# EKLUTNA SALMON HATCHERY ANNUAL REPORT 2007

Cook Inlet Aquaculture Association Gary Fandrei, Executive Director November 2008

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

#### ABSTRACT

Reports such as this one covering the operations of the Eklutna Salmon 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 2007. During 2007, the Eklutna Salmon Hatchery Basic Management Plan was amended and redrafted. Because changes were made to the Basic Management Plan during the calendar year, this report covers projects identified in the original Basic Management Plan and reflects the changes that were made in 2007.

Schedule A data deal with eggs collected during the report year – 2007.

Regular sockeye and coho salmon egg collections were not conducted. In the spring of 1998, CIAA made the decision to temporarily suspend egg collection and fish incubation at this facility; and in 2007, egg collection and incubation were deleted from the Basic Management Plan.

The facility provides additional fish rearing resources for Resurrection Bay and Big Lake sockeye smolt when water supplies are limited at Trail Lakes Hatchery.

Schedule B data deal with fish released during the report year – 2007.

Regular sockeye and coho salmon releases were not conducted. In the spring of 1998, CIAA made the decision to temporarily suspend operations at this facility; and in 2007, regular sockeye and coho salmon releases were deleted from the Basic Management Plan.

The facility provides additional fish rearing resources for Resurrection Bay and Big Lake sockeye smolt when water supplies are limited at Trail Lakes Hatchery. Resurrection Bay and Big Lake sockeye release information is presented in the Trail Lakes Hatchery Annual Report and not addressed in the Eklutna Salmon Hatchery Annual Report.

ADF&G releases Chinook salmon to the Eklutna tailrace after temporarily holding the fish at the Eklutna Salmon Hatchery. The Chinook salmon release is part of the Elmendorf/Fort Richardson Hatchery release plan and is not addressed in the Eklutna Salmon Hatchery Annual Report.

Schedule C data deal with fish harvested in the common property fisheries; fish used for brood stock and fish harvested for cost recovery revenues during the report year – 2007.

No sockeye and coho salmon returns were projected. In the spring of 1998, CIAA made the decision to temporarily suspend operations at this facility; and in 2007, regular sockeye and coho salmon returns were deleted from the Basic Management Plan.

The facility provides additional fish rearing resources for Resurrection Bay and Big Lake sockeye smolt when water supplies are limited at Trail Lakes Hatchery. Resurrection Bay and Big Lake sockeye return information is presented in the Trail Lakes Hatchery Annual Report and is not addressed in the Eklutna Salmon Hatchery Annual Report.

Schedule D data project the total adult return for the coming year – 2008.

There are no fish released by CIAA projected to return for the coming year 2008. In the spring of 1998, CIAA made the decision to temporarily suspend operations at this facility; and in 2007, regular sockeye and coho salmon returns were deleted from the Basic Management Plan.

The facility provides additional fish rearing resources for Resurrection Bay and Big Lake sockeye smolt when water supplies are limited at Trail Lakes Hatchery. Resurrection Bay and Big Lake sockeye return information is presented in the Trail Lakes Hatchery Annual Report and is not addressed in the Eklutna Salmon Hatchery Annual Report.

ADF&G releases Chinook salmon to the Eklutna tailrace after temporarily holding the fish at the Eklutna Salmon Hatchery. The Chinook salmon release is part of the Elmendorf/Fort Richardson Hatchery release plan and is not addressed in the Eklutna Salmon Hatchery Annual Report.

Schedule F data are presented only when information reported in the prior year's annual report needs to be corrected or updated.

In 2007, ADF&G requested CIAA review all reported hatchery returns and provide corrected information to the Department. A Schedule F has been completed for every release from the Eklutna Salmon Hatchery since 1982 and is included in this report.

#### INTRODUCTION

The Eklutna Salmon Hatchery is owned and operated by CIAA and is located on the Old Glenn Highway between Anchorage and Palmer. In the spring of 1998, CIAA made the decision to temporarily suspend operations at this facility; and in 2007, regular sockeye and coho salmon returns were deleted from the Basic Management Plan.

The facility provides additional fish rearing resources for Resurrection Bay and Big Lake sockeye smolt when water supplies are limited at Trail Lakes Hatchery. Resurrection Bay and Big Lake sockeye information is presented in the Trail Lakes Hatchery Annual Report and is not addressed in the Eklutna Salmon Hatchery Annual Report.

The Eklutna Salmon Hatchery operates under Private Non-Profit Permit #17 issued in 1982 and has a current permitted capacity of 18.0 million sockeye salmon eggs and 0.160 million coho salmon eggs. The Fish Transport Permits (FTP's) under which CIAA operates the programs of the Eklutna Salmon Hatchery are as follows:

Permit Number	Expiration Date	Activity
96A-0080	12/31/07	Transport and release of up to 1.25 million sockeye salmon fry at Hazel Lake. This FTP was replaced by FTP 98A-0059 for Trail Lakes Hatchery which has an expiration date of 07/31/02.
96A-0081	12/31/07	Transport and release of up to 0.25 million sockeye salmon fry at Kirschner Lake. This FTP was replaced by FTP 98A-0060 for Trail Lakes Hatchery which has an expiration date of 07/31/02.
96A-0082	12/31/07	Transport and release of up to 2.00 million sockeye salmon fry at Leisure Lake. This FTP was replaced by FTP 98A-0061 for Trail Lakes Hatchery which has an expiration date of 07/31/02.
07A-0015	06/15/07	Allows transport and temporary rearing of Big Lake sockeye at the ESH in 2007. The release of fish to Meadow Creek is described in FTP 06A-0058.
07A-0016	06/15/07	Allows transport and temporary rearing of Bear Lake sockeye at the ESH in 2007. The release of fish to Bear Lake is described in FTP 01A-0112.
07A-0061	06/30/11	Allows for the egg collection, incubation and release of up to 1,536,000 smolt to Resurrection Bay and the temporary rearing at the ESH during periods of water shortages. <i>This permit replaces FTPs 01A-0111 and 01A-0112.</i>
????????	????????	CIAA requested a permit for temporary rearing Big Lake smolt at the ESH during periods of water shortages. The release of fish to Big Lake is described in FTP 06A-0058.

