

**TUTKA BAY LAGOON HATCHERY  
ANNUAL REPORT  
2005**

Cook Inlet Aquaculture Association  
Trenten T. Dodson, CIAA Biologist  
December 2005

This year's operation of the Tutka Bay Lagoon Hatchery was made possible through enhancement taxes paid by commercial salmon fishermen in Area H, Cook Inlet and associated waters and a grant administered through the National Oceanic and Atmospheric Administration and the Alaska Department of Fish and Game provided by Senator Ted Stevens and through the harvest and sale of surplus fish.

## ABSTRACT

Reports such as this one covering the operations of the Tutka Bay Lagoon Hatchery are prepared annually for each hatchery the Cook Inlet Aquaculture Association (CIAA) operates and are submitted to the Alaska Department of Fish and Game.

Such reports cover a calendar year (report year) and, thus, address overlapping fish brood years.

This report covers events during calendar year 2005.

Schedule A data deal with eggs collected during the report year – 2005.

**Regular pink salmon egg collections were suspended and no eggs were collected in 2005**

**No dedicated sockeye salmon program is currently conducted at this facility, and no sockeye eggs were collected in 2005. The facility is being used to temporarily rear and release sockeye salmon smolts for a Trail Lakes Hatchery Program. See Trail Lakes Annual Report Schedule A-3 for egg collections associated with this release.**

Schedule B data deal with fish released during the report year – 2005.

**No pink salmon fry were released in 2005. The pink salmon release program has been suspended**

**No dedicated sockeye salmon smolts were released in 2005. The sockeye salmon smolt release program has been suspended. The facility is being used to temporarily rear and release sockeye salmon smolts for a Trail Lakes Hatchery Program. See Trail Lakes Annual Report Schedule B-3 and B-4 for release data related to this program.**

Schedule C data deal with fish harvested in the common property fisheries; fish used for broodstock and fish harvested for cost recovery revenues during the report year – 2005.

**Due to low pink salmon prices the majority of pinks returning to Tutka Bay Lagoon were harvested and sold through cost recovery efforts. As a result, few fish were available for the common property fishery in 2005.**

**No dedicated hatchery reared sockeye salmon returned in 2005. The facility is being used to temporarily rear and release sockeye salmon smolts for a Trail Lakes Hatchery Program. See Trail Lakes Annual Report Schedule B-3 for return projections related to this program.**

Schedule D data project the total adult return for the coming year – 2005.

**There are no pink salmon released by CIAA projected to return for the coming year 2006.**

Schedule F data are presented only when information reported in the prior year's annual report needs to be corrected or updated, and Schedule F is used infrequently by CIAA.

**There were no alterations made to the 2004 data entries. Schedule F is identical to the 2004 Schedule C.**

## INTRODUCTION

The Tutka Bay Lagoon Hatchery is owned by the State of Alaska and operated by CIAA and is located across Kachemak Bay from Homer. Operations at the hatchery have been suspended except for temporary rearing of Trail Lakes Hatchery sockeye salmon smolt in the lagoon net pen complex.

The Tutka Bay Lagoon Hatchery operates under Private Non-Profit Permit #32 issued in 1994 and has a current permitted capacity of 125.0 million pink salmon eggs and 0.660 million sockeye salmon eggs. The Fish Transport Permits (FTP's) under which CIAA operates the programs of the Tutka Bay Lagoon Hatchery are summarized below:

<b>Permit Number</b>	<b>Expiration Date</b>	<b>Activity</b>
<b>00A-0073</b>	12/31/10	Collection of pink salmon eggs from Tutka Bay Lagoon. Incubate, rear and release up to 125.0 million fry. Twenty percent of fry must be released to Tutka Bay Lagoon. Remaining fry can be released within 1 mile of Tutka Bay Lagoon.
<b>95A-0051</b>	12/31/05	Collection of pink salmon eggs from Tutka Bay Lagoon. Incubation, rear and release up to 125.0 million fry into Tutka Bay Lagoon.
<b>95A-0052</b>	12/31/05	Collection of up to 0.660 million sockeye salmon eggs from Packers Lake and the rearing and release of no more than 0.330 million of the subsequent smolts into Tutka Bay Lagoon. (This program has been suspended.)
<b>05A-0093</b>	06/30/06	Transport of up to 0.5 million sockeye salmon presmolt to Tutka Bay Lagoon. Reared and released as smolt.

# ANNUAL REPORT SALMON HATCHERY

Year Ended December 15, 2005

Hatchery name/Location  
Permit holder name/Address

<b>Tutka Bay Lagoon Hatchery</b>
Cook Inlet Aquaculture Association
40610 Kalifronsky Beach Road
Kenai, Alaska 99611

Person to contact  
regarding this report

Trenten Dodson	name
907-283-5761	phone

---

## DECLARATION AND SIGNATURE

I declare that the information given in this annual report is, to my knowledge, true, correct and complete.

