidal/subtidal biota, marbled murrelet, pigeon guillemot, river otters, sea otters, and cultural and archeological resources. This analysis has also indicated that the Lands have high value for the restoration

of injured services that rely on these natural resources, including commercial fishing, wilderness, recreation, tourism and subsistence. Restoration of the injured species will benefit from acquisition and protection of this important habitat through the elimination of activities and disturbances which may adversely affect their recovery.

- 7. The Lands are located wholly within the boundaries of the Refuge and their protection will ensure the preservation of a significant portion of one of the nation's most productive and unique ecosystems. The benefits resulting from such acquisition and protection are further described in the Habitat Benefits Report at Attachment C.
- 8. Existing laws and regulations, including but not limited to the Alaska Native Claims Settlement Act, the Alaska National Interest Lands Conservation Act, the Alaska Anadromous Fish Protection Act, the Clean Water Act, the Alaska Coastal Management Act, the Bald Eagle Protection Act and the Marine Mammal Protection Act, are intended, under normal circumstances, to protect resources from serious adverse effects from activities on the lands. However, restoration, replacement and enhancement of resources injured by EVOS present a unique situation. Without passing judgment on the adequacy or inadequacy of existing laws and regulations to protect resources, biologists, scientists and other resource specialists agree that, in their best professional judgment, protection of habitat in the spill area to levels above and beyond that provided by existing laws and regulations will likely have a beneficial effect on recovery of injured resources and lost or diminished services provided by these resources.
- 9. There has been widespread public support for the acquisition of the Lands, locally, within the spill zone and nationally.
- 10. Implementation of the Agreement is an appropriate means to restore a portion of

the injured resources and services in the oil spill area and is consistent with the Final Restoration Plan.

- 11. Recently, on private lands within the Refuge, development and construction have included lodges, private residences and recreational cabins. Such sites have been near key water bodies and can have a significant impact, particularly on a cumulative basis, on water quality and injured natural resources and services well beyond the boundaries of the individual sites. In the event the subject lands are not acquired or protected at this time, development by the owners is certain to occur on them in a manner that will adversely impact the water quality and the injured EVOS resources and services sensitive to human disturbance.
- 12. The approved appraisal procured on behalf of the Trustee Council as of September 8,1994 provided an estimate of fair market value totaling approximately \$7,297,100 (Seven million two hundred ninety-seven one hundred and no/100 dollars) for the fee acquisition of the Lands.
- 13. The Service prepared and submitted an offer to Koniag to purchase its Kodiak Island lands as per the September 8, 1994 estimate of fair market value in the approved appraisal. This offer was rejected and negotiations and discussions ensued over the past several years between Koniag and a joint Federal/State of Alaska negotiating team which resulted in the Agreement. Koniag has also advised the Federal/State negotiators that it is unwilling to sell the Lands in fee at the present time, but would consider a long-term agreement that would provide for habitat protection and economic opportunities for the residents of Karluk and Larsen Bay, Alaska, as well as Koniag's other shareholders.
- 14. It is ordinarily the federal government's practice to pay its estimate of fair market value for lands it acquires. However, due to the unique circumstances of this proposed acquisition, including the exceptional habitat value of the Lands for

purposes of promoting recovery of natural resources and services injured by EVOS and the levels of compensation paid in other transactions providing for the protection of key habitat within the Oil Spill Zone, including that for the prior acquisitions from Koniag, the Trustee Council believes the payment structure provided in the attached Agreement is appropriate.

- 15. The acquisition of these lands or interests in lands is in compliance with the National Environmental Policy Act; Section 810 of the Alaska National Interest Lands Conservation Act; Section 7 of the Endangered Species Act; and the provisions of E.O. 11593 implementing the National Historic Preservation Act; and has been determined to be consistent with Section 307 of the Coastal Zone Management Act.
- 16. A satisfactory hazardous substance survey has been or will be completed prior to the initial closing with respect to the lands or interests in lands being acquired.

THEREFORE, we resolve to provide the funds as set forth below and in the Agreement for the United States and the State to enter into the Agreement with Koniag, in conformity with applicable Federal and State laws. In the event that there are any disagreements among the Parties as to the legal descriptions and the scope of the lands intended to be the subject of this Agreement, the maps at Attachment A are intended to be controlling. Any substantive changes in the language contained in the Agreement, including the exhibits attached thereto, or modifications in the legal descriptions that would be at variance with the foregoing attached maps, must be approved by the Trustee Council. Non-substantive changes may be made by the Alaska Department of Law and the U.S. Department of the Interior.

