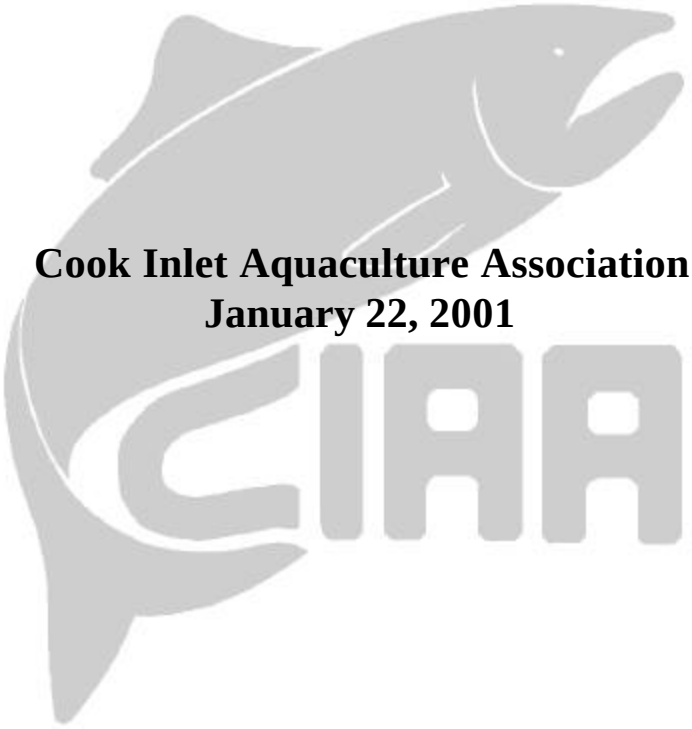
Cook Inlet Fishing Community Assistance through Fisheries Rehabilitation and Enhancement Year 2



Cook Inlet Aquaculture Association
January 22, 2001

Operation of the Cook Inlet Aquaculture Association is made possible through enhancement taxes paid by commercial fishermen in Area H, Cook Inlet and associated waters, the harvest and sale of surplus fish and a grant from the Seward Chamber of Commerce.

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Cook Inlet Fishing Community Assistance Through Fisheries Rehabilitation and Enhancement

The Kenai Peninsula Borough and the Federal government have declared the Cook Inlet fishing community, consisting of native and nonnative subsistence users, commercial, personal use and sport fishers and the businesses that support these users, an economic disaster. While the economic disaster declarations provide for immediate economic relief, only a limited long-term commitment has been made to support the Cook Inlet fishing community. The Cook Inlet Aquaculture Association requests additional funding to provide long-term assistance through fisheries rehabilitation and enhancement. This is the second year of a multi-year effort to develop a long-term self-sustaining rehabilitation and enhancement program that supports the Cook Inlet fishing community.

Existing CIAA Programs:	**$ 5.290 million**
Proposed Inlet Wide Projects:	**$ 3.070 million**
Proposed Lower Cook Inlet Projects:	**$ 1.975 million**
Proposed Central Cook Inlet Projects:	**$ 0.850 million**
Proposed Northern Cook Inlet Projects:	**$ 1.100 million**
Proposed Education Projects:	**$ 1.165 million**
Grand Total:	***$13.450 million***

Project Summary For
Assistance to the Cook Inlet Fishing Community Through Fisheries Enahncement

Support of Existing Programs

Project	Species	Estimated Production	Estimated Cost Breakdown		Cost
CIAA Program Support					
Enhancement Tax Match	All Enhanced Species		$500,000 per year for four years	$	2,000,000
Trail Lakes Hatchery Capital Improvements	Sockeye Coho		$300,000 to, enclose outdoor raceways.	$	300,000
CIAA Contingency Fund	All Enhanced Species		$1,500,000 to establish contingency fund for 1 year operating expenses	$	1,500,000
Debt Retirement	All Enhanced Species		$1,310,000 to pay money owed to the State for the develeopment and implementation of existing salmon rehabilitation and enhancement projects	$	1,310,000
Eklutna Property Purchase	Sockeye		$180,000 to purchase property for Eklutna Salmon Hatchery	$	180,000
			Subtotal:	**$**	**5,290,000**

New Programs

Inlet Wide Programs					
Eklutna/Port Graham/Tutka Enhancement	Sockeye	Up to 500,000 fish	$500,000 per year for four years for development and operation	$	2,000,000
Genetic Stock Preserve Study	All Species		$70,000 for first year to complete genetic stock reserve map $250,000 for following 2 years to verify genetic map	$	570,000
Small Stream Habitat Improvement Projects	All Species		$500,000 over 5 years to identify and implement habitat improvement projects on small streams	$	500,000
			Subtotal:	**$**	**3,070,000**

Project Summary Continued

Project Summary Continued

New Programs

Project	Species	Estimated Production	Estimated Cost Breakdown		Cost
Lower Cook Inlet Programs					
Paint River Enhancement and Remote Research Facility	Sockeye Pink Chum Coho King	Up to 50,000 fish Up to 900,000 fish Up to 600,000 fish Up to 7,500 fish Up to 7,500 fish	$300,000 to complete construction, plus $125,000 per year for five years for operation and evaluation	$	925,000
Chenik Lake Study	Sockeye	Up to 100,000 fish if enhancement re-established	$300,000 over three years	$	300,000
Resurrection Bay Smolt Release	Coho	Up to 10,000 fish	$50,000 per year for three years	$	150,000
Baseline Fisheries Data Collection in Resurrection Bay	All Species		$200,000 per year for three years	$	600,000
				Subtotal:	**$ 1,975,000**
Central Cook Inlet Programs					
Packers Lake Enhancement	Sockeye	Up to 25,000 fish	$50,000 per year for three years for operation and evaluation	$	150,000
Fisher Lake	Sockeye	Up to 30,000 fish	$50,000 per year for four years for operation and evaluation	$	200,000
Cook Inlet Salmon Population Study	All Species		$250,000 per year for two years	$	500,000
				Subtotal:	**$ 850,000**
Northern Cook Inlet Programs					
Big Lake Study	Sockeye	Up to 200,000 fish if enhancement continues	$200,000 over two years	$	200,000
Tyonek Remote Salmon Rearing Study and Implementation	Sockeye or Coho	Up to 100,000 fish	$50,000 for site evaluation, $250,000 for rearing facility construction $100,000 per year for four years for operation and evaluation	$	900,000
				Subtotal:	**$ 1,100,000**
Educational Programs					
Kenai Peninsula Northern Pike Study and Education			$125,000 per year for two years and on-going education	$	250,000
Trail Lakes Hatchery "Adopt an Incubator"			$50,000 first year for hatchery modifications $10,000 per year for two years for educational materials and staffing	$	70,000
Bear Lake Weir Visitor Site			$230,000 for weir building modifications $20,000 per year for two years for educational materials and staffing	$	270,000
Trail Lakes Hatchery Visitor Center			$575,000 to modify building and build a meeting room/theater to accommodate bus tours school groups	$	575,000
				Subtotal:	**$ 1,165,000**
				Grand Total:	**$ 13,450,000**

COOK INLET AQUACULTURE ASSOCIATION

MISSION

The Cook Inlet Aquaculture Association is a non-profit regional association which exists to: (1) protect self-perpetuating salmon stocks and the habitats upon which they depend; (2) rehabilitate self-perpetuating salmon stocks; (3) rehabilitate salmon habitat; and (4) maximize the value of the Cook Inlet (Area H) common property salmon resource by applying science and enhancement technology to supplement the value attained from protection and rehabilitation of self-perpetuating salmon stocks.

GOALS

To accomplish this mission the Board of Directors of the Cook Inlet Aquaculture Association will:

Seek protection of salmon habitat through active participation (testimony, committee work, data input, etc.) in planning, permitting and enforcement processes.

