

# 2016 ANNUAL REPORT ALASKA SALMON HATCHERY

Year Ending December 15, 2016

Hatchery name/Location  
Permit holder name/Address

<b>Pillar Creek Hatchery / Kodiak, Alaska</b>
104 Center Ave. STE. 205
Kodiak, Alaska 99615

Person to contact  
regarding this report

Trent Dodson
907-486-6555

name  
phone

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## DECLARATION AND SIGNATURE

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

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Name of Legal Representative

--

Date

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## 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)	341	females	229	male 570 total
4. Inviabile broodstock (green/over-ripe/bad)	30	females	50	male 80 total
5. Unspawned fish (roe recovery, excess males)				
6. Holding mortalities (raceway, pen mortalities)	58			
7. Adults sacrificed for broodstock (sum 3 thru 6)	708			
8. Average length and weight of adults used for broodstock				
females>	51.0	cm	1.9	kg
males>	51.0	cm	1.9	kg
9. Average fecundity (eggs/female)	2,207			
10. Egg-take dates:	7/30-8/3/2016			
11. Number of green eggs taken	753,618			
12. Number of eggs transferred out (annotate below)	-	0		
13. Number of eggs destroyed (annotate below)	-	0		
14. Number of green eggs retained in hatchery <sup>1</sup>	753,618			
15. Number remaining in hatchery at eyed stage	653,061	86.7% % survival <sup>2</sup>		
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				
Broodstock not weighed or measured; average eye-fork length provided by ADF&G, 2015				
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) Fertility increased by pumping creek water that was 4.0 degrees Celcius cooler to the egg take site				
for process water at the egg take. This will become SOP for warm year egg takes at Afognak Lake for PCH				
(343) 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

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)	1,533	females	1,033	male 2,566 total
4. Inviabile broodstock (green/over-ripe/bad)	172	females	274	male 446 total
5. Unspawned fish (roe recovery, excess males)	-			
6. Holding mortalities (raceway, pen mortalities)	478			
7. Adults sacrificed for broodstock (sum 3 thru 6)	3,490			
8. Average length and weight of adults used for broodstock				
females>	54.0	cm	2.4	kg
males>	54.0	cm	2.4	kg
9. Average fecundity (eggs/female)	2,700			
10. Egg-take dates:	8/6-8/19-2016			
11. Number of green eggs taken	4,139,232			
12. Number of eggs transferred out (annotate below)	-	765,718		
13. Number of eggs destroyed (annotate below)	-	0		
14. Number of green eggs retained in hatchery <sup>1</sup>	4,139,232			
15. Number remaining in hatchery at eyed stage	3,061,780	92.5% % survival <sup>2</sup>		
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				
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.				
(12) Eyed eggs transferred to Kitoi Bay Hatchery				
(1320) Brood fish released back to Saltery Lake unused .				
(2)BY2016 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)	<i>Pillar Creek/ Buskin River stock</i>			
3. Viable broodstock (spawned, eggs in incubators)	39	females	61	male 100 total
4. Inviabile broodstock (green/over-ripe/bad)	1	females	-	male 1 total
5. Unspawned fish (roe recovery, excess males)				
6. Holding mortalities (raceway, pen mortalities)	25			
7. Adults sacrificed for broodstock (sum 3 thru 6)	126			
8. Average length and weight of adults used for broodstock				
	62.0	females> cm	4.5	kg
	62.0	males> cm	4.5	kg
9. Average fecundity (eggs/female)	2,359			
10. Egg-take dates:	11-10/17-2016			
11. Number of green eggs taken	92,000			
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 <sup>1</sup>	92,000			
15. Number remaining in hatchery at eyed stage	0 % survival <sup>2</sup>			

16. Describe procedures used for egg takes and evaluation of in-hatchery survivals:  
Dry spawning method used. Eggs water hardened before loading into incubators.

Lines 9, 11, and 14 entries are estimates based on historical assumed fecundity. Actual egg inventory and survival will be estimated by weight sampling method at eyed egg processing.

(2)Eggs have not developed to eyed stage.

Broodstock not weighed or measured; eye-fork length provided in Line 8 above are from 2016 at the Buskin wier

ADF&G weir sampling. Weight entry is historic average for Buskin Lake coho.

