

Case 3:91-cv-00083-HRH Document 286 Filed 11/15/2007 Page 1 of 6

TALIS J. COLBERG  
ATTORNEY GENERAL

CRAIG J. TILLERY  
DEPUTY ATTORNEY GENERAL

ELISE HSIEH  
Assistant Attorney General  
State of Alaska  
Department of Law  
1031 West Fourth Avenue, Suite 200  
Anchorage, Alaska 99501-1994  
Telephone: (907) 269-5274  
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Attorneys for the State of Alaska

UNITED STATES DISTRICT COURT  
DISTRICT OF ALASKA

STATE OF ALASKA,	)	
	)	
Plaintiff,	)	No. 3:91-CV-0083 (HRH)
	)	
v.	)	<b>TWENTY-SEVENTH JOINT</b>
	)	<b>NOTICE OF EXPENDITURES</b>
EXXON CORPORATION, and EXXON	)	<b>FROM</b>
SHIPPING COMPANY,	)	<b>THE INVESTMENT FUND</b>
	)	
Defendants.	)	
	)	

The State of Alaska and the United States (the "Governments") jointly provide notice of the expenditure of \$95,600.00 in settlement funds from the Research Investment Sub-Account of the EXXON VALDEZ Oil Spill Investment Fund ("Investment Fund"). The Governments' natural resource trustee agencies will use these funds for purposes consistent

with the Memorandum of Agreement and Consent Decree entered by this Court in *United States v. State of Alaska*, No. A91-081 CIV (D. Alaska) on August 28, 1991 ("MOA").

On September 25, 1991 the State of Alaska and the United States settled their claims against the Exxon Corporation, Exxon Shipping Company, Exxon Pipeline Company, and the T/V EXXON VALDEZ arising from the EXXON VALDEZ oil spill. All funds resulting from these settlements were subsequently ordered by this Court to be placed in an interest-bearing account in the Court Registry Investment System ("CRIS") administered through the United States District Court for the Southern District of Texas.

On June 7, 2000 this Court entered its Third Amended Order for Deposit and Transfer of Settlement Proceeds ("Third Amended Order"). The Third Amended Order allows the Governments the option of investing the money in an account outside the United States Treasury. On September 29, 2000, upon application by the Governments, the Court entered an Order Re: Transfer of Funds from the Exxon Valdez Liquidity Account and the Reserve Fund to an Investment Fund Within the Alaska Department of Revenue, Division of Treasury, authorizing transfer of settlement proceeds to an account within the State. On October 5, 2000 all funds and securities were transferred from the CRIS to the Investment Fund. The Third Amended Order further allows the Governments to establish separate sub-accounts within the primary account as the Trustee Council determines appropriate. On October 1, 2002 three sub-accounts were created in the Investment Fund, to wit:

the Research Investment Sub-Account, the Habitat Investment Sub-Account, and the Koniag Investment Sub-Account. These sub-accounts were established to carry out the Trustee Council's decision in its Resolution of March 1, 1999 to separately manage the remaining assets of the Joint Trust Funds for the specific purposes of funding a long term research and monitoring program, the acquisition of lands along the Karluk River and the establishment of a fund to purchase small parcels of land that may become available in the future.

Paragraph 27 of the Third Amended Order provides that "funds in an Investment Fund shall remain on deposit in that Fund until such time as the Exxon Valdez Oil Spill Trustee Council unanimously resolve to expend all or part of the funds." The funds may then be expended, for purposes consistent with the MOA, upon the joint notification of the Governments to the Investment Fund and the Court.<sup>1</sup> The notification is to inform the Court of the proposed uses of the funds in the same manner and to the same extent as was the Governments' practice when the funds were in the registry of the Court.

The Governments provide notice of this twenty-seventh expenditure from the Investment Fund.<sup>2</sup> The entire amount of \$95,600.00 that is the subject of this notice will be provided to the State of Alaska.

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<sup>1</sup> A copy of the notice provided to the Investment Fund pursuant to paragraph 27 of the Third Amended Order for Deposit and Transfer of Settlement Proceeds is appended to this Notice as Attachment A, pp. 1 - 2.

