13.08.01 – Reading File

June 2004

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: Kevin Buckland
Finance Officer, ADF&G

From: Paula Banks
Administrative Manager

RE: Attached Billing for DOR Investment Management Fees
RSA: EVOS Investment Fund – ADF&G/Revenue

DATE: June 10, 2004

The attached billing (June 1, 2004 memo from Betty Martin to Paula Banks) identifies investment management fees incurred of $27,739.35 for period January 1, 2004 – March 31, 2004. This bill is to be paid from the appropriate funds currently in the EVOS Investment Fund as outlined below:

From Research Sub-account	$ 16,969.73
From Habitat Sub-account	$ 4,832.60
From Koniag Sub-account	$ 5,937.02
Total	$ 27,739.35

Please let me know if you need any additional information or have any questions.

Cc: Betty Martin, State Comptroller, DOR
Sharon Gill, Accountant, DOR
Vera Thomas, RSA/Contract Desk, DOR

Investment Fee Assignment for Period
January 1, 2004 thru March 31, 2004

2003 Mo-end balance	Research		Habitat		Koniag		Total
Jan	$ 1,574,391	1.33	$ 454,946	0.38	$ 553,933	0.47	$ 2,583,270
Feb	$ 1,330,098	(3.64)	$ 383,308	(1.05)	$ 469,289	(1.29)	$ 2,182,695
Mar	$ (417,074)	(0.19)	$ (129,894)	(0.06)	$ (152,976)	(0.07)	$ (699,944)
Total	**$ 2,487,415**	**0.61**	**$ 708,360**	**0.17**	**$ 870,246**	**0.21**	$ 4,066,021
Fees= $55,030.05 for 6 mo. (Jun-Dec 2003).							
Fee "assignment":							
Amount to be charged to each =							
	Research		Habitat		Koniag		Total Fees
	0.61	**$ 16,969.73**	**0.17**	**$ 4,832.60**	**0.21**	**$ 5,937.02**	**$ 27,739.35**

STATE OF ALASKA
DEPARTMENT OF REVENUE
TREASURY DIVISION

Exxon Valdez Oil Spill Investment Fund

SCHEDULE OF INVESTMENT INCOME
AND CHANGES IN INVESTED ASSETS

For the month ended February 29, 2004

Investment Income		
Research Investment	**CURRENT MONTH**	**FEDERAL YEAR TO DATE**
Cash and cash equivalents		
Short-term Fixed Income Pool	$ 10	$ 34
Marketable debt and equity securities		
Broad Market Fixed Income Pool	341,813	922,674
Non-retirement Domestic Equity Pool	615,888	6,615,995
SOA International Equity Pool	372,103	3,224,011
Commission Recapture	284	1,902
Total investment income (loss) Research Investment	1,330,098	10,764,616
Habitat Investment		
Cash and cash equivalents		
Short-term Fixed Income Pool	1	2
Marketable debt and equity securities		
Broad Market Fixed Income Pool	92,460	249,595
Non-retirement Domestic Equity Pool	180,822	1,896,576
SOA International Equity Pool	109,942	907,056
Commission Recapture	84	541
Total investment income (loss) Habitat Investment	383,308	3,053,770
Koniag Investment		
Cash and cash equivalents		
Short-term Fixed Income Pool	-	-
Marketable debt and equity securities		
Broad Market Fixed Income Pool	115,946	313,003
Non-retirement Domestic Equity Pool	216,116	2,279,551
SOA International Equity Pool	137,122	1,131,305
Commission Recapture	105	675
Total investment income (loss) Koniag Investment	469,289	3,724,534
Total investment income (loss)	2,182,695	17,542,920
Total invested assets, beginning of period	171,475,219	161,272,729
Net contributions (withdrawals):		
Research Investment	(33,942)	(4,809,837)
Habitat Investment	(9,496)	(13,854)
Koniag Investment	(11,591)	(389,074)
Total invested assets, end of period	$ 173,602,884	$ 173,602,884

STATE OF ALASKA
DEPARTMENT OF REVENUE
TREASURY DIVISION

Exxon Valdez Oil Spill Investment Fund

SCHEDULE OF INVESTMENT INCOME
AND CHANGES IN INVESTED ASSETS

For the month ended March 31, 2004

Investment Income		
Research Investment	**CURRENT MONTH**	**FEDERAL YEAR TO DATE**
Cash and cash equivalents		
Short-term Fixed Income Pool	$ 1	$ 35
Marketable debt and equity securities		
Broad Market Fixed Income Pool	307,988	1,230,663
Non-retirement Domestic Equity Pool	(554,275)	6,061,721
SOA International Equity Pool	(171,883)	3,052,127
Commission Recapture	1,095	2,997
Total investment income (loss) Research Investment	(417,074)	10,347,542
Habitat Investment		
Cash and cash equivalents		
Short-term Fixed Income Pool	-	2
Marketable debt and equity securities		
Broad Market Fixed Income Pool	83,299	332,894
Non-retirement Domestic Equity Pool	(162,732)	1,733,844
SOA International Equity Pool	(50,785)	856,271
Commission Recapture	324	865
Total investment income (loss) Habitat Investment	(129,894)	2,923,876
Koniag Investment		
Cash and cash equivalents		
Short-term Fixed Income Pool	-	-
Marketable debt and equity securities		
Broad Market Fixed Income Pool	104,456	417,459
Non-retirement Domestic Equity Pool	(194,496)	2,085,055
SOA International Equity Pool	(63,340)	1,067,965
Commission Recapture	404	1,079
Total investment income (loss) Koniag Investment	(152,976)	3,571,558
Total investment income (loss)	(699,944)	16,842,976
Total invested assets, beginning of period	173,602,884	161,272,729
Net contributions (withdrawals):		
Research Investment	-	(4,809,837)
Habitat Investment	-	(13,854)
Koniag Investment	-	(389,074)
Total invested assets, end of period	$ 172,902,940	$ 172,902,940

STATE OF ALASKA
DEPARTMENT OF REVENUE
TREASURY DIVISION

Exxon Valdez Oil Spill Investment Fund

SCHEDULE OF INVESTMENT INCOME AND CHANGES IN INVESTED ASSETS

For the month ended January 31, 2004

Investment Income		
	CURRENT MONTH	**FEDERAL YEAR TO DATE**
Research Investment		
Cash and cash equivalents		
Short-term Fixed Income Pool	$ 9	$ 24
Marketable debt and equity securities		
Broad Market Fixed Income Pool	340,020	580,861
Non-retirement Domestic Equity Pool	923,832	6,000,107
SOA International Equity Pool	310,120	2,851,908
Commission Recapture	409	1,617
Total investment income (loss) Research Investment	1,574,391	9,434,518
Habitat Investment		
Cash and cash equivalents		
Short-term Fixed Income Pool	1	1
Marketable debt and equity securities		
Broad Market Fixed Income Pool	91,979	157,134
Non-retirement Domestic Equity Pool	271,232	1,715,755
SOA International Equity Pool	91,612	797,114
Commission Recapture	121	457
Total investment income (loss) Habitat Investment	454,946	2,670,462
Koniag Investment		
Cash and cash equivalents		
Short-term Fixed Income Pool	-	-
Marketable debt and equity securities		
Broad Market Fixed Income Pool	115,346	197,057
Non-retirement Domestic Equity Pool	324,175	2,063,435
SOA International Equity Pool	114,261	994,183
Commission Recapture	151	570
Total investment income (loss) Koniag Investment	553,933	3,255,245
Total investment income (loss)	2,583,270	15,360,225
Total invested assets, beginning of period	168,891,949	161,272,729
Net contributions (withdrawals):		
Research Investment	-	(4,775,894)
Habitat Investment	-	(4,358)
Koniag Investment	-	(377,483)
Total invested assets, end of period	$ 171,475,219	$ 171,475,219

Memorandum

State of Alaska
Department of Revenue
Treasury Division
PO Box 110405
Juneau, AK 99811-0405
Phone: 907-465-8497
Fax: 907-465-2394

DATE: June 1, 2004

TO: Paula Banks, Administrative Manager
Exxon Valdez Oil Spill Trustee Council
Phone: 907-278-8012
Fax: 907-276-7178

FROM: Betty Martin, State Comptroller BM
Treasury Division, Department of Revenue

SUBJECT: Investment management services billing for the Exxon Valdez Oil Spill (EVOS) Investment Fund.

The attached schedule outlines investment management fees to be billed to your FY04 EVOS investment Fund Reimbursable Services Agreement (RSA) for the period January 1, 2004 through March 31, 2004. The total includes actual charges paid by Treasury plus unbilled but incurred fees for the period ending March 31, 2004. The total due on this billing is $27,739.35.

Please sign below indicating your authorization and fax a copy to Fish and Game and one each to Josie Valliant (465-2394) and Loretta Withington (465-2335) in the Department of Revenue.

Gail Phillips

Gail Phillips, Executive Director

6-10-04
Date

Please return the signed memorandum to my attention at the address above.

CC: Steve Sikes, RSA/Contract Desk
Department of Revenue

Keven Buckand, Finance Officer
Department of Fish and Game

Treasury Division
EVOS FY04
For the Nine Month Period Ending 03/31/2004

	Average MV 7/03-3/04
Fixed Income	62,165,810.13
Domestic Equity-Russell 3000	74,453,482.56
International Equity	29,631,920.16
Total	166,271,212.85

	Total AKSAS Charges to RSA through 03/31/04	Estimated unbilled fees for period ended 03/31/04	Total Charges To-Date as of 03/31/04	Previous Bill for FY2004	Amount Now Due
External Fees in Dollars					
Domestic Management Fees	2,297.18	4,557.04	**6,854.22**	**4,437.58**	**2,416.64**
International Mangement Fees	27,088.67	13,331.19	**40,419.86**	**27,088.66**	**13,331.20**
	29,385.85	17,888.23	**47,274.08**	**31,526.24**	**15,747.84**
Custody Fees mo = 1 BP	4,100.01	8,370.33	**12,470.34**	**8,153.83**	**4,316.51**
Total externally paid fees	33,485.86	26,258.56	**59,744.42**	**39,680.07**	**20,064.35**
Internal Fees					
	20,466.64	2,558.33	**23,024.97**	**15,349.98**	**7,674.99**
Total	**53,952.50**	**28,816.89**	**82,769.39**	**55,030.05**	**27,739.35**

Average Basis Point Breakdown	
Domestic Management Fees	1.23
International Mangement Fees	18.19
Custody Fees	1.00
Treasury charge	1.85

State of Alaska
Department of Revenue
Treasury Division
PO Box 110405
Juneau, AK 99811-0405
Phone: 907-465-8497
Fax: 907-465-2394

FAX

TO: Paula Banks, Administrative Manager
Exxon Valdez Oil Spill Trustee Council
Phone: 907-278-8012
Fax: 907-276-7178

FROM: Betty Martin, State Comptroller
Treasury Division, Department of Revenue

Number of pages sent, includes this cover sheet: 3

If you have any questions, contact Josie Valliant at 907-465-8497

Exxon Valdez Oil Spill Trustee Council

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

June 2, 2004

Robert Day
ABR Inc.
PO Box 80410
Fairbanks, AK 99708-0410

RE: 00287/Seabird-Oceanographic Relationships in the Northern Gulf of ALaska: Integration wiht NSF/NOAA Study GLOBEC.

Dear Robert:

On behalf of Dr. Phillip Mundy, Science Director for the *Exxon Valdez* Oil Spill Trustee Council, I am pleased to inform you that your final report 00287/Seabird-Oceanographic Relationships in the Northern Gulf of ALaska: Integration wiht NSF/NOAA Study GLOBEC has been peer reviewed and accepted. Below are the next steps for competition of your final report.

- Within 30 days of the date on which the Science Director accepts the final report, the principal investigator shall submit the first several pages of the approved final report to ARLIS for format review (i.e. Cover, Title Page, Study History, Abstract, Key Words, Project Data and Citation). These pages can be mailed, faxed, or emailed to ARLIS (attention: Carrie Holba):

  Carrie Holba
  ARILS
  3150 C Street, Suite 100
  Anchorage, AK 99503

  phone (907) 272-7547
  fax (907) 271-4742
  carrie@arlis.org

- Within 15 days of receipt of the first several pages of the final report, ARLIS staff shall review it for compliance with the report format standards and notify the principal investigator in writing regarding any changes that need to be made.

- To be certain the format revisions are made correctly, the principal investigator shall fax a copy of the corrected version to ARLIS. The principal investigator shall not reproduce the report until format approval is confirmed in writing by ARLIS.

Reproduction and Number of Copies - Within 60 days of the date of the written confirmation from ARLIS indicating approval of the final report format, the principal investigator shall remove all references to "draft" from the report and produce final copies as follows:

Two-sided Pages. The body of the report shall be printed in two-sided format to reduce the space needed to store reports.

Number of Copies. The principal investigator shall provide a total of 21 paper copies and 1 electronic copy, as follows:

- 1 bound copy of the approved final report to the chairman of the Lingering Oil Effects Subcommittee;
- 18 bound copies and 2 camera ready copies of the approved final report to ARLIS, which shall include a copy for the Science Director and a copy for the Trustee Council's official record. A camera-ready copy is an unbound copy of the report as it will appear in its final format, except that it is single-sided with blank pages inserted as appropriate; and
- 1 electronic copy to the Science Director. The electronic copy may be submitted either as an Acrobat Portable Document Format (PDF) file or word processing document (Microsoft Word 2000 for Windows or lower or WordPerfect 9.0 or lower) with all figures and tables imbedded. Acrobat PDF 4.0 or above file format shall be used, preferable in 'formatted text with graphics' (called "PDF normal" under Acrobat PDF 4.0) format. Minimally, "PDF searchable image" (called "PDF original image with hidden text" under Acrobat PDF 4.0) may be used if pre-approved by the Trustee Council Office. In either case, the PDF file shall not be secured or locked from future editing, or contain a digital signature from the principal investigator.

Binding - Copies of final reports shall be bound using PERFECT binding. Smaller reports may be bound with black tape or comb binding. Very small reports may be bound with staples in three places along the spine, but only when other binding options are not available. Questions regarding binding shall be directed to ARLIS (attention: Carrie Holba).

Distribution of Final Reports - ARLIS shall distribute the bound and camera-ready copies of final reports to the appropriate individuals and libraries. Final reports shall be posted on the Trustee Council website at www.evostc.state.ak.us.

For more detailed information regarding finalizing your final report please visit our website at http://www.evostc.state.ak.us/pdf/admin/reportguidelines.pdf. Thank you for your participation and contribution to the Program.

Sincerely,

Brenda Hall
Administrative Officer

Cc: Phil Mundy, Science Directior
Gail Phillips, Executive Director
Carrie Holba, ARLIS
Peter Hagen, NOAA Project Manager

Exxon Valdez Oil Spill Trustee Council

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

Date 06/22/2004

Re: Response required regarding Willette-FY05-Salmon Smolt Monitoring

Dear Dr. Willette,

The Scientific and Technical Advisory Committee has given your proposal a positive recommendation for funding that is contingent on some changes being made. The revisions requested by the STAC are in the attached statement of contingency. Also attached are the comments of non-STAC peer reviewers, if available.

If the revisions are not completed to the satisfaction of the Science Director within the specified time frame, the recommendation of the STAC for your proposal will change to "Do Not Fund." As funding can only be authorized by unanimous vote of the Trustee Council, a positive recommendation from the STAC is a prerequisite for funding, not a guarantee. Nonetheless, most proposals recommended by the STAC are subsequently funded by the Trustee Council, and conversely.

If you wish to continue to be considered for funding starting in FY 2005, please submit the revisions requested to Brenda Ramos in this office by **9:00 AM, Monday July 26, 2004.** To the extent that the revisions entail changes in the elements of the original proposal package, those elements will need to be updated and re-submitted. Please consult the FY 2005 Invitation on our web site for details.

If you anticipate that you will be unable to submit the revisions by the time above please advise Brenda Ramos so that the funding recommendation may be changed in a timely manner. Otherwise I will look forward to reviewing your revision on July 26.

Sincerely,

Phillip R. Mundy, Ph.D., Science Director

Cc: Executive Director, STAC, proposal files

Attachments (2)

Statement of Contingencies

Please submit a revised proposal and budget. Revised narrative and budget are to provide for measuring stable isotopes, C, N, S. Funding contingent on addition of objective to estimate the proportion of marine derived elements (C, N, S) in the smolt. Budget is expected to increase. Authors are required to address comments of peer reviewers regarding potential biases in estimator of abundance in a letter prior to receiving funding.

Reviews:

START OF NEW REVIEW

Review ID: **318**

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

The problem of providing pre-season forecasts is a serious one, and good estimates of smolt production would undoubtedly improve those forecasts. However, there is a fundamental flaw in the study design that limits that usefulness. The major aim of the proposal is to "evaluate the accuracy and precision" of two different smolt estimates over a two year period, and choose the best method relative to cost. However, the proposal fails to describe how the methods will be prepared. On the surface, there appears to be no way to evaluate the accuracy of either method, and the proposal addresses precision (in the form of a variance estimate) only for the mark-recapture method; thus, there is no way to conduct the fundamental comparison of the methods. There is also no description of how costs would be estimated or compared--direct costs of a pilot study don't necessarily relate to the life-cycle costs of a long-term monitoring program. Even though the primary goal of the study can't be met, there is still some value in the study. Even without knowing absolute accuracy, either method of smolt estimation, when conducted over a sufficiently long time frame, could contribute statistically to pre-season forecasting. The proposal also mentions benefits of the data to other biological studies in the area.

