

2014 ANNUAL REPORT ALASKA SALMON HATCHERY

Year Ending December 15, 2014

Hatchery name/Location	Pillar Creek Hatchery/Kodiak Alaska	
Permit holder name/Address	Kodiak Regional Aquaculture Association 104 Center Av. Ste. 205 Kodiak, Alaska 99615	
Person to contact regarding this report	J. Alan Seale / Hatchery Manager	name
	907-486-4730	phone

DECLARATION AND SIGNATURE

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

Name of Legal Representative

Date

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**

Pillar Creek Hatchery/Kodiak Alaska

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)	Afognak Lake / 252-342			
3. Viable broodstock (spawned, eggs in incubators)	280	females	158	male 438 total
4. Inviabile broodstock (green/over-ripe/bad)	3	females	43	male 46 total
5. Unspawned fish (roe recovery, excess males)				
6. Holding mortalities (raceway, pen mortalities)	160			
7. Adults sacrificed for broodstock (sum 3 thru 6)	644			
8. Average length and weight of adults used for broodstock				
	females>	44.7	cm	4.2 kg
	males>	44.7	cm	4.2 kg
9. Average fecundity (eggs/female)	2,566			
10. Egg-take dates:	08/04/14			
11. Number of green eggs taken	706,434			
12. Number of eggs transferred out (annotate below)	green eggs or	eyed eggs		
13. Number of eggs destroyed (annotate below)	green eggs or	eyed eggs		
14. Number of green eggs retained in hatchery ¹	706,434			
15. Number remaining in hatchery at eyed stage	425,767		60.27%	% survival ²

16. Describe procedures used for egg takes and evaluation of in-hatchery survivals:

Standard remote sockeye eggtake procedures, as described in ADF&G Special Fisheries Report #6: Alaska

Sockeye Salmon Culture Manual, published August 1994, were utilized.

Eyed eggs are picked using a Jensorter Model JM8 Egg Sorter; egg inventory and survival are estimated by weight eyed egg processing.

Broodstock not weighed or measured; average eye-fork length provided by ADF&G, 2014

sampling of escapement at weir, with Age x.1 fish lengths omitted. Weight entry is historical average from

Stat Area 252-34 sockeye harvest.

(2a) Line 15. BY2014 Afognak Lake sockeye green-to-eye egg survival is consistent with remote eggtake expectations.

(2b) line 15. Our lower survivals this year have led to a review of processes for eggtake at Afognak Lake for PCH

(244) Brood fish released back to Afognak Lake unused

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**

Pillar Creek Hatchery/Kodiak Alaska

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)	Saltery Lake / 259-415				
3. Viable broodstock (spawned, eggs in incubators)	1,100	females	732	male	1,832 total
4. Inviabile broodstock (green/over-ripe/bad)	126	females	129	male	255 total
5. Unspawned fish (roe recovery, excess males)					
6. Holding mortalities (raceway, pen mortalities)	585				
7. Adults sacrificed for broodstock (sum 3 thru 6)	2,672				
8. Average length and weight of adults used for broodstock					
	females>	53.2	cm	5.4	kg
	males>	53.2	cm	5.4	kg
9. Average fecundity (eggs/female)	3,042				
10. Egg-take dates:	9-5/9-16-2014				
11. Number of green eggs taken	3,345,877				
12. Number of eggs transferred out (annotate below)	<i>green eggs or eyed eggs</i>				
13. Number of eggs destroyed (annotate below)	<i>green eggs or eyed eggs</i>				
14. Number of green eggs retained in hatchery ¹	3,345,877				
15. Number remaining in hatchery at eyed stage	2,908,692				
				86.93%	% survival ²

16. Describe procedures used for egg takes and evaluation of in-hatchery survivals:

Standard remote sockeye eggtake procedures, as described in ADF&G Special Fisheries Report #6: Alaska Sockeye Salmon Culture Manual, published August 1994, were utilized.

Eyed eggs are picked using a Jentsorter Model JM8 Egg Sorter; egg inventory and survival are estimated by weight eyed egg processing.

Broodstock not weighed or measured; average eye-fork length provided by ADF&G, 2014 sampling of escapement at weir. Weight entry is historical average from Stat Area 259-41 sockeye harvest. 958 (overall brood loss 21.8%) Brood fish released back to Saltery Lake unused (817).

(2)BY2014 Saltery sockeye green-to-eye egg survival is consistent with remote eggtake expectations.