<sup>2</sup> Appended to this Notice at Attachment A, pp. 3 - 16 is Trustee Council Resolution 08-02 documenting the Council's unanimous agreement, at its November 9, 2007 meeting, to provide \$95,600 in monies for the FY 2008 Work Plan. Of this amount, \$87,900.00 is to fund PJ 080821 entitled *Development of Culture Technology to Support*

A complete summary of the Council's activities since approval of the settlement was appended to our Second Application, filed January 19, 1993, as Attachment B, and interim updates of activities appeared as Attachments to each of the Governments' Third through Sixth, Eighth through Twelfth, Fifteenth, Nineteenth, Twenty-First, Twenty-Second, Twenty-Fourth through Twenty-Ninth, Thirty-First, and Thirty-Third through Forty-Fifth applications for disbursement, the Fifth through Seventh and Tenth through Fourteenth Joint Notices of Expenditure From Settlement Account Monies Previously Disbursed, and the First, Second, Fourth, and Seventh through the Twenty-Second, Twenty-Fourth through Twenty-Sixth Joint Notices of Expenditures From Investment Fund (and From Monies Previously Disbursed). The Trustee Council has met once since the Governments' filing on October 24, 2007 of their Twenty-Sixth Joint Notice of Expenditures from Investment Fund and from Monies Previously Disbursed. The Governments will submit the meeting notes for that November 9, 2007 meeting once they have been approved. The meeting notes for the Trustee Council's October 12, 2007 meeting are appended to this Notice as Attachment B.

RESPECTFULLY SUBMITTED this 15<sup>th</sup> day of November, 2007 at  
Anchorage, Alaska.

FOR THE STATE OF ALASKA

TALIS J. COLBERG

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*Restoration of Herring in Prince William Sound*, and \$7,700.00 is for associated project management costs. The project management costs will be added to the Trustee Council Support component of Project #080100 (FY '08 Program Development and Implementation Budget).

TWENTY-SEVENTH JOINT NOTICE OF EXPENDITURES FROM THE INVESTMENT FUND

3:91-CV-0083 (HRH)

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## ATTORNEY GENERAL

By: s/Elise Hsieh  
Assistant Attorney General  
State of Alaska  
Department of Law  
1031 West Fourth Avenue, Suite 200  
Anchorage, Alaska 99501-1994  
Telephone: (907) 269-5274  
Facsimile: (907) 278-7022  
Email: elise.hsieh@alaska.gov  
Alaska Bar #9511048

FOR THE UNITED STATES OF AMERICA  
RONALD J. TENPAS  
Acting Assistant Attorney General  
Environment & Natural Resources Division

WILLIAM D. BRIGHTON, Asst. Section Chief  
Environmental Enforcement Section  
Environment & Natural Resources Division  
U.S. Department of Justice  
Washington, D.C. 20530

By: s/Regina R. Belt (consent)  
Environmental Enforcement Section  
Environment & Natural Resources Division  
U.S. Department of Justice  
801 B Street, Suite 504  
Anchorage, Alaska 99501-3657  
Telephone: (907) 271-3456  
Facsimile: (907) 271-5827  
Email: Regina.Belt@usdoj.gov

## CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on the 15<sup>th</sup> day of  
November, 2007, a copy of the foregoing TWENTY-SEVENTH  
JOINT NOTICE OF EXPENDITURES FROM THE  
INVESTMENT FUND, together with attachments A  
and B thereto, were served by U.S. mail, first class,

TWENTY-SEVENTH JOINT NOTICE OF EXPENDITURES FROM THE INVESTMENT  
FUND

3:91-CV-0083 (HRH)

Page 5 of 6

Case 3:91-cv-00083-HRH Document 286 Filed 11/15/2007 Page 6 of 6

postage prepaid, on the following:

Regina R. Belt  
U.S. Dept. of Justice  
801 B Street, Suite 504  
Anchorage, AK 99501-3657

James F. Neal  
Neal & Harwell  
2000 One Nashville Place  
150 Forth Avenue North  
Nashville TN 37219

Douglas J. Serdahely  
Patton Boggs LLP  
601 W. 5<sup>th</sup> Avenue, Suite 700  
Anchorage, AK 99501

Patrick Lynch  
O'Melveny & Meyers  
400 South Hope Street  
Los Angeles, CA 90071

John F. Clough III  
Clough & Associates  
PO Box 211187  
Auke Bay, AK 99821-1187

s/Elise Hsieh

TWENTY-SEVENTH JOINT NOTICE OF EXPENDITURES FROM THE INVESTMENT  
FUND

3:91-CV-0083 (HRH)

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# STATE OF ALASKA

**DEPARTMENT OF LAW**

*OFFICE OF THE ATTORNEY GENERAL*

*SARAH PALIN, GOVERNOR*

*Environmental*  
1031 WEST 4<sup>th</sup> AVENUE, SUITE 200  
ANCHORAGE, ALASKA 99501-1994  
PHONE: (907) 269-5274  
FAX: (907) 278-7022

November 14, 2007

Mr. Gary Bader  
Chief Investment Officer  
Treasury Division, Dept. of Revenue  
P.O. Box 110405  
Juneau, AK 99811-0405

