FY12 INVITATION
PROPOSAL SUMMARY PAGE

Project Title: Long term monitoring: Environmental drivers component - Long-term Monitoring of zooplankton populations on the Alaskan Shelf and Gulf of Alaska using Continuous Plankton Recorders.

Project Period: October 1, 2011 – September 30, 2016

Primary Investigator(s): Sonia Batten soba@sahfos.ac.uk and Alex Bychkov (bychkov@pices.int)

Study Location: Shelf waters SW of PWS, Cook Inlet, northern Gulf of Alaska

Abstract: This project is a component of the integrated Long-term Monitoring of Marine Conditions and Injured Resources and Services submitted by McCammon et. al. Many important species, including herring, forage outside of Prince William Sound for at least some of their life history (salmon, birds and marine mammals for example) so an understanding of the productivity of these shelf and offshore areas is important to understanding and predicting fluctuations in resource abundance. The Continuous Plankton Recorder (CPR) has sampled a continuous transect extending from the inner part of Cook Inlet, onto the open continental shelf and across the shelf break into the open Gulf of Alaska monthly through spring and summer since 2004. There are also data from 2000-2003 from a previous transect. The current transect intersects with the outer part of the Seward Line and provides complementary large scale data to compare with the more local, finer scale plankton sampling on the shelf and in PWS. We propose to continue sampling this transect through 2016. Resulting data will enable us to identify where the incidences of high or low plankton are, which components of the community are influenced, and whether the whole region is responding in a similar way to meteorological variability. Evidence from CPR sampling over the past decade suggests that the regions are not synchronous in their response to ocean climate forcing. The data can also be used to try to explain how the interannual variation in ocean food sources creates interannual variability in PWS zooplankton, and when changes in ocean zooplankton are to be seen inside PWS. The CPR survey is a cost-effective, ship-of-opportunity based sampling program supported in the past by the EVOS TC that includes local involvement and has a proven track record.

Estimated Budget: $664.1K total
EVOSTC Funding Requested: $279.5K including GA (9%)
FY12 $0, FY13 $66.8K, FY14 $68.8K, FY15 $70.7K, FY16 $73.1K

Non-EVOSTC Funds to be used: $384.6K
FY12 $0, FY13 $91.9K, FY14 $94.7K, FY15 $97.5K, FY16 $100.4K

Date: May 25, 2011

(NOT TO EXCEED ONE PAGE)

PROJECT PLAN

I. NEED FOR THE PROJECT

A. Statement of Problem

Identify the problem the project is designed to address. Describe the background and history of the problem. Include a scientific literature review that covers the most significant previous work history related to the project.

Justification

The Continuous Plankton Recorder (CPR) transect samples the Alaskan shelf and crosses the slope into the open Gulf of Alaska, providing a record of taxonomically resolved near-surface zooplankton and large phytoplankton abundance over wide spatial scales. Many important species, including herring, forage outside of Prince William Sound for at least some of their life history (salmon, birds and marine mammals for example) so an understanding of the productivity of these shelf and offshore areas is important to understanding and predicting fluctuations in resource abundance. Our sampling transect extends from the inner part of Cook Inlet, onto the open continental shelf, across the shelf break and into the open Gulf of Alaska in a continuous fashion (Figure 1), enabling us to identify where the incidences of high or low plankton are and whether the whole region is responding in a similar way to meteorological variability. Evidence from CPR sampling over the past decade suggests that the regions are not synchronous in their response to ocean climate forcing.

Figure 1 Location of samples on a typical CPR transect (○) together with the Seward Line (+)

The funding requested is modest and because of the Consortium approach (the North Pacific CPR program is funded through a consortium managed by the North Pacific Marine Science organization, PICES) is less than half the actual cost of the data collection. The project has a proven track record with a high sampling success rate, all past deliverables have been fully met and there is a strong record of primary publications resulting from the program; the funding would likely generate a very positive return for the EVOS TC. SAHFOS has trained local technicians to service the CPRs and uses the Horizon shipping company for the sampling so that ~10% of the requested funding will be returned to the region.

