

2015 ANNUAL REPORT ALASKA SALMON HATCHERY

Year Ending December 15, 2015

Hatchery name/Location
Permit holder name/Address

TRAIL LAKES HATCHERY
Cook Inlet Aquaculture Association
40610 Kalifornsky Beach Road
Kenai, AK 99611

Person to contact
regarding this report

Caroline Cherry	name
907-283-5761	phone

DECLARATION AND SIGNATURE

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

Gary Fandrei

Name of Legal Representative

12/11/15

Date


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Signature of Representative

THE FOLLOWING PARTS ARE INCLUDED IN THIS REPORTING FORM.

Part 1. REPORT OF THIS YEAR'S PERFORMANCE

Complete the following schedules of production statistics for this year, for each species/stock/brood year combination:

Schedule A: Annual Broodstock and Initial Survival Report

Schedule B: Annual Fish Culture Production Report

Schedule C: Harvest Management and Hatchery Adult Returns

Note: One Schedule C for each species/stock/project location (release site).

Part 2. PROJECTED RETURNS FOR NEXT YEAR

Complete **Schedule D**, to provide projections for each species and each release site.

Part 3. UPDATED SCHEDULES FOR PRIOR YEAR ANNUAL REPORT

Schedule F is used to update last year's Schedule C reported adult return data.

Use this form to update the information that we have on file, if known changes have occurred or numbers have been finalized since last year's report.

**SCHEDULE A-1
ANNUAL BROODSTOCK AND INITIAL SURVIVAL REPORT**

TRAIL LAKES HATCHERY

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

Use lines 3-6 to report fish captured and sacrificed as broodstock (fish that died during collection of eggs).

Use line 16 to report and describe captured fish that were released alive (for example, at remote egg-take locations).

1. Species	Sockeye				
2. Stock (donor stock/ancestral stock)	Bear Lake/Russian River/Big River Lakes				
3. Viable broodstock (spawned, eggs in incubators)	1,920	females	1,920	male	3,840 total
4. Inviabile broodstock (green/over-ripe/bad)	21	females	24	male	45 total
5. Unspawned fish (roe recovery, excess males)	-				
6. Holding mortalities (raceway, pen mortalities)	60				
7. Adults sacrificed for broodstock (sum 3 thru 6)	3,945				
8. Average length and weight of adults used for broodstock					
	females>	cm	2.4	kg	
	males>	cm	2.4	kg	
9. Average fecundity (eggs/female)	2,703				
10. Egg-take dates:	July 29 - Aug 4				
11. Number of green eggs taken	5,148,399				
12. Number of eggs transferred out (annotate below)	-	eyed eggs			
13. Number of eggs destroyed (annotate below)	-	eyed eggs			
14. Number of green eggs retained in hatchery ¹	5,148,399				
15. Number remaining in hatchery at eyed stage	4,786,569		92.97%	% survival ²	
16. Describe procedures used for egg takes and evaluation of in-hatchery survivals:					

Delayed Fertilization. Biomass inventory of live and dead eggs to estimate survival

1. Provide explanation if greater than number of green eggs taken. 2. Provide explanation for survivals less than 90%.

**SCHEDULE A-2
ANNUAL BROODSTOCK AND INITIAL SURVIVAL REPORT**

TRAIL LAKES HATCHERY

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

Use lines 3-6 to report fish captured and sacrificed as broodstock (fish that died during collection of eggs).

Use line 16 to report and describe captured fish that were released alive (for example, at remote egg-take locations).

1. Species	Sockeye				
2. Stock (donor stock/ancestral stock)	English Bay Lakes (Tutka & Kirschner)				
3. Viable broodstock (spawned, eggs in incubators)	486	females	490	male	976 total
4. Inviabile broodstock (green/over-ripe/bad)	22	females	41	male	63 total
5. Unspawned fish (roe recovery, excess males)	-				
6. Holding mortalities (raceway, pen mortalities)	9,396				
7. Adults sacrificed for broodstock (sum 3 thru 6)	10,435				
8. Average length and weight of adults used for broodstock					
	females>	cm	2.4	kg	
	males>	cm	2.4	kg	
9. Average fecundity (eggs/female)	2,349				
10. Egg-take dates:	Sept 24 - Oct 22				
11. Number of green eggs taken	1,141,683				
12. Number of eggs transferred out (annotate below)	-	eyed eggs			
13. Number of eggs destroyed (annotate below)	-	eyed eggs			
14. Number of green eggs retained in hatchery ¹	1,141,683				
15. Number remaining in hatchery at eyed stage	867,069		75.95%	% survival ²	
16. Describe procedures used for egg takes and evaluation of in-hatchery survivals:					

7. Broodstock was initially collected at Tutka and transported to Port Graham for rearing. Fish experienced high mortalities due to transport stress, elevated temperatures and physical damage. Additional broodstock was collected from Kirschner but again a number of fish perished due to transport stress, elevated temperatures and atypical environmental conditions

10. Five different lots (sept 24, Oct 5, 13, 19, 22)

16. Delayed fertilization and biomass inventory of live and dead eggs to determine survival

1. Provide explanation if greater than number of green eggs taken. 2. Provide explanation for survivals less than 90%.

**SCHEDULE A-3
ANNUAL BROODSTOCK AND INITIAL SURVIVAL REPORT**

TRAIL LAKES HATCHERY

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

Use lines 3-6 to report fish captured and sacrificed as broodstock (fish that died during collection of eggs).

Use line 16 to report and describe captured fish that were released alive (for example, at remote egg-take locations).

1. Species	Sockeye					
2. Stock (donor stock/ancestral stock)	Hidden Lake					
3. Viable broodstock (spawned, eggs in incubators)	635	females	635	male	1,270	total
4. Inviabile broodstock (green/over-ripe/bad)	23	females	9	male	32	total
5. Unspawned fish (roe recovery, excess males)	-					
6. Holding mortalities (raceway, pen mortalities)	11					
7. Adults sacrificed for broodstock (sum 3 thru 6)	1,313					
8. Average length and weight of adults used for broodstock						
	females>	cm	2.0	kg		
	males>	cm	2.0	kg		
9. Average fecundity (eggs/female)	2,320					
10. Egg-take dates:	sept 16, 18, 21					
11. Number of green eggs taken	1,445,598					
12. Number of eggs transferred out (annotate below)	-	eyed eggs				
13. Number of eggs destroyed (annotate below)	-	eyed eggs				
14. Number of green eggs retained in hatchery ¹	1,445,598					
15. Number remaining in hatchery at eyed stage	1,266,663		87.62%	% survival ²		
16. Describe procedures used for egg takes and evaluation of in-hatchery survivals:						

16. Delayed fertilization and biomass inventory of live and dead eggs to determine survival.

1. Provide explanation if greater than number of green eggs taken. 2. Provide explanation for survivals less than 90%.

**SCHEDULE A-4
ANNUAL BROODSTOCK AND INITIAL SURVIVAL REPORT**

TRAIL LAKES HATCHERY

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

Use lines 3-6 to report fish captured and sacrificed as broodstock (fish that died during collection of eggs).