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

RATING: 7

The methods are fundamentally sound, although some of the description is unclear. Some questions that were unanswered: Is the initial (mark) sampling conducted once per week, or daily like the second (recapture) sampling? Is it certain that marked fish will migrate past the second sample point within the same week they are marked? If not, is there a way to distinguish marks among weeks? (This is critical for the stratified analysis techniques described.) What are the "tags" mentioned in the description of equation 1--no tagging was mentioned in the methods, only dye marks? Finally, there is no real discussion of potential biases in either sampling method, nor what is planned to reduce such biases.

RATING: 8

The budget seems commensurate with the amount of field work, although the field methods are not given in much detail.

Additional Comments

START OF NEW REVIEW

Review ID: **319**

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: 7

The work is largely based on the premise that smolt population size directly affects adult run size. What information is there that shows this is the case? Do PDO and ocean conditions generally play a larger role? If freshwater food webs are dependent on MDN (e.g., p. 3), shouldn't higher adult returns provide more MDN and subsequently support more smolts? Not sure how this information will improve the understanding of the "interplay between the positive ecological effects of MDN and the compensatory effects of large large juvenile salmon populations" (p. 3). Can more information be provided here for clarification on these points? Other than this, the proposal is sound and should contribute to better methods for estimating smolt populations.

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

RATING: 8

Methods for estimating smolt pops. seem sound. But is there some potential size-selection bias during the capturing phase of the study (3rd papragraph, p. 5) by using the beach seines or fyke nets? Can this be clarified/addressed?

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: 9

The solution should be achieved for the amount of money requested and within the indicated timeframe. Project is cost effective.

Additional Comments

Is the Mazumder project relying on this project for their samples? Do they already have funding in place to support their sampling? Will the Mazumder project still get their samples if this project is not funded?

What about the contribution of MDN from other salmon species, and what are the potential MDN effects on other species and thepotential interactions between juvenile

sockeye and other salmonids?

START OF NEW REVIEW

Review ID: **320**

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: 8

This proposal describes an ambitious attempt to deal with an important, although very difficult, problem with the management of one of Alaska?s most important sockeye stock groups. The proposers have demonstrated a complete understanding of the problem and the difficulties they are likely to face. They have done a good job of describing the technical obstacles standing in the way of the mark-recapture methods and hydroacoustics to measure smolt abundance in the riverine environment. Even so, a lot of very capable researchers have failed in the past to meet similar objectives, using similar methods. If they are successful, this will be an important step forward in developing methods for assessing smolt abundance ? and therefore estimating the marine survival for wild salmon returning to large rivers..

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

RATING: 9

Although there has been a lot of failure to achieve these kinds of objectives in Alaska, that is largely because there are no well-developed and effective tools that have a consistent and demonstrated record of success with this problem. I don?t know of a more appropriate way to try and estimate smolt abundance in the Kenai River.

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: 8

The EVOS funding seems appropriate and reasonable, although the non-EVOS funds does seem a little high for the stated objectives.. I believe these proposers have the ability to meet these objectives in the time frame they describe.

Additional Comments

Exxon Valdez Oil Spill Trustee Council

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

June 18, 2004

Mr. Bruce Bustamante
524 West 4th Avenue
Anchorage, Alaska 99501

Re: Presentation for Convention Center

Dear Mr. ~~Bustamante~~ Bruce –

Our group at Exxon Valdez Trustee Council would like to schedule a presentation of your vision of a proposed Convention Center for the City of Anchorage. Please contact Elizabeth Goodrich in our office at 278-8012.to arrange a meeting.
Thank you for offering the residents of Anchorage an opportunity to discuss a crucial direction for the City.

Sincerely,

Gail

Gail Phillips
Executive Director

GP:eg

P.S. Note that we have a new Executive Director.

Exxon Valdez Oil Spill Trustee Council

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

June 14, 2004

Scott Pegau
Kachemak Bay Estuarine Research Reserve
2181 Kachemak Drive
Homer, AK 99603

RE: 040556/ High Resolution Mapping of Intertidal and Shallow Subtital Shores in Kachemak Bay

Dear Scott:

The *Exxon Valdez* Oil Spill Trustee Council acted on your mid-term request and I am pleased to inform you that the Council approved funding in the amount of $15,000 for Project 040556/ High Resolution Mapping of Intertidal and Shallow Subtital Shores in Kachemak Bay. This includes $13,800 in project funds and $1,200 in agency administrative costs.

Before a project may begin, the lead agency for the project must provide documentation to the Executive Director showing that the requirements of the National Environmental Policy Act (NEPA) have been met. We hope that for most projects this will be completed within the next couple weeks. For more information, please contact the project manager for your lead agency.

Thank you for your participation in the Trustee Council's Gulf Ecosystem Research and Monitoring (GEM) program. We appreciate your continued interest, and look forward to working with you this coming year.

Sincerely,

Gail Phillips

Gail Phillips
Executive Director

Enclosure

cc: Brett Huber/ADF&G Project Manager

Exxon Valdez Oil Spill Trustee Council

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

June 14, 2004

Dennis Lees
Littoral Ecological & Environmental Services
1075 Urania Ave.
Leucadia, CA 92024

RE: 040574/ Assessment of Bivalve Recovery on Treated Mixed-Soft Beaches in Prince William Sound.

Dear Dennis:

The *Exxon Valdez* Oil Spill Trustee Council acted on the Fiscal Year 2004 Work Plan at its meeting on May 14, 2004. I am pleased to inform you that the Council approved funding in the amount of $36,200 for 040574/ Assessment of Bivalve Recovery on Treated Mixed-Soft Beaches in Prince William Sound. This includes $33,200 in project funds and $3,000 in agency administrative costs. A copy of the Council's action on your project is enclosed.

Before a project may begin, the lead agency for the project must provide documentation to the Executive Director showing that the requirements of the National Environmental Policy Act (NEPA) have been met. We hope that for most projects this will be completed within the next couple weeks. For more information, please contact the project manager for your lead agency.

Thank you for your participation in the Trustee Council's Gulf Ecosystem Research and Monitoring (GEM) program. We appreciate your continued interest, and look forward to working with you this coming year.

Sincerely,

Gail Phillips

Gail Phillips
Executive Director

Enclosure

cc: Craig Tillery/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

Date 06/22/2004

Re: Response required regarding Moffitt-FY05-SEA Pink Salmon Survival Model

Dear Dr. Moffitt,

The Scientific and Technical Advisory Committee has given your proposal a positive recommendation for funding that is contingent on some changes being made. The revisions requested by the STAC are in the attached statement of contingency. Also attached are the comments of non-STAC peer reviewers, if available.

If the revisions are not completed to the satisfaction of the Science Director within the specified time frame, the recommendation of the STAC for your proposal will change to "Do Not Fund." As funding can only be authorized by unanimous vote of the Trustee Council, a positive recommendation from the STAC is a prerequisite for funding, not a guarantee. Nonetheless, most proposals recommended by the STAC are subsequently funded by the Trustee Council, and conversely.

If you wish to continue to be considered for funding starting in FY 2005, please submit the revisions requested to Brenda Ramos in this office by **9:00 AM, Monday July 26, 2004.** To the extent that the revisions entail changes in the elements of the original proposal package, those elements will need to be updated and re-submitted. Please consult the FY 2005 Invitation on our web site for details.

If you anticipate that you will be unable to submit the revisions by the time above please advise Brenda Ramos so that the funding recommendation may be changed in a timely manner. Otherwise I will look forward to reviewing your revision on July 26.

Sincerely,

Phillip R. Mundy, Ph.D., Science Director

Cc: Executive Director, STAC, proposal files

Attachments (2)

Statement of Contingencies

Please provide a revised proposal and budget: The revision is to address measuring sources of handling mortality per peer reviewer concerns. The revised narrative and budget will add objective(s) and method(s) to measure handling mortality. The budget is expected to increase as a result.

Peer Reviewer Comments:
For (1) juvenile salmon will be captured, tagged and held for a 96 hours to see how many die. Four days seems short, but probably most death from the insertions will have run its course by then. No control is proposed, which seems to me a mistake. Without an untagged control group of some kind, tag mortality cannot be separated from general mortality. The obvious control is fish captured and held but not anesthetized or tagged. It is true that there probably is no way to separate specifically tag mortality from capture-induced mortality, since background mortality would also continue in both groups.

For (2) tag reading in processing plants is to be evaluated by injecting tags into mature fish entering the processing line. Clearly, these tags should have been aged in temperatures and wet conditions comparable to a ride through the ocean inside a salmon. No such conditioning was mentioned. Otherwise, the effort seems sound. There must be specifications for the PIT antennas to optimize detection, but those aren't mentioned; the project sounds as if it is taking on PIT detection without much guidance for antenna placement, etc. In any case, a test independent of those by the manufacturer is surely in order. The STAC expects that handling mortality will be estimated.

Questions regarding this proposal are:

No mention is made of the plan, timing or scale of the ultimate PIT tagging to be carried out for juveniles exiting PWS. It will take thousands, maybe >10,000, tags to obtain useful results, if return rates are of the likely order of a few percent. Some statement of the ultimate plan would have improved the proposal.

(2) Is the PIT method sound in its full application in the field? It is possible that the main tag mortality effect won't be discernible in a holding-pen study, since even a slightly enhanced susceptibility to predators could be much more important than effects the holding pen study will test: mortality directly from cannula insertion, infection, irritation from the PIT, anesthesia effects.

Methods are unclear. I understand the placement of PIT tags in juveniles (Objective 1—200 fish), but I do not understand the methods for Objective 2. It is unclear what adults, what methods. It may be a matter on clarity, not true methodology, but I simply do not understand. I also would suggest that more attention be paid to whether 200 fish is sufficient for Objective 1, sample size is unclear in Objective 2

Reviews:

START OF NEW REVIEW

Review ID: **370**

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: 9

Could provide more direct detail on scientific questions and how this fits into historical PWS pink salmon research, rather than basing it mainly on support by workshop participants. While I'm somewhat familiar with the questions that this proposal is targeting, other reviewers may not be. I believe the approach is sound and will provide a substantial contribution.

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

RATING: 10

Tagging this size of fish should be feasible using PIT tags. The proposer did not mention why PIT tags were selected rather than full-length coded-wire tags (CWTs). At minimum, the project should provide information needed to evaluate the relative feasibility and potential biases of using PIT tags compared with what is known from CWT projects in the sound.

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: 10

The project appears very cost-effective. It appears achievable with the budget.

Additional Comments

It appears to be a well thought out and cost-effective proposal that is needed to open the next frontier to understanding processes affecting marine mortality of PWS pink salmon.

START OF NEW REVIEW

Review ID: 372

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: 10

This project is a feasibility study to determine the efficacy of PIT tagsto mark juvenile pink salmon emigrating from Prince William Sound. The project will explore techniques for monitoring ecosystem function in relation to early marine mortality of pink salmon and for determining the variation in overall marine survival due to the early marine and oceanic phases of the pink salmon life history. Such information is essential for management application of the SEA model and juvenile censusing to improve forecasting and to manage hatchery release strategies to optimize survival while minimizing impacts of the releases on wild stocks. The ability to partition the variability in survival of release groups into PWS and oceanic stanzas would increase our understanding of mortality processes affecting salmon in the Gulf of Alaska ecosystem, and determine if juvenile censusing can reliably be used as a forecasting tool.

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

RATING: 9

The project will determine if PIT-tagging at sea is a reasonable approach for secondary-marking of pink salmon emigrating from PWS. The methods are effective and appropriate for a feasibility study. Two major issues will be addressed: 1) the feasibility of marking, including capture, handling, and estimation of short-term mortality; 2)the feasibility of automated detection of tags from processing lines. The number of tags that can be released will be limited by cost and capture and marking rates; a high percentage of the catch must be censused to recover sufficient tags for estimation of mortality, and the detection rate must be well-understood to avoid a negative bias in the mortality estimate. The study is well-designed for examining the feasibility of these issues. Before the approach is advanced from feasibility to implementation, the data from this project must be carefully evaluated to determine if the number of tags that can be affordably released will be adequate to estimate variability in oceanic mortality, given the observed short-term mortality and tag loss, the potential for long-term effects of tagging on survival, the proportion of the catch and escapement that can be surveyed for tags, and the uncertainty in the tag detection rate.

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: 10

The project personel are uniquely suited to carry out the objectives of the study because of their scientific expertise, experience with sampling juvenile salmon in the study area, and their ability to provide equipment and senior staff support. This in-kind support makes the feasibility study extremely cost-effective. This project was been coordinated with the proposal to develop an implementation plan for the SEA pink salmon model; timely completion is essential to provide input to the planning process.

Additional Comments

This project is an important component of the planning process for implementation of the SEA pink salmon model. The project will provide not only insight into the feasibilityof secondary marking with PIT tags, but also more information on sampling emigrating juvenile pink salmon for evaluation of hatchery-specific otolith marks, essential for using the pink salmon model for evaluating early marine mortality processes affecting pink salmon.

Exxon Valdez Oil Spill Trustee Council

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

Date 06/22/2004

Re: Response required regarding Schoch-FY05-ShoreZone Mapping for PWS

Dear Dr. Schoch,

The Scientific and Technical Advisory Committee has given your proposal a positive recommendation for funding that is contingent on some changes being made. The revisions requested by the STAC are in the attached statement of contingency. Also attached are the comments of non-STAC peer reviewers, if available.

If the revisions are not completed to the satisfaction of the Science Director within the specified time frame, the recommendation of the STAC for your proposal will change to "Do Not Fund." As funding can only be authorized by unanimous vote of the Trustee Council, a positive recommendation from the STAC is a prerequisite for funding, not a guarantee. Nonetheless, most proposals recommended by the STAC are subsequently funded by the Trustee Council, and conversely.

If you wish to continue to be considered for funding starting in FY 2005, please submit the revisions requested to Brenda Ramos in this office by **9:00 AM, Monday July 26, 2004.** To the extent that the revisions entail changes in the elements of the original proposal package, those elements will need to be updated and re-submitted. Please consult the FY 2005 Invitation on our web site for details.

If you anticipate that you will be unable to submit the revisions by the time above please advise Brenda Ramos so that the funding recommendation may be changed in a timely manner. Otherwise I will look forward to reviewing your revision on July 26.

Sincerely,

Phillip R. Mundy, Ph.D., Science Director

Cc: Executive Director, STAC, proposal files

Attachments (2)

Statement of Contingencies

Please submit a revised proposal and reduced budget. The revision is to address the specifics of the localities to be mapped. The areas so identified need to be identified in terms of existing information and its adequacy to serve the purposes of design of the Nearshore Monitoring program for GEM. Further the Copper River Delta region is to be excluded. The revision is to cover a two-year project (not 3 years as proposed) as requested in the Invitation for Proposals. The revision is also to address the Alyeska video of the shore zones and why it is (is not) being used to serve the purposes for which funding is being requested. Problem with financial information needs to be rectified; FY 05 contractual dollar amount on the justification ($134.9) does not match the budget ($134.3) by 600 dollars. See GA for FY 06, should be 29.1.

Reviews:

START OF NEW REVIEW

Review ID: **353**

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: 9

A comprehensive inventory will be extremely valuable to researchers and managers. The technique and usefulness is proven. The challenge will be to insure the methods and products are regionally appropriate but also comparable to contiguous coastal inventories. No statement is explicit to this effect. There is no statistical component to the study and none needed. No quality/assurance/quality control protocol is proposed to insure observer accuracy and among-observer consistency. Quality assurance is implied by a "formalized data collection procedure".

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

RATING: 9

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: 8

This is a very expensive project. AVI surveys are very highly dependent on weather. Serial 6-day surveys during low-tide windows will be difficult to achieve. Shore access for shore-zone mapping is also weather dependent. Scheduling four surveys over two years reduces the risk of under-achieving the overall goal of coastline to be imaged. However, cost overruns may still result from abbreviated AVI survey trips and weather delays.

Additional Comments

START OF NEW REVIEW

Review ID: **354**

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: 1

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

RATING: 1

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: 1

Additional Comments

Potential Conflict of Interest In reviewing the details of the budget, I find that I am listed as a participant in the ground-truth studies. Consequently, my comments should be viewed from the perspective that I have a conflict of interest, as I would probably receive compensation if the program were funded.

Value to GEM objectives

It is my impression that the products of this program would provide a valuable inventory of the distribution and abundance of wetlands, intertidal, and shallow subtidal habitats and selected types of natural resources for the region within GEM?s purview. The approach provides some information on the distribution of major biological assemblages on rocky habitat (e.g., lichens, barnacles, mussels, rockweed, red algae, kelps, etc.) and on eelgrass on soft sediments.

This database would provide an extremely powerful tool to investigators planning intertidal and shallow subtidal ecological investigations in Prince William Sound for GEM or in response to long-term climate change, new development, or oil spills, etc. It would also provide a useful tool for evaluating long-term changes in the general distribution and abundance of major intertidal and shallow subtidal biological assemblages (i.e., a comparison of the distribution of biobands over time). Of the two major areas in southcentral Alaska in which AVI has not been completed, it would seem to me that Prince William Sound has a higher priority than Kodiak. Applicability of Approach to GEM Research and Potential Value to GEM Applicants and Investigators. The products of this approach are of great value to investigators proposing or executing projects for GEM. This reviewer

recently completed an extensive site-selection exercise using the ShoreZone mapping database for the outer Kenai Peninsula.

