



# Smolts

COOK INLET AQUACULTURE ASSOCIATION  
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## Points of Interest at CIAA

- Trenten Dodson receives another promotion to Field Biologist.
- Lois Bettini, from Homer, AK is hired as CIAA's Grant Biologist.
- Carol Jones accepts the responsibilities as Administrative Assistant in July.
- Ronald Carlson is hired as the Project Technician, which was vacated by Trenten's promotion.
- CIAA's Annual Report and Smolts can now be viewed on CIAA's web site. ([www.ciaaet.org](http://www.ciaaet.org))

## Ninth Circuit Court of Appeals Axes Tustumena Sockeye Project

By Gary Fandrei—CIAA Staff

A December 30, 2003, decision by the 9<sup>th</sup> Circuit Court of Appeals in the case captioned: *The Wilderness Society; Alaska Center for the Environment vs. United State Fish & Wildlife Service*, No. 01-35266, enjoins or prohibits the Tustumena Lake sockeye salmon enhancement project. This decision brings to question the future of this project and three associated projects in Lower Cook Inlet. Executive Director Gary Fandrei reported "The Tustumena Lake project is very important to CIAA and the Cook Inlet common property fishery. The project has been in operation since 1974 and has provided sockeye salmon to numerous users from Big Lake near Anchorage to Port Dick Lake on the outer coast."

The Wilderness Society and the Alaska Center for the Environment (ACE) brought a suit against the U.S. Fish & Wildlife Service (USF&W) challenging the issuance of a permit for the Tustumena Lake sockeye salmon enhancement project where CIAA releases 6 million salmon fry into Tustumena Lake and 3.5 million fry into three Lower Cook Inlet Lakes - Lei-

sure, Hazel and Kirschner Lakes. Initially, ACE's legal arguments did not persuade the District Court in Anchorage and the enhancement project permit was allowed to continue. However, on appeal, the 9<sup>th</sup> Circuit Court of Appeals agreed with ACE's argument that the enhancement project is a "commercial enterprise" and is, therefore, prohibited by the Wilderness Act. To the surprise of many, the appeals court dismissed the USF&W's reliance on section 1315(b) of ANILCA which does not prohibit fishery enhancement projects in Alaskan refuge wilderness areas and, in fact, permits such projects.

The staff and Board of Directors have met twice and are working to address two questions - what will be the fate of the Tustumena Lake fry currently in Trail Lakes Hatchery and how can the Association continue to provide sockeye salmon to central Cook Inlet where the bulk of the users are.

CIAA Biologist Trent Dodson stated "We have submitted a request to release the fish currently in Trail Lakes Hatchery to Tustumena

Lake and are hoping to receive a timely response. While the fish are not normally released until June, if we cannot release the fish to Tustumena Lake, we must have plans in place soon to secure all the necessary State permits for an alternative release site. **We do not want to kill 6 million fry.**"

Also at issue is the future of the three Lower Cook Inlet Lakes projects. These highly successful projects contribute significantly to the Kachemak Bay sockeye fishery. Fish returning to Tustumena Lake have served as the Broodstock for these projects since the 1980's. Developing a new brood source can be done, but it can require several years and is expensive. Executive Director Gary Fandrei reported "Suddenly having to change broodstocks is very disruptive and may limit returns until the broodstock source is fully developed."

The CIAA Board and staff are committed to finding a way to continue to enhance the Kasilof River return and provide eggs for the three Lower Cook Inlet Lakes projects.

## INSIDE THIS ISSUE

- Letter from the Executive Director 2
- New Faces Join the CIAA Team 2
- Kasilof Smolt Migration: A perspective from the Field 3
- Record Smolt Outs are Observed at Bear Creek Weir and Kasilof River Sites 3
- Cook Inlet Aquaculture's 2003 Financial Statement 4
- Trail Lakes Hatchery Successfully Battles a Minor IHNV Outbreak 7
- Paint Lake "Paints" an Abstract Picture 7

## Tutka Hatchery Pushing Forward

By: Aaron & Christy VanArnum

It has been a year and a half long learning curve at Tutka Hatchery for new manager Aaron VanArnum and Assistant manager Justin Evans. The key factor has been finding out what the problems are, what the causes of the problems are, and determining how to fix them. The primary areas of concern have been: fish culture practices, maintenance, staff, and hatchery revenue short falls, pretty much covering all aspects of the hatchery.

Fish culturally, many changes have been implemented to bring the hatchery up to speed with current aquaculture practices and technology. Water quality monitoring at Tutka has been updated with reliable and functioning electronic meters on a daily schedule. When fry or broodstock are in the

lagoon, dissolved oxygen is monitored twice daily. Year round, water temperatures in the hatchery and the lagoon are recorded four times daily. These changes in practice have allowed staff to recognize and attack problems as they develop and to prepare for future rectification of those problems. As a result, a new aeration system will be in place this spring in the lagoon for fry rearing and broodstock holding. A pump system will also be added to increase freshwater flow to the pens when necessary. These changes will improve our ability to grow healthy and bigger fry as well as increase fertility rates of broodstock and quality of eggs. Finally, in terms of fish culture practices, our goals and methods for fish production have changed. Fry are monitored closely each spring to determine the exact time for emer-

gence to the pens. The diet fed to the fish has changed to use two brands of fish food that have resulted in much more efficient growth rates than in the past. Feeding is monitored closely to ensure food is not wasted and records are meticulously kept. Sampling is done weekly for growth, with a goal of the bigger the better. We believe that the closer the fish are to 1 gram, the better chance we have of a good return. An emergency release system has been set up utilizing the existing fish pump and lines to extend out of the lagoon. Because of this "relief value", fry can be released to the bay even during low tide conditions if necessary. Normal releases are done during very high tides by moving the pens out into the bay.

In the area of maintenance, the "To Do" list has been constantly added to and gradually subtracted from. The facility and

See Tutka Hatchery back page -

# Letter From The Executive Director



Photo by Staff / CIAA

In 2001, we began several efforts to secure additional funding sources through a variety of grant programs. As a

result of these efforts, and with the support of Senator Ted Stevens, the Kenai Peninsula Borough and numerous local communities and organizations, we secured several grants which now play a significant role in our operations. These grants have helped us stretch the dollars we received from the Salmon Enhancement Tax and cost recovery harvests. Numer-

*"If the current Tustumena Lake project can not continue, we are considering a number of options for providing sockeye salmon to the central district."*

Gary Fandrei

ous improvements were made to both the Trail Lakes and Tutka Bay Lagoon Hatchery programs. We expect these improvements to result in greater returns to everyone that uses the Cook Inlet salmon resource. Recently, a decision by the 9th Circuit Court of Appeals has put the future of the Tustumena Lake project in question. If the cur-

rent Tustumena Lake project can not continue, we are considering a number of options for providing sockeye salmon to the central district. However, our priority is to continue enhancement efforts in the Kasilof River system. As we work to continue our existing projects and improve all of our programs, we must keep everyone informed of the progress we are making. I am committed to improving this newsletter and our website at [www.ciaa.net.org](http://www.ciaa.net.org) so that both remain a resource for the members of the Association and others interested in our activities.