PROVIDED FURTHER, that the Agreement shall contain or be subject to the following terms or conditions:

- 1. Receipt by the United States and the State of Alaska of the remaining settlement payment due on October 1, 2001, from Exxon Corporation, et al.
- 2. Filing by the United States Department of Justice and the Alaska Department of Law of a notice(s), as required by the Third Amended Order for Deposit and Transfer of Settlement Proceeds, of the proposed expenditure with the United States District Court for the District of Alaska and with the Investment Fund established by the Trustee Council within the Alaska Department of Revenue, Division of Treasury ("Investment Fund"), and transfer of the necessary monies from the Investment Fund to the United States.
- 3. Completion of a title search satisfactory to the Alaska Department of Law and consistent with the title regulations of the Attorney General of the United States.
- 4. No development is to take place prior to closing on the Lands which is inconsistent with that provided for in the various granting documents attached as exhibits to the tentative agreement.
- 5. The terms and conditions of the granting instruments attached as exhibits to the Agreement are subject to review and approval as to form and substance by the U.S. Department of Justice and the Alaska Department of Law.
- 6. Should title to any lands be conveyed in fee to the United States pursuant to the Agreement, such lands shall be subject to a conservation easement in the State of Alaska authorizing it to enforce in a court of competent jurisdiction, the restoration and conservation purposes for which this acquisition is made as set forth in the State Conservation Easement, attached as an exhibit to the Agreement.

THEREFORE, by unanimous consent, and upon execution of the Agreement and written notice from the Department and the Alaska Department of Law to the Executive Director that the terms and conditions set forth herein and in the Agreement have been satisfied, we request the Alaska Department of Law and the Assistant Attorney General of the Environment and Natural Resources Division of the United States Department of Justice to take such steps as may be necessary for the Trustee Council to provide joint settlement funds as set forth below:

- 1. (a) \$150,000 (One hundred fifty thousand and no/100 dollars) unless Koniag instead elects to complete the land exchange set forth in Section 20 of the Agreement, in which event the amount shall be \$300,000 (Three hundred thousand and no/100 dollars) to be paid to Koniag by December 15, 2001, for the extension of the existing Non-Development Easements and the State Access and Use Easement until October 15, 2002. The provision of the foregoing \$150,000 is conditioned upon the United States providing funding of an equal amount for this payment in the event that Koniag does not elect such land exchange.
  - (b) For purposes of the March 1, 1999 Trustee Council Resolution concerning the Restoration Reserve, the foregoing \$150,000 or \$300,000 payment from the joint settlement funds, as applicable, and any interest attributable to that amount between December 1, 2001 (or such other date on which these funds are transferred from the Investment Fund) and October 1, 2002 shall reduce the \$55 million (Fifty-five million and no/100 dollars) available for habitat protection on October 1, 2002.
  - (c) In the event that Koniag does not elect and complete the exchange option, then from the funds then available and previously authorized by the Trustee Council by its resolution dated December 11, 1995 and motion dated June 8, 1998 concerning the acquisition of certain small parcels within the Refuge, \$50,000 is reallocated therefrom to be used for the deposit to the Special Account.

- (d) In the event that Koniag initially elects to pursue the exchange option, but does not complete such exchange for any reason, then the Department of Interior shall reimburse the joint settlement funds in the amount of \$150,000 from the federal criminal restitution funds for the payment due December 15, 2001 from the joint funds for the extension of the existing Non-Development Easements and the State Access and Use Easement in order to fulfill the federal payment obligation set forth in the above paragraph 1(a).
- The Trustee Council, will cause to be established and fund as of October 15, 2002, 2. a special account in the amount of \$29,800,000 (Twenty-nine million, eight hundred thousand and no/100 dollars), unless Koniag instead elects to complete the land exchange set forth in Section 20 of the Agreement, in which event the amount shall be \$29,550,000 (Twenty-nine million, five hundred fifty thousand and no/100 dollars)("Special Account"). The Special Account shall be established by the United States and the State, acting through the Trustee Council or its successors in function (the "Governments"), with the State of Alaska investment system in accordance with the authority provided by Congress in Section 350 of P.L. 106-113, 113 Stat.1501 (1999). The Governments will manage the Special Account and are solely responsible for its investment. Notwithstanding the foregoing, over the life of this Agreement, the Governments shall (a) consult with Koniag concerning the investment strategy for the Special Account and (b) establish an initial investment target of a projected average annual return of 5.75% above inflation when considered over a ten year period, unless after consultation with Koniag, the Governments determine that such investment targets would be imprudent and would require an investment strategy relying on undue risk of principal of these joint governmental funds. Koniag shall be provided a financial report on the Special Account at least quarterly, which report shall identify the investments held therein, their value and all transactions made with respect to the Special Account during the reporting period. Such reports shall be provided within thirty (30) days of the close of the reporting period.