## ANNUAL REPORT SALMON HATCHERY

Year Ended December 1, 2007

Hatchery name/Location	Eklutna Salmon Hatchery	
Permit holder name/Address	Cook Inlet Aquaculture Association	
	40610 Kalifornsky Beach Road	
	Kenai, AK 99611-6445	
		_
Person to contact	Gary Fandrei	name
regarding this report	(907) 283-5761	phone
DECLARATION AND CICNATURE		
DECLARATION AND SIGNATURE		
I declare that the information given in this annual report is, to m	w knowledge true correct and complete	
r deciare that the information given in this armual report is, to the	y knowledge, true, correct and complete.	
Gary Fandrei		
Name of Legal Representative	1	Date
Signature of Representative	I	
organists of respressionality		
Part 1. REPORT OF THIS YEAR'S PERFORMANCE		
A. Complete the following schedules of production statist	ics 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 MANDATORY

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

### **SCHEDULE A-1**

### ANNUAL BROODSTOCK AND INITIAL SURVIVAL REPORT

Occupated this cake hills for each an exist to test of a new tales.	data areas				Eklutna Salmon
Complete this schedule for each species/ stock of eggs taken 1. Species	tnis year.				Hatchery
Stock (donor stream name/number)					]
,		female		male	tota
3. Viable broodstock (spawned, eggs in incubators)		S		S -	1
4. Inviable broodstock (green/over-ripe/bad)		female s		male s -	tota
5. Unspawned fish (roe recovery, excess males)					-
6. Holding mortalities (raceway, pen mortalities)					
7. Adults captured for broodstock (sum 3 thru 6)	-				
8. Average length and weight of adults used for broods	tock				
females>		cm		kg	
males>		cm		kg	
9. Average fecundity (eggs/female)					
10. Eggtake dates:					
11. Number of green eggs taken					
12. Number of eggs transferred (annotate below)					
13. Number placed in hatchery <sup>1</sup>					
14. Number surviving to eyed			#DIV/0!	% survival <sup>2</sup>	
15. Describe procedures used for egg takes and evalua					
Regular salmon egg collections were not conduct resources for	ed. This facility p	orovide	s additiona	al fish rearing	
Resurrection Bay and Big Lake sockeye smolt wh	en water supplie	s are li	mited at Tr	ail Lakes	
Hatchery.					
Provide explanation if greater than number of green eggs t	aken.	2. Prov 90%.	ride explanati	on for survivals less th	an

### **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 CULTU	JRE REPOR	RT						Eklutna Salmon Hatchery
Species:	Sockeye	Stock:	Bear Lake	•		Brood	d year:	2005
A. Lifestage In	formation							
/ Lindolago III	Actual	% cum						
	number	survival	Transfers	s- betwee	n hatche	ries (annotate)		
1. Green eggs		100%				(11)		
2. Eyed eggs	_	#DIV/0!						
3. Emergent fry		#DIV/0!						
4. Fed fry		#DIV/0!						
5. Smolts	673,300	#DIV/0!	Smolts tran	nsferred fro	m TLH to	ESH February 14, 15 a	nd 16, 2	007
B. Release Infor				0:		E		Marada)
0:1-	Relea		Pf (		ze	Expected		Year(s)
Site	Number	date	lifestage	gm/fish	mm/fish	adult return		of return
Bear Lake	618,900	5/16,17,18/07	Smolt	9.9 gm		61,9	00	2009 & 2010
Total:	618,900							
C. Tagging/Ma 6. Number of fis	-	agged (by rele	ase group a	nd metho	d of mark	ing)		
D. Other								
7. Report any c			-		_			
						tesurrection Bay (Bea		
						tchery. Resurrection B		<b>.</b>
		ockeye release in the				Lakes Hatchery Annu	ai Repor	τ
	and not fully a	idaressed in the	Litiulia Salli	ion i iatorie	ay Amuan	порон.		

### **SCHEDULE B-2**

### 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.

and not fully addressed in the Eklutna Salmon Hatchery Annual Report.

ISH CULIU	JRE REPOF	<b>( I</b>						Eklutna Salmon Hatchery
Species:	Sockeye	Stock:	Big Lake			]	Brood year:	2005
. Lifestage In	formation							
. Liicstage iii	Actual	% cum						
	number	survival	Transfers	s- betwee	n hatche	eries (annotate	<del>)</del> )	
. Green eggs		100%						
. Eyed eggs		#DIV/0!						
. Emergent fry		#DIV/0!						
. Fed fry		#DIV/0!						
. Smolts	337,300	#DIV/0!	Smolts tran	nsferred fro	om TLH to	ESH February 1	2 and 13, 2007	
8. Release Infor	mation							
	Relea	se		Si	ze	Expected		Year(s)
Site	Number	date	lifestage	gm/fish	mm/fish	adult return		of return
Meadow Creek	315,700	5/22/2007	Smolt	16.9 gm			31,600	2009 & 2010
Total:	315,700							
'		l						
C. Tagging/Ma	_	oggod (by rolo	ooo group o	nd matha	d of morle	ina)		
o. Number of its	sii iiiaikeu oi t	agged (by relea	ase group a	na memo	u oi illaik	urig)		
•								
). Other								
	liseases rearin	ng problems, o	r significant	mortalitia	s among	these fish		
. Report arry u			-		_	Big Lake (Mead	ow Creek)	
						itchery. Big Lak		
•		-				es Hatchery Anr	•	

