

## ***Securing Flow Data for a Lower Kenai Peninsula Salmon Stream***

Project Number: 030596

Restoration Category: Monitoring

Proposer: Cook Inlet Keeper

Lead Trustee Agency: ADFG

Cooperating Agencies: DOI-USGS

Alaska SeaLife Center: No

Duration: 1-year request for funding

Cost FY 03: \$22,600

Geographic Area: Cook Inlet basin

Injured Resources/Service: This project will result in direct and indirect benefits to all injured resources and lost or reduced services located in the Cook Inlet basin.

### ***ABSTRACT***

Since August 1998, Cook Inlet Keeper and the Homer Soil and Water Conservation District have been collecting discharge and water quality data from four important salmon streams on the lower Kenai Peninsula in Southcentral Alaska: Ninilchik River, Anchor River, Deep Creek, and Stariski Creek. With the loss of funding, USGS no longer can maintain the Ninilchik River gauge. Keeper, HSWCD, Ninilchik Traditional Council and others depend on this gauge for the flow data needed to achieve a complete picture of water quality in these watersheds. Keeper requests funds from the *Exxon Valdez* Oil Spill Trustee Council to contract with USGS to maintain the gauge for one year, during which time long-term funding will be secured.

## ***INTRODUCTION***

In response to population growth and rapidly changing land use on the Kenai Peninsula, Cook Inlet Keeper and the Homer Soil and Water Conservation District (HSWCD) initiated a water quality monitoring program on four salmon-bearing streams on the lower Kenai Peninsula. Through this program, Keeper's Stream Ecologist collects baseline water quality and flow data from the Ninilchik River, Deep Creek, Stariski Creek, and Anchor River. HSWCD conducts a coordinated education and information project that involves local communities in the monitoring and protection of these watersheds.

To conduct this comprehensive monitoring program and understand water quality patterns, Keeper and HSWCD rely on a gauge station on the Ninilchik River maintained by USGS. With the loss of funding for the National Water-Quality Assessment Program, USGS can no longer maintain the Ninilchik River gauge. Recognizing the importance of Keeper and HSWCD's monitoring program and the three and a half years of data collected from these streams, USGS has been working with Keeper to help ensure that flow data can continue to be collected. If Keeper and its partners can secure funding, USGS will not remove the Ninilchik River gauge. As of June 2002, the gauge has been operating, but no data has yet been downloaded or computed since Sept. 2001. The data are still available, if matching funds of \$7,750 to sponsor retrieval and processing of the FY02 data can be obtained. Efforts by Keeper to secure a grant of matching funds to operate the gauge during 2002 have recently failed. For retrieving and processing gauge data from Oct. 2001 thru Sept. 2002, this proposal is requesting \$7,750, which will be matched by USGS. For continued normal operation, maintenance of the gauge, data retrieval and processing, and serving the data RealTime on the Internet through FY03, this proposal is requesting \$10,500, which will be matched by USGS. For FY04 and beyond, the Ninilchik Tribal Council has prepared a proposal to the BIA to secure long-term funding for the gauge (Please see enclosed letter of support.)

Three years of continuous discharge data have already been collected on the Ninilchik River and it is important that Keeper and HSWCD continue this dataset. With the USGS gauge data and Keeper's in-stream discharge data, Keeper and HSWCD are beginning to understand how the hydrographs of the Anchor River, Deep Creek, and Stariski Creek differ from the Ninilchik River hydrograph. Through this comparison, Keeper and HSWCD are able to estimate the magnitude of the peak flow of these other salmon streams, based on data from the Ninilchik River. With this knowledge, Keeper's Stream Ecologist can target high flow events on each of the four streams and capture water quality samples at times of greatest concern.