Conduct salmon rehabilitation and enhancement projects, which can be expected to significantly contribute to common property fishery harvests. A 66% harvest rate in commercial fisheries is the acceptable standard for "significant contribution". That standard can be adjusted (raised or lowered) from project to project if the project offers terminal harvest opportunities, presents special mixed-stock harvest concerns, or benefits users whose harvest methods are less efficient than the commercial fishery.

Conduct evaluation activities, which increase the effectiveness of project implementation.

Engage in research, which advances the state of enhancement/rehabilitation technology.

Be sensitive to the interests of those harvesting the Cook Inlet common property salmon resource.

Educate the public about the salmon resource and the mission, goals and projects of the Association.

Maintain the highest standards of financial responsibility and accountability for the funds entrusted to it.

Maintain facilities, administrative practices and personnel policies, which require and encourage its staff to perform in a safe, professional and cost-effective manner.

Comply with all statutes and regulations governing private non-profit aquaculture association activities in the State of Alaska.

Participate, within the limits for tax-exempt corporations, in the development of legislation and regulation relevant to attainment of the mission.

BOARD OF DIRECTORS OF COOK INLET AQUACULTURE ASSOCIATION

A Board of Directors that meets monthly controls the affairs of the association. All of the twenty-eight seats on the Board are currently filled. None of the Directors receives any compensation, per diem, or expense reimbursements from the Association for serving on the board. The Directors commitment and time to the Association's mission must not go unnoticed.

Commercial Fishermen of Cook's Inlet:		**Alternates**
DIRECTORS:	JULIE MARCINKOWSKI	James Arness
	LEON MARCINKOWSKI	James Arness
Cook Inlet Fishermen's Fund:		
DIRECTORS:	DOUGLAS F. BLOSSOM	Melvin Johnson
	DAVID MARTIN	Daniel Leman
Cook Inlet Seiners Association:		
DIRECTORS:	CHARLES WALKDEN	John Wise
	NATHAN WISE	Lenord Miller
Inlet Wide Commercial Fishermen Representatives:		
DIRECTORS:	BUDDY HARRIS	Steven Perrizo
	DAVE JEWELL	Erik Lindow
	DREW SPARLIN, SR.	Dennis Crandall
	DYER VAN DEVERE	Philip Squires
	ROBERT MERCHANT	None
Kenai Peninsula Fishermen's Association:		
DIRECTORS:	HOWARD DAVIS	Rory Rorrison
	BRENT JOHNSON	Rory Rorrison
North Pacific Fisheries Association:		
DIRECTORS:	MARK MAHAN	Dan Winn
	JESSIE NELSON	Dan Winn
Northern District Set Netters of Cook Inlet:		
DIRECTORS:	JOHN LIGHT	Stephen Braund
	KEVIN BARKSDALE	Les Hogan
United Cook Inlet Drifters Association:		
DIRECTORS:	JOHN EFTA	Leonard Efta
	FRANCIS DEROSSITT	Ron Rust
City of Homer:		
DIRECTOR:	AL RAY CARROLL	None
City of Kachemak:		
DIRECTOR:	PAUL JONES	Leonard Billotte
City of Seward:		
DIRECTOR:	JOHN FRENCH	None
Cook Inlet Region: Inc.:		
DIRECTOR:	PAUL SHADURA	None
Kenia Peninsula Borough:		
DIRECTOR:	CHRISTOPHER MOSS	Ron Long
Matanuska-Susitna Borough:		
DIRECTOR:	JIM CHESBRO	None
Municipality of Anchorage:		
DIRECTOR:	DICK TREMAINE	Dan Kendall
Ninilchik Village Council:		
DIRECTOR:	STEPHEN VANEK	None

A Brief History

The Cook Inlet Aquaculture Association incorporated in 1976 with the intent to facilitate the Cook Inlet drainage with an organized, scientifically respected community, responsible for the protection of self-perpetuating salmon stocks, and the rehabilitation of the salmon stocks and habitat. These goals set forth by the board of directors were to be accomplished by maximizing the value of Cook Inlet's common property salmon resource through the use of science, education, and enhancement technology.

In the early years, Cook Inlet Aquaculture Association's board seated twenty-four individuals representing fourteen interest groups, including Native Associations, City Governments, Borough Governments, and local Fisherman Associations. As the Association's mission became more visible, interest by other organizations and user groups increased. Enrollment of the Association's board currently consists of twenty-eight seats representing seventeen diverse groups. The obvious significance of the Cook Inlet Aquaculture Association and its continued responsibility to perform the task of enhancement and rehabilitation for the users of the salmon resource in the Cook Inlet drainage is without doubt demonstrated by the ongoing support from all users.

The Association is funded by an enhancement tax of two percent, self-imposed on the commercial fisherman of Cook Inlet, by a majority vote. Also, a cost recovery program in which the Association harvests fish returning to project sites for sale to local processors generates additional revenue. Outside of a small number of grants, the majority of capital for the Association's operations comes from the aforementioned sources.

Since its inception, the Association has seen tremendous growth, not only from interested users and their organizations, but projects and responsibilities. Projects the Association has assumed accountability for include: 1) *Lake fertilization* to enhance the freshwater rearing environment which allows juvenile salmon to sustain better growth rates, 2) Construction and operation of *flow control structures* at Cook Inlet lakes to assure adequate water is available for salmon to migrate to their spawning grounds in these drainages, 3) *Surveying* critical habitat areas for the identification and correction of seasonal barriers that affect the migration of salmon to their spawning grounds, 4) *Fish way* (also known as fish ladders) management and development in areas that can support and perpetuate returns of salmon, 5) *Hatchery* management and operation, and 6) *Educating* the people that populate and visit the communities of the Cook Inlet drainage on the fisheries and their enhancement, through demonstration, participation and communication.

Early in the last decade, the Association entered a period of significant growth. The Association had recently acquired responsibility, from the State of Alaska, for the operation of Trail Lakes Hatchery, located just north of Moose Pass, and was working on the development of the Paint River Fish Ladder, a project funded by the fishermen of Cook Inlet, the Association, a state grant and a federal grant. The Paint River drainage, located in the southwest corner of Cook Inlet, was expected to contribute substantially to the fisheries of Cook Inlet.

(continued: A Brief History)

As construction of the Paint River Fish Ladder was nearing completion, CIAA was presented with the opportunity to operate Tutka Bay Lagoon Hatchery, a state owned facility situated in a small lagoon in the southwest corner of Tutka Bay, which was threatened with closure. To accept the responsibility of operating Tutka Bay Lagoon Hatchery and preventing its closure, the Association was forced to temporarily halt the stocking and operation of the Paint River project, due to financial limitations.

As the Association was completing the work necessary to economically operate the Tutka Bay Lagoon Hatchery, two other State operated hatchery programs, Crooked Creek and Big Lake, were threatened with closure. The Association carefully reviewed both programs and decided to assume responsibility for the operation of Crooked Creek Hatchery and transfer the sockeye portion of the Big Lake program to the Association's Eklutna Salmon Hatchery.

By the middle of the decade, the Association had grown substantially and was operating four facilities and the sockeye programs of a fifth facility. The Association, because it had not anticipated the State divesting itself of its hatchery programs, had not developed a long-range plan for the operation of these programs; but, had assumed the responsibility for their operation when they were threatened with closure by the State.

During the second half of the decade, salmon prices began a downward trend reducing revenue available to the Association from the enhancement tax and the cost recovery harvest program. This, coupled with the added responsibility of operating hatchery programs acquired from the State, began to squeeze the Association's budget. Recently, not only did the price of salmon continue its downtrend, but the return of salmon stocks to Cook Inlet has also weakened, particularly for sockeye in 1998 and 2000 and coho salmon in 1999. These two uncontrollable elements, coupled to severely reduce the operating capital the Association relies on for the continuation of its hatchery, enhancement and educational programs.