### **SCHEDULE C-1**

### HARVEST MANAGEMENT AND HATCHERY ADULT RETURNS

Complete a separate schedule for	or each project and spec	sies.		Eklutna Salmon Hatchery
	Species: Location of harvest/return:			. nationerly
Hatchery Escapement  1. Cost recovery fish (line 16A & fish  2. Adults captured for broodstock 16B)  3. Escapement for hatchery wate  4. Jacks  5. Other <sup>1</sup> (annotate in comments  6. Other <sup>1</sup> (annotate in comments  7. Other <sup>1</sup> (annotate in comments  8. Total return to hatchery	c (Schedule A line 7) mirershed (as required in persons section)	nus roe recovery fish (line	-	-
Common Property Harvest 9. Commercial				
	<ul><li>A. Troll</li><li>B. Gillnet</li><li>C. Seine</li><li>D. Other (annotate in cosection)</li><li>Total commercial</li></ul>	omments		_
10. Non-commercial	Total commercial			<del>-</del>
	A. Sport B. Personal Use C. Subsistence D. Other (annotate in cosection) Total non-commercial	omments		-

11. Total Return (sum 8	,9,10)					-
·	•		Total # returning in	Cumulative		
		BY	2007	Survival		
12. Estimated ocean					%	
survival by BY 2					%	
cultival by b.					%	
					%	
					1	
					%	
13. Average size of fish s	sold			<length-cm< td=""><td></td><td>wt-kg</td></length-cm<>		wt-kg
14. Date(s) of harvest						
15. Gear type or method	used					
						•
16. Disposition of Hatch	nery Escapement					
		# fish	lbs. fish	1		
A .	Fish harvested/sold adults					
	jacks					
	total	-	-			
				•		
_		# fish	lbs. roe	1		
В	Dec receives					
•	Roe recovery	-				
С						
	Carcasses	# Disposed	# Donated	# Sold	•	
	Spawners					
	Roe recovery (during					
	eggtake)					
	Roe recovery (non-					
	eggtake) Other (annotate in					
	comments)					
	ŕ					
	total number of fish	-	-	-		
	total pounds					
<b>Comments:</b> This facility provides additio limited at	nal fish rearing resources fo	r Resurrection Ba	ay and Big Lake	sockeye smolt wl	hen wate	er supplies are
	rrection Bay and Big Lake s	ockeye return inf	ormation is prese	ented in the Trail	Lakes F	latchery Annual
is not fully addressed in the	Eklutna Salmon Hatchery A	nnual Report.				
					-	
1. "Other" use one line per	category (e.g. fish remaini	ng in saltwater s	ea lion predation	etc)		

Other" use one line per category. (e.g. fish remaining in saltwater, sea lion predation, etc.).

<sup>&</sup>lt;sup>2.</sup> **Estimated ocean survival.** Provide method used in estimation.

### **SCHEDULE D**

### **PROJECTED RETURNS FOR 2008**

			Range in expected return		
Species	Release Site	Total number of fish expected	minimum	maximum	
This facility provide	es additional fish rearing resour	ces for Resurrection Bay and Big	Lake		
sockeye smolt whe	en water supplies are limited at	Trail Lakes Hatchery. Resurrection	on Bay		
and Big Lake sock	eye return information is preser	nted in the Trail Lakes Hatchery A	nnual		
Report and is not f	ully addressed in the Eklutna Sa	almon Hatchery Annual Report.			

### SCHEDULE F-1 (2006)

### **UPDATED 2006 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 2006 AR" at the bottom of the form.

Species: Location of harvest/return:		Eklutna Salm Hatche	_
Hatchery Escapement  1. Cost recovery fish (line 16A & 16B) traditional recovery fish  2. Adults captured for broodstock (Schedule A line 16B)  3. Escapement for hatchery watershed (as required 4. Jacks  5. Other 1 (annotate in comments section)  6. Other 1 (annotate in comments section)  7. Other 1 (annotate in comments section)  8. Total return to hatchery	ne 7) minus roe recovery fish (line	-	
Common Property Harvest 9. Commercial			
A. Troll			
B. Gillnet			
C. Seine			
D. Other (annotate in com	ments		
section)			
Total commercial		-	
10. Non-commercial			
A. Sport B. Personal Use			
C. Subsistence			
D. Other (annotate in com	ments		
section)	inens		
Total non-			
commercial		_	

11. To	otal Return (sum 8,9,10)				-
		BY	Total # returning in 2006	Cumulative Survival	
12. Es	stimated ocean				%
sur	vival by BY <sup>2</sup>				%
					%
					% %
					] 70
	verage size of fish sold			<length-cm< td=""><td>wt-kg</td></length-cm<>	wt-kg
	ate(s) of harvest				
15. G	ear type or method used				
16. Di	isposition of Hatchery Escapen	nent			
	.,	# fish	lbs. fish	_	
A.	Fish harvested/sold adults				
	jacks				
	total	-	-		
		# fish	lbs. roe		
B.	Roe recovery	-			
C.	Carcasses	# Disposed	# Donated	# Sold	
•	Spawners		0.10.00	<i></i> <b> </b>	]
	Roe recovery (during eggtake)				]
	Roe recovery (non-eggtake)				_
	Other (annotate in comments) total number of fish	_	_		-
	total number of fish		-	-	-
Comr	ments:			<u> </u>	1
No ch	anges from 2006 AR				

<sup>&</sup>lt;sup>1.</sup> "Other" use one line per category. (e.g. fish remaining in saltwater, sea lion predation, etc.).
<sup>2.</sup> Estimated ocean survival. Provide method used in estimation.