Re: Exxon Valdez Oil Spill Investment Fund

Dear Mr. Bader:

The Exxon Valdez Trustee Council has unanimously determined to expend \$95,600.00 in joint trust funds for restoration purposes consistent with the terms of the Memorandum of Agreement and Consent Decree entered by the federal district court in *United States v. State of Alaska*, No. A91-081 CIV (D. Alaska) on August 28, 1991. Of this amount, \$95,600.00 will come from the Research Investment Sub-Account, currently held by the State of Alaska in the Exxon Valdez Oil Spill Investment Fund and invested by the Treasury Division, Alaska Department of Revenue. Under the terms of the Reimbursable Services Agreement between the Alaska Department of Fish and Game and the Alaska Department of Revenue, please transfer the following amounts from cash held in the Exxon Valdez Oil Spill Investment Fund to the accounts described below:

**State of Alaska**

Amount: \$95,600.00  
State of Alaska  
Exxon Valdez Settlement Account  
GeFONSI 33070  
Account 22177

The transfer should take place when most financially advantageous, preferably on or before November 16, 2007, or as soon thereafter as possible. If you have any questions, please call Elise Hsieh at (907) 269-5274.


Nov 14 07 11:49a William Hammel 507-243-9641  
Case 3:91-cv-00083-HRH Document 286-2 Filed 11/15/2007 Page 2 of 5

p. 1

Mr. Gary Bader  
Treasury Division, Department of Revenue

Page Two  
November 14, 2007

Sincerely,



*by Elise Hsieh*  
(by email consent)

Elise Hsieh  
Assistant Attorney General  
State of Alaska

Regina R. Belt  
Environmental Enforcement Section  
Environment & Natural Resources Division  
U.S. Department of Justice  
United States of America

cc: Divina Pelayo, Alaska Department of Fish and Game  
Christine O'Sullivan, Alaska Department of Fish and Game  
Sue Bump, Alaska Department of Revenue  
Bob Mitchell, Alaska Department of Revenue  
Barbara Hannah, Exxon Valdez Oil Spill Trustee Council Restoration Office



**RESOLUTION 08-02 OF THE  
EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL  
PJ 080821 – Development of Culture Technology  
to Support Restoration of Herring in Prince William Sound**

We, the undersigned, duly authorized members of the *Exxon Valdez* Oil Spill Trustee Council do hereby certify that, in accordance with the Memorandum of Agreement and Consent Decree entered as settlement of United States of America v. State of Alaska, No. A91-081 Civil, U.S. District Court for the District of Alaska, and after public meetings, unanimous agreement has been reached to expend funds received in settlement of State of Alaska v. Exxon Corporation, et al., No. A91-083 CIV, and United States of America v. Exxon Corporation, et al., No. A91-082 CIV, U.S. District Court for the District of Alaska, for necessary Natural Resource Damage Assessment and Restoration activities for fiscal year 2008 in the amount of \$95,600. Of this amount, \$87,900 is designated to fund PJ 080821, entitled "Development of Culture Technology to Support Restoration of Herring in Prince William Sound," approved as per the revised scope and budget detailed within Attachment A. The remaining \$7,700 is to be added to the Trustee Council Support component of PJ 080100 – "FY 08 Program Development and Implementation Budget," for Trustee agency project management of PJ 080821. All funds are designated to the State of Alaska. Funding is to be distributed as follows:

State of Alaska – Department of Fish & Game	\$95,600
<b>Total State of Alaska</b>	<b>\$95,600</b>

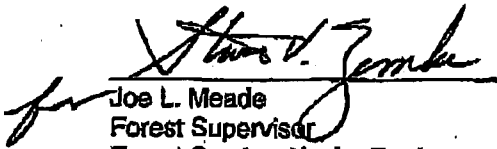
By unanimous consent, we hereby request the Alaska Department of Law and the Assistant Attorney General of the Environmental and Natural Resources Division of the United States Department of Justice to take such steps as may be necessary to make funds available in the amount of \$95,600 from the appropriate accounts as designated by the Executive Director.

Case 3:91-cv-00083-HRH  
11/09/07 17:29 FAX 907 743 9492

Document 286-2  
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Filed 11/15/2007 Page 4 of 5  
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Approved by the Council at its telephonic meeting of November 9, 2007 as affirmed by our signatures affixed below.