## New Faces Join the CIAA Team

**Carol Jones** accepted the job as the Administrative Assistant after a rather lengthy transition process. Judy Miller, the former Admin Assistant retired from CIAA in January of 2003 and was temporarily replaced by Susan Swartz. Susan left the Association in July of 2003 and thanks to good fortune, Carol stepped into this position and is doing a remarkable job in getting the books back in order. She has recently completed the task of switching all financial software over to Quick Books Pro which has already streamlined the report feeds that are demanded by the various organizations and staff requiring



Carol Jones



Ron Carlson

up to date financial information. **Ron Carlson** received a promotion to the full time project Technician. Previous to this upgrade, Ron worked as a full time temporary employee responsible for keeping the mechanical end of Tutka Hatchery in good order. Ron will continue to work at the Tutka facility in the winter months. In the summer and fall periods, he will contribute to the setup and operation of all scheduled projects, and will be located out of the Kenai corporate office. **Lois Bettini** was hired to fill the newly created position of grant biologist. She has a background in environmental sciences and currently resides in Homer, Alaska.

## Board of Directors

A Board of Directors that meets monthly controls the affairs of the association. Twenty three 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.

<b>Commercial Fishermen of Cook's Inlet</b>	<b>Alternates</b>
DIRECTORS: VACANT	None
VACANT	None
<b>Cook Inlet Fishermen's Fund:</b>	
DIRECTORS: DOUGLAS F. BLOSSOM	Chris Garcia
DAVID MARTIN	Chris Garcia
<b>Cook Inlet Seiners Association:</b>	
DIRECTORS: CHARLES WALKDEN	John Wise
NATHAN WISE	None
<b>Inlet Wide Commercial Fishermen Representatives:</b>	
DIRECTORS: JAMES BUTLER III	Phillip Squires
BUDDY HARRIS	Steven Perrizo
DREW SPARLIN, SR.	Dennis Crandall
STEVE TVENSTRUP	Dan Thompson
DYER VAN DEVERE	Roland Maw
<b>Kenai Peninsula Fishermen's Association:</b>	
DIRECTORS: HOWARD DAVIS	Rory Rorrison
VACANT	None
<b>North Pacific Fisheries Association:</b>	
DIRECTORS: JESSIE NELSON	Dan Winn
VACANT	None
<b>Northern District Set Netters of Cook Inlet:</b>	
DIRECTORS: JEAN RING	Stephen Braund
VACANT	None
<b>United Cook Inlet Drifters Association</b>	
DIRECTORS: JOHN EFTA	Leonard Efta
FRANCIS DEROSSITT	Ron Rust
<b>City of Homer:</b>	
DIRECTOR: LEONARD MILLER	Al Ray Carroll
<b>City of Kachemak:</b>	
DIRECTOR: PAUL JONES	Emil Nelson
<b>City of Seward:</b>	
DIRECTOR: JOHN FRENCH	None
<b>Cook Inlet Region, Inc.:</b>	
DIRECTOR: PAUL SHADURA	None
<b>Kenai Peninsula Borough:</b>	
DIRECTOR: CHRISTOPHER MOSS	Ron Long
<b>Matanuska-Susitna Borough:</b>	
DIRECTOR: JAMES CHESBRO	None
<b>Municipality of Anchorage:</b>	
DIRECTOR: DICK TREMAINE	Dan Kendall
<b>Ninilchik Village Council:</b>	
DIRECTOR: STEPHEN VANEK	None
<b>Processor Representative:</b>	
DIRECTOR: TIMOTHY SCHMIDT	Duff Hoyt



### Cook Inlet Aquaculture Staff



#### Kenai Office

Gary Fandrei	Executive Director
Lani Eggertsen-Goff	Special Projects
Carol Jones	Admin. Assistant
Trent Dodson	Field Biologist
Lois Bettini	Grant Biologist
Mark Matarrese	Special Projects Mgn.
Ron Carlson	Project Technicain

#### Tutka Bay Hatchery

Aaron VanArnum	Hatchery Manager
Justin Evans	Assistant Manager

#### Trail Lakes Hatchery

Robert Blankenship	Hatchery Manager
Thomas Prochazka	Assistant Manager
Mark Thomas	Assistant Manager

## Kasilof Smolt Migration: A perspective from the Field

By CIAA Staff

As spring gives way to summer, sockeye salmon smolts intuitively negotiate a labyrinth of guided drift boats, thrashing king salmon, diving seagulls, and fish lures as the ever rising current of the Kasilof River throttles them along. And as millions of these fish migrate from the glacial waters of Tustumena Lake down the Kasilof River to the productive waters of Cook Inlet, The Cook Inlet Aquaculture Association staff assesses dynamics of the smolt population.

"To begin the project, we place an incline smolt trap in the Kasilof River near the confluence of Crooked Creek," says Trent Dodson, Field Biologist for CIAA. The trap is suspended between a system of pontoons and is anchored down to the substrate. The design allows water to flow up the incline, and pour down a series of live boxes. As smolts are swept downstream, they are captured within the strong current created by the incline. Unable to swim back upstream, the smolts fall into the first of two live boxes. As smolts begin to accumulate in the front live box, they are able to escape the turbulence created by the plunging water through a small door to the second live box. "The smolts can relax and swim freely once they are in the second live box," Dodson says.

"An over-head cable is installed over the river, and we use a pulley-driven boat system is to gain access to the trap," says CIAA Project Technician Ron Carlson. "The system uses the river's current to push the boat across the river to the trap, and sometimes it's difficult to traverse the river while steering the boat and dodging large rocks. However this area has a restriction on motorized use, so we have to cross the river this way," says Carlson.

"Each morning we load up the boat and slide our way across the Kasilof to check the trap for smolts," says Dodson, "and then we board the trap, remove the protective netting (used to protect the smolts from birds preying on them,) and begin counting." The smolts are netted from the live box and transferred to a water-filled bucket. Using a tally counter, "we carefully pour the smolts from the bucket, and click as each fish gently falls back

into the river," says Andy Sheets, CIAA Seasonal Assistant. The "pour-n-click" method is preferred since each smolt is individually counted, though under certain circumstances a different means of enumeration may be used.

"When the number of smolts in the live box exceeds 10,000 or if we observe that the smolt are experiencing a considerable amount of stress within the live box, we will use the biomass procedure to alleviate stress caused by crowding," says Dodson. The procedure involves weighing nets full of smolts, recording the result, and immediately placing them back in the river. Once the live box is empty and all smolts are released, the weights are added (with the weight of the net subtracted) and divided by the average weight of the individual smolts.