Keeper and HSWCD's program is playing an important role in protecting these watersheds from degradation. Keeper and HSWCD have been working closely with Alaska Department of Environmental Conservation, Alaska Department of Fish and Game, U.S. Geological Survey, the University of Alaska Anchorage Environment and Natural Resources Institute (ENRI), Anchor River Community Rivers Planning Coalition (CRPC), and local communities to protect these salmon streams from nonpoint source pollution. This study has already revealed that for the Ninilchik River watershed, as well as other watersheds on the lower Kenai Peninsula, water quality issues related to temperature and sediment are of particular concern. Fifty-eight percent of water temperatures collected in July (1999 – 2001) exceeded Alaska's standards in the lower reaches of these salmon streams. Throughout the past four years of this salmon stream monitoring project, 32% of the total phosphorus measurements exceeded EPA standards. In

January 2002, ADEC, ADFG, USGS, and ENRI met with Keeper and the HSWCD to discuss these findings. At the meeting it was determined that the frequency and duration of elevated water temperatures needs further investigation and that high phosphorus levels may be the result of geologic characteristics of the lower Kenai Peninsula. More information is needed to determine whether the observed phosphorus levels are naturally occurring and whether increased sedimentation is exacerbating the problem and threatening to degrade the water quality in these watersheds. Keeper and HSWCD rely on the Ninilchik gauge to assess baseline conditions of these salmon streams, increase understanding of the water quality issues Keeper and HSWCD have observed, and track changes in these watersheds.

## ***NEED FOR THE PROJECT***

### ***A. Statement of Problem***

The Cook Inlet watershed was hit hard by the *Exxon Valdez* oil spill. The currents in the Gulf of Alaska caused oil to move up into Cook Inlet, along the Kenai Peninsula and back down the Alaska Peninsula, soaking much of the shoreline and ocean floor with crude oil. As a result, many of Cook Inlet's coastal resources, and the services which they support, were impacted.

Although some recovery has occurred, Cook Inlet's sensitive resources face additional threats from ongoing, unsustainable activities including rapid filling of wetlands, additional oil spills from an aging oil and gas infrastructure, discharge of pollutants from industrial activities, and increased nonpoint source runoff from population growth and sprawl. Approximately 400,000 people, nearly 2/3 of Alaska's population, live in the Cook Inlet watershed, and a population increase of 600% over the past thirty years has substantially magnified pressures on Cook Inlet's sensitive resources. Water quality in Cook Inlet's coastal watersheds is extremely important because these watersheds support diverse wildlife and fish populations including all five species of Pacific salmon, steelhead trout and Dolly Varden. These resources support recreational uses including sportfishing and hunting, that are vital to the economic and social wellbeing of Southcentral Alaska's coastal communities.

Because of the rapid changes taking place in Southcentral Alaska, it is essential that we invest in long-term monitoring now before further impacts have occurred. Baseline information collected from monitoring provides a benchmark for measuring future changes in habitat and water quality, and establishes a basis for developing and implementing the best management practices and pollution prevention techniques.

As state and federal budgets for monitoring continue to decline, agencies rely heavily on other sources of monitoring information. In recent years, communities and organizations have stepped in to fill this important role to gauge the health of our viable yet stressed public resources. Since 1998, Cook Inlet Keeper has been working with the Homer Soil and Water Conservation District to collect discharge and water quality information from coastal watersheds of four important salmon streams on the lower Kenai Peninsula: Ninilchik River, Anchor River, Deep Creek, and Stariski Creek. The Alaska Department of Environmental Conservation rated the Ninilchik River at "high risk" from nonpoint source pollution and as "high need" for data collection.

Collecting discharge data from stream gauges in conjunction with other water quality parameters is essential for having a complete picture of water quality conditions. Discharge is an important stream variable because of its impact on water quality and on the living organisms and habitats in the stream. Discharge, or stream flow, is a function of water volume and velocity. Water volume is affected by weather, snow melt, evapotranspiration, topography, geology, and human withdrawals. Stream velocity changes with channel width and depth and can affect the organisms living in the water, the rate of sediment delivery, and dissolved oxygen concentrations. Changes in climate, impervious surfaces, vegetation composition, and abundance can alter discharge patterns in a watershed. In addition to providing important information about water quality and quantity, discharge data provides a continuous hydrograph allowing Keeper to relate other water quality parameters to stream discharge in order to understand how and why water quality parameters change throughout the year and between years.