### **SCHEDULE F-2 (2005)**

### **UPDATED 2005 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 2005 AR" at the bottom of the form.

Species: Location of harvest/return:			Eklutna Salmon Hatchery
Hatchery Escapement  1. Cost recovery fish (line 16A & 16B) recovery fish  2. Adults captured for broodstock (Sch 16B)  3. Escapement for hatchery watershed  4. Jacks  5. Other <sup>1</sup> (annotate in comments sect 6. Other <sup>1</sup> (annotate in comments sect 7. Other <sup>1</sup> (annotate in comments sect 8. Total return to hatchery	nedule A line 7) minus roe recovery fish (li d (as required in permit) ion) ion)	ine	<u>.</u>
Common Property Harvest  9. Commercial A. Troll B. Gillnet C. Seine D. Other (annotate in comm Total commercial  10. Non-commercial A. Sport	ents section)		<u>-</u>
B. Personal Use C. Subsistence D. Other (annotate in comm Total non- commercial	ents section)		-

11. To	otal Return (sum 8,9,10)				-
		BY	Total # returning in 2005	Cumulative Survival	
12. E	stimated ocean				%
sur	vival by BY <sup>2</sup>				%
					%
					%
					%
13. A	verage size of fish sold			<length-cm< td=""><td>wt-kg</td></length-cm<>	wt-kg
14. D	ate(s) of harvest				
15. G	ear type or method used				
16. D	isposition of Hatchery Escap				
		# fish	lbs. fish	1	
A.	Fish harvested/sold adult				
	jacl tot		_		
	101	.ai			
		# fish	lbs. roe	1	
B.	Roe recovery	-			
C.		# Disposed	# Donated	# Sold	_
	Spawne				
	Roe recovery (during eggtak	•			
	Roe recovery (non-eggtak	•			_
	Other (annotate in comment				
	total number of fis		-	-	<u></u>
•	total pound	ds [			
	ments:				
No cn	anges from 2005 AR				_

<sup>&</sup>lt;sup>1.</sup> "Other" use one line per category. (e.g. fish remaining in saltwater, sea lion predation, etc.).
<sup>2.</sup> Estimated ocean survival. Provide method used in estimation.

### **SCHEDULE F-3 (2004)**

### **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:			Eklutna Salmon Hatchery
Location of harvest/return:			
Hatchery Escapement  1. Cost recovery fish (line 16A & 16B) recovery fish  2. Adults captured for broodstock (Sch 16B)  3. Escapement for hatchery watershed  4. Jacks  5. Other <sup>1</sup> (annotate in comments sect  6. Other <sup>1</sup> (annotate in comments sect  7. Other <sup>1</sup> (annotate in comments sect  8. Total return to hatchery	nedule A line 7) minus roe recovery fish (line d (as required in permit) ion) ion)	-	_
Common Property Harvest 9. Commercial			
A. Troll B. Gillnet C. Seine D. Other (annotate in comm	ents section)		_
<ul> <li>10. Non-commercial</li> <li>A. Sport</li> <li>B. Personal Use</li> <li>C. Subsistence</li> <li>D. Other (annotate in comm</li> <li>Total non-commercial</li> </ul>	ents section)		-

11. IC	otai Return (sum 8,9,10)					•
			Total #	Cumulative		
		BY	returning in 2004	Survival		
12. Es	stimated ocean				%	
	vival by BY <sup>2</sup>				%	
Sui	ival by b1				- / <sub>%</sub>	
					- /°   %	
					- /°   %	
12 Av	rerage size of fish sold			<length-cm< td=""><td></td><td>wt-kg</td></length-cm<>		wt-kg
	ate(s) of harvest			<lengul-citi< td=""><td></td><td>wt-kg</td></lengul-citi<>		wt-kg
	ear type or method used					
15. G	ear type of method used					
16 D:	sposition of Hatchery Escapen	nont				
וט. טו	sposition of Hatchery Escapen	# fish	lbs. fish			
Α.	Fish harvested/sold adults	# 11311	103. 11311	]		
	jacks					
	total		-			
			<u> </u>	1		
		# fish	lbs. roe			
B.	Roe recovery	-				
	,			1		
C.	Carcasses	# Disposed	# Donated	# Sold		
	Spawners	1				
	Roe recovery (during eggtake)					
	Roe recovery (non-eggtake)					
	Other (annotate in comments)					
	total number of fish	-	-	-		
	total pounds					
Comn	nents:				_	
	anges from 2004 AR					
NO CIT	anges from 2004 Art					
1						

<sup>&</sup>lt;sup>1.</sup> "Other" use one line per category. (e.g. fish remaining in saltwater, sea lion predation, etc.).

<sup>&</sup>lt;sup>2.</sup> **Estimated ocean survival.** Provide method used in estimation.