The objective of this process was to identify candidate sites in Kenai Fjords National Park for performing an inventory of unconsolidated intertidal sediments within the park to assist the National Park Service in developing its long-term monitoring program. The availability of the web-based database for the outer Kenai Peninsula was extremely valuable in completing this exercise. Moreover, manipulation of the database will be useful in completing the final report for this inventory, i.e., in extrapolating the results from the survey to the region.

We did observe certain limitations of the existing on-line database, however. During our field operations, we found that we would have benefited from greater ability to manipulate (query) the database than is currently possible on-line. We concluded that the sediment categories provided in the sediment-type layer were for the upper margin of the intertidal zone and were not generally representative of sediment conditions in the lower intertidal where the resources of interest to this program are located. Typically, the nature of the sediment for beach segments (e.g., mud, sand, sand/gravel, or wetlands) indicated in the sediment type layer was incorrect for the lower beach. Also, the quality of the captured images was not sufficiently good to determine the nature of finer sediments on many beaches. Nevertheless, the availability of various layers of the GIS database and access to the AVI photo captures provided copious detailed information for selecting candidate sites. Better selections would have been possible if we had been able to modify the intertidal level for which sediment types are classified. My impression is that the geomorphological interpretations are simpler and more correct for rocky habitats than for unconsolidated sediments.

Extrapolation, however, must be approached with caution. Based on this recent study, extrapolation, while probably acceptable for rocky habitats, is not completely acceptable for soft substrates where the major components of the biota are mostly concealed from view in the unconsolidated beaches. Occurrence and abundance of the macroinfaunal species is greatly influenced by factors that cannot be documented during an aerial survey (e.g., salinity of interstitial water, water temperature,

organic content of sediments, interactions of sediment grain size and exposure). Based on experience in earlier ShoreZone mapping programs, the ground-truthing surveys mainly provide information on rocky substrate. The unconsolidated substrates, which are far more unpredictable but often quite productive, generally have not surveyed. I view this as a limitation of the implementation of the technique.

Validity of Rationale

The claim in the proposal that the ShoreZone mapping technique provides ?a spatially comprehensive reference for ? subtidal habitats? stretches the capabilities of approach and the observers unrealistically. In shallow areas with kelps or eelgrass or deeper areas inhabited with canopy-forming species, these may be detected. However in deeper areas or areas with limited water clarity, the technique is unable to discern subtidal conditions. Moreover, where subtidal information is provided, it is far less ?comprehensive? than in the intertidal zone, where some individual animals such as the chiton Katharina tunicata and some starfish can be observed in addition to the biobands. I question the statement in ?Section II. Need for the Project? that ?no quantitative information exists on where and how much of these habitats occur in the Sound even after 15 year of research and monitoring following the Exxon Valdez oil spill.? I think that NOAA?s (RPI?s) ESI GIS database for Prince William Sound can probably be queried to provide summaries for abundance and distribution for at least some of these habitats. I question the claim that eelgrass is ?a resource known to be sensitive to oil spills?. While Dean et al. have demonstrated that the critters living in eelgrass beds recovered more slowly than those in kelp beds, I am not aware of studies (including those that we conducted during our NOAA studies of EVOS) that have shown significant damage to eelgrass itself following oil spills.

The statement, Shore-Zone data will interact directly with the Prince William Sound Ocean Observing System real time numerical circulation and wave models? is used apparently to justify claiming $390,000 in Cost-share Funds. The only explanation that I find indicating a relationship between the ShoreZone data and PWSOOS indicates that, ?The PWSOOS would be greatly enhanced by the integration of spatially comprehensive nearshore habitat data. By coupling the nearshore habitat data to the numerical ocean circulation and wave models, the affects [sic] of changing ocean conditions on different habitat types could be studied. This understanding of natural variability in the ocean and how the nearshore habitats and associated biota respond will provide a better assessment of how other disturbances including earthquakes, oil spills, and fishing affect PWS biota.? This explanation doesn?t provide any real mechanism for connecting or integrating these two databases and, in my mind, falls short of justifying the use of the Cost-share Funds. The two programs appear, on the basis of this explanation, to be independent and pretty much unrelated.

Schedule Realism If both ShoreZone mapping proposals are funded, CORI will be surveying during all four low-tides windows in June and July 2005. Period for ground-truthing (field validation) survey and completion of Biota Catalog are not indicated in IV. SCHEDULE. B. Measurable Project Tasks.

Budgetary and Staffing Realism The budget and staffing appear reasonable compared to the budget proposed for Kodiak. Ms. Saupe and Dr. Harper have

START OF NEW REVIEW

Review ID: **355**

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: 9

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

RATING: 9

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: 9

Additional Comments

The results of the proposed work will provide a data layer essential to the implementation of a nearshore GEM monitoring program. It should be clarified how the $450,000 Non-EVOS funds will be used to support the proposed work. It would be desirable to see this work completed in two years, as opposed to one. I recommend this proposal be highly ranked for funding.

Exxon Valdez Oil Spill Trustee Council

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

Date 06/22/2004

Re: Response required regarding Baird-FY05-Connecting with Coastwalk

Dear Mr. Baird,

The Scientific and Technical Advisory Committee has given your proposal a positive recommendation for funding that is contingent on some changes being made. The revisions requested by the STAC are in the attached statement of contingency. Also attached are the comments of non-STAC peer reviewers, if available.

If the revisions are not completed to the satisfaction of the Science Director within the specified time frame, the recommendation of the STAC for your proposal will change to "Do Not Fund." As funding can only be authorized by unanimous vote of the Trustee Council, a positive recommendation from the STAC is a prerequisite for funding, not a guarantee. Nonetheless, most proposals recommended by the STAC are subsequently funded by the Trustee Council, and conversely.

If you wish to continue to be considered for funding starting in FY 2005, please submit the revisions requested to Brenda Ramos in this office by **9:00 AM, Monday July 26, 2004.** To the extent that the revisions entail changes in the elements of the original proposal package, those elements will need to be updated and re-submitted. Please consult the FY 2005 Invitation on our web site for details.

If you anticipate that you will be unable to submit the revisions by the time above please advise Brenda Ramos so that the funding recommendation may be changed in a timely manner. Otherwise I will look forward to reviewing your revision on July 26.

Sincerely,

Phillip R. Mundy, Ph.D., Science Director

Cc: Executive Director, STAC, proposal files

Attachments (2)

Statement of Contingencies

Please provide a revised proposal and budget: The proposal needs to be expanded into a three-year approach where the validity of the CoastWalk data set is evaluated by intertidal specialists for taxonomic accuracy, consistency, and applicability of abundance classifications in the first year, followed by incorporation (the original proposal) in the second and third years. Peer reviewer concerns need to be addressed in the rewritten proposal and re-budgeted proposal. Improve the cited literature to demonstrate that the proposal is informed on what information is available to provide accurate coastal resource inventories that could be incorporated into the proposed study. Outline a process whereby the data are proven to be worthy of consideration and incorporation. The revision is expected to establish the connection of the proposed work to the historic data sets available within the targeted region to establish a comprehensive perspective on what studies have been done and what data gaps still exist. The revision will further state explicitly how duplication of effort is to be avoided by future integration of the KBRR ShoreZone mapping information into the larger ShoreZone mapping database maintained by Dr. John Harper.

Reviews:

START OF NEW REVIEW

Review ID: **341**

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: 8

The proposal is fairly well written and does provide an explanation of the problem. The objectives are clear. The project is challenged by the potential incompatibility between the nearshore mapping GIS and the CoastWalk database - how will the database be geo-referenced to specific nearshore mapping habitat polygons? Updating the monitoring protocol is key to effective integration of the programs. Legacy data probably cannot be calibrated to the updated protocol, though, limiting the quantitative analytical usefulness of the historical information in an ongoing scientific context.

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

RATING: 9

Given the limitations inherent in working with legacy data that were not intended for high resolution geo-referencing to a GIS, not

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: 7

The software tools needed to integrate the database to the GIS are available as standard applications, requiring little custom programming. This type of work always takes longer than expected, though, and the amount of time and funding identified may not be enough for contingencies.

Additional Comments

START OF NEW REVIEW

Review ID: **344**

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

The proposed work will merge existing shore zone maps with historic data on some undisclosed results of community based surveys of shoreline biota and human impacts. The methods/data presented on community surveys are inadequate to evaluate the feasibility and potential contribution of the work.

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

RATING: 3

The proposal provides inadequate information on the design, methods, results and conclusions that can be drawn from the periodic Coast Walk program conducted in Kachemak Bay to evaluate the potential benefit to the GEM program.

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

The proposed work has potential merit in that community based shoreline sampling is linked with existing shore zone maps. Such community based sampling may have a role in the GEM program but too little detail are provided on the community surveys to critically evaluate the potential merit. The proposal is of relatively low cost and if details on coast walk surveys (e.g. sampling design, segement dimensons, effort, data fields...) could be provided, the proposal may be worth considering.

Additional Comments

START OF NEW REVIEW

Review ID: **345**

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: 1

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

RATING: 1

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: 1

Additional Comments

Applicability of Approach to GEM Goals and Objectives

The aims of the program are in agreement with the GEM program objectives and Science Plan strategies encouraging and ?fostering community involvement and local knowledge and to a lesser degree, of supporting management applications.? However, for reasons described below, I think it has the cart before the horse.

Validity of Rationale

The second sentence of A. ?Statement of Problem? and a glance at the cited literature suggest that the proposal authors are woefully uninformed on what information is available to provide ?accurate coastal resource inventories? (just in Kachemak Bay)for coastal resource managers, etc., and that could be incorporated into their proposed study. Large volumes of information were generated in the 1970s specifically on intertidal and subtidal resources in Kachemak Bay through OCSEAP, state, and local governmental funding and have been catalogued in the Kachemak Bay NERR library. It concerns me that this body of detailed information is neither acknowledged nor considered for integration into the Shoreline mapping database whereas the less detailed community-based monitoring results are apparently considered, without serious review for taxonomic accuracy and continuity, worthy of integration.

I am concerned by the statement, ?We propose to show that biological and human impact data collection using CoastWalk and GLOBE protocols can be integrated into ShoreZone mapping and high-resolution GIS shoreline mapping of geomorphological and physical features to enhance the basis for nearshore monitoring site selection.? This suggests that the intent of the program is to prove that integration is possible rather than to evaluate whether the CoastWalk data set has the validity to justify integration. It assumes that the CoastWalk data are of value without demonstrating this. I believe this approach is flawed. Before funds are expended to effect integration, the case must be made that the data are worthy of consideration and incorporation. Otherwise, the program may just introduce misleading noise into the system. The objective of developing data collection protocols for the community-based CoastWalk program is a worthy one but development should not take place until the existing data set is reviewed and evaluated to understand where inconsistencies and problems exist. The evaluation process will also provide needed insight into the capabilities and limitations that will be encountered in the volunteer population.

Recommendations

I do not recommend that this proposal be funded. Instead, I encourage the proposal authors to have the validity of CoastWalk data set evaluated by intertidal specialists for taxonomic accuracy, consistency, and applicability of abundance classifications. These types of issues need to be satisfied BEFORE there is consideration for integrating these possibly anecdotal data into the relatively rigorous data set provided by ShoreZone mapping. I believe that it would be inappropriate and invalid to integrate the CoastWalk data set into the ShoreZone data set without validation because its inclusion would suggest level of credibility that it has not yet earned. Furthermore, I would recommend that the authors familiarize themselves with the historic data sets available within their region so that they can approach future research with a more comprehensive perspective on what studies have been done and what data gaps still exist. Another useful effort would be to integrate the KBRR ShoreZone mapping information into the larger ShoreZone mapping database maintained by Dr. John Harper so that we don?t have two ?competing? sets of ShoreZone maps for Kachemak Bay.

START OF NEW REVIEW

Review ID: **350**

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: 8

This proposal calls for the integration of data and information collected during Kachemak Bay CoastWalk activities into the ShoreZone imagery and data that is available as a geographical information system for Kachemak Bay. I think in principle, this is a nice cost-effective means of adding value to the ShoreZone GIS efforts that directly involves students and local residents in coastal monitoring and resource documentation.

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

RATING: 7

My misgivings mostly center upon the variable expertise of the participants, but the proposers seem to understand the limitations of the data that will be added to the existing GIS. The focus of the project will be on integrating existing CoastWalk data, followed by a citizen-scientist workshop. Unfortunately I didn?t get a precise idea of the quality and characteristics of the data that are available from the proposal. If the data to be added to the GIS are simple presence or absence data for specific species that can be unambiguously identified, it is not without value, but the sophistication needed to identify areas for special monitoring will not likely be achieved, at least at this stage. Nevertheless, the

citizen involvement and participatory nature of the CoastWalk activity is a strong point, and I? m cautiously optimistic that some significant value will come out of this proposed

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: 9

The proposal is relatively modest and economical in approach. The costs are consistent with other workshops of this nature. I don?t understand why purchase of two new licenses of ArcView is budgeted, given the presumed GIS expertise of the proposers, but that is a relatively minor point

Additional Comments

Exxon Valdez Oil Spill Trustee Council

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

Date 06/22/2004

Re: Response required regarding Schoch-FY05-ShoreZone Mapping for PWS

Dear Dr. Schoch,

The Scientific and Technical Advisory Committee has given your proposal a positive recommendation for funding that is contingent on some changes being made. The revisions requested by the STAC are in the attached statement of contingency. Also attached are the comments of non-STAC peer reviewers, if available.

If the revisions are not completed to the satisfaction of the Science Director within the specified time frame, the recommendation of the STAC for your proposal will change to "Do Not Fund." As funding can only be authorized by unanimous vote of the Trustee Council, a positive recommendation from the STAC is a prerequisite for funding, not a guarantee. Nonetheless, most proposals recommended by the STAC are subsequently funded by the Trustee Council, and conversely.

If you wish to continue to be considered for funding starting in FY 2005, please submit the revisions requested to Brenda Ramos in this office by **9:00 AM, Monday July 26, 2004.** To the extent that the revisions entail changes in the elements of the original proposal package, those elements will need to be updated and re-submitted. Please consult the FY 2005 Invitation on our web site for details.

If you anticipate that you will be unable to submit the revisions by the time above please advise Brenda Ramos so that the funding recommendation may be changed in a timely manner. Otherwise I will look forward to reviewing your revision on July 26.

Sincerely,

Phillip R. Mundy, Ph.D., Science Director

Cc: Executive Director, STAC, proposal files

Attachments (2)

Statement of Contingencies

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Reviews:

START OF NEW REVIEW

Review ID: **353**

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: 9

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RATING: 9

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: 8

This is a very expensive project. AVI surveys are very highly dependent on weather. Serial 6-day surveys during low-tide windows will be difficult to achieve. Shore access for shore-zone mapping is also weather dependent. Scheduling four surveys over two years reduces the risk of under-achieving the overall goal of coastline to be imaged. However, cost overruns may still result from abbreviated AVI survey trips and weather delays.

Additional Comments

START OF NEW REVIEW

Review ID: **354**

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: 1

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

RATING: 1

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: 1

Additional Comments

Potential Conflict of Interest In reviewing the details of the budget, I find that I am listed as a participant in the ground-truth studies. Consequently, my comments should be viewed from the perspective that I have a conflict of interest, as I would probably receive compensation if the program were funded.

Value to GEM objectives

It is my impression that the products of this program would provide a valuable inventory of the distribution and abundance of wetlands, intertidal, and shallow subtidal habitats and selected types of natural resources for the region within GEM?s purview. The approach provides some information on the distribution of major biological assemblages on rocky habitat (e.g., lichens, barnacles, mussels, rockweed, red algae, kelps, etc.) and on eelgrass on soft sediments.

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recently completed an extensive site-selection exercise using the ShoreZone mapping database for the outer Kenai Peninsula.

The objective of this process was to identify candidate sites in Kenai Fjords National Park for performing an inventory of unconsolidated intertidal sediments within the park to assist the National Park Service in developing its long-term monitoring program. The availability of the web-based database for the outer Kenai Peninsula was extremely valuable in completing this exercise. Moreover, manipulation of the database will be useful in completing the final report for this inventory, i.e., in extrapolating the results from the survey to the region.

We did observe certain limitations of the existing on-line database, however. During our field operations, we found that we would have benefited from greater ability to manipulate (query) the database than is currently possible on-line. We concluded that the sediment categories provided in the sediment-type layer were for the upper margin of the intertidal zone and were not generally representative of sediment conditions in the lower intertidal where the resources of interest to this program are located. Typically, the nature of the sediment for beach segments (e.g., mud, sand, sand/gravel, or wetlands) indicated in the sediment type layer was incorrect for the lower beach. Also, the quality of the captured images was not sufficiently good to determine the nature of finer sediments on many beaches. Nevertheless, the availability of various layers of the GIS database and access to the AVI photo captures provided copious detailed information for selecting candidate sites. Better selections would have been possible if we had been able to modify the intertidal level for which sediment types are classified. My impression is that the geomorphological interpretations are simpler and more correct for rocky habitats than for unconsolidated sediments.

Extrapolation, however, must be approached with caution. Based on this recent study, extrapolation, while probably acceptable for rocky habitats, is not completely acceptable for soft substrates where the major components of the biota are mostly concealed from view in the unconsolidated beaches. Occurrence and abundance of the macroinfaunal species is greatly influenced by factors that cannot be documented during an aerial survey (e.g., salinity of interstitial water, water temperature,

organic content of sediments, interactions of sediment grain size and exposure). Based on experience in earlier ShoreZone mapping programs, the ground-truthing surveys mainly provide information on rocky substrate. The unconsolidated substrates, which are far more unpredictable but often quite productive, generally have not surveyed. I view this as a limitation of the implementation of the technique.