Kenai Peninsula's coastal watersheds are under new development pressures with increased road building, logging, and gravel mining. These activities may affect stream water quality by changing the natural hydrograph of these systems as well as introducing sediments to the stream channel. In order to know if real changes are occurring in these watersheds because of land-use activity, Keeper and HSWCD must understand how water quality parameters change naturally with discharge. With this information, Keeper and HSWCD can begin to assess how activities in these watersheds might be changing the quality and quantity of water in the lower Kenai Peninsula's salmon streams.

Since 1998, Keeper and HSWCD have relied on a stream gauge on the Ninilchik River established by USGS to understand water quality patterns. With the loss of funding for the National Water Quality-Assessment Program, USGS no longer can maintain the Ninilchik River gauge. The importance of having long-term continuous discharge data can not be overstated for these valuable salmon streams of the lower Kenai Peninsula. Having water quality and discharge data collected concurrently makes these two types of data much more valuable than if they are collected separately. Understanding the relationship between discharge and water quality will allow us to quantify natural variability and detect how our activities in the watershed might be changing the quality and quantity of water in our salmon-bearing streams.

## ***B. Rationale/Link to Restoration***

Healthy coastal resources are critical to the economic and social wellbeing of Cook Inlet communities. One of the challenges in the efforts to restore the environment following the *Exxon Valdez* oil spill has been the lack of adequate data describing conditions prior to the spill. It is essential that monitoring takes place in Cook Inlet now, before more impacts are realized, so that reference conditions can be established from which to detect changes. Yet, state and federal agencies responsible for water quality monitoring are strapped by budget cuts, and unable to collect the water quality information needed to ensure compliance with state and federal water quality standards.

Keeper and HSWCD's salmon stream monitoring project has already contributed significantly to the restoration and monitoring of Alaska's public resources. Through three years of data collection and analysis, Keeper and HSWCD were able to identify water quality issues of

particular concern in these watersheds (e.g. high summer temperatures and elevated phosphorus levels). By working closely with other organizations and agencies, Keeper and HSWCD have responded to these issues by implementing new monitoring protocols and will continue to work to protect these important watersheds.

Funding from the Trustee Council will provide Keeper, HSWCD, and the Ninilchik Traditional Council with an opportunity to continue collecting important baseline data and to work collaboratively with other agencies and organizations and agencies to secure long-term funding for the Ninilchik River gauge.

### ***C. Location***

Cook Inlet Keeper and Homer Soil and Water Conservation District's salmon stream monitoring project monitors water and habitat quality of four watersheds on the lower Kenai Peninsula: Ninilchik River, Anchor River, Deep Creek, and Stariski Creek.

## ***COMMUNITY INVOLVEMENT AND TRADITIONAL KNOWLEDGE***

This project will further community involvement by providing a critical data source to the Ninilchik Traditional Council (NTC). The Tribe is in the ongoing process of developing community water and wastewater profile programs and water quality monitoring programs for the community of Ninilchik and neighboring communities encompassed within its Tribal Boundaries. NTC relies on the reliable flow data available from the Ninilchik River gauge for the success and future development of these programs. These programs are of great importance to NTC's Tribal Members because they promote environmental and human health.

Other audiences which may find particular use for monitoring data include community planners, local and Tribal governments, commercial and sport fishermen, university personnel and students, environmental consultants, decision makers, and resource agencies such as Alaska Department of Fish and Game, the U.S. Fish and Wildlife Service, and others.

In addition, this project will further community involvement by providing Keeper and HSWCD with an opportunity to continue involving local communities in the collection of important flow data from coastal watersheds. In addition, this flow data will provide important information about the health of watersheds that Keeper and HSWCD will relay to communities.

## ***PROJECT DESIGN***

### ***A. Objectives***

The goal of this project is to maintain the Ninilchik River gauge so that discharge data are available to Keeper, HSWCD as well as citizens of the Ninilchik River watershed and other users of its resources.

### ***B. Methods***

Cook Inlet Keeper will prepare a contract for USGS to maintain the Ninilchik River gauge. Keeper's Stream Ecologist will continue to collect in-stream discharge data as well as water quality data. These data will be correlated in Keeper's annual report on the lower Kenai Peninsula salmon stream monitoring project. Once the contract is in place, the USGS discharge data will also be provided in real-time on the USGS website (<http://ak.water.usgs.gov>).

