# TRAIL LAKES HATCHERY ANNUAL REPORT 2006

Cook Inlet Aquaculture Association Trenten T. Dodson, CIAA Biologist December 2006

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

#### **ABSTRACT**

Reports such as this one covering the operations of the Trail Lakes 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 2006.

Schedule A data deal with eggs collected during the report year – 2006.

Sockeye salmon and coho salmon egg collections were conducted for Trail Lakes Hatchery programs following procedures for delayed fertilization. Numeric egg collections were attained for all sockeye and coho salmon programs.

Schedule B data deal with fish released during the report year – 2006.

Sockeye salmon were released into Bear Lake, Hidden Lake, Tutka Bay Lagoon, and Meadow Creek (Big Lake). Numeric sockeye release goals were not met at Meadow Creek (Big Lake), Hazel Lake, Kirschner Lake, Leisure Lake, since the 2005 egg take goals for these projects were not met.

Coho salmon were released into Bear Lake (Seward), Bear Creek (Seward), Resurrection Bay, Fish Creek Reservoir at Seldovia, and the Homer spit. All numeric coho salmon release goals were met.

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 – 2006.

Sockeye salmon and coho salmon returning to the Bear Creek weir complex were harvested and sold when the flesh quality was acceptable for human consumption or harvested and donated to dog mushers when the flesh quality was unacceptable for human consumption. Cost recovery harvest for sockeye salmon returning to Bear Lake also occurred in Resurrection Bay. Cost Recovery goals at Bear Lake were not met.

Sockeye salmon cost recovery harvests were also completed at Leisure, Hazel, and Kirschner Lakes. Revenue goals for harvests at Leisure, Hazel and Kirschner Lakes were met.

Sockeye salmon and coho salmon broodstock were collected at Bear, Hidden, and Big Lakes to support Trail Lakes Hatchery projects. These

projects contribute to all common property fisheries with one exception. The commercial harvest of the return of coho salmon to Resurrection Bay is precluded by regulation.

Schedule D data project the total adult return for the coming year – 2007.

Returns were projected for 2007 based on the number of fish released in the stocking year or smolt migration (when available) and assumed survival rates.

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 additions to the 2005 data; schedules F-5, F-6, and F-7 have been updated.

#### INTRODUCTION

The Trail Lakes Hatchery is owned by the State of Alaska, operated by CIAA and is located on the Seward Highway near Moose Pass. No fish releases are made at the facility. With the programs transferred from the Eklutna Salmon Hatchery, releases are made at ten locations for the primary purpose of contributing to the common property fisheries of Cook Inlet.

The Trail Lakes Hatchery sockeye salmon releases return to the stocking sites as adults through the recreational and commercial fisheries of the Central District, the Northern District and Lower Cook Inlet including Resurrection Bay. Coho salmon releases return to the stocking sites as adults through the recreational fisheries of Lower Cook Inlet (Resurrection Bay).

The Trail Lakes Hatchery operates under Private Non-Profit Permit #27 issued in 1988 and has a permitted capacity of 30.0 million sockeye salmon eggs, 6.0 million coho salmon eggs and 4.0 million Chinook salmon eggs. The Fish Transport Permits (FTP's) under which CIAA operates the programs of the Trail Lakes Hatchery are as follows:

Permit	Expiration	
Number	Date	Activity
02A-0049	07/31/07	Collection of up to 6.25 million sockeye salmon eggs from Meadow Creek and the rearing and release of the subsequent fry. Up to 3.0 million fry may be released into Big Lake and 2.0 million into Blodgett Lake. (This replaces FTP 93A-0193 for Eklutna Salmon Hatchery, which expired on 06/30/98.)
02A-0050	07/31/07	Transport and release of up to 1.25 million sockeye salmon fry at Hazel Lake. (This replaces FTP 96A-0080 for Eklutna Salmon Hatchery, which had an expiration date of 12/31/07.)
02A-0051	07/31/07	Transport and release of up to 0.25 million sockeye salmon fry at Kirschner Lake. (This replaces FTP 96A-0081 for Eklutna Salmon Hatchery, which had an expiration date of 12/31/07.)
02A-0052	07/31/07	Transport and release of up to 2.00 million sockeye salmon fry at Leisure Lake. (This replaces FTP 96A-0082 for Eklutna Salmon Hatchery, which had an expiration date of 12/31/07.)
93A-0030	06/30/08	Collection of coho salmon eggs from Bear Lake and the rearing and release of no more than 0.450 million of the subsequent fry into Bear Lake.
93A-0031	06/30/08	Collection of coho salmon eggs from Bear Lake and the rearing and release of no more than 0.250 million of the subsequent smolts into Bear Lake.
93A-0032	06/30/08	Collection of up to 4.1 million sockeye salmon eggs from Bear Lake and the rearing and release of the subsequent fry into Bear Lake.

	Т	
06A-0034	06/15/06	Transfer 0.875 million Bear Lake sockeye salmon smolt to Eklutna Salmon Hatchery
06A-0033	06/15/06	Transfer 0.45 million Bear Lake coho salmon smolt to Eklutna Salmon Hatchery
04A-0053	06/30/05	Collection of up to 0.235 million coho salmon eggs from Bear Lake and the rearing and release of no more than 0.150 million of the subsequent smolts into Homer Spit.
06A-0059	06/30/08	Collection of up to 0.235 million coho salmon eggs from Bear Lake and the rearing and release of no more than 0.150 million of the subsequent smolts into Fish Creek Reservoir at Seldovia.
93A-0036	06/30/08	Collection of up to 2.2 million sockeye salmon eggs from Hidden Lake and the rearing and release of the subsequent fry into Hidden lake.
96A-0086	06/30/07	Transport and release of up to 6.0 million sockeye salmon fry at Tustumena Lake
04A-0064	10/15/09	Collection of up to 1.56 million sockeye salmon eggs from Hidden Lake and the rearing and release of the subsequent of up to 1.25 million fry into Hazel Lake.
04A-0065	10/15/09	Collection of up to 0.31 million sockeye salmon eggs from Hidden Lake and the rearing and release of the subsequent of up to 0.25 million fry into Kirschner Lake.
04A-0066	10/15/09	Collection of up to 2.5 million sockeye salmon eggs from Hidden Lake and the rearing and release of the subsequent of up to 2.0 million fry into Leisure Lake.
06A-0095	06/30/10	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, 2006

Hatchery name/Location	Trail Lakes Hatchery	
Permit holder name/Address	Cook Inlet Aquaculture Association	
	40610 Kalifornsky Beach Road	
	Kenai, AK 99611	
		_
Person to contact	Trenten T. Dodson	name
regarding this report	907-283-5761	phone
		-
DECLARATION AND SIGNATURE		
I declare that the information given in th	is annual report is, to my knowledge, true	e, correct and complete.
Gary L. Fandrei	7	12/5/2006
Name of Legal Representative	_	Date
	٦	
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 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.