Validity of Rationale

The claim in the proposal that the ShoreZone mapping technique provides ?a spatially comprehensive reference for ? subtidal habitats? stretches the capabilities of approach and the observers unrealistically. In shallow areas with kelps or eelgrass or deeper areas inhabited with canopy-forming species, these may be detected. However in deeper areas or areas with limited water clarity, the technique is unable to discern subtidal conditions. Moreover, where subtidal information is provided, it is far less ?comprehensive? than in the intertidal zone, where some individual animals such as the chiton Katharina tunicata and some starfish can be observed in addition to the biobands. I question the statement in ?Section II. Need for the Project? that ?no quantitative information exists on where and how much of these habitats occur in the Sound even after 15 year of research and monitoring following the Exxon Valdez oil spill.? I think that NOAA?s (RPI?s) ESI GIS database for Prince William Sound can probably be queried to provide summaries for abundance and distribution for at least some of these habitats. I question the claim that eelgrass is ?a resource known to be sensitive to oil spills?. While Dean et al. have demonstrated that the critters living in eelgrass beds recovered more slowly than those in kelp beds, I am not aware of studies (including those that we conducted during our NOAA studies of EVOS) that have shown significant damage to eelgrass itself following oil spills.

The statement, Shore-Zone data will interact directly with the Prince William Sound Ocean Observing System real time numerical circulation and wave models? is used apparently to justify claiming $390,000 in Cost-share Funds. The only explanation that I find indicating a relationship between the ShoreZone data and PWSOOS indicates that, ?The PWSOOS would be greatly enhanced by the integration of spatially comprehensive nearshore habitat data. By coupling the nearshore habitat data to the numerical ocean circulation and wave models, the affects [sic] of changing ocean conditions on different habitat types could be studied. This understanding of natural variability in the ocean and how the nearshore habitats and associated biota respond will provide a better assessment of how other disturbances including earthquakes, oil spills, and fishing affect PWS biota.? This explanation doesn?t provide any real mechanism for connecting or integrating these two databases and, in my mind, falls short of justifying the use of the Cost-share Funds. The two programs appear, on the basis of this explanation, to be independent and pretty much unrelated.

Schedule Realism If both ShoreZone mapping proposals are funded, CORI will be surveying during all four low-tides windows in June and July 2005. Period for ground-truthing (field validation) survey and completion of Biota Catalog are not indicated in IV. SCHEDULE. B. Measurable Project Tasks.

Budgetary and Staffing Realism The budget and staffing appear reasonable compared to the budget proposed for Kodiak. Ms. Saupe and Dr. Harper have

START OF NEW REVIEW

Review ID: **355**

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: 9

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

RATING: 9

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: 9

Additional Comments

The results of the proposed work will provide a data layer essential to the implementation of a nearshore GEM monitoring program. It should be clarified how the $450,000 Non-EVOS funds will be used to support the proposed work. It would be desirable to see this work completed in two years, as opposed to one. I recommend this proposal be highly ranked for funding.

Exxon Valdez Oil Spill Trustee Council

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

Date 06/22/2004

Re: Response required regarding Moffitt-FY05-SEA Pink Salmon Survival Model

Dear Dr. Moffitt,

The Scientific and Technical Advisory Committee has given your proposal a positive recommendation for funding that is contingent on some changes being made. The revisions requested by the STAC are in the attached statement of contingency. Also attached are the comments of non-STAC peer reviewers, if available.

If the revisions are not completed to the satisfaction of the Science Director within the specified time frame, the recommendation of the STAC for your proposal will change to "Do Not Fund." As funding can only be authorized by unanimous vote of the Trustee Council, a positive recommendation from the STAC is a prerequisite for funding, not a guarantee. Nonetheless, most proposals recommended by the STAC are subsequently funded by the Trustee Council, and conversely.

If you wish to continue to be considered for funding starting in FY 2005, please submit the revisions requested to Brenda Ramos in this office by **9:00 AM, Monday July 26, 2004.** To the extent that the revisions entail changes in the elements of the original proposal package, those elements will need to be updated and re-submitted. Please consult the FY 2005 Invitation on our web site for details.

If you anticipate that you will be unable to submit the revisions by the time above please advise Brenda Ramos so that the funding recommendation may be changed in a timely manner. Otherwise I will look forward to reviewing your revision on July 26.

Sincerely,

Phillip R. Mundy, Ph.D., Science Director

Cc: Executive Director, STAC, proposal files

Attachments (2)

Statement of Contingencies

Please provide a revised proposal and budget: The revision is to address measuring sources of handling mortality per peer reviewer concerns. The revised narrative and budget will add objective(s) and method(s) to measure handling mortality. The budget is expected to increase as a result.

Peer Reviewer Comments:
For (1) juvenile salmon will be captured, tagged and held for a 96 hours to see how many die. Four days seems short, but probably most death from the insertions will have run its course by then. No control is proposed, which seems to me a mistake. Without an untagged control group of some kind, tag mortality cannot be separated from general mortality. The obvious control is fish captured and held but not anesthetized or tagged. It is true that there probably is no way to separate specifically tag mortality from capture-induced mortality, since background mortality would also continue in both groups.

For (2) tag reading in processing plants is to be evaluated by injecting tags into mature fish entering the processing line. Clearly, these tags should have been aged in temperatures and wet conditions comparable to a ride through the ocean inside a salmon. No such conditioning was mentioned. Otherwise, the effort seems sound. There must be specifications for the PIT antennas to optimize detection, but those aren't mentioned; the project sounds as if it is taking on PIT detection without much guidance for antenna placement, etc. In any case, a test independent of those by the manufacturer is surely in order. The STAC expects that handling mortality will be estimated.

Questions regarding this proposal are:

No mention is made of the plan, timing or scale of the ultimate PIT tagging to be carried out for juveniles exiting PWS. It will take thousands, maybe >10,000, tags to obtain useful results, if return rates are of the likely order of a few percent. Some statement of the ultimate plan would have improved the proposal.

(2) Is the PIT method sound in its full application in the field? It is possible that the main tag mortality effect won't be discernible in a holding-pen study, since even a slightly enhanced susceptibility to predators could be much more important than effects the holding pen study will test: mortality directly from cannula insertion, infection, irritation from the PIT, anesthesia effects.

Methods are unclear. I understand the placement of PIT tags in juveniles (Objective 1—200 fish), but I do not understand the methods for Objective 2. It is unclear what adults, what methods. It may be a matter on clarity, not true methodology, but I simply do not understand. I also would suggest that more attention be paid to whether 200 fish is sufficient for Objective 1, sample size is unclear in Objective 2

Reviews:

START OF NEW REVIEW

Review ID: **370**

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: 9

Could provide more direct detail on scientific questions and how this fits into historical PWS pink salmon research, rather than basing it mainly on support by workshop participants. While I'm somewhat familiar with the questions that this proposal is targeting, other reviewers may not be. I believe the approach is sound and will provide a substantial contribution.

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

RATING: 10

Tagging this size of fish should be feasible using PIT tags. The proposer did not mention why PIT tags were selected rather than full-length coded-wire tags (CWTs). At minimum, the project should provide information needed to evaluate the relative feasibility and potential biases of using PIT tags compared with what is known from CWT projects in the sound.

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: 10

The project appears very cost-effective. It appears achievable with the budget.

Additional Comments

It appears to be a well thought out and cost-effective proposal that is needed to open the next frontier to understanding processes affecting marine mortality of PWS pink salmon.

Exxon Valdez Oil Spill Trustee Council

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

Date 06/22/2004

Re: Response required regarding Baird-FY05-Connecting with Coastwalk

Dear Mr. Baird,

The Scientific and Technical Advisory Committee has given your proposal a positive recommendation for funding that is contingent on some changes being made. The revisions requested by the STAC are in the attached statement of contingency. Also attached are the comments of non-STAC peer reviewers, if available.

If the revisions are not completed to the satisfaction of the Science Director within the specified time frame, the recommendation of the STAC for your proposal will change to "Do Not Fund." As funding can only be authorized by unanimous vote of the Trustee Council, a positive recommendation from the STAC is a prerequisite for funding, not a guarantee. Nonetheless, most proposals recommended by the STAC are subsequently funded by the Trustee Council, and conversely.

If you wish to continue to be considered for funding starting in FY 2005, please submit the revisions requested to Brenda Ramos in this office by **9:00 AM, Monday July 26, 2004.** To the extent that the revisions entail changes in the elements of the original proposal package, those elements will need to be updated and re-submitted. Please consult the FY 2005 Invitation on our web site for details.

If you anticipate that you will be unable to submit the revisions by the time above please advise Brenda Ramos so that the funding recommendation may be changed in a timely manner. Otherwise I will look forward to reviewing your revision on July 26.

Sincerely,

Phillip R. Mundy, Ph.D., Science Director

Cc: Executive Director, STAC, proposal files

Attachments (2)

Statement of Contingencies

Please provide a revised proposal and budget: The proposal needs to be expanded into a three-year approach where the validity of the CoastWalk data set is evaluated by intertidal specialists for taxonomic accuracy, consistency, and applicability of abundance classifications in the first year, followed by incorporation (the original proposal) in the second and third years. Peer reviewer concerns need to be addressed in the rewritten proposal and re-budgeted proposal. Improve the cited literature to demonstrate that the proposal is informed on what information is available to provide accurate coastal resource inventories that could be incorporated into the proposed study. Outline a process whereby the data are proven to be worthy of consideration and incorporation. The revision is expected to establish the connection of the proposed work to the historic data sets available within the targeted region to establish a comprehensive perspective on what studies have been done and what data gaps still exist. The revision will further state explicitly how duplication of effort is to be avoided by future integration of the KBRR ShoreZone mapping information into the larger ShoreZone mapping database maintained by Dr. John Harper.

Reviews:

START OF NEW REVIEW

Review ID: **341**

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: 8

The proposal is fairly well written and does provide an explanation of the problem. The objectives are clear. The project is challenged by the potential incompatibility between the nearshore mapping GIS and the CoastWalk database - how will the database be geo-referenced to specific nearshore mapping habitat polygons? Updating the monitoring protocol is key to effective integration of the programs. Legacy data probably cannot be calibrated to the updated protocol, though, limiting the quantitative analytical usefulness of the historical information in an ongoing scientific context.

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

RATING: 9

Given the limitations inherent in working with legacy data that were not intended for high resolution geo-referencing to a GIS, not

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: 7

The software tools needed to integrate the database to the GIS are available as standard applications, requiring little custom programming. This type of work always takes longer than expected, though, and the amount of time and funding identified may not be enough for contingencies.

Additional Comments

START OF NEW REVIEW

Review ID: **344**

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

The proposed work will merge existing shore zone maps with historic data on some undisclosed results of community based surveys of shoreline biota and human impacts. The methods/data presented on community surveys are inadequate to evaluate the feasibility and potential contribution of the work.

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

RATING: 3

The proposal provides inadequate information on the design, methods, results and conclusions that can be drawn from the periodic Coast Walk program conducted in Kachemak Bay to evaluate the potential benefit to the GEM program.

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

The proposed work has potential merit in that community based shoreline sampling is linked with existing shore zone maps. Such community based sampling may have a role in the GEM program but too little detail are provided on the community surveys to critically evaluate the potential merit. The proposal is of relatively low cost and if details on coast walk surveys (e.g. sampling design, segement dimensons, effort, data fields...) could be provided, the proposal may be worth considering.

Additional Comments

START OF NEW REVIEW

Review ID: **345**

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: 1

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

RATING: 1

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: 1

Additional Comments

Applicability of Approach to GEM Goals and Objectives

The aims of the program are in agreement with the GEM program objectives and Science Plan strategies encouraging and ?fostering community involvement and local knowledge and to a lesser degree, of supporting management applications.? However, for reasons described below, I think it has the cart before the horse.

Validity of Rationale

The second sentence of A. ?Statement of Problem? and a glance at the cited literature suggest that the proposal authors are woefully uninformed on what information is available to provide ?accurate coastal resource inventories? (just in Kachemak Bay)for coastal resource managers, etc., and that could be incorporated into their proposed study. Large volumes of information were generated in the 1970s specifically on intertidal and subtidal resources in Kachemak Bay through OCSEAP, state, and local governmental funding and have been catalogued in the Kachemak Bay NERR library. It concerns me that this body of detailed information is neither acknowledged nor considered for integration into the Shoreline mapping database whereas the less detailed community-based monitoring results are apparently considered, without serious review for taxonomic accuracy and continuity, worthy of integration.

I am concerned by the statement, ?We propose to show that biological and human impact data collection using CoastWalk and GLOBE protocols can be integrated into ShoreZone mapping and high-resolution GIS shoreline mapping of geomorphological and physical features to enhance the basis for nearshore monitoring site selection.? This suggests that the intent of the program is to prove that integration is possible rather than to evaluate whether the CoastWalk data set has the validity to justify integration. It assumes that the CoastWalk data are of value without demonstrating this. I believe this approach is flawed. Before funds are expended to effect integration, the case must be made that the data are worthy of consideration and incorporation. Otherwise, the program may just introduce misleading noise into the system. The objective of developing data collection protocols for the community-based CoastWalk program is a worthy one but development should not take place until the existing data set is reviewed and evaluated to understand where inconsistencies and problems exist. The evaluation process will also provide needed insight into the capabilities and limitations that will be encountered in the volunteer population.

Recommendations

I do not recommend that this proposal be funded. Instead, I encourage the proposal authors to have the validity of CoastWalk data set evaluated by intertidal specialists for taxonomic accuracy, consistency, and applicability of abundance classifications. These types of issues need to be satisfied BEFORE there is consideration for integrating these possibly anecdotal data into the relatively rigorous data set provided by ShoreZone mapping. I believe that it would be inappropriate and invalid to integrate the CoastWalk data set into the ShoreZone data set without validation because its inclusion would suggest level of credibility that it has not yet earned. Furthermore, I would recommend that the authors familiarize themselves with the historic data sets available within their region so that they can approach future research with a more comprehensive perspective on what studies have been done and what data gaps still exist. Another useful effort would be to integrate the KBRR ShoreZone mapping information into the larger ShoreZone mapping database maintained by Dr. John Harper so that we don?t have two ?competing? sets of ShoreZone maps for Kachemak Bay.

START OF NEW REVIEW

Review ID: **350**

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: 8

This proposal calls for the integration of data and information collected during Kachemak Bay CoastWalk activities into the ShoreZone imagery and data that is available as a geographical information system for Kachemak Bay. I think in principle, this is a nice cost-effective means of adding value to the ShoreZone GIS efforts that directly involves students and local residents in coastal monitoring and resource documentation.

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

RATING: 7

My misgivings mostly center upon the variable expertise of the participants, but the proposers seem to understand the limitations of the data that will be added to the existing GIS. The focus of the project will be on integrating existing CoastWalk data, followed by a citizen-scientist workshop. Unfortunately I didn?t get a precise idea of the quality and characteristics of the data that are available from the proposal. If the data to be added to the GIS are simple presence or absence data for specific species that can be unambiguously identified, it is not without value, but the sophistication needed to identify areas for special monitoring will not likely be achieved, at least at this stage. Nevertheless, the

citizen involvement and participatory nature of the CoastWalk activity is a strong point, and I? m cautiously optimistic that some significant value will come out of this proposed

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: 9
The proposal is relatively modest and economical in approach. The costs are consistent with other workshops of this nature. I don?t understand why purchase of two new licenses of ArcView is budgeted, given the presumed GIS expertise of the proposers, but that is a relatively minor point

Additional Comments

Exxon Valdez Oil Spill Trustee Council

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

Date 06/22/2004

Re: Response required regarding Edmundson-FY05-Synthesis of Watershed Linkages

Dear Dr. Edmundson,

The Scientific and Technical Advisory Committee has given your proposal a positive recommendation for funding that is contingent on some changes being made. The revisions requested by the STAC are in the attached statement of contingency. Also attached are the comments of non-STAC peer reviewers, if available.

If the revisions are not completed to the satisfaction of the Science Director within the specified time frame, the recommendation of the STAC for your proposal will change to "Do Not Fund." As funding can only be authorized by unanimous vote of the Trustee Council, a positive recommendation from the STAC is a prerequisite for funding, not a guarantee. Nonetheless, most proposals recommended by the STAC are subsequently funded by the Trustee Council, and conversely.

If you wish to continue to be considered for funding starting in FY 2005, please submit the revisions requested to Brenda Ramos in this office by **9:00 AM, Monday July 26, 2004.** To the extent that the revisions entail changes in the elements of the original proposal package, those elements will need to be updated and re-submitted. Please consult the FY 2005 Invitation on our web site for details.

If you anticipate that you will be unable to submit the revisions by the time above please advise Brenda Ramos so that the funding recommendation may be changed in a timely manner. Otherwise I will look forward to reviewing your revision on July 26.

Sincerely,

Phillip R. Mundy, Ph.D., Science Director

Cc: Executive Director, STAC, proposal files

Attachments (2)

Statement of Contingencies

Please provide a revised proposal and budget: The revision will address the following: The revision will stipulate that the project bibliography is to be done in ProCite, and that the introduction to the Watershed section of the Science Plan will be linked to the references in the ProCite bibliography. The revision will provide an outline of the product that is to be produced; the introduction to the Watershed section of the Science Plan. Production of the introduction of the watershed section of GEM Science Plan needs to be explicitly added as an objective. A list of recommendations on which to build a long-term monitoring plan needs to be explicitly stated as an objective. An objective will be added to attend the EVOS workshops for the presently ongoing GEM watershed projects in order to annually incorporate the status and results into the synthesis. Workshops that include stakeholders and scientists together need to be planned and budgeted. The travel budget needs to be explained in terms of the workshops and the objectives identified in the proposal. The revised proposal will include responses to peer reviewer comments as appropriate.