Use line 16 to report and describe captured fish that were released alive (for example, at remote egg-take locations).

1. Species	Coho					
2. Stock (donor stock/ancestral stock)	Bear Lake/Bear Lake					
3. Viable broodstock (spawned, eggs in incubators)	168	females	112	male	280	total
4. Inviabile broodstock (green/over-ripe/bad)	4	females	-	male	4	total
5. Unspawned fish (roe recovery, excess males)	-					
6. Holding mortalities (raceway, pen mortalities)	202					
7. Adults sacrificed for broodstock (sum 3 thru 6)	486					
8. Average length and weight of adults used for broodstock						
	females>	cm	2.3	kg		
	males>	cm	2.3	kg		
9. Average fecundity (eggs/female)	3,503					
10. Egg-take dates:	Oct 12, 13, 14					
11. Number of green eggs taken	575,260					
12. Number of eggs transferred out (annotate below)	-	eyed eggs				
13. Number of eggs destroyed (annotate below)	-	eyed eggs				
14. Number of green eggs retained in hatchery ¹	575,260					
15. Number remaining in hatchery at eyed stage	522,359		90.80%	% survival ²		
16. Describe procedures used for egg takes and evaluation of in-hatchery survivals:						

3.; 4; 7. Do not include broodstock used by ADFG for their coho program.

16. On site fertilization. Biomass inventory for live and dead eggs for determining survival.

1. Provide explanation if greater than number of green eggs taken. 2. Provide explanation for survivals less than 90%.

SCHEDULE B-1 ANNUAL FISH CULTURE PRODUCTION REPORT

TRAIL LAKES HATCHERY

Complete this schedule for each species/stock of eggs (or fish) cultured this year from prior brood years. Please provide explanations for any differences in numbers of green and eyed eggs from those reported last year for this species/stock (e.g. reenumeration of inventory at eyed stage, transfers, mortality, etc.).

Species: Sockeye Stock: Bear Lake/Upper Russian Brood Year: 2013

A. Life Stage Information

	Actual number	% cum survival	Annotate transfers between hatcheries, significant mortalities, or provide other descriptive comments.
1. Green eggs	5,325,000	100.0%	
2. Eyed eggs	4,774,000	89.65%	
3. Emergent fry	4,646,000	87.25%	
4. Fed fry	4,223,000	79.31%	2,405,000 stocked as fry to Bear Lake
5. Smolts	1,818,444	34.15%	1,758,000 released as smolts to Resurrection Bay

B. Release Information

Site	Release			Size		Return	
	Number	Date	Life stage	gm/fish	mm/fish	Expected return	Return year(s)
Resurrection Bay	1,758,000	6/2/2015	Smolts	15.3		140,640	2017;2018
Total:	1,758,000						

C. Marking/Tagging

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

Release				Marking/Tagging		
Release Group ¹	Release Location	Number	Dates	Otolith Mark Pattern	Tag Code	Valid Tags
SW_Net Pen	Resurrection Bay	1,758,000	6/2/2015	2,4H		

¹Report release group as fresh or salt water; from net pen or raceway; or other rearing/release/site group description.

D. Other

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

B. Expected return is based on marine survival of 8%.

SCHEDULE B-2 ANNUAL FISH CULTURE PRODUCTION REPORT

TRAIL LAKES HATCHERY

Complete this schedule for each species/stock of eggs (or fish) cultured this year from prior brood years. Please provide explanations for any differences in numbers of green and eyed eggs from those reported last year for this species/stock (e.g. reenumeration of inventory at eyed stage, transfers, mortality, etc.).

Species: Sockeye Stock: Tutka/English Bay Brood Year: 2013

A. Life Stage Information

	Actual number	% cum survival	Annotate transfers between hatcheries, significant mortalities, or provide other descriptive comments.
1. Green eggs	2,664,000	100.0%	Mix of EBL & HL stock. All were family tracked. 2,429,794 were retained
2. Eyed eggs	4,525,555	169.88%	EBL/EBL. 227,261 were culled as HL stock. 1,675,500 were transferred ir
3. Emergent fry	3,423,082	128.49%	from EBL Second Lake (schedule b-6) and 193,000 were culled for IHN
4. Fed fry	3,417,230	128.27%	2,793,000 stocked as fry
5. Smolts	606,488	22.77%	529,900 stocked as smolts at Tutka Bay Lagoon

B. Release Information

Site	Release			Size		Return	
	Number	Date	Life stage	gm/fish	mm/fish	Expected return	Return year(s)
Tutka Bay Lagoon	523,500	5/22/2015	Smolts	14.5		52,350	2017;2018
Total:	523,500						

C. Marking/Tagging

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

Release Group ¹	Release			Marking/Tagging		
	Release Location	Number	Dates	Otolith Mark Pattern	Tag Code	Valid Tags
SW-Net Pen	Tutka Bay Lagoon	523,500	5/22/2015	2,5H		

¹Report release group as fresh or salt water; from net pen or raceway; or other rearing/release/site group description.

D. Other

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

A. All HL crosses were culled at eyed. Only EBL stock was retained. 193,500 were culled for IHN.

SCHEDULE B-4 ANNUAL FISH CULTURE PRODUCTION REPORT

TRAIL LAKES HATCHERY

Complete this schedule for each species/stock of eggs (or fish) cultured this year from prior brood years. Please provide explanations for any differences in numbers of green and eyed eggs from those reported last year for this species/stock (e.g. reenumeration of inventory at eyed stage, transfers, mortality, etc.).

Species: Sockeye Stock: Bear Lake/Upper Russian Brood Year: 2014

A. Life Stage Information

	Actual number	% cum survival	Annotate transfers between hatcheries, significant mortalities, or provide other descriptive comments.
1. Green eggs	5,292,800	100.0%	
2. Eyed eggs	4,656,250	87.97%	
3. Emergent fry	4,347,200	82.13%	180,572 culled due to IHN
4. Fed fry	4,101,400	77.49%	2,415,000 released as fry to Bear Lake
5. Smolts	1,692,900	31.98%	Retained for smolt production

B. Release Information

Site	Release			Size		Return	
	Number	Date	Life stage	gm/fish	mm/fish	Expected return	Return year(s)
Bear Lake	2,415,000	6/4/2015	Fed Fry	0.55		72,450	2018;2019
Total:	2,415,000						

C. Marking/Tagging

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

Release				Marking/Tagging		
Release Group ¹	Release Location	Number	Dates	Otolith Mark Pattern	Tag Code	Valid Tags
FW-Direct to Lake	Bear Lake	2,415,000	6/4/2015	3,2H		

¹ Report release group as fresh or salt water; from net pen or raceway; or other rearing/release/site group description.

D. Other

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

One incubator culled for IHN (180,572)
 3% fry to adult survival rate used for calculating estimated return

SCHEDULE B-5 ANNUAL FISH CULTURE PRODUCTION REPORT

TRAIL LAKES HATCHERY

Complete this schedule for each species/stock of eggs (or fish) cultured this year from prior brood years. Please provide explanations for any differences in numbers of green and eyed eggs from those reported last year for this species/stock (e.g. reenumeration of inventory at eyed stage, transfers, mortality, etc.).