B. Relevance to 1994 Restoration Plan Goals and Scientific Priorities

Please see pages 2-4 of the integrated proposal titled “Long-Term Monitoring of Marine Conditions and Injured Resources and Services,” and submited by McCammon et. al

II. PROJECT DESIGN

A. Objectives

Project Objectives

The fundamental goal of this program is to provide continued large spatial scale data on zooplankton populations to extend the existing time series and integrate the data with more regional, locally more intensive, sampling programs. More specifically, we will provide monthly (spring to fall – typically April to September) sampling of zooplankton and large phytoplankton along the transect from the oceanic Gulf of Alaska to Cook Inlet, analyzing every 4th oceanic and every shelf sample to provide taxonomically resolved abundances. Temperature loggers have been fitted to some CPRs in the past and from 2010 we are endeavouring to maintain in situ temperature data collection on this transect.

Project Integration

Work is currently underway to compare the CPR sampling with historic and concurrent plankton data collected from within PWS to examine the links between zooplankton within and outside of the Sound under EVOS TC project 10100624, as part of the herring restoration program. This would continue within the current proposed work as only a short time series of taxonomically resolved plankton data from PWS will be generated by 2012. We also here propose to integrate CPR sampling with the twice-yearly zooplankton sampling along the Seward Line (which intersects the CPR transect at its outermost stations, Fig 1) and the continuous oceanographic framework provided by the GAK-1 sampling.

CPR sampling has strengths (robust, cost-effective and large scale) but it also has limitations (near surface sampling only, small sample volumes and robust sampling mechanism that may cause underrepresentation of rarer and/or fragile organisms). The PWS and Seward Line zooplankton sampling are complementary by providing spatially detailed, full water column sampling in key point locations. The Seward Line sampling is carried out twice/year so the monthly resolution of the CPR will fill-in information on seasonality of shelf and off shore lower trophic levels.

Leveraging

PICES has endorsed the North Pacific CPR project since its inception in 2000. In 2007 PICES initiated a funding consortium to support the project, through relatively small contributions from agencies with interest in all or part of the region. At this time, the Canadian Department of Fisheries and Oceans (DFO) and the North Pacific Research Board (NPRB) have each made commitments through 2014 and we are also supported by the CPR parent organization, SAHFOS. The EVOSTC was instrumental in the establishment of the CPR program and has supported it through projects 030624, 040624, 070624 and currently to the PICES consortium through project 10100624 which extends through the 2012 field season.

B. Procedural and Scientific Methods

Project Approach and Logistics

We do not propose to make any changes to the sampling regime that has been operating so successfully. The cargo vessel *Horizon Kodiak* will tow a CPR northbound towards Cook Inlet approximately once per month between April and September each year. The samples will be unloaded and the gear serviced each time by Alaskan technicians who have been trained by

SAHFOS. Sample processing will be carried out at the DFO laboratory in Sidney, BC and at the SAHFOS laboratory. QC and sample archiving will be carried out by SAHFOS.

C. Data Analysis and Statistical Methods

Previous proposals have already described in detail the statistical validity of this approach and demonstrated that the sampling frequency and spacing is suitable to characterize seasonal, interannual and spatial variability at the mesoscale. Further information can be found in Batten et al., (2003) and previous funded EVOS TC proposals, but since our proposed sampling and processing protocols are unchanged and have been previously approved we are not repeating them extensively here.

Large scale patchiness (on the order of 10s to 100s of kms) needs to be considered as a factor that may contribute to observed variability in the plankton data. The greatest resolution possible from CPR data is 18.5 km, however, to maximise coverage with the resources available we process samples spaced 74 km in the open ocean (every fourth sample being processed) but all samples on the shelf. An individual sample will pass through small patches of plankton and so provide an 'average' of the small-scale patchiness. We have established the decorrelation length-scales for common taxa from data collected early in the survey (2000) and determined that samples that are spaced well apart, such as every 74 km, are likely to be representative and not likely to be within or outside of a patch.

Our methodology has remained unchanged since the survey's inception so comparisons with historical CPR data are straightforward. Comparisons with other plankton sampling are more problematic as each sampling system has a bias of some sort caused by, for example, mesh size, depth of sampling, taxonomic resolution. However, by using indices such as anomalies and pooling taxa to create functional groups useful comparisons can be made. Such work is currently underway under project 10100624 and will continue here, as described above.