Reviews:

Review ID: **279**

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: 9

The proposers clearly understand watershed-marine linkages and have tailored the proposal to match their understanding. Although aspects of athe proposal are fairly procedural (surveying, contacting people, assembling information, etc.) the authors have begun both their abstract and introdiction with the pertinent technical information. They seem quite familiar with GEM and related activities in the GOA. I am confident that they will make meaningful contributions to generation and dissemination of knowledge in this area.

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

RATING: 9

I believe their methods are good. They have the experience in other places according to their CVs. They have appropriate contacts for this topic and will be able to make (or renew) connections with the right people quickly. The procedural steps they will go through are common to many problems, but they seem to have tailored them well to this subject.

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: 9

Especially with their knowledge of the subject, I am confident that the work they propose can be done with the available budget. They essentially have the needed team together now, and have published similar assessments.

Additional Comments

I feel good about this proposal. It seems to be right on target.

START OF NEW REVIEW

Review ID: **387**

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: 10

Sorry to be sophmoric in this response but this is truly one great proposal!!! Not only technically and scientifically sound, it provides a true integration of what is known hence CONTRIBUTES TREMENDOUSLY to the generation and dissemination of integrated/comprehensive knowledge.

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

RATING: 10

This is a highly polished comprehensive/integrative approach to the problem. The investigators credentials and experience are truly excellent. It is hard for me to imagine that there some some unknown scientists out there that could do the job anywhere near as good much less better.

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: 10

I have a small amount of concern that not enough money is being requested. The PI has both a full time job and will be finishing up his doctorate so I don't think he knows how little time he will have. It would be absolutely justified to increase the budget giving more time for a highly qualified research associate to help with all the work.

Additional Comments

It was very surprising to me, as far as I can discern, that this work has not already been done as a fundamental need for assessing both new and ongoing funding. I apologize for the lack of comments regarding this review but proposals stands by itself as a truly fine and meaty document. I thank GEM in advance for funding this project and look forward to seeing and using the final product.

Exxon Valdez Oil Spill Trustee Council

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

Date 06/22/2004

Re: Response required regarding Szarzi-FY05-Salmon Smolt Abundance

Dear Dr. Szarzi,

The Scientific and Technical Advisory Committee has given your proposal a positive recommendation for funding that is contingent on some changes being made. The revisions requested by the STAC are in the attached statement of contingency. Also attached are the comments of non-STAC peer reviewers, if available.

If the revisions are not completed to the satisfaction of the Science Director within the specified time frame, the recommendation of the STAC for your proposal will change to "Do Not Fund." As funding can only be authorized by unanimous vote of the Trustee Council, a positive recommendation from the STAC is a prerequisite for funding, not a guarantee. Nonetheless, most proposals recommended by the STAC are subsequently funded by the Trustee Council, and conversely.

If you wish to continue to be considered for funding starting in FY 2005, please submit the revisions requested to Brenda Ramos in this office by **9:00 AM, Monday July 26, 2004.** To the extent that the revisions entail changes in the elements of the original proposal package, those elements will need to be updated and re-submitted. Please consult the FY 2005 Invitation on our web site for details.

If you anticipate that you will be unable to submit the revisions by the time above please advise Brenda Ramos so that the funding recommendation may be changed in a timely manner. Otherwise I will look forward to reviewing your revision on July 26.

Sincerely,

Phillip R. Mundy, Ph.D., Science Director

Cc: Executive Director, STAC, proposal files

Attachments (2)

Statement of Contingencies

Please submit a revised proposal and budget. Revised narrative and budget are to provide for measuring stable isotopes, C, N, S. Funding contingent on addition of objective to estimate the proportion of marine derived elements (C, N, S) in the smolt. Budget is expected to increase. Authors are required to address comments of peer reviewers regarding potential biases in estimator of abundance in a letter prior to receiving funding.

Reviews:

Review ID: 317

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: 7

The project introduction suggests that this project will contribute to general knowledge of variation in freshwater and marine productivity of Chinook and coho salmon. Given that the proposal is a short-term (three year) study of a single small watershed (ecological sample size of one), it is hard to see how the results will be generalizable. That said, it will provide some local information that could be combined with other studies in a broader context, and could serve as the start of a potentially valuable longer-term time series.

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

RATING: 7

In general, the methods are good, and show good understanding of the field sampling problems and statistical treatment of the data generated. However, potential violations of the mark-recapture assumptions are severely downplayed; there are potential sources of substantial bias that are not effectively addressed. First, it is assumed that there is no adult immigration into the population. This assumption is dismissed in a single sentence saying that substantial immigration is unlikely. While wild fish migrations are not well studied, there is literature that would suggest that migration could be substantial at the spatial scales separating streams within Cook Inlet. Migration should not be dismissed without local evidence that it is unimportant. This issue could be addressed quite easily by either marking smolts in adjacent watersheds or checking for Anchor River marks in adjacent watersheds. Second, marking only smolts > 70mm could lead to bias in results if (as is likely) marine survival is size-dependent.

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: 10

The level of effort and budget are well constructed and appropriate for the scope of work.

Additional Comments

START OF NEW REVIEW

Review ID: 321

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: 3

This proposal begins with a discussion of the benefits of ?quantifying the influence of freshwater and marine habitats on variability in salmon production,? and characterizing freshwater ecosystems ? very, very ambitions goals that would obviously require monitoring over an extended period. The proposers state that ?this study will provide data to answer important biological questions needed to address concerns regarding stock productivity throughout the life cycle of both Chinook and coho salmon,? ? which I think means that they are intending to use this one study to make definitive statements about Chinook and coho stock productivity in the Anchor River watershed at the end of the study. However, there seems to be a substantial disconnect between the description of the problem and the project objectives. They intend to just coded-wire-tag smolts over a three-year period ? far short of what is needed to quantify this variability, let alone study what influences it. This tagging effort should lead to estimates of juvenile abundance, age class distribution, and short-term tag retention and survival, as the proposers state. But, I have strong reservations about their objective of estimating oceansurvival. Total return is made up of both catch and escapement. They intended to estimate catch by means of a mail-in survey. I see no reason to think that this mail-in survey will be either accurate enough or precise enough for this purpose. They do not seem to have anticipated this problem, nor offered anything to quiet a skeptic on this subject. If they have some reason to think that this survey is both accurate and precise enough, they should have included that information in the proposal.

Moreover, they seem to intend to quantify the uncertainty in the marine survival estimate using an approximate variance formula that is very much inappropriate unless the mail-in survey is highly accurate, which it probably is not. The proposers may have confused accuracy with precision ? I am not sure. One additional point is that the authors have not demonstrated that they are familiar with the current literature on this subject. Although they did cite an unpublished technical report from the 1970?s and a couple of technical reports on recent work done in Cook Inlet, I noted the absence of any of the modern papers on statistical methods for coded-wire tags or any citations of similar work done elsewhere ? although these citations exist.

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

RATING: 3

Over and over in the proposal, the authors seem to have exaggerated expectations for this effort. For example, they state ?Estimates of Chinook and coho salmon juvenile production in the Anchor River would be useful as predictors of future adult returns, allowing more responsive management?? There is really nothing that can be done in the

time frame of this study that would result in an effective forecasting tool that could be used in actual management. So, although there are probably genuine benefits that would flow from this study, there are no methods available that will provide solutions to the problems the proposal seeks to address in the time frame of this 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?

RATING: 3

I believe these proposers cannot meet all of the expectations they describe in the proposal, in the time frame they describe, using the methods they describe. The EVOS funding seems appropriate and reasonable for the actual field work, although the non-EVOS funds seems to be exaggerated for the stated objectives.

Additional Comments

Overall, I believe this is probably a very worthwhile project that could produce some real benefit. My main criticisms have to do with the disconnect between their statement of the problem and what they actually intend to do. I also think that the proposers approach to estimating marine survival is statistically unsound, as is their stated means of quantifying the uncertainty in that estimate.

Exxon Valdez Oil Spill Trustee Council

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

Date 06/22/2004

Re: Response required regarding Willette-FY05-Salmon Smolt Monitoring

Dear Dr. Willette,

The Scientific and Technical Advisory Committee has given your proposal a positive recommendation for funding that is contingent on some changes being made. The revisions requested by the STAC are in the attached statement of contingency. Also attached are the comments of non-STAC peer reviewers, if available.

If the revisions are not completed to the satisfaction of the Science Director within the specified time frame, the recommendation of the STAC for your proposal will change to "Do Not Fund." As funding can only be authorized by unanimous vote of the Trustee Council, a positive recommendation from the STAC is a prerequisite for funding, not a guarantee. Nonetheless, most proposals recommended by the STAC are subsequently funded by the Trustee Council, and conversely.

If you wish to continue to be considered for funding starting in FY 2005, please submit the revisions requested to Brenda Ramos in this office by **9:00 AM, Monday July 26, 2004.** To the extent that the revisions entail changes in the elements of the original proposal package, those elements will need to be updated and re-submitted. Please consult the FY 2005 Invitation on our web site for details.

If you anticipate that you will be unable to submit the revisions by the time above please advise Brenda Ramos so that the funding recommendation may be changed in a timely manner. Otherwise I will look forward to reviewing your revision on July 26.

Sincerely,

Phillip R. Mundy, Ph.D., Science Director

Cc: Executive Director, STAC, proposal files

Attachments (2)

Statement of Contingencies

Please submit a revised proposal and budget. Revised narrative and budget are to provide for measuring stable isotopes, C, N, S. Funding contingent on addition of objective to estimate the proportion of marine derived elements (C, N, S) in the smolt. Budget is expected to increase. Authors are required to address comments of peer reviewers regarding potential biases in estimator of abundance in a letter prior to receiving funding.

Reviews:

START OF NEW REVIEW

Review ID: **318**

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

The problem of providing pre-season forecasts is a serious one, and good estimates of smolt production would undoubtedly improve those forecasts. However, there is a fundamental flaw in the study design that limits that usefulness. The major aim of the proposal is to "evaluate the accuracy and precision" of two different smolt estimates over a two year period, and choose the best method relative to cost. However, the proposal fails to describe how the methods will be prepared. On the surface, there appears to be no way to evaluate the accuracy of either method, and the proposal addresses precision (in the form of a variance estimate) only for the mark-recapture method; thus, there is no way to conduct the fundamental comparison of the methods. There is also no description of how costs would be estimated or compared--direct costs of a pilot study don't necessarily relate to the life-cycle costs of a long-term monitoring program. Even though the primary goal of the study can't be met, there is still some value in the study. Even without knowing absolute accuracy, either method of smolt estimation, when conducted over a sufficiently long time frame, could contribute statistically to pre-season forecasting. The proposal also mentions benefits of the data to other biological studies in the area.

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

RATING: 7

The methods are fundamentally sound, although some of the description is unclear. Some questions that were unanswered: Is the initial (mark) sampling conducted once per week, or daily like the second (recapture) sampling? Is it certain that marked fish will migrate past the second sample point within the same week they are marked? If not, is there a way to distinguish marks among weeks? (This is critical for the stratified analysis techniques described.) What are the "tags" mentioned in the description of equation 1--no tagging was mentioned in the methods, only dye marks? Finally, there is no real discussion of potential biases in either sampling method, nor what is planned to reduce such biases.

RATING: 8

The budget seems commensurate with the amount of field work, although the field methods are not given in much detail.

Additional Comments

START OF NEW REVIEW

Review ID: **319**

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: 7

The work is largely based on the premise that smolt population size directly affects adult run size. What information is there that shows this is the case? Do PDO and ocean conditions generally play a larger role? If freshwater food webs are dependent on MDN (e.g., p. 3), shouldn't higher adult returns provide more MDN and subsequently support more smolts? Not sure how this information will improve the understanding of the "interplay between the positive ecological effects of MDN and the compensatory effects of large large juvenile salmon populations" (p. 3). Can more information be provided here for clarification on these points? Other than this, the proposal is sound and should contribute to better methods for estimating smolt populations.

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

RATING: 8

Methods for estimating smolt pops. seem sound. But is there some potential size-selection bias during the capturing phase of the study (3rd papragraph, p. 5) by using the beach seines or fyke nets? Can this be clarified/addressed?

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: 9

The solution should be achieved for the amount of money requested and within the indicated timeframe. Project is cost effective.

Additional Comments

Is the Mazumder project relying on this project for their samples? Do they already have funding in place to support their sampling? Will the Mazumder project still get their samples if this project is not funded?

What about the contribution of MDN from other salmon species, and what are the potential MDN effects on other species and thepotential interactions between juvenile

sockeye and other salmonids?

START OF NEW REVIEW

Review ID: **320**

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: 8

This proposal describes an ambitious attempt to deal with an important, although very difficult, problem with the management of one of Alaska?s most important sockeye stock groups. The proposers have demonstrated a complete understanding of the problem and the difficulties they are likely to face. They have done a good job of describing the technical obstacles standing in the way of the mark-recapture methods and hydroacoustics to measure smolt abundance in the riverine environment. Even so, a lot of very capable researchers have failed in the past to meet similar objectives, using similar methods. If they are successful, this will be an important step forward in developing methods for assessing smolt abundance ? and therefore estimating the marine survival for wild salmon returning to large rivers..

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

RATING: 9

Although there has been a lot of failure to achieve these kinds of objectives in Alaska, that is largely because there are no well-developed and effective tools that have a consistent and demonstrated record of success with this problem. I don?t know of a more appropriate way to try and estimate smolt abundance in the Kenai River.

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: 8

The EVOS funding seems appropriate and reasonable, although the non-EVOS funds does seem a little high for the stated objectives.. I believe these proposers have the ability to meet these objectives in the time frame they describe.

Additional Comments

Exxon Valdez Oil Spill Trustee Council

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

Date 06/22/2004

Re: Response required regarding Willette-FY05-Salmon Smolt Monitoring

Dear Dr. Willette,

The Scientific and Technical Advisory Committee has given your proposal a positive recommendation for funding that is contingent on some changes being made. The revisions requested by the STAC are in the attached statement of contingency. Also attached are the comments of non-STAC peer reviewers, if available.

If the revisions are not completed to the satisfaction of the Science Director within the specified time frame, the recommendation of the STAC for your proposal will change to "Do Not Fund." As funding can only be authorized by unanimous vote of the Trustee Council, a positive recommendation from the STAC is a prerequisite for funding, not a guarantee. Nonetheless, most proposals recommended by the STAC are subsequently funded by the Trustee Council, and conversely.

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If you anticipate that you will be unable to submit the revisions by the time above please advise Brenda Ramos so that the funding recommendation may be changed in a timely manner. Otherwise I will look forward to reviewing your revision on July 26.

Sincerely,

Phillip R. Mundy, Ph.D., Science Director

Cc: Executive Director, STAC, proposal files

Attachments (2)

Statement of Contingencies

Please submit a revised proposal and budget. Revised narrative and budget are to provide for measuring stable isotopes, C, N, S. Funding contingent on addition of objective to estimate the proportion of marine derived elements (C, N, S) in the smolt. Budget is expected to increase. Authors are required to address comments of peer reviewers regarding potential biases in estimator of abundance in a letter prior to receiving funding.

Reviews:

START OF NEW REVIEW

Review ID: **318**

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

The problem of providing pre-season forecasts is a serious one, and good estimates of smolt production would undoubtedly improve those forecasts. However, there is a fundamental flaw in the study design that limits that usefulness. The major aim of the proposal is to "evaluate the accuracy and precision" of two different smolt estimates over a two year period, and choose the best method relative to cost. However, the proposal fails to describe how the methods will be prepared. On the surface, there appears to be no way to evaluate the accuracy of either method, and the proposal addresses precision (in the form of a variance estimate) only for the mark-recapture method; thus, there is no way to conduct the fundamental comparison of the methods. There is also no description of how costs would be estimated or compared--direct costs of a pilot study don't necessarily relate to the life-cycle costs of a long-term monitoring program. Even though the primary goal of the study can't be met, there is still some value in the study. Even without knowing absolute accuracy, either method of smolt estimation, when conducted over a sufficiently long time frame, could contribute statistically to pre-season forecasting. The proposal also mentions benefits of the data to other biological studies in the area.

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

RATING: 7

The methods are fundamentally sound, although some of the description is unclear. Some questions that were unanswered: Is the initial (mark) sampling conducted once per week, or daily like the second (recapture) sampling? Is it certain that marked fish will migrate past the second sample point within the same week they are marked? If not, is there a way to distinguish marks among weeks? (This is critical for the stratified analysis techniques described.) What are the "tags" mentioned in the description of equation 1--no tagging was mentioned in the methods, only dye marks? Finally, there is no real discussion of potential biases in either sampling method, nor what is planned to reduce such biases.

RATING: 8

The budget seems commensurate with the amount of field work, although the field methods are not given in much detail.