Species: Sockeye Stock: Second Lake/English Bay Brood Year: 2014

A. Life Stage Information

	Actual number	% cum survival	Annotate transfers between hatcheries, significant mortalities, or provide other descriptive comments.
1. Green eggs	1,093,200	100.0%	
2. Eyed eggs	847,100	77.49%	607,100 transferred to Tutka EBL Program
3. Emergent fry	232,760	21.29%	
4. Fed fry	232,760	21.29%	200,200 released as fall fry to Second Lake
5. Smolts		0.00%	

B. Release Information

Site	Release		Life stage	Size		Return	
	Number	Date		gm/fish	mm/fish	Expected return	Return year(s)
Second Lake	200,200	10/22/2015	Fall Fry	2.59		10,010	2018;2019
Total:	200,200						

C. Marking/Tagging

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

Release				Marking/Tagging		
Release Group ¹	Release Location	Number	Dates	Otolith Mark Pattern	Tag Code	Valid Tags
FW-Direct to Lake	Second Lake	200,200	10/22/2015	4H		

¹Report release group as fresh or salt water; from net pen or raceway; or other rearing/release/site group description.

D. Other

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

Family tracking until eyed. Only mating crosses identified as non hatchery used for back-stocking program. Remaining eggs (607,110) placed into Tutka EBL Program.

Return is estimated using a 5% survival from fall fry stocking.

SCHEDULE B-6 ANNUAL FISH CULTURE PRODUCTION REPORT

TRAIL LAKES HATCHERY

Complete this schedule for each species/stock of eggs (or fish) cultured this year from prior brood years. Please provide explanations for any differences in numbers of green and eyed eggs from those reported last year for this species/stock (e.g. reenumeration of inventory at eyed stage, transfers, mortality, etc.).

Species: Sockeye Stock: Tutka/ Hidden and EBL Brood Year: 2014

A. Life Stage Information

	Actual number	% cum survival	Annotate transfers between hatcheries, significant mortalities, or provide other descriptive comments.
1. Green eggs	3,067,700	100.0%	
2. Eyed eggs	2,494,500	81.31%	26,905 culled as HL crosses. 607,110 transferred from EBL Second Lake
3. Emergent fry	2,409,100	78.53%	618,020 culled for IHN
4. Fed fry	2,483,600	80.96%	1,909,000 released as fry to Hazel, Kirschner, Leisure
5. Smolts	574,600	18.73%	retained as smolts for Tutka Bay Lagoon

B. Release Information

Site	Release			Size		Return	
	Number	Date	Life stage	gm/fish	mm/fish	Expected return	Return year(s)
Hazel Lake	621,000	6/10/2015	Fed fry	0.19		18,630	2018;2019
Kirschner Lake	237,000	6/12/2015	Fed fry	0.2		28,440	2018;2019
Leisure Lake	1,051,000	6/9/2015	Fed fry	0.2		31,530	2018;2019
Total:	1,909,000						

C. Marking/Tagging

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

Release				Marking/Tagging		
Release Group ¹	Release Location	Number	Dates	Otolith Mark Pattern	Tag Code	Valid Tags
FW-Direct to Lake	Hazel Lake	621,000	6/10/2015	3,3H3		
FW-Direct to Lake	Kirschner Lake	237,000	6/12/2015	2,2H		
FW-Direct to Lake	Leisure Lake	1,051,000	6/9/2015	2,2H		

¹Report release group as fresh or salt water; from net pen or raceway; or other rearing/release/site group description.

D. Other

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

All mating crosses kept separate. All crosses identified as Hidden Lake stock were culled (26,905). 607,100 eyed eggs added from EBL second lake program

Culled 3 incubators for IHN = 618,020.

Hazel and Leisure use a 3% fry-to-adult survival and Kirschner uses a 12% fry-to-adult survival to calculate expected returns.

SCHEDULE B-7 ANNUAL FISH CULTURE PRODUCTION REPORT

TRAIL LAKES HATCHERY

Complete this schedule for each species/stock of eggs (or fish) cultured this year from prior brood years. Please provide explanations for any differences in numbers of green and eyed eggs from those reported last year for this species/stock (e.g. reenumeration of inventory at eyed stage, transfers, mortality, etc.).

Species: Stock: Brood Year:

A. Life Stage Information

	Actual number	% cum survival	Annotate transfers between hatcheries, significant mortalities, or provide other descriptive comments.
1. Green eggs	1,647,600	100.0%	
2. Eyed eggs	1,497,100	90.87%	
3. Emergent fry	1,497,000	90.86%	released to Hidden Lake as unfed fry
4. Fed fry		0.00%	
5. Smolts		0.00%	

B. Release Information

Site	Release			Size		Return	
	Number	Date	Life stage	gm/fish	mm/fish	Expected return	Return year(s)
Hidden Lake	1,497,000	5/1/2015	Unfed Fry	0.09		22,455	2018;2019
Total:	1,497,000						

C. Marking/Tagging

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

Release Group ¹	Release			Marking/Tagging		
	Release Location	Number	Dates	Otolith Mark Pattern	Tag Code	Valid Tags
FW-Direct to Lake	Hidden Lake	1,497,000	5/1	2,1,2H		

¹Report release group as fresh or salt water; from net pen or raceway; or other rearing/release/site group description.

D. Other

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

Expected return is based on a 15% survival from fry-to-smolt and 10% from smolt-to-adult.

SCHEDULE B-8 ANNUAL FISH CULTURE PRODUCTION REPORT

TRAIL LAKES HATCHERY

Complete this schedule for each species/stock of eggs (or fish) cultured this year from prior brood years. Please provide explanations for any differences in numbers of green and eyed eggs from those reported last year for this species/stock (e.g. reenumeration of inventory at eyed stage, transfers, mortality, etc.).

Species: Stock: Brood Year:

A. Life Stage Information

	Actual number	% cum survival	Annotate transfers between hatcheries, significant mortalities, or provide other descriptive comments.
1. Green eggs	581,000	100.0%	
2. Eyed eggs	547,500	94.23%	
3. Emergent fry	531,000	91.39%	
4. Fed fry	530,000	91.22%	448,000 released as fry to Bear Lake
5. Smolts	106,000	18.24%	

B. Release Information

Site	Release		Life stage	Size		Return	
	Number	Date		gm/fish	mm/fish	Expected return	Return year(s)
Bear Lake	448,000	6/19/2015	Fed fry	1.14		5,380	2017
Total:	448,000						

C. Marking/Tagging

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

Release				Marking/Tagging		
Release Group ¹	Release Location	Number	Dates	Otolith Mark Pattern	Tag Code	Valid Tags
FW-Accl to Lake	Bear Lake	448,000	42,174	2,6H		

¹Report release group as fresh or salt water; from net pen or raceway; or other rearing/release/site group description.

D. Other

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

Expected return based on a 12% survival to smolt and a 10% survival from smolt to adult.