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

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)	<i>Karluk stock / Monashka Creek / 259-10</i>			
3. Viable broodstock (spawned, eggs in incubators)	40	females	41	male 81 total
4. Inviabile broodstock (green/over-ripe/bad)	2	females	5	male 7 total
5. Unspawned fish (roe recovery, excess males)				
6. Holding mortalities (raceway, pen mortalities)	24			
7. Adults sacrificed for broodstock (sum 3 thru 6)	112			
8. Average length and weight of adults used for broodstock				
	73.0	females> cm	8.2	kg
	73.0	males> cm	8.2	kg
9. Average fecundity (eggs/female)	4,226			
10. Egg-take dates:	08/12/16			
11. Number of green eggs taken	169,030			
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 <sup>1</sup>	169,030			
15. Number remaining in hatchery at eyed stage	147,381 87.2% % survival <sup>2</sup>			

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.

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.

Line 15 (2) Survival is in line with remote egg take goals.

**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:  Stock:  Release Site:

**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 <sup>1</sup> (annotate in comments section)	
6. Other <sup>1</sup> (annotate in comments section)	
7. Other <sup>1</sup> (annotate in comments section)	
<b>8. Total hatchery escapement</b>	-

**B. Common Property Harvest**

9. Commercial harvest <sup>2</sup>	
a. Troll	
b. Gillnet	
c. Seine	7,943
d. Other (annotate in comments section)	
<b>Total commercial harvest</b>	7,943
10. Noncommercial harvest <sup>2</sup>	
a. Sport	
b. Personal Use	
c. Subsistence	
d. Other (annotate in comments section)	
<b>Total noncommercial harvest</b>	-
<b>11. Total Common Property Harvest (sum 9 and 10)</b>	7,943
<b>12. Total Return (sum 8 and 11)</b>	7,943

13. Estimated ocean survival by brood year <sup>2</sup>	Brood Year	Total # in Run, Current Year	Cumulative Ocean Survival (%)	Complete Return (yes or no)
	2010	50	4.0	yes
	2011	2,715	3.1	no
	2012	4,643	1.7	no
	2013	535	0.3	no

14. Average size of fish sold	51	length-cm	1.9	wt-kg
15. Date(s) of harvest	6/2/2016- 6/9/2016			
16. Gear type or method used	purse seine			

**17. Disposition of Hatchery Escapement**

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

**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 BY2010 cumulative survival figure in line 13 represents the complete brood year return.

<sup>1</sup> "Other": use one line per category (e.g. fish remaining in salt water, sea lion predation, etc.).  
<sup>2</sup> Commercial harvest, noncommercial harvest, and estimated ocean survival: Please provide method used in estimation.  
<sup>3</sup> 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.

**Pillar Creek Hatchery / Kodiak, Alaska**

Species:  Stock:  Release Site:

### 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 <sup>1</sup> (annotate in comments section)
6. Other <sup>1</sup> (annotate in comments section)
7. Other <sup>1</sup> (annotate in comments section)

	-
	-

### 8. Total hatchery escapement

### B. Common Property Harvest

9. Commercial harvest <sup>2</sup>
  - a. Troll
  - b. Gillnet
  - c. Seine
  - d. Other (annotate in comments section)

	-

#### Total commercial harvest

10. Noncommercial harvest <sup>2</sup>
  - 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)

	-
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### 12. Total Return (sum 8 and 11)

	-
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	Brood Year	Total # in Run, Current Year	Cumulative Ocean Survival (%)	Complete Return (yes or no)
13. Estimated ocean survival by brood year <sup>2</sup>	2010	See Below		
	2011			
	2012			
	2013			

14. Average size of fish sold	51	length-cm	1.9	wt-kg
15. Date(s) of harvest				
16. Gear type or method used				

### 17. Disposition of Hatchery Escapement

	# fish sold	lbs fish
a. Traditional harvest fish		
adults		
jacks		
total	-	-

	# fish	lbs fish	lbs roe
b. Roe-recovery fish			
Sold			
Donated			
Disposed <sup>3</sup>			
<b>total number of fish</b>	-	-	-

	# Sold	# Donated	# Disposed <sup>3</sup>	Total
c. Carcasses				
Spawners				-
Other (annotate in comments)				-
<b>total number of fish</b>	-	-	-	-
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 2017. The 2016 subsistence harvest will be reported in Schedule F of the 2017 Annual Report.