### **SCHEDULE F-4 (2003)**

### **UPDATED 2003 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 2003 AR" at the bottom of the form.

Species: Location of harvest/return:			Eklutna Salmon Hatchery
Hatchery Escapement  1. Cost recovery fish (line 16A & 16B) recovery fish  2. Adults captured for broodstock (Sch 16B)  3. Escapement for hatchery watershed  4. Jacks  5. Other <sup>1</sup> (annotate in comments sect  6. Other <sup>1</sup> (annotate in comments sect  7. Other <sup>1</sup> (annotate in comments sect	nedule A line 7) minus roe recovery fish (line d (as required in permit) ion)	-	
8. Total return to hatchery			-
Common Property Harvest 9. Commercial A. Troll B. Gillnet C. Seine D. Other (annotate in commercial	ents section)		_
<ul> <li>10. Non-commercial</li> <li>A. Sport</li> <li>B. Personal Use</li> <li>C. Subsistence</li> <li>D. Other (annotate in commercial</li> </ul>	ents section)		-

11. Total Return (sum 8,9,10)							-
				Total # returning in	Cumulative	•	
			BY	2003	Survival		
12. Estimated ocean						%	
survival by BY <sup>2</sup>						%	
						%	
						% %	
						70	
13. Average size of fish sold					<length-cm< th=""><th></th><th>wt-kg</th></length-cm<>		wt-kg
14. Date(s) of harvest					,		3
15. Gear type or method used							
16. Disposition of Hatchery Esc	car	nement					
To. Disposition of Flatonery Loc	Jup		# fish	lbs. fish	7		
•	A	Fish harvested/sold adults					
		jacks					
		total	-	-			
			# fish	lbs. roe	-		
	В	D					
	•	Roe recovery	-		J		
	С						
		Carcasses	# Disposed	# Donated	# Sold		
		Spawners					
		Roe recovery (during eggtake)					
		Roe recovery (non-					
		eggtake)					
		Other (annotate in					
		comments)					
		total number of fish	-	-	-		
		total pounds					
Comments:							
No changes from 2003 AR							
1. "Other" use one line per categor	у. (	e.g. fish remaining in saltw	ater, sea lion pred	dation, etc.).			

### **SCHEDULE F-5 (2001)**

### **UPDATED 2001 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 2001 AR" at the bottom of the form.

Species: Location of harvest/return:	Sockeye Salmon Eklutna Tailrace		Eklutna Salmon Hatchery
Hatchery Escapement 1. Cost recovery fish (line 16A & 16 roe recovery fish 2. Adults captured for broodstock (fish (line 16B) 3. Escapement for hatchery waters 4. Jacks	Schedule A line 7) minus roe	recovery	
<ul> <li>5. Other <sup>1</sup> (annotate in comments s</li> <li>6. Other <sup>1</sup> (annotate in comments s</li> <li>7. Other <sup>1</sup> (annotate in comments s</li> </ul>	ection)	unknown	
8. Total return to hatchery	,		unknown
Common Property Harvest  9. Commercial A. Troll  B. Gillnet C. Seine D. Other (annotate in commer	nts section)	unknown	unknown
10. Non-commercial			dikilowii
<ul><li>A. Sport</li><li>B. Personal Use</li><li>C. Subsistence</li><li>D. Other (annotate in commer</li><li>Total non-</li></ul>	nts section)	999	
commercial			999

11. Total	Return (sum 8,9,10)					999
			Total # returning in	Cumulative		
		ВҮ	2001	Survival	_	
12. Estima	ated ocean	1996	unknown	3.75	%	
survival	by BY <sup>2</sup>				%	
					%	
					%	
					%	
	ge size of fish sold s) of harvest			<length-cm< td=""><td></td><td>wt-kg</td></length-cm<>		wt-kg
· ·	ype or method used	-				
		<u>-</u>				•
16. Dispo	sition of Hatchery Escape					
	Fish harvested/sold	# fish	lbs. fish	1		
A.	adults					
	jacks					
	total	-	-			
		# fish	lbs. roe	7		
В.	Roe recovery	-				
C.	Carcasses	# Disposed	# Donated	# Sold		
	Spawners					
	Roe recovery (during eggtake)					
	Roe recovery (non-				1	
	eggtake) Other (annotate in				4	
	comments)					
	,			1		

#### Comments:

#5, 9, 10 and 12 - Sockeye returns to the Eklutna Tailrace in 2001 were from the 3-ocean component of the last release to the

Tailrace. The 3-ocean component typically represents a small proportion (20%) of the return and few sockeye (<1,100) were

expected in 2001. Because few fish were expected to return, no attempt to enumerate the return was made. It is likely the

ADF&G reported sportfish harvest from the Eklutna Tailrace includes fish destined for other areas.

total number of fish

total pounds

<sup>&</sup>lt;sup>1.</sup> "Other" use one line per category. (e.g. fish remaining in saltwater, sea lion predation, etc.).

<sup>&</sup>lt;sup>2.</sup> **Estimated ocean survival.** Provide method used in estimation.

### **SCHEDULE F-6 (2000)**

### **UPDATED 2000 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 2000 AR" at the bottom of the form.

Species: Location of harvest/return:	Sockeye Salmon Eklutna Tailrace		Eklutna Salmon Hatchery
Hatchery Escapement 1. Cost recovery fish (line 16A & roe recovery fish 2. Adults captured for broodstock (line 16B)	(Schedule A line 7) minus roe rec	2,623 overy fish	
3. Escapement for hatchery water	shed (as required in permit)	-	
4. Jacks		-	
<ul> <li>5. Other <sup>1</sup> (annotate in comments</li> <li>6. Other <sup>1</sup> (annotate in comments</li> <li>7. Other <sup>1</sup> (annotate in comments</li> </ul>	section)	1,000	
8. Total return to hatchery			3,623
Common Property Harvest 9. Commercial			1
A. Troll		-	
B. Gillnet		4,500	
C. Seine		-	
D. Other (annotate in comme Total commercial	ents section)		4,500
10. Non-commercial			]
A. Sport		764	
B. Personal Use C. Subsistence			
D. Other (annotate in comme	ents section)		
Total non- commercial			764

		returning in		
	BY	2000	Survival	_
12. Estimated ocean	1996	7,110	0.77	%
survival by BY <sup>2</sup>	1995	1,777	3.75	%
				% %
				%