D. Description of Study Area

The project will sample waters on a transect from the Straits of Juan de Fuca outside of Puget Sound (48.45°N, 125°W, Captain's discretion) across the Gulf of Alaska to Cook Inlet and Anchorage. Sampling will end at about 60ºN, 151.9°W (at Captain's discretion). See Figure 1 for a map of the transect. Ship tracks vary minimally from month to month.

Figure 1 Location of samples on a typical CPR transect (○) together with the Seward Line (+)

E. Coordination and Collaboration with Other Efforts

See Leveraging and Integration sections above**.**

Budget

Funding is already provided for the 2012 field sampling and work up, under the existing project 10100624. Costs below are for 2013 onwards and commence at a similar level to 2012. Modest annual inflationary increases are requested for subsequent years (3%).

III. SCHEDULE

A. Project Milestones

Objective 1. Sample collection on the transect from Cook Inlet to Puget Sound will begin in spring 2012 and continue approximately monthly through to August/September 2012 (6 transects will be sampled). This schedule will be repeated each year to 2016. All shelf samples will be processed and every 4th oceanic sample.

Objective 2. A subset of samples (25%) will be processed within 3 months of collection at the Institute of Ocean Sciences (DFO, Canada) and results from this processing (e.g. estimated mesozooplankton biomass and comparisons with data from previous years) will available in progress reports and on the project website as soon as practicable. Full, quality controlled data from 2012 will be available by August 2013, and in a similar fashion in subsequent years (e.g. August 2014 for data collected within 2013).

B. Measurable Project Tasks

FFY 12, 1st quarter (October 1, 2011-December 31, 2011)

December:	Processing and initial analysis of samples collected in summer/fall 2011 will be completed.

FFY 12, 2nd quarter (January 1, 2012-March 31, 2012)

January:	Attend Annual Science Symposium
February:	Shipping of serviced CPR from UK to Horizon Kodiak
March/April:	First transect sampled

FFY 12, 3rd quarter (April 1, 2012-June 30, 2012)

April:	Begin sample processing (ongoing hereafter)
April-June:	Three transects sampled
June:	First results from 2010 sampling available (ongoing hereafter)

FFY 12, 4th quarter (July 1, 2012-September 30, 2012)

July-Sept:	Two transects sampled, CPR shipped back to UK for overhaul.
August:	Final QC data from 2011 available

FFY 13, 1st quarter (October 1, 2012-December 31, 2012)

October:	Attend annual PICES meeting

December: Processing and initial analysis of samples collected in summer/fall 2011 will be completed

Subsequent years will follow the same pattern until:

FFY 17, 3rd quarter (April 1, 2012-June 30, 2017)

April 15 Submit final report.

Budget Justification

The North Pacific CPR survey is supported by a Consortium managed by the North Pacific Marine Science Organisation (PICES), of which the EVOS TC is a member. Costs included here are estimated at 40% of the full costs of acquiring data along the north-south transect. The proposal and budget asks for a contribution to the CPR funding consortium to enable sampling and analysis of samples from the northern Gulf of Alaska to be maintained at the current resolution (6 times per year March-September, all shelf samples processed and every 4th oceanic sample) after 2012 which is currently funded through project 10100624. The North Pacific Research Board and Canadian Department of Fisheries and Oceans (DFO) are each contributing to the consortium at a similar level to this request (until 2014 under current agreements). The CPR parent organization, Sir Alister Hardy Foundation for Ocean Science (SAHFOS) is also providing salary support for some of the UK-based personnel.

Personnel

S. Batten will manage the day to day running of the project, carry out research on the data and complete reports and publications. D. Moore is the technician based in Sidney, BC who will process the samples and carry out some sample analysis. The SAHFOS team of analysts will complete the sample analysis and sample curation. Small amounts of time are allocated for other personnel to liaise with the shipping company (P. Pritchard), technicians to set up/repair the CPRs at the start/end of the field season and the data manager (D. Stevens) to collate, check and deliver the finalized data. Salaries have been increased by 3% in each year after FY12 (which is currently funded by project 10100624). There is no overtime and the salary costs include National Insurance and pension contributions.

