

2018 ANNUAL REPORT ALASKAN SALMON HATCHERY

Year ending December 15, 2018

Hatchery name/Location	TRAIL LAKES
Permit holder name/Address	Forrest Cohn

Person to contact	Forrest Cohn	name
regarding this report	9072835761	phone

Schedule A - Egg-take

ID	Brood Year	Species	Ancestral Stock	Donor Stock	Egg-take Green	Eggs Retained	Eggs Survived
1	2018	SOCKEYE	BEAR LK	BEAR LK+SHIP CR	2,770,000	2,770,000	2,556,000
2	2018	SOCKEYE	ENGLISH BAY LK	TUTKA BAY H	3,913,000	3,913,000	
3	2018	SOCKEYE	HIDDEN LK 244-30	HIDDEN LK 244-30	1,258,000	1,258,000	1,135,000
4	2018	COHO	BEAR LK	BEAR LK	640,000	640,000	577,000

Schedule B - Section A - Life Stage Information

ID	Brood Year	Species	Ancestral Stock	Donor Stock	Green	Eyed	Emg Fry	Fed Fry	Smolt
1	2016	SOCKEYE	BIG R LKS+U RUSSIAN	BEAR LK	5,006,997	4,516,650	4,381,150	4,380,300	1,488,000
2	2016	SOCKEYE	ENGLISH BAY LK	ENGLISH BAY LK	4,273,494	3,401,700	3,299,649	3,035,824	518,000
3	2016	COHO		BEAR LK	293,074	232,187	225,231	225,231	98,000
4	2017	SOCKEYE	BEAR LK	BEAR LK	5,122,000	4,475,800	4,342,000	4,182,000	1,588,000
5	2017	SOCKEYE	ENGLISH BAY LK	TUTKA BAY H	5,555,000	4,035,600	3,834,000	3,490,000	485,000
6	2017	SOCKEYE	HIDDEN LK 244-30	HIDDEN LK 244-30	1,282,300	1,184,900	1,271,000		
7	2016	SOCKEYE		SHELL LK 247-41	87,595	65,179	63,000	62,000	46,000
8	2017	COHO	BEAR LK	BEAR LK	587,900	525,000	514,537	512,000	60,000

Schedule B - Section C - Release

ID	Release ID/Tag Code	Brood Year	Species	Ancestral Stock	Donor Stock	Site	Total Released
1	!01184CIAA01	2016	SOCKEYE	BIG R LKS+U RUSSIAN	BEAR LK	RESURRECTION BAY 231-30	1,488,000
2	!01184CIAA03	2016	SOCKEYE	ENGLISH BAY LK	ENGLISH BAY LK	TUTKA BAY 241-16	518,000
3	!01182CIAA03	2016	COHO		BEAR LK	RESURRECTION BAY 231-30	28,000
3	!01182CIAA04	2016	COHO		BEAR LK	BEAR CR 231-30	70,000
4	!01184CIAA07	2017	SOCKEYE	BEAR LK	BEAR LK	BEAR LK 231-30	2,555,000
5	!01184CIAA04	2017	SOCKEYE	ENGLISH BAY LK	TUTKA BAY H	KIRSCHNER LK 249-75 (B)	244,000
5	!01184CIAA05	2017	SOCKEYE	ENGLISH BAY LK	TUTKA BAY H	LEISURE LK 241-15	1,948,000
5	!01184CIAA06	2017	SOCKEYE	ENGLISH BAY LK	TUTKA BAY H	HAZEL LK 241-15 (B)	813,000
6	!01184CIAA09	2017	SOCKEYE	HIDDEN LK 244-30	HIDDEN LK 244-30	HIDDEN LK 244-30	1,271,000
7	!01184CIAA02	2016	SOCKEYE		SHELL LK 247-41	SHELL LK 247-41	46,000
8	!01182CIAA02	2017	COHO	BEAR LK	BEAR LK	BEAR LK 231-30	438,000

Schedule C - Return

ID	Species	Ancestral Stock	Donor Stock	Project	Cost Recovery	Comm Property	Total Return
1	SOCKEYE	BEAR LK	BEAR LK	BEAR L	158,427	34,310	208,634
2	COHO	BEAR LK	BEAR LK	BEAR L-TL		5,000	6,165
3	SOCKEYE	ENGLISH BAY LK	TUTKA BAY H	TUTKA BAY-TL	62,653	22,251	88,316
4	SOCKEYE	HIDDEN LK 244-30	HIDDEN LK 244-30	HIDDEN L			88,540
5	SOCKEYE	ENGLISH BAY LK	TUTKA BAY H	KIRSCHNER L-TL	11,536	5,702	17,238
6	SOCKEYE	ENGLISH BAY LK	TUTKA BAY H	LEISURE & HAZEL LKS	29,628	3,600	33,228

Schedule F - Return

ID	Species	Stock	Project	Cost Recovery	Comm Property	Total Return
----	---------	-------	---------	---------------	---------------	--------------

Schedule A-1

2018 ANNUAL BROODSTOCK AND INITIAL SURVIVAL REPORT

TRAIL LAKES

Continued to

1. Species	<input type="text" value="SOCKEYE"/>				
2. Donor stock	<input type="text" value="BEAR LK+SHIP CR"/>				
3. Ancestral stock	<input type="text" value="BEAR LK"/>				
4. Viable broodstock (spawned, eggs in incubators)	<input type="text" value="1,043"/>	females	<input type="text" value="1,052"/>	males	<input type="text" value="2,095"/> total
5. Inviabile broodstock (green/over-ripe/bad)	<input type="text" value="37"/>	females	<input type="text" value="13"/>	males	<input type="text" value="50"/> total
6. Unspawned fish (roe recovery, excess males)	<input type="text"/>				
7. Holding mortalities (raceway, pen mortalities)	<input type="text" value="66"/>				
8. Adults sacrificed for broodstock (sum 4 thru 7)	<input type="text" value="2,211"/>				
9. Average length and weight of adults used for broodstock					
	Females	<input type="text"/>	mm	<input type="text"/>	kg
	Males	<input type="text"/>	mm	<input type="text"/>	kg
10. Average fecundity (eggs/female)	<input type="text" value="2,656"/>	<input type="checkbox"/> Override auto calculation			
11. Egg-take dates (first date)	<input type="text" value="07/27/2018"/>				
12. Egg-take dates (last date)	<input type="text" value="08/23/2018"/>				
13. Number of green eggs taken	<input type="text" value="2,770,000"/>				

14-16. Transfers, Morts, and Culls

Transfer Type	Date	Life Stage	FTP	Direction	Site/Discard Cause	Total
Total Transfers, Morts, and Culls						<input type="text"/>

17. Number of green eggs retained in hatchery	<input type="text" value="2,770,000"/>
18. Number remaining in hatchery at eyed stage	<input type="text" value="2,556,000"/> <input type="text" value="92.274"/> % survival <input type="checkbox"/> Override auto calculation
19. Describe procedures used for egg takes and evaluation of in-hatchery survivals:	

Eggs collected at Bear Lake are retrieved from broodstock held in small net pens located on a stream at the Northwest corner of Bear Lake. Eggs and milt are transported separately to Trail Lakes Hatchery just north of Moose Pass, AK for delayed fertilization. At the eyed egg stage these eggs are shocked (~340 CTU), then picked using a Jensortor JH pick machine. Good eggs are weighed and placed back into the incubators, while the dead eggs are culled. Both live and dead eggs are sampled for size, which allows staff to calculate survival till eyed.