Additional Comments

START OF NEW REVIEW

Review ID: **319**

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: 7

The work is largely based on the premise that smolt population size directly affects adult run size. What information is there that shows this is the case? Do PDO and ocean conditions generally play a larger role? If freshwater food webs are dependent on MDN (e.g., p. 3), shouldn't higher adult returns provide more MDN and subsequently support more smolts? Not sure how this information will improve the understanding of the "interplay between the positive ecological effects of MDN and the compensatory effects of large large juvenile salmon populations" (p. 3). Can more information be provided here for clarification on these points? Other than this, the proposal is sound and should contribute to better methods for estimating smolt populations.

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

RATING: 8

Methods for estimating smolt pops. seem sound. But is there some potential size-selection bias during the capturing phase of the study (3rd papragraph, p. 5) by using the beach seines or fyke nets? Can this be clarified/addressed?

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: 9

The solution should be achieved for the amount of money requested and within the indicated timeframe. Project is cost effective.

Additional Comments

Is the Mazumder project relying on this project for their samples? Do they already have funding in place to support their sampling? Will the Mazumder project still get their samples if this project is not funded?

What about the contribution of MDN from other salmon species, and what are the potential MDN effects on other species and thepotential interactions between juvenile

sockeye and other salmonids?

START OF NEW REVIEW

Review ID: **320**

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: 8

This proposal describes an ambitious attempt to deal with an important, although very difficult, problem with the management of one of Alaska?s most important sockeye stock groups. The proposers have demonstrated a complete understanding of the problem and the difficulties they are likely to face. They have done a good job of describing the technical obstacles standing in the way of the mark-recapture methods and hydroacoustics to measure smolt abundance in the riverine environment. Even so, a lot of very capable researchers have failed in the past to meet similar objectives, using similar methods. If they are successful, this will be an important step forward in developing methods for assessing smolt abundance ? and therefore estimating the marine survival for wild salmon returning to large rivers..

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

RATING: 9

Although there has been a lot of failure to achieve these kinds of objectives in Alaska, that is largely because there are no well-developed and effective tools that have a consistent and demonstrated record of success with this problem. I don?t know of a more appropriate way to try and estimate smolt abundance in the Kenai River.

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: 8

The EVOS funding seems appropriate and reasonable, although the non-EVOS funds does seem a little high for the stated objectives.. I believe these proposers have the ability to meet these objectives in the time frame they describe.

Additional Comments

Exxon Valdez Oil Spill Trustee Council

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

Date 06/22/2004

Re: Response required regarding Szarzi-FY05-Salmon Smolt Abundance

Dear Dr. Szarzi,

The Scientific and Technical Advisory Committee has given your proposal a positive recommendation for funding that is contingent on some changes being made. The revisions requested by the STAC are in the attached statement of contingency. Also attached are the comments of non-STAC peer reviewers, if available.

If the revisions are not completed to the satisfaction of the Science Director within the specified time frame, the recommendation of the STAC for your proposal will change to "Do Not Fund." As funding can only be authorized by unanimous vote of the Trustee Council, a positive recommendation from the STAC is a prerequisite for funding, not a guarantee. Nonetheless, most proposals recommended by the STAC are subsequently funded by the Trustee Council, and conversely.

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If you anticipate that you will be unable to submit the revisions by the time above please advise Brenda Ramos so that the funding recommendation may be changed in a timely manner. Otherwise I will look forward to reviewing your revision on July 26.

Sincerely,

Phillip R. Mundy, Ph.D., Science Director

Cc: Executive Director, STAC, proposal files

Attachments (2)

Statement of Contingencies

Please submit a revised proposal and budget. Revised narrative and budget are to provide for measuring stable isotopes, C, N, S. Funding contingent on addition of objective to estimate the proportion of marine derived elements (C, N, S) in the smolt. Budget is expected to increase. Authors are required to address comments of peer reviewers regarding potential biases in estimator of abundance in a letter prior to receiving funding.

Reviews:

Review ID: 317

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: 7

The project introduction suggests that this project will contribute to general knowledge of variation in freshwater and marine productivity of Chinook and coho salmon. Given that the proposal is a short-term (three year) study of a single small watershed (ecological sample size of one), it is hard to see how the results will be generalizable. That said, it will provide some local information that could be combined with other studies in a broader context, and could serve as the start of a potentially valuable longer-term time series.

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

RATING: 7

In general, the methods are good, and show good understanding of the field sampling problems and statistical treatment of the data generated. However, potential violations of the mark-recapture assumptions are severely downplayed; there are potential sources of substantial bias that are not effectively addressed. First, it is assumed that there is no adult immigration into the population. This assumption is dismissed in a single sentence saying that substantial immigration is unlikely. While wild fish migrations are not well studied, there is literature that would suggest that migration could be substantial at the spatial scales separating streams within Cook Inlet. Migration should not be dismissed without local evidence that it is unimportant. This issue could be addressed quite easily by either marking smolts in adjacent watersheds or checking for Anchor River marks in adjacent watersheds. Second, marking only smolts > 70mm could lead to bias in results if (as is likely) marine survival is size-dependent.

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: 10

The level of effort and budget are well constructed and appropriate for the scope of work.

Additional Comments

START OF NEW REVIEW

Review ID: 321

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: 3

This proposal begins with a discussion of the benefits of ?quantifying the influence of freshwater and marine habitats on variability in salmon production,? and characterizing freshwater ecosystems ? very, very ambitions goals that would obviously require monitoring over an extended period. The proposers state that ?this study will provide data to answer important biological questions needed to address concerns regarding stock productivity throughout the life cycle of both Chinook and coho salmon,? ? which I think means that they are intending to use this one study to make definitive statements about Chinook and coho stock productivity in the Anchor River watershed at the end of the study. However, there seems to be a substantial disconnect between the description of the problem and the project objectives. They intend to just coded-wire-tag smolts over a three-year period ? far short of what is needed to quantify this variability, let alone study what influences it. This tagging effort should lead to estimates of juvenile abundance, age class distribution, and short-term tag retention and survival, as the proposers state. But, I have strong reservations about their objective of estimating oceansurvival. Total return is made up of both catch and escapement. They intended to estimate catch by means of a mail-in survey. I see no reason to think that this mail-in survey will be either accurate enough or precise enough for this purpose. They do not seem to have anticipated this problem, nor offered anything to quiet a skeptic on this subject. If they have some reason to think that this survey is both accurate and precise enough, they should have included that information in the proposal.

Moreover, they seem to intend to quantify the uncertainty in the marine survival estimate using an approximate variance formula that is very much inappropriate unless the mail-in survey is highly accurate, which it probably is not. The proposers may have confused accuracy with precision ? I am not sure. One additional point is that the authors have not demonstrated that they are familiar with the current literature on this subject. Although they did cite an unpublished technical report from the 1970?s and a couple of technical reports on recent work done in Cook Inlet, I noted the absence of any of the modern papers on statistical methods for coded-wire tags or any citations of similar work done elsewhere ? although these citations exist.

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

RATING: 3

Over and over in the proposal, the authors seem to have exaggerated expectations for this effort. For example, they state ?Estimates of Chinook and coho salmon juvenile production in the Anchor River would be useful as predictors of future adult returns, allowing more responsive management?? There is really nothing that can be done in the

time frame of this study that would result in an effective forecasting tool that could be used in actual management. So, although there are probably genuine benefits that would flow from this study, there are no methods available that will provide solutions to the problems the proposal seeks to address in the time frame of this 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?

RATING: 3

I believe these proposers cannot meet all of the expectations they describe in the proposal, in the time frame they describe, using the methods they describe. The EVOS funding seems appropriate and reasonable for the actual field work, although the non-EVOS funds seems to be exaggerated for the stated objectives.

Additional Comments

Overall, I believe this is probably a very worthwhile project that could produce some real benefit. My main criticisms have to do with the disconnect between their statement of the problem and what they actually intend to do. I also think that the proposers approach to estimating marine survival is statistically unsound, as is their stated means of quantifying the uncertainty in that estimate.

Exxon Valdez Oil Spill Trustee Council

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

Date 06/22/2004

Re: Response required regarding Edmundson-FY05-Synthesis of Watershed Linkages

Dear Dr. Edmundson,

The Scientific and Technical Advisory Committee has given your proposal a positive recommendation for funding that is contingent on some changes being made. The revisions requested by the STAC are in the attached statement of contingency. Also attached are the comments of non-STAC peer reviewers, if available.

If the revisions are not completed to the satisfaction of the Science Director within the specified time frame, the recommendation of the STAC for your proposal will change to "Do Not Fund." As funding can only be authorized by unanimous vote of the Trustee Council, a positive recommendation from the STAC is a prerequisite for funding, not a guarantee. Nonetheless, most proposals recommended by the STAC are subsequently funded by the Trustee Council, and conversely.

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If you anticipate that you will be unable to submit the revisions by the time above please advise Brenda Ramos so that the funding recommendation may be changed in a timely manner. Otherwise I will look forward to reviewing your revision on July 26.

Sincerely,

Phillip R. Mundy, Ph.D., Science Director

Cc: Executive Director, STAC, proposal files

Attachments (2)

Statement of Contingencies

Please provide a revised proposal and budget: The revision will address the following: The revision will stipulate that the project bibliography is to be done in ProCite, and that the introduction to the Watershed section of the Science Plan will be linked to the references in the ProCite bibliography. The revision will provide an outline of the product that is to be produced; the introduction to the Watershed section of the Science Plan. Production of the introduction of the watershed section of GEM Science Plan needs to be explicitly added as an objective. A list of recommendations on which to build a long-term monitoring plan needs to be explicitly stated as an objective. An objective will be added to attend the EVOS workshops for the presently ongoing GEM watershed projects in order to annually incorporate the status and results into the synthesis. Workshops that include stakeholders and scientists together need to be planned and budgeted. The travel budget needs to be explained in terms of the workshops and the objectives identified in the proposal. The revised proposal will include responses to peer reviewer comments as appropriate.

Reviews:

Review ID: **279**

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: 9

The proposers clearly understand watershed-marine linkages and have tailored the proposal to match their understanding. Although aspects of athe proposal are fairly procedural (surveying, contacting people, assembling information, etc.) the authors have begun both their abstract and introdiction with the pertinent technical information. They seem quite familiar with GEM and related activities in the GOA. I am confident that they will make meaningful contributions to generation and dissemination of knowledge in this area.

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

RATING: 9

I believe their methods are good. They have the experience in other places according to their CVs. They have appropriate contacts for this topic and will be able to make (or renew) connections with the right people quickly. The procedural steps they will go through are common to many problems, but they seem to have tailored them well to this subject.

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: 9

Especially with their knowledge of the subject, I am confident that the work they propose can be done with the available budget. They essentially have the needed team together now, and have published similar assessments.

Additional Comments

I feel good about this proposal. It seems to be right on target.

START OF NEW REVIEW

Review ID: **387**

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: 10

Sorry to be sophmoric in this response but this is truly one great proposal!!! Not only technically and scientifically sound, it provides a true integration of what is known hence CONTRIBUTES TREMENDOUSLY to the generation and dissemination of integrated/comprehensive knowledge.

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

RATING: 10

This is a highly polished comprehensive/integrative approach to the problem. The investigators credentials and experience are truly excellent. It is hard for me to imagine that there some some unknown scientists out there that could do the job anywhere near as good much less better.

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: 10

I have a small amount of concern that not enough money is being requested. The PI has both a full time job and will be finishing up his doctorate so I don't think he knows how little time he will have. It would be absolutely justified to increase the budget giving more time for a highly qualified research associate to help with all the work.

Additional Comments

It was very surprising to me, as far as I can discern, that this work has not already been done as a fundamental need for assessing both new and ongoing funding. I apologize for the lack of comments regarding this review but proposals stands by itself as a truly fine and meaty document. I thank GEM in advance for funding this project and look forward to seeing and using the final product.

Exxon Valdez Oil Spill Trustee Council

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

Date 06/22/2004

Re: Response required regarding Baird-FY05-Connecting with Coastwalk

Dear Mr. Baird,

The Scientific and Technical Advisory Committee has given your proposal a positive recommendation for funding that is contingent on some changes being made. The revisions requested by the STAC are in the attached statement of contingency. Also attached are the comments of non-STAC peer reviewers, if available.

If the revisions are not completed to the satisfaction of the Science Director within the specified time frame, the recommendation of the STAC for your proposal will change to "Do Not Fund." As funding can only be authorized by unanimous vote of the Trustee Council, a positive recommendation from the STAC is a prerequisite for funding, not a guarantee. Nonetheless, most proposals recommended by the STAC are subsequently funded by the Trustee Council, and conversely.

If you wish to continue to be considered for funding starting in FY 2005, please submit the revisions requested to Brenda Ramos in this office by **9:00 AM, Monday July 26, 2004.** To the extent that the revisions entail changes in the elements of the original proposal package, those elements will need to be updated and re-submitted. Please consult the FY 2005 Invitation on our web site for details.

If you anticipate that you will be unable to submit the revisions by the time above please advise Brenda Ramos so that the funding recommendation may be changed in a timely manner. Otherwise I will look forward to reviewing your revision on July 26.

Sincerely,

Phillip R. Mundy, Ph.D., Science Director

Cc: Executive Director, STAC, proposal files

Attachments (2)

Statement of Contingencies

Please provide a revised proposal and budget: The proposal needs to be expanded into a three-year approach where the validity of the CoastWalk data set is evaluated by intertidal specialists for taxonomic accuracy, consistency, and applicability of abundance classifications in the first year, followed by incorporation (the original proposal) in the second and third years. Peer reviewer concerns need to be addressed in the rewritten proposal and re-budgeted proposal. Improve the cited literature to demonstrate that the proposal is informed on what information is available to provide accurate coastal resource inventories that could be incorporated into the proposed study. Outline a process whereby the data are proven to be worthy of consideration and incorporation. The revision is expected to establish the connection of the proposed work to the historic data sets available within the targeted region to establish a comprehensive perspective on what studies have been done and what data gaps still exist. The revision will further state explicitly how duplication of effort is to be avoided by future integration of the KBRR ShoreZone mapping information into the larger ShoreZone mapping database maintained by Dr. John Harper.

Reviews:

START OF NEW REVIEW

Review ID: **341**

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: 8

The proposal is fairly well written and does provide an explanation of the problem. The objectives are clear. The project is challenged by the potential incompatibility between the nearshore mapping GIS and the CoastWalk database - how will the database be geo-referenced to specific nearshore mapping habitat polygons? Updating the monitoring protocol is key to effective integration of the programs. Legacy data probably cannot be calibrated to the updated protocol, though, limiting the quantitative analytical usefulness of the historical information in an ongoing scientific context.

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

RATING: 9

Given the limitations inherent in working with legacy data that were not intended for high resolution geo-referencing to a GIS, not

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: 7

The software tools needed to integrate the database to the GIS are available as standard applications, requiring little custom programming. This type of work always takes longer than expected, though, and the amount of time and funding identified may not be enough for contingencies.

Additional Comments

START OF NEW REVIEW

Review ID: **344**

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

The proposed work will merge existing shore zone maps with historic data on some undisclosed results of community based surveys of shoreline biota and human impacts. The methods/data presented on community surveys are inadequate to evaluate the feasibility and potential contribution of the work.

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

RATING: 3

The proposal provides inadequate information on the design, methods, results and conclusions that can be drawn from the periodic Coast Walk program conducted in Kachemak Bay to evaluate the potential benefit to the GEM program.

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

The proposed work has potential merit in that community based shoreline sampling is linked with existing shore zone maps. Such community based sampling may have a role in the GEM program but too little detail are provided on the community surveys to critically evaluate the potential merit. The proposal is of relatively low cost and if details on coast walk surveys (e.g. sampling design, segement dimensons, effort, data fields...) could be provided, the proposal may be worth considering.

Additional Comments

START OF NEW REVIEW

Review ID: **345**

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: 1

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

RATING: 1

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: 1

Additional Comments

Applicability of Approach to GEM Goals and Objectives

The aims of the program are in agreement with the GEM program objectives and Science Plan strategies encouraging and ?fostering community involvement and local knowledge and to a lesser degree, of supporting management applications.? However, for reasons described below, I think it has the cart before the horse.

Validity of Rationale

The second sentence of A. ?Statement of Problem? and a glance at the cited literature suggest that the proposal authors are woefully uninformed on what information is available to provide ?accurate coastal resource inventories? (just in Kachemak Bay)for coastal resource managers, etc., and that could be incorporated into their proposed study. Large volumes of information were generated in the 1970s specifically on intertidal and subtidal resources in Kachemak Bay through OCSEAP, state, and local governmental funding and have been catalogued in the Kachemak Bay NERR library. It concerns me that this body of detailed information is neither acknowledged nor considered for integration into the Shoreline mapping database whereas the less detailed community-based monitoring results are apparently considered, without serious review for taxonomic accuracy and continuity, worthy of integration.

I am concerned by the statement, ?We propose to show that biological and human impact data collection using CoastWalk and GLOBE protocols can be integrated into ShoreZone mapping and high-resolution GIS shoreline mapping of geomorphological and physical features to enhance the basis for nearshore monitoring site selection.? This suggests that the intent of the program is to prove that integration is possible rather than to evaluate whether the CoastWalk data set has the validity to justify integration. It assumes that the CoastWalk data are of value without demonstrating this. I believe this approach is flawed. Before funds are expended to effect integration, the case must be made that the data are worthy of consideration and incorporation. Otherwise, the program may just introduce misleading noise into the system. The objective of developing data collection protocols for the community-based CoastWalk program is a worthy one but development should not take place until the existing data set is reviewed and evaluated to understand where inconsistencies and problems exist. The evaluation process will also provide needed insight into the capabilities and limitations that will be encountered in the volunteer population.