Personnel	Time allocated per yr 2012-16	FY 2013	FY 2014	FY 2015	FY 2016
S Batten	1.2	$8,955	$9,2234	$9,500	$9,786
Doug Moore	1.4	$7,765	$7,998	$8,238	$8,485
Technicians - workshop	0.3	$1,617	$1,666	$1,716	$1,767
Technicians - analysts	2.0	$10,163	$10,468	$10,782	$11,105
D Stevens	0.3	$1,830	$1,885	$1,942	$2,000
P Pritchard	0.2	$1,493	$1,537	$1,583	$1,631
Total	5.4 mo	$31,822.80	$32,777.50	$33,760.80	$34,773.70

Travel

A proportion (20%) of estimated costs for the PI to attend the Alaska Science Symposium in Anchorage and the PICES annual meeting is requested for FY13-16.

Contractual

Lease of CPRs from SAHFOS is included here. 40% of the costs for 6 tows per year = $3373 in FY13 increasing by 3% per year in subsequent years.
A proportion of the costs for shipping CPRs to and from the port of Tacoma at the start/end of the field season is also included at $1311 in FY13, increased by 3% per year in subsequent years.
Servicing of the CPRs by SAHFOS-trained technicians in Anchorage is included at $2,472 in FY13 increased by 3% in subsequent years.
A gratuity is given to the ship's crew for each transect sampled and a proportion (40%) included here: $705 in FY13 increased by 3% in subsequent years.

A contribution to the computing services costs in the UK and maintenance of the project website by PICES is included here at $205 and $412 respectively in FY13 increased by 3% in subsequent years.

Commodities
A proportion (40%) of the costs for shipping samples between Anchorage and the DFO and SAHFOS labs is included at $367 in FY13 increased by 3% in subsequent years.
40% of the costs of the filtering mesh are included ($223 per mechanism): $1652 in FY13, increased by 3% in subsequent years.
A proportion of the tow wires and lab consumables are included at $433 and $764 in FY2013 respectively, increased by 3% in subsequent years.

Equipment
No new equipment will be purchased, existing microscopes and CPRs will be used.

Indirect costs
45% of the salaries are added as an indirect cost (personnel at SAHFOS and technicians in BC and Anchorage). This will be split 40% to SAHFOS and 5% retained by PICES.

***EXXON VALDEZ* OIL SPILL TRUSTEE COUNCIL**
DETAILED BUDGET FORM FY 12-FY16

Budget Category:	Proposed FY 12	Proposed FY 13	Proposed FY 14	Proposed FY 15	Proposed FY 16	TOTAL PROPOSED
Personnel	$0.0	$31.8	$32.7	$33.8	$35.0	$133.3
Travel	$0.0	$1.0	$1.0	$1.0	$1.1	$4.1
Contractual	$0.0	$7.2	$7.4	$7.5	$7.9	$30.0
Commodities	$0.0	$4.5	$4.7	$4.8	$4.8	$18.8
Equipment	$0.0	$0.0	$0.0	$0.0	$0.0	$0.0
Indirect Costs (*will vary by proposer*)		$16.8	$17.3	$17.8	$18.3	$70.2
SUBTOTAL	$0.0	$61.3	$63.1	$64.9	$67.1	$256.4
General Administration (9% of subtotal)	$0.0	$5.5	$5.7	$5.8	$6.0	$23.1
PROJECT TOTAL	$0.0	$66.8	$68.8	$70.7	$73.1	$279.5
Other Resources (Cost Share Funds)	$0.0	$91.9	$94.7	$97.3	$100.7	$384.6

The North Pacific CPR survey is supported by a Consortium managed by the North Pacific Marine Science Organisation, of which the EVOS TC is a member. Costs included here are estimated at 40% of the full costs of acquiring data along the north-south transect. The remining funds will come from the consortium which currently includes the NPRB, Canadian Dept Fisheries and oceans and SAHFOS.