#### ANNUAL BROODSTOCK AND INITIAL SURVIVAL REPORT

Complete this schedule for each species/ str	ock of eggs taken this		I IAL SURVI			Hatchery	
1. Species	Sockeye Salmon	,				Lakes H	atchery
Donor stream (name/number):	Bear Lake (Sewa	rd) 231	-30-10080-20	10-3065-40			atchery
Adults used for broodstock		females		males		acks	4,060 total
Average length and weight of adults			2,002	maics	)	doks	1,000
females>		cm		kg			
males>		cm		kg			
5. Average fecundity (eggs/female):	3,115			3			
6. Eggtake dates:	7/26-8/18						
7. Number of green eggs taken:	6,087,000						
8. Number placed in hatchery <sup>1</sup>	6,087,000						
9. Number surviving to eyed	5,444,000		89.44%	% survival <sup>2</sup>	2		
10. Describe procedures used for egg		on of in					
#9 Poor quality broodstock and poor e			-				
#10 All eggs and milt transferred directly to	Trail Lakes Hatchery.	Delaye	ed fertilization to	echnique use	d follov	ving ADF&	G
Sockeye Salmon protocol. Surv	ival estimates base	ed on a	verage egg w	eights.			
1. Provide explanation if greater than numb	er of green eggs take	2. Prov	ide explanation	for survivals	less th	an 90%.	
	SCHEE	ULE	A-2				
ANNUAL BE	ROODSTOCK AN			IVAL REP	ORT		
Complete this schedule for each species/ sto						Hatchery	
1. Species	Sockeye Salmon				Trail	Lakes H	atchery
Donor stream (name/number):	Meadow Creek (E	Big Lake	e) 247-50-103	330-2050			a.c.,
Adults used for broodstock	2,864	_	2,986		i	acks	5,850 total
4. Average length and weight of adults			_,,,,,		,		
females>		cm		kg			
males>		cm		kg			
5. Average fecundity (eggs/female):	2,284						
6. Eggtake dates:	8/8-8/18						
7. Number of green eggs taken:	6,483,000						
8. Number placed in hatchery <sup>1</sup>	6,483,000						
9. Number surviving to eyed	5,895,000		90.93%	% survival2	2		
10. Describe procedures used for egg	takes and evaluati	on of in	-hatchery su	rvivals:			
#10 All eggs and milt transferred dire	ectly to Trail Lakes	Hatche	ry. Delayed	fertilization	techni	que used	following
ADF&G Sockeye Salmon protocol. S	urvival estimates b	ased o	n average eg	g weights.			
1. Provide explanation if greater than numb	er of green eggs take	2. Prov	ide explanation	for survivals	less th	an 90%.	
	SCHE	DULE	E A-3				
ANNUAL BF	ROODSTOCK AN	ID INI	TIAL SURV	IVAL REP	ORT		
Complete this schedule for each species/ st	ock of eggs taken this	year.		Trail	Lakes	Hatchery	
1. Species	Sockeye Salmon				<u>Trail</u>	Lakes H	atchery
2. Donor stream (name/number):	Hidden Lake (Ker						
3. Adults used for broodstock	2,340		2,350	males	j	acks	4,690 total
4. Average length and weight of adults	s used for broodsto	CK I		1			
females>		cm		kg			
males>		cm		kg			
5. Average fecundity (eggs/female):	- / /						
6. Eggtake dates:	9/12-9/26						
7. Number of green eggs taken:							
8. Number placed in hatchery <sup>1</sup>		ı					
9. Number surviving to eyed				% survival <sup>2</sup>	1		
10. Describe procedures used for egg			-				
#10 All eggs and milt transferred dire					techni	que used	following
ADF&G Sockeye Salmon protocol. S							
1. Provide explanation if greater than numb	er of green eggs take	<ol><li>Prov</li></ol>	ide explanation	ntor survivals	less th	an 90%.	

# ANNUAL BROODSTOCK AND INITIAL SURVIVAL REPORT

Complete this schedule for each species/ st	s yea		Trail I	Lakes Hatchery	,	
1. Species	Coho Salmon				Trail Lakes I	Hatchery
2. Donor stream (name/number):	Bear Lake (Sewa	rd) 231-3	0-10080-2	010-3065-40	10-0010	
3. Adults used for broodstock	359	females	245	males	jacks	604 to
4. Average length and weight of adults	s used for broodsto	ock		_		<u> </u>
females>		cm		kg		
males>		cm		kg		
<ol><li>Average fecundity (eggs/female):</li></ol>						
6. Eggtake dates:	10/5-10/17					
7. Number of green eggs taken:						
8. Number placed in hatchery <sup>1</sup>						
9. Number surviving to eyed			#DIV/0!	% survival <sup>2</sup>		
10. Describe procedures used for egg	takes and evaluat	ion of in-l	natchery su	ırvivals:		
#10 575,000 eggs and milt were tran	sferred to the Trai	l Lakes H	atchery. D	elayed fertiliz	zation techniq	ue used.
566,000 eggs were transferred to Tra	il Lakes Hatchery	after imm	ediate on-	site fertilizatio	on technique.	
1. Provide explanation if greater than numb	er of green eggs take	2. Provid	e explanatio	n for survivals I	less than 90%.	· · · · · · · · · · · · · · · · · · ·

## 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.

reported last year by species and stock.								
FISH CULTUR	E REPORT						Trail L	_akes Hatchery
Species:	Species: Sockeye Stock:					Broo	od year:	2004
A. Lifestage Infor								
	Actual	% cum						
	number	survival		s- betwe	en hat	cheries (annota	ite)	
<ol> <li>Green eggs</li> </ol>	5,661,000	100%						
<ol><li>Eyed eggs</li></ol>	4,989,000	88%						
<ol><li>Emergent fry</li></ol>	4,839,000	85%						
4. Fed fry	4,742,000	84%	fry and pre	smolts rel	leased	in 2005		
5. Smolts	1,065,000	19%						
B. Release Informa	tion							
	Release	!		Siz	:e	Expected		Year(s)
Site	Number	date	lifestage	gm/fish	mm/fish	adult return		of return
Bear Lake (Seward)	2,416,000	6/27-6/28/05	fry	0.74			108,000	2008, 2009
Bear Lake (Seward)	604,000	11/8-11/10/05	presmolt	2.87			24,000	2008, 2009
Bear Lake (Seward)	979,000	5/22-6/9/06	smolt	10			40,000	2008, 2009
Total:	3,999,000							
C. Tagging/Marki	na							
6. Number of fish r	_	ged (by relea	se group an	nd metho	d of m	arking)		
	3.	<b>5</b> (- <b>)</b>	3 - 1			37		
	Fry Hatch Cod	le: H4	Rbr: 2:	1.4				
	Presmolt Code		Rbr: 1:1	1.2,2.4				
	Smolt Hatch C	ode: 3,3H3	Rbr: 1:	1.3,2.3,+3	3.3			
D. Other								
7. Report any dise	ases, rearing	problems, or	significant r	nortalitie	s amo	ng these fish.		
	Please see Al	F&G Fish Pat	hology Section	on Access	sion No	s. 2006-0048, 20	06-0004	
			5,					

## 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 CULTUR	-	OUK.					Trail L	_akes Hatchery
Species:	Sockeye	Stock:	Bear Lake	(Sewar	d)	Bro	ood year:	2005
A. Lifestage Infor	mation							
	Actual	% cum						
	number	survival		- betwe	en hat	cheries (annot	ate)	
1. Green eggs	4,002,000	100%						
<ol><li>Eyed eggs</li></ol>	3,618,000	90%						
<ol><li>Emergent fry</li></ol>	3,509,000	88%						
4. Fed fry	3,404,000	85%				Section B)		
5. Smolts	737,000	18%	for release	e in 2007	7			
B. Release Informa	tion							
	Release	<del></del>		Si	ze	Expected		Year(s)
Site	Number		lifestage	{	mm/fish	adult return		of return
Bear Lake (Seward)	2,414,000	6/21-6/22 06	fry	0.52			108,000	2009, 2010
,							·	
Total:	2,414,000				•			
C. Tagging/Marki	na	-						
6. Number of fish	-	and (by rologe	co aroup an	d moth	nd of m	arkina)		
o. Number of fish i	markeu or tag	ged (by releas	se group an	iu mem	Ju oi iii	arking)		
	Fry Hatch Cod	le (	6H I	Rbr: 1:1.	.6			
	Presmolt Hate	ch Code 2,1	IH R	br: 1:1.2	2,2.1			
<ul><li><b>D. Other</b></li><li>7. Report any dise</li></ul>	ases, rearing none	problems, or	significant r	mortalitie	es amo	ng these fish.		