Recommendations

I do not recommend that this proposal be funded. Instead, I encourage the proposal authors to have the validity of CoastWalk data set evaluated by intertidal specialists for taxonomic accuracy, consistency, and applicability of abundance classifications. These types of issues need to be satisfied BEFORE there is consideration for integrating these possibly anecdotal data into the relatively rigorous data set provided by ShoreZone mapping. I believe that it would be inappropriate and invalid to integrate the CoastWalk data set into the ShoreZone data set without validation because its inclusion would suggest level of credibility that it has not yet earned. Furthermore, I would recommend that the authors familiarize themselves with the historic data sets available within their region so that they can approach future research with a more comprehensive perspective on what studies have been done and what data gaps still exist. Another useful effort would be to integrate the KBRR ShoreZone mapping information into the larger ShoreZone mapping database maintained by Dr. John Harper so that we don?t have two ?competing? sets of ShoreZone maps for Kachemak Bay.

START OF NEW REVIEW

Review ID: **350**

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: 8

This proposal calls for the integration of data and information collected during Kachemak Bay CoastWalk activities into the ShoreZone imagery and data that is available as a geographical information system for Kachemak Bay. I think in principle, this is a nice cost-effective means of adding value to the ShoreZone GIS efforts that directly involves students and local residents in coastal monitoring and resource documentation.

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

RATING: 7

My misgivings mostly center upon the variable expertise of the participants, but the proposers seem to understand the limitations of the data that will be added to the existing GIS. The focus of the project will be on integrating existing CoastWalk data, followed by a citizen-scientist workshop. Unfortunately I didn?t get a precise idea of the quality and characteristics of the data that are available from the proposal. If the data to be added to the GIS are simple presence or absence data for specific species that can be unambiguously identified, it is not without value, but the sophistication needed to identify areas for special monitoring will not likely be achieved, at least at this stage. Nevertheless, the

citizen involvement and participatory nature of the CoastWalk activity is a strong point, and I? m cautiously optimistic that some significant value will come out of this proposed

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: 9
The proposal is relatively modest and economical in approach. The costs are consistent with other workshops of this nature. I don?t understand why purchase of two new licenses of ArcView is budgeted, given the presumed GIS expertise of the proposers, but that is a relatively minor point

Additional Comments

Exxon Valdez Oil Spill Trustee Council

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

Date 06/22/2004

Re: Response required regarding Konar-FY05-SOP for Long-term Monitoring

Dear Dr. Konar,

The Scientific and Technical Advisory Committee has given your proposal a positive recommendation for funding that is contingent on some changes being made. The revisions requested by the STAC are in the attached statement of contingency. Also attached are the comments of non-STAC peer reviewers, if available.

If the revisions are not completed to the satisfaction of the Science Director within the specified time frame, the recommendation of the STAC for your proposal will change to "Do Not Fund." As funding can only be authorized by unanimous vote of the Trustee Council, a positive recommendation from the STAC is a prerequisite for funding, not a guarantee. Nonetheless, most proposals recommended by the STAC are subsequently funded by the Trustee Council, and conversely.

If you wish to continue to be considered for funding starting in FY 2005, please submit the revisions requested to Brenda Ramos in this office by **9:00 AM, Monday July 26, 2004.** To the extent that the revisions entail changes in the elements of the original proposal package, those elements will need to be updated and re-submitted. Please consult the FY 2005 Invitation on our web site for details.

If you anticipate that you will be unable to submit the revisions by the time above please advise Brenda Ramos so that the funding recommendation may be changed in a timely manner. Otherwise I will look forward to reviewing your revision on July 26.

Sincerely,

Phillip R. Mundy, Ph.D., Science Director

Cc: Executive Director, STAC, proposal files

Attachments (2)

Statement of Contingencies

Please provide a revised project narrative and reduced budget. Propose to write reports and manuscripts on the current GEM work (through summer 2004), propose to work with the Bodkin project to identify long-term permanent monitoring sites. Reduce proposed sampling efforts in the anticipation of the implementation process for GEM being in place. Move closer to the model of Bodkin and Dean. Propose sampling efforts in places where there is not currently sampling and reduce sampling in areas that are over sampled. Work to move efforts closer to the original model of Bodkin and Dean. Address other peer review comments as appropriate.

Reviews:

START OF NEW REVIEW

Review ID: **284**

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: 9

The proposal is technically and scientifically sound. I encourage the proposers to contact Alan Bennett of the National Park Service regarding the NPS's nearshore inventory and monitoring program taking place in Kenai Fjords, Katmai and Lake Clark National Parks. 907-644-3681

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

RATING: 9

Because the proposers have selected tried and true protocol they are well ahead of the curve.

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: 9

The budget appears to be realistic given the nature of the study. Marine studies are logistically challenging and the budget reflects this. The administrative overhead seems very reasonable as well. Project milestones appear well defined and achievable given the qualifications of the proposers.

Additional Comments

I favor this proposal because it does not hinge on development of new protocol. The use of existing methods, consistent with other monitoring efforts, will go a long way to allow for comparability of data and identification of trends.

Exxon Valdez Oil Spill Trustee Council

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

Date 06/22/2004

Re: Response required regarding Moffitt-FY05-SEA Pink Salmon Survival Model

Dear Dr. Moffitt,

The Scientific and Technical Advisory Committee has given your proposal a positive recommendation for funding that is contingent on some changes being made. The revisions requested by the STAC are in the attached statement of contingency. Also attached are the comments of non-STAC peer reviewers, if available.

If the revisions are not completed to the satisfaction of the Science Director within the specified time frame, the recommendation of the STAC for your proposal will change to "Do Not Fund." As funding can only be authorized by unanimous vote of the Trustee Council, a positive recommendation from the STAC is a prerequisite for funding, not a guarantee. Nonetheless, most proposals recommended by the STAC are subsequently funded by the Trustee Council, and conversely.

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If you anticipate that you will be unable to submit the revisions by the time above please advise Brenda Ramos so that the funding recommendation may be changed in a timely manner. Otherwise I will look forward to reviewing your revision on July 26.

Sincerely,

Phillip R. Mundy, Ph.D., Science Director

Cc: Executive Director, STAC, proposal files

Attachments (2)

Statement of Contingencies

Please provide a revised proposal and budget: The revision is to address measuring sources of handling mortality per peer reviewer concerns. The revised narrative and budget will add objective(s) and method(s) to measure handling mortality. The budget is expected to increase as a result.

Peer Reviewer Comments:
For (1) juvenile salmon will be captured, tagged and held for a 96 hours to see how many die. Four days seems short, but probably most death from the insertions will have run its course by then. No control is proposed, which seems to me a mistake. Without an untagged control group of some kind, tag mortality cannot be separated from general mortality. The obvious control is fish captured and held but not anesthetized or tagged. It is true that there probably is no way to separate specifically tag mortality from capture-induced mortality, since background mortality would also continue in both groups.

For (2) tag reading in processing plants is to be evaluated by injecting tags into mature fish entering the processing line. Clearly, these tags should have been aged in temperatures and wet conditions comparable to a ride through the ocean inside a salmon. No such conditioning was mentioned. Otherwise, the effort seems sound. There must be specifications for the PIT antennas to optimize detection, but those aren't mentioned; the project sounds as if it is taking on PIT detection without much guidance for antenna placement, etc. In any case, a test independent of those by the manufacturer is surely in order. The STAC expects that handling mortality will be estimated.

Questions regarding this proposal are:

No mention is made of the plan, timing or scale of the ultimate PIT tagging to be carried out for juveniles exiting PWS. It will take thousands, maybe >10,000, tags to obtain useful results, if return rates are of the likely order of a few percent. Some statement of the ultimate plan would have improved the proposal.

(2) Is the PIT method sound in its full application in the field? It is possible that the main tag mortality effect won't be discernible in a holding-pen study, since even a slightly enhanced susceptibility to predators could be much more important than effects the holding pen study will test: mortality directly from cannula insertion, infection, irritation from the PIT, anesthesia effects.

Methods are unclear. I understand the placement of PIT tags in juveniles (Objective 1—200 fish), but I do not understand the methods for Objective 2. It is unclear what adults, what methods. It may be a matter on clarity, not true methodology, but I simply do not understand. I also would suggest that more attention be paid to whether 200 fish is sufficient for Objective 1, sample size is unclear in Objective 2

Reviews:

START OF NEW REVIEW

Review ID: 370

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: 9

Could provide more direct detail on scientific questions and how this fits into historical PWS pink salmon research, rather than basing it mainly on support by workshop participants. While I'm somewhat familiar with the questions that this proposal is targeting, other reviewers may not be. I believe the approach is sound and will provide a substantial contribution.

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

RATING: 10

Tagging this size of fish should be feasible using PIT tags. The proposer did not mention why PIT tags were selected rather than full-length coded-wire tags (CWTs). At minimum, the project should provide information needed to evaluate the relative feasibility and potential biases of using PIT tags compared with what is known from CWT projects in the sound.

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: 10

The project appears very cost-effective. It appears achievable with the budget.

Additional Comments

It appears to be a well thought out and cost-effective proposal that is needed to open the next frontier to understanding processes affecting marine mortality of PWS pink salmon.

START OF NEW REVIEW

Review ID: 372

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: 10

This project is a feasibility study to determine the efficacy of PIT tagsto mark juvenile pink salmon emigrating from Prince William Sound. The project will explore techniques for monitoring ecosystem function in relation to early marine mortality of pink salmon and for determining the variation in overall marine survival due to the early marine and oceanic phases of the pink salmon life history. Such information is essential for management application of the SEA model and juvenile censusing to improve forecasting and to manage hatchery release strategies to optimize survival while minimizing impacts of the releases on wild stocks. The ability to partition the variability in survival of release groups into PWS and oceanic stanzas would increase our understanding of mortality processes affecting salmon in the Gulf of Alaska ecosystem, and determine if juvenile censusing can reliably be used as a forecasting tool.

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

RATING: 9

The project will determine if PIT-tagging at sea is a reasonable approach for secondary-marking of pink salmon emigrating from PWS. The methods are effective and appropriate for a feasibility study. Two major issues will be addressed: 1) the feasibility of marking, including capture, handling, and estimation of short-term mortality; 2)the feasibility of automated detection of tags from processing lines. The number of tags that can be released will be limited by cost and capture and marking rates; a high percentage of the catch must be censused to recover sufficient tags for estimation of mortality, and the detection rate must be well-understood to avoid a negative bias in the mortality estimate. The study is well-designed for examining the feasibility of these issues. Before the approach is advanced from feasibility to implementation, the data from this project must be carefully evaluated to determine if the number of tags that can be affordably released will be adequate to estimate variability in oceanic mortality, given the observed short-term mortality and tag loss, the potential for long-term effects of tagging on survival, the proportion of the catch and escapement that can be surveyed for tags, and the uncertainty in the tag detection rate.

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: 10

The project personel are uniquely suited to carry out the objectives of the study because of their scientific expertise, experience with sampling juvenile salmon in the study area, and their ability to provide equipment and senior staff support. This in-kind support makes the feasibility study extremely cost-effective. This project was been coordinated with the proposal to develop an implementation plan for the SEA pink salmon model; timely completion is essential to provide input to the planning process.

Additional Comments

This project is an important component of the planning process for implementation of the SEA pink salmon model. The project will provide not only insight into the feasibilityof secondary marking with PIT tags, but also more information on sampling emigrating juvenile pink salmon for evaluation of hatchery-specific otolith marks, essential for using the pink salmon model for evaluating early marine mortality processes affecting pink salmon.

Exxon Valdez Oil Spill Trustee Council

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

Date 06/22/2004

Re: Response required regarding Schoch-FY05-ShoreZone Mapping for PWS

Dear Dr. Schoch,

The Scientific and Technical Advisory Committee has given your proposal a positive recommendation for funding that is contingent on some changes being made. The revisions requested by the STAC are in the attached statement of contingency. Also attached are the comments of non-STAC peer reviewers, if available.

If the revisions are not completed to the satisfaction of the Science Director within the specified time frame, the recommendation of the STAC for your proposal will change to "Do Not Fund." As funding can only be authorized by unanimous vote of the Trustee Council, a positive recommendation from the STAC is a prerequisite for funding, not a guarantee. Nonetheless, most proposals recommended by the STAC are subsequently funded by the Trustee Council, and conversely.

If you wish to continue to be considered for funding starting in FY 2005, please submit the revisions requested to Brenda Ramos in this office by **9:00 AM, Monday July 26, 2004.** To the extent that the revisions entail changes in the elements of the original proposal package, those elements will need to be updated and re-submitted. Please consult the FY 2005 Invitation on our web site for details.

If you anticipate that you will be unable to submit the revisions by the time above please advise Brenda Ramos so that the funding recommendation may be changed in a timely manner. Otherwise I will look forward to reviewing your revision on July 26.

Sincerely,

Phillip R. Mundy, Ph.D., Science Director

Cc: Executive Director, STAC, proposal files

Attachments (2)

Statement of Contingencies

Please submit a revised proposal and reduced budget. The revision is to address the specifics of the localities to be mapped. The areas so identified need to be identified in terms of existing information and its adequacy to serve the purposes of design of the Nearshore Monitoring program for GEM. Further the Copper River Delta region is to be excluded. The revision is to cover a two-year project (not 3 years as proposed) as requested in the Invitation for Proposals. The revision is also to address the Alyeska video of the shore zones and why it is (is not) being used to serve the purposes for which funding is being requested. Problem with financial information needs to be rectified; FY 05 contractual dollar amount on the justification ($134.9) does not match the budget ($134.3) by 600 dollars. See GA for FY 06, should be 29.1.

Reviews:

START OF NEW REVIEW

Review ID: **353**

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: 9

A comprehensive inventory will be extremely valuable to researchers and managers. The technique and usefulness is proven. The challenge will be to insure the methods and products are regionally appropriate but also comparable to contiguous coastal inventories. No statement is explicit to this effect. There is no statistical component to the study and none needed. No quality/assurance/quality control protocol is proposed to insure observer accuracy and among-observer consistency. Quality assurance is implied by a "formalized data collection procedure".

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

RATING: 9

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: 8

This is a very expensive project. AVI surveys are very highly dependent on weather. Serial 6-day surveys during low-tide windows will be difficult to achieve. Shore access for shore-zone mapping is also weather dependent. Scheduling four surveys over two years reduces the risk of under-achieving the overall goal of coastline to be imaged. However, cost overruns may still result from abbreviated AVI survey trips and weather delays.

Additional Comments

START OF NEW REVIEW

Review ID: **354**

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: 1

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

RATING: 1

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: 1

Additional Comments

Potential Conflict of Interest In reviewing the details of the budget, I find that I am listed as a participant in the ground-truth studies. Consequently, my comments should be viewed from the perspective that I have a conflict of interest, as I would probably receive compensation if the program were funded.

Value to GEM objectives

It is my impression that the products of this program would provide a valuable inventory of the distribution and abundance of wetlands, intertidal, and shallow subtidal habitats and selected types of natural resources for the region within GEM?s purview. The approach provides some information on the distribution of major biological assemblages on rocky habitat (e.g., lichens, barnacles, mussels, rockweed, red algae, kelps, etc.) and on eelgrass on soft sediments.

This database would provide an extremely powerful tool to investigators planning intertidal and shallow subtidal ecological investigations in Prince William Sound for GEM or in response to long-term climate change, new development, or oil spills, etc. It would also provide a useful tool for evaluating long-term changes in the general distribution and abundance of major intertidal and shallow subtidal biological assemblages (i.e., a comparison of the distribution of biobands over time). Of the two major areas in southcentral Alaska in which AVI has not been completed, it would seem to me that Prince William Sound has a higher priority than Kodiak. Applicability of Approach to GEM Research and Potential Value to GEM Applicants and Investigators. The products of this approach are of great value to investigators proposing or executing projects for GEM. This reviewer

recently completed an extensive site-selection exercise using the ShoreZone mapping database for the outer Kenai Peninsula.

The objective of this process was to identify candidate sites in Kenai Fjords National Park for performing an inventory of unconsolidated intertidal sediments within the park to assist the National Park Service in developing its long-term monitoring program. The availability of the web-based database for the outer Kenai Peninsula was extremely valuable in completing this exercise. Moreover, manipulation of the database will be useful in completing the final report for this inventory, i.e., in extrapolating the results from the survey to the region.

We did observe certain limitations of the existing on-line database, however. During our field operations, we found that we would have benefited from greater ability to manipulate (query) the database than is currently possible on-line. We concluded that the sediment categories provided in the sediment-type layer were for the upper margin of the intertidal zone and were not generally representative of sediment conditions in the lower intertidal where the resources of interest to this program are located. Typically, the nature of the sediment for beach segments (e.g., mud, sand, sand/gravel, or wetlands) indicated in the sediment type layer was incorrect for the lower beach. Also, the quality of the captured images was not sufficiently good to determine the nature of finer sediments on many beaches. Nevertheless, the availability of various layers of the GIS database and access to the AVI photo captures provided copious detailed information for selecting candidate sites. Better selections would have been possible if we had been able to modify the intertidal level for which sediment types are classified. My impression is that the geomorphological interpretations are simpler and more correct for rocky habitats than for unconsolidated sediments.

Extrapolation, however, must be approached with caution. Based on this recent study, extrapolation, while probably acceptable for rocky habitats, is not completely acceptable for soft substrates where the major components of the biota are mostly concealed from view in the unconsolidated beaches. Occurrence and abundance of the macroinfaunal species is greatly influenced by factors that cannot be documented during an aerial survey (e.g., salinity of interstitial water, water temperature,

organic content of sediments, interactions of sediment grain size and exposure). Based on experience in earlier ShoreZone mapping programs, the ground-truthing surveys mainly provide information on rocky substrate. The unconsolidated substrates, which are far more unpredictable but often quite productive, generally have not surveyed. I view this as a limitation of the implementation of the technique.