Entered By

Date Last Modified

Schedule A-2

2018 ANNUAL BROODSTOCK AND INITIAL SURVIVAL REPORT

TRAIL LAKES

Continued to

1. Species	<input type="text" value="SOCKEYE"/>			
2. Donor stock	<input type="text" value="TUTKA BAY H"/>			
3. Ancestral stock	<input type="text" value="ENGLISH BAY LK"/>			
4. Viable broodstock (spawned, eggs in incubators)	<input type="text" value="1,666"/>	females	<input type="text" value="1,199"/>	males <input type="text" value="2,865"/> total
5. Inviabile broodstock (green/over-ripe/bad)	<input type="text" value="60"/>	females	<input type="text" value="4"/>	males <input type="text" value="64"/> total
6. Unspawned fish (roe recovery, excess males)	<input type="text" value="483"/>			
7. Holding mortalities (raceway, pen mortalities)	<input type="text" value="1,733"/>			
8. Adults sacrificed for broodstock (sum 4 thru 7)	<input type="text" value="5,145"/>			
9. Average length and weight of adults used for broodstock				
	Females	<input type="text"/>	mm	<input type="text"/>
	Males	<input type="text"/>	mm	<input type="text"/>
10. Average fecundity (eggs/female)	<input type="text" value="2,349"/>	<input type="checkbox"/> Override auto calculation		
11. Egg-take dates (first date)	<input type="text" value="09/28/2018"/>			
12. Egg-take dates (last date)	<input type="text" value="10/17/2018"/>			
13. Number of green eggs taken	<input type="text" value="3,913,000"/>			

14-16. Transfers, Morts, and Culls

Transfer Type	Date	Life Stage	FTP	Direction	Site/Discard Cause	Total
---------------	------	------------	-----	-----------	--------------------	-------

Total Transfers, Morts, and Culls

17. Number of green eggs retained in hatchery	<input type="text" value="3,913,000"/>
18. Number remaining in hatchery at eyed stage	<input type="text"/> % survival <input type="checkbox"/> Override auto calculation
19. Describe procedures used for egg takes and evaluation of in-hatchery survivals:	

Sockeye broodstock are ripened in a lensing bag located in Tutka Bay Lagoon. Ripeness checks are performed and when enough broodstock are ripe, eggtake begins. Eggs and milt are kept separate at collection, packed in coolers with burlap and ice, then flown to Upper Trail Lake where Trail Lakes Hatchery staff pick up the coolers and fertilize through the delayed fertilization method. Eggtakes continue each day until all broodstock have been utilized. At the eyed egg stage these eggs are shocked (~340 CTU), then picked using a Jensorter JH pick machine. Good eggs are weighed and placed back into the incubators, while the dead eggs are culled. Both live and dead eggs are sampled for size, which allows staff to calculate survival till eyed.

Entered By Date Last Modified

Schedule A-3

2018 ANNUAL BROODSTOCK AND INITIAL SURVIVAL REPORT

TRAIL LAKES

Continued to

1. Species	<input type="text" value="SOCKEYE"/>				
2. Donor stock	<input type="text" value="HIDDEN LK 244-30"/>				
3. Ancestral stock	<input type="text" value="HIDDEN LK 244-30"/>				
4. Viable broodstock (spawned, eggs in incubators)	<input type="text" value="540"/>	females	<input type="text" value="542"/>	males	<input type="text" value="1,082"/> total
5. Inviabile broodstock (green/over-ripe/bad)	<input type="text" value="36"/>	females	<input type="text" value="4"/>	males	<input type="text" value="40"/> total
6. Unspawned fish (roe recovery, excess males)	<input type="text"/>				
7. Holding mortalities (raceway, pen mortalities)	<input type="text" value="16"/>				
8. Adults sacrificed for broodstock (sum 4 thru 7)	<input type="text" value="1,138"/>				
9. Average length and weight of adults used for broodstock					
	Females	<input type="text"/>	mm	<input type="text"/>	kg
	Males	<input type="text"/>	mm	<input type="text"/>	kg
10. Average fecundity (eggs/female)	<input type="text" value="2,330"/>	<input type="checkbox"/> Override auto calculation			
11. Egg-take dates (first date)	<input type="text" value="09/18/2018"/>				
12. Egg-take dates (last date)	<input type="text" value="09/20/2018"/>				
13. Number of green eggs taken	<input type="text" value="1,258,000"/>				

14-16. Transfers, Morts, and Culls

Transfer Type	Date	Life Stage	FTP	Direction	Site/Discard Cause	Total
Total Transfers, Morts, and Culls						<input type="text"/>

17. Number of green eggs retained in hatchery	<input type="text" value="1,258,000"/>
18. Number remaining in hatchery at eyed stage	<input type="text" value="1,135,000"/> <input type="text" value="90.223"/> % survival <input type="checkbox"/> Override auto calculation
19. Describe procedures used for egg takes and evaluation of in-hatchery survivals:	

Adult sockeye are passed into Hidden Lake by Seasonal Assistants at the Hidden Creek Weir. Once fish are ripe and on the spawning grounds Trail Lakes Hatchery staff place females and males into separate net pens in the lake. The following day eggtake is conducted. Gametes are transported back to Trail Lakes Hatchery where they are fertilized using the delayed fertilization method. At the eyed egg stage these eggs are shocked (~340 CTU), then picked using a Jensorter JH pick machine. Good eggs are weighed and placed back into the incubators, while the dead eggs are culled. Both live and dead eggs are sampled for size, which allows staff to calculate survival till eyed.