## 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.

F	IS	Н	Cl	JL	Tι	JR	Εl	RE	ΞP	OF	₹T	
•		• •	•				_			•	٠.	

**Trail Lakes Hatchery** 

	04 1 1111	1 1 1 /1/ '\	<b>-</b> -	0004
Species: Sockeve	Stock, IHide	den Lake (Kenai)	Brood year:	12004
Openico. Locollo y c	Otook. I had	Jon Lake (Renai)	Diood your.	2007

#### A. Lifestage Information

	Actual	% cum	
	number	survival	Transfers- between hatcheries (annotate)
<ol> <li>Green eggs</li> </ol>	5,445,000	100%	
<ol><li>Eyed eggs</li></ol>	4,967,000	91%	
<ol><li>Emergent fry</li></ol>	4,917,000	90%	
4. Fed fry	4,873,000	89%	
5. Smolts	284,000	5%	released in 2006

#### **B.** Release Information

	Release	)			Si	ze	Expected	Year(s)
Site	Number	date		lifestage	gm/fish	mm/fish	adult return	of return
Hidden Lake(Kenai)	573,000	6/6	05	fry	0.119		55,700	2008, 2009
Hazel Lake	1,558,000	6/15	05	fry	0.131		62,300	2008, 2009
Leisure Lake	2,252,000	6/15	05	fry	0.125		90,000	2008, 2009
Kirschner Lake	316,000	6/15	05	fry	0.128		31,600	2008, 2009
Tutka Bay Hatchery	260,000	4/26	06	smolt	10		no estimate	2008, 2009

Total: 4,959,000

## C. Tagging/Marking

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

Hidden Lake fry Hatch Code	4,2H	Rbr: 1:1.4,2.2
Hazel Lake fry Hatch Code	2,2H	Rbr: 1:1.2,2.2
Leisure Lake fry Hatch Code	2,2H	Rbr: 1:1.2,2.2
Kirschner Lake fry Hatch Code	2,2H	Rbr: 1:1.2,2.2
Tutka Bay Hatchery smolts Hatch Code	2,2H	Rbr: 1:1.2,2.2

#### D. Other

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

Please see ADF&G Fish Pathology Section Accession Nos. 2006-0028, 2005-0071

## 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		TILL		ED	ODT
гіэп	GUI	∟ I UI	T C C	CE	URI

Species	Cookovo	Ctooks	Hiddon Lo	ko /l/on	o:)	l Brood year	2005			
Species:	Sockeye	Stock:	Hidden La	ke (Ken	ai)	Brood year	2005			
A. Lifestage Infor	mation									
	Actual	% cum								
	number	survival	Transfers	s- betwe	en hat	cheries (annotate)				
1. Green eggs	2,027,000	100%								
<ol><li>Eyed eggs</li></ol>	1,642,000	81%								
<ol><li>Emergent fry</li></ol>	1,593,000	79%								
4. Fed fry	1,545,000	76%	,							
<ol><li>Smolts</li></ol>	193,000	10%	for releas	e at Tutk	a Bay H	latchery in 2007				
B. Release Information										
	Release	) 		Si	ze	Expected	Year(s)			
Site	Number	date	lifestage	gm/fish	mm/fish	adult return	of return			
Hidden Lake	582,000	5/18 06	fry	0.089		56,000	2009, 2010			
Leisure Lake	680,000	6/29 06	fry	0.193		27,000	2009, 2010			
Total:	1,262,000									
C. Tagging/Marki	_									
<ol><li>Number of fish r</li></ol>	marked or tag	ged (by relea	se group ar	nd metho	od of m	arking)				
	Hidden Lake f					Rbr: 2:1.2,2.2,3.2				
	Leisure Lake f	ry Hatch Code	H3,1			Rbr: 2:1.3,2.1				
,										
,										
D. Other				. 1141		4 6 1				
7. Report any dise	ases, rearing	problems, or	significant r	mortalitie	es amo	ng these fish.				
					<del></del>					
•	Please see AL	DF&G Fish Pat	hology Secti	on Acces	ssion No	os. 2007-0021, 2006-0087				

#### 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**

FISH CULTUR	EKEPOKI					ı raii i	Lakes Hatchery		
Species:	Sockeye	Stock:	Meadow C	ck. (Big l	_ake)	Brood year:	2005		
A. Lifestage Info	mation								
J	Actual	% cum							
	number	survival		s- betwe	en hat	cheries (annotate)			
1. Green eggs	2,185,000	100%				,			
2. Eyed eggs	1,662,000	76%							
3. Emergent fry	1,612,000	74%							
4. Fed fry	1,564,000	72%							
5. Smolts	409,000	19%	for releas	e in 2007	,				
B. Release Informa	ntion								
B. Reiease imornie	Release	<u> </u>		Si	ze	Expected	Year(s)		
Site	Number		lifestage	<b>4</b>	mm/fish	•	of return		
Meadow Ck.	444,000		fry	0.846	11111/11311	18,000	2009, 2010		
Meadow Ck.		11/22-11/29 06		4.7			2009, 2010		
	.20,000	,,	proomon	· · · · ·		110 00111111111	2000, 2010		
Total:	870,000			-	l.		•		
C. Tagging/Marki									
6. Number of fish		ged (by relea	se group ar	nd metho	od of m	arking)			
	-					J,			
	Meadow Ck. F	ry Hatch Code	9	H4		Rbr: 2:1.4			
	Meadow Ck. F			H6		Rbr: 2:1.6			
	Meadow Ck. S	Smolt Hatch Co	ode	H2,4	ļ	Rbr: 2:1.2,2.4			
				•					
D. Other									
7. Report any dise	ases, rearing	problems, or	significant i	mortalitie	es amo	ng these fish.			
		-	_						
	none								

# 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**

						Trail Lakes Traismony
Species:	Sockeye	Stock:	English Ba	ıy Lake	Br	rood year: 2004
A. Lifestage Infor	mation					
	Actual	% cum				
	number	survival	Transfers	s- between ha	tcheries (anno	otate)
1. Green eggs	1,562,000	100%				
2. Eyed eggs	1,349,000	86%				
<ol><li>Emergent fry</li></ol>	1,309,000	84%				
4. Fed fry	1,283,000	82%	approx. 5	75,000 fry lost c	luring raceway ov	verflow
<ol><li>Smolts</li></ol>	505,000	32%	released at	t Port Graham ir	n 2006	
B. Release Informa					T = .	
	Release			Size	Expected	Year(s)
Site	Number		lifestage	gm/fish mm/fish	adult return	of return
English Bay Lake		10/10-10/12 05	presmolt	2.18		no estimate 2008, 2009
Port Graham	499,000	5/4-5/12 06	smolt	11.17		no estimate 2008, 2009
				<u> </u>		
Total:	702,000	-				
C. Tagging/Marki	-	and (by rales)	oo aroup or	d mathad of n	oorking)	
6. Number of fish r	narkeu or tag	ged (by releas	se group ar	ia memoa oi n	iaikiiig)	
,	88,000 English	n Bay Lake fry	Hatch Code	H3,	2 Rbr: 2:1.0	3 2 2
	115,000 Englis					
•	Port Graham s			H3		
•	T OIT GIAIIAIII S	SHIOR HAROH CC	Jue	113	, <del>4</del> 101. 2. 1.	.5,2.4
•						
•						
D. Other						
7. Report any dise	ases, rearing	problems, or	significant r	mortalities amo	ong these fish.	
	acce, .cag	p. 00.0, 0.	0.90		geeee	
•	On 5/4/2006 a	pprox. 73,000	fish were los	st during transpo	ort.	
•		11		<u> </u>		
•						
•						
•						
•						
•						
•						