"We perform a weekly test to assess the efficiency of the trap," says Carlson, "because the smolt trap doesn't capture the entire population of smolts during the migration." Up to one thousand smolts are captured and dyed with Bismark Brown Y, and inert dye that harmlessly turns the smolts gold in color and lasting approximately 4 to 5 days. The dyed smolts are transported in an oxygenated tank to the Sterling Highway Bridge (about 0.6 miles upstream from the trap.) "Once we arrive at the landing, the smolts are transferred to a holding box already secured in the river," says Sheets, "and later in the evening the smolt are released and will migrate back downstream."

"We record the number of recaptured 'golden' smolts over the course of a week, and we use this number to calculate the percentage of smolts captured during the week," says Dodson. "By comparing those smolts enumerated with those recaptured during the test, we can figure the total number of smolts that migrated for that particular week," he says.

While the smolts are counted every day in order to gain an idea of how many smolts are migrating, CIAA also collects other data pertinent to the dynamics of the migrating smolt population. Each day, a small sample of smolts are collected and taken back to the laboratory for length and weight measurements, and scales are removed for age determination.

To obtain the age of the smolt, a scale is taken, placed on a microscope slide, and examined under a microfilm viewer. By studying the growth rings on the scale, Dodson can ascertain different seasons of growth. "By paying special attention to rings that are close together and seemingly broken, an area of winter growth or 'check,' is noted. A one-check smolt would be considered a one-year smolt; a two check smolt would be a two-year smolt, and so on," says Dodson. He says that although the age structure of the smolt migration varies from year to year, the average over the last five years has been approximately 70% age-1, and 30% age-2.

"After we take scale samples, we record the weight and length of the individual smolts," says Sheets. A five-year average reveals Tustumena age-1 smolts are 74.3 mm in length, and weigh 3.54 g; age-2 smolts are 85.1 mm in length, and weigh 5.29 g, according to Dodson. "This year (2003) we've seen a 25 to 30% increase in the weight of the smolts, though the length has stayed relatively constant. I would attribute this weight gain to the increase in zooplankton we've seen in our limnology sampling on Tustumena Lake", Dodson added.

Two otoliths ("ear stones") are then removed from the smolts, and are placed into a vial. Later in the fall, the laboratory staff at the Trail Lakes Hatchery will analyze the otoliths for hatchery marks. "This data helps us estimate what portion of the migrating smolts was from the CIAA fry release. Moreover, the data will help us ascertain the survival of our released fry to the smolt stage," says Dodson. In 2003, approximately 18% of the migrating smolts were resultant of CIAA releases at Bear Creek.

In the future these smolts will return to Cook Inlet, the Kasilof River, and Tustumena Lake for all to enjoy. By enumerating and analyzing the populations of migrating smolts in the Kasilof River, CIAA can uncover valuable information to improve the enhancement practices on Tustumena Lake, and develop better ways to provide and protect your salmon resource.

## Record Smolt Outs are Observed at Bear Creek Weir and Kasilof River Sites

By CIAA Staff

CIAA field crews monitor smolt migrations at locations throughout the Cook Inlet drainage (See Map on Page 8). Two systems in particular produce some pleasant results in 2003

Between May 18<sup>th</sup> and July 5<sup>th</sup> of 2003, an estimated 12.9 million Tustumena Lake sockeye salmon smolt migrated to Cook Inlet. This signifies the third largest smolt migration since 1980. Additionally, it is the largest since the number of fry released at Bear Creek was reduced to 6 million. The large volume of migrating smolts forced field personnel to conduct several sub-sampling events (see Kasilof Smolt Migration article).

"We experienced several nights with 50,000 to 100,000 migrating smolts in our trap during the peak of the migration" reports CIAA field biologist Trent Dodson. "Once we applied the trap efficiency, which was quite low and erratic in 2003, it correlates to 1 or 2 million smolts moving in one night."

Although sub-sampling and low tarp efficiencies increase potential error in the enumeration, Dodson is quite confident with the results.

"Despite the increase in sub-sampling and the low trap efficiency, we are still looking at a migration of 10.6 million smolt on the low end and possibly 15.2 million on the upper limit," adds Dodson.

With the current average smolt to adult survival rate (14%), the large number of Tustumena Lake smolts that entered Cook Inlet could translate into quite a nice return in a few years.

Meanwhile across the peninsula, the smolt enumeration at Bear Lake Weir also witnessed a record number of sockeye smolts. An estimated 1.3 million smolts, migrated between May 5<sup>th</sup> and June 11<sup>th</sup> of 2003.

"We knew it was going to be a big one", explained CIAA

# Cook Inlet Aquaculture Association's

## INDEPENDENT AUDITOR'S REPORT

To the Board of Directors  
Cook Inlet Aquaculture Association, Inc.  
Kenai, Alaska

We have audited the accompanying statements of financial position of Cook Inlet Aquaculture Association, Inc. (a nonprofit organization) as of June 30, 2003 and 2002, and the related statements of activities, statements of functional expenses and cash flows for the years then ended. These financial statements are the responsibility of the Association's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the financial position of Cook Inlet Aquaculture Association, Inc. as of June 30, 2003 and 2002, and the changes in its net assets and its cash flows for the years then ended in conformity with accounting principles generally accepted in the United States of America.

*Lambert, Tuttle & Wagner CPAs*

October 20, 2003

## COOK INLET AQUACULTURE ASSOCIATION, INC. STATEMENT OF ACTIVITIES Year Ended June 30, 2003

	Unrestricted	Temporarily Restricted	Total
<b>REVENUES AND OTHER SUPPORT</b>			
Grants	\$ -	\$ 182,025	\$ 182,025
Enhancement tax proceeds		191,778	191,778
Terminal fish revenues	324,160	-	324,160
Lawsuit settlement	429,241	-	429,241
Interest	3,871	-	3,871
Other	1,702	-	1,702
	758,974	373,803	1,132,777
<b>NET ASSETS RELEASED FROM RESTRICTIONS</b>			
Satisfaction of program restrictions	665,137	(665,137)	-
Total revenue and other support	1,244,117	(191,334)	1,132,777
<b>PROJECT EXPENSES</b>			
Tutka Hatchery	489,731	-	489,731
Trail Lakes Hatchery	604,078	-	604,078
Eklutna Hatchery	87,010	-	87,010
Field projects	213,637	-	213,637
Special projects	89,231	-	89,231
	1,483,687	-	1,483,687
<b>GENERAL AND ADMINISTRATIVE EXPENSES</b>			
	394,797	-	394,797
Total expenses	1,878,484	-	1,878,484
CHANGE IN NET ASSETS	(554,373)	(191,334)	(745,707)
NET ASSETS AT JUNE 30, 2002	(694,889)	353,654	(341,235)
NET ASSETS AT JUNE 30, 2003	\$ (1,249,262)	\$ 162,320	\$ (1,086,942)