Gary Fandrei  
Name of Legal Representative

12/20/2005  
Date

Signature of Representative

---

### Part 1. REPORT OF THIS YEAR'S PERFORMANCE

A. Complete the following schedules of production statistics for this year. Use the metric system for length and weight measurements.

Schedule A- Annual Broodstock Report

Schedule B- Fish Culture Report

Schedule C- Harvest Management and Hatchery Returns

If this site is a central incubation Facility, complete a separate schedule for each remote release site.

### Part 2. PROJECTED RETURNS FOR NEXT YEAR

A. Complete Schedule D with each species and each release site.

### Part 3. UPDATED SCHEDULES FOR PRIOR YEAR ANNUAL REPORT ARE NOW MANDATORY

A. Updated schedule C (called F) is attached. Please update the information we have on file, if changes have occurred or numbers have been finalized.

# SCHEDULE A-1

## ANNUAL BROODSTOCK AND INITIAL SURVIVAL REPORT

Complete this schedule for each species/ stock of eggs taken this year.

1. Species  **Tutka Bay Lagoon Hatchery**
2. Donor stream (name/number):
3. Adults used for broodstock  females  males  jacks  total
4. Average length and weight of adults used for broodstock
- |          |                      |    |                      |    |
|----------|----------------------|----|----------------------|----|
| females> | <input type="text"/> | cm | <input type="text"/> | kg |
| males>   | <input type="text"/> | cm | <input type="text"/> | kg |
5. Average fecundity (eggs/female):
6. Eggtake dates:
7. Number of green eggs taken:
8. Number placed in hatchery<sup>1</sup>
9. Number surviving to eyed   % survival<sup>2</sup>
10. Describe procedures used for egg takes and evaluation of in-hatchery survivals:

**In the winter of 2004 CIAA made the decision to temporarily suspend operations at this facility**

---

---

---

## SCHEDULE B-1 ANNUAL FISH CULTURE PRODUCTION REPORT

Complete this schedule for each species and stock of eggs (or fish) cultured this year from prior broodyears. Please provide explanations for any differences in reported numbers of green eggs and eyed eggs from those reported last year by species and stock

### FISH CULTURE REPORT

Tutka Bay Lagoon Hatchery

Species:

Stock:

Brood year:

#### A. Lifestage Information

	Actual number	% cum survival	Transfers- between hatcheries (annotate)
1. Green eggs		100%	
2. Eyed eggs		#DIV/0!	
3. Emergent fry		#DIV/0!	
4. Fed fry		#DIV/0!	
5. Smolts		#DIV/0!	

#### B. Release Information

Site	Release		lifestage	Size		Expected adult return	Year(s) of return
	Number	date		gm/fish	mm/fish		
Total:	-						

#### C. Tagging/Marking

6. Number of fish marked or tagged (by release group and method of marking)

---

---

---

---

---

---

---

---

---

---

#### D. Other

7. Report any diseases, rearing problems, or significant mortalities among these fish.

**In the winter of 2004 CIAA made the decision to temporarily suspend operations at this facility**  
**Sockeye Salmon smolts from Trial Lakes Hatchery are reared and released at the Tutka**  
**Lagoon net pen complex. Data is presented in the the Trail Lakes Hatchery Annual Report**  
**schedule A-3, B-3, and B-4.**

---

---

---

---

---

---

---

---

---

---

## SCHEDULE C-1

### HARVEST MANAGEMENT AND HATCHERY ADULT RETURNS

Complete a separate schedule for each project and species.

**Species:** Pink Salmon **Tutka Bay Lagoon Hatchery**  
**Location of harvest/return** Tutka Bay and Tutka Bay Lagoon

1. Number of fish harvested under Hatchery Harvest Permit	adults	1,631,806
2. Hatchery broodstock	jacks	
3. Broodstock for hatchery watershed		133,600
4. Jacks		
5. Excess fish (surplus to all other requirements) <sup>1</sup>		
6. Other: <sup>2</sup> explain> <span style="border: 1px solid black; padding: 2px;"> </span>	number	
<b>7. Total return to hatchery</b>		<b>1,765,406</b>
8. Estimated contribution to common property fisheries		
A. Commercial		
1. Troll		
2. Gillnet		
3. Seine		4,779
<b>TOTAL</b>		<b>4,779</b>
B. Sport		
C. Other: explain> <span style="border: 1px solid black; padding: 2px;"> </span>		
<b>9. Total return(sum 7+8A, B, C)</b>		<b>1,770,185</b>

	BY	Total # returning in 2005	cumulative % survival	
10. Estimated ocean survival by BY <sup>3</sup>	2003	1,770,185	3.69	%
				%
				%
				%
				%

11. Average size of fish sold	ND	<length-cm	1.6	wt-kg
12. Date(s) of harvest	7/3/2005 to 8/17/2005			
13. Gear type or method used	Seine			