#### 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**

**Trail Lakes Hatchery** 

Species: Coho	Stock:	Bear Creek (Seward)	Brood year:	2004

#### A. Lifestage Information

	Actual	% cum	
	number	survival	Transfers- between hatcheries (annotate)
<ol> <li>Green eggs</li> </ol>	1,673,000	100%	
<ol><li>Eyed eggs</li></ol>	1,557,000	93%	
<ol><li>Emergent fry</li></ol>	1,510,000	90%	
4. Fed fry	1,480,000	88%	
<ol><li>Smolts</li></ol>	700,000	42%	for release in 2006

#### **B.** Release Information

	Release	)			Size		Expected	Year(s)
Site	Number	date		lifestage	gm/fish	mm/fish	adult return	of return
Bear Lake (Seward)	405,000	7/3	05	fry	1.3		3,800	2007
Homer Spit	324,000	6/7-6/14	06	smolt	10.9		23,000	2007
Lowell Falls(Seward)	146,000	6/16	06	smolt	10.5		10,300	2007
Seldovia	114,000	6/6	06	smolt	10.5		8,000	2007
Bear Lake (Seward)	115,000	5/30	06	smolt	10.8		8,000	2007
Total:	1,104,000						-	

## C. Tagging/Marking

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

	Coho fry Hatch Code	3,3H	Rbr: 1:1.3,2.3	
	Coho smolt Hatch Code	3,3H2	Rbr: 1:1.3,2.3+3.2	
D. Other				
7. Report any dis	eases, rearing problems, or s	ignificant mortalities	among these fish.	
, ,	, 51		· ·	
	Please see ADF&G Fish Path	ology Section Accessi	on Nos. 2005-0077, 2005-0072	
			,	
	-			

## 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.

F	ISI	4	CI	П	١٦	П	П	<b>5</b>	F	D	F	D	<b></b>	D	т
	ΙЭΓ	7	u	U.	ᄓ	ιL	JI	₹.		К		_	u	К	

Species:	Coho	Stock:	Bear Cree	k (Seward	d)	Broo	od year: 20	05	
A. Lifestage Infor	mation								
<b>3</b>	Actual	% cum							
	number	survival		s- betwee	en hat	cheries (annota	ite)		
1. Green eggs	1,415,000	100%				,			
2. Eyed eggs	1,253,000	89%	,						
3. Emergent fry	1,215,000	86%	,						
4. Fed fry	1,179,000	83%							
5. Smolts	687,000	49%	for releas	e in 2007					
B. Release Informa	tion								
	Release	)		Size	е	Expected	Υe	ear(s)	
Site	Number	date	lifestage	gm/fish n	mm/fish	adult return	of	return	
Bear Lake(Seward)	447,000	6/20 06	fry	0.84			4,200		2008
Total:	447,000								
C. Tagging/Marki	_								
6. Number of fish i	marked or tag	ged (by relea	se group ar	nd method	d of ma	arking)			
	D		1.	110.0		DI 0400			
		ho fry Hatch C		H3,3		Rbr: 2:1.3,2.3			
		ho smolt Hatch		H2,2		Rbr: 2:1.2,2.2			
	Bear Lake Co	no smoit Hater	1 Code	H3,1		Rbr: 2:1.3,2.1			
D. Other									
7. Report any dise	ases rearing	nroblems or	significant i	mortalities	s amoi	na these fish			
7. Roport arry also	asos, rearing	problems, or	oigi iii odi it i	Tiortainio	o arrior	ng mose non.			
	Please see Al	DF&G Fish Par	thology Secti	on Access	sion No	. 2007-0034			
					,,,,,,,,				

# SCHEDULE C-1 HARVEST MANAGEMENT AND HATCHERY ADULT RETURNS

Species:	Sockeye Salmor	า			Tı	rail Lake	s Hatchery
Location of harvest/return	Leisure/Hazel						
1. Number of fish harvested under	•		adults		18,921	Ī	
Hatchery Harvest Permit			jacks			Ī	
Hatchery broodstock			•			Ť	
3. Broodstock for hatchery watersl	hed					İ	
4. Jacks						İ	
5. Excess fish (surplus to all other	requirements)					1	
6. Other: <sup>2</sup>		Below Barrier	number		820		
7. Total return to hatchery				·			19,741
8. Estimated contribution to comm	on property fisher	ries					
A. Commercial	,						
1. Troll						T	
2. Gillnet						t	
3. Seine						+	
TOTAL				<u> </u>			_
_							-
B. Sport	المناهانية	Const/DLI	Ī	-	F FF0	<u>.</u>	
C. Other:	expiain>	Sprot/PU	l		5,550		25 204
9. Total return(sum 7+8A, B, C)		<b>-</b>					25,291
	DV	Total #	cumulative				
40 5 % 4 1	BY	returning in 2006	% survival	۱۵,			
10. Estimated ocean				%			
survival by BY <sup>3</sup>				%			
				%			
				%			
				%			
				•			
11. Average size of fish sold		ND	<length-cm< td=""><td></td><td>2.2</td><td>wt-kg</td><td></td></length-cm<>		2.2	wt-kg	
12. Date(s) of harvest			6/29/2006 to 7/19/	200		Ť	
13. Gear type or method used			Purrse Seine		-	Ì	
<b>,</b>	A // £' - I-	D. I.b (6-b./)		_	T-1-1 (		
AA Mile ala Kababan sa ta disada	A. # fish	B. Lbs (fish/roe)	C.\$/lb received		Total \$ received	1 T	
14. Whole fish harvested/sold	18,921	84,191	0.98	\$	82,374.9	1	
15. Fish donated				_		T	
16. Carcasses sold				\$	-	1	
17. Roe processed/sold				\$	-	ļ	
<ol><li>18. Broodstock disposed</li></ol>							
19. Total dollars received (sum line	es 14,16,17)					\$	82,375
20. Total corporate revenue4	sources	all source	ces	\$	2,232,574.00		
21. Amount required to recover co	rporate costs			\$	2,114,398.00	Ī	
22. Total surplus or deficit at corpo		e 21)		Ψ		\$	118,176
22. Total culpido of donoit at corpe	314H011(III10 20 III10	<i>5</i> <b>-</b> 1 <i>)</i>				Ψ	110,110
-							
-							

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

<sup>&</sup>lt;sup>2</sup> Other fish. (e.g. fish remaining in saltwater after egg take is complete, straying).

<sup>&</sup>lt;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 incom rental and/or lease income, revenues from sales proceeds of assets and inventory Period covered is January 1 – December 31.