### ***C. Cooperating Agencies, Contracts and Other Agency Assistance***

U.S. Geological Survey: The U.S. Geological Survey's (USGS) Cooperative Water Program will provide a 50% match for maintenance and data retrieval of the gauge from October 2001 through September 2003. USGS will operate and maintain the gauge. They will use consistent techniques of data collection and archiving, with the information stored in a common data base readily available to all.

Alaska Department of Fish and Game: Fishery biologists from the Southcentral Sport Fish Division rely on water discharge and water quality information from the Ninilchik and other area streams for management purposes. An Area Management Biologist is serving as co-PI on this project to facilitate and support the contract agreement for operation of the Ninilchik stream gauge.

Alaska Department of Environmental Conservation: ADEC is the primary funder of Keeper and HSWCD's lower Kenai Peninsula salmon stream monitoring project and is collaborating closely with monitoring groups to make their data more useful to agencies and more accessible to the public.

Ninilchik Traditional Council: The Ninilchik Traditional Council (NTC) is the Tribal governing body for the federally recognized Ninilchik Tribe. Ninilchik is located on the Kenai Peninsula between Kenai and Homer, Alaska on the east coast of Cook Inlet. The Ninilchik Traditional Council is attempting to secure long-term funding to service and maintain the gauge through BIA funding or other sources. Please see attached letter of support.

Homer Soil and Water Conservation District and Cook Inlet Keeper: The Homer Soil and Water Conservation District and Cook Inlet Keeper are playing a central role in watershed protection and community-based water quality monitoring in Southcentral Alaska. Since 1998, HSWCD and Keeper have been working together through the Cook Inlet Watershed Health Monitoring project to establish Alaska's first successful community-based effort to gather baseline water quality data and track water quality trends related to current and potential land use and management within the Cook Inlet basin. They continue to partner to collect valuable data on the Lower Peninsula Salmon Streams.

## ***SCHEDULE***

### ***A. Measurable Project Tasks for FY 03 (October 1, 2002 – September 30, 2003)***

October 1	Keeper will initiate contract for USGS to maintain gauge
October 1 – September 30	USGS will maintain gauge Keeper will collect discharge data
January 2003	Keeper will attend EVOS Annual Workshop
September 2003	Keeper and HSWCD will publish annual report for lower Kenai Peninsula salmon stream monitoring project
April 2004	Keeper will provide final report to Trustee Council

### ***B. Project Milestones and Endpoints***

Fulfillment of project objectives will be measured by the following milestones:

1. Contract initiated for USGS to maintain Ninilchik River gauge (October 2002)
2. Continuous discharge data available to Keeper (October 2002 – September 2003)
3. Data published in annual report (September 2003)

### ***C. Completion Date***

This project will be completed by September 30, 2003

## ***PUBLICATIONS AND REPORTS***

September 2001, Keeper and HSWCD published the third annual report, "A Preliminary Water Quality Assessment of Lower Kenai Peninsula Salmon-bearing Stream," which Keeper made available to policy-makers, scientists, and the general public and posted them on the Internet as a link from Keeper's website. The fourth annual report from this project will be released by September 2002 and another edition of the report will be released during the FY 2003 grant period.

Keeper and HSWCD's salmon stream monitoring project has received considerable media attention recently. This month, Alaska Public Radio Network aired a story which featured Keeper's Stream Ecologist conducting stream monitoring in the field. Stories like these bring information about habitat and water quality monitoring to diverse individuals and communities. Keeper will continue to expand media coverage of its water quality monitoring work in order to reach and engage diverse audiences. Keeper also highlights its monitoring programs in its quarterly newsletters, which are sent to more than 500 individuals, organizations, and agencies and are linked to Keeper's website.

Keeper is currently researching the opportunities for other publications, but is unaware at this point, which publications it will pursue during FY 03.

## ***PROFESSIONAL CONFERENCES***

Several professional organizations hold conferences relevant to water quality monitoring. Keeper attends conferences where it may make the best use of its particular experience and expertise, and where Keeper can best benefit from the networking and exchange of information. Through conference participation, Keeper's monitoring work is strengthened and better able to stay current in the field.