**SCHEDULE C-1
HARVEST MANAGEMENT AND HATCHERY ADULT RETURNS**

Complete a separate schedule for each project (location of release/return), stock (e.g. fall or summer, if applicable), and species.

TRAIL LAKES HATCHERY

Species: Sockeye
Location of project: Bear Lake/Resurrection Bay

A. Hatchery Escapement

1. Cost-recovery fish (line 17a & 17b): traditional harvest and roe-recovery fish	92,596
2. Adults sacrificed as broodstock (Schedule A line 7) minus roe-recovery fish (17b)	3,945
3. Escapement for hatchery watershed (as required in permit)	9,560
4. Jacks	-
5. Other ¹ (annotate in comments section)	2,056
6. Other ¹ (annotate in comments section)	69
7. Other ¹ (annotate in comments section)	
8. Total hatchery escapement	108,226

B. Common Property Harvest

9. Commercial harvest ²	
a. Troll	
b. Gillnet	
c. Seine	4,633
d. Other (annotate in comments section)	
Total commercial harvest	4,633
10. Noncommercial harvest ²	
a. Sport	12,000
b. Personal Use	
c. Subsistence	
d. Other (annotate in comments section)	
Total noncommercial harvest	12,000
11. Total Common Property Harvest (sum 9 and 10)	16,633
12. Total Return (sum 8 and 11)	124,859

13. Estimated ocean survival by brood year ²	Brood Year	Total # in Run, Current Year	Cumulative Ocean Survival (%)	Complete
				Return (yes or no)
	BY09 Lake	656	16.6%	Y
	BY10 Lake	36,182	14.6%	N
	BY10 Net Per	15,665	3.9%	N
	BY11 Lake	29,073	7.1%	N
	BY11 Net Per	31,488	1.5%	N

14. Average size of fish sold		length-cm	2.4 wt-kg
15. Date(s) of harvest			
16. Gear type or method used	Purse Seine - SW Harvest and Weir-FW Harvest		

17. Disposition of Hatchery Escapement

a. Traditional harvest fish		# fish sold	lbs fish		
	adults	92,596			
	jacks				
	total	92,596	-		
b. Roe-recovery fish		# fish	lbs fish	lbs roe	
	Sold				
	Donated				
	Disposed ³				
	total number of fish	-	-	-	
c. Carcasses		# Sold	# Donated	# Disposed ³	Total
	Spawners				-
	Other (annotate in comments)				-
	total number of fish	-	-	-	-
	total pounds				-

Comments:

A1. 63,537 were harvested in SW (Res Bay) and 29,059 in FW (Bear Lake Weir).
A3. 13,505 was the escapement - broodstock used (3,945) = 9,560
A5. Fish donated to senior center or food bank = 2,056
A6. Mortalities at the weir
A13. BY09 Lake Cum. Return = 73,017 with 439,484 smolt enumerated; BY10 Lake Cum Return = 73,753 with 505,400 smolt enumerated.
BY11 Lake Cum Return = 29,073 with 740,700 smolt enumerated. BY09 Net Pen = no stocking (IHN). BY10 Net Pen = 92,285
with 1,305,000 smolt released. BY11 Net Pen = 31,488 with 2,090,000 smolt released

¹ "Other": use one line per category (e.g. fish remaining in salt water, sea lion predation, etc.).

² Commercial harvest, noncommercial harvest, and estimated ocean survival: Please provide method used in estimation.

³ Disposed fish require a carcass disposal log.

SCHEDULE C-2 HARVEST MANAGEMENT AND HATCHERY ADULT RETURNS

Complete a separate schedule for each project (location of release/return), stock (e.g. fall or summer, if applicable), and species.

TRAIL LAKES HATCHERY

Species: Sockeye
 Location of project: Second Lake

A. Hatchery Escapement

1. Cost-recovery fish (line 17a & 17b): traditional harvest and roe-recovery fish	-	
2. Adults sacrificed as broodstock (Schedule A line 7) minus roe-recovery fish (17b)	-	
3. Escapement for hatchery watershed (as required in permit)	774	
4. Jacks	-	
5. Other ¹ (annotate in comments section)	-	
6. Other ¹ (annotate in comments section)	15	
7. Other ¹ (annotate in comments section)	-	
8. Total hatchery escapement	789	

B. Common Property Harvest

9. Commercial harvest ²		
a. Troll		
b. Gillnet		
c. Seine		
d. Other (annotate in comments section)		
Total commercial harvest	-	
10. Noncommercial harvest ²		
a. Sport		
b. Personal Use		
c. Subsistence	90	
d. Other (annotate in comments section)		
Total noncommercial harvest	90	
11. Total Common Property Harvest (sum 9 and 10)		90
12. Total Return (sum 8 and 11)		880

	Brood Year	Total # in Run, Current Year	Cumulative Ocean Survival (%)	Complete Return (yes or no)
13. Estimated ocean survival by brood year ²	BY10	176	1.5	N
	BY11	704	1.7	N

14. Average size of fish sold		length-cm	2.4	wt-kg
15. Date(s) of harvest				
16. Gear type or method used	No CR harvest			

17. Disposition of Hatchery Escapement

		# fish sold	lbs fish	
a. Traditional harvest fish	adults	0	0	
	jacks	0	0	
	total	-	-	
b. Roe-recovery fish	Sold	-	-	-
	Donated	-	-	-
	Disposed [*]	-	-	0
	total number of fish	-	-	-
c. Carcasses		# Sold	# Donated	# Disposed [*]
	Spawners	-	-	-
	Other (annotate in comments)	-	-	-
	total number of fish	-	-	-
	total pounds			

Comments:

A2. No eggtake was performed at Second Lake.
 A3. 6,290 was the total escapement. Otolith analysis from the weir indicated that 12.3% were hatchery fish (774)
 A5. Fish sampled for otoliths that were not included in the lake escapement count.
 A13. BY10 Cum return = 483 with 30,814 smolts enumerated (hatchery only). BY11 Cum Return = 703 with 41,534 smolts enumerated
 A10 Subsistence harvest = $735 * 12.3\% = 90$ fish

¹ "Other": use one line per category (e.g. fish remaining in salt water, sea lion predation, etc.).
² Commercial harvest, noncommercial harvest, and estimated ocean survival: Please provide method used in estimation.
³ Disposed fish require a carcass disposal log.

**SCHEDULE C-3
HARVEST MANAGEMENT AND HATCHERY ADULT RETURNS**

Complete a separate schedule for each project (location of release/return), stock (e.g. fall or summer, if applicable), and species.