## COOK INLET AQUACULTURE ASSOCIATION, INC. STATEMENT OF ACTIVITIES Year Ended June 30, 2002

	Unrestricted	Temporarily Restricted	Total
<b>REVENUES AND OTHER SUPPORT</b>			
Grants	\$ -	\$ 1,015,000	\$ 1,015,000
Enhancement tax proceeds		244,555	244,555
Terminal fish revenues	339,676	-	339,676
Interest	12,719	-	12,719
Other	57	-	57
	352,452	1,259,555	1,612,007
<b>NET ASSETS RELEASED FROM RESTRICTIONS</b>			
Satisfaction of program restrictions	905,901	(905,901)	-
Total revenue and other support	1,258,353	353,654	1,612,007
<b>PROJECT EXPENSES</b>			
Tutka Hatchery	376,247	-	376,247
Trail Lakes Hatchery	655,558	-	655,558
Eklutna Hatchery	80,853	-	80,853
Field projects	211,865	-	211,865
Special projects	8,383	-	8,383
	1,332,906	-	1,332,906
<b>GENERAL AND ADMINISTRATIVE EXPENSES</b>			
	347,395	-	347,395
Total expenses	1,680,301	-	1,680,301
CHANGE IN NET ASSETS	(421,948)	353,654	(68,294)
NET ASSETS AT JUNE 30, 2001	(272,941)	-	(272,941)
NET ASSETS AT JUNE 30, 2002	\$ (694,889)	\$ 353,654	\$ (341,235)

## COOK INLET AQUACULTURE ASSOCIATION, INC. STATEMENTS OF FINANCIAL POSITION June 30, 2003 and 2003

	2003	2002
<b>ASSETS</b>		
<b>CURRENT ASSETS</b>		
Cash and cash equivalents	\$ 541,915	\$ 343,932
Grants receivable	158,582	236,366
Accounts receivable	25,000	10,000
Prepaid expenses	51,252	34,360
Total current assets	776,749	624,658
<b>PROPERTY AND EQUIPMENT</b>	3,708,074	3,685,776
Less accumulated depreciation	(2,272,132)	(2,179,371)
	1,435,942	1,506,405
	\$ 2,212,691	\$ 2,131,063
<b>LIABILITIES AND NET ASSETS</b>		
<b>CURRENT LIABILITIES</b>		
Accounts payable	\$ 41,421	\$ 33,172
Accrued personnel expenses	96,354	73,111
Deposits advanced	75,000	-
Accrued interest	23,051	57,789
Current portion of notes payable	99,563	44,065
Total current liabilities	335,389	208,137
NOTES PAYABLE, less portion classified as current	2,964,244	2,264,161
	3,299,633	2,472,298
<b>NET ASSETS</b>		
Unrestricted	(1,249,262)	(694,889)
Temporarily restricted	162,320	353,654
	(1,086,942)	(341,235)
	\$ 2,212,691	\$ 2,131,063

## COOK INLET AQUACULTURE ASSOCIATION, INC. STATEMENT OF FUNCTIONAL EXPENSES Year Ended June 30, 2003

	Tutka Hatchery Operations	Trail Lakes Hatchery Operations	Eklutna Hatchery Operations	Field Projects	Special Projects	General and Administrative Expenses	Total
Wages	\$ 165,980	\$ 173,019	\$ 180	\$ 85,225	\$ 37,900	\$ 226,966	\$ 689,270
Supplies	38,276	54,995	40	24,894	2,029	13,476	133,710
Payroll taxes and benefits	30,684	35,567	17	8,459	6,168	49,647	130,542
Equipment operation/maintenance	28,618	73,368	-	9,441	1,423	10,141	122,991
Utilities	36,135	70,908	3,433	3,845	-	4,217	118,538
Insurance/workers compensation	29,727	25,989	15,709	2,678	927	25,172	100,112
Fish food	60,282	28,611	-	6,490	-	-	95,383
Depreciation	7,641	8,418	65,178	-	-	11,525	92,762
Interest	-	80,054	-	-	-	-	80,054
Professional services	770	21,111	-	38,865	-	13,216	73,962
Fish harvesting	59,582	-	-	-	12,126	-	71,708
Aircraft and boat charters	2,145	-	-	24,708	24,544	340	51,737
Postage and freight	16,386	11,814	-	3,895	-	3,895	35,990
Telephone	2,049	2,651	528	2,286	186	7,939	15,639
Medication and disinfectants	1,575	9,852	-	-	-	-	11,427
Travel, lodging and meals	3,968	795	-	531	1,574	4,257	11,125
Building and land maintenance	4,897	4,303	-	452	-	392	10,044
Rent	-	-	1,500	500	150	100	2,250
Safety program	219	835	-	721	20	229	2,024
Other	797	1,878	425	647	2,184	23,285	29,216
	\$ 489,731	\$ 604,078	\$ 87,010	\$ 213,637	\$ 89,231	\$ 394,797	\$ 1,878,484

## COOK INLET AQUACULTURE ASSOCIATION, INC. STATEMENT OF FUNCTIONAL EXPENSES Year Ended June 30, 2002

	Tutka Hatchery Operations	Trail Lakes Hatchery Operations	Eklutna Hatchery Operations	Field Projects	Special Projects	General and Administrative Expenses	Total
Wages	\$ 122,568	\$ 168,295	\$ 2,340	\$ 98,638	\$ -	\$ 188,939	\$ 580,780
Supplies	25,159	72,338	573	20,994	-	18,289	137,953
Payroll taxes and benefits	17,856	47,811	1,642	17,719	-	37,804	122,832
Equipment operation/maintenance	19,948	20,311	345	2,264	-	8,984	51,852
Utilities	41,024	72,812	(515)	1,620	-	5,188	120,129
Insurance/workers compensation	26,330	16,589	6,920	488	-	28,789	79,116
Fish food	53,145	12,683	-	10,113	-	-	75,941
Depreciation	6,961	5,497	66,605	-	-	12,060	91,123
Interest	-	116,178	-	-	-	637	116,844
Professional services	-	400	-	18,240	-	-	9,992
Fish harvesting	42,713	1,500	-	-	-	-	44,213
Aircraft and boat charters	3,622	-	-	31,442	8,033	539	43,636
Postage and freight	3,203	10,190	-	90	-	3,616	17,099
Telephone	1,604	2,309	1,012	1,655	-	5,301	11,881
Medication and disinfectants	7,630	7,655	-	-	-	-	15,285
Travel, lodging and meals	1,004	355	46	131	-	-	10,472
Building and land maintenance	2,277	95,548	-	120	-	225	98,170
Rent	-	-	1,500	270	-	-	1,770
Safety program	104	669	-	-	-	1,525	2,298
Other	1,099	3,818	385	7,444	350	15,643	28,739
	\$ 376,247	\$ 655,558	\$ 80,853	\$ 211,865	\$ 8,383	\$ 347,395	\$ 1,680,301