As the price of salmon continues to decline and salmon returns continue to be lower than historical averages, ***the effect of decreasing revenues challenges the Association's mission of "maximizing the value of self-perpetuating salmon stocks in Cook Inlet" for all user groups at a time when the Association should provide the greatest assistance to those that rely on the salmon resource.***

Existing Fishery Enhancement Programs
At Full Production

Upper Cook Inlet

Big Lake
- Production: 50,000 Adult Sockeye Salmon
- Value: $200,000
- Users: Commercial, Sport & Personal Use

Hidden Lake
- Production: 100,000 Adult Sockeye
- Value: $400,000
- Users: Commercial, Sport, Guided Sport & Personal Use

Tustumena Lake
- Production: 135,000 Adult Sockeye
- Value: $540,000
- Users: Commercial, Sport, Guided Sport & Personal Use

Lower Cook Inlet

Bear Lake
- Production: 100,000 Adult Sockeye, 30,000 Adult Coho Salmon
- Value: $700,000
- Users: Commercial, Sport & Guided Sport

Kirschner Lake
- Production: 30,000 Adult Sockeye Salmon
- Value: $120,000
- Users: Commercial

Leisure & Hazel Lakes
- Production: 150,000 Adult Sockeye Salmon
- Value: $600,000
- Users: Commercial, Sport, Guided Sport & Personal Use

Tutka Lagoon Hatchery
- Production: 3,000,000 Adult Pink Salmon
- Value: $1,350,000
- Users: Commercial, Sport, Guided Sport & Personal Use

Other Programs

- Lake Fertilization – Bear & Leisure Lakes are fertilized for increased smolt production.
- Fishways – facilitate salmon migration into Daniels, Marten & Packers Lakes & the Paint River.
- Education – hatchery tours, egg take participation by area schools.
- Habitat – beaver dam removal to help salmon reach spawning grounds. Assist area agencies in water quality monitoring and habitat restoration projects.

Cook Inlet Map

(Insert Picture)

Disclosure

The purpose of this proposal is to provide a vehicle to distribute information to interested parties. This document is intended to provide a general description and is not an exhaustive evaluation of any proposal.

The information presented in this document has not undergone an extensive review. As reviews are completed, the information within this document may be updated and presented at a later time.

The following Cook Inlet Aquaculture Association staff worked on the preparation of this document.

Gary Fandrei - **Executive Director**
Mark Matarrese - **Special Project Manager**

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(907) 283-5761

Professional Experience

Cook Inlet Aquaculture Association, 40610 Kalifornsky Beach Road, Kenai, AK. 99611-6445. Tel: (907) 283-5761. FAX: (907) 283-9433. E-mail: ciaa@ptialaska.net.

EXECUTIVE DIRECTOR. 11/97 to present. Full-time position to provide direction and leadership to the Cook Inlet Aquaculture Association, a private non-profit corporation dedicated to salmon enhancement throughout the Cook Inlet drainage. Responsible for budgets, personnel, facilities, project management and all aspects of the management of the Cook Inlet Aquaculture Association.

Currently serving as a Director of the United Fishermen of Alaska, alternate Director of the Cook Inlet Regional Citizens Advisory Council, Deputy Commander of the Kenai Composite Squadron of the Civil Air Patrol, a member of the Public Advisory Group of the Exxon Valdez Trustee Council and a member of the Cook Inlet brand sockeye salmon marketing study.

BIOLOGIST. 8/90 to 11/97. Full-time position. Responsible for the development and operation of salmon enhancement projects throughout Cook Inlet drainage. Primary activities involved the direction and technical evaluation of lake stocking and fertilization projects. Integrated basic principles of fishery biology to lake and stream ecology to assure the successful implementation of salmon enhancement projects.

State of Minnesota, Pollution Control Agency, 520 Lafayette Road, St. Paul, MN 55155.

RESEARCH SCIENTIST II. 4/88 to 7/90. Full-time position. Responsible for project management activities for eight Clean Water Partnership projects by acting as the liaison between local units of government and the Minnesota Pollution Control Agency. Provided direction and technical guidance to local project managers on work plans and budgets. Also responsible for developing and directing studies on nonpoint source pollution reference watersheds and provided biological assistance to other members of the Nonpoint Source Unit.

SENIOR BIOLOGIST. 3/85 TO 4/88. Full-time position. Responsible for identification of areas with significant nonpoint source water quality impacts and the development of a strategy to prioritize the impacted areas for the protection of important fish and wildlife environments. Integrated all aspects of surface and groundwater pollution and its relationship to the physical, chemical and biological components of the environment.

INTERMEDIATE BIOLGIST. 12/82 to 3/85. Full-time position. Responsible for biological and technical support of the Comprehensive Studies Unit through the collection and evaluation of stream and lake fishery habitat information for use attainability determinations. Involved in indepth studies of aquatic biological, chemical and physical characteristics of both large and small waterbodies.

POLLUTION CONTROL SPECIALIST II. 4/80 to 12/82. Full-time position. Assisted with the development and operation of a mobile bioassay unit and the evaluation of toxic waste discharges. Also assisted with an assessment of combined sewer overflows on the Mississippi River, toxic spill investigations and fish kills.

BIOLOGIST. 2/79 to 4/80. Full-time position. Assisted in the conduction of toxic spill investigations, routine water quality monitoring, effluent bioassays, fish and wildlife kill investigations.

POLLUTION CONTROL SPECIALIST I. 6/78 to 4/80. Full-time temporary position. Conducted library research on the toxic effects of pesticides and other compounds on aquatic organisms in support of proposed water quality standards.

Other Work Experience

Biological Technician. U.S. Bureau of Land Management 5/78 to 7/78.

Creel Census Clerk. Minnesota Department of Natural Resources. 7/77 to 10/77.

Teaching Assistant. University of Minnesota. 9/75 to 6/77.

Research Assistant. University of Minnesota. 7/75 to 9/75.

Education

MASTER OF SCIENCE DEGREE. Environmental Biology. 12/77. University of Minnesota - Duluth. Attended 9/75 to 12/77.

Studied the effects of chlorine toxicity on fish as thesis research project. Analyzed behavior impacts and mortality rates of short-term exposure to total residual chlorine. Published thesis in the *Bulletin of Environmental Contamination and Toxicology.*

BACHELOR OF SCIENCE DEGREE. Ecosystems Analysis. 5/75. University of Wisconsin - Green Bay. Attended 9/71 to 5/75.

Extensive course work in population biology of aquatic communities and management of public lands.

CIAA Support Programs

(Insert Picture)

Title: Enhancement Tax Match

Purpose: To provide the funds necessary for the continued operation of CIAA programs until new programs that provide funding are operational.

Budget: $2.0 million is requested in full or, at the grantor's option, $0.5 million is requested annually for four years.

Revenue will support:

General Fund	$0.500 million/year
Total:	**$0.500 million/year**

Local Match:

CIAA will match these funds with revenues from the salmon enhancement tax ($0.2 million to $0.6 million annually) or the harvest of surplus fish ($0.5 million annually).

Description: CIAA currently operates two hatcheries and a central office facility that support salmon enhancement programs throughout the Cook Inlet drainage. These programs include sockeye and coho salmon stocking projects at Big Lake, Hidden Lake, Bear Lake, Bear Creek, Tustumena Lake, Tutka Bay, Leisure Lake, Hazel Lake, and Kirschner Lake; flow control projects at Packers Lake, Marten Lake and Daniels Lake; lake fertilization projects at Bear Lake and Leisure Lake, seasonal fish migration barrier removal in numerous small streams throughout the drainage and the publication of *Smolts* for public education. The projects provide fish for subsistence, commercial, sport, and personal use fisheries. Fish produced by these projects at full production have an estimated annual value of $3.91 million.