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 2016

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

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

<sup>3</sup> **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:  Stock:  Release Site:

### 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 <sup>1</sup> (annotate in comments section)
6. Other <sup>1</sup> (annotate in comments section)
7. Other <sup>1</sup> (annotate in comments section)

51,328
51,328

### 8. Total hatchery escapement

### B. Common Property Harvest

9. Commercial harvest <sup>2</sup>
  - a. Troll
  - b. Gillnet
  - c. Seine
  - d. Other (annotate in comments section)

92,514
31,766
124,280

#### Total commercial harvest

10. Noncommercial harvest <sup>2</sup>
  - a. Sport
  - b. Personal Use
  - c. Subsistence
  - d. Other (annotate in comments section)

500
200
700

#### Total noncommercial harvest

### 11. Total Common Property Harvest (sum 9 and 10)

124,980

### 12. Total Return (sum 8 and 11)

176,308

Brood Year	Total # in Run, Current Year	Cumulative Ocean Survival (%)	Complete Return (yes or no)
2009	3,526	12.0	Yes
2010	3,699	11.8	No
2011	66,062	7.5	No
2012	105,185	3.9	No
2013	104	0.004	No

13. Estimated ocean survival by brood year <sup>2</sup>

	50.4	length-cm		1.9	wt-kg
14. Average size of fish sold					
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		
<b>total</b>	-	-

b. Roe-recovery fish

	# fish	lbs fish	lbs roe
Sold			
Donated			
Disposed <sup>a</sup>			
<b>total number of fish</b>	-	-	-

c. Carcasses

	# Sold	# Donated	# Disposed <sup>a</sup>	Total
Spawners				-
Other (annotate in comments)				-
<b>total number of fish</b>	-	-	-	-
total pounds				-

### Comments:

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

The 2016 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 2016, 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 BY2009 cumulative survival figure in line 13 represents the complete brood year return. Previously untracked 3.3 age class

Return numbers based on percentages from stat runs by KRAA in yearly preliminary run reconstructions for 2016

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

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

<sup>3</sup> 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.

**Pillar Creek Hatchery / Kodiak, Alaska**

Species:  Stock:  Release Site:

### 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 <sup>1</sup> (annotate in comments section)	
6. Other <sup>1</sup> (annotate in comments section)	
7. Other <sup>1</sup> (annotate in comments section)	
<b>8. Total hatchery escapement</b>	-

### B. Common Property Harvest

9. Commercial harvest <sup>2</sup>	
a. Troll	
b. Gillnet	
c. Seine	
d. Other (annotate in comments section)	
<b>Total commercial harvest</b>	-
10. Noncommercial harvest <sup>2</sup>	
a. Sport	600
b. Personal Use	
c. Subsistence	
d. Other (annotate in comments section)	
<b>Total noncommercial harvest</b>	600
<b>11. Total Common Property Harvest (sum 9 and 10)</b>	<b>600</b>
<b>12. Total Return (sum 8 and 11)</b>	<b>600</b>

Brood Year	Total # in Run, Current Year	Cumulative Ocean Survival (%)	Complete Return (yes or no)
13. Estimated ocean survival by brood year <sup>2</sup>	BY13	data incomplete	

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

### 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 <sup>3</sup>			
	<b>total number of fish</b>	-	-	-

  

c. Carcasses		# Sold	# Donated	# Disposed <sup>3</sup>	Total
	Spawners				-
	Other (annotate in comments)				-
	<b>total number of fish</b>	-	-	-	-
	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 2016; 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.

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

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

<sup>3</sup> 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:  Stock:  Release Site:

### 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)	112
3. Escapement for hatchery watershed (as required in permit)	
4. Jacks	
5. Other <sup>1</sup> (annotate in comments section)	
6. Other <sup>1</sup> (annotate in comments section)	
7. Other <sup>1</sup> (annotate in comments section)	
<b>8. Total hatchery escapement</b>	<b>112</b>

### B. Common Property Harvest

9. Commercial harvest <sup>2</sup>	
a. Troll	
b. Gillnet	
c. Seine	
d. Other (annotate in comments section)	
<b>Total commercial harvest</b>	-
10. Noncommercial harvest <sup>2</sup>	
a. Sport	3,450
b. Personal Use	
c. Subsistence	
d. Other (annotate in comments section)	
<b>Total noncommercial harvest</b>	3,450
<b>11. Total Common Property Harvest (sum 9 and 10)</b>	<b>3,450</b>
<b>12. Total Return (sum 8 and 11)</b>	<b>3,562</b>

Brood Year	Total # in Run, Current Year	Cumulative Ocean Survival (%)	Complete Return (yes or no)
13. Estimated ocean survival by brood year <sup>2</sup>			
2009	Data incomplete		
2010	all years		
2011			
2012			

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				
	<b>total</b>	-	-		
b. Roe-recovery fish		# fish	lbs fish	lbs roe	
	Sold				
	Donated				
	Disposed <sup>3</sup>				
	<b>total number of fish</b>	-	-	-	
c. Carcasses		# Sold	# Donated	# Disposed <sup>3</sup>	Total
	Spawners				-
	Other (annotate in comments)				-
	<b>total number of fish</b>	-	-	-	-
	<b>total pounds</b>				-

### 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, Salonie Creek and the American and Olds Rivers. 2016 was the twelfth year in which adult (3-, 4-, and 5-ocean) Chinook returned to Monashka Creek, and thus the twelfth year that Monashka Creek Chinook were utilized as broodstock. It was the sixth 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 2016.