TRAIL LAKES HATCHERY

Species: Sockeye (English Bay Lakes)
Location of project: Tutka Bay Lagoon

A. Hatchery Escapement

1. Cost-recovery fish (line 17a & 17b): traditional harvest and roe-recovery fish	31,105
2. Adults sacrificed as broodstock (Schedule A line 7) minus roe-recovery fish (17b)	6,769
3. Escapement for hatchery watershed (as required in permit)	-
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 hatchery escapement	37,874

B. Common Property Harvest

9. Commercial harvest ²	
a. Troll	
b. Gillnet	16,553
c. Seine	28,882
d. Other (annotate in comments section)	
Total commercial harvest	45,435
10. Noncommercial harvest ²	
a. Sport	500
b. Personal Use	
c. Subsistence	
d. Other (annotate in comments section)	
Total noncommercial harvest	500
11. Total Common Property Harvest (sum 9 and 10)	45,935
12. Total Return (sum 8 and 11)	83,809

13. Estimated ocean survival by brood year ²	Brood Year	Total # in Run, Current Year	Cumulative Ocean Survival (%)	Complete
				Return (yes or no)
	2010	25,143	24.1	Y
	2011	58,666	11.5	N

14. Average size of fish sold	length-cm	2.3	wt-kg
15. Date(s) of harvest			
16. Gear type or method used	Purse Seine		

17. Disposition of Hatchery Escapement

a. Traditional harvest fish		# fish sold	lbs fish		
	adults	31,105			
	jacks				
	total	31,105	-		
b. Roe-recovery fish		# fish	lbs fish	lbs roe	
	Sold				
	Donated				
	Disposed*				
	total number of fish	-	-	-	
c. Carcasses		# Sold	# Donated	# Disposed*	Total
	Spawners			6,769	6,769
	Other (annotate in comments)				-
	total number of fish	-	-	6,769	6,769
	total pounds				-

Comments:

A13. No otoliths were collected from the cost recovery harvest. Hatchery contribution for Hatchery escapement is assumed to be 100% and age composition to be 70/30.

A.13 BY10 Cum Return = 89,363 with smolt stocking of 371,300. BY11 Cum Return = 58,666 with smolt stocking of 511,000.

¹ "Other": use one line per category (e.g. fish remaining in salt water, sea lion predation, etc.).

² Commercial harvest, noncommercial harvest, and estimated ocean survival: Please provide method used in estimation.

* Disposed fish require a carcass disposal log.

**SCHEDULE C-4
HARVEST MANAGEMENT AND HATCHERY ADULT RETURNS**

Complete a separate schedule for each project (location of release/return), stock (e.g. fall or summer, if applicable), and species.

TRAIL LAKES HATCHERY

Species: Sockeye
Location of project: Hidden Lake

A. Hatchery Escapement

1. Cost-recovery fish (line 17a & 17b): traditional harvest and roe-recovery fish	-
2. Adults sacrificed as broodstock (Schedule A line 7) minus roe-recovery fish (17b)	890
3. Escapement for hatchery watershed (as required in permit)	11,846
4. Jacks	-
5. Other ¹ (annotate in comments section)	407
6. Other ¹ (annotate in comments section)	
7. Other ¹ (annotate in comments section)	
8. Total hatchery escapement	13,143

B. Common Property Harvest

9. Commercial harvest ²	
a. Troll	
b. Gillnet	TBD
c. Seine	
d. Other (annotate in comments section)	
Total commercial harvest	-
10. Noncommercial harvest ²	
a. Sport	
b. Personal Use	
c. Subsistence	
d. Other (annotate in comments section)	
Total noncommercial harvest	-
11. Total Common Property Harvest (sum 9 and 10)	-
12. Total Return (sum 8 and 11)	13,143

13. Estimated ocean survival by brood year ²	Brood Year	Total # in Run, Current Year	Cumulative Ocean Survival (%)	Complete Return
				(yes or no)
	2010	Need commercial harvest		
	2011	Need commercial harvest		

14. Average size of fish sold length-cm 2.2 wt-kg
 15. Date(s) of harvest
 16. Gear type or method used

17. Disposition of Hatchery Escapement

a. Traditional harvest fish		# fish sold	lbs fish		
	adults	0	0		
	jacks	0	0		
	total	-	-		
b. Roe-recovery fish		# fish	lbs fish	lbs roe	
	Sold				
	Donated				
	Disposed*				
	total number of fish	-	-	-	
c. Carcasses		# Sold	# Donated	# Disposed*	Total
	Spawners			1,313	1,313
	Other (annotate in comments)	400	200		600
	total number of fish	400	200	1,313	1,913
	total pounds	880	440	2,889	4,209

Comments:

A3. 18,785 was the total escapement minus 1,313 used for broodstock = 17,472. 67.8% were of hatchery origin
A5. Fish collected for otoliths at the weir. 400 were sold to Snug Harbor. 200 were donated. 67.8% were of hatchery origin.
A13. Otoliths analysis indicated 67.8% were of hatchery origin. Age breakdown is 86.5% Age 3 and 13.5% age 4. Survivals will be updated in 2016 Annual Report

¹ "Other": use one line per category (e.g. fish remaining in salt water, sea lion predation, etc.).

² Commercial harvest, noncommercial harvest, and estimated ocean survival: Please provide method used in estimation.

³ Disposed fish require a carcass disposal log.

**SCHEDULE C-5
HARVEST MANAGEMENT AND HATCHERY ADULT RETURNS**

Complete a separate schedule for each project (location of release/return), stock (e.g. fall or summer, if applicable), and species.

TRAIL LAKES HATCHERY

Species: Sockeye
Location of project: Kirschner Lake

A. Hatchery Escapement

1. Cost-recovery fish (line 17a & 17b): traditional harvest and roe-recovery fish	23,571
2. Adults sacrificed as broodstock (Schedule A line 7) minus roe-recovery fish (17b)	3,666
3. Escapement for hatchery watershed (as required in permit)	-
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 hatchery escapement	27,237

B. Common Property Harvest

9. Commercial harvest ²	
a. Troll	
b. Gillnet	
c. Seine	
d. Other (annotate in comments section)	
Total commercial harvest	-
10. Noncommercial harvest ²	
a. Sport	
b. Personal Use	
c. Subsistence	
d. Other (annotate in comments section)	
Total noncommercial harvest	-
11. Total Common Property Harvest (sum 9 and 10)	-
12. Total Return (sum 8 and 11)	27,237

13. Estimated ocean survival by brood year ²	Brood Year	Total # in Run, Current Year	Cumulative Ocean Survival (%)	Complete Return (yes or no)
	2010	10,895	17.02%	N
	2011	16,342	5.50%	N

14. Average size of fish sold length-cm 2.2 wt-kg
 15. Date(s) of harvest
 16. Gear type or method used

17. Disposition of Hatchery Escapement

a. Traditional harvest fish		# fish sold		lbs fish	
	adults	23,571		97,669	
	jacks				
	total	23,571		97,669	
b. Roe-recovery fish		# fish	lbs fish	lbs roe	
	Sold				
	Donated				
	Disposed ³				
	total number of fish	-	-	-	
c. Carcasses		# Sold	# Donated	# Disposed ³	Total
	Spawners			3,666	3,666
	Other (annotate in comments)				
	total number of fish	-	-	3,666	3,666
	total pounds				

Comments:

A2. Due to broodstock losses from Tutka, an additional 3,666 were collected for broodstock purposes at Kirschner Lake.
A13. No otolith collection occurred from the cost recovery harvest at Kirschner Lake. It is assumed that there is a 60/40 age split and 100% hatchery
 BY10 has 19,229 harvested in 2014 plus an additional 10,895 in 2015. BY10 release was 160,000
 BY11 had 16,342 harvested in 2015. BY11 release was 300,000

¹ "Other": use one line per category (e.g. fish remaining in salt water, sea lion predation, etc.).
² Commercial harvest, noncommercial harvest, and estimated ocean survival: Please provide method used in estimation.
³ Disposed fish require a carcass disposal log.