CIAA's current program budget is $1.5 million annually. Revenue is obtained from three sources: a state grant based on a tax paid by commercial fishermen, the harvest and sale of surplus fish and a small grant from the Seward Chamber of Commerce. Enhancement tax proceeds and the value of harvested fish have dropped substantially resulting in a significant decline in operating revenues. CIAA's harvest programs currently provide $0.5 million annually and the enhancement tax revenues have ranged from $0.2 million to $0.6 million annually. CIAA has been operating with an annual deficit of $0.5 million and has expended most of its reserve revenues.

CIAA recently implemented a new project to provide additional funds from the harvest of surplus fish; however, due to the long life cycle of sockeye salmon, this project will not reach it full potential to generate revenues until 2006. To maintain its enhancement programs, CIAA needs to secure operational revenues until additional surplus fish are available for harvest and sale by CIAA.

This project was originally proposed as a five-year project. The first year of this project will be completed with funds secured in 2001.

Title: Trail Lakes Hatchery Capital Improvements

Purpose: To provide funds necessary to rehabilitate an aging State of Alaska owned hatchery facility.

Budget: $0.300 million is requested in full for building and equipment rehabilitation.

Revenue will support:

Enclose Outdoor Raceways	$0.300 million
Total:	**$0.300 million**

Description: Trail Lakes Hatchery is owned by the State of Alaska and operated by Cook Inlet Aquaculture Association (CIAA) through contract with the Alaska Department of Fish and Game (ADF&G). The hatchery is located at Trail Lakes near the community of Moose Pass, Alaska and is permitted for sockeye, coho and chinook salmon releases at selected sites throughout the Cook Inlet drainage. Built in 1982 the hatchery is overdue for much needed repairs and maintenance. These improvements will serve to update the facility to improve performance and efficiency.

This project, as originally proposed, included building maintenance, incubator and raceway modifications and UV treatment systems for waste and process water. The building maintenance, incubator and raceway modification, and UV treatment systems for waste and process water portions of this project will be completed with funds secured in 2001.

The Trail Lakes Hatchery benefits numerous groups. At capacity the hatchery has the potential to provide 1.8 million adult salmon for all user groups in the Cook Inlet area. The operation of the hatchery provides employment for three full time positions and up to 30 seasonal positions. This hatchery currently provides returning salmon to areas such as Big Lake in Upper Cook Inlet, Leisure Lake in Kachemak Bay, Kirschner Lake in Kamishak Bay and Bear Lake in Resurrection Bay. The hatchery also provides a limited educational opportunity for area schools to participate in fish culture techniques such as egg collection and incubation.

This project will benefit all users of the Cook Inlet salmon resource – subsistence, commercial, sport and personal use.

Title: Cook Inlet Aquaculture Association Contingency Fund

Purpose: Proposal seeks the funding necessary to establish a contingency fund equal to one year of operating expenses of the Cook Inlet Aquaculture Association.

Budget: $1.5 million is requested in full.

Revenue will support:

Contingency Fund	$1.500 million
Total:	**$1.500 million**

Description: The Cook Inlet Aquaculture Association is currently funded by a 2% enhancement tax on the ex-vessel value of the Cook Inlet commercial fishery. Additionally, CIAA is funded through the harvest of fish returning to several enhancement project sites. However, the consistency of this type of funding is dependent entirely upon the harvest quantity and market price of fish returning to Cook Inlet. CIAA has little control over these factors and the annual operation of the Association's salmon rehabilitation and enhancement projects is extremely vulnerable to their fluctuation.

Development and operation of a salmon rehabilitation or enhancement project is dependent on the multi-year life cycle of salmon. Loss of one year of a project's operation due to fluctuations in the price of salmon may result in the loss of brood stock. Brood stock development is very costly. As a result of the recent downtrend in salmon price and low fish returns, the Association has depleted its normal operating reserve and currently does not have contingency funds available to continue existing Upper Cook Inlet projects when revenues from cost recovery harvest operations or proceeds from the enhancement tax are insufficient to meet the Association's needs. CIAA seeks the funds necessary to establish a contingency fund equal to one year of operating expense. This fund would safeguard existing Cook Inlet salmon rehabilitation and enhancement programs from temporary suspension and costly brood stock redevelopment when the Association's revenue falls below operating expenses.

This project will provide stability to the Cook Inlet Aquaculture Association's Cook Inlet salmon rehabilitation and enhancement programs and will benefit all users of the Cook Inlet salmon resource – subsistence, commercial, sport and personal use.

Title: Cook Inlet Aquaculture Association Dept Retirement

Purpose: Proposal seeks the funding necessary to retire the Cook Inlet Aquaculture Association's current debt load.

Budget: $1,310 million is requested in full.

Revenue will support:

Payment of CIAA's current debt:	$1.310million
Total:	**$1.310 million**

Description: The Cook Inlet Aquaculture Association is currently funded by a 2% enhancement tax on the ex-vessel value of the Cook Inlet commercial fishery. Additionally, CIAA is funded through the harvest of fish returning to several enhancement project sites. The consistency of this type of funding is dependent upon the quantity and market price of fish returning to Cook Inlet. CIAA has little control over these factors. The annual operation of the Association's salmon rehabilitation and enhancement projects is extremely vulnerable to their fluctuation.

During the second half of the last decade, salmon prices began a downward trend reducing the amount of enhancement tax revenue available to the Association. Recently, not only has the price of salmon continued its downtrend, but the return of salmon stocks to Cook Inlet has also weakened, particularly sockeye in 1998 and 2000 and coho in 1999.

Development and operation of a salmon rehabilitation or enhancement project is dependent on the multi-year life cycle of salmon. Temporarily suspending the operation of a project for one year results in the loss of brood stock, which is very costly to develop. As a result of fluctuating revenues due to the recent downtrend in salmon price and low fish returns, the Association's revenues have not met expenses. To avoid temporarily suspending projects and the associated cost of brood stock redevelopment, the Association has depleted its operating reserves and borrowed $1,807 million, as of January 2001.

CIAA currently has five outstanding loans with repayment schedules of 15 to 22 years. Beginning this year, CIAA will make its first debt payment of $122,000. Over the life of the loans, debt payments will total $4.164 million. CIAA seeks the funds necessary to retire this debt. This will allow the Association to direct its financial resources toward the maintenance and development of salmon rehabilitation and enhancement projects.

CIAA's 2002 debt payment of $122,000 will be completed, along with a payoff of a $375,000 loan, with funds secured in 2001. These payments will reduce the total debt to $1.310 million excluding interest over the term of the loan. Debt retirement will provide stability to the Cook Inlet Aquaculture Association's Upper Cook Inlet salmon rehabilitation and enhancement programs and will benefit all users of the Cook Inlet salmon resource – subsistence, commercial, sport and personal use.

Title: Purchase of Eklutna Hatchery Land From the U. S. Bureau of Land Management

Purpose: To provide funds necessary to purchase the land from the U. S. Bureau of Land Management on which the Eklutna Salmon Hatchery building currently is situated.

Budget: $0.180 million is requested for the purchase of 2.026 acres from the U. S. Bureau of Land Management located in the SE ¼, Section 18, T.16 N., R. 2 E., Seward Meridian, Alaska.