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

<sup>3</sup> Disposed fish require a carcass disposal log.



## SCHEDULE C-8 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:  Stock:  Release Site:

### 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 <sup>1</sup> (annotate in comments section)
6. Other <sup>1</sup> (annotate in comments section)
7. Other <sup>1</sup> (annotate in comments section)

-
-

### 8. Total hatchery escapement

### B. Common Property Harvest

9. Commercial harvest <sup>2</sup>
  - a. Troll
  - b. Gillnet
  - c. Seine
  - d. Other (annotate in comments section)
- Total commercial harvest**
10. Noncommercial harvest <sup>2</sup>
  - 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)

-

Brood Year	Total # in Run, Current Year	Cumulative Ocean Survival (%)	Complete Return (yes or no)
2011	Data Incomplete		
2012			
2013			

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

### 17. Disposition of Hatchery Escapement

	# fish sold	lbs fish
a. Traditional harvest fish		
adults		
jacks		
<b>total</b>	-	-

	# fish	lbs fish	lbs roe
b. Roe-recovery fish			
Sold			
Donated			
Disposed <sup>3</sup>			
<b>total number of fish</b>	-	-	-

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

### Comments:

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

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

<sup>3</sup> 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: 2015

### A. Life Stage Information

	Actual number	% cum survival	Annotate transfers between hatcheries, significant mortalities, or provide other descriptive comments.
1. Green eggs	1,030,117	100.0%	
2. Eyed eggs	195,320	19.0%	
3. Emergent fry	104,231	10.1%	
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	99,969	4/5/2016	fry	0.32		6,300	2019-20
Total:	99,969						

### C. Marking/Tagging

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

Release Group <sup>1</sup>	Release			Marking/Tagging		
	Release Location	Number <sup>2</sup>	Dates	Otolith Mark Pattern	Tag Code	Valid Tags

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

<sup>2</sup> This should be the sum of the marked + unmarked release for each tag code or otolith mark.

### D. Other

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

With lake temperatures near 20 Centigrade we had terrible fertilization at 20-30%

Developmental problems continued at the hatchery with even more mortality post-eye

These fish were exhibiting fusio-bacteria infection symptoms and were released at a smaller size to decrease density.

These fish received formalin treatments

PCH pumped cold creek water to the eggtake site in 2016, this raised fertilization rates significantly



















**SCHEDULE D**  
**PROJECTED RETURNS FOR 2017**

**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	2011-2014	Hidden Lake	10,536	8,100	12,971
Sockeye	2011-2014	Crescent Lake	6,211	4,774	7,677
Sockeye	2011-2014	Spiridon Lake/Telrod Cove	288,106	238,938	337,274
Sockeye	2011-2014	Anton Larsen	22,281	14,714	29,848
Sockeye	2011-2014	Ouzinkie	10,610	7,481	13,739
Coho	2014	Pillar Creek	6,140	4,605	7,675
	2014	Monashka Creek	4,980	3,735	6,225
	2014	Island Lake	1,500	1,125	1,875
	2014	Mission Beach	1,100	825	1,375
Chinook	2011	Kodiak Road System	1,010	756	1,253
	2012	Kodiak Road System	1,169	877	1,461
	2013	Kodiak Road System	459	412	574

**COMMENTS:**

- Hidden: 4.6% fry to adult survival applied to average adult age composition for BY01-10
- Crescent: Same calculations as Hidden
- Spiridon: Smolt-adult survival (31.2%) was applied to average adult composition for BY98-08  
Lake outmigrants and net pen releases both based on BY98-08 smolt-adult survival
- Anton Larsen: Assumed 15% smolt-adult survival applied to Spiridon age composition
- Ouzinkie: Assumed 15% smolt-adult survival applied to Spiridon age composition
- Coho: Assumed 4.4% release to return (1-ocean) survival
- Chinook: Assumed 1.3% smolt-adult survival and age classes 1.2 ( 12%), 1.3 (33%), and 1.4 (55%)