In January 2002, Keeper attended the *Exxon Valdez* Oil Spill Trustee Council 2002 Annual Workshop. Keeper will attend the 2003 workshop and may present on the water quality database (project 02668) and the Effectiveness of the Citizens' Environmental Monitoring Program (project 02667).

In March 2002, Keeper attended the Technology Networking Conference sponsored by the Alaska Department of Transportation and Public Facilities. This was an information sharing conference focusing on the data gathering capabilities of existing and proposed meteorological, natural resource, maritime, and transportation remote sensing sites. Keeper presented information about its monitoring programs and networking capacity at the conference. Keeper plans to attend the conference again next year.

Cook Inlet Keeper plans to attend the 20<sup>th</sup> Annual Native American Fish and Wildlife Society National Conference April 29 - May 2, 2002 in Anchorage, Alaska. Attending this conference will continue to build relationships with the Native Alaskan community. The conference covers topics such as watershed and fisheries issues, Indigenous research, Tribes and Environmental groups, and more.

Cook Inlet Keeper plans to attend Alaska's Oceans and Watersheds: Sustainability in the Context of Change, on June 18-19, 2002 in Anchorage, AK. The two-day symposium is sponsored by: State of Alaska, University of Alaska, *Exxon Valdez* Oil Spill Trustee Council, North Pacific Research Board, North Pacific Fisheries Management Council, Alaska Board of Fisheries, Alaska Coastal Policy Council, NOAA, DOI: USGS/USFWS, EPA

## ***NORMAL AGENCY MANAGEMENT***

Not applicable.

## ***COORDINATION AND INTEGRATION OF RESTORATION EFFORTS***

Keeper works closely with agencies involved in habitat and water quality monitoring in the Cook Inlet basin. These agencies include: U.S. Geological Survey, Alaska Department of Environmental Conservation, U.S. Environmental Protection Agency, National Oceanic and Atmospheric Administration, Alaska Department of Fish and Game, Alaska Department of Natural Resources, and the Cook Inlet Regional Citizens Advisory Council. Representatives from each of these agencies participate as members of Keeper's TAC.

Keeper is currently conducting three restoration projects supported by the Trustee Council. In a project that is enhancing the capacity of water quality monitoring in the Cook Inlet watershed, Keeper is working with Kachemak Bay National Estuarine Research Reserve to bring together citizen volunteer monitors and professional researchers to collect water quality data. Keeper and the NERR will work with Vessels of Opportunity to deploy a systematic array of electronic sensors along the south and north sides of Kachemak Bay, which will coincide with volunteer water quality monitoring sites, to assess water circulation patterns throughout the Bay.

In addition, the *Exxon Valdez* Oil Spill Trustee Council has provided Keeper with a grant to analyze the effectiveness of the Citizens' Environmental Monitoring Program to determine if sampling frequency, methods, parameters, and site selection are effective at meeting the monitoring objectives of detecting significant changes in water quality over time. Keeper will share this information to its partner monitoring groups at the conclusion of the project.

A third grant from the Trustee Council is helping Keeper work with ADEC and a database committee to develop a unified database for the reporting and management of data collected by citizen-based water quality monitoring programs. This database, which will make important water quality information easily accessible by policy-makers, scientists, and the general public, will be integrated with CIIMMS.

Cook Inlet Keeper has a close relationship with many other restoration efforts that have been funded by the Trustee Council. Most notably, Keeper shared its *Cook Inlet GIS Atlas* on CD ROM and Annotated Bibliography to assist the Kachemak Bay National Estuarine Research Reserve's Ecological Characterization Project, and CIIMMS. Keeper is linked to the CIIMMS web page, and will link its water quality database and the comprehensive GIS map of monitoring program in the Gulf of Alaska to CIIMMS. The information Keeper shares with CIIMMS contributes greatly to a more holistic understanding of Cook Inlet's natural resources.

Keeper collaborates with numerous other local and national groups and agencies. Keeper collaborates with UAA's Kachemak Bay Campus which makes an in-kind contribution of lab space for water quality analysis. Keeper is a partner in the Pratt Museum's Kachemak Bay Discovery Project, a member of the River Network and a member of the National Water Keeper Alliance.