# 2003 Financial Statements

**COOK INLET AQUACULTURE ASSOCIATION, INC.**  
STATEMENT OF CASH FLOWS  
Year Ended June 30, 2003 AND 2002

	2003	2002
<b>CASH FLOWS FROM OPERATING ACTIVITIES</b>		
Cash received from grants and contracts	\$ 259,809	\$ 778,634
Cash received from terminal fish revenue	384,160	229,676
Cash received from enhancement tax proceeds	191,778	244,555
Cash received from other sources	430,943	57
Interest received	3,871	12,719
Interest paid	(114,792)	(116,615)
Cash paid to suppliers and employees	(1,691,068)	(1,467,232)
Net cash used by operating activities	<u>(535,299)</u>	<u>(318,211)</u>
<b>CASH FLOWS FROM INVESTING ACTIVITIES</b>		
Purchase of property and equipment	(22,299)	(52,035)
Net cash used for investing activities	<u>(22,299)</u>	<u>(52,035)</u>
<b>CASH FLOWS FROM FINANCING ACTIVITIES</b>		
Proceeds from long-term financing	800,000	-
Principal payments on long-term financing	(44,419)	(42,752)
Net cash provided/(used) by financing activities	<u>755,581</u>	<u>(42,752)</u>
<b>NET INCREASE/(DECREASE) IN CASH AND CASH EQUIVALENTS</b>	197,983	(412,988)
<b>CASH AND CASH EQUIVALENTS AT BEGINNING OF YEAR</b>	<u>343,932</u>	<u>756,930</u>
<b>CASH AND CASH EQUIVALENTS AT END OF YEAR</b>	<u>\$ 541,915</u>	<u>\$ 343,932</u>
<b>RECONCILIATION OF CHANGES IN NET ASSETS TO NET CASH USED BY OPERATING ACTIVITIES</b>		
	2003	2002
<b>CHANGES IN NET ASSETS</b>	<u>\$ (745,707)</u>	<u>\$ (68,294)</u>
<b>ADJUSTMENTS TO RECONCILE CHANGES IN NET ASSETS TO NET CASH USED BY OPERATIONS</b>		
Depreciation	92,762	91,123
(Decrease)/increase in accrued interest	(34,738)	229
Increase in accounts receivable	(15,000)	(10,000)
Increase in prepaid expenses	(6,892)	(12,018)
Increase in accounts payable	8,249	26,451
Increase/(decrease) in accrued personnel expenses	23,243	(9,336)
Increase/(decrease) in deposits payable	75,000	(100,000)
Decrease/(increase) in grant receivable	77,784	(236,366)
	<u>210,408</u>	<u>(249,917)</u>
	<u>\$ (535,299)</u>	<u>\$ (318,211)</u>

**SUPPLEMENTAL SCHEDULE OF NONCASH FINANCING ACTIVITIES:**

During the year ended June 30, 2002, the Association financed the purchase of property as follows:

Bear Lake property	\$ 137,500
Down payment	(1,000)
Notes payable to State of Alaska	<u>\$ 136,500</u>

See notes to financial statements.

**COOK INLET AQUACULTURE ASSOCIATION, INC.**  
NOTES TO FINANCIAL STATEMENTS (CONT.)  
June 30, 2003 AND 2002

**2. GRANT RECEIVABLE**

Grant receivable consists of the following:

	Total Award Amount	Receivable at June 30 2003	2002
U.S. Fish and Wildlife Service	\$ 1,000,000	\$ 86,503	\$ 236,366
U.S. Department of National Oceanic and Atmospheric Administration	<u>112,878</u>	<u>72,079</u>	<u>-</u>
	<u>\$ 1,112,878</u>	<u>\$ 158,582</u>	<u>\$ 236,366</u>

**3. PROPERTY AND EQUIPMENT**

Property and equipment at June 30, 2003 and 2002, is as follows:

	2003	2002
Tutka Lagoon Hatchery	\$ 143,801	\$ 129,871
Eklutna Hatchery and equipment	2,636,555	2,636,555
Trail Lakes Hatchery and equipment	232,821	232,822
Bear Lake property	137,500	137,500
Headquarters building	314,951	314,951
Field equipment	167,873	165,056
Office equipment	64,937	59,385
Warehouse equipment	<u>9,636</u>	<u>9,636</u>
	3,708,074	3,685,776
Less accumulated depreciation	<u>(2,272,132)</u>	<u>(2,179,371)</u>
	<u>\$ 1,435,942</u>	<u>\$ 1,506,405</u>

The Association operates the facilities owned by the State of Alaska at Tutka Lagoon and Trail Lakes. Title of the physical properties is retained by the State of Alaska and the costs of the physical plants are not reflected in the financial statements of the Association.

The Association provides minimal operations at its Eklutna Hatchery to ensure the safekeeping of hatchery property owned by the Association until such time as the Board of Directors determine to reopen the hatchery.

During the year ended June 30, 2002, the Kenai Peninsula Borough transferred the land formerly under lease that is the site of the headquarters complex to the Association with the special restriction that the complex property be used solely for the operation of Association authorized purposes. The Association may remove the restriction by paying the Borough fair market value for the land.

**4. DEPOSITS ADVANCED**

Deposits advanced of \$75,000 at June 30, 2003, consist of cash received from processors for the acquisition of surplus fish from planned terminal recovery harvests.

**5. NOTES PAYABLE**

Notes payable at June 30, 2003 and 2002, consist of the following:

	2003	2002
Notes payable including deferred interest to the Dept. of Commerce and Economic Development, State of Alaska, Division of Investments, secured by an assignment of future revenues and proceeds of sales of surplus fish and eggs, with interest at 5.5%, payable in equal annual installments of \$36,874 including principal, interest and deferred interest.	\$ 346,344	\$ 361,111

**COOK INLET AQUACULTURE ASSOCIATION, INC.**  
NOTES TO FINANCIAL STATEMENTS  
June 30, 2003 AND 2002

**SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

Cook Inlet Aquaculture Association, Inc. is an Alaskan regional nonprofit corporation established under Alaska Statutes and operated for the enhancement of salmon in Alaska. The accounting policies that affect the more significant elements of the financial statements of the Association are summarized as follows:

**a. Method of Accounting**

The Association reports information regarding its financial position and activities according to three classes of net assets as follows:

- Unrestricted amounts are those currently available at the discretion of the Board for use in the Association's operations.
- Temporarily restricted amounts are those that are stipulated by donors or grantors for specific operating purposes.
- Permanently restricted amounts are those for which the principal is stipulated by donors or grantors to be invested in perpetuity.