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

Pillar Creek Hatchery/Kodiak Alaska

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)	Buskin Lake / 259-211				
3. Viable broodstock (spawned, eggs in incubators)	75	females	45	male	120 total
4. Inviable broodstock (green/over-ripe/bad)	1	females	3	male	4 total
5. Unspawned fish (roe recovery, excess males)					
6. Holding mortalities (raceway, pen mortalities)					
7. Adults sacrificed for broodstock (sum 3 thru 6)	124				
8. Average length and weight of adults used for broodstock					
	females>	62.0	cm	4.5	kg
	males>	62.0	cm	4.5	kg
9. Average fecundity (eggs/female)	3,500				
10. Egg-take dates:	11/7/14				
11. Number of green eggs taken	262,500				
12. Number of eggs transferred out (annotate below)	1,000	green eggs			
13. Number of eggs destroyed (annotate below)	green eggs or eyed eggs				
14. Number of green eggs retained in hatchery ¹	261,500				
15. Number remaining in hatchery at eyed stage	0 % survival ²				

16. Describe procedures used for egg takes and evaluation of in-hatchery survivals:
 Dry spawning method used. Eggs water hardened before loading into incubators.
 Line 11, and 14 entries are estimates based on assumed fecundity. Actual egg inventory and survival will be estimated by weight sampling method at eyed egg processing.
 (1) Estimated 1,000 green eggs were seeded into Kodiak school classroom incubators.
 (2) Eggs have not developed to eyed stage.
 Broodstock not weighed or measured; eye-fork length provided in Line 8 above are from 2014 ADF&G weir sampling. Weight entry is historic average for Buskin Lake coho.
 Pillar Creek Hatchery worked with Sun'aq Tribe of Kodiak to complete a 2014 coho eggtake. Sun'aq BY14 brood and eggtake numbers to be reported by Sun'aq Tribe of Kodiak per permit requirements.

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

Pillar Creek Hatchery/Kodiak Alaska

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	Chinook			
2. Stock (donor stock/ancestral stock)	Karluk stock / Monashka Creek / 259-10			
3. Viable broodstock (spawned, eggs in incubators)	6	females	6	male 12 total
4. Inviabile broodstock (green/over-ripe/bad)	1	females	7	male 8 total
5. Unspawned fish (roe recovery, excess males)				
6. Holding mortalities (raceway, pen mortalities)	6			
7. Adults sacrificed for broodstock (sum 3 thru 6)	26			
8. Average length and weight of adults used for broodstock				
	females>	73.0	cm	8.2 kg
	males>	73.0	cm	8.2 kg
9. Average fecundity (eggs/female)	6,887			
10. Egg-take dates:	8/8/14			
11. Number of green eggs taken	41,320			
12. Number of eggs transferred out (annotate below)	green eggs or	eyed eggs		
13. Number of eggs destroyed (annotate below)	green eggs or	eyed eggs		
14. Number of green eggs retained in hatchery ¹	41,320			
15. Number remaining in hatchery at eyed stage	36,902		89.31%	% survival ²
16. Describe procedures used for egg takes and evaluation of in-hatchery survivals:	Remote eggtake procedures, as described in ADF&G Special Fisheries Report #6: Alaska Sockeye Salmon Culture Manual, published August 1994, were utilized. Eggs were fertilized at a 1 male:1 female ratio, and eggs from each pair are incubated in individual trays.			
	Line 13: Ovarian fluid and Kidney samples from each brood female were sent to the ADF&G Fish Pathology Lab for disease screening had no culls for this brood year.			
	Broodstock not weighed or measured; Line 8 entries are estimates.			
	Eyed eggs are picked by hand; egg inventory and survival are estimated by weight at eyed egg processing.			

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.