**SCHEDULE C-6
HARVEST MANAGEMENT AND HATCHERY ADULT RETURNS**

Complete a separate schedule for each project (location of release/return), stock (e.g. fall or summer, if applicable), and species.

TRAIL LAKES HATCHERY

Species:
Location of project:

A. Hatchery Escapement

1. Cost-recovery fish (line 17a & 17b): traditional harvest and roe-recovery fish	-
2. Adults sacrificed as broodstock (Schedule A line 7) minus roe-recovery fish (17b)	-
3. Escapement for hatchery watershed (as required in permit)	-
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 hatchery escapement	-

B. Common Property Harvest

9. Commercial harvest ²	
a. Troll	
b. Gillnet	
c. Seine	4,516
d. Other (annotate in comments section)	
Total commercial harvest	4,516
10. Noncommercial harvest ²	
a. Sport	
b. Personal Use	500
c. Subsistence	
d. Other (annotate in comments section)	
Total noncommercial harvest	500
11. Total Common Property Harvest (sum 9 and 10)	5,016
12. Total Return (sum 8 and 11)	5,016

13. Estimated ocean survival by brood year ²	Brood Year	Total # in Run, Current Year	Cumulative Ocean Survival (%)	Complete
				Return (yes or no)
	2010	1505	unknown	N
	2011	3511	unknown	N

14. Average size of fish sold	<input type="text"/>	length-cm	<input type="text"/>	wt-kg
15. Date(s) of harvest	<input type="text"/>			
16. Gear type or method used	<input type="text"/>			

17. Disposition of Hatchery Escapement

a. Traditional harvest fish		# fish sold	lbs fish		
	adults	<input type="text"/>	<input type="text"/>		
	jacks	<input type="text"/>	<input type="text"/>		
	total	-	-		
b. Roe-recovery fish		# fish	lbs fish	lbs roe	
	Sold	<input type="text"/>	<input type="text"/>	<input type="text"/>	
	Donated	<input type="text"/>	<input type="text"/>	<input type="text"/>	
	Disposed*	<input type="text"/>	<input type="text"/>	<input type="text"/>	
	total number of fish	-	-	-	
c. Carcasses		# Sold	# Donated	# Disposed*	Total
	Spawners	<input type="text"/>	<input type="text"/>	<input type="text"/>	-
	Other (annotate in comments)	<input type="text"/>	<input type="text"/>	<input type="text"/>	-
	total number of fish	-	-	-	-
	total pounds	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Comments:

A1. There was no cost recovery harvest. Assume 100% hatchery
A9c. There was 11392 sockeye harvested in the Neptune and China Poot sub-districts. Assume the 25% of these fish are hatchery and A13. Assumed age split of 70/30.
A10. Personal use = dip net fishery. Estimate only. Assume 100% hatchery fish.

¹ "Other": use one line per category (e.g. fish remaining in salt water, sea lion predation, etc.).

² Commercial harvest, noncommercial harvest, and estimated ocean survival: Please provide method used in estimation.

* Disposed fish require a carcass disposal log.

SCHEDULE C-7 HARVEST MANAGEMENT AND HATCHERY ADULT RETURNS

Complete a separate schedule for each project (location of release/return), stock (e.g. fall or summer, if applicable), and species.

TRAIL LAKES HATCHERY

Species: Coho
Location of project: Bear Lake

A. Hatchery Escapement

1. Cost-recovery fish (line 17a & 17b): traditional harvest and roe-recovery fish	-
2. Adults sacrificed as broodstock (Schedule A line 7) minus roe-recovery fish (17b)	471
3. Escapement for hatchery watershed (as required in permit)	253
4. Jacks	
5. Other ¹ (annotate in comments section)	983
6. Other ¹ (annotate in comments section)	212
7. Other ¹ (annotate in comments section)	
8. Total hatchery escapement	1,920

B. Common Property Harvest

9. Commercial harvest ²		
a. Troll		
b. Gillnet		
c. Seine		
d. Other (annotate in comments section)		
Total commercial harvest		
10. Noncommercial harvest ²		
a. Sport	5,238	
b. Personal Use		
c. Subsistence		
d. Other (annotate in comments section)		
Total noncommercial harvest	5,238	
11. Total Common Property Harvest (sum 9 and 10)		5,238
12. Total Return (sum 8 and 11)		7,158

13. Estimated ocean survival by brood year ²	Brood Year	Total # in Run, Current Year	Cumulative Ocean Survival (%)	Complete Return (yes or no)	
	BY11 Fry	1,586	3.90%	Y	fry-adult
BY12 Fry	3,842	0.95%	N	fry-adult	
BY12 Smolt	1,730	3.10%	N	smolt-adult	

14. Average size of fish sold	length-cm	2.4	wt-kg
15. Date(s) of harvest	Sept 11 - Oct 20, 2015		
16. Gear type or method used	Weir		

17. Disposition of Hatchery Escapement

a. Traditional harvest fish		# fish sold	lbs fish		
	adults				
	jacks				
	total	-	-		
b. Roe-recovery fish		# fish	lbs fish	lbs roe	
	Sold				
	Donated				
	Disposed*				
	total number of fish	-	-	-	
c. Carcasses		# Sold	# Donated	# Disposed*	Total
	Spawners		683		683
	Other (annotate in comments)		983		983
	total number of fish	-	1,666	-	1,666
	total pounds		3,998		3,998

Comments:

A2. CIAA eggtake only. 97% hatchery.
A5. Excess male harvest donated to dog mushers. 97% hatchery.
A6. ADFG eggtake and salmon in the classroom. 97% hatchery
A17C. All carcasses and excess males donated to dog mushers.
A13. BY11 Cum. Return = 7172+1586=8758 with a 222,000 fry stocking. BY12 Fry = 3842 with a 405,000 fry stocking. BY12 Smolts = 1730 with 55,000 smolt stocking.

¹ "Other": use one line per category (e.g. fish remaining in salt water, sea lion predation, etc.).

² Commercial harvest, noncommercial harvest, and estimated ocean survival: Please provide method used in estimation.

* Disposed fish require a carcass disposal log.

SCHEDULE D
PROJECTED RETURNS FOR 2016

TRAIL LAKES HATCHERY

Combine brood years for species with returns of multiple year classes, except Chinook salmon.
Please report projected returns of Chinook salmon by brood year.