#### HARVEST MANAGEMENT AND HATCHERY ADULT RETURNS

Species:	Sockeye Salmo	n		_ T	rail Lakes	s Hatchery
Location of harvest/return	Kirschner Lake					
					<del>-</del>	
<ol> <li>Number of fish harvested under</li> </ol>	•		adults			
Hatchery Harvest Permit			jacks		4	
Hatchery broodstock						
<ol><li>Broodstock for hatchery waters!</li></ol>	ned				- ↓	
4. Jacks	4				- ↓	
5. Excess fish (surplus to all other	requirements)		<del>-</del>			
6. Other: 2	explain>	•	number	•		
7. Total return to hatchery					26,130	
8. Estimated contribution to comm	on property fishe	eries				
A. Commercial					_	
1. Troll						
2. Gillnet						
3. Seine				24,130		
TOTAL						24,130
B. Sport			_			
C. Other:	explain>	•				
9. Total return(sum 7+8A, B, C)						50,260
		Total #	cumulative			
	BY	returning in 2006	% survival	-		
10. Estimated ocean				%		
survival by BY <sup>3</sup>				%		
				%		
				%		
				%		
			-		_	
<ol><li>Average size of fish sold</li></ol>		ND	<length-cm< td=""><td></td><td>wt-kg</td><td></td></length-cm<>		wt-kg	
12. Date(s) of harvest		7,	/7/2006 to 7/14/200	06		
<ol><li>Gear type or method used</li></ol>			Purse Seine			
	A. # fish	B. Lbs (fish/roe)	C.\$/lb received	·		
<ol><li>14. Whole fish harvested/sold</li></ol>	26,310	106,925	0.50	\$ 53,939.8		
15. Fish donated					_	
16. Carcasses sold				\$ -		
17. Roe processed/sold				\$ -		
<ol><li>Broodstock disposed</li></ol>						
19. Total dollars received (sum line	es 14,16,17)	1			\$	53,940
20. Total corporate revenue <sup>4</sup>	sources	all source	ces	\$ 2,232,574.00		
21. Amount required to recover co				\$ 2,114,398.00		
22. Total surplus or deficit at corpo	oration(line 20-lin	e 21)			\$	118,176
-						
-						

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

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

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

<sup>&</sup>lt;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 inventor. Period covered is January 1 – December 31

# SCHEDULE C-3 HARVEST MANAGEMENT AND HATCHERY ADULT RETURNS

Species:	Sockeye Salmor	1			Ti	rail Lake	s Hatchery
Location of harvest/return	Bear Lake						
						т	
Number of fish harvested under			adults		34,655	-	
Hatchery Harvest Permit			jacks		4.000		
2. Hatchery broodstock					4,060	<u> </u>	
Broodstock for hatchery watersh	nea				8,338	<u> </u>	
<ul><li>4. Jacks</li><li>5. Excess fish (surplus to all other</li></ul>	roquiromonto)					ł	
6. Other: <sup>2</sup>		Fish in Creek	l numbor		4	ł	
7. Total return to hatchery	explain>	I ISII III CIEEK	number	<u> </u>	4		47,057
Estimated contribution to comm	on property fisher	·ios					41,031
A. Commercial	on property listies	163					
1. Troll						T	
2. Gillnet						<u>.</u>	
3. Seine					27,793	<u>.</u>	
TOTAL					21,195		27,793
B. Sport							21,193
C. Other:	explain>		Ī			1	
	explairi>		l				74,850
9. Total return(sum 7+8A, B, C)		Total #	cumulative				74,630
	ВҮ	returning in 2006	% survival				
10 Fatimated ages	БТ	returning in 2006	% Survivai	%			
10. Estimated ocean survival by BY <sup>3</sup>				-			
survival by BY				% %			
				-			
				%			
				%			
11 Average size of fish cold	Г	ND	I donath am		2.2	Tuet tea	
11. Average size of fish sold	-	עא	<length-cm< td=""><td></td><td>2.3</td><td>wt-kg</td><td></td></length-cm<>		2.3	wt-kg	
12. Date(s) of harvest			Purse Seine and \	Mair		<u> </u>	
13. Gear type or method used	Į.		Purse Seine and V	veii		1	
	A. # fish	B. Lbs (fish/roe)	C.\$/lb received	ъ.	Total \$ received	1	
14. Whole fish harvested/sold	30,339	101,862	1.30		132,382.6	Í	
15. Fish donated	4,316	22,566	1.50	Ψ	102,002.0	1	
16. Carcasses sold	4,010	22,000		\$		ī	
17. Roe processed/sold				\$		ŧ	
18. Broodstock disposed				Ψ		1	
19. Total dollars received (sum line	LI		l			\$	132,383
20. Total corporate revenue <sup>4</sup>	sources	all source	200	\$	2,232,574.00	Ψ	132,303
21. Amount required to recover co	L	all source	JC3	\$	2,114,398.00	<u>.</u>	
22. Total surplus or deficit at corpo	•	\ 21\		Ψ	2,114,390.00	\$	118,176
22. Total surplus of deficit at corpo	ration(inte 20-inte	, 21)				Ψ	110,170

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

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

<sup>&</sup>lt;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 incommental and/or lease income, revenues from sales proceeds of assets and inventory. Period covered is January 1 – December 31

# SCHEDULE C-4 HARVEST MANAGEMENT AND HATCHERY ADULT RETURNS

Species:	Coho Salmon			Т	rail Lakes Ha	atcherv
Location of harvest/return	Bear Lake					•
<ol> <li>Number of fish harvested under</li> </ol>	•		adults	1,511		
Hatchery Harvest Permit			jacks			
Hatchery broodstock				604		
3. Broodstock for hatchery waters	hed			2,042	<u> </u>	
4. Jacks	4					
5. Excess fish (surplus to all other			7		<u> </u>	
6. Other: <sup>2</sup>	explain>		number			
7. Total return to hatchery						4,157
8. Estimated contribution to comm	on property fisheri	es				
A. Commercial					<b>-</b>	
1. Troll					<u> </u>	
2. Gillnet					<u> </u>	
3. Seine						
TOTAL						-
B. Sport			Ţ		1	
C. Other:	explain>					
9. Total return(sum 7+8A, B, C)		<b>-</b>				4,157
	DV	Total #	cumulative			
40 Fatherated assess	ВҮ	returning in 2006	% survival	lo.		
10. Estimated ocean				%		
survival by BY <sup>3</sup>				%		
				%		
				%		
				%		
11 Average size of fish sold	F		Jonath om		Turt ka	
<ul><li>11. Average size of fish sold</li><li>12. Date(s) of harvest</li></ul>	F		<length-cm< td=""><td></td><td>wt-kg</td><td></td></length-cm<>		wt-kg	
. ,	-				1	
13. Gear type or method used	L				1	
	A. # fish	B. Lbs (fish/roe)	C.\$/lb received	D. Total \$ received	4	
14. Whole fish harvested/sold	Α. # 11311	D. LD3 (11311/10C)	<u>Ο.ψ/ΙΒ ΤΟΟΟΙΨΟΔ</u>	\$ -	Ĵ	
15. Fish donated				Ψ	1	
16. Carcasses sold				\$ -	T	
17. Roe processed/sold				\$ -	1	
18. Broodstock disposed				<b>*</b>	4	
19. Total dollars received (sum lin	es 14.16.17)		<u></u>		\$	-
20. Total corporate revenue <sup>4</sup>	sources	all source	ces	\$ 2,232,574.00	*	
21. Amount required to recover co		an oour	500	\$ 2,114,398.00	1	
22. Total surplus or deficit at corpo		21)		Ψ =,,σσσ.σσ	\$ 1	18,176
22. Total outplus of deficit at corp.	31411011(11110 20 11110	,			Ψ .	10,110
-						
-						
-						
-						

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

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

<sup>&</sup>lt;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 incom rental and/or lease income, revenues from sales proceeds of assets and inventory. Period covered is January 1 – December 31