Revenue will support:

Land Purchase	$0.160 million
Conveyance of Deed	$0.020 million
Total:	**$0.180 million**

Description: The Eklutna Salmon Hatchery was built by CIAA in 1982 on land owned by the U. S. Bureau of Land Management. At that time CIAA entered into an agreement to lease the land. CIAA seeks to purchase this land in an effort to minimize costs, eliminate the annual fees incurred by the lease and allow CIAA stronger leverage in developing future projects. The Kenai Peninsula Borough in 2001 conveyed property to CIAA. Transfer of the Eklutna property from the U.S. Bureau of Land Management to CIAA would match the Kenai Peninsula Borough's efforts.

This project will benefit all users of the Cook Inlet salmon resource – subsistence, commercial, sport and personal use.

Inlet Wide Programs

(Insert Picture)

Title: Eklutna /Port Graham /Tutka Enhancement

Purpose: Provide funds necessary to produce as many as 500,000 additional sockeye salmon to the Cook Inlet common property fishery through a cooperative enhancement project with the village of Port Graham.

Budget: $2.0 million is requested in full or, at the grantor's option, $0.5 million annually for four years.

Revenue will support:

Operation of Eklutna Hatchery	$0.350 million/year
Acquisition & Securing Brood stock	$0.035 million/year
Saltwater Net pens – Tutka & Port Graham	$0.015 million/year
Port Graham – Pre-smolt Rearing	$0.040 million/year
Tutka – Pre-smolt Rearing	$0.040 million/year
Transportation of Pre-smolt	$0.020 million/year
Total:	**$0.500 million/year**

Description: The project will provide a substantial return of sockeye salmon for subsistence and commercial users in the Port Graham/Nanwalek and Tutka Bay areas of the lower Cook Inlet, the Knik Arm of upper Cook Inlet and, as an option, will provide fish to the village of Tyonek (see proposal on Tyonek Remote Salmon Rearing). Currently, the CIAA owned Eklutna Salmon Hatchery is not in operation. This facility is in a state of readiness and can be operational with minimal costs. Funding is requested for four years because the lifecycle of salmon will not provide adult fish until the fifth year. A portion of the returning fish will be harvested and provide funds for future operations.

Eklutna hatchery has an incubation capacity of 20 million eggs, is ideally suited for incubating and rearing sockeye salmon and can serve as a central incubation and early rearing facility. For this project the facility will be used to incubate and raise sockeye salmon to pre-smolt for final saltwater rearing and release at Port Graham and Tutka Hatcheries. Approximately, four million sockeye will be reared to pre-smolt and transported to Tutka Bay Lagoon and Port Graham in March of each year. In the marine environment the pre-smolts will grow rapidly to smolt and imprint prior to their release in June. One million sockeye will also be reared to smolt and released from Eklutna Hatchery.

The smolt release from Port Graham and Tutka will provide a 200,000 adult return to each facility and provide for common property use (subsistence, commercial and sport) as well as cost recovery harvest opportunities. The smolt released from Eklutna Hatchery will provide a return of 100,000 adult sockeye to the upper Inlet for common property harvest and serve as the project's brood stock source. In total, this combined project could produce as many as 500,000 sockeye and provide up to $2 million dollars to the local economy annually. Once established, the harvest and sale of surplus fish would financially support the program.

This project will benefit all users of the Cook Inlet salmon resource – subsistence, commercial, sport and personal use.

Title: Genetic Stock Preserve Study

Purpose: To identify salmon populations, which are characteristic of the major Cook Inlet drainages and develop a plan to maintain these populations as a genetic preserve.

Budget: $0.570 million is requested in full or, at the grantor's option, $0.070 million is requested for the first year and $0.250 million for the following two years.

Revenue will support:

Biologist Salary and Benefits (1.5):		$0.060 million/year
Travel, Meetings and Publications:		$0.005 million/year
Overhead:		$0.005 million/year
	Total:	**$0.070 million/year, plus**
Genetic Sampling and Analysis:		$0.180 million/year for two years
	Total:	**$0.180 million/year for two years**

Description: In 1991, the Cook Inlet Regional Planning Team initiated a mapping exercise to identify and catalogue salmon populations that were typical of the major Cook Inlet drainages. These salmon populations were to be designated as genetic preserves where stocking activities would be prohibited. The populations would serve as a gamete source to rehabilitate or re-establish other salmon populations in the drainage. The mapping exercise was not completed.

Based on a report by the Environment and Natural Resource Institute of the University of Alaska, Trout Unlimited has identified the establishment of genetic preserves as a priority.

CIAA proposes to complete the mapping exercise and conduct genetic sampling of the major salmon populations in each drainage to further define the genetic characteristics of the salmon populations. The information and data collected will be published, add significantly to the area's understanding of salmon genetics and provide additional tools for management, education and research. CIAA proposes to fund a graduate student to assist with the mapping and sampling exercise.

This project will benefit all users of the Cook Inlet salmon resource – subsistence commercial, sport and personal use; and, assist educators, graduate level researchers, state and federal Cook Inlet fishery resource managers and planners through a greater understanding of the salmon populations in Cook Inlet.

Title: Small Stream Habitat Improvement Projects

Purpose: The proposed project seeks to identify, prioritize and implement habitat improvement or habitat protection projects on small watersheds throughout the Cook Inlet drainage.

Budget: $0.50 million is requested in full or, at the grantor's option, $0.10 million is requested annually for five years.

Revenue will support

Seasonal Personnel (3):	$0.030 million/year
Travel:	$0.010 million/year
Supplies & Equipment:	$0.010 million/year
Inventory, Mapping & Implementation:	$0.040 million/year
Education and Publications:	$0.010 million/year
Total:	**$0.100 million/year**

Description: The Cook Inlet drainage consists of a complex system of small streams coursing their way through pristine wilderness and 21st Century development. These streams are crucial towards maintaining the abundant aquatic resources that are so much a part of every Alaskans way of life. However, little is known about these small streams. Annually field personnel will collect basic biological information on small streams to build an inventory database. Through public input and area resource managers this information will be used to identify, prioritize and implement habitat improvement projects or habitat protection. CIAA proposes to use local secondary school educators to fill the seasonal positions associated with this program. This will provide teachers with first-hand experience in habitat assessment and protection and provide a mechanism to educate the public on the importance of small stream habitats.

Habitat improvement and protection benefits a variety of people who utilize or enjoy Alaska's aquatic resources.

This project will benefit all residents of the Cook Inlet drainage.

Lower Cook Inlet Programs

(Insert Picture)

Title: Paint River Enhancement and Remote Research Facility

Purpose: Increase the amount of salmon available in Lower Cook Inlet for common property harvest; and, provide for and encourage scientific research on genetics, food web and nutrient cycles associated with anadromous salmon.

Budget: $0.925 million is requested in full or, at the grantor's option, $0.425 million is requested for the first year and $0.125 million for the following four years.

Revenue will support:

Complete Fish Ladder Construction:	$0.200 million/first year
Construct Staff and Guest Research Quarters:	$0.100 million/first year
Total:	**$0.300 million/first year,**

plus:

Salmon Stocking:	$0.100 million/year
Project Assessment and Evaluation:	$0.025 million/year
	$0.125 million/year

Description: In the 1980s, the Alaska Department of Fish and Game identified unutilized spawning and rearing habitat in the Paint River watershed that could provide for substantial returns of all five species of Pacific salmon. Anadromous salmon production from the Paint River watershed, however, was limited by a barrier falls.

In 1990, the Cook Inlet Aquaculture Association secured the funds and permits necessary to initiate construction of a fish ladder to bypass the barrier falls; and, by 1991, contruction of the Paint River fish ladder was nearly complete. However, final completion of the ladder and development of anadromous salmon runs was halted when the State of Alaska began to divest itself of its hatchery programs and the Aquaculture Association redirected its financial resources to operate and maintain the State's hatchery programs.