Pillar Creek Hatchery/Kodiak Alaska

Species: Sockeye
Location of project: Foul Bay SHA 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)	
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	12,363
d. Other (annotate in comments section)	
Total commercial harvest	12,363
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)	12,363
12. Total Return (sum 8 and 11)	12,363

	Brood Year	Total # in Run, Current Year	Cumulative Ocean Survival (%)	Complete Return (yes or no)
13. Estimated ocean survival by brood year ²	2008	193	8.9	yes
	2009	4411	2.4	no
	2010	7697	3.1	no
	2011	72	0.028	no

14. Average size of fish sold	49.8	length-cm	1.9	wt-kg
15. Date(s) of harvest	6-5-14 / 6-8-14			
16. Gear type or method used	Purse Seine			

17. Disposition of Hatchery Escapement

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

Comments:

No brood is collected at this location. The primary donor stock is Afognak Lake;
 The return figures entered above are based on harvest numbers obtained from the ADF&G fish ticket database. It is typically assumed that all sockeye harvested in Foul Bay (Statistical Area 251-41) prior to July 15 are hatchery-stocked early-run sockeye; fish harvested after July 15 are not counted as hatchery contribution to the fishery.
 Age composition is based on scale samples taken from fish harvested in the SHA.
 The BY2008 cumulative survival figure in line 13 represents the complete brood year return.

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.

Pillar Creek Hatchery/Kodiak Alaska

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	2,270
d. Other (annotate in comments section)	
Total commercial harvest	2,270
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)	2,270
12. Total Return (sum 8 and 11)	2,270

Brood Year	Total # in Run, Current Year	Cumulative Ocean Survival (%)	Complete Return (yes or no)
13. Estimated ocean survival by brood year ²			
2008	70	5%	
2009	822	8%	
2010	1379	3%	
2011	0		

14. Average size of fish sold	48.9	length-cm	2.2	wt-kg
15. Date(s) of harvest	6-5-14 / 6-15-14			
16. Gear type or method used	Purse Seine			

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 ³			
total number of fish	-	-	-	
c. Carcasses	# Sold	# Donated	# Disposed ³	Total
	Spawners			-
	Other (annotate in comments)			-
	total number of fish	-	-	-
total pounds				-

Comments:

No brood is collected at this location. The primary donor stock is Afognak Lake.
 The return figures entered above are based on harvest numbers obtained from the ADF&G fish ticket database. It is typically assumed that all sockeye harvested in the Waterfall SHA (Statistical Area 251-82) prior to July 15 are hatchery stocked early run sockeye; fish harvested after July 15 are not counted as hatchery contribution to the fishery.
 ~ Age composition for the 2014 return is based on scale samples taken from fish harvested in the SHA.
 The BY2008 cumulative survival figure in line 13 represents the complete brood year return.

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

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

Pillar Creek Hatchery/Kodiak Alaska

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	
d. Other (annotate in comments section)	
Total commercial harvest	-
10. Noncommercial harvest ²	
a. Sport	
b. Personal Use	
c. Subsistence	See Below
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)	-

Brood Year	Total # in Run, Current Year	Cumulative Ocean Survival (%)	Complete Return (yes or no)
13. Estimated ocean survival by brood year ²			
2008	See Below		
2009			
2010			
2011			

14. Average size of fish sold	50.1	length-cm	2.3	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				
	jacks				
	total	-	-		
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:
 No brood is collected at this location. The primary donor stock is Afognak Lake.
 Total return estimate is based on harvest numbers obtained from the ADF&G fish ticket database, plus reported subsistence catch.
 A portion of the Crescent Lake-bound sockeye return was likely harvested in the set gillnet fishery outside Settler's Cove and the Kizhuyak Section.
 The local subsistence fishery harvests a significant portion of this run. Subsistence harvest reporting/analysis will not be complete until March 2015. The 2014 subsistence harvest will be reported in Schedule F of the 2015 Annual Report. Anecdotal reports of the 2014 Settler's Cove subsistence harvest suggest that the run was average.
 Age composition of this return is unavailable as the data needed for it is not collected by ADF&G or KRAA

Figures in Line 14 are from parent stock weir info for 2013
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-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.

Pillar Creek Hatchery/Kodiak Alaska

Species:
Location of project:

A. Hatchery Escapement

1. Cost-recovery fish (line 17a & 17b): traditional harvest and roe-recovery fish	63,299
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	63,299

B. Common Property Harvest

9. Commercial harvest ²	
a. Troll	
b. Gillnet	124,208
c. Seine	79,411
d. Other (annotate in comments section)	
Total commercial harvest	203,619
10. Noncommercial harvest ²	
a. Sport	1,000
b. Personal Use	
c. Subsistence	
d. Other (annotate in comments section)	2,000
Total noncommercial harvest	3,000
11. Total Common Property Harvest (sum 9 and 10)	206,619