Entered By

Date Last Modified

Schedule A-4

2018 ANNUAL BROODSTOCK AND INITIAL SURVIVAL REPORT

TRAIL LAKES

Continued to

- 1. Species
- 2. Donor stock
- 3. Ancestral stock
- 4. Viable broodstock (spawned, eggs in incubators) females males total
- 5. Inviabile broodstock (green/over-ripe/bad) females males total
- 6. Unspawned fish (roe recovery, excess males)
- 7. Holding mortalities (raceway, pen mortalities)
- 8. Adults sacrificed for broodstock (sum 4 thru 7)
- 9. Average length and weight of adults used for broodstock
 - Females mm kg
 - Males mm kg
- 10. Average fecundity (eggs/female) Override auto calculation
- 11. Egg-take dates (first date)
- 12. Egg-take dates (last date)
- 13. Number of green eggs taken

14-16. Transfers, Morts, and Culls

Transfer Type	Date	Life Stage	FTP	Direction	Site/Discard Cause	Total
---------------	------	------------	-----	-----------	--------------------	-------

Total Transfers, Morts, and Culls

- 17. Number of green eggs retained in hatchery
- 18. Number remaining in hatchery at eyed stage % survival Override auto calculation
- 19. Describe procedures used for egg takes and evaluation of in-hatchery survivals:

Adult coho are collected at the Bear Creek Weir and allowed to ripen in one concrete raceway with a divider separating males and females. When fish are ripe staff from Trail Lakes Hatchery conducts the egtakes. Females are spawned in groups of 3 and their eggs are placed in a 2 gallon bucket, milt is added and eggs are then fertilized, rinsed, and allowed to water harden for 2 hours. Eggs are then transported back to Trail Lakes Hatchery where they are inventoried and placed into heath trays. At the eyed egg stage these eggs are shocked (~275 CTU), then picked using a Jensortor JH pick machine. Good eggs are weighed and placed back into the incubators, while the dead eggs are culled. Both live and dead eggs are sampled for size, which allows staff to calculate survival till eyed. An additional 173 fish were taken for broodstock at the Bear Creek weir by WJHSFH as reported on their report (not reported here).

Entered By

Date Last Modified

Schedule B-1

2018 ANNUAL FISH CULTURE PRODUCTION REPORT

TRAIL LAKES

Species

Donor Stock

Brood Year

Ancestral Stock

Continued from to

A. Life Stage Information

	Actual Number	% cum survival	Annotate transfers between hatcheries, significant mortalities, or provide other descriptive comments.
1. Green Eggs	5,006,997	100	
2. Eyed Eggs	4,516,650	90.21	
3. Emergent Fry	4,381,150	87.50	
4. Fed Fry	4,380,300	87.48	
5. Smolts	1,488,000	29.72	2017 end inventory was 1.7M smolts

B. Transfers, Morts, and Culls

Transfer Type	Date	Life Stage	FTP	Direction	Site/Discard Cause	Total
Mortalities	4/1/2018	SMOLT			Other, annotate in comments	229,300

Total Transfers, Morts, and Culls

C. Release Information

Release ID/ Tag Code	FTP	Ancestral Stock	Donor Stock	Site	Date Last Released	Life Stage	Total
!01184CIAA01		BIG R LKS+U RUSSIAN	BEAR LK	RESURRECTION BAY 231-30	6/1/2018	SMOLT	1,488,000

Total Released

D. Other

Untagged ReleaseAnnual Report: **2018, SCHEDULE B-1**

Release ID Code: !01184CIAA01

General Information

Project Leader:	COHN	Species:	SOCKEYE	Rearing Type:	HATCHERY
Agency:	CIAA	Brood Year:	2016	Release Type:	PRODUCTION
Division/Section:		Adult Run:	SUMMER	Mark Type:	TM
Facility:	TRAIL LAKES	Release Group:	TRAILLAKES16B	Thermal Mark ID:	TRAILLAKES16B
Donor Stock:	BEAR LK	FTP:	11A-0062(2)	Hatch Code:	2,4H
Ancestral Stock:	BIG R LKS+U RUSSIAN	Experimental Class:			

Experimental Narrative: 250 characters max.

Untagged Release Information

Release Supervisor:	COHN	Release Stage:	SMOLT
Release Site:	RESURRECTION BAY 231-30	Unmarked Counting Method:	WEIGHT DERIVED
Anadromous Stream #:		Expected Survival:	NORMAL

Size at Release		Release Dates		Total Fish Released				
Weight (g):	15.23	Fork Length (mm):	114	Began:	06/01/2018	Ended:	06/01/2018	1,488,000

Comments: 250 characters max.

ALL PARTS OF THE RELEASE WENT AS PLANNED. ADDED MARK ID AS PER BROOD YEAR, SPECIES, AND HATCH CODE PROVIDED ON ONLINE RELEASE ENTRY FORM (EK 1/16/19)

Schedule B-2

2018 ANNUAL FISH CULTURE PRODUCTION REPORT

TRAIL LAKES

Species

Donor Stock

Brood Year

Ancestral Stock

Continued from to

A. Life Stage Information

	Acutal Number	% cum survival	Annotate transfers between hatcheries, significant mortalities, or provide other descriptive comments.
1. Green Eggs	4,273,494	100	
2. Eyed Eggs	3,401,700	79.60	
3. Emergent Fry	3,299,649	77.21	
4. Fed Fry	3,035,824	71.04	
5. Smolts	518,000	12.12	2017 year end inventory ws 554,824

B. Transfers, Morts, and Culls

Transfer Type	Date	Life Stage	FTP	Direction	Site/Discard Cause	Total
Mortalities	6/4/2018	SMOLT		TO	Other, annotate in comments	36,824

Total Transfers, Morts, and Culls

C. Release Information

Release ID/ Tag Code	FTP	Ancestral Stock	Donor Stock	Site	Date Last Released	Life Stage	Total
!01184CIAA03		ENGLISH BAY LK	ENGLISH BAY LK	TUTKA BAY 241-16	6/4/2018	SMOLT	518,000

Total Released

D. Other

Untagged Release

Annual Report: **2018, SCHEDULE B-2**

Release ID Code: **!01184CIAA03**

General Information

Project Leader:	COHN	Species:	SOCKEYE	Rearing Type:	HATCHERY
Agency:	CIAA	Brood Year:	2016	Release Type:	PRODUCTION
Division/Section:		Adult Run:	SUMMER	Mark Type:	TM
Facility:	TRAIL LAKES	Release Group:	TUTKA SMOLT BY16	Thermal Mark ID:	TUTKA16
Donor Stock:	ENGLISH BAY LK	FTP:	11A-0051(1)	Hatch Code:	2,5H
Ancestral Stock:	ENGLISH BAY LK	Experimental Class:			

Experimental Narrative: 250 characters max.

Untagged Release Information

Release Supervisor:	COHN	Release Stage:	SMOLT
Release Site:	TUTKA BAY 241-16	Unmarked Counting Method:	WEIGHT DERIVED
Anadromous Stream #:		Expected Survival:	NORMAL

Size at Release		Release Dates		Total Fish Released				
Weight (g):	13.85	Fork Length (mm):	109	Began:	06/04/2018	Ended:	06/04/2018	518,000

Comments: 250 characters max.