Paint River provides an exceptional research model in which to explore the introduction of salmon to a watershed that is uncomplicated with development. Numerous stocks of salmon from California to British Columbia have been extirpated and attempts to re-establish sustainable runs of salmon to these systems have largely failed. The extirpation of salmon from these systems was caused largely by habitat degradation and, it is speculated, re-introduction of salmon into extirpated systems has failed for two reasons, habitat and/or genetics. The Paint River system is uncomplicated by human development and provides a unique opportunity to investigate the movement of salmon populations into new habitat. Completion of the Paint River salmon enhancement project and construction of a facility to house researchers will provide the opportunity for these studies to go forward. The information gained will benefit management decisions throughout the Pacific Northwest and the introduction of Pacific salmon to the Paint River watershed will support the Lower Cook Inlet fishing community through substantial returns of harvestable fish. Once established, the harvest and sale of surplus fish would financially support the program.

This project will benefit all users of the Lower Cook Inlet salmon resource – subsistence, commercial, sport and personal use; and, will assist educators, graduate level researchers, state and federal fishery resource managers and planners through a greater understanding of salmon populations.

Title: Chenik Lake Evaluation Study

Purpose: This is a proposal to evaluate the factors associated with the crash of the Chenik Lake sockeye population in an effort to rehabilitate this once valuable fishery.

Budget: $0.30 million is requested in full or, at the grantor's option, $0.10 million is requested annually for three years.

Revenue will support:

Seasonal Personnel (3):	$0.040 million/year
Travel:	$0.020 million/year
Supplies & Equipment:	$0.010 million/year
Graduate Researcher:	$0.030 million/year
Total:	**$0.100 million/year**

Description: Chenik Lake located in Kamishak Bay in southern Cook Inlet historically produced returns of sockeye salmon in the excess of 100,000 fish. Beginning in the 1940's the Chenik Lake sockeye population crashed and did not recover until the 1980's when fisheries enhancement projects were conducted. The work appeared to be a success as the returns rebounded and set record highs (173,200 fish in 1988). However, the population fell again in the early 1990's and has not rebounded. Preliminary investigations have not clearly identified the cause of the population declines.

Chenik Lake provides one of the most productive sockeye rearing habitats in the state and has the potential to provide a considerable fishery. The goal of this study is to identify how to rehabilitate the Chenik Lake sockeye population and manage it to sustain a long-term fishery. The main objectives are to identify those factors responsible for the rise and fall of the Chenik Lake sockeye population and develop a plan to rehabilitate the fishery that avoids the factors that caused the fishery to crash. Rehabilitation of Chenik Lake sockeye will provide a substantial fishing opportunity for subsistence and commercial fishermen of Lower Cook Inlet. CIAA proposes to fund one graduate level and three undergraduate level students to complete the study.

This study will benefit all users of the Lower Cook Inlet salmon resource – subsistence, commercial, sport and personal use; and provide graduate level research opportunities and subsequent knowledge to Alaskan universities and fishery professionals.

Title: Resurrection Bay Smolt Release

Purpose: This proposal seeks to secure funding to release coho smolt to provide an additional 10,000 adult return to the sport fishery of Resurrection Bay.

Budget: $0.15 million is requested in full or, at the grantor's option, $0.05 million is requested annually for three years.

Revenue will support:

Coho Smolt Incubation and Rearing:	$0.050 million/year
Total:	**$0.050 million/year**

Description: CIAA currently releases 150,000 coho smolt from the CIAA operated facility at Bear Creek weir for return to Resurrection Bay. These fish provide for a substantial recreational fishery in Resurrection Bay. CIAA proposes to increase this coho salmon smolt release to 250,000 smolts.

This project was originally proposed as a four-year project. The first year of this project will be completed with funds secured in 2001.

Once established, the harvest and sale of surplus fish would financially support the project. This project will benefit the Resurrection Bay recreational fishers and the businesses upon which they depend.

Title: Baseline Fisheries Data Collection in Resurrection Bay

Purpose: Provide the funds necessary to gather baseline fisheries data on the Resurrection Bay drainage to facilitate state, federal, and non-profit fisheries programs currently in operation.

Budget: $0.60 million is requested in full or, at the grantor's option, $0.20 million is requested annually for three years.

Revenue will support

Seasonal Personnel (8):	$0.120 million/year
Travel:	$0.010 million/year
Supplies & Equipment:	$0.010 million/year
Graduate Researchers (2):	$0.060 million/year
Total:	**$0.200 million/year**

Description: This project establishes a baseline fisheries database or inventory for Resurrection Bay anadromous fishes. This will include river and stream habitat classification, adult salmon escapement enumeration, smolt out migration, and resident fishes distribution and abundance. Field personnel will gather data annually and projects will be designed to provide information crucial for Resurrection Bay fisheries management. Annually, information will be compiled, mapped and distributed to the public, state and federal agencies. CIAA proposes to fund two graduate level and eight undergraduate level students to complete the assessment.

Currently, fisheries information in Resurrection Bay is limited. This lack of information inhibits resource manager's ability to make sound biological decisions. Better information creates better management and that benefits the future of the fisheries resource in Resurrection Bay and the people that depend upon it.

This project will benefit all users of the Resurrection Bay salmon resource and; and provide graduate level research opportunities and subsequent knowledge to Alaskan universities and fishery professionals.

Central Cook Inlet Programs

(Insert Picture)

Title: Packers Lake Enhancement

Purpose: To investigate the use of shoreline incubators to increase the number of harvestable salmon available to sport and commercial fishermen in central Cook Inlet.

Budget: $0.150 million is requested in full or, at the grantor's option, $0.050 million is requested for the three years.

Revenue will support:

Field Camp Operation:	$0.025 million/year
Lake Nutrient Enrichment:	$0.005 million/year
Water Quality Sampling & Analysis:	$0.005 million/year
Graduate Researcher (1):	$0.015 million/year
Total:	**$0.050 million/year**

Description: Packers Lake is located on Kalgin Island in central Cook Inlet. The lake appears to be spawning area limited; and, since 1972, has been the focus of several salmon enhancement exercises. CIAA, who enriched the lake's nutrient environment and released supplementally produced sockeye salmon fry, conducted the most recent enhancement project. This project produced over 100,000 additional sockeye annually. However, due to CIAA's financial limitations and harvest restrictions imposed by the Board of Fisheries limiting commercial sockeye harvests during mid-August when many of the Packers Lake fish return, CIAA discontinued the Packers Lake enhancement activities.

CIAA, however, believes Packers Lake may still be able to produce additional fish for both sport and commercial harvest through a modified enhancement effort. Several springs along the Lake's shoreline are ideally suited for the placement of experimental incubators. CIAA proposes to develop and test several small shoreline incubators designed to take advantage of the springs that surround the lake. The incubators will provide up to 1,000,000 fry and the lake's rearing environment will be enhanced through nutrient enrichment. CIAA proposes to fund a university graduate student to design and test the shoreline incubators.

The Packers Lake enhancement project is expected to produce up to 25,000 additional sockeye salmon for harvest by sport and commercial fisheries. Estimated value of the fish is $100,000 annually. Once established, the harvest and sale of surplus fish would financially support the project.

This project will benefit all users of the Packers Lake salmon resource; and will provide graduate level research opportunities and subsequent knowledge to Alaskan universities and fishery professionals.

Title: Fisher Lake Enhancement

Purpose: To increase the number of harvestable salmon available to sport and commercial fishermen on the west side of Cook Inlet.

Budget: $0.200 million is requested in full or, at the grantor's option, $0.050 million is requested for the four years.

