

# AGENDA

## Cook Inlet Regional Planning Team Meeting

Cook Inlet Aquaculture Association Conference Room

December 7, 2017 at 10 a.m.

**Meeting called by:** Cook Inlet Aquaculture Association and ADF&G  
**Type of meeting:** 2017 Overview and Things to Look Forward to in 2018  
**Chairman:** Ethan Ford  
**Note taker:** CIAA representative/ audio tape recorder

**Team Members:** Dave Martin, Steve Vanek, Mark Roth, Glenn Hollowell, Sam Rabung, Matt Miller, Tim Schmidt (alternate), Brent Johnson (alternate)

- 1.0 Call to Order
- 2.0 Attendance
- 3.0 Introductions
- 4.0 Approve/Amend Agenda
- 5.0 Approve/Amend Minutes from April 2017 RPT meeting
- 6.0 Public Comment
- 7.1 Eklutna Salmon Hatchery
  - 7.1.1 Land Lease
- 7.2 Tutka Bay Lagoon Hatchery
  - 7.2.1 Overview of 2017 Field Season
  - 7.2.2 Tutka Secondary Net Pen Anticipated 2018 Release and Potential Permit Renewal
  - 7.2.3 TBLH otolith marks
- 7.3 Port Graham Hatchery
  - 7.3.1 Overview of 2017 Field Season
- 7.4 Trail Lakes Hatchery
  - 7.4.1 Overview of 2017 Field Season
  - 7.4.2 Move Resurrection Bay Saltwater Smolt Release to Thumb Cove or Other Alternative Site
- 7.5 Field Projects
  - 7.5.1 Overview of 2017 Field Season
  - 7.5.2 Program Changes for 2018
  - 7.5.3 Delight Lake Weir 2018
- 7.6 Hidden Lake
  - 7.6.1 Drafting New Operational Plan (2018 - 2022)
- 7.7 Lower Cook Inlet Board of Fish Update
- 8.0 Discuss time/place for next meeting

9.0 Additional Public Comment

10.0 Adjourn

# AGENDA

## Cook Inlet Regional Planning Team Meeting

Cook Inlet Aquaculture Association Conference Room

April 6, 2017 at 10 a.m.

**Meeting called by:** Cook Inlet Aquaculture Association and ADF&G  
**Type of meeting:** Updates and New Business  
**Chairman:** Ethan Ford  
**Note taker:** Caroline Cherry / audio tape recorder

**Team Members:** Dave Martin, Steve Vanek, Mark Roth, Glenn Hollowell, Sam Rabung, Matt Miller, Tim Schmidt (alternate), Brent Johnson (alternate)

### 1.0 Call to Order –

Meeting was called to order by **Ethan Ford** at 10:05 am

### 2.0 and 3.0 Attendance & Introductions

Voting members: *Brent Johnson (alternate for Dave Martin), Steve Vanek, Mark Roth, Glenn Hollowell, Brian Marston (alternate for Matt Miller), Sam Rabung,*

Other Staff: *Ethan Ford (Chair), Ted Otis, Lorraine Vercessi (telephone), Stu Grant (telephone (Chum PAR discussion only), Gary Fandrei, Caroline Cherry, Lisa Ka'aihue,*

Public: *Beaver Nelson (CIAA Board Director), Jessie Nelson (CIAA Board Director)*

### 4.0 Approve/Amend Agenda

**Caroline Cherry** noted that there was one error on the agenda. Under Section 5.0 it should read Approve/Amend Minutes from December **2016** (not 2017) RPT meeting.

**Sam Rabung**- move to approve the amendment

**Glenn Hollowell**- second

Amendment to the agenda was approved unanimously.

**Brian Martson**- move to approve the original agenda.

**Steve Vanek**- second.

Original agenda was approved unanimously.

### 5.0 Approve/Amend Minutes from December 2016 RPT meeting

**Brent Johnson**- move to approve.

**Steve Vanek**- second.

Minutes were approved unanimously.

## 6.0 Public Comment

There was no public comment.

## 7.1 Eklutna Salmon Hatchery

### 7.1.1 Land Lease

**Caroline** reminded the RPT that there were issues completing the land survey because the parcel that the hatchery sits on does not have enough useable land for a septic system. We have asked if we can combine the two tracts to get closer to having enough land that a septic system is not required. This was directed to DNR in December but as of yet we have not heard anything back from them. However, they have extended the deadline on our early entry authorization to allow the survey to be finished and appraisal done.

### 7.1.2 AMP

**Caroline** indicated that for Eklutna AMP and for the others only those areas which had significant changes or where the issues should be discussed further would be highlighted for discussion. The only change for Eklutna Hatchery is we would be working to get some portion of the facility restored using the dedicated insurance funds to be able to use the facility as a backup to Trail Lakes Hatchery. Trail Lakes Hatchery did experience water shortages this winter and having Eklutna available would have helped.

Glenn- move to approve the Eklutna AMP.  
Brent- second.

Eklutna AMP was approved unanimously.

## 7.2 Tutka Bay Lagoon Hatchery

### 7.2.1 Secondary Net Pen Site

**Caroline** informed the RPT members that all of the permits have been received. Due to the extended and cold winter, we are behind in our projection for getting fish out to this site. Current projections have us installing the pens in the last couple of weeks of April and fish transfer shortly afterwards.

### 7.2.2 AMP

**Caroline** directed the RPT to the request from the department to change the table used to calculate the number of broodstock. This table uses the projected female to male ratio along with a combined projected for losses due to mortality, green or overripe and excess males to determine the number of broodstock required (both male and female). The department has requested that instead of a combined projected loss, they would like to see this broken out into inviable (green, overripe), unspawned (excess males, roe recovery) and mortalities. This is similar to how it is reported for the annual report and CIAA does collect the information separately. CIAA has no issues with accepting this request.

**Caroline** pointed out the language changed added by the department in regards to CIAA's arrangement to purchase broodstock from the common property fishery. **Gary Fandrei** asked Glenn if the intent was just to limit it to a processor or could a fisherman who had a catcher-seller permit also sell the live fish to CIAA. **Glenn** indicated that was okay as long as there was a fish ticket. **Sam** indicated that this is not a requirement for CIAA to purchase broodstock. The BMP and AMP do allow CIAA to collect broodstock as per the broodstock collection schedule without having to purchase fish.

**Sam**- move to approve the Tutka AMP with the amended changes.

**Mark Roth** – second.

Tutka AMP was unanimously approved with the amended changes.

### **7.3 Port Graham Hatchery**

#### **7.3.1 Chum PAR**

**Ethan** called for a short break so he could get Stu Grant on the phone for the discussion. **Caroline** provided a short summary of why CIAA had submitted the PAR. There was concern that as the pink program grew to peak production that there would be limitations put on the commercial and cost recovery harvests of pink salmon in order to ensure escapement of the chum salmon into Port Graham River. For this reason, CIAA would like to enhance the chum at Port Graham River. Approximately 6 million eggs would be collected