  
Joe L. Meade  
Forest Supervisor  
Forest Service Alaska Region  
U. S. Department of Agriculture

\_\_\_\_\_  
Randall Luthi  
Director  
U.S. Minerals Management Services  
U.S. Department of Interior

\_\_\_\_\_  
Denby S. Lloyd  
Commissioner  
Alaska Department of Fish and Game

\_\_\_\_\_  
Talis J. Colberg  
Attorney General  
Alaska Department of Law

\_\_\_\_\_  
Craig R. O'Connor  
Special Counsel  
National Oceanic & Atmospheric  
Administration  
U.S. Department of Commerce

\_\_\_\_\_  
Larry Hartig  
Commissioner  
Alaska Department of Environmental  
Conservation

Attachment: Dr. Linley's Letter of October 30, 2007

Case 3:91-cv-00083-HRH Document 286-2 Filed 11/15/2007 Page 5 of 5  
11/09/2007 17:23 FAX 907 271 4102 SIO-AK 003/003

Approved by the Council at its telephonic meeting of November 9, 2007 as affirmed by our signatures affixed below.

\_\_\_\_\_  
Joe L. Meade  
Forest Supervisor  
Forest Service Alaska Region  
U. S. Department of Agriculture

\_\_\_\_\_  
Talis J. Colberg  
Attorney General  
Alaska Department of Law

For

\_\_\_\_\_  
Randall Luthi  
Director  
U.S. Minerals Management Services  
U.S. Department of Interior

\_\_\_\_\_  
Craig R. O'Connor  
Special Counsel  
National Oceanic & Atmospheric  
Administration  
U.S. Department of Commerce

\_\_\_\_\_  
Denby S. Lloyd  
Commissioner  
Alaska Department of Fish and Game

\_\_\_\_\_  
Larry Hartig  
Commissioner  
Alaska Department of Environmental  
Conservation

Attachment: Dr. Linley's Letter of October 30, 2007

Case 3:91-cv-00083-HRH Document 286-3 Filed 11/15/2007 Page 1 of 5

Approved by the Council at its telephonic meeting of November 9, 2007 as affirmed by our signatures affixed below.

\_\_\_\_\_  
Joe L. Meade  
Forest Supervisor  
Forest Service Alaska Region  
U. S. Department of Agriculture

\_\_\_\_\_  
Talis J. Colberg  
Attorney General  
Alaska Department of Law

\_\_\_\_\_  
Randall Luthi  
Director  
U.S. Minerals Management Services  
U.S. Department of Interior

\_\_\_\_\_  
Craig R. O'Connor  
Special Counsel  
National Oceanic & Atmospheric  
Administration  
U.S. Department of Commerce

  
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Denby S. Lloyd  
Commissioner  
Alaska Department of Fish and Game

\_\_\_\_\_  
Larry Hartig  
Commissioner  
Alaska Department of Environmental  
Conservation

Attachment: Dr. Linley's Letter of October 30, 2007

Case 3:91-cv-00083-HRH  
11/09/2007 17:25 FAX 94652075

Document 286-3  
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Filed 11/15/2007 Page 2 of 5  
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Approved by the Council at its telephonic meeting of November 9, 2007 as affirmed by our signatures affixed below.

---

Joe L. Meade  
Forest Supervisor  
Forest Service Alaska Region  
U. S. Department of Agriculture

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*Talis J. Colberg*  
Talis J. Colberg  
Attorney General  
Alaska Department of Law

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Randall Luthi  
Director  
U.S. Minerals Management Services  
U.S. Department of Interior

---

Craig R. O'Connor  
Special Counsel  
National Oceanic & Atmospheric  
Administration  
U.S. Department of Commerce

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Denby S. Lloyd  
Commissioner  
Alaska Department of Fish and Game

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Larry Hartig  
Commissioner  
Alaska Department of Environmental  
Conservation

Attachment: Dr. Linley's Letter of October 30, 2007

Case 3:91-cv-00083-HRH Document 286-3 Filed 11/15/2007 Page 3 of 5  
Nov 13 07 12:42p Craig O'Connor 360-293-3250 p.3

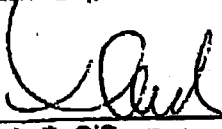
Approved by the Council at its telephonic meeting of November 9, 2007 as affirmed by our signatures affixed below.

\_\_\_\_\_  
Joe L. Meade  
Forest Supervisor  
Forest Service Alaska Region  
U. S. Department of Agriculture

\_\_\_\_\_  
Randall Luthi  
Director  
U.S. Minerals Management Services  
U.S. Department of Interior

\_\_\_\_\_  
Denby S. Lloyd  
Commissioner  
Alaska Department of Fish and Game

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Talis J. Colberg  
Attorney General  
Alaska Department of Law

  
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Special Counsel  
National Oceanic & Atmospheric  
Administration  
U.S. Department of Commerce

\_\_\_\_\_  
Larry Hartig  
Commissioner  
Alaska Department of Environmental  
Conservation

Attachment: Dr. Linley's Letter of October 30, 2007

Case 3:91-cv-00083-HRH Document 286-3 Filed 11/15/2007 Page 4 of 5

Approved by the Council at its telephonic meeting of November 9, 2007 as affirmed by our signatures affixed below.