**b. Contributions**

All contributions are considered to be available for unrestricted use unless specifically restricted by the donor or grantor. Amounts received that are designated for future periods or restricted by the donor or grantor for specific purposes are reported as temporarily restricted or permanently restricted support that increase those net asset classes. When a temporary restriction expires, temporarily restricted net assets are reclassified to unrestricted net assets and reported in the statement of activities as net assets released from restriction.

**c. Property and Equipment**

Property and equipment are recorded at cost and depreciated over their estimated useful life. Depreciation is computed using the straight line method.

**d. Income Tax**

The Internal Revenue Service has determined that the Association is exempt from federal and applicable state income tax under Section 501(c)(3) of the Internal Revenue Code.

**e. Enhancement Tax**

Cook Inlet commercial fishermen voted in 1981 to assess a 2% tax on gross value of the salmon harvest from Cook Inlet. The tax is collected by the State of Alaska from salmon processors and then paid to the Association by the state in the form of a grant. The proceeds are to be used for enhancement and development of the salmon fishery with a goal of stabilizing the salmon runs and producing sufficient fish to meet the needs of all user groups. The enhancement tax revenue is a major source of funding for the Association.

**f. Estimates**

The preparation of financial statements in conformity with generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

**g. Cash and Cash Equivalents**

For purposes of the statement of cash flows, the Association considers all highly liquid debt instruments with a maturity of three months or less to be cash equivalents.

**COOK INLET AQUACULTURE ASSOCIATION, INC.**  
NOTES TO FINANCIAL STATEMENTS (CONT.)  
June 30, 2003 AND 2002

**5. NOTES PAYABLE (CONT.)**

Notes payable including deferred interest to the Dept. of Commerce and Economic Development, State of Alaska, Division of Investments, secured by all property now owned or hereafter acquired and an assignment of future revenues and proceeds of sales of surplus fish and eggs, with interest at 5.5%, payable in equal annual installments of \$107,918 including principal, interest and deferred interest.

1,051,541      1,075,182

Notes payable to the Dept. of Commerce and Economic Development, State of Alaska, Division of Investments, secured by all property now owned or hereafter acquired and an assignment of future revenues and proceeds of sales of surplus fish and eggs, with interest at 5% beginning April 4, 2006, and payable in equal annual installments of \$28,904 including interest beginning January 1, 2007.

249,981      249,981

Notes payable to the Dept. of Commerce and Economic Development, State of Alaska, Division of Investments, secured by all property now owned or hereafter acquired and an assignment of future revenues and proceeds of sales of surplus fish and eggs, with interest at 5% beginning May 7, 2007, and payable in equal annual installments of \$40,465 including interest beginning January 1, 2008

349,250      349,250

Notes payable to the Dept. of Commerce and Economic Development, State of Alaska, Division of Investments, secured by real property and by all property now owned or hereafter acquired and an assignment of future revenues and proceeds of surplus fish and eggs, with interest at 5% beginning June 19, 2008, and payable in equal annual installments of \$12,333 including interest beginning January 1, 2009.

136,500      136,500

Notes payable to the Dept. of Commerce and Economic Development, State of Alaska, Division of Investments, secured by real property and by all property now owned or hereafter acquired and an assignment of future revenues and proceeds of surplus fish and eggs, with interest at 5% beginning April 9, 2009, and payable in equal annual installments of \$60,829 including interest beginning January 1, 2010.

799,500      -

Less current portion

3,063,807      2,308,226  
(99,563)      (44,065)

\$ 2,964,244      \$ 2,264,161

Following are maturities of long-term debt for each of the next five years:

2004	\$ 99,563
2005	103,538
2006	107,711
2007	112,094
2008	160,884

# CIAA 2003 Financial Statements (cont.)

**COOK INLET AQUACULTURE ASSOCIATION, INC.**  
 NOTES TO FINANCIAL STATEMENTS (CONT.)  
 June 30, 2003 AND 2002

**6. ANNUAL LEASES**

The Association entered into a long-term lease with the federal government on July 22, 1982, for lease of approximately two acres for the Eklutna Hatchery. The lease is for a period of 30 years with right of renewal. Lease payments are \$1,500 per year and can be adjusted every five years to reflect current market value. The annual lease payments were \$1,500 for years ended June 30, 2003 and 2002. This amount is included with Eklutna Hatchery expenses.

On February 15, 1991, the Association entered into a lease with the State of Alaska on 4.68 acres of land, which is the site of the Paint River fish ladder. The lease is for a period of 55 years with right to renewal. Annual lease payments are \$200. Total lease payments for the years ended June 30, 2003 and 2002, were \$200. This amount is included with special projects expenses.

Future minimum rental payments in aggregate for all leases:

2004	\$	1,700
2005		1,700
2006		1,700
2007		1,700
2008		1,700

**7. COMMITMENTS AND CONTINGENCIES**

On December 8, 1994, the Association entered into a memorandum of agreement with the Seward Silver Salmon Derby-Fish Restoration Fund whereby the Association agreed to produce and stock 150,000 or more silver salmon smolt yearly for a ten-year period for a fee of \$15,000 per year. The Association received \$30,000 in 2003 and \$15,000 in 2002.

**8. RELATED PARTY TRANSACTIONS**

During the year ended June 30, 2002, the Association paid \$43,127 to a board member under a contract to harvest fish for the Association's Hatchery Cost Recovery program.

**9. FINANCIAL INSTRUMENTS**

Financial instruments that potentially subject the Association to concentration of credit risk consist principally of temporary cash investments. The Association places its temporary cash investments with money market funds through McDonald Investments, Inc.

**10. RETIREMENT COSTS**

The Association sponsors a defined contribution retirement plan that covers all regular employees. Contributions to the plan are based on a percentage of the employee's base salary that is established from time to time by the Board. There is no retirement expense for 2003 and 2002.

**11. MAJOR FUNDING SOURCES**

The Association receives a substantial portion of its annual funding through a U.S. Fish and Wildlife Service grant and the State of Alaska Enhancement Tax proceeds. The funding received from these two sources totaled \$227,428 and \$1,244,555 for the years ended June 30, 2003 and 2002, respectively.

**12. SUBSEQUENT EVENT**

The U.S. Fish and Wildlife Service grant has been modified to include an additional \$685,515 to fund capital improvement and habitat restoration projects through November 20, 2004.

## Record Smolt

*Continued from Page 3*

Field Technician Terry "T" Magee. "The smolts started to show up and mass in our lagoon area...they just kept coming." Magee and his co-worker Cathy Cline worked around the clock passing smolts and collecting samples for age, length, and weight.

Like the crew at the Kasilof River, the crew had to deal with several events involving sub-sampling. In this case, smolts were allowed to pass freely during 20 minute intervals and counted for two minutes within each interval.