FISH WERE RELEASED FROM TUTKA BAY LAGOON 06/04/2018. ADDED MARK ID AS PER HATCH CODE PROVIDED ON ONLINE RELEASE ENTRY FORM (EK 1/16/19)

Schedule B-3

2018 ANNUAL FISH CULTURE PRODUCTION REPORT

TRAIL LAKES

Species

Donor Stock

Brood Year

Ancestral Stock

Continued from to

A. Life Stage Information

	Acutal Number	% cum survival	Annotate transfers between hatcheries, significant mortalities, or provide other descriptive comments.
1. Green Eggs	293,074	100	
2. Eyed Eggs	232,187	79.22	
3. Emergent Fry	225,231	76.85	
4. Fed Fry	225,231	76.85	
5. Smolts	98,000	33.44	2017 year end inventory was 125,231

B. Transfers, Morts, and Culls

Transfer Type	Date	Life Stage	FTP	Direction	Site/Discard Cause	Total
Mortalities	5/5/2018	SMOLT		TO	Other, annotate in comments	27,231

Total Transfers, Morts, and Culls

C. Release Information

Release ID/ Tag Code	FTP	Ancestral Stock	Donor Stock	Site	Date Last Released	Life Stage	Total
!01182CIAA04		BEAR LK	BEAR LK	BEAR CR 231-30	6/5/2018	SMOLT	70,000
!01182CIAA03		BEAR LK	BEAR LK	RESURRECTION BAY 231-30	6/5/2018	SMOLT	28,000

Total Released

D. Other

--

Untagged ReleaseAnnual Report: **2018, SCHEDULE B-3**Release ID Code: **!01182CIAA04****General Information**

Project Leader:	COHN	Species:	COHO	Rearing Type:	HATCHERY
Agency:	CIAA	Brood Year:	2016	Release Type:	PRODUCTION
Division/Section:		Adult Run:	FALL	Mark Type:	TM
Facility:	TRAIL LAKES	Release Group:	FW-ACCL RACEWAY	Thermal Mark ID:	RESURRECTION16COHO
Donor Stock:	BEAR LK	FTP:	08A-0114(2)	Hatch Code:	2,4H
Ancestral Stock:	BEAR LK	Experimental Class:			

Experimental Narrative: 250 characters max.

Untagged Release Information

Release Supervisor:	COHN	Release Stage:	SMOLT
Release Site:	BEAR CR 231-30	Unmarked Counting Method:	WEIGHT DERIVED
Anadromous Stream #:	231-30-10080-2010-3065-4010	Expected Survival:	NORMAL

Size at Release		Release Dates		Total Fish Released				
Weight (g):	14.62	Fork Length (mm):	110	Began:	06/05/2018	Ended:	06/05/2018	70,000

Comments: 250 characters max.

SMOLT RELEASED FROM BEAR CREEK. CHANGED MARKID FROM BEARLAKE16COHO AND HATCH CODE FROM 2,2H AS PER KRISTIN BATES AND FORREST COHN (EK 1/23/19)

Untagged Release

Annual Report: 2018, SCHEDULE B-3

Release ID Code: !01182CIAA03

General Information

Project Leader:	BAUMER	Species:	COHO	Rearing Type:	HATCHERY
Agency:	CIAA	Brood Year:	2016	Release Type:	PRODUCTION
Division/Section:		Adult Run:	FALL	Mark Type:	TM
Facility:	TRAIL LAKES			Thermal Mark ID:	BEARLAKE16COHO
Donor Stock:	BEAR LK	Release Group:	COHO SMOLT SEWARD LAGOON	Hatch Code:	2,2H
Ancestral Stock:	BEAR LK	FTP:	18A-0032	Experimental Class:	

Experimental Narrative: 250 characters max.

Untagged Release Information

Release Supervisor:	COHN	Release Stage:	SMOLT
Release Site:	RESURRECTION BAY 231-30	Unmarked Counting Method:	WEIGHT DERIVED
Anadromous Stream #:		Expected Survival:	NORMAL

Size at Release		Release Dates		Total Fish Released				
Weight (g):	15.92	Fork Length (mm):	110	Began:	06/05/2018	Ended:	06/05/2018	28,000

Comments: 250 characters max.

SMOLT WERE RELEASED AT SEWARD LAGOON FROM TRAIL LAKES HATCHERY. IN 2016 THERE WAS A SHORTAGE OF COHO BROODSTOCK SO CIAA TOOK ALL EGGS FOR PRODUCTION, ADF&G TOOK ZERO. THE RELEASE FOR BY16 SMOLT WAS SPLIT BETWEEN THE SEWARD LAGOON AND BEAR CREEK.

Schedule B-4

2018 ANNUAL FISH CULTURE PRODUCTION REPORT

TRAIL LAKES

Species

Donor Stock

Brood Year

Ancestral Stock

Continued from to

A. Life Stage Information

	Actual Number	% cum survival	Annotate transfers between hatcheries, significant mortalities, or provide other descriptive comments.
1. Green Eggs	5,122,000	100	
2. Eyed Eggs	4,475,800	87.38	
3. Emergent Fry	4,342,000	84.77	
4. Fed Fry	4,182,000	81.65	
5. Smolts	1,588,000	31	

B. Transfers, Morts, and Culls

Transfer Type	Date	Life Stage	FTP	Direction	Site/Discard Cause	Total
Total Transfers, Morts, and Culls						<input type="text"/>

C. Release Information

Release ID/ Tag Code	FTP	Ancestral Stock	Donor Stock	Site	Date Last Released	Life Stage	Total
I01184CIAA07		BEAR LK	BEAR LK	BEAR LK 231-30	6/13/2018	FED FRY	2,555,000
Total Released							<input type="text" value="2,555,000"/>

D. Other

--

Untagged Release

Annual Report: **2018, SCHEDULE B-4**

Release ID Code: **!01184CIAA07**

General Information

Project Leader:	COHN	Species:	SOCKEYE	Rearing Type:	HATCHERY
Agency:	CIAA	Brood Year:	2017	Release Type:	PRODUCTION
Division/Section:		Adult Run:	SUMMER	Mark Type:	TM
Facility:	TRAIL LAKES	Release Group:	FW-DIRECT TO LAKE	Thermal Mark ID:	TRAILLAKES17A
Donor Stock:	BEAR LK	FTP:	08A-0069(3)	Hatch Code:	3,3H
Ancestral Stock:	BEAR LK	Experimental Class:			

Experimental Narrative: 250 characters max.

Untagged Release Information

Release Supervisor:	COHN	Release Stage:	FED FRY
Release Site:	BEAR LK 231-30	Unmarked Counting Method:	WEIGHT DERIVED
Anadromous Stream #:	231-30-10080-2010-3065-4010-0010	Expected Survival:	NORMAL

Size at Release		Release Dates		Total Fish Released				
Weight (g):	0.54	Fork Length (mm):	40	Began:	06/12/2018	Ended:	06/13/2018	2,555,000

Comments: 250 characters max.

FRY MOVED TO BEAR LAKE FOR RELEASE VIA TRUCK/TRANSPORT TANK. FISH WERE THEN LOADED INTO A BOAT WITH A TANK AND TAKEN TO THEIR IMPRINTING LOCATION.