Total #

- 13. Average size of fish sold
- 14. Date(s) of harvest
- 15. Gear type or method used

	donath om	4.0	urt lea	
	<length-cm< th=""><th>1.8</th><td> wt-kg</td></length-cm<>	1.8	wt-kg	
7/9/2000 to 8/5/2000				
Weir and beach seine				

Cumulative

#### 16. Disposition of Hatchery Escapement

			# fish	lbs.	fish
A	Fish harvested/sold adults		2,623		10,503
		jacks			
		total	2,623	10,503	

	# fish	lbs. roe
3		
Roe recovery	-	

C				
	Carcasses	# Disposed	# Donated	# Sold
	Spawners Roe recovery (during eggtake) Roe recovery (non- eggtake) Other (annotate in comments)			
	total number of fish	-	-	-
	total nounds			

#### Comments:

#5 - When harvest operations were terminated, CIAA estimated 1,000 fish remained in the Eklutna Tailrace. These fish were

not expected to spawn successfully.

#12 - Age composition of the returning fish was not determined. However, based on historic age composition of the broodstock, 80% of the return is typically 2-ocean fish and 20% 3-ocean. To estimate survival rate, CIAA assumed these

percentages.

<sup>&</sup>lt;sup>1.</sup> "Other" use one line per category. (e.g. fish remaining in saltwater, sea lion predation, etc.).

<sup>&</sup>lt;sup>2.</sup> **Estimated ocean survival.** Provide method used in estimation.

### **SCHEDULE F-7 (1999)**

### **UPDATED 1999 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 1999 AR" at the bottom of the form.

Species: Location of harvest/return:	Sockeye Salmon Eklutna Tailrace		Eklutna Salmon Hatchery
Hatchery Escapement 1. Cost recovery fish (line 16A & roe recovery fish 2. Adults captured for broodstoo (line 16B) 3. Escapement for hatchery wat 4. Jacks	k (Schedule A line 7) minus roe recovery fish	15,285	
<ul> <li>5. Other <sup>1</sup> (annotate in comment</li> <li>6. Other <sup>1</sup> (annotate in comment</li> <li>7. Other <sup>1</sup> (annotate in comment</li> <li>8. Total return to hatchery</li> </ul>	s section)	2,500	17,785
Common Property Harvest 9. Commercial A. Troll			
B. Gillnet C. Seine D. Other (annotate in comn Total commercial 10. Non-commercial	nents section)	17,785	17,785
<ul><li>A. Sport</li><li>B. Personal Use</li><li>C. Subsistence</li><li>D. Other (annotate in commercial</li></ul>	nents section)	151	151

35,721

D) (	returning in	0 : 1	
BY	1999	Survival	7
1995	35,721	3.57	%
			%
			%
			%
			%

Total #

12. Estimated ocean survival by BY <sup>2</sup>

13. Average size of fish sold

14. Date(s) of harvest

15. Gear type or method used

	<length-cm< th=""><td>1.8</td><td>wt-kg</td></length-cm<>	1.8	wt-kg
7/9/1999 to 8/20/1999			
Weir and beau	ch seine		

Cumulative

### 16. Disposition of Hatchery Escapement

		# fish	lbs. fish
A.	Fish harvested/sold adults	15,285	59,956
	jacks		
	total	15,285	59,956

	# fish	lbs. roe
Roe recovery	-	

C.	Carcasses	# Disposed	# Donated	# Sold
	Spawners			
	Roe recovery (during eggtake)			
	Roe recovery (non- eggtake)			
	Other (annotate in comments)		16	
	total number of fish	-	16	-
	total pounds		63	

#### Comments:

B.

#5 - When harvest operations were terminated, CIAA estimated 2,500 fish remained in the Eklutna Tailrace. These fish were

not expected to spawn successfully.

#12 - Age composition of the returning fish was not determined. However, no broodyear 1994 fish were released and all

the returning fish were assumed to be from the broodyear 1995 release.

#16C - Fish were donated to charity

<sup>&</sup>lt;sup>1.</sup> "Other" use one line per category. (e.g. fish remaining in saltwater, sea lion predation, etc.).

<sup>&</sup>lt;sup>2.</sup> **Estimated ocean survival.** Provide method used in estimation.

### **SCHEDULE F-8 (1998)**

### **UPDATED 1998 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 1998 AR" at the bottom of the form.

	Sockeye		Eklutna Salmon
Species:	Salmon		Hatchery
Location of	Eklutna		
harvest/return:	Tailrace		
Hatchery Escapement 1. Cost recovery fish (line 16A & roe recovery fish 2. Adults captured for broodstock (line 16B)	16B) traditional harvest and (Schedule A line 7) minus roe rec	2,713 overy fish	
3. Escapement for hatchery water	ershed (as required in permit)		
4. Jacks			
5. Other <sup>1</sup> (annotate in comments 6. Other <sup>1</sup> (annotate in comments 7. Other <sup>1</sup> (annotate in comments 1.	s section)	1,500	
7. Other <sup>1</sup> (annotate in comments	s section)		
8. Total return to hatchery			4,213
Common Property Harvest 9. Commercial A. Troll B. Gillnet C. Seine D. Other (annotate in comm	ents section)	2,260	2,260
			2,200
<ul><li>10. Non-commercial</li><li>A. Sport</li><li>B. Personal Use</li><li>C. Subsistence</li><li>D. Other (annotate in comm</li></ul>	ents section)	57	
Total non- commercial			57

11.	Total	Return	(sum	8.9.10	١
	ı Otai	INCLUIII	(Juii	0,0,10	,

6,530

	returning in		
BY	1998	Survival	
1993	6,530	6.54	%
			%
			%
			%
			%
		BY 1998	BY 1998 Survival