12. Total Return (sum 8 and 11) 269,918

Brood Year	Total # in Run, Current Year	Cumulative Ocean Survival (%)	Complete Return (yes or no)
13. Estimated ocean survival by brood year ²			
2008	4805	9.9	yes
2009	107940	11.6	no
2010	151721	12.9	no
2011	5128	0.28	no

14. Average size of fish sold	51.8	length-cm	2.2	wt-kg
15. Date(s) of harvest	6-19-14 / 8-13-14			
16. Gear type or method used	Purse Seine/Gillnet/ Beach Seine/ Sportfish Gear			

17. Disposition of Hatchery Escapement

a. Traditional harvest fish		# fish sold		lbs fish	
	adults	63,299		309,532	
	jacks				
	total	63,299		309,532	
b. Roe-recovery fish	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:

No brood is collected at this location. The donor stock is Saltery Lake.

The 2014 total return estimate (Line 11 above) is the sum of two figures: the first, for sockeye harvested within the Spiridon SHA, is based on numbers obtained from the ADF&G fish ticket database; the second, for Spiridon-bound sockeye harvested in NW Kodiak and SW Afognak Districts and was estimated by ADF&G.

Estimation of the Spiridon-bound sockeye harvest by gear type outside of the Spiridon Lake SHA is based on the reported catch of all sockeye by each type in the Central Section of the Northwest Kodiak District and the Southwest Afognak Section of the Afognak District between the dates of June 21 and August 15. In 2014, 39.0% of Spiridon-bound sockeye outside the SHA were harvested by purse seine, and 61.0% by set gillnet. All harvest within the SHA is by seine. Percentage rounding causes difference between BY cumulative and total fish number on line 12

Age composition is based on scale samples taken from fish harvested in the SHA.

(10d) This number represents fish that were uncatchable up the creek in Telrod Cove

The BY2008 cumulative survival figure in line 13 represents the complete brood year return.

Return numbers based on percentages from stat runs by KRAA in yearly preliminary run reconstructions for 2014

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

³ **Disposed** fish require a carcass disposal log.

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

Pillar Creek Hatchery/Kodiak Alaska

Species: Coho
 Location of project: Kodiak road system lakes and streams

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		
d. Other (annotate in comments section)		
Total commercial harvest	-	
10. Noncommercial harvest ²		
a. Sport	4,950	
b. Personal Use		
c. Subsistence		
d. Other (annotate in comments section)		
Total noncommercial harvest	4,950	
11. Total Common Property Harvest (sum 9 and 10)		4,950
12. Total Return (sum 8 and 11)		4,950

13. Estimated ocean survival by brood year ²	Brood Year	Total # in Run, Current Year	Cumulative Ocean Survival (%)	Complete Return (yes or no)
	BY11	data incomplete		

14. Average size of fish sold		length-cm		wt-kg
15. Date(s) of harvest	August - October			
16. Gear type or method used	sport tackle and gillnet subsistence			

17. Disposition of Hatchery Escapement

a. Traditional harvest fish		# fish sold	lbs fish		
	adults				
	jacks				
	total	-	-		
b. Roe-recovery fish	Sold	# fish	lbs fish	lbs roe	
	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:

Pillar Creek Hatchery produces coho and Chinook juveniles in cooperation with the ADF&G Sportfish Division. These sportfish programs are detailed in, and receive funding through, Co-operative Agreement 14-155 between KRAA and the Division. No brood is collected at this location. The donor stock is Buskin Lake. These coho are released in cooperation with the ADF&G Division of Sport Fish. The goal of the program, stated in the ADF&G Statewide Stocking Plan, is to create 1600 adult fish and 1500 angler days. The estimates entered above are based on these goals. Subsistence catch is included in the overall return estimate, and not specifically enumerated. Additional sportfish harvest estimates are reported in the ADF&G Statewide Sportfish Harvest Survey, which has not been completed for 2014; however, the Survey does not specify effort/harvest of stocked vs. native salmon on the Kodiak Road System. All returning coho are assumed to be 1yr freshwater . 1yr ocean fish.

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.