Schedule B-5 2018 ANNUAL FISH CULTURE PRODUCTION REPORT

TRAIL LAKES

Species

Donor Stock

Brood Year

Ancestral Stock

Continued from to

A. Life Stage Information

	Acutal Number	% cum survival	Annotate transfers between hatcheries, significant mortalities, or provide other descriptive comments.
1. Green Eggs	5,555,000	100	
2. Eyed Eggs	4,035,600	72.65	
3. Emergent Fry	3,834,000	69.02	2 incubators lost to IHNV destined for Hazel Lake. loss to emergence calculated at 5%
4. Fed Fry	3,490,000	62.83	
5. Smolts	485,000	8.73	

B. Transfers, Morts, and Culls

Transfer Type	Date	Life Stage	FTP	Direction	Site/Discard Cause	Total
Mortalities	11/1/2018	EMERGENT FRY			IHNV - Infectious Hematopoietic Necrosis Virus	201,600

Total Transfers, Morts, and Culls

C. Release Information

Release ID/ Tag Code	FTP	Ancestral Stock	Donor Stock	Site	Date Last Released	Life Stage	Total
!01184C1AA06		ENGLISH BAY LK	TUTKA BAY H	HAZEL LK 241-15 (B)	6/21/2018	FED FRY	813,000
!01184C1AA04		ENGLISH BAY LK	TUTKA BAY H	KIRSCHNER LK 249-75 (B)	6/20/2018	FED FRY	244,000
!01184C1AA05		ENGLISH BAY LK	TUTKA BAY H	LEISURE LK 241-15	6/19/2018	FED FRY	1,948,000

Total Released

D. Other

Untagged ReleaseAnnual Report: **2018, SCHEDULE B-5**

Release ID Code: !01184CIAA06

General Information

Project Leader:	COHN	Species:	SOCKEYE	Rearing Type:	HATCHERY
Agency:	CIAA	Brood Year:	2017	Release Type:	PRODUCTION
Division/Section:		Adult Run:	SUMMER	Mark Type:	TM
Facility:	TRAIL LAKES	Release Group:	FW-DIRECT TO LAKE	Thermal Mark ID:	HAZEL17
Donor Stock:	TUTKA BAY H	FTP:	11A-0052(1)	Hatch Code:	3,3H3
Ancestral Stock:	ENGLISH BAY LK	Experimental Class:			

Experimental Narrative: 250 characters max.

Untagged Release Information

Release Supervisor:	COHN	Release Stage:	FED FRY
Release Site:	HAZEL LK 241-15 (B)	Unmarked Counting Method:	WEIGHT DERIVED
Anadromous Stream #:		Expected Survival:	NORMAL

Size at Release		Release Dates		Total Fish Released				
Weight (g):	0.25	Fork Length (mm):	32	Began:	06/21/2018	Ended:	06/21/2018	813,000

Comments: 250 characters max.

FRY MOVED TO HAZEL LAKE FROM TRAIL LAKES HATCHERY. RELEASE # LOWER THAN EXPECTED DUE TO INCUBATION MORTALITY (IHNV - 2 INCUBATORS LOST @ SWIM UP).

Untagged ReleaseAnnual Report: **2018, SCHEDULE B-5**

Release ID Code: !01184CIAA04

General Information

Project Leader:	COHN	Species:	SOCKEYE	Rearing Type:	HATCHERY
Agency:	CIAA	Brood Year:	2017	Release Type:	PRODUCTION
Division/Section:		Adult Run:	SUMMER	Mark Type:	TM
Facility:	TRAIL LAKES	Thermal Mark ID:	PENINSULA17SOCKEYE	Hatch Code:	2,2H
Donor Stock:	TUTKA BAY H	Release Group:	FW-DIRECT TO LAKE	Experimental Class:	
Ancestral Stock:	ENGLISH BAY LK	FTP:	11A-0053(1)		

Experimental Narrative: 250 characters max.

Untagged Release Information

Release Supervisor:	COHN	Release Stage:	FED FRY
Release Site:	KIRSCHNER LK 249-75 (B)	Unmarked Counting Method:	WEIGHT DERIVED
Anadromous Stream #:		Expected Survival:	NORMAL

Size at Release		Release Dates		Total Fish Released				
Weight (g):	0.26	Fork Length (mm):	32	Began:	06/14/2018	Ended:	06/20/2018	244,000

Comments: 250 characters max.

FRY MOVED TO KIRSCHNER LAKE VIA AIRPLANE. FISH FLOWN OUT OF UPPER TRAIL LAKE IN MOOSE PASS, AK (FROM TRAIL LAKES HATCHERY).

Untagged ReleaseAnnual Report: **2018, SCHEDULE B-5**

Release ID Code: !01184CIAA05

General Information

Project Leader:	COHN	Species:	SOCKEYE	Rearing Type:	HATCHERY
Agency:	CIAA	Brood Year:	2017	Release Type:	PRODUCTION
Division/Section:		Adult Run:	SUMMER	Mark Type:	TM
Facility:	TRAIL LAKES	Thermal Mark ID:	PENINSULA17SOCKEYE	Hatch Code:	2,2H
Donor Stock:	TUTKA BAY H	Release Group:	FW-DIRECT TO LAKE	Experimental Class:	
Ancestral Stock:	ENGLISH BAY LK	FTP:	11A-0054(1)		

Experimental Narrative: 250 characters max.

Untagged Release Information

Release Supervisor:	COHN	Release Stage:	FED FRY
Release Site:	LEISURE LK 241-15	Unmarked Counting Method:	WEIGHT DERIVED
Anadromous Stream #:	241-15-10370-0010	Expected Survival:	NORMAL

Size at Release		Release Dates		Total Fish Released				
Weight (g):	0.20	Fork Length (mm):	30	Began:	06/19/2018	Ended:	06/19/2018	1,948,000

Comments: 250 characters max.

FRY MOVED TO LEISURE LAKE FROM TRAIL LAKES HATCHERY. 3 TRIPS IN 1 DAY USING A TURBINE OTTER AIRCRAFT.

Schedule B-6

2018 ANNUAL FISH CULTURE PRODUCTION REPORT

TRAIL LAKES

Species

Donor Stock

Brood Year

Ancestral Stock

Continued from to

A. Life Stage Information

	Acutal Number	% cum survival	Annotate transfers between hatcheries, significant mortalities, or provide other descriptive comments.
1. Green Eggs	1,282,300	100	
2. Eyed Eggs	1,184,900	92.40	
3. Emergent Fry	1,271,000	99.12	
4. Fed Fry			
5. Smolts			

B. Transfers, Morts, and Culls

Transfer Type	Date	Life Stage	FTP	Direction	Site/Discard Cause	Total
---------------	------	------------	-----	-----------	--------------------	-------

Total Transfers, Morts, and Culls

C. Release Information

Release ID/ Tag Code	FTP	Ancestral Stock	Donor Stock	Site	Date Last Released	Life Stage	Total
!01184CIAA09		HIDDEN LK 244-30	HIDDEN LK 244-30	HIDDEN LK 244-30	5/1/2018	EMERGENT FRY	1,271,000

Total Released

D. Other

Untagged ReleaseAnnual Report: **2018, SCHEDULE B-6**

Release ID Code: !01184CIAA09

General Information

Project Leader:	COHN	Species:	SOCKEYE	Rearing Type:	HATCHERY
Agency:	CIAA	Brood Year:	2017	Release Type:	PRODUCTION
Division/Section:		Adult Run:		Mark Type:	TM
Facility:	TRAIL LAKES			Thermal Mark ID:	HIDDENLAKE17
Donor Stock:	HIDDEN LK 244-30	Release Group:	HIDDENLAKE17	Hatch Code:	2,1,2H
Ancestral Stock:	HIDDEN LK 244-30	FTP:	08A-0089(2)	Experimental Class:	

Experimental Narrative: 250 characters max.