Total #

13. Average size of fish sold

14. Date(s) of harvest

15. Gear type or method used

	<length-cm< th=""><th>1.8</th><th>wt-kg</th></length-cm<>	1.8	wt-kg
7/20/1998 to 8/6/1998			]
Gillnet, Beach seine, Fish ladder			

Cumulative

### 16. Disposition of Hatchery Escapement

Α	Fish harvested/sold
	adults

		# fish	lbs. roe
В			
	Roe recovery	-	

С

Carcasses	# Disposed	# Donated	# Sold
Spawners			
Roe recovery (during			
eggtake)			
Roe recovery (non-			
eggtake) Other (annotate in			
comments)			
total number of fish	-	-	-
total pounds			

#### **Comments:**

#5 - When harvest operations were terminated, CIAA estimated 1,500 fish remained in the Eklutna Tailrace. These fish were

not expected to spawn successfully.

#12 - Age composition of the returning fish was not determined. However, no broodyear 1994 fish were released and all

the returning fish were assumed to be from the broodyear 1993 release.

<sup>1. &</sup>quot;Other" use one line per category. (e.g. fish remaining in saltwater, sea lion predation, etc.).

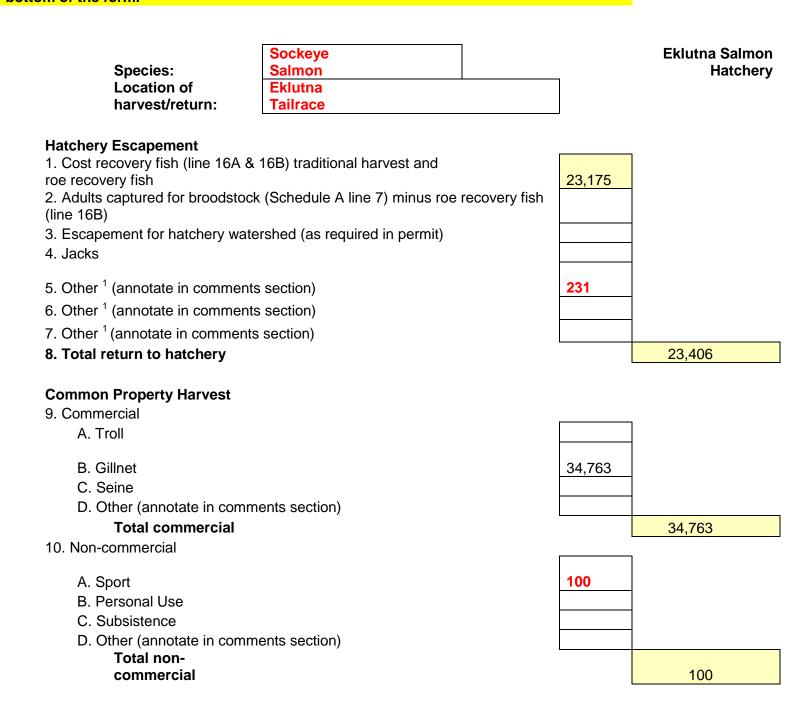
<sup>&</sup>lt;sup>2.</sup> **Estimated ocean survival.** Provide method used in estimation.

### **SCHEDULE F-9 (1997)**

### **UPDATED 1997 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 1997 AR" at the bottom of the form.



58,269

	ВҮ	returning in 1997	Survival	
12. Estimated ocean	1993	58,269	5.89	%
survival by BY <sup>2</sup>				%
				%
				%
				%

Total #

lbs. fish

13. Average size of fish sold

14. Date(s) of harvest

15. Gear type or method used

	<length-cm< th=""><th>1.6</th><th>wt-kg</th></length-cm<>	1.6	wt-kg
7/10/1997 to 9/9/1997			
Gillnet, Beach seine, Fish ladder			

Cumulative

#### 16. Disposition of Hatchery Escapement

A Fish harvested/sold adults

jacks

23,114 83,458

total 23,114 83,458

# fish

В

Roe recovery

# fish lbs. roe

С

Carcasses	# Disposed	# Donated	# Sold
Spawners			
Roe recovery (during eggtake)			
Roe recovery (non-			
eggtake)			
Other (annotate in comments)		61	
comments)		01	
total number of fish	-	61	-
total pounds			

#### **Comments:**

#5 - When harvest operations were terminated, CIAA estimated 250 fish remained in the Eklutna Tailrace. These fish were

not expected to spawn successfully.

#12 - Age composition of the returning fish was not determined. However, no broodyear 1992 fish were released and all

the returning fish were assumed to be from the broodyear 1993

#16C - Fish were donated to charity

<sup>&</sup>lt;sup>1.</sup> "Other" use one line per category. (e.g. fish remaining in saltwater, sea lion predation, etc.).