Cook Inlet Keeper's water quality monitoring has been funded through ADEC by EPA 319 Nonpoint Source Pollution Program funds over the last three years, along with other sources to meet EPA's required 40% non-federal match. Keeper's other monitoring support has included grants from the Skaggs Foundation (\$8,000 in 1999 and \$10,000 in 2001), EPA Wetlands Development Program (\$8,824 from a collaborative grant with the Homer Soil and Water Conservation District and Community Rivers Planning Coalition in 2002), Norcross Wildlife Foundation (\$10,000 in 1999 and \$13,000 in 2001), River Network Watershed Assistance Grant (\$20,000 in 1999), Bullitt Foundation (\$10,000 in 2001), individuals and businesses (~\$10,000/yr.) fees for GIS services (~\$5,000/yr.), and in-kind contributions of time and services (~\$25,000/yr.).

Keeper's monitoring budget for FY 03 is \$205,634. Keeper anticipates a few more years of funding from ADEC, including \$105,000 in FY 03. In addition, other pending and possible

grants include: \$18,000 from the Norcross Wildlife Foundation, \$10,000 from the Ben and Jerry's Foundation, \$15,000 from the U.S. Fish and Wildlife Service Coastal Program, and \$5,000 from the FishAmerica Foundation. Keeper will raise additional funding from other grants, individuals, businesses and fees for services.

Funding from the *Exxon Valdez* Trustee Council will provide Keeper with an opportunity to continue collecting important flow data from lower Kenai Peninsula salmon streams. This data will provide important information to enhance the understanding, monitoring, and protection of these watersheds.

### ***EXPLANATION OF CHANGES IN CONTINUING PROJECTS***

Not applicable.

### **PRINCIPAL INVESTIGATORS**

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### ***PRINCIPAL INVESTIGATORS***

Joel Cooper joined Keeper's staff in 1998. Joel coordinates and oversees citizen water quality monitoring in Kachemak Bay. Prior to joining Keeper, Joel's work experience includes conducting stream surveys for the U.S. Forest Service, serving as an Organic Chemist for the Rocky Mountain Analytical Laboratory, and working as Environmental Scientist for the Southern Illinois University Department of Pollution Control. Joel has a B.S. in Environmental Studies focusing on forestry, plant and soil sciences from Southern Illinois University.

Nicky Szarza is the Area Management Biologist for the Homer office of the Sport Fish Division of the Alaska Department of Fish and Game.

### ***OTHER KEY PERSONNEL***

Sue Mauger, Keeper's Stream Ecologist, will compile flow data from USGS and correlate these data with Keeper's water quality information in the annual report for the salmon stream monitoring project.

Miranda Weiss, Keeper's Development Director, will conduct grant administration and reporting.

Kathy Peel, Keeper's Office Manager, will be responsible for financial administration of this grant.

**2003 EXXON VALDEZ TRUSTEE COUNCIL PROJECT BUDGET**

October 1, 2002 - September 30, 2003

<b>Budget Category:</b>	<b>Authorized FY 2002</b>	<b>Proposed FY 2003</b>						
Personnel		\$0.0						
Travel		\$0.0						
Contractual		\$20.7						
Commodities		\$0.0						
Equipment		\$0.0						
Subtotal	\$0.0	\$20.7	LONG RANGE FUNDING REQUIREMENTS					
General Administration		\$1.9		FY04 0				
Project Total	\$0.0	\$22.6						
Full-time Equivalents (FTE)		0.0						
Other Resources								
Dollar amounts are shown in thousands of dollars.								
Comments:								

**FY03**

Prepared:8/3/02

Project Number: 030596  
 Project Title: Securing Flow Data for a Lower Kenai Peninsula  
 Salmon Stream  
 Agency: ADFG





**2003 EXXON VALDEZ TRUSTEE COUNCIL PROJECT BUDGET**

October 1, 2002 - September 30, 2003

<b>New Equipment Purchases:</b>		Number of Units	Unit Price	P
Description				
Those purchases associated with replacement equipment should be indicated by placement of an R.			<b>New Equipment Total</b>	
<b>Existing Equipment Usage:</b>		Number of Units	I	
Description				