Untagged Release Information

Release Supervisor:	COHN	Release Stage:	EMERGENT FRY
Release Site:	HIDDEN LK 244-30	Unmarked Counting Method:	WEIGHT DERIVED
Anadromous Stream #:	244-30-10010-2137-0010	Expected Survival:	NORMAL

Size at Release		Release Dates		Total Fish Released				
Weight (g):	0.09	Fork Length (mm):	26	Began:	05/01/2018	Ended:	05/01/2018	1,271,000

Comments: 250 characters max.

UNFED FRY MOVED TO HIDDEN LAKE FROM TRAIL LAKES HATCHERY. CHANGED LEADER AND SUPERVISOR FROM CIAA BASED ON OTHER RELEASE INFORMATION SUBMITTED BY TRAIL LAKES HATCHERY IN 2018. ADDED MARK ID BASED ON HATCH CODE PROVIDED ON ONLINE RELEASE ENTRY FORM (EK 1/16/19)

Schedule B-7

2018 ANNUAL FISH CULTURE PRODUCTION REPORT

TRAIL LAKES

Species

Donor Stock

Brood Year

Ancestral Stock

Continued from to

A. Life Stage Information

	Acutal Number	% cum survival	Annotate transfers between hatcheries, significant mortalities, or provide other descriptive comments.
1. Green Eggs	87,595	100	
2. Eyed Eggs	65,179	74.41	
3. Emergent Fry	63,000	71.92	
4. Fed Fry	62,000	70.78	
5. Smolts	46,000	52.51	

B. Transfers, Morts, and Culls

Transfer Type	Date	Life Stage	FTP	Direction	Site/Discard Cause	Total
Total Transfers, Morts, and Culls						<input type="text"/>

C. Release Information

Release ID/ Tag Code	FTP	Ancestral Stock	Donor Stock	Site	Date Last Released	Life Stage	Total
!01184CIAA02		SHELL LK 247-41	SHELL LK 247-41	SHELL LK 247-41	5/31/2018	SMOLT	46,000
Total Released							<input type="text" value="46,000"/>

D. Other

--

Untagged ReleaseAnnual Report: **2018, SCHEDULE B-7**

Release ID Code: !01184CIAA02

General Information

Project Leader:	COHN	Species:	SOCKEYE	Rearing Type:	HATCHERY
Agency:	CIAA	Brood Year:	2016	Release Type:	PRODUCTION
Division/Section:		Adult Run:	FALL	Mark Type:	AD+TM
Facility:	TRAIL LAKES	Release Group:	BY16 SMOLT	Thermal Mark ID:	SHELLLAKE16
Donor Stock:	SHELL LK 247-41	FTP:	12A-0111(1)	Hatch Code:	3,2,4H
Ancestral Stock:	SHELL LK 247-41	Experimental Class:			

Experimental Narrative: 250 characters max.

Untagged Release Information

Release Supervisor:	COHN	Release Stage:	SMOLT
Release Site:	SHELL LK 247-41	Unmarked Counting Method:	WEIGHT DERIVED
Anadromous Stream #:	247-41-10200-2053-3205-4052-0010	Expected Survival:	NORMAL

Size at Release		Release Dates		Total Fish Released				
Weight (g):	10.91	Fork Length (mm):	103	Began:	05/30/2018	Ended:	05/31/2018	46,000

Comments: 250 characters max.

HALF OF THE SMOLT WERE IMPRINTED AT THE NORTH END OF THE LAKE IN A NET PEN, THEN TOWED TO THE CREEK FOR RELEASE. THE OTHER HALF WAS IMPRINTED AT THE CREEK IN A NET PEN, THEN RELEASED. ALL FISH WERE ADIPOSE FIN CLIPPED AND THERMALLY MARKED. CHANGED PROJECT LEADER AND RELEASE SUPERVISOR FROM CIAA BASED ON OTHER RELEASES REPORTED FROM TRAIL LAKES IN 2018. ADDED MARK ID AS PER HATCH CODE PROVIDED ON ONLINE RELEASE ENTRY FORM (EK 1/16/19)

Schedule B-8

2018 ANNUAL FISH CULTURE PRODUCTION REPORT

TRAIL LAKES

Species

Donor Stock

Brood Year

Ancestral Stock

Continued from to

A. Life Stage Information

	Actual Number	% cum survival	Annotate transfers between hatcheries, significant mortalities, or provide other descriptive comments.
1. Green Eggs	587,900	100	
2. Eyed Eggs	525,000	89.30	
3. Emergent Fry	514,537	87.52	
4. Fed Fry	512,000	87.09	
5. Smolts	60,000	10.21	

B. Transfers, Morts, and Culls

Transfer Type	Date	Life Stage	FTP	Direction	Site/Discard Cause	Total
Culled	11/1/2017	EYED EGG			BKD - Bacterial Kidney Disease	23,688

Total Transfers, Morts, and Culls

C. Release Information

Release ID/ Tag Code	FTP	Ancestral Stock	Donor Stock	Site	Date Last Released	Life Stage	Total
!01182CIAA02		BIG R LKS+U RUSSIAN	BEAR LK	BEAR LK 231-30	6/27/2018	FED FRY	438,000

Total Released

D. Other

--

Untagged ReleaseAnnual Report: **2018, SCHEDULE B-8**

Release ID Code: !01182CIAA02

General Information

Project Leader:	COHN	Species:	COHO	Rearing Type:	HATCHERY
Agency:	CIAA	Brood Year:	2017	Release Type:	PRODUCTION
Division/Section:		Adult Run:	FALL	Mark Type:	TM
Facility:	TRAIL LAKES			Thermal Mark ID:	BEARLAKE17COHO
Donor Stock:	BEAR LK	Release Group:	FW-DIRECT TO LAKE	Hatch Code:	4,4H
Ancestral Stock:	BIG R LKS+U RUSSIAN	FTP:	08A-0113(3)	Experimental Class:	

Experimental Narrative: 250 characters max.

Untagged Release Information

Release Supervisor:	COHN	Release Stage:	FED FRY
Release Site:	BEAR LK 231-30	Unmarked Counting Method:	WEIGHT DERIVED
Anadromous Stream #:	231-30-10080-2010-3065-4010-0010	Expected Survival:	NORMAL

Size at Release		Release Dates		Total Fish Released				
Weight (g):	1.14	Fork Length (mm):	46	Began:	06/26/2018	Ended:	06/27/2018	438,000

Comments: 250 characters max.