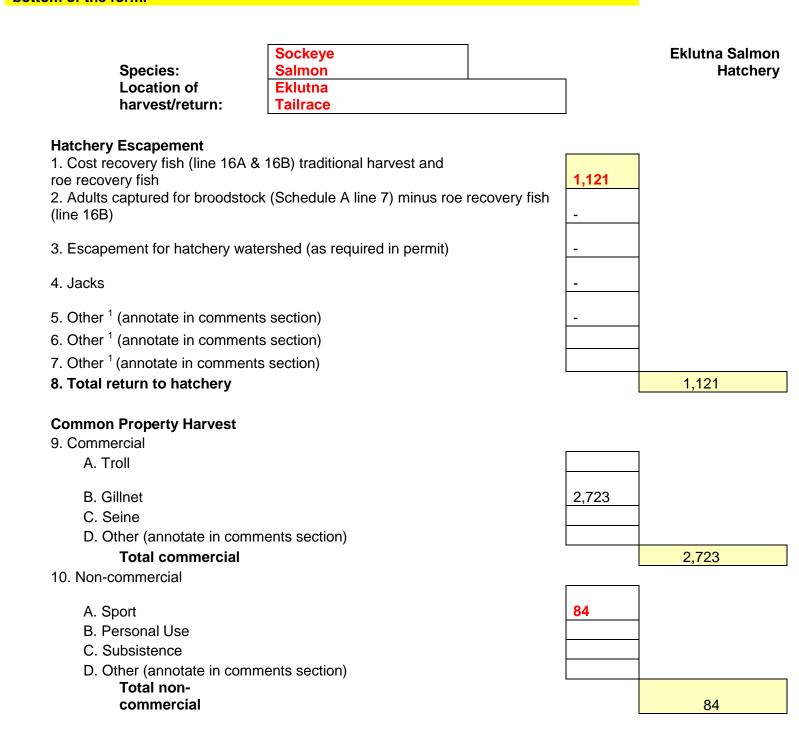
<sup>&</sup>lt;sup>2.</sup> **Estimated ocean survival.** Provide method used in estimation.

### **SCHEDULE F-10 (1996)**

### **UPDATED 1996 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 1996 AR" at the bottom of the form.



	returning in		
BY	1996	Survival	
1991	3,337	1.42	%
1993	591	0.06	%
			%
			%
			%

Total #

13. Average size of fish sold

14. Date(s) of harvest

12. Estimated ocean

survival by BY 2

15. Gear type or method used

	<length-cm< td=""><td>1.7</td><td>wt-kg</td></length-cm<>	1.7	wt-kg
7/16/1996 to 9/3/1996			
Beach seine, l	Fish ladder		
			•

Cumulative

### 16. Disposition of Hatchery Escapement

		# fish	lbs. fish
A.	Fish harvested/sold adults	1,113	4,245
	jacks		
	total	1,113	4.245
	เบเลเ	1,113	4,243

	# fish	lbs. roe
Roe recovery	-	

μ **:**---

C.	Carcasses	# Disposed	# Donated	# Sold
	Spawners			
	Roe recovery (during			
	eggtake)			
	Roe recovery (non-			
	eggtake)			
	Other (annotate in comments)		8	
	total number of fish	-	8	-
	total nounds		30	

#### Comments:

B.

#1 - The number of fish harvested includes 591

#12 - Age composition of the returning fish was not determined. However, no broodyear 1992 fish were released

the large returning fish were assumed to be from the broodyear 1991 release and the jacks from the broodyear 1993

release.

#16C - Fish were donated to charity

<sup>1. &</sup>quot;Other" use one line per category. (e.g. fish remaining in saltwater, sea lion predation, etc.).

<sup>&</sup>lt;sup>2.</sup> **Estimated ocean survival.** Provide method used in estimation.

### **SCHEDULE F-11 (1995)**

### **UPDATED 1995 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 1995 AR" at the bottom of the form.

Species: Location of harvest/return:	Sockeye Salmon Eklutna Tailrace		Eklutna Salmon Hatchery
Hatchery Escapement 1. Cost recovery fish (line 16A & roe recovery fish 2. Adults captured for broodstoo (line 16B)	16B) traditional harvest and k (Schedule A line 7) minus roe reco	2,524 every fish	
<ul><li>3. Escapement for hatchery wat</li><li>4. Jacks</li></ul>	ershed (as required in permit)	-	
<ul> <li>5. Other <sup>1</sup> (annotate in comment</li> <li>6. Other <sup>1</sup> (annotate in comment</li> <li>7. Other <sup>1</sup> (annotate in comment</li> <li>8. Total return to hatchery</li> </ul>	s section)	-	2,524
Common Property Harvest 9. Commercial			٦
A. Troll  B. Gillnet C. Seine D. Other (annotate in comm	nents section)	6,310	6,310
A. Sport B. Personal Use C. Subsistence	agenta agentian)	190	
D. Other (annotate in comn Total non- commercial	nenia section)		190

		returning in	Cumulative	
	ВҮ	1995	Survival	7
12. Estimated ocean	1991	9,024	1.04	%
survival by BY <sup>2</sup>				%
				%
				_ % 
				%
40 4 ' (('			1 1 41	4 ^

Total #

lbs. fish

lbs. roe

13. Average size of fish sold

14. Date(s) of harvest

15. Gear type or method used

	<length-cm< th=""><th>1.8</th><td>wt-kg</td></length-cm<>	1.8	wt-kg
8/3/1995 to 9/7/1995			
Beach seine, Fish ladder, Dip net			

Cumulativa

### 16. Disposition of Hatchery Escapement

A Fish harvested/soldadults

2,501 10,113 jacks total 2,501 10,113

# fish

B . Roe recovery -

С

Carcasses	# Disposed	# Donated	# Sold
Spawners	•		
Roe recovery (during eggtake)			
Roe recovery (non- eggtake)			
Other (annotate in comments)		23	
total number of fish	1	23	-
total pounds		93	

#### **Comments:**

#12 - Age composition of the returning fish was not determined. However, no other broodyear fish were released and all

the returning fish were assumed to be from the broodyear 1991 lease.

#16C - Fish were donated to charity

<sup>&</sup>lt;sup>1.</sup> "Other" use one line per category. (e.g. fish remaining in saltwater, sea lion predation, etc.).

<sup>&</sup>lt;sup>2.</sup> **Estimated ocean survival.** Provide method used in estimation.