Pillar Creek Hatchery/Kodiak Alaska

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)	26
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	26

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	2,375
b. Personal Use	
c. Subsistence	
d. Other (annotate in comments section)	
Total noncommercial harvest	2,375
11. Total Common Property Harvest (sum 9 and 10)	2,375
12. Total Return (sum 8 and 11)	2,401

13. Estimated ocean survival by brood year ²	Brood Year	Total # in Run, Current Year	Cumulative Ocean Survival (%)	Complete Return (yes or no)
		2007	data incomplete	
	2008	data incomplete		
	2009	data incomplete		
	2010	data incomplete		

14. Average size of fish sold	n/a	length-cm		wt-kg
15. Date(s) of harvest	June / August			
16. Gear type or method used	Sport Tackle			

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 ³			
	total number of fish	-	-	-

c. Carcasses		# Sold	# Donated	# Disposed ³	Total
	Spawners				-
	Other (annotate in comments)				-
	total number of fish	-	-	-	-
	total pounds				-

Comments:

Pillar Creek Hatchery produces coho and Chinook juveniles in cooperation with the ADF&G Division of Sport Fish. These sportfish programs are detailed in, and receive funding through, Co-operative Agreement 14-155 between KRAA and the Division. The Kodiak Road System Chinook project includes returns to Monashka Creek and the American and Olds Rivers. 2014 was the tenth year in which adult (3-, 4-, and 5-ocean) Chinook returned to Monashka Creek, and thus the tenth year that Monashka Creek Chinook were utilized as broodstock. It was the fourth year of adult Chinook returns to the American and Olds Rivers. The project utilized broodstock from the Karluk River from 2000-2004. These Chinook are released in cooperation with the ADF&G Division of Sport Fish Division. Summary adult return figures are estimated by ADF&G staff, taking into account stream surveys, brood numbers, reported subsistence and estimated sport harvest. Harvest data will also be reported in the ADF&G Statewide Sportfish Harvest Survey, which has not been completed for 2014.

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

³ Disposed fish require a carcass disposal log.

SCHEDULE B-1

ANNUAL FISH CULTURE PRODUCTION REPORT

Pillar Creek Hatchery/Kodiak Alaska

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: Afognak Lake 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	476,843	100.0%	
2. Eyed eggs	329,934	69.19%	
3. Emergent fry	323,308	67.80%	
4. Fed fry		0	
5. Smolts		0	

B. Release Information

Site	Release		Life stage	Size		Return	
	Number	Date		gm/fish	mm/fish	Expected return	Return year(s)
Hidden Lake	200,000	5/14/2014	Fed fry	0.44		10,485	2017-18
Crescent Lake	107,785	5/14/2014	Fed fry	0.44		5,650	2017-18
Total:	307,785						

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

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.

Poor survivals were associated with poor egg quality and lake temperatures during brood collection, holding and eggtake

No major diseases, rearing problems or significant mortalities during fry rearing

SCHEDULE B-2

ANNUAL FISH CULTURE PRODUCTION REPORT

Pillar Creek Hatchery/Kodiak Alaska

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: Saltery Lake 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	4,548,430	100.0%	
2. Eyed eggs	3,868,667	85.05%	
3. Emergent fry	3,802,517	83.60%	
4. Fed fry		0	
5. Smolts	1,150,733	25.30%	Telrod Cove, Ouzinkie Village and Anton Larsen Bay Releases

B. Release Information

Site	Release			Size		Return	
	Number	Date	Life stage	gm/fish	mm/fish	Expected return	Return year(s)
Spiridon Lake	2,200,000	6/5/2014	Fed fry	0.46		192,918	2017-2018
L. Jennifer Lake	55,200	6/11/2014	Fed fry	0.49		4,840	2017-2018
Ruth Lake	55,200	6/11/2014	Fed fry	0.49		4,840	2017-2018
Total:	2,310,400						

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
Freshwater	Spiridon Lake	2,200,000	06/05/14	3,4H/4,3,2H		
Freshwater	L. Jennifer Lake	55,200	06/11/14	3,4H/4,3,2H		
Freshwater	Ruth Lake	55,200	06/11/14	3,4H/4,3,2H		
Saltwater Net Pen	Telrod Cove	650,000	05/25/15	3,4H/4,3,2H		
Saltwater Net Pen	Anton Larsen Bay	250,000	06/12/15	4,3,2H		
Saltwater Net Pen	Ouzinkie Village	100,000	06/05/15	4,3,2H		

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.