FRY WERE MOVED TO BEAR LAKE FROM TRAIL LAKES HATCHERY. FISH WERE LOADED INTO A BOAT AND MOVED TO THEIR IMPRINTING LOCATION AT THE NORTHWEST END OF THE LAKE.

Schedule C-1 2018 HARVEST MANAGEMENT AND HATCHERY ADULT RETURNS

TRAIL LAKES

Species

Donor Stock
Ancestral Stock

Project

A. Hatchery Escapement

1. Cost-recovery (line 12a & 12b): traditional harvest and roe-recovery fish	158,427	
2. Adults sacrificed as broodstock (Schedule A line 8) minus roe-recovery fish (12b)	2,211	
3. Escapement for hatchery watershed (as required in permit)	12,752	
4. Jacks	934	
5. Other (annotate for each Other escapement return)	Other escapement	Other escapement comment
6. Total hatchery escapement	174,324	

Other Comments

B. Common Property Harvest

7. Commercial Harvest		
a. Troll		
b. Gillnet		
c. Seine	22,310	
d. Other (annotate for each Other commercial return)	Other commercial	Other commercial comment
Total Commercial Harvest	22,310	
8. Noncommercial Harvest		
a. Sport	12,000	
b. Personal Use		
c. Subsistence		
d. Other (annotate for each Other noncommercial return)	Other noncommercial	Other noncommercial comment
Total Noncommercial Harvest	12,000	
9. Total Common Property Harvest (sum 7 and 8)		34,310
10. Total Return (sum 6 and 9)		208,634
11. Estimated ocean survival by brood year		

Brood Year	Total # in Run, Current Year	Cumulative Ocean Survival (%)	Complete Return (yes or no)
2013	93,885	6.40	Yes
2014	107,029	3.90	No

Total Ocean Survival

Harvest Comments

2013 6.4% survival includes 5668 from 2017 Annual report Trail Lakes Schedule C-1 "Total # in run current year" Total ocean survival less than Line 10 total return as some otolith marks were no read, wild, and strays. Total ocean survival calculated by known return percentages of fry and smolt from otolith results in harvest 2018.

12. Disposition of Hatchery Escapement

		# fish sold	lbs fish		
a. Traditional harvest fish	adults	158,427	567,689		
	jacks				
	total	158,427	567,689		
b. Roe-recovery fish	# fish		lbs fish	lbs roe	
	Sold				
	Donated				
	Disposed				
	total number of fish				
c. Carcasses	# Sold		# Donated	# Disposed	Total
	Spawners			2,211	2,211
	Other (annotate in comments)				
	total number of fish			2,211	2,211
	total pounds				

Disposition Comments

Carcasses from spawners are used as nutrients for Bear Lake and disposed of in the nutrient enrichment zone of the lake after gametes are removed.

Schedule C-2

2018 HARVEST MANAGEMENT AND HATCHERY ADULT RETURNS

TRAIL LAKES

Species

Donor Stock
Ancestral Stock

Project

A. Hatchery Escapement

1. Cost-recovery (line 12a & 12b): traditional harvest and roe-recovery fish	
2. Adults sacrificed as broodstock (Schedule A line 8) minus roe-recovery fish (12b)	259
3. Escapement for hatchery watershed (as required in permit)	906
4. Jacks	
5. Other (annotate for each Other escapement return)	Other escapement Other escapement comment
6. Total hatchery escapement	1,165

Other Comments

An additional 173 fish were taken for broodstock at the Bear Creek weir by WJHSFH as reported on their report (not reported here).

B. Common Property Harvest

7. Commercial Harvest	
a. Troll	
b. Gillnet	
c. Seine	
d. Other (annotate for each Other commercial return)	Other commercial Other commercial comment
Total Commercial Harvest	
8. Noncommercial Harvest	
a. Sport	5,000
b. Personal Use	
c. Subsistence	
d. Other (annotate for each Other noncommercial return)	Other noncommercial Other noncommercial comment
Total Noncommercial Harvest	5,000
9. Total Common Property Harvest (sum 7 and 8)	5,000
10. Total Return (sum 6 and 9)	6,165
11. Estimated ocean survival by brood year	

Brood Year	Total # in Run, Current Year	Cumulative Ocean Survival (%)	Complete Return (yes or no)
2015	6,165	1.23	No

Total Ocean Survival

Harvest Comments

Sport harvest is estimate based off previous 2017 annual report.

12. 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	259		259
	Other (annotate in comments)	1,281		1,281
	total number of fish	1,540		1,540
	total pounds			

Disposition Comments

Spawner carcasses were donated to local dog mushers and "other" donations were made to the public from the Bear Creek Weir facility.

Schedule C-3

2018 HARVEST MANAGEMENT AND HATCHERY ADULT RETURNS

TRAIL LAKES

Species **SOCKEYE**

Donor Stock **TUTKA BAY H**

Project **TUTKA BAY-TL**

Ancestral Stock **ENGLISH BAY LK**

A. Hatchery Escapement

1. Cost-recovery (line 12a & 12b): traditional harvest and roe-recovery fish	62,653
2. Adults sacrificed as broodstock (Schedule A line 8) minus roe-recovery fish (12b)	3,412
3. Escapement for hatchery watershed (as required in permit)	
4. Jacks	
5. Other (annotate for each Other escapement return)	Other escapement Other escapement comment
6. Total hatchery escapement	66,065

Other Comments

B. Common Property Harvest

7. Commercial Harvest	
a. Troll	
b. Gillnet	6,397
c. Seine	14,354
d. Other (annotate for each Other commercial return)	Other commercial Other commercial comment
Total Commercial Harvest	20,751
8. Noncommercial Harvest	
a. Sport	1,500
b. Personal Use	
c. Subsistence	
d. Other (annotate for each Other noncommercial return)	Other noncommercial Other noncommercial comment
Total Noncommercial Harvest	1,500
9. Total Common Property Harvest (sum 7 and 8)	22,251
10. Total Return (sum 6 and 9)	88,316
11. Estimated ocean survival by brood year	

Brood Year	Total # in Run, Current Year	Cumulative Ocean Survival (%)	Complete Return (yes or no)
2014	88,316	16.60	No

Total Ocean Survival

88,316

Harvest Comments

Sport fish number is estimate. However, many fisherman were observed catching sockeye in Tutka Bay Lagoon.

12. Disposition of Hatchery Escapement

a. Traditional harvest fish	# fish sold	lbs fish		
	adults	62,653	240,161	
	jacks			
	total	62,653	240,161	
b. Roe-recovery fish	# fish	lbs fish	lbs roe	
	Sold			
	Donated			
	Disposed			
	total number of fish			
c. Carcasses	# Sold	# Donated	# Disposed	Total
	Spawners		3,412	3,412
	Other (annotate in comments)		1,733	1,733
	total number of fish		5,145	5,145
	total pounds			

Disposition Comments

spawners were transported to Tutka Bay for carcass disposal by carcass barge. Other disposed were carcasses from a mortality event in the lensing bag during broodstock ripening.