- 3. Investment management fees shall be paid from the Special Account in accordance with the provisions set forth below:
  - (a) If the Special Account is held in the State of Alaska's Treasury, the management fees for the account shall be the actual fees assessed by, and commensurate with other management fee charges of, the Alaska Department of Revenue, Division of Treasury for an account of this nature.
  - (b) If the Special Account is held in an entity other than that of the State of Alaska, the fees to be charged shall be the actual fees assessed by, and commensurate with, the management fees charged for an account of this nature.
  - (c) For each entire year that the Conservation Easement is in effect, an annual payment from the Special Account shall be made to Koniag as follows:

Year 1	\$372,100, paid on October 15, 2003
Year 2	\$405,589, paid on October 15, 2004
Year 3	\$439,078, paid on October 15, 2005
Year 4	\$472,567, paid on October 15, 2006
Year 5	\$506,056, paid on October 15, 2007
Year 6	\$539,545, paid on October 15, 2008
Year 7	\$573,034, paid on October 15, 2009
Year 8	\$606,523, paid on October 15, 2010
Year 9	\$640,012, paid on October 15, 2011
Year 10	\$673,501, paid on October 15, 2012
Year 11	\$706,990, paid on October 15, 2013
Year 12	\$744,200, paid on October 15, 2014
Year 13	\$744,200, paid on October 15, 2015
Year 14	\$744,200, paid on October 15, 2016

Year 15	\$744,200, paid on October 15, 2017
Year 16	\$744,200, paid on October 15, 2018
Year 17	\$744,200, paid on October 15, 2019
Year 18	\$744,200, paid on October 15, 2020
Year 19	\$744,200, paid on October 15, 2021
Year 20	\$744,200, paid on October 15, 2022

- (d) If Koniag elects in accordance with the Agreement not to subsequently sell the lands to the United States in fee, and otherwise allows the easements to terminate, Koniag shall cease to have any right or claim with respect to any amounts in the Special Account, and the balance thereof shall be subject to use by the Governments in accordance with the consent decrees applicable to the use of the proceeds from the EVOS settlement and other applicable law. If Koniag elects to sell the lands covered by the Conservation Easement in fee to the United States, then it shall receive the balance in the Special Account in accordance with the terms of the Agreement.
- (e) So long as the Conservation Easement and the Camp Island Limited Development Easement are in effect, no funds in the Special Account may be withdrawn therefrom except in accordance with the terms of the Agreement. The funds in such Special Account may not otherwise be transferred to another account without the prior written consent of Koniag.

PROVIDED FURTHER, that the funds provided above represent the only amounts under this resolution due to Koniag which are to be funded from the joint federal-State funds.

Adopted this 16<sup>th</sup> day of January, 2001, in Anchorage, Alaska.

DAVE GIBBONS Date

Trustee Representative

Alaska Region

**USDA Forest Service** 

CRAIG TYLLERY

Assistant Attorney General

State of Alaska

DAVID B. ALLEN

Trustee Representative

Director, Alaska Region

U.S. Fish and Wildlife Service

U.S. Department of the Interior

FRANK RUF Date

Commissioner

Alaska Department of

Fish and Game

JAMÉS W. BALSIGER Director, Alaska Region

National Marine Fisheries Service

MICHELE BROWN

Commissioner

Alaska Department of

**Environmental Conservation** 

## Exxon Valdez Oil Spill Trustee Council

441 W. 5" Ave., Suite 500 • Anchorage, Alaska 99501-2340 • 907/278-8012 • fax 907/276-7178

October 2, 2002



I certify that the U.S. Fish and Wildlife Service, on behalf of the United States government, has complied with the terms and conditions of the Exxon Valdez Oil Spill Trustee Council's resolution of July 5, 2000, and hereby request that the Alaska Department of Law and U.S. Department of Justice notify the U.S. District Court of the following disbursement from the EVOS Habitat Investment Sub-Fund:

Parcel Number Landowner Purchase Price David Abston, heirs of KAP 2042 \$15.000

Further, I certify that the State of Alaska has complied with the terms and conditions of the Exxon Valdez Oil Spill Trustee Council's Resolution 01-10 of May 3, 2001, and hereby request that the Alaska Department of Law and U.S. Department of Justice notify the U.S. District Court of the following disbursement from the EVOS Habitat Investment Sub-Fund:

Parcel Number Landowner Purchase Price The Conservation Fund **KEN 294** \$78,000

Further, I certify that the State of Alaska has complied with the terms and conditions of the Exxon Valdez Oil Spill Trustee Council's Resolution 01-13 of August 6, 2001, and hereby request that the Alaska Department of Law and U.S. Department of Justice notify the U.S. District Court of the following disbursement from the EVOS Habitat Investment Sub-Fund:

Parcel Number Landowner Purchase Price

University of Alaska \$100,000 **PWS 06** 

Further, I certify that the State of Alaska has complied with the terms and conditions of the Exxon Valdez Oil Spill Trustee Council's Resolution 02-05 of February 25, 2002, and hereby request that the Alaska Department of Law and U.S. Department of Justice notify the U.S. District Court of the following disbursement from the EVOS Habitat Investment Sub-Fund:

Parcel Number Landowner Purchase Price The Conservation Fund \$113,000 **KEN 309** 

The disbursements total \$306,000.

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Molly McCammon **Executive Director**