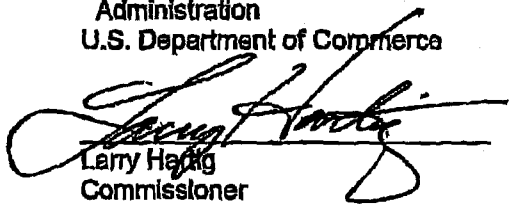
\_\_\_\_\_  
Joe L. Meade  
Forest Supervisor  
Forest Service Alaska Region  
U. S. Department of Agriculture

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Talis J. Colberg  
Attorney General  
Alaska Department of Law

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Randall Luthi  
Director  
U.S. Minerals Management Services  
U.S. Department of Interior

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National Oceanic & Atmospheric  
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Denby S. Lloyd  
Commissioner  
Alaska Department of Fish and Game

  
\_\_\_\_\_  
Larry Hagg  
Commissioner  
Alaska Department of Environmental  
Conservation

Attachment: Dr. Linley's Letter of October 30, 2007

Attachment A  
Page 9 of 16



October 30, 2007

Mr. Michael Baffrey  
Executive Director  
Exxon Valdez Trustee Council  
441 West 5<sup>th</sup> Avenue, Suite 500  
Anchorage, AK 99501-2340

Dear Mr. Baffrey:

We are writing to you in response to the decision made by the EVOS Trustee Council at the October 12, 2007 meeting that we participated in regarding the partial funding of our FY 2008 proposal, *Development of Culture Technology to Support Restoration of Herring in Prince William Sound: Use of In Vitro Studies to Validate and Optimize Restoration Actions*. As you recall, discussions by the Trustee Council emphasized the importance of maintaining our established collaboration with the Japanese scientists because of their expertise in the field of herring culture techniques. According to our understanding of the directive provided by the Trustee Council at the meeting, you, as the Director, have been given the discretion to develop and fund a 1 yr modified proposal with Marical and the Alaska SeaLife Center to further this collaboration with these Japanese researchers and provide EVOS the option to expand this collaboration should herring culture techniques be pursued to help restore herring in Prince William Sound.

In lieu of the Trustee Council's decision to defer funding on the specific aspects of our project involving herring culture techniques until completion of a herring restoration plan, we are respectfully submitting the following amended proposal that is specifically designed to maintain our previously established collaboration with the Japanese herring researchers and foster their further involvement to address critical questions regarding factors that may be limiting recovery of herring in Prince William Sound. Please note that the two Objectives we have proposed are focused on scientific topics that were encompassed by our original proposal and thus should not require any additional scientific or technical review.

## **Solutions for Global Aquaculture**

400 Commercial Street . Portland, Maine 04101 USA . 207 773-2500 .  
207 773 2522 (FX) . [www.marical.biz](http://www.marical.biz)

Attachment A  
Page 10 of 16



**Objective 1: Plan and coordinate travel for Dr. Takahiro Matsubara and an associate or designee to travel to Alaska to attend the Marine Science Symposium in January 2008, participate in an EVOS Trustee Council sponsored workshop on herring stock restoration, visit the fish culture facilities at the ASLC, the Seward Shellfish Hatchery and USGS Marrowstone Field Lab (Nordland, WA), tour potential stock restoration rearing and release sites in PWS (e.g. Tatiltik), and meet with scientists and interested parties involved in the Prince William Sound herring restoration effort. Dr. Matsubara is an internationally recognized expert in the field of fish endocrinology with a specific focus in the area of reproduction. He has authored over 50 peer reviewed papers and has collaborated on multiple occasions with fish physiology researchers in the U.S. As the Section Chief for the Resources Enhancement Section of the Hokkaido National Fisheries Research Institute, he directs all aspects of fish culture investigations at the Akkeshi Field Station, including those for Pacific herring.**

For Objective 1, we propose to have Dr. Matsubara and an associate make a presentation at and EVOS TC sponsored herring restoration workshop to be held in conjunction with the Marine Science Symposium in January 2008. The goal of the workshop will be to provide a forum for the exchange of information related to past, present and future efforts to restore herring stocks in Japan and PWS. Dr. Matsubara and his colleague(s) will describe the research, development and implementation of herring culture techniques for stock supplementation that has taken place in Japan during the last 20 years. The presentation will focus on the technical problems encountered during the early phases of the program, the economic bottlenecks in scaling up production from the laboratory to large-scale releases for stock supplementation, and post-release evaluation to determine the contribution to recruitment.