	A. # fish	B. Lbs (fish/roe)	C. \$/lb received	D. Total \$ received
14. Whole fish harvested/sold	1,631,806	5,660,964	0.06	\$ 339,657.24
15. Fish donated				
16. Carcasses sold				\$ -
17. Roe processed/sold				\$ -
18. Broodstock disposed				
19. Total dollars received (sum lines 14,16,17)				<b>\$ 339,657</b>
20. Total corporate revenue <sup>4</sup> sources	all sources			\$ 2,181,361.16
21. Amount required to recover corporate costs				\$ 1,992,638.82
22. Total surplus or deficit at corporation(line 20-line 21)				<b>\$ 188,722</b>

#10. This number was calculated using the estimated number of brood year 2003 fry released in 2004 and the estimated return of that brood year in 2005.

---

**In the winter of 2004 CIAA made the decision to temporarily suspend operations at this facility**

---

<sup>1</sup> **Excess fish.** (e.g. extra or green males, extra or unviable females whose roe was not sold).  
<sup>2</sup> **Other fish.** (e.g. fish remaining in saltwater after egg take is complete).  
<sup>3</sup> **Estimated ocean survival.** Provide method used in estimation.  
<sup>4</sup> **Total corporate revenue.** Defined as all income to the corporation including but not limited to: cost recovery, carcass and egg sales, donations, grants, loan proceeds, interest income, rental and/or lease income, revenues from sales proceeds of assets and inventory.  
 Period covered is January 1 – December 31.



**SCHEDULE D**  
**PROJECTED RETURNS FOR 2006**

<b>Species</b>	<b>Release Site</b>	<b>Total number of fish expected</b>	<b>Range in expected return</b>	
			<b>minimum</b>	<b>maximum</b>

In the winter of 2004 CIAA made the decision to temporarily suspend operations at this facility

## SCHEDULE F-1

### UPDATED 2004 HARVEST MANAGEMENT AND HATCHERY ADULT RETURNS

Complete this schedule for each special harvest area and species of fish with updated numbers from last year's annual report. If there are no changes to the data, write in "no changes from 2004 AR" at the bottom of the form.

Species:

**Tutka Bay Lagoon Hatchery**

1. Number of fish harvested under Hatchery Harvest Permit	adults	1,175,326	
2. Hatchery broodstock	jacks		
3. Broodstock for hatchery watershed		17,846	
4. Jacks			
5. Excess fish (surplus to all other requirements) <sup>1</sup>			
6. Other: <sup>2</sup> explain> <input type="text"/>	number		
<b>7. Total return to hatchery</b>			<b>1,193,172</b>
8. Estimated contribution to common property fisheries			
A. Commercial			
1. Troll			
2. Gillnet		747	
3. Seine		776	
<b>TOTAL</b>			<b>1,523</b>
B. Sport			
C. Other:	explain> <input type="text"/>	1,500	
<b>9. Total return(sum 7+8A, B, C)</b>			<b>1,196,195</b>

10. Estimated ocean survival by BY <sup>3</sup>	BY	Total # returning in 04	cumulative % survival	
	2002	1,196,195	1.73	%
				%
				%
				%
				%

11. Average size of fish sold	ND	<length-cm	1.5	wt-kg
12. Date(s)/location(s) of harvest	7/3/2004 to 8/7/2004			
13. Gear type or method used	Purse Seine			

	A. # fish	B. Lbs (fish/roe)	C. \$/lb received	D. Total \$ received
14. Whole fish harvested/sold	1,175,326	3,759,169	0.02	75,183.38
15. Fish donated				
16. Carcasses sold				\$ -
17. Roe processed/sold				\$ -
18. Broodstock disposed				
19. Total dollars received (sum lines 14,16,17)				<b>\$ 75,183</b>
20. Total corporation revenue <sup>4</sup> sources				\$ 1,614,760.00
21. Amount required to recover corporation costs				\$ 2,740,486.00
22. Total surplus or deficit at corporation(line 20-line 21)				<b>\$ (1,125,726)</b>

no changes from 2004 AR

#10. This number was calculated based on the number of estimated brood year 2002 fry released in 2003 and the total estimated return to that brood year in 2004

#21. \$1,184,588 of this figure represents the sum deficit experienced at Tutka Bay Lagoon Hatchery from FY 2000 to FY 2004

<sup>1</sup> **Excess fish.** (e.g. extra or green males, extra or unviable females whose roe was not sold).

<sup>2</sup> **Other fish.** (e.g. fish remaining in saltwater after egg take is complete).

<sup>3</sup> **Estimated ocean survival.** Provide method used in estimation.

<sup>4</sup> **Total corporate revenue.** Defined as all income to the corporation including but not limited to: cost recovery, carcass and egg sales, donations, grants, loan proceeds, interest income, rental and/or lease income, revenues from sales proceeds of assets and inventory. Period covered is January 1 – December 31.