"I'm still working out the data analysis for Bear Lake" reports Dodson, "but, given the amount of smolts the crew had to deal with, I'm confident that sub-

sampling was in order." Over the past five years, CIAA has seen the Bear Lake sockeye salmon smolt to adult survivals increase to well above 30%. If ocean survivals remain strong, Resurrection Bay could be boiling with sockeye salmon in 2005 and 2006.

Further information on these projects is available by contacting Trenten Dodson at the CIAA headquarters - (907) 283-5761.

COOK INLET

Aquaculture Association

"Providing and Protecting Your Salmon Resource"

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**INDEPENDENT AUDITOR'S REPORT  
 ON SUPPLEMENTARY INFORMATION**

Board of Directors  
 Cook Inlet Aquaculture Association, Inc.  
 Kenai, Alaska

Our report on our audits of the basic financial statements of Cook Inlet Aquaculture Association, Inc. (a nonprofit corporation) at and for the years ended June 30, 2003 and 2002, appears on page 10. We conducted our audits in accordance with auditing standards generally accepted in the United States of America for the purpose of forming an opinion on the basic financial statements taken as a whole. The following schedule on field and special projects expenses is presented for purposes of additional analysis and is not a required part of the basic financial statements. Such information has been subjected to the auditing procedures applied in the audit of the basic financial statements and, in our opinion, is fairly stated in all material respects in relation to the basic financial statements taken as a whole.

*Lamba, Titus & Wagner CPAs*

October 20<sup>th</sup>, 2003

**COOK INLET AQUACULTURE ASSOCIATION, INC.**  
 SCHEDULE OF FIELD AND SPECIAL PROJECTS EXPENSES  
 Years ended June 30, 2003 AND 2002  
 See Auditor's Report on Supplementary Information

	2003	2002
<b>FIELD PROJECTS</b>		
Bear Lake	\$ 85,976	\$ 56,034
Big Lake	39,499	27,229
Tustumena Lake	35,869	52,261
Hidden Lake	29,971	30,847
Leisure Lake	10,871	14,616
Lower Cook Inlet Lakes	8,283	14,340
Grouse Lake	2,229	13,900
Packers Lake	939	2,638
	213,637	211,865
<b>SPECIAL PROJECTS</b>		
Enhancement Planning	38,965	-
Paint River	33,911	350
Habitat Survey	16,355	8,033
	89,231	8,383
	\$ 302,868	\$ 220,248

Stock	Brood Year	Number	Wt (g)
Hidden-Sockeye	2002	628,000	0.092
Bear-Sockeye-Fry	2002	1,467,000	.338-.540
Bear-Sockeye-Presmolt	2002	0	NA
Bear-Sockeye-Smolts	2001	334,000	11.4-11.8
Bear-Coho-Fry	2002	405,000	1.37
Bear-Coho-Smolt	2001	253,000	12.7-13.7
Bear-Coho-Smolt-(Homer)	2001	103,000	12.7
Tustumena-Sockeye-Fry	2002	6,023,000	0.34
Tustumena-Sockeye-Leisure-Fry	2002	2,240,000	0.34
Tustumena-Sockeye-Hazel-Fry	2002	1,547,000	0.34
Tustumena-Sockeye-Kirschner-Fry	2002	298,000	0.33
Big Lake-Sockeye-Fry	2002	3,589,000	0.48
<b>Total Fish Released</b>		<b>16,887,000</b>	

Stock	Brood Year	Number	Wt (g)
Hidden-Sockeye	2003	600,000	0.09
Bear-Sockeye-Fry	2003	2,400,000	0.34
Bear-Sockeye-Presmolt	2003	800,000	4.5
Bear-Coho-Fry	2003	405,000	1
Bear-Coho-Smolt	2002	250,000	14
Bear-Coho-Smolt-(Surplus)	2002	300,000	14
Tustumena-Sockeye-Fry	2003	6,000,000	0.34
Tustumena-Sockeye-Leisure-Fry	2003	2,000,000	0.34
Tustumena-Sockeye-Hazel-Fry	2003	1,250,000	0.34
Tustumena-Sockeye-Kirschner-Fry	2003	250,000	0.34
Big Lake-Sockeye-Fry	2003	5,000,000	0.34
<b>Total Fish Released</b>		<b>19,255,000</b>	

The above tables display the Trail Lake Hatchery 2003 production figures and the 2004 projections.

# Trail Lakes Hatchery Paint Lake "Paints" an Abstract Picture

By CIAA Staff

By: Robert Blankenship- CIAA Staff

During the 2003 rearing season (Brood year 2002) the staff had an IHNV outbreak in the Big Lake Sockeye stock. Hatchery personnel followed the "Sockeye Culture Policy" as well as recommendations from ADF&G's Pathology Lab and successfully recognized, combated, and controlled the virus. The virus was contained to three incubators, therefore 629,000 fish were destroyed. The hatchery saved 3,589,000 sockeye fry. In May of 2003 these fry were released into Meadow Creek at Big Lake.

As the rearing season progressed, d another IHNV outbreak was noticed in the Bear Lake Sockeye stock. Because of race-way space constraints, caused by the Big Lake outbreak, the staff was forced to combine multiple incubator lots into single raceways. It was necessary to destroy 3,000,000 Bear Lake sockeye fry. In May of 2003, 1,467,000 sockeye fry were release to Bear Lake. The staff did an outstanding job of implementing a vigorous program of disease control management in recognizing, combating, and to some degree controlling two IHN virus outbreaks.

Due to the IHN virus outbreaks, an extensive disinfection protocol was executed while preparing the hatchery for Brood year 2003 eggs. The staff continues to implement projects and make modifications that enhance the disease control management program.

A new formalin pump system for delivering the formalin treatments for controlling egg fungus was installed in the summer of 2003, along with new bird netting over the raceway complex. The netting functions as a bird barrier reducing the possibility of cross contamination. The hatchery will be utilizing 15 additional aluminum raceways allowing for smaller individual lots to be reared. This separation aids in limiting the spread of the IHN virus to large biomasses.

It is hypothesized that all sockeye salmon harbor the virus at any stage in life. One of the best means in containing this virus points to sound sanitation and disinfectant procedures, throughout all phases of handling the eggs, milt, juveniles and adults.

The eggs from the 2003 brood year have hatched and will be ponded in February and March of 2004. Pictured to the left are the Trail Lakes Hatchery smolt and fry releases for 2003 and the projected smolt and fry releases for 2004.

During the 2003 rearing season the hatchery, even with all the IHNV problems, released a total of 16,887,000 fish.

For more information on hatchery protocol feel free to contact Robert Blankenship at (907) 288-3688.