In conjunction with this trip, we will arrange for Dr. Matsubara and his colleague(s) to travel to Seward to tour the ASLC and Seward Shellfish Hatcheries where they will be able to view and assess these facilities as to their potential use for conducting culture related research for herring. This visit will include a review of the ASLC - MarCal program progress to date and discussions to guide future research efforts and topics. We will also attempt to include in these collective discussions with Dr. Matsubara a preliminary assessment of the likely costs of scaling a hatchery-based herring culture effort into a larger pilot-study project for releasing juvenile herring in PWS. As part of this workshop, we are also planning a meeting between Dr. Matsubara and Dr. Shannon Atkinson, UAF faculty member and director of the UAF Endocrinology Laboratory which is located at the ASLC. The purpose of this meeting and laboratory tour will be to foster further linkages between Alaska based endocrinology researchers and determine the availability and adequacy of the laboratory to conduct specific analyses for the research described below.

## **Solutions for Global Aquaculture**

400 Commercial Street . Portland, Maine 04101 USA . 207 773-2500 .  
207 773 2522 (FX) . [www.marical.biz](http://www.marical.biz)

In addition to the proposed travel to Seward, we will also make arrangements for Dr. Matsubara and his colleague(s) to get a short (half day) tour of PWS and visit the community and a potential field site for a pilot-scale herring rearing and release project at Tatitlik. The purpose of this visit will be to broaden the interaction between scientists involved in herring stock restoration and PWS community stakeholders. Such interaction will help provide a foundation for community participation in the recovery efforts in PWS, much as they have for in Japan where community based enhancement projects play a major role in supplementing wild herring stock production.

Finally, we will coordinate with Dr. Paul Hershberger of the USGS for Dr. Matusbara and his colleague(s) to visit the Marrowstone Field Station in Nordland, WA before or after travel to Alaska. The endocrine studies proposed as part of Objective 2 are directly linked to environmental stress and disease expression in PWS herring (e.g. VHS) and this meeting will be used to develop hypotheses regarding the role of disease on reproductive function in herring, and the potential implications for stock restoration in PWS. It will also give the Japanese the opportunity to view and assess the culture techniques employed at one of major herring research facilities in the U.S.

**Objective 2: Conduct an assessment (survey) of yolk proteins and products in female herring that affect gamete quality and potential larval recruitment during the spawning cycle in PWS during 2008.** This second Objective is an extension of our initial sampling work in Prince William Sound and focuses on the characterization of the egg quality from spawning females and collected from roe-on-kelp sources. Data gathered from this effort will provide important insights into how spawning stress experienced by herring may affect gamete quality and larval production in the wild as well as under culture conditions. These proposed studies will focus on analysis of yolk proteins within collected eggs. Such studies will directly benefit from the collaboration of Dr. Matsubara and his colleagues as a result of his expertise in fish reproductive endocrinology.

Yolk formation in oocytes (developing eggs) of pelagic marine fish occurs through the accumulation of vitellogenin and its structural proteins, lipovitellin and phosvitin, that are synthesized by the liver in response to ovarian-derived estrogen (Hiramatsu et al. 2002). These proteins supply the amino acids necessary for embryonic development, as well as bind and deliver lipids and minerals (e.g. calcium) used for energy and structural synthesis by developing embryo. Studies have shown that stress (measured as or directly induced by cortisol) interferes with the production of vitellogenin (Berg et al. 2004), possibly through down regulation of estrogen-mediated estrogen receptor transcription (Lethimonier et al. 2000). The documented expression and incidence of viral hemorrhagic septicemia (VHS) and other pathogens in PWS herring suggest that these fish experience stress at the time of spawning which could potentially affect gamete quality and larval production. These effects may be manifest as reduced

## **Solutions for Global Aquaculture**

400 Commercial Street . Portland, Maine 04101 USA : 207 773-2500 .  
207 773 2522 (FX) . [www.marical.biz](http://www.marical.biz)

Attachment A  
Page 12 of 16

levels of amino acids, lipids or essential minerals. Understanding time-related changes in these proteins during the spawning cycle will have direct benefit for gamete as well as roe-on-kelp collection for stock supplementation projects.

In this study, we propose to sample, measure and characterize changes in yolk proteins, amino acids and bound calcium levels in the blood and (developing) eggs of pre-spawning and spawning herring during the early, middle and late part of the spawning cycle within Matthews Bay (site of our 2007 gamete and roe-on-kelp collections), or an alternate spawning site as determined by the ADF&G. Our objective is to measure these changes in visibility healthy as well as stressed (diseased) fish identified on the basis of external symptoms (hemorrhagic tissue). Analyses of yolk proteins will be conducted at the UAF Endocrinology Lab at the ASLC and follow the method described by Ohkubo et al. (2006) and Sawaguchi et al. (2006). Analyses of amino acid content and bound calcium in eggs will be conducted at the MarCal molecular biology lab in Portland, ME. Tissue samples will be sent to the ADF&G pathology lab to determine the presence of VHS or other documented PWS herring pathogens.