Revenue will support:

Field Camp Operation:	$0.015 million/year
Lake Nutrient Enrichment:	$0.005 million/year
Water Quality Sampling & Analysis:	$0.005 million/year
Hatchery Operations:	$0.020 million/year
Overhead:	$0.005 million/year
Total:	**$0.050 million/year**

Description: Fisher Lake is part of the Big River Lakes drainage. Salmon production from this lake is prevented by a barrier falls, but could be enhanced through a small fry or presmolt release program. CIAA proposes to incubate 310,000 eggs collected from sockeye populations resident to the Big Lake system at Trail Lakes Hatchery and release the resulting fry to Fisher Lake for rearing. The rearing environment will also be enhanced through nutrient enrichment. Resulting smolt will migrate volitionally from the lake; however, the barrier falls will prevent returning adults from entering the lake. Returning adults will be captured by CIAA to prevent straying to other systems.

The Big River Lakes system provides fish for the commercial fishery and is the target of a growing guided sports fishery. The project is expected to provide up to 30,000 adult fish that will be available to both the sport and commercial fisheries. Estimated value of the fish produced is $120,000 annually. Once established, the harvest and sale of surplus fish would financially support the project.

This project will benefit all users of the Big River Lakes area salmon resource.

Title: Cook Inlet Salmon Population Study

Purpose: Provide the funds necessary to conduct a study to estimate the total population and escapement of pink, chum, and coho salmon entering Upper Cook Inlet.

Budget: $0.50 million is requested in full or, at the grantor's option, $0.25 million is requested annually for two years.

Revenue will support

Equipment & Supplies (PIT Tags)	$0.080 million/year
Seasonal Personnel (4)	$0.040 million/year
Biologist & Benefits	$0.035 million/year
Contract Research Vessel	$0.085 million/year
Study Publication & Distribution	$0.010 million/year
Total:	**$0.250 million/year**

Description: This project utilizes the latest in mark-recapture technology to estimate both total return and escapement of three species of salmon within Upper Cook Inlet. To conduct this study returning salmon are captured just before entering the Upper Inlet, they are tagged and released. The commercial harvest and Department operated fish wheels and weirs are then checked for marked fish to recover tags. The total population at the time of tagging will be estimated from tag recoveries from commercial harvest and escapement past fish wheels and weirs.

Currently, an accurate estimate does not exist for chum, pink, and coho salmon returning to Upper Cook Inlet for two reasons; these fish are not available for commercial fishermen which results in a lack of harvest records and escapement monitoring (sonar, aerial and foot surveys) which focuses primarily on sockeye salmon. In 1999, the Board of Fish (BOF) directed the Alaska Department of Fish and Game to develop a management plan for pink and chum salmon in the Upper Inlet. The BOF further directed that until a plan is completed, no additional commercial fishing periods would occur. In the past several years the Cook Inlet fishery has been decimated by exceptionally low returns of sockeye salmon, which is the primary species of salmon sought for harvest. However, during these years of low sockeye returns, pink and chum salmon have appeared to prosper. The problem is that the Department cannot adequately determine the run strength of pink and chum or even coho, which in essence forces the Upper Cook Inlet fishing industry to close when there may be excess salmon available for harvest. The ability to harvest from a multiple species fishery within the Upper Cook Inlet would bring greater stability to the Cook Inlet Fishing Industry.

This study will benefit all users of the Central Cook Inlet salmon resource – subsistence, commercial, sport and personal use; and, provide resource managers with the information necessary to effectively manage Cook Inlet's salmon stocks.

Northern Cook Inlet Programs

(Insert Picture)

Title: Big Lake Evaluation Study

Purpose: This is a proposal to evaluate the factors associated with the crash of the Big Lake sockeye population in an effort to rehabilitate this once valuable fishery.

Budget: $0.20 million is requested in full or, at the grantor's option, $0.10 million is requested annually for two years.

Revenue will support:

Seasonal Personnel (1):	$0.010 million/year
Travel:	$0.005 million/year
Supplies & Equipment:	$0.010 million/year
Water Quality & Biological Sample Analysis:	$0.020 million/year
Field Camp Operation:	$0.035 million/year
Graduate Researcher:	$0.020 million/year
Total:	$**0.100 million/year**

Description: Big Lake, located near Anchorage, Alaska's largest city, drains into the Knik Arm of northern Cook Inlet and has historically produced returns of sockeye salmon in the excess of 200,000 fish. Beginning in the 1970's the Big Lake sockeye population declined (2,750 adult escapement) and enhancement activities were initiated in 1975. The Big Lake enhancement project appeared to be a success as the returns steadily increased and set record highs (192,352 adult escapement) in 1984. Beginning in 1998, however, the Big Lake system has not achieved its minimum escapement goal of 50,000 fish. Unfortunately, extensive biological data is not available to address the recent reduction in the Big Lake sockeye return.

Big Lake has a history of providing an excellent sockeye rearing habitat and a substantial return of sockeye to the upper Cook Inlet. Rehabilitation of Big Lake sockeye will provide substantial fishing opportunity for all users of the salmon resource. This study will identify how to rehabilitate the Big Lake sockeye population and manage it to sustain a long-term fishery. CIAA proposes to fund one graduate level and one undergraduate level student to complete the study.

This project was originally proposed as a three-year project. The first year of this project will be completed with funds secured in 2001.

This study will benefit all users of the Northern Cook Inlet salmon resource – subsistence, commercial, sport and personal use; and provide graduate level research opportunities and subsequent knowledge to Alaskan universities and fishery professionals.

Title: Tyonek Remote Salmon Rearing

Purpose: Seek funding to build a fry rearing facility and release the resultant smolt to establish a return of approximately 100,000 sockeye for commercial and subsistence use to the village of Tyonek on the Westside of Cook Inlet.

Budget: $0.90 million is requested in full or, at the grantor's option, $0.40 million the first year for site development and construction, $0.050 million for two years for local training, $0.10 million for operations over four years.

Revenue will support:

Tyonek Raceway Site Evaluation		$0.050 million
Purchase Site:		$0.100 million
Construction of Tyonek Rearing Facility		$0.250 million
	Total:	**$0.400 million**

plus

Training for 2 Local Operators		$0.050 million/year for 2 years
	Total:	**$0.050 million/ year for 2 years**

plus

Incubation of Fry at Eklutna Hatchery		$0.040 million/year for 4 years
Rearing Facility Staff (2) & Operations		$0.060 million/year for 4 years
	Total:	**$0.100 million/year for 4 years**

Description: The proposed project provides a substantial return of sockeye salmon for subsistence and commercial users in the Tyonek area of the Westside of upper Cook Inlet. This proposal requires the operation of the CIAA owned Eklutna Salmon Hatchery as part of another proposal in this document (see Eklutna/Port Graham/Tutka Enhancement). Currently, the CIAA owned Eklutna Salmon Hatchery is not in operation. This facility is in a state of readiness and can be operational with minimal costs. Funding is requested for four years because the lifecycle of salmon will not provide adult fish until the fifth year. A portion of the returning fish will be harvested and provide funds for future operations.

Eklutna hatchery has an incubation capacity of 20 million eggs, is ideally suited for incubating and rearing sockeye salmon and can serve as a central incubation and early rearing facility. For this project the facility will be used to incubate and raise sockeye salmon fry for transfer to Tyonek. The Tyonek Rearing Facility would provide the raceways necessary to rear sockeye fry to smolt for release. Tyonek is chosen as the site for a rearing facility because it contains natural artesian wells that can supply cheap, clean water necessary to operate the facility.

As proposed the project would evaluate and construct a facility in Tyonek to support the rearing of 1 million sockeye fry to smolt and release. The facility would provide an adult sockeye return of 100,000 fish worth over $400,000 annually to Tyonek area commercial and subsistence fishermen. Additionally, the project would provide training and employment for two local residents to staff and operate the Tyonek facility. Harvests of returning adult fish could be used to pay for annual operating costs after adult returns are established.

This project will benefit all users of the Northern Cook Inlet salmon resource – subsistence, commercial, sport and personal use; and provide training and employment for two local residents.