Validity of Rationale

The claim in the proposal that the ShoreZone mapping technique provides ?a spatially comprehensive reference for ? subtidal habitats? stretches the capabilities of approach and the observers unrealistically. In shallow areas with kelps or eelgrass or deeper areas inhabited with canopy-forming species, these may be detected. However in deeper areas or areas with limited water clarity, the technique is unable to discern subtidal conditions. Moreover, where subtidal information is provided, it is far less ?comprehensive? than in the intertidal zone, where some individual animals such as the chiton Katharina tunicata and some starfish can be observed in addition to the biobands. I question the statement in ?Section II. Need for the Project? that ?no quantitative information exists on where and how much of these habitats occur in the Sound even after 15 year of research and monitoring following the Exxon Valdez oil spill.? I think that NOAA?s (RPI?s) ESI GIS database for Prince William Sound can probably be queried to provide summaries for abundance and distribution for at least some of these habitats. I question the claim that eelgrass is ?a resource known to be sensitive to oil spills?. While Dean et al. have demonstrated that the critters living in eelgrass beds recovered more slowly than those in kelp beds, I am not aware of studies (including those that we conducted during our NOAA studies of EVOS) that have shown significant damage to eelgrass itself following oil spills.

The statement, Shore-Zone data will interact directly with the Prince William Sound Ocean Observing System real time numerical circulation and wave models? is used apparently to justify claiming $390,000 in Cost-share Funds. The only explanation that I find indicating a relationship between the ShoreZone data and PWSOOS indicates that, ?The PWSOOS would be greatly enhanced by the integration of spatially comprehensive nearshore habitat data. By coupling the nearshore habitat data to the numerical ocean circulation and wave models, the affects [sic] of changing ocean conditions on different habitat types could be studied. This understanding of natural variability in the ocean and how the nearshore habitats and associated biota respond will provide a better assessment of how other disturbances including earthquakes, oil spills, and fishing affect PWS biota.? This explanation doesn?t provide any real mechanism for connecting or integrating these two databases and, in my mind, falls short of justifying the use of the Cost-share Funds. The two programs appear, on the basis of this explanation, to be independent and pretty much unrelated.

Schedule Realism If both ShoreZone mapping proposals are funded, CORI will be surveying during all four low-tides windows in June and July 2005. Period for ground-truthing (field validation) survey and completion of Biota Catalog are not indicated in IV. SCHEDULE. B. Measurable Project Tasks.

Budgetary and Staffing Realism The budget and staffing appear reasonable compared to the budget proposed for Kodiak. Ms. Saupe and Dr. Harper have

START OF NEW REVIEW

Review ID: **355**

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: 9

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

RATING: 9

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: 9

Additional Comments

The results of the proposed work will provide a data layer essential to the implementation of a nearshore GEM monitoring program. It should be clarified how the $450,000 Non-EVOS funds will be used to support the proposed work. It would be desirable to see this work completed in two years, as opposed to one. I recommend this proposal be highly ranked for funding.

Exxon Valdez Oil Spill Trustee Council

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

June 17, 2004

The Honorable Mark Begich
Mayor, Municipality of Anchorage
P.O. 196650
Anchorage, Alaska 99519-6650

Dear Mayor Begich: Mark -

It was nice visiting with you last week at Lee Gorsuch's event. Both he and his wife will be missed by this community and Alaska.

This letter is to follow up on our conversation about the utilization of the Egan Center's roof. First of all, since this is one of the points of interest I look down upon from my office each day, I need to pass the word that the grasses are growing again all over the roof, and someone needs to get up there and try to kill all that growth. If left to grow unchecked, it will cause more damage to the roof, I'm sure.

Second – I just want to reiterate our conversation about the proposal for the City to lease out the space on the roof to a private vendor to put in a protected outdoor Café. To begin with, this wouldn't have to be very elaborate, and the vendor could put in Plexiglas walls and ceiling to protect against the elements. It's a wonderful location, and with the stairs and elevator already in place to the top floor of the Egan Center, it shouldn't be that much work to extend them to the roof.

The vendor could set up a portable kitchen inside the building or on the roof as long as all the fire protection provisions were taken care of. This is a large unused space, and in this day and age of diminishing space in the downtown area, I think it is something that could be utilized.

Hopefully, the fee charged to the vendor would help to provide the funds to redo the roof. Since the building was built and fortified for another floor, it just makes good sense to utilize this space, and it wouldn't be hard to do. Of course, if a vendor wanted to come in with a permanent structure, that would be something that you and the Assembly probably would need to address.

It's a good idea! In the meantime, someone needs to kill the grass there now!

My best to you,

Gail

Gail Phillips
Executive Director, EVOSTC

Exxon Valdez Oil Spill Trustee Council

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

Date 06/22/2004

Re: Response required regarding Konar-FY05-SOP for Long-term Monitoring

Dear Dr. Konar,

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If the revisions are not completed to the satisfaction of the Science Director within the specified time frame, the recommendation of the STAC for your proposal will change to "Do Not Fund." As funding can only be authorized by unanimous vote of the Trustee Council, a positive recommendation from the STAC is a prerequisite for funding, not a guarantee. Nonetheless, most proposals recommended by the STAC are subsequently funded by the Trustee Council, and conversely.

If you wish to continue to be considered for funding starting in FY 2005, please submit the revisions requested to Brenda Ramos in this office by **9:00 AM, Monday July 26, 2004.** To the extent that the revisions entail changes in the elements of the original proposal package, those elements will need to be updated and re-submitted. Please consult the FY 2005 Invitation on our web site for details.

If you anticipate that you will be unable to submit the revisions by the time above please advise Brenda Ramos so that the funding recommendation may be changed in a timely manner. Otherwise I will look forward to reviewing your revision on July 26.

Sincerely,

Phillip R. Mundy, Ph.D., Science Director

Cc: Executive Director, STAC, proposal files

Attachments (2)

Statement of Contingencies

Please provide a revised project narrative and reduced budget. Propose to write reports and manuscripts on the current GEM work (through summer 2004), propose to work with the Bodkin project to identify long-term permanent monitoring sites. Reduce proposed sampling efforts in the anticipation of the implementation process for GEM being in place. Move closer to the model of Bodkin and Dean. Propose sampling efforts in places where there is not currently sampling and reduce sampling in areas that are over sampled. Work to move efforts closer to the original model of Bodkin and Dean. Address other peer review comments as appropriate.

Reviews:

START OF NEW REVIEW

Review ID: 284

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: 9

The proposal is technically and scientifically sound. I encourage the proposers to contact Alan Bennett of the National Park Service regarding the NPS's nearshore inventory and monitoring program taking place in Kenai Fjords, Katmai and Lake Clark National Parks. 907-644-3681

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

RATING: 9

Because the proposers have selected tried and true protocol they are well ahead of the curve.

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: 9

The budget appears to be realistic given the nature of the study. Marine studies are logistically challenging and the budget reflects this. The administrative overhead seems very reasonable as well. Project milestones appear well defined and achievable given the qualifications of the proposers.

Additional Comments

I favor this proposal because it does not hinge on development of new protocol. The use of existing methods, consistent with other monitoring efforts, will go a long way to allow for comparability of data and identification of trends.

Exxon Valdez Oil Spill Trustee Council

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

Date 06/22/2004

Re: Response required regarding Edmundson-FY05-Synthesis of Watershed Linkages

Dear Dr. Edmundson,

The Scientific and Technical Advisory Committee has given your proposal a positive recommendation for funding that is contingent on some changes being made. The revisions requested by the STAC are in the attached statement of contingency. Also attached are the comments of non-STAC peer reviewers, if available.

If the revisions are not completed to the satisfaction of the Science Director within the specified time frame, the recommendation of the STAC for your proposal will change to "Do Not Fund." As funding can only be authorized by unanimous vote of the Trustee Council, a positive recommendation from the STAC is a prerequisite for funding, not a guarantee. Nonetheless, most proposals recommended by the STAC are subsequently funded by the Trustee Council, and conversely.

If you wish to continue to be considered for funding starting in FY 2005, please submit the revisions requested to Brenda Ramos in this office by **9:00 AM, Monday July 26, 2004.** To the extent that the revisions entail changes in the elements of the original proposal package, those elements will need to be updated and re-submitted. Please consult the FY 2005 Invitation on our web site for details.

If you anticipate that you will be unable to submit the revisions by the time above please advise Brenda Ramos so that the funding recommendation may be changed in a timely manner. Otherwise I will look forward to reviewing your revision on July 26.

Sincerely,

Phillip R. Mundy, Ph.D., Science Director

Cc: Executive Director, STAC, proposal files

Attachments (2)

Statement of Contingencies

Please provide a revised proposal and budget: The revision will address the following: The revision will stipulate that the project bibliography is to be done in ProCite, and that the introduction to the Watershed section of the Science Plan will be linked to the references in the ProCite bibliography. The revision will provide an outline of the product that is to be produced; the introduction to the Watershed section of the Science Plan. Production of the introduction of the watershed section of GEM Science Plan needs to be explicitly added as an objective. A list of recommendations on which to build a long-term monitoring plan needs to be explicitly stated as an objective. An objective will be added to attend the EVOS workshops for the presently ongoing GEM watershed projects in order to annually incorporate the status and results into the synthesis. Workshops that include stakeholders and scientists together need to be planned and budgeted. The travel budget needs to be explained in terms of the workshops and the objectives identified in the proposal. The revised proposal will include responses to peer reviewer comments as appropriate.

Reviews:

Review ID: **279**

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: 9

The proposers clearly understand watershed-marine linkages and have tailored the proposal to match their understanding. Although aspects of athe proposal are fairly procedural (surveying, contacting people, assembling information, etc.) the authors have begun both their abstract and introdiction with the pertinent technical information. They seem quite familiar with GEM and related activities in the GOA. I am confident that they will make meaningful contributions to generation and dissemination of knowledge in this area.

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

RATING: 9

I believe their methods are good. They have the experience in other places according to their CVs. They have appropriate contacts for this topic and will be able to make (or renew) connections with the right people quickly. The procedural steps they will go through are common to many problems, but they seem to have tailored them well to this subject.

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: 9

Especially with their knowledge of the subject, I am confident that the work they propose can be done with the available budget. They essentially have the needed team together now, and have published similar assessments.

Additional Comments

I feel good about this proposal. It seems to be right on target.

START OF NEW REVIEW

Review ID: 387

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: 10

Sorry to be sophmoric in this response but this is truly one great proposal!!! Not only technically and scientifically sound, it provides a true integration of what is known hence CONTRIBUTES TREMENDOUSLY to the generation and dissemination of integrated/comprehensive knowledge.

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

RATING: 10

This is a highly polished comprehensive/integrative approach to the problem. The investigators credentials and experience are truly excellent. It is hard for me to imagine that there some some unknown scientists out there that could do the job anywhere near as good much less better.

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: 10

I have a small amount of concern that not enough money is being requested. The PI has both a full time job and will be finishing up his doctorate so I don't think he knows how little time he will have. It would be absolutely justified to increase the budget giving more time for a highly qualified research associate to help with all the work.

Additional Comments

It was very surprising to me, as far as I can discern, that this work has not already been done as a fundamental need for assessing both new and ongoing funding. I apologize for the lack of comments regarding this review but proposals stands by itself as a truly fine and meaty document. I thank GEM in advance for funding this project and look forward to seeing and using the final product.

Exxon Valdez Oil Spill Trustee Council

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

Date 06/22/2004

Re: Response required regarding Szarzi-FY05-Salmon Smolt Abundance

Dear Dr. Szarzi,

The Scientific and Technical Advisory Committee has given your proposal a positive recommendation for funding that is contingent on some changes being made. The revisions requested by the STAC are in the attached statement of contingency. Also attached are the comments of non-STAC peer reviewers, if available.

If the revisions are not completed to the satisfaction of the Science Director within the specified time frame, the recommendation of the STAC for your proposal will change to "Do Not Fund." As funding can only be authorized by unanimous vote of the Trustee Council, a positive recommendation from the STAC is a prerequisite for funding, not a guarantee. Nonetheless, most proposals recommended by the STAC are subsequently funded by the Trustee Council, and conversely.

If you wish to continue to be considered for funding starting in FY 2005, please submit the revisions requested to Brenda Ramos in this office by **9:00 AM, Monday July 26, 2004.** To the extent that the revisions entail changes in the elements of the original proposal package, those elements will need to be updated and re-submitted. Please consult the FY 2005 Invitation on our web site for details.

If you anticipate that you will be unable to submit the revisions by the time above please advise Brenda Ramos so that the funding recommendation may be changed in a timely manner. Otherwise I will look forward to reviewing your revision on July 26.

Sincerely,

Phillip R. Mundy, Ph.D., Science Director

Cc: Executive Director, STAC, proposal files

Attachments (2)

Statement of Contingencies

Please submit a revised proposal and budget. Revised narrative and budget are to provide for measuring stable isotopes, C, N, S. Funding contingent on addition of objective to estimate the proportion of marine derived elements (C, N, S) in the smolt. Budget is expected to increase. Authors are required to address comments of peer reviewers regarding potential biases in estimator of abundance in a letter prior to receiving funding.

Reviews:

Review ID: 317

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: 7

The project introduction suggests that this project will contribute to general knowledge of variation in freshwater and marine productivity of Chinook and coho salmon. Given that the proposal is a short-term (three year) study of a single small watershed (ecological sample size of one), it is hard to see how the results will be generalizable. That said, it will provide some local information that could be combined with other studies in a broader context, and could serve as the start of a potentially valuable longer-term time series.

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

RATING: 7

In general, the methods are good, and show good understanding of the field sampling problems and statistical treatment of the data generated. However, potential violations of the mark-recapture assumptions are severely downplayed; there are potential sources of substantial bias that are not effectively addressed. First, it is assumed that there is no adult immigration into the population. This assumption is dismissed in a single sentence saying that substantial immigration is unlikely. While wild fish migrations are not well studied, there is literature that would suggest that migration could be substantial at the spatial scales separating streams within Cook Inlet. Migration should not be dismissed without local evidence that it is unimportant. This issue could be addressed quite easily by either marking smolts in adjacent watersheds or checking for Anchor River marks in adjacent watersheds. Second, marking only smolts > 70mm could lead to bias in results if (as is likely) marine survival is size-dependent.

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: 10

The level of effort and budget are well constructed and appropriate for the scope of work.

Additional Comments

START OF NEW REVIEW

Review ID: 321

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: 3

This proposal begins with a discussion of the benefits of ?quantifying the influence of freshwater and marine habitats on variability in salmon production,? and characterizing freshwater ecosystems ? very, very ambitions goals that would obviously require monitoring over an extended period. The proposers state that ?this study will provide data to answer important biological questions needed to address concerns regarding stock productivity throughout the life cycle of both Chinook and coho salmon,? ? which I think means that they are intending to use this one study to make definitive statements about Chinook and coho stock productivity in the Anchor River watershed at the end of the study. However, there seems to be a substantial disconnect between the description of the problem and the project objectives. They intend to just coded-wire-tag smolts over a three-year period ? far short of what is needed to quantify this variability, let alone study what influences it. This tagging effort should lead to estimates of juvenile abundance, age class distribution, and short-term tag retention and survival, as the proposers state. But, I have strong reservations about their objective of estimating oceansurvival. Total return is made up of both catch and escapement. They intended to estimate catch by means of a mail-in survey. I see no reason to think that this mail-in survey will be either accurate enough or precise enough for this purpose. They do not seem to have anticipated this problem, nor offered anything to quiet a skeptic on this subject. If they have some reason to think that this survey is both accurate and precise enough, they should have included that information in the proposal.

Moreover, they seem to intend to quantify the uncertainty in the marine survival estimate using an approximate variance formula that is very much inappropriate unless the mail-in survey is highly accurate, which it probably is not. The proposers may have confused accuracy with precision ? I am not sure. One additional point is that the authors have not demonstrated that they are familiar with the current literature on this subject. Although they did cite an unpublished technical report from the 1970?s and a couple of technical reports on recent work done in Cook Inlet, I noted the absence of any of the modern papers on statistical methods for coded-wire tags or any citations of similar work done elsewhere ? although these citations exist.

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

RATING: 3

Over and over in the proposal, the authors seem to have exaggerated expectations for this effort. For example, they state ?Estimates of Chinook and coho salmon juvenile production in the Anchor River would be useful as predictors of future adult returns, allowing more responsive management?? There is really nothing that can be done in the

time frame of this study that would result in an effective forecasting tool that could be used in actual management. So, although there are probably genuine benefits that would flow from this study, there are no methods available that will provide solutions to the problems the proposal seeks to address in the time frame of this 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?

RATING: 3

I believe these proposers cannot meet all of the expectations they describe in the proposal, in the time frame they describe, using the methods they describe. The EVOS funding seems appropriate and reasonable for the actual field work, although the non-EVOS funds seems to be exaggerated for the stated objectives.

Additional Comments

Overall, I believe this is probably a very worthwhile project that could produce some real benefit. My main criticisms have to do with the disconnect between their statement of the problem and what they actually intend to do. I also think that the proposers approach to estimating marine survival is statistically unsound, as is their stated means of quantifying the uncertainty in that estimate.