**Budget Request:** As indicated on the attached budget, we are requesting a total of \$80,600, (not including G&A), to conduct this work that will directly maintain and foster our established collaboration with the Hokkaido National Fisheries Research Institute scientists. Our request includes 2 months of personnel time for the P.I. and one month for the co-P.I. They will personally arrange for Dr. Matsubara's visit and coordinate all site visit and workshop activities. Travel in the amount of \$20,000 is requested to bring Dr. Matsubara and a colleague to Alaska for 10 days each and for the P.I. and co P.I. to accompany them during their meetings, presentation and site visits. A consulting contract of \$5000 is also included for Dr. Matsubara to review in detail the data obtained from our first year of effort, other data presented to him as part of any workshop proceedings, and to help establish and interact in efforts to characterize yolk protein synthesis and utilization in Pacific herring. An additional \$11,000 is requested for contractual analyses of yolk and stress proteins at the ASLC, and \$1,500 for supplies..

Lastly, we would like to call to your attention the need for your prompt action on our request for possible EVOS funding of our amended proposal as detailed above. We are very interested in securing a place for Dr. Matsubara as a featured speaker for the Marine Science Symposium that occurs in January 2008 as a key part of Objective #1. In order for us to proceed in this effort, we would very much like to receive a reply from your office as soon as possible. To this end, we have already secured an appointment with you this Friday, October 26<sup>th</sup> where we can address any questions or concerns that you or your staff might have after review of the proposal. We thank you for your consideration of furthering the collaboration we have established with the herring researchers from the Hokkaido National Fisheries Research Institute. We believe the

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contribution of these scientists to the recovery effort for herring in PWS will be significant and that the funds requested are vital to help us ensure their continuing participation.

Sincerely,



Tim Linley, Ph.D.  
Senior Research Scientist

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Attachment A

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**Herring Japanese Collaboration Budget**  
**Single Year Budget - November 1, 2007 - October 31, 2008**

FY 08

<b>Personnel (including fringe)</b>		<b>MBF</b>	<b>Rate/MBF</b>	
Howard Ferren	Co-PI	1	7.5	7.5
<b>Subtotal Personnel</b>				<b>7.5</b>
<b>Travel</b>		<b>Quantity</b>	<b>Cost/eq.</b>	
Annual EVOS Meeting (Ferren, Scientist)				
Mileage		1	0.1	0.1
Per diem		5	0.2	1.0
<b>Subtotal Travel</b>				<b>1.1</b>
<b>Contractual services, equipment rental, professional services, communications, printing</b>				
MarCal				48.4
UAF - Endocrinology Lab				
Cortisol ELISA (n=60) @ \$75 per sample		60	0.07	4.2
Vitellogenin ELISA (n=60) @ \$75 per sample		60	0.07	4.2
<b>Subtotal Contractual</b>				<b>54.8</b>
<b>Commodities, expendable supplies w/estimated life of less than one year and unit value &lt; \$1,000</b>				
<b>Subtotal Commodities</b>				<b>0.0</b>
<b>Equipment - non-expendable items w/estimated life of more than one year and unit value &gt; \$1,000</b>				
<b>Subtotal Equipment</b>				<b>0.0</b>
<b>Subtotal Direct Costs All Categories</b>				<b>63.4</b>
<b>Modified Total Direct Costs (exclude Equipment)</b>				<b>63.4</b>
ASLC indirect rate 27.08% of MTDC (modified total direct cost)			27.08%	17.2
<b>TOTAL COSTS w/o G&amp;A</b>				<b>80.6</b>
<b>TOTAL COSTS including G&amp;A</b>				<b>87.9</b>