Educational Programs

(Insert Picture)

Title: Kenai Peninsula Northern Pike Study & Education

Purpose: This proposal seeks funding to assess the distribution and occurrence of northern pike within the Kenai Peninsula.

Budget: $0.25 million is requested in full or, at the grantor's option, $0.125 million is requested for two years.

Revenue will support

Seasonal Personnel (4)	$0.075 million/year
Travel	$0.005 million/year
Supplies & Equipment	$0.020 million/year
Education & Materials	$0.025 million/year
Total:	**$0.125 million/year**

Description: Pike is an exotic species that has been found in the tributaries and main stem of the Kenai River. Currently, the extent of pike introduction into the Kenai River drainage is not known. The spread of pike is a concern because they are a voracious predator of juvenile salmon and their introduction has the potential to severely degrade the Kenai Peninsula's existing salmon stocks. The main objectives of this project are to assess the distribution of northern pike and educate the public on the potential negative impacts, both biological and economical, to the Kenai Peninsula. To fulfill these objectives a two-year biological investigation will be conducted to catch and enumerate pike from the area's tributaries and lakes. After one year of initial investigation, data will be compiled and developed into lessen plans for Kenai Peninsula Borough teachers, public meetings will be held and educational pamphlets will be distributed to inform the community about the status of pike.

CIAA proposes to use local secondary school educators to fill two of the seasonal positions associated with this program. This will provide teachers with first-hand experience in exotic species management and provide a mechanism to educate the public on the impact of "bucket biology".

The proposed project will serve to evaluate and educate the community about pike in an effort to help lessen the impacts of invasion by exotic species. This information is crucial to allow area fish biologists and resource managers to make appropriate decisions in addressing the pike issue.

Title: Trail Lakes Hatchery "Adopt an Incubator" Project

Purpose: Provides the funding necessary to develop a program for Kenai Peninsula elementary schoolchildren to gain hands on experience in the field of aquaculture.

Budget: $0.07 million is requested in full or, at the grantor's option, $0.05 million is requested the first year for hatchery modifications and $0.01 million for two additional years.

Revenue will support:

Hatchery Incubator & Raceway Modification	$0.050 million
Total:	**$0.050 million**

plus

Educational Material & Staffing	$0.010 million/year
Total:	**$0.010 million/year**

Description: Trail Lakes Hatchery is owned by the State of Alaska and operated by Cook Inlet Aquaculture Association (CIAA). The hatchery facility is on the Seward Highway near the community of Moose Pass, Alaska and provides an easily accessible location for many Kenai Peninsula area schools. The communities of Seward, Cooper's Landing, Sterling, Soldotna, Kenai, Nikiski, Ninilchik and Girdwood all have elementary schools within a 2 hour drive of the facility.

Trail Lakes Hatchery currently incubates and rears both coho and sockeye salmon. This proposal will provide funding necessary to commit staff towards arranging the facility for active school participation. This will include coordination of study plans with teachers, hatchery modification so children can help collect eggs and view the development of "their" incubator. Additionally, upon hatching the students will help put the fish into raceways, assist in feeding the baby salmon and help let the fish go at the permitted release site. Teachers will also be provided with the educational materials necessary to teach the children about the lifecycle of salmon and what part aquaculture plays in producing fish for the streams and lakes of the area.

The "Adopt an Incubator" project greatly benefits not only children but also the public by informing them of the role aquaculture plays in the community. Educating the community about salmon is now more crucial than ever as a diverse array of user groups compete for a limited resource.

Title: Bear Lake Weir Visitor Site

Purpose: Provides the funding necessary to construct and provide a visitor center for the public to witness a salmon by-pass facility in operation.

Budget: $0.270 million is requested in full or, at the grantor's option, $0.230 million is requested the first year for building and parking lot construction and $0.02 million for two additional years to provide staff for tour groups and informational materials.

Revenue will support:

Weir & Building Modification		$0.130 million
Buy Land & Build Parking Lot		$0.100 million
	Total:	**$0.230 million**

plus

Educational Materials & Staffing (1)		$0.020 million/year
	Total:	**$0.020 million/year**

Description: Bear Lake weir is a State of Alaska owned facility located on Bear Creek (0.5 miles downstream from Bear Lake) near the community of Seward, Alaska. This area has been the site of enhancement activities since 1962. The weir facility was built in 1963 and is currently in need of repair. During the summer season from five to 50 tourists visit the site daily. Many of these individuals are "turned away" because the site was not designed to accommodate visitors.

The proposed funding will pay for redesign and construction of the facility to provide access and viewing opportunities for tourists. The facility will also be designed to safely accommodate tourists around the facility while allowing for a crew to function (pass adult fish, release smolt, harvest surplus fish, etc). Additionally, land adjacent to the facility will be purchased and developed to provide a parking lot large enough to accommodate buses, (school or cruise line tours buses) and passenger vehicles. Funds not used for construction are designated for the development of educational materials and to hire a seasonal staff person to provide daily tours to interested visitors.

Currently, CIAA has enhancement programs in effect that provide viewing opportunities of salmon from May to November. A run of sockeye begins to return to the facility in late-May and continues through July. In August an adult coho salmon return begins and continues until November. CIAA passes the adult fish to the lake. Also, at the facility CIAA harvests and collects eggs from returning salmon, passes out-migrating smolt and releases hatchery reared fish from the site's raceway.

These daily activities provide entertainment for visiting tourists that stimulate area businesses. Additionally, construction of the facility and staffing tour groups provide local jobs. But mostly, the Bear Lake weir provides an excellent opportunity for visitors to witness first hand the lifecycle of the salmon from fry to smolt to adult.

CIAA will initiate the first phase of this project in 2002 with funds secured in 2001.

Title: Trail Lakes Hatchery Visitor Center

Purpose: To provide the funds necessary to modify the facility to provide displays, a meeting room/theater and accommodate informational tours for the public and area schools.

Budget: $0.575 million is requested in full to provide displays, build a meeting room/theater and modify the facility to accommodate informational tours.

Revenue will support:

Displays and Freshwater Aquaria	$0.070 million
Informational Videos	$0.070 million
Meeting Room/Theater	$0.170 million
Update Domestic Water Treatment Facility	$0.135 million
Modifications to Accommodate Tours	$0.130 million
Total:	**$0.575 million**

Description: Trail Lakes Hatchery is owned by the State of Alaska and operated by Cook Inlet Aquaculture Association (CIAA) through contract with the Alaska Department of Fish and Game (ADF&G). The hatchery is located at Trail Lakes near the community of Moose Pass, Alaska and is permitted for sockeye, coho and chinook salmon releases at selected sites throughout the Cook Inlet drainage. At capacity the hatchery has the potential to provide 1.8 million adult salmon for all user groups in the Cook Inlet area. This hatchery currently provides returning salmon to areas such as Big Lake in Upper Cook Inlet, Leisure Lake in Kachemak Bay, Kirschner Lake in Kamishak Bay and Bear Lake in Resurrection Bay.

Trail Lakes Hatchery is ideally located (just off the Seward Highway) to provide public tours and serve area schools with a "hands on" opportunity to learn about the salmon resource. CIAA has offered public tours of the facility in the past. These tours were immensely popular with an estimated 20,000 to 30,000 visitors annually; however, the tours were discontinued because the facility was not designed to accommodate that number of people. Hatchery staff currently works with a small number of school groups providing information on fish culture and the life history of Cook Inlet salmon.

This project will benefit all users of the Cook Inlet salmon resource – subsistence, commercial, sport and personal use; and, assist educators and the general public by providing a greater understanding of the salmon populations in Cook Inlet.

CIAA will initiate the first phase of this project in 2002 with funds secured in 2001.