# SCHEDULE C-5 HARVEST MANAGEMENT AND HATCHERY ADULT RETURNS

Species:	Sockeye Salmor	n		7	Γrail Lake	s Hatchery
Location of harvest/return	Hidden Lake					
				-		
1. Number of fish harvested under			adults			
Hatchery Harvest Permit			jacks			
2. Hatchery broodstock				4,690		
3. Broodstock for hatchery watersh	ned			33,852	<u>:</u>	
4. Jacks						
5. Excess fish (surplus to all other	requirements <sup>1</sup> )					
6. Other: <sup>2</sup>		Otolith Samples (CIAA)	number	92	!	
7. Total return to hatchery	·	, , ,	•			38,634
8. Estimated contribution to comm	on property fishe	ries				·
A. Commercial						
1. Troll					1	
2. Gillnet				21,049	7	
3. Seine				ŕ	1	
TOTAL						21,049
B. Sport				4,030	)	,
C. Other:	explain>	Personal Use	•	3,720		
9. Total return(sum 7+8A, B, C)			•			67,433
( , , , , ,		Total #	cumulative			- ,
	BY	returning in 2006	% survival			
10. Estimated ocean		<b>3</b>	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	<b>1</b> %		
survival by BY <sup>3</sup>				%		
Survival by DT				% %		
				/% //		
				/% //		
				70		
11. Average size of fish sold	•		<length-cm< td=""><td></td><td>wt-kg</td><td></td></length-cm<>		wt-kg	
12. Date(s) of harvest			violigai om	1	<b></b> "" "9	
13. Gear type or method used					+	
To. Coar type of motified acca						
	A. # fish	B. Lbs (fish/roe)	C.\$/lb received	D. Total \$ receive	ed	
14. Whole fish harvested/sold			***************************************	\$ -		
15. Fish donated	92	396		, <del>T</del>		
16. Carcasses sold				\$ -	1	
17. Roe processed/sold				\$ -	7	
18. Broodstock disposed				, <del>,</del>	}	
19. Total dollars received (sum line	es 14.16.17)		•		\$	-
20. Total corporate revenue <sup>4</sup>	sources	all source	200	\$ 2,232,574.00	-	
21. Amount required to recover co		all sould	,63	\$ 2,114,398.00		
22. Total surplus or deficit at corpo	•	0.21)		Ψ 2,114,390.00	\$	118,176
22. Total surplus of deficit at corpo	nation(iiile 20-iiile	521)			Ψ	110,170
	<del></del>					

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

<sup>&</sup>lt;sup>2</sup> Other fish. (e.g. fish remaining in saltwater after egg take is complete, straying).

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

<sup>&</sup>lt;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 incom rental and/or lease income, revenues from sales proceeds of assets and inventor. Period covered is January 1 – December 31.

# SCHEDULE C-6 HARVEST MANAGEMENT AND HATCHERY ADULT RETURNS

Species:	Sockeye Salmor	١		T	rail Lake	s Hatchery
Location of harvest/return	Big Lake					
				•		
1. Number of fish harvested under	•		adults			
Hatchery Harvest Permit			jacks			
Hatchery broodstock				5,850		
3. Broodstock for hatchery watersl	hed			26,712		
4. Jacks						
5. Excess fish (surplus to all other	requirements <sup>1</sup> )					
6. Other: 2		Otolith Samples (ADF&G)	number	247		
7. Total return to hatchery	' '	1 7	1			32,809
8. Estimated contribution to comm	on property fisher	ries				·
A. Commercial	,					
1. Troll					T	
2. Gillnet				3,637	1	
3. Seine					1	
TOTAL						3,637
B. Sport				100		-,
C. Other:	explain>		Ī		1	
9. Total return(sum 7+8A, B, C)	oxpiaii i		1			36,546
0. 10.0. 10.0. (0.0. 1.0. 1, 2, 0)		Total #	cumulative			00,010
	BY	returning in 2006	% survival			
10. Estimated ocean			70 00 1110	%		
survival by BY <sup>3</sup>				%		
Survival by B1				% %		
				% %		
				/^ /%		
				J /0		
11. Average size of fish sold	1		<length-cm< th=""><th></th><th>wt-kg</th><th></th></length-cm<>		wt-kg	
12. Date(s) of harvest	•		< le rigui - ci ri		wi-kg	
. ,					+	
13. Gear type or method used						
	A. # fish	B. Lbs (fish/roe)	C.\$/lb received	D. Total \$ receive	d	
14. Whole fish harvested/sold	Λ. # 11311	D. LD3 (IISII/IOE)	C.w/ib received	\$ -	Ĭ	
15. Fish donated				-		
16. Carcasses sold				-	7	
17. Roe processed/sold				\$ -	+	
18. Broodstock disposed				-	4	
19. Total dollars received (sum line	Oc 14 16 17)		1		\$	_
	· ·	-0		A 0.000 574.00	•	_
20. Total corporate revenue <sup>4</sup>	sources	all source	ces	\$ 2,232,574.00		
21. Amount required to recover co	•	0.4)		\$ 2,114,398.00		440.470
22. Total surplus or deficit at corpo	oration(line 20-line	e 21)			\$	118,176

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

<sup>&</sup>lt;sup>2</sup> Other fish. (e.g. fish remaining in saltwater after egg take is complete, straying).

<sup>&</sup>lt;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 incom rental and/or lease income, revenues from sales proceeds of assets and inventory. Period covered is January 1 – December 31

# SCHEDULE C-7 HARVEST MANAGEMENT AND HATCHERY ADULT RETURNS

Species:	Sockeye Salmor	า	Trail Lakes Hatchery				
Location of harvest/return	Tustumena Lake	)					
				-!			
1. Number of fish harvested under			adults				
Hatchery Harvest Permit			jacks			Ī	
2. Hatchery broodstock			-			Ì	
3. Broodstock for hatchery watersh	ned				366,592	Ī	
4. Jacks						Ī	
5. Excess fish (surplus to all other	requirements <sup>1</sup> )					Ī	
6. Other: <sup>2</sup>	explain>		number			İ	
7. Total return to hatchery			1				366,592
8. Estimated contribution to comme	on property fishe	ries					,
A. Commercial							
1. Troll						Ī	
2. Gillnet					1,211,408	1	
3. Seine					1,211,100	1	
TOTAL							1,211,408
B. Sport					5,500		1,211,400
C. Other:	explains	Personal Use	Ţ		75,000	1	
9. Total return(sum 7+8A, B, C)	CAPIGITIS	1 Clochai Coc	1		70,000		1,658,500
5. Total return(5am 7 Tox, 2, 5)		Total #	cumulative				1,000,000
	ВҮ	returning in 2006	% survival				
10. Estimated ocean		returning in 2000	70 341 1114	%			
survival by BY <sup>3</sup>				%			
Survival by B1							
				%			
				%			
				%			
44 Averes sine of fish cold						T	
11. Average size of fish sold			<length-cm< td=""><td><u> </u></td><td></td><td>wt-kg</td><td></td></length-cm<>	<u> </u>		wt-kg	
12. Date(s) of harvest						1	
13. Gear type or method used						1	
	A // 6:-1-	D. I.I (6:-I-/)	O (*/!la		<b>Γ</b> -1-1 Φ		
44.38/1.1.6/1.1.	A. # fish	B. Lbs (fish/roe)	C.\$/lb received		Total \$ received	1	
14. Whole fish harvested/sold				\$	-	<u> </u>	
15. Fish donated				۱.		T	
16. Carcasses sold				\$	-	1	
17. Roe processed/sold				\$	-	1	
18. Broodstock disposed	4.4.40.47		1				
19. Total dollars received (sum line	·			Τ.		\$	-
20. Total corporate revenue <sup>4</sup>	sources	all source	ces	\$	2,232,574.00	ļ	
21. Amount required to recover co				\$	2,114,398.00		
22. Total surplus or deficit at corpo	ration(line 20-line	e 21)				\$	118,176

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

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

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

<sup>&</sup>lt;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 incom rental and/or lease income, revenues from sales proceeds of assets and inventor. Period covered is January 1 – December 31.