Species	Brood Year	Release Site	Total number of fish expected	Range of expected return	
				minimum	maximum
Sockeye	2011	Bear Lake/Res. Bay	64,226	54,000	74,000
	2011	Tutka (EBL)	18,547	14,000	22,000
	2011	Hazel (EBL)	1,625	0	2,500
	2011	Leisure (EBL)	1,625	0	2,500
	2011	Kirschner (EBL)	8,857	6,000	10,000
	2011	Second Lake (EBL)	4,487	3,000	5,500
	2011	Hidden (HL)	2,908	1,500	3,500
Coho	2013	Bear Lake	18,780	12,000	20,000
Sockeye	2012	Bear Lake/Res. Bay	104,347	95,000	115,000
	2012	Tutka (EBL)	43,164	37,000	46,000
	2012	Hazel (HL)	6,163	4,500	7,000
	2012	Leisure (HL)	6,778	4,500	7,000
	2012	Kirschner	0	0	0
	2012	Second Lake (EBL)	1,902	1,000	2,500
	2012	Hidden (HL)	23,239	20,000	25,000
	2012	Shell Lake	1,067	500	1,500

COMMENTS:

Please provide additional information on ocean-survival calculations (i.e. percentages used, etc.)

Location	Stage	Fry-Adult Survival	Smolt to Adult Survival	Age 2	Age 3
Res Bay	Lake		12%	32%	68%
	Net Pen		8%	68%	32%
Tutka	Smolt		12%	60%	40%
Hazel	Fry (HL)	0.50%		85%	15%
Hazel	Fry (EBL)	3.00%		60%	40%
Leisure	Fry (HL)	0.50%			
Leisure	Fry (EBL)		8%		
Kirschner	Fry (EBL)	12.00%		60%	40%
Second Lake	Fall Fry(EBL)	5.00%		30%	70%
Hidden Lake			10%	85%	15%
Bear Lake (Coho)			10%	100%	
Shell Lake	Smolt		10%	50%	50%
Note Second Lake and Hidden Lake include natural fish returns as well as enhanced returns.					
For enhanced returns only multiply Second Lake by 25%. For Hidden Lake by 60%.					

SCHEDULE F-1
UPDATED 2014 HARVEST MANAGEMENT AND HATCHERY ADULT RETURNS

This form is only required if there are known changes to the previous year's reported Schedule C data.
 Complete a separate schedule for each project and species of fish with updated numbers from last year's annual report.

Species: Sockeye TRAIL LAKES HATCHERY
 Location of harvest/return: Bear Lake/Resurrection Bay

Hatchery Escapement

1. Cost-recovery fish (line 16A & 16B): traditional harvest and roe recovery fish	
2. Adults captured for broodstock (Schedule A line 7) minus roe recovery fish (line 16B)	
3. Escapement for hatchery watershed (as required in permit)	
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	-

Common Property Harvest

9. Commercial ²	
A. Troll	
B. Gillnet	
C. Seine	
D. Other (annotate in comments section)	
Total commercial	-

10. Noncommercial ²	
A. Sport	
B. Personal Use	
C. Subsistence	
D. Other (annotate in comments section)	
Total noncommercial	-

11. Total Return (sum 8,9,10) -

12. Estimated ocean survival by BY ²	BY	Total # return in 2011	Cumulative Survival	%
				%
				%
				%
				%
				%
				%

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

16. Disposition of Hatchery Escapement

A. Fish harvested/sold		# fish	lbs fish	
	adults			
	jacks			
	total	-	-	
B. Roe recovery		# fish	lbs roe	
		-		
C. Carcasses		# Disposed	# Donated	# Sold
	Spawners			
	Roe recovery (during egg take)			
	Roe recovery (non-egg take)			
	Other (annotate in comments)			
	total number of fish	-	-	-
	total pounds			

Comments:
No changes necessary

¹ "Other": use one line per category (e.g. fish remaining in salt water, sea lion predation, etc.)
² Commercial harvest, noncommercial harvest, and estimated ocean survival: Please provide method used in estimation.

SCHEDULE F-1
UPDATED 2014 HARVEST MANAGEMENT AND HATCHERY ADULT RETURNS

This form is only required if there are known changes to the previous year's reported Schedule C data.
 Complete a separate schedule for each project and species of fish with updated numbers from last year's annual report.

Species: TRAIL LAKES HATCHERY
 Location of harvest/return:

Hatchery Escapement

1. Cost-recovery fish (line 16A & 16B): traditional harvest and roe recovery fish	
2. Adults captured for broodstock (Schedule A line 7) minus roe recovery fish (line 16B)	
3. Escapement for hatchery watershed (as required in permit)	
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	-

Common Property Harvest

9. Commercial ²	
A. Troll	
B. Gillnet	
C. Seine	
D. Other (annotate in comments section)	
Total commercial	-
10. Noncommercial ²	
A. Sport	
B. Personal Use	
C. Subsistence	
D. Other (annotate in comments section)	
Total noncommercial	-
11. Total Return (sum 8,9,10)	-

12. Estimated ocean survival by BY ²	BY	Total # return in 2011	Cumulative Survival	
				%
				%
				%
				%
				%

13. Average size of fish sold	<input type="text"/>	length-cm	<input type="text"/>	wt-kg
14. Date(s) of harvest	<input type="text"/>			
15. Gear type or method used	<input type="text"/>			

16. Disposition of Hatchery Escapement

A. Fish harvested/sold		# fish	lbs fish	
	adults	<input type="text"/>	<input type="text"/>	
	jacks	<input type="text"/>	<input type="text"/>	
	total	-	-	
B. Roe recovery		# fish	lbs roe	
		-	<input type="text"/>	
C. Carcasses		# Disposed	# Donated	# Sold
	Spawners	<input type="text"/>	<input type="text"/>	<input type="text"/>
	Roe recovery (during egg take)	<input type="text"/>	<input type="text"/>	<input type="text"/>
	Roe recovery (non-egg take)	<input type="text"/>	<input type="text"/>	<input type="text"/>
	Other (annotate in comments)	<input type="text"/>	<input type="text"/>	<input type="text"/>
	total number of fish	-	-	-
	total pounds	<input type="text"/>	<input type="text"/>	<input type="text"/>

Comments:

No changes necessary

¹ "Other": use one line per category (e.g. fish remaining in salt water, sea lion predation, etc.)
² Commercial harvest, noncommercial harvest, and estimated ocean survival: Please provide method used in estimation.

SCHEDULE F-3
UPDATED 2014 HARVEST MANAGEMENT AND HATCHERY ADULT RETURNS

This form is only required if there are known changes to the previous year's reported Schedule C data.
 Complete a separate schedule for each project and species of fish with updated numbers from last year's annual report.