Schedule C-4 2018 HARVEST MANAGEMENT AND HATCHERY ADULT RETURNS

TRAIL LAKES

Species

Donor Stock
Ancestral Stock

Project

A. Hatchery Escapement

- 1. Cost-recovery (line 12a & 12b): traditional harvest and roe-recovery fish
- 2. Adults sacrificed as broodstock (Schedule A line 8) minus roe-recovery fish (12b)
- 3. Escapement for hatchery watershed (as required in permit)
- 4. Jacks
- 5. Other (annotate for each Other escapement return)

Other escapement	Other escapement comment
------------------	--------------------------
- 6. Total hatchery escapement**

Other Comments

B. Common Property Harvest

- 7. Commercial Harvest
 - a. Troll
 - b. Gillnet
 - c. Seine
 - d. Other (annotate for each Other commercial return)

Other commercial	Other commercial comment
------------------	--------------------------

Total Commercial Harvest

8. Noncommercial Harvest

- a. Sport
- b. Personal Use
- c. Subsistence
- d. Other (annotate for each Other noncommercial return)

Other noncommercial	Other noncommercial comment
---------------------	-----------------------------

Total Noncommercial Harvest

9. Total Common Property Harvest (sum 7 and 8)

10. Total Return (sum 6 and 9)

11. Estimated ocean survival by brood year

Brood Year	Total # in Run, Current Year	Cumulative Ocean Survival (%)	Complete Return (yes or no)
2013	5,134	7.90	Yes
2014	57,259	3.80	No

Total Ocean Survival

Harvest Comments

12. 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	<input type="text"/>	<input type="text"/>
- 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	<input type="text"/>	<input type="text"/>	<input type="text"/>
- c. Carcasses

	# Sold	# Donated	# Disposed	Total
Spawners	<input type="text"/>	<input type="text"/>	1,138	1,138
Other (annotate in comments)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
total number of fish	<input type="text"/>	<input type="text"/>	1,138	1,138
total pounds	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Disposition Comments

Schedule C-5 2018 HARVEST MANAGEMENT AND HATCHERY ADULT RETURNS

TRAIL LAKES

Species

Donor Stock

Project

Ancestral Stock

A. Hatchery Escapement

1. Cost-recovery (line 12a & 12b): traditional harvest and roe-recovery fish	11,536	
2. Adults sacrificed as broodstock (Schedule A line 8) minus roe-recovery fish (12b)		
3. Escapement for hatchery watershed (as required in permit)		
4. Jacks		
5. Other (annotate for each Other escapement return)	Other escapement	Other escapement comment
6. Total hatchery escapement	11,536	

Other Comments

B. Common Property Harvest

7. Commercial Harvest		
a. Troll		
b. Gillnet		
c. Seine	5,702	
d. Other (annotate for each Other commercial return)	Other commercial	Other commercial comment
Total Commercial Harvest	5,702	
8. Noncommercial Harvest		
a. Sport		
b. Personal Use		
c. Subsistence		
d. Other (annotate for each Other noncommercial return)	Other noncommercial	Other noncommercial comment
Total Noncommercial Harvest		
9. Total Common Property Harvest (sum 7 and 8)		5,702
10. Total Return (sum 6 and 9)		17,238

11. Estimated ocean survival by brood year

Brood Year	Total # in Run, Current Year	Cumulative Ocean Survival (%)	Complete Return (yes or no)
2014	17,238	7.30	No

Total Ocean Survival

17,238

Harvest Comments

12. Disposition of Hatchery Escapement

		# fish sold	lbs fish		
a. Traditional harvest fish	adults	11,536	54,833		
	jacks				
	total	11,536	54,833		
b. Roe-recovery fish		# fish	lbs fish	lbs roe	
		Sold			
		Donated			
		Disposed			
		total number of fish			
c. Carcasses		# Sold	# Donated	# Disposed	Total
		Spawners			
		Other (annotate in comments)			
		total number of fish			
		total pounds			

Disposition Comments

Schedule C-6

2018 HARVEST MANAGEMENT AND HATCHERY ADULT RETURNS

TRAIL LAKES

Species **SOCKEYE**

Donor Stock **TUTKA BAY H**

Project **LEISURE & HAZEL LKS**

Ancestral Stock **ENGLISH BAY LK**

A. Hatchery Escapement

1. Cost-recovery (line 12a & 12b): traditional harvest and roe-recovery fish	29,628
2. Adults sacrificed as broodstock (Schedule A line 8) minus roe-recovery fish (12b)	
3. Escapement for hatchery watershed (as required in permit)	
4. Jacks	
5. Other (annotate for each Other escapement return)	Other escapement Other escapement comment
6. Total hatchery escapement	29,628

Other Comments

B. Common Property Harvest

7. Commercial Harvest	
a. Troll	
b. Gillnet	
c. Seine	
d. Other (annotate for each Other commercial return)	Other commercial Other commercial comment
Total Commercial Harvest	
8. Noncommercial Harvest	
a. Sport	1,800
b. Personal Use	1,800
c. Subsistence	
d. Other (annotate for each Other noncommercial return)	Other noncommercial Other noncommercial comment
Total Noncommercial Harvest	3,600
9. Total Common Property Harvest (sum 7 and 8)	3,600
10. Total Return (sum 6 and 9)	33,228

11. Estimated ocean survival by brood year

Brood Year	Total # in Run, Current Year	Cumulative Ocean Survival (%)	Complete Return (yes or no)
2014	33,228	2	No

Total Ocean Survival

33,228

Harvest Comments

Sport and personal use are estimates based off previous estimates and current year percentages of total return.

12. Disposition of Hatchery Escapement

a. Traditional harvest fish	# fish sold	29,628	lbs fish	133,968				
	adults							
	jacks							
	total	29,628		133,968				
b. Roe-recovery fish	# fish		lbs fish		lbs roe			
	Sold							
	Donated							
	Disposed							
	total number of fish							
c. Carcasses	# Sold		# Donated		# Disposed		Total	
	Spawners							
	Other (annotate in comments)							
	total number of fish							
	total pounds							

Disposition Comments

Schedule D-1
PROJECTED RETURNS FOR 2019

TRAIL LAKES

Run	Species	First Brood Year	Last Brood Year	Release Site	Total number of fish expected	Range of expected return	
						minimum	maximum
	COHO	2015	2016	BEAR LK 231-30	5,500		
COHO					5,500		
	SOCKEYE	2014	2015	BEAR LK 231-30	124,044		
	SOCKEYE	2014	2015	HAZEL LK 241-15 (B)	25,020		
	SOCKEYE	2014	2015	HIDDEN LK 244-30	26,557		
	SOCKEYE	2014	2015	KIRSCHNER LK 249-75 (B)	39,000		
	SOCKEYE	2014	2015	LEISURE LK 241-15	44,384		
	SOCKEYE	2014	2015	RESURRECTION BAY 231-30	181,600		
	SOCKEYE	2014	2015	TUTKA BAY 241-16	53,400		
SOCKEYE					494,005		

COMMENTS:

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