# **SCHEDULE D**

# **PROJECTED RETURNS FOR 2007**

			Range in expected return		
		Total number of			
Species	Release Site	fish expected	minimum	maximum	
Sockeye (LCI)	Leisure/Hazel Lakes	105,500	No Estimate	No Estimate	
Sockeye (LCI)	Kirschner Lake	23,600	No Estimate	No Estimate	
Sockeye (LCI)	Bear Lake (Seward)	112,800	No Estimate	No Estimate	
Sockeye (UCI)	Big Lake	No Estimate	No Estimate	No Estimate	
Sockeye (UCI)	Hidden Lake	62,000	No Estimate	No Estimate	
Sockeye (UCI)	Tustumena Lake	No Estimate	No Estimate	No Estimate	
Coho (LCI)	Bear Lake (Seward)	11,800	No Estimate	No Estimate	

#### **UPDATED 2005 HARVEST MANAGEMENT AND HATCHERY ADULT RETURNS**

Species: Sockeye Salmor	n			-	Trail Lakes Hatchery
Location of harvest/return	Leisure/Hazel				-
1. Number of fish harvested	d under		adults	22,050	
Hatchery Harvest Permit			jacks		]
2. Hatchery broodstock					
3. Broodstock for hatchery	watershed				
4. Jacks					<u> </u>  -
<ol><li>Excess fish (surplus to al</li></ol>	I other requirem	ents)	•		
6. Other: <sup>2</sup>		Below Barrier	number	1	
7. Total return to hatchery					22,051
8. Estimated contribution to	common prope	rty fisheries			
A. Commercial					٦
1. Troll					4
2. Gillnet				40.000	4
3. Seine <b>TOTAL</b>				40,333	40,333
B. Sport				650	40,333
C. Other:	explain>			4,900	1
	·			4,500	27.004
9. Total return(sum 7+8A,	В, С)	T. ( . 1 #			67,934
	BY	Total # returning in 05	cumulative % survival		
10. Estimated ocean		Tetarring in oc	/0 Sul VIVal	<b>]</b> %	
survival by BY <sup>3</sup>				%	
Survival by B1				% %	
				%	
	<u> </u>			%	
		LID	l	1	1
11. Average size of fish sol		ND C/G	<li>length-cm</li>		wt-kg
12. Date(s)/location(s) of ha		6/2	26/2005 to 7/15/20 Purse Seine	005	4
13. Gear type or method us	ea		Purse Seine		J
	A. # fish	B. Lbs (fish/roe)		Total \$ received	
14. Whole fish harvested/so	22,050	127,828	0.72	\$ 92,036.2	]
15. Fish donated				1	-
16. Carcasses sold				\$ -	
17. Roe processed/sold				\$ -	]
18. Broodstock disposed		<u> </u>			
19. Total dollars received (s				1	\$ 92,036
20. Total corporation reven	sources	all so	urces	\$2,181,361.16	
21. Amount required to reco	over corporation	costs		\$1,992,638.82	
22. Total surplus or deficit a	at corporation(lin	e 20-line 21)			\$ 188,722
No Changes from 2005 AF					
-					
	_				

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

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

<sup>&</sup>lt;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

#### UPDATED 2005 HARVEST MANAGEMENT AND HATCHERY ADULT RETURNS

Species: Sockeye Salmon	n				Trail Lakes Hatchery
Location of harvest/return	Kirschner Lake				_
1. Number of fish harvested	d under		adults	14,969	
Hatchery Harvest Permit			jacks		
<ol><li>Hatchery broodstock</li></ol>					
3. Broodstock for hatchery	watershed				
4. Jacks					
5. Excess fish (surplus to al					
6. Other: <sup>2</sup>		Below Barrier	number	ND	
7. Total return to hatchery					14,969
8. Estimated contribution to	common prope	rty fisheries			
A. Commercial					1
1. Troll					
2. Gillnet					
3. Seine					
TOTAL			1		-
B. Sport					
C. Other:	explain>				
9. Total return(sum 7+8A,	B, C)				14,969
		Total #	cumulative		
	BY	returning in 05	% survival	l	
10. Estimated ocean				%	
survival by BY 3				%	
				%	
				%	
				%	
11. Average size of fish sole	d	ND	<length-cm< td=""><td>17</td><td>wt-kg</td></length-cm<>	17	wt-kg
12. Date(s)/location(s) of ha			9/2005 to 7/15/20		Wt-kg
13. Gear type or method us		17	Purse Seine	00	
ro. Godi typo or morriod do	,64		1 dide Cenie		I
	A. # fish	B. Lbs (fish/roe)	C.\$/lb received	Total \$ received	
14. Whole fish harvested/so		54,913	0.4025	\$ 22,102.5	]
15. Fish donated	•	,			ı
16. Carcasses sold				\$ -	
17. Roe processed/sold				\$ -	
18. Broodstock disposed					•
19. Total dollars received (s	sum lines 14,16,	17)			\$ 22,102
20. Total corporation reven	sources	all so	urces	\$2,181,361.16	
21. Amount required to reco	over corporation	costs		\$1,992,638.82	
22. Total surplus or deficit a			!		\$ 188,722
·	•				
No Changes from 2005 AR					

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

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

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

<sup>&</sup>lt;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.

## UPDATED 2005 HARVEST MANAGEMENT AND HATCHERY ADULT RETURNS

Species: Sockeye Salmo	n				Trail Lakes Hatchery
Location of harvest/return	Bear Lake				_
1. Number of fish harvested			adults	37,654	
Hatchery Harvest Permit			jacks		
Hatchery broodstock				3,122	
3. Broodstock for hatchery	watershed			10,285	
4. Jacks		4			_
5. Excess fish (surplus to a			•		
6. Other: <sup>2</sup>	explain>	Fish in Creek	number	10	
7. Total return to hatchery	/				51,071
8. Estimated contribution to	common prope	rty fisheries			
A. Commercial					-
1. Troll					
2. Gillnet					
3. Seine				19,018	
TOTAL					19,018
B. Sport		Γ	•	500	
C. Other:	explain>				
9. Total return(sum 7+8A,	B, C)				70,589
		Total #	cumulative		
Ī	BY	returning in 05	% survival	•	
10. Estimated ocean				%	
survival by BY <sup>3</sup>				%	
				%	
				%	
				%	
		_	•		-
11. Average size of fish sole		ND	<length-cm< td=""><td></td><td>wt-kg</td></length-cm<>		wt-kg
12. Date(s)/location(s) of ha			2/2005 to 7/15/20		
13. Gear type or method us	ed	P	urse Seine and W	eir	
	A. # fish	B. Lbs (fish/roe)		Total \$ received	1
14. Whole fish harvested/se	36,352	148,848	0.78	\$ 115,361.4	]
15. Fish donated	1,302	5,339		•	1
16. Carcasses sold				\$ -	-
17. Roe processed/sold				\$ -	
18. Broodstock disposed	3,122	12,800			445.004
19. Total dollars received (s					\$ 115,361
20. Total corporation reven	sources		urces	\$2,181,361.16	
21. Amount required to reco	•			\$1,992,638.82	
22. Total surplus or deficit a	at corporation(lin	ie 20-line 21)			\$ 188,722
No Observe ( 2005 15					
No Changes from 2005 AR					

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

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

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

<sup>&</sup>lt;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.