**FY03**

Project Number: 030596  
 Project Title: Securing Flow Data for a Lower Kenai Peninsula  
 Salmon Stream  
 Name: ADFG

Prepared: 8/3/02

**2003 EXXON VALDEZ TRUSTEE COUNCIL PROJECT BUDGET**

October 1, 2002 - September 30, 2003

<b>Budget Category:</b>	<b>Authorized FY 2002</b>	<b>Proposed FY 2003</b>							
Personnel		\$1.6							
Travel		\$0.5							
Contractual		\$0.0							
Commodities		\$0.0							
Equipment		\$0.0							
Subtotal	\$0.0	\$2.1	LONG RANGE FUNDING REQUIREMENTS						
Indirect		\$0.3							
Project Total	\$0.0	\$2.4							
Full-time Equivalents (FTE)		0.1							
Other Resources			Dollar amounts are shown in thousands of dollars.						

Comments: Matching funds for Cook Inlet Keeper's Lower Kenai Peninsula Salmon Stream Monitoring project are provided primarily through ADEC's Nonpoint Source Pollution program (\$45,000 in FY 2002 and an anticipated \$45,000 in FY 2003). The FY 2003 budget for this project is \$67,770. Keeper secures additional funds for this project through grants from private foundations (\$10,000 from Bullitt Foundation in 2001 and \$6,000 pending from the Norcross Wildlife Foundation), other state and federal grants, membership and business contributions, and fees for services. Cook Inlet Keeper uses an indirect cost rate of 15% to account for grant administration and reporting, financial reporting, and other indirect costs (portion of rent, utilities, etc.) related to this project. Expenses related to participation at the EVOS workshop represent \$900 (personnel, travel, and accommodations for Stream Ecologist) of the budget. Expenses related to report writing represent \$300 of this budget.

**FY02**

Prepared: 8/3/02

Project Number: 030596  
 Project Title: Securing Flow Data for a Lower Kenai Peninsula  
 Salmon Stream  
 Name: Cook Inlet Keeper

**2003 EXXON VALDEZ TRUSTEE COUNCIL PROJECT BUDGET**

October 1, 2002 - September 30, 2003

<b>Personnel Costs:</b>				Months Budgeted	Monthly Costs	Overtime	P
	Name	Position Description					
	J. Cooper	Research Coordinator		0.2	2.9		
	S. Mauger	Stream Ecologist		0.4	2.9		
Subtotal				0.6	5.8	0.0	
<b>Personnel Total</b>							
<b>Travel Costs:</b>			Ticket Price	Round Trips	Total Days	Daily Per Diem	P
	Description						
	1 RT Homer to Anchorage - EVOS Workshop		0.2	1	2	0.1	
	1 Rental Car - 2 days for EVOS Workshop (\$50/day)						
	Accommodation 2 nights - EVOS Workshop (\$50/day)						
<b>Travel Total</b>							

**FY02**

Prepared:8/2/03

Project Number: 030596  
 Project Title: Securing Flow Data for a Lower Kenai Peninsula  
 Salmon Stream  
 Name: Cook Inlet Keeper

**2003 EXXON VALDEZ TRUSTEE COUNCIL PROJECT BUDGET**

October 1, 2002 - September 30, 2003

<b>Contractual Costs:</b>		P
Description		
<b>Contractual Total</b>		
<b>Commodities Costs:</b>		F
Description		
<b>Commodities Total</b>		

**FY03**

Prepared:8/3/02

Project Number: 030596  
 Project Title: Securing Flow Data for a Lower Kenai Peninsula  
 Salmon Stream  
 Name: Cook Inlet Keeper

**2003 EXXON VALDEZ TRUSTEE COUNCIL PROJECT BUDGET**

October 1, 2002 - September 30, 2003

<b>New Equipment Purchases:</b>		Number of Units	Unit Price	P
Description				
Those purchases associated with replacement equipment should be indicated by placement of an R.			<b>New Equipment Total</b>	
<b>Existing Equipment Usage:</b>		Number of Units		
Description				

**FY03**

Prepared:8/3/02

Project Number: 030596  
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