In October of 2002, CIAA released a half-million, 3.6 gram sockeye salmon pre-smolts of Tustumena Lake origin into Upper Paint Lake. These fish were flown from Soldotna Airport to the lake system in an agricultural plane operated by Glen Air Services of Palmer, Alaska. CIAA field staff conducted a smolt migration enumeration in the spring of 2003 which yielded some unusual and abstract results.

During the spring of 2003, approximately 7,000 sockeye smolts were counted emigrating from Lower Paint Lake. Because the number of smolts observed during the migration was much smaller then expected, CIAA cooperated with ADF&G to conduct a hydro-acoustic survey (sonar scan of localized biomasses) in October of 3003. Unfortunately, the results indicated the lake was void of any

large concentrations of sockeye salmon smolts.

Trent Dodson, CIAA Field Biologist says, "Several hypotheses exist regarding the fate of these fish; the most optimistic speculates that an early migration of the smolts occurred prior to the establishment of the smolt counting station. If this is the case, it will be revealed to us when the first of these fish return to Paint River Falls in 2005."

Additional funding is needed to continue studies and enhancement efforts focused on determining the potential for the Paint Lakes system.



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We thank you for your support and dedication in our efforts to continue enhancement and rehabilitation of Cook Inlet Salmon.



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Proceeds will help support our salmon habitat restoration projects

# Tutka Hatchery

*Continued from Page 1*

and equipment were in disarray and in need of attention after years of neglect. Money has been spent and time put into repairing the existing hatchery equipment. One of the best things done so far has been hiring a maintenance person, Ron Carlson of Kenai, to come out and stay for the winter. Ron is the epitome of "jack of all trades", providing much needed skills to getting things up and in running order after the busy field season. New equipment has also been purchased where necessary and a plan has been written out for further needed improvements. The staff is constantly on cleanup duty, cleaning out 25 years of stuff that tends to pile up at remote facilities and sorting through materials that can be salvaged for future use.

Data collection is another aspect of fish culture at Tutka that needed improvement. All historical data available at the hatchery has been entered into a database on a computer for easy access. A daily hatchery log and standardized data sheets have been developed for recording clearly all of the hatchery functions. This will enable us to access a solid database, allowing personnel to monitor historical data, which will aid in the adaptation to ever changing conditions.

In the hatchery, incubation practices have been standardized according to the best practices available. Incubators are completely dismantled and thoroughly cleaned every year. The egg disinfection system using formalin was repaired and updated. Benefits of these improvements have already been seen this year as the rate of fungus was completely negligible in comparison to past years. In addition, a grant proposal has been written with the assistance of Lois Bettini to develop a saltwater line to the hatchery for treatment of eggs, dissolving of egg shells during the hatching period, help in regulating temperatures, and to reduce the hatchery's dependency on formalin.

In terms of staffing, since the summer of 2002, everyone is new except for one

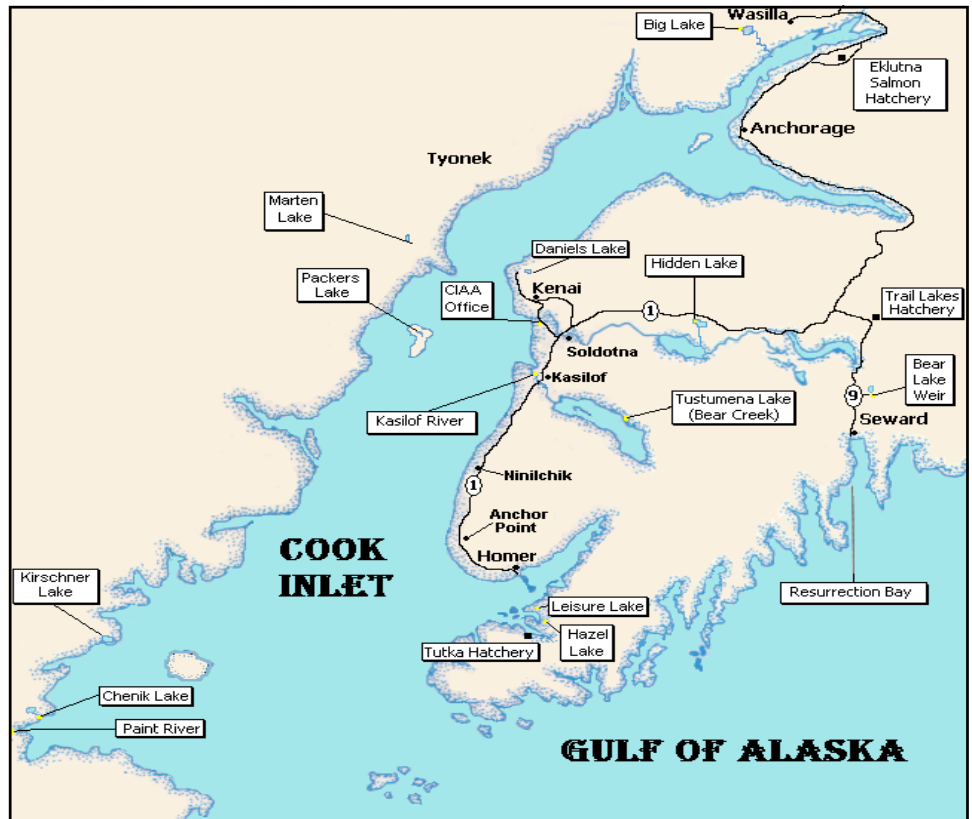
seasonal employee who returned in 2003 for his fourth season. A brochure detailing "Life at Tutka" was sent out to colleges and universities around the United States having fisheries programs. This was very successful, resulting in a great crew of motivated and hard working students with an interest in seeing the hatchery succeed. We are very excited as 2004 looks to be a repeat year with most of those workers returning.

Looking forward to the 2004 field season, our goals are the following: 1). Release of 45,000,000 fry at approximately 1 gram each by early June. 2). Eggtake of 125,000,000 with a viability rate of 90 - 95%. 3). Roe sales (we could not keep up with demand last year) at least 20,000 lbs. (Up from 7,000 lbs. in 2003 and 14,000 lbs. in 2002). 4). Expansion of the hatchery program to include additional species when surplus fish are available. 5). Continue

to improve upon the existing facility with repairs and purchase of need equipment. 6). Community service, donating carcasses to the local animal shelter for food.

If ever the opportunity arises, and you are in the Homer area, please come and visit us in Tutka. It is a once in a lifetime experience to see the beauty and seclusion that surrounds this remarkable facility.

*Christy VanArnum the wife of hatchery manager Aaron VanArnum works on a seasonal full time basis with Cook Inlet Aquaculture Association. She has a degree in Aquaculture science and contributes regularly to articles submitted by the hatchery for publication.*



**Pictured at Right:** This map pinpoints all the sites where C.I.A.A. has salmon activities and operational facilities.

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**COOK INLET AQUACULTURE ASSOCIATION**

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