#### **UPDATED 2005 HARVEST MANAGEMENT AND HATCHERY ADULT RETURNS**

Species: Coho Salmon					Trail Lakes Hatche
Location of harvest/return	Bear Lake				_
1. Number of fish harvested	d under		adults	1,536	
Hatchery Harvest Permit			jacks		
2. Hatchery broodstock				808	
3. Broodstock for hatchery	watershed			546	
4. Jacks					
5. Excess fish (surplus to al	ll other requirem	ents)			
6. Other: <sup>2</sup>	explain>	Morts	number	57	
7. Total return to hatchery			!		2,947
8. Estimated contribution to		rty fisheries			•
A. Commercial		·			
1. Troll					
2. Gillnet					
3. Seine					
TOTAL					-
B. Sport				4,788	
C. Other:	explain>			,	
9. Total return(sum 7+8A,					7,73
or rotal rotal (call r rot),	_, _,	Total #	cumulative		.,
	BY	returning in 05	% survival		
10. Estimated ocean			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	%	
survival by BY <sup>3</sup>				%	
Survival by bi				%	
-				%	
-				%	
L				70	
11. Average size of fish solo	d	ND	<length-cm< td=""><td>ND</td><td>wt-kg</td></length-cm<>	ND	wt-kg
12. Date(s)/location(s) of ha			/2005 to 10/23/20		i ne ng
13. Gear type or method us		0/ 1	Weir	300	
10. Gear type of method as	loca		VVCII		I
	A. # fish	B. Lbs (fish/roe)	C.\$/lb received	Total \$ received	
14. Whole fish harvested/so		,		\$ -	
15. Fish donated	2,344	ND		!	!
16. Carcasses sold	·			\$ -	
17. Roe processed/sold				\$ -	
18. Broodstock disposed					1
19. Total dollars received (s	sum lines 14.16.	17)			\$ -
20. Total corporation reven	1	all so	urces	\$2,181,361.16	,
21. Amount required to reco			41000	\$1,992,638.82	
22. Total surplus or deficit a				ψ1,002,000.02	\$ 188,722
22. Total surplus of deficit a	at corporation(iii)	C 20 IIIIC 21)			100,722
No Changes from 2005 AR					

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

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

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

<sup>&</sup>lt;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.

#### **UPDATED 2005 HARVEST MANAGEMENT AND HATCHERY ADULT RETURNS**

Species: Sockeye Salmo	n			_	Trail Lakes Hatchery
Location of harvest/return	Hidden Lake	•			
1. Number of fish harvested	d under		adults		
Hatchery Harvest Permit			jacks		
2. Hatchery broodstock			-	2,093	
3. Broodstock for hatchery	watershed			10,907	
4. Jacks					
5. Excess fish (surplus to a	Il other requirem	ents)			
6. Other: <sup>2</sup>	explain>		number		1
7. Total return to hatchery			Hambol		13,000
8. Estimated contribution to		rty fisheries			10,000
A. Commercial	oommon prope	ity nononos			
1. Troll					1
2. Gillnet				28,467	1
3. Seine				20,407	
TOTAL					28,467
B. Sport				2,987	20,401
C. Other:	evnlain	Personal Use		2,674	
9. Total return(sum 7+8A,		i ersonar ose		2,074	47,128
9. Total return(Sum 7+0A,	ь, с,	Total #	cumulative		47,120
	ВҮ	returning in 05	% survival		
10. Estimated ocean	БІ	returning in 05	% Sui vivai	]%	
				1	
survival by BY <sup>3</sup>				%	
				%	
				%	
				<b>%</b>	
			la a		1
11. Average size of fish sol			<length-cm< td=""><td></td><td>wt-kg</td></length-cm<>		wt-kg
12. Date(s)/location(s) of ha					
13. Gear type or method us	sed				
				_	
	A. # fish	B. Lbs (fish/roe)	C.\$/lb received	Total \$ received	1
14. Whole fish harvested/so	old			\$ -	
15. Fish donated					1
16. Carcasses sold				\$ -	
17. Roe processed/sold				\$ -	
18. Broodstock disposed					
19. Total dollars received (s		17)		_	\$ -
20. Total corporation reven	sources	all so	urces	\$2,181,361.16	
21. Amount required to reco	over corporation	costs		\$1,992,638.82	
22. Total surplus or deficit a	at corporation(lin	e 20-line 21)		•	\$ 188,722
		·			

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

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

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

<sup>&</sup>lt;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.

#### **UPDATED 2005 HARVEST MANAGEMENT AND HATCHERY ADULT RETURNS**

Species: Sockeye Salmor	n			_	Trail Lakes Hatchery				
Location of harvest/return	Big Lake (Mead	ow Creek)							
1. Number of fish harvested	d under	i e							
Hatchery Harvest Permit									
2. Hatchery broodstock									
3. Broodstock for hatchery									
4. Jacks									
5. Excess fish (surplus to al	ll other requirem								
6. Other: <sup>2</sup>	explain>	170							
7. Total return to hatchery			14,555						
8. Estimated contribution to common property fisheries									
A. Commercial									
1. Troll									
2. Gillnet				7,711					
3. Seine				,					
TOTAL					7,711				
B. Sport				102	,				
C. Other:	explain>	Personal Use							
9. Total return(sum 7+8A,	•				22,368				
,	_, -,	Total #	cumulative		,				
	BY	returning in 05	% survival						
10. Estimated ocean		g cc	70 0000 777 000	<b>1</b> %					
survival by BY <sup>3</sup>				%					
Survival by B1				%					
•				% %					
•				% %					
l				70					
11. Average size of fish solo	d		<length-cm< td=""><td></td><td>wt-kg</td></length-cm<>		wt-kg				
12. Date(s)/location(s) of harvest				<u> </u>	I WE KG				
13. Gear type or method used									
13. Gear type of method us	ecu								
	A. # fish	B. Lbs (fish/roe)	C \$/lb received	Total \$ received					
14. Whole fish harvested/so		2. 255 ()	0.47.2.7000.700	\$ -					
15. Fish donated	2,164				I				
16. Carcasses sold	, -			\$ -					
17. Roe processed/sold				\$ -					
18. Broodstock disposed				1 *					
19. Total dollars received (s	sum lines 14.16.	17)	<u>.</u>		-				
20. Total corporation reven	<del></del>								
21. Amount required to reco		\$2,181,361.16 \$1,992,638.82							
22. Total surplus or deficit a	\$ 188,722								
22. Total dalpido di dolloli d	Ψ 100,722								

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

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

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

<sup>&</sup>lt;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.

#### **UPDATED 2005 HARVEST MANAGEMENT AND HATCHERY ADULT RETURNS**

Species: Sockeye Salmo	n			_	Trail Lakes Hatchery			
Location of harvest/return Tustumean Lake								
1. Number of fish harvested	d under	;						
Hatchery Harvest Permit								
2. Hatchery broodstock								
3. Broodstock for hatchery								
4. Jacks								
5. Excess fish (surplus to a								
6. Other: <sup>2</sup>	explain>	number	•					
7. Total return to hatchery					346,012			
8. Estimated contribution to	common proper	ty fisheries			-			
A. Commercial								
1. Troll								
2. Gillnet				828,848				
3. Seine								
TOTAL					828,848			
B. Sport				8,000	,			
C. Other:	explain>	Personal Use		78,356				
9. Total return(sum 7+8A,					1,261,216			
,		Total #	cumulative		, ,			
	BY	returning in 05	% survival					
10. Estimated ocean	1998	102,609	24.60	%				
survival by BY 3	1999	601,848						
outival by D1	2001	456,885		%				
	2002	7,722		%				
	2002	1,122	110	%				
11. Average size of fish sol	d [		<length-cm< td=""><td></td><td>wt-kg</td></length-cm<>		wt-kg			
12. Date(s)/location(s) of harvest				Į.	ğ			
13. Gear type or method used								
	A. # fish	B. Lbs (fish/roe)	C.\$/lb received	Total \$ received	_			
14. Whole fish harvested/so	old			\$ -				
15. Fish donated					_			
16. Carcasses sold				\$ -				
17. Roe processed/sold				\$ -				
18. Broodstock disposed								
19. Total dollars received (s	sum lines 14,16,1	17)	•		-			
20. Total corporation reven								
21. Amount required to reco								
22. Total surplus or deficit a	\$ 188,722							
, , , , , , , , , , , , , , , , , , ,	,							

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

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

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

<sup>&</sup>lt;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.