FY12-16

Program Title:
Team Leader:

FORM 3A
NON-TRUSTEE AGENCY SUMMARY

***EXXON VALDEZ* OIL SPILL TRUSTEE COUNCIL**
DETAILED BUDGET FORM FY 12-FY16

Personnel Costs:		Months	Monthly		Personnel
Name	Project Title	Budgeted	Costs	Overtime	Sum
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
		Subtotal	0.0	0.0	
				Personnel Total	$0.0

Travel Costs:	Ticket	Round	Total	Daily	Travel
Description	Price	Trips	Days	Per Diem	Sum
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
				Travel Total	$0.0

FY12

Program Title:
Team Leader:

FORM 3B
PERSONNEL & TRAVEL DETAIL

***EXXON VALDEZ* OIL SPILL TRUSTEE COUNCIL**
DETAILED BUDGET FORM FY 12-FY16

Contractual Costs: Description	Contract Sum
If a component of the project will be performed under contract, the 4A and 4B forms are required. **Contractual Total**	$0.0

Commodities Costs: Description	Commodities Sum
Commodities Total	$0.0

FY12

Program Title:
Team Leader:

FORM 3B
CONTRACTUAL & COMMODITIES DETAIL

***EXXON VALDEZ* OIL SPILL TRUSTEE COUNCIL**
DETAILED BUDGET FORM FY 12-FY16

New Equipment Purchases: Description	Number of Units	Unit Price	Equipment Sum
			0.0
			0.0
			0.0
			0.0
			0.0
			0.0
			0.0
			0.0
			0.0
			0.0
			0.0
			0.0
			0.0
		New Equipment Total	$0.0

Existing Equipment Usage: Description	Number of Units	Inventory Agency

FY12

Program Title:
Team Leader:

FORM 3B
EQUIPMENT DETAIL

***EXXON VALDEZ* OIL SPILL TRUSTEE COUNCIL**
DETAILED BUDGET FORM FY 12-FY16

Personnel Costs:		Months	Monthly		Personnel
Name	Project Title	Budgeted	Costs	Overtime	Sum
S Batten	Long term monitoring of zooplankton	1.2	7.5	0.0	9.0
Doug Moore	populations on the Alaskan Shelf and Gulf	1.4	5.6	0.0	7.8
Technicians - workshop	of Alaska using Continuous Plankton recorders	0.3	5.4	0.0	1.6
Technicians - analysts		2.0	5.0	0.0	10.0
D Stevens		0.3	5.7	0.0	1.8
P Pritchard		0.2	7.5	0.0	1.5
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
		Subtotal	36.7	0.0	
				Personnel Total	$31.8

Travel Costs:	Ticket	Round	Total	Daily	Travel
Description	Price	Trips	Days	Per Diem	Sum
					0.0
Portion of PI's travel to Alaska marine Science meeting and PICES annual					1.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
				Travel Total	$1.0

FY13

Program Title:
Team Leader:

FORM 3B
PERSONNEL & TRAVEL DETAIL

***EXXON VALDEZ* OIL SPILL TRUSTEE COUNCIL**
DETAILED BUDGET FORM FY 12-FY16

Contractual Costs: Description	Contract Sum
Portion of local CPR servicing in Anchorage	2.5
Portion of CPR leasing	3.4
Portion of computing services	0.2
Portion of website maintenance by PICES	0.4
Portion of tow payment to ship	0.7
If a component of the project will be performed under contract, the 4A and 4B forms are required. **Contractual Total**	7.2

Commodities Costs: Description	Commodities Sum
lab consumables	0.8
Shipping of gear	1.2
shipping of samples	0.4
filtering mesh	1.7
Tow wires	0.4
Commodities Total	4.5

FY13

Program Title:
Team Leader:

FORM 3B
CONTRACTUAL & COMMODITIES DETAIL

***EXXON VALDEZ* OIL SPILL TRUSTEE COUNCIL**
DETAILED BUDGET FORM FY 12-FY16

New Equipment Purchases: Description	Number of Units	Unit Price	Equipment Sum
			0.0
			0.0
			0.0
			0.0
			0.0
			0.0
			0.0
			0.0
			0.0
			0.0
			0.0
			0.0
			0.0
		New Equipment Total	$0.0

Existing Equipment Usage: Description	Number of Units	Inventory Agency
existing CPRs will be used. Lease costs charged above cover replacement/repair		
external bodies	1	
internal mechanisms	4	
Existing microscopes will also be used, (including one purchased in FY03)	7	