**Herring Japanese Collaboration Budget**  
**Single Year Budget - November 1, 2007 - October 31, 2008**

				FY 08
<b>PERSONNEL</b>				
Tim Linley	Principal Investigator	2	7.1	14.2
<b>Subtotal Personnel</b>				<b>14.2</b>
<b>TRAVEL</b>				
Annual EVOS Meeting (Linley)				
Airfare		1	1.1	1.1
Per diem		10	0.2	2.0
Scientific Meeting - AFS (Linley)				
Airfare		1	0.7	0.7
Per diem		5	0.3	1.5
Japan-US travel (Matsubara)				
Airfare		2	2.6	5.2
Per diem		20	0.3	6.0
PWS site tour		1	2.5	2.5
Collections, field work PWS (TBD)				
Airfare		3	0.5	1.5
Per diem		6	0.2	1.2
<b>Subtotal Travel</b>				<b>21.7</b>
<b>Contractual vessel charter, equipment rental on PWS, professional services, communications, printing</b>				
T. Matsubara (HNFRI) consulting contract				5.0
Vessel charter - fish collection		3	1	3.0
Communications				1.0
<b>Subtotal Contractual</b>				<b>9.0</b>
<b>Commodities expendable supplies w/estimated life of less than one year and unit value &lt; \$1,000</b>				
Chemicals, reagents				
HPLC (amino acids)				0.5
Spectrophotometry (calcium)				0.5
Freight/postage				0.5
<b>Subtotal Commodities</b>				<b>1.5</b>
<b>Equipment non-expendable items w/estimated life of more than one year and unit value &gt; \$1,000</b>				
<b>Subtotal All Categories</b>				<b>46.4</b>

## **Exxon Valdez Oil Spill Trustee Council**

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### **TRUSTEE COUNCIL MEETING NOTES**

**Anchorage, Alaska**

**October 12, 2007**

Chaired by: Talis Colberg  
Trustee Council Member

#### **Trustee Council Members Present:**

Joe Meade, USFS  
Randall Luthi, USDOJ  
Craig O'Connor, NOAA \*\*

• Talis Colberg, ADOL \*  
Denby Lloyd, ADF&G  
Larry Hartig, ADEC

- Chair
- \* Craig Tillery alternate for Talis Colberg at 10:00 a.m.
- \*\* Craig O'Connor alternate for James Balsiger

The meeting convened at 9:00 a.m., October 12, 2007 in Anchorage at the EVOS Conference Room.

#### **1. Approval of the Agenda**

APPROVED MOTION: Motion to approve the draft agenda dated October 12, 2007, distributed on September 27, 2007.

Motion by Hartig, second by Lloyd

#### **2. Approval of September 13, 2007 meeting notes**

APPROVED MOTION: Motion to approve the September 13, 2007 meeting notes

Motion by O'Connor, second by Hartig

Federal Trustees  
U.S. Department of the Interior  
U.S. Department of Agriculture  
National Oceanic and Atmospheric Administration

State Trustees  
Alaska Department of Fish and Game  
Alaska Department of Environmental Conservation  
Alaska Department of Law

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**Public Advisory Committee (PAC) comments were offered by: Stacy Studebaker, Ed Zeine, Pat Lavin and RJ Kopchak**

**Public comment period began at 9:15 a.m.**

**Eleven public comments were received.**

**Public comment closed at 10:50 a.m.**

**Off the record 10:50 a.m.**

**On the record 11:00 a.m.**

**3. FY 08 Draft Work Plan**

**APPROVED MOTION:**

Motion to approve projects 080814 – Bishop, 080817 – Gay, 080811 – Kline, 080742 – Matkin, 080834 – Meuret-Woody, 080290 – Nelson, 080806 – Vollenweider and with respect to project 080821 – Linley direct the Executive Director to work with the PI's to determine if some lesser project could be put together to make sure this project is available for funding in '09 or can go forward in '09

Motion by Luthi, second by Meade

**4. FY 08 – Project Management Fees**

**APPROVED MOTION:**

Motion to approve adding project manager's one month salary as management fee to the appropriate agency for projects 080814, 080817, 080811, 080742, 080834, 080290, and 080806

Motion by Lloyd; second by O'Connor

**5. Executive Session**

**APPROVED MOTION:**

Motion to go into executive session to discuss personnel and legal issues

Attachment B  
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Motion by Luthi, second by O'Connor

Off the record: 12:45 p.m.

On the record: 2:00 p.m.

6. FY 08 Draft Work Plan

APPROVED MOTION: Motion to approve funding for 080751 – Irons,  
080822 – Moffitt, 080804 – Rice, and 080759 –  
Rosenberg

Motion by O'Connor, second by Luthi

Off the record: 3:57 p.m.

On the record: 4:09 p.m.

7. FY 08 – Project 080100 Program Development & Implementation Budget –  
AFE Budget Item

APPROVED MOTION: Motion to approve \$10,000 for participation at the  
Alaska Forum on the Environment

Motion by Luthi, second by Meade

8. FY 08 – Project Management Fees

APPROVED MOTION: Motion to approve adding project manager's one  
month salary as management fee to the  
appropriate agency for projects 080751, 080822,  
080804, and 080759

Motion by O'Connor, second by Luthi

Meeting adjourned at 5:05 p.m.

APPROVED MOTION: Motion to adjourn Luthi, second by Hartig