Species: Sockeye (EBL+HL) TRAIL LAKES HATCHERY
 Location of harvest/return: Tutka Bay Lagoon

Hatchery Escapement

1. Cost-recovery fish (line 16A & 16B): traditional harvest and roe recovery fish	29,553
2. Adults captured for broodstock (Schedule A line 7) minus roe recovery fish (line 16B)	4,087
3. Escapement for hatchery watershed (as required in permit)	972
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	34,612

Common Property Harvest

9. Commercial ²	
A. Troll	
B. Gillnet	14,772
C. Seine	11,885
D. Other (annotate in comments section)	
Total commercial	26,657
10. Noncommercial ²	
A. Sport	6,804
B. Personal Use	
C. Subsistence	
D. Other (annotate in comments section)	
Total noncommercial	6,804
11. Total Return (sum 8,9,10)	68,073

12. Estimated ocean survival by BY²

BY	Total # return in 2011	Cumulative Survival	
BY09 Hidden	2,171	na	%
BY09 EBL	1,681	na	%
BY10 EBL	64,221	na	%
			%
			%
			68,073

13. Average size of fish sold

 length-cm 2.4 wt-kg

14. Date(s) of harvest

 July 8 - August 1, 2014

15. Gear type or method used

 Seine

16. Disposition of Hatchery Escapement

A. Fish harvested/sold		# fish	lbs fish
adults	30,404		
jacks			
total	30,404	-	
B. Roe recovery		# fish	lbs roe
	-		
C. Carcasses		# Disposed	# Donated
Spawners	4,205		
Roe recovery (during egg take)			
Roe recovery (non-egg take)			
Other (annotate in comments)			
total number of fish	4,205	-	
total pounds			

Comments:

**F12. Otolith analysis at Tutka indicated 94% were EBL and 3.1% were HL. Remaining 2.8% were wild stock. BY09 EBL = 2.4% and BY10 EBL = 91.7%.
 F16. Disposition = hatchery plus wild.**

¹ "Other": use one line per category (e.g. fish remaining in salt water, sea lion predation, etc.).

² Commercial harvest, noncommercial harvest, and estimated ocean survival: Please provide method used in estimation.

SCHEDULE F-5
UPDATED 2014 HARVEST MANAGEMENT AND HATCHERY ADULT RETURNS

This form is only required if there are known changes to the previous year's reported Schedule C data.
 Complete a separate schedule for each project and species of fish with updated numbers from last year's annual report.

Species: Sockeye TRAIL LAKES HATCHERY
 Location of harvest/return: Kirschner Lake

Hatchery Escapement

1. Cost-recovery fish (line 16A & 16B): traditional harvest and roe recovery fish	-
2. Adults captured for broodstock (Schedule A line 7) minus roe recovery fish (line 16B)	
3. Escapement for hatchery watershed (as required in permit)	
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	-

Common Property Harvest

9. Commercial ²	
A. Troll	
B. Gillnet	
C. Seine	
D. Other (annotate in comments section)	
Total commercial	-

10. Noncommercial ²	
A. Sport	
B. Personal Use	
C. Subsistence	
D. Other (annotate in comments section)	
Total noncommercial	-

11. Total Return (sum 8,9,10) -

12. Estimated ocean survival by BY ²	BY	Total # return in 2011	Cumulative Survival	
				%
				%
				%
				%
				%
				%

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

16. Disposition of Hatchery Escapement

A. Fish harvested/sold		# fish	lbs fish	
	adults			
	jacks			
	total	-	-	
B. Roe recovery		# fish	lbs roe	
		-		
C. Carcasses		# Disposed	# Donated	# Sold
	Spawners			
	Roe recovery (during egg take)			
	Roe recovery (non-egg take)			
	Other (annotate in comments)			
	total number of fish	-	-	-
	total pounds			

Comments:

 No changes necessary

¹ "Other": use one line per category (e.g. fish remaining in salt water, sea lion predation, etc.).
² Commercial harvest, noncommercial harvest, and estimated ocean survival: Please provide method used in estimation.

**SCHEDULE F-6
UPDATED 2014 HARVEST MANAGEMENT AND HATCHERY ADULT RETURNS**

This form is only required if there are known changes to the previous year's reported Schedule C data.
Complete a separate schedule for each project and species of fish with updated numbers from last year's annual report.

Species: TRAIL LAKES HATCHERY
Location of harvest/return:

Hatchery Escapement

1. Cost-recovery fish (line 16A & 16B): traditional harvest and roe recovery fish	-
2. Adults captured for broodstock (Schedule A line 7) minus roe recovery fish (line 16B)	
3. Escapement for hatchery watershed (as required in permit)	
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	-

Common Property Harvest

9. Commercial ²	
A. Troll	
B. Gillnet	
C. Seine	
D. Other (annotate in comments section)	
Total commercial	-

10. Noncommercial ²	
A. Sport	
B. Personal Use	
C. Subsistence	
D. Other (annotate in comments section)	
Total noncommercial	-

11. Total Return (sum 8,9,10) -

12. Estimated ocean survival by BY ²	BY	Total # return in 2011	Cumulative Survival	
				%
				%
				%
				%
				%

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

16. Disposition of Hatchery Escapement

A. Fish harvested/sold		# fish	lbs fish	
	adults			
	jacks			
	total	-	-	
B. Roe recovery		# fish	lbs roe	
		-		
C. Carcasses		# Disposed	# Donated	# Sold
	Spawners			
	Roe recovery (during egg take)			
	Roe recovery (non-egg take)			
	Other (annotate in comments)			
	total number of fish	-	-	-
total pounds				

Comments:

No changes necessary

¹ "Other": use one line per category (e.g. fish remaining in salt water, sea lion predation, etc.).
² Commercial harvest, noncommercial harvest, and estimated ocean survival: Please provide method used in estimation.

SCHEDULE F-7
UPDATED 2014 HARVEST MANAGEMENT AND HATCHERY ADULT RETURNS

This form is only required if there are known changes to the previous year's reported Schedule C data.

Complete a separate schedule for each project and species of fish with updated numbers from last year's annual report.

Species: TRAIL LAKES HATCHERY
 Location of harvest/return:

Hatchery Escapement

1. Cost-recovery fish (line 16A & 16B): traditional harvest and roe recovery fish	-
2. Adults captured for broodstock (Schedule A line 7) minus roe recovery fish (line 16B)	
3. Escapement for hatchery watershed (as required in permit)	
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	-

Common Property Harvest

9. Commercial ²	
A. Troll	
B. Gillnet	
C. Seine	
D. Other (annotate in comments section)	
Total commercial	-

10. Noncommercial ²	
A. Sport	
B. Personal Use	
C. Subsistence	
D. Other (annotate in comments section)	
Total noncommercial	-

11. Total Return (sum 8,9,10) -

12. Estimated ocean survival by BY ²	BY	Total # return in 2011	Cumulative Survival	
				%
				%
				%
				%
				%

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

16. Disposition of Hatchery Escapement

A. Fish harvested/sold		# fish		lbs fish			
	adults	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>		
	jacks	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>		
	total	-		-			
B. Roe recovery		# fish		lbs roe			
		-		-			
C. Carcasses		# Disposed		# Donated		# Sold	
	Spawners	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	Roe recovery (during egg take)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	Roe recovery (non-egg take)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	Other (annotate in comments)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
	total number of fish	-		-		-	
	total pounds	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Comments:

 No changes necessary.

¹ "Other": use one line per category (e.g. fish remaining in salt water, sea lion predation, etc.).
² Commercial harvest, noncommercial harvest, and estimated ocean survival: Please provide method used in estimation.