FY13

Program Title:
Team Leader:

FORM 3B
EQUIPMENT DETAIL

***EXXON VALDEZ* OIL SPILL TRUSTEE COUNCIL**
DETAILED BUDGET FORM FY 12-FY16

Personnel Costs:		Months	Monthly		Personnel
Name	Project Title	Budgeted	Costs	Overtime	Sum
					0.0
S Batten	Long term monitoring of zooplankton	1.2	7.7		9.2
Doug Moore	populations on the Alaskan Shelf and Gulf	1.4	5.7		8.0
Technicians - workshop	of Alaska using Continuous Plankton recorders	0.3	5.6		1.7
Technicians - analysts		2.0	5.2		10.4
D Stevens		0.3	5.9		1.9
P Pritchard		0.2	7.7		1.5
					0.0
					0.0
					0.0
					0.0
					0.0
		Subtotal	37.8	0.0	
				Personnel Total	$32.7

Travel Costs:	Ticket	Round	Total	Daily	Travel
Description	Price	Trips	Days	Per Diem	Sum
					0.0
Portion of PI's travel to Alaska marine Science meeting and PICES annual					1.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
				Travel Total	$1.0

FY14

Program Title:
Team Leader:

FORM 3B
PERSONNEL & TRAVEL DETAIL

***EXXON VALDEZ* OIL SPILL TRUSTEE COUNCIL**
DETAILED BUDGET FORM FY 12-FY16

Contractual Costs: Description	Contract Sum
Portion of local CPR servicing in Anchorage	2.6
Portion of CPR leasing	3.5
Portion of computing services	0.2
Portion of website maintenance by PICES	0.4
Portion of tow payment to ship	0.7
If a component of the project will be performed under contract, the 4A and 4B forms are required. **Contractual Total**	7.4

Commodities Costs: Description	Commodities Sum
lab consumables	0.8
Shipping of gear	1.4
shipping of samples	0.4
filtering mesh	1.7
Tow wires	0.4
Commodities Total	4.7

FY14

Program Title:
Team Leader:

FORM 3B
CONTRACTUAL & COMMODITIES DETAIL

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL
DETAILED BUDGET FORM FY 12-FY16

New Equipment Purchases: Description	Number of Units	Unit Price	Equipment Sum
			0.0
			0.0
			0.0
			0.0
			0.0
			0.0
			0.0
			0.0
			0.0
			0.0
			0.0
			0.0
		New Equipment Total	$0.0

Existing Equipment Usage: Description	Number of Units	Inventory Agency
existing CPRs will be used. Lease costs charged above cover replacement/repair		
external bodies	1	
internal mechanisms	4	
Existing microscopes will also be used, (including one purchased in FY03)	7	

FY14

Program Title:
Team Leader:

FORM 3B
EQUIPMENT DETAIL

***EXXON VALDEZ* OIL SPILL TRUSTEE COUNCIL**
DETAILED BUDGET FORM FY 12-FY16

Personnel Costs:		Months	Monthly		Personnel
Name	Project Title	Budgeted	Costs	Overtime	Sum
					0.0
S Batten	Long term monitoring of zooplankton	1.2	7.9		9.5
Doug Moore	populations on the Alaskan Shelf and Gulf	1.4	5.9		8.3
Technicians - workshop	of Alaska using Continuous Plankton recorders	0.3	5.7		1.7
Technicians - analysts		2.0	5.4		10.8
D Stevens		0.3	6.1		2.0
P Pritchard		0.2	7.9		1.6
					0.0
					0.0
					0.0
					0.0
					0.0
		Subtotal	38.9	0.0	
				Personnel Total	$33.8

Travel Costs:	Ticket	Round	Total	Daily	Travel
Description	Price	Trips	Days	Per Diem	Sum
					0.0
Portion of PI's travel to Alaska marine Science meeting and PICES annual					1.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
				Travel Total	$1.0

FY15

Program Title:
Team Leader:

FORM 3B
PERSONNEL & TRAVEL DETAIL

***EXXON VALDEZ* OIL SPILL TRUSTEE COUNCIL**
DETAILED BUDGET FORM FY 12-FY16

Contractual Costs: Description	Contract Sum
Portion of local CPR servicing in Anchorage	2.6
Portion of CPR leasing	3.6
Portion of computing services	0.2
Portion of website maintenance by PICES	0.4
Portion of tow payment to ship	0.7
If a component of the project will be performed under contract, the 4A and 4B forms are required. **Contractual Total**	$7.5

Commodities Costs: Description	Commodities Sum
lab consumables	0.8
Shipping of gear	1.3
shipping of samples	0.4
filtering mesh	1.8
Tow wires	0.5
Commodities Total	4.8

FY15	**Program Title:** **Team Leader:**	**FORM 3B** **CONTRACTUAL &** **COMMODITIES DETAIL**

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL
DETAILED BUDGET FORM FY 12-FY16

New Equipment Purchases: Description	Number of Units	Unit Price	Equipment Sum
			0.0
			0.0
			0.0
			0.0
			0.0
			0.0
			0.0
			0.0
			0.0
			0.0
			0.0
			0.0
		New Equipment Total	$0.0

Existing Equipment Usage: Description	Number of Units	Inventory Agency
existing CPRs will be used. Lease costs charged above cover replacement/repair		
external bodies	1	
internal mechanisms	4	
Existing microscopes will also be used, (including one purchased in FY03)	7	

FY15

Program Title:
Team Leader:

FORM 3B
EQUIPMENT DETAIL

***EXXON VALDEZ* OIL SPILL TRUSTEE COUNCIL**
DETAILED BUDGET FORM FY 12-FY16

Personnel Costs:		Months	Monthly		Personnel
Name	Project Title	Budgeted	Costs	Overtime	Sum
					0.0
S Batten	Long term monitoring of zooplankton	1.2	8.2		9.8
Doug Moore	populations on the Alaskan Shelf and Gulf	1.4	6.1		8.5
Technicians - workshop	of Alaska using Continuous Plankton recorders	0.3	5.9		1.8
Technicians - analysts		2.0	5.6		11.2
D Stevens		0.3	6.3		2.0
P Pritchard		0.2	8.2		1.6
					0.0
					0.0
					0.0
					0.0
					0.0
		Subtotal	40.3	0.0	
				Personnel Total	$35.0

Travel Costs:	Ticket	Round	Total	Daily	Travel
Description	Price	Trips	Days	Per Diem	Sum
					0.0
Portion of PI's travel to Alaska marine Science meeting and PICES annual					1.1
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
					0.0
				Travel Total	$1.1

FY16

Program Title:
Team Leader:

FORM 3B
PERSONNEL & TRAVEL DETAIL

***EXXON VALDEZ* OIL SPILL TRUSTEE COUNCIL**
DETAILED BUDGET FORM FY 12-FY16

Contractual Costs: Description	Contract Sum
Portion of local CPR servicing in Anchorage	2.7
Portion of CPR leasing	3.7
Portion of computing services	0.2
Portion of website maintenance by PICES	0.5
Portion of tow payment to ship	0.8
If a component of the project will be performed under contract, the 4A and 4B forms are required. **Contractual Total**	7.9

Commodities Costs: Description	Commodities Sum
lab consumables	0.8
Shipping of gear	1.3
shipping of samples	0.4
filtering mesh	1.8
Tow wires	0.5
Commodities Total	4.8

FY16	**Program Title:** **Team Leader:**	**FORM 3B** **CONTRACTUAL & COMMODITIES DETAIL**

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL
DETAILED BUDGET FORM FY 12-FY16

New Equipment Purchases: Description	Number of Units	Unit Price	Equipment Sum
			0.0
			0.0
			0.0
			0.0
			0.0
			0.0
			0.0
			0.0
			0.0
			0.0
			0.0
			0.0
		New Equipment Total	$0.0

Existing Equipment Usage: Description	Number of Units	Inventory Agency
existing CPRs will be used. Lease costs charged above cover replacement/repair		
external bodies	1	
internal mechanisms	4	
Existing microscopes will also be used, (including one purchased in FY03)	7	

FY16

Program Title:
Team Leader:

FORM 3B
EQUIPMENT DETAIL

EXXON VALDEZ OIL SPILL TRUSTEE COUNCIL
DETAILED BUDGET FORM FY 12-FY16