298,553 fed fry destroyed for IHNV Accession# 2014-0081

5-31-2014 at 0.40g

27,776 fish lost to airlock in RW13 on 7-29-2014

39,138 fish lost to airlock in RW15 on 10-4-2014

Hatchery water supply systems under review to try to get rid of supply problems concerning airlocks at high production levels

Mixed marks will go to all release sites annotated due to release number requirements and production holding capacity

We had a second assigned mark (4,3,2H) after a mismark on our Lots 2 and 3 BY13 Saltery eggs

SCHEDULE B-3 ANNUAL FISH CULTURE PRODUCTION REPORT

Pillar Creek Hatchery/Kodiak Alaska

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	124,677	100.0%	
2. Eyed eggs	113,434	90.98%	
3. Emergent fry	112,684	90.38%	
4. Fed fry		0	
5. Smolts		0	

B. Release Information

Site	Release			Size		Return	
	Number	Date	Life stage	gm/fish	mm/fish	Expected return	Return year(s)
Island Lake	30,000	7/22/2014	Fingerling	3.2		1,410	2016
Dark Lake	8,981	7/22/2014	Fingerling	3.2		425	2016
Mission Lake	13,141	7/22/2014	Fingerling	3.2		620	2016
Potato Patch Lake	10,192	7/22/2014	Fingerling	3.2		480	2016
Mayflower Lake	6,500	7/22/2014	Fingerling	3.2		130	2016
Abercrombie Lake	3,465	7/22/2014	Fingerling	3.2		75	2016
Barry Lagoon	22,500	7/22/2014	Fingerling	3.2			landlocked
Lilly Lake	10,655	7/22/2014	Fingerling	3.2			landlocked
Total:	105,434						

Release				Marking/Tagging		
Release Group ¹	Release Location	Number	Dates	Otolith Mark Pattern	Tag Code	Valid Tags

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.

None to report

SCHEDULE B-4

ANNUAL FISH CULTURE PRODUCTION REPORT

Pillar Creek Hatchery/Kodiak Alaska

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: Chinook Stock: Monashka Creek 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	365,019	100.0%	
2. Eyed eggs	338,687	92.79%	
3. Emergent fry	333,704	91.42%	
4. Fed fry		0	
5. Smolts		0	

B. Release Information

Site	Release			Size		Return	
	Number	Date	Life stage	gm/fish	mm/fish	Expected return	Return year(s)
Anticipated Kodiak	300,000	May/June 2015	pre-smolt	14		6,000	2018-2020
Road system release							
Total:	300,000						

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

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.

No major diseases, rearing problems or significant mortalities at this time

SCHEDULE B-5 ANNUAL FISH CULTURE PRODUCTION REPORT

Pillar Creek Hatchery/Kodiak Alaska

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: Rainbow Trout

Stock: Swanson River/JWHSFH

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		100.0%	
2. Eyed eggs	188,000	100.0%	First batch of 92,000 eggs experienced 100% mortality during transport
3. Emergent fry	50,710	26.97%	Lost 46,000 eggs or alevin during incubation of second egg shipment
4. Fed fry		0.00%	
5. Smolts		0.00%	

B. Release Information

Site	Release		Life stage	Size		Return	
	Number	Date		gm/fish	mm/fish	Expected return	Return year(s)
Kodiak Road system lakes	18,566	8/6/2014	fed fry	0.7			
Total:	18,566						

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

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.

First transport from JHSFH experienced 100% mortality when seeded after transport

Second transport of eggs had 52% mortality in heath trays during incubation period

Suspected coagulated yolk and triploiding complications contributed to another 36% loss during rearing period

ADFG supplied additional fish from JHSFH to stock in Kodiak lakes transported and fingerlings brought

by truck to Kodiak via Alaska Marine Highway.

Rainbow trout will be ponded to round pond inside in 2015 to avoid dog piling suspected to cause massive yolk problems in linear rearing trough at ponding.

SCHEDULE B-6

ANNUAL FISH CULTURE PRODUCTION REPORT

Pillar Creek Hatchery/Kodiak Alaska

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: Chinook

Stock: Monashka Creek

Brood Year: 2012

A. Life Stage Information

	Actual number	% cum survival	Annotate transfers between hatcheries, significant mortalities, or provide other descriptive comments.
1. Green eggs	333,786	100.0%	
2. Eyed eggs	312,461	93.61%	
3. Emergent fry	305,263	91.45%	
4. Fed fry		0	
5. Smolts		0	

B. Release Information

Site	Release			Size		Return	
	Number	Date	Life stage	gm/fish	mm/fish	Expected return	Return year(s)
American River	70,000	5/28/2014	pre-smolt	13.5		1,400	2017-2019
Olds River	70,000	5/29/2014	pre-smolt	12.5		1,400	2017-2019
Monashka Creek	70,000	5/30/2014	pre-smolt	12.5		1,400	2017-2019
Salonie Creek	62,561	5/31/2014	pre-smolt	12.5		1,400	2017-2019
Total:	272,561						

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

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.

No major diseases, rearing problems or significant mortalities

SCHEDULE B-7

ANNUAL FISH CULTURE PRODUCTION REPORT

Pillar Creek Hatchery/Kodiak Alaska

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: Saltery Lake Brood Year: 2012

A. Life Stage Information

	Actual number	% cum survival	Annotate transfers between hatcheries, significant mortalities, or provide other descriptive comments.
1. Green eggs	3,717,450	100.0%	
2. Eyed eggs	3,486,150	93.78%	
3. Emergent fry	3,194,847	85.94%	
4. Fed fry	2,101,690	56.54%	stocked summer 2013
5. Smolts	842,393	22.66%	released spring 2014 (details B7.B.)

B. Release Information

Site	Release			Size		Return	
	Number	Date	Life stage	gm/fish	mm/fish	Expected return	Return year(s)
Telrod Cove	607,274	5/31/2014	smolt	16.9		172,700	2016-2017
Ouzinkie Village Harbor	95,000	6/13/2014	smolt	12.7		27,000	2016-2017
Anton Larsen Bay	140,119	6/7/2014	smolt	15		40,000	2016-2017
Total:	842,393						

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
Saltwater net pen	Telrod Cove	607,274	41,790	5,2H		

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.

Dry conditions followed by heavy rains led to increased turbidity and mortality caused by gill hyperplasia which was further compounded by high TDGs. Total loss approx. 27,000 fish.

PCH raceways experienced air locks on two occasions resulting in mortality. Events occurred on August 2nd 2013 and September 17th 2014. Total loss approx. 67,000 fish from two raceways.

These events described above totaled approx. 94,000 fish lost to production. Both incidents documented with the PNP office.

18% mortality recorded after transfer to salt water pens at Anton Larsen Bay during rearing period

This mortality was thought to be associated with no fresh water influence at the net pen site due to no rainfall

SCHEDULE D
PROJECTED RETURNS FOR 2015
Pillar Creek Hatchery/Kodiak Alaska

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	2009-2012	Hidden Lake	350	0	500
Sockeye	2009-2012	Crescent Lake	6,700	4,500	8,500
Sockeye	2009-2012	Spiridon Lake	232,000	127,000	337,000
Sockeye	2010-2011	Terod Cove	64,000	53,000	71,000
Sockeye	2011	Anton-Larsen	45,000	20,000	65,000
Sockeye	2011	Ouzinkie Village	8,500	5,000	12,000
Chinook	2008	Kodiak Road System	188	0	400
	2009	Kodiak Road System	268	0	600
	2010	Kodiak Road System	1,650	500	2,500
Coho	2012	Kodiak Road System	1,600		

All ocean survival calculations are based on historical returns by year class in KRAA Pillar Creek Hatchery data sets. Pillar Creek Hatchery has several projects where return data is not available, and forecasts are best-guess estimates of KRAA staff and regional biologists.

For these projects, estimates are not made by individual brood year but are based on historical data. Some forecasts include numbers with no historical return data (li.e. Telrod Cove net pen imprinting program and road system Chinook).

SCHEDULE F-1
UPDATED 2013 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: **Pillar Creek Hatchery/Kodiak Alaska**
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	2,743
D. Other (annotate in comments section)	
Total noncommercial	2,743
11. Total Return (sum 8,9,10)	2,743

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

Comments:
 ~ No brood is collected at this location. The primary donor stock is Afognak Lake.
 ~ Total return estimate is based on harvest numbers obtained from the ADF&G fish ticket database, plus reported subsistence catch.
 A portion of the Crescent Lake-bound sockeye return was likely harvested in the set gillnet fishery outside Settler's Cove and the Kizhuyak Section.
 ~ The local subsistence fishery harvests a significant portion of this run. Subsistence harvest reporting/analysis will not be complete until March 2015. **The 2013 subsistence harvest will be reported in Schedule F of the 2014 Annual Report.** Anecdotal reports of the 2013 Settler's Cove subsistence harvest suggest that the run was average.
 ~Age composition of this return is unavailable as the data needed for it is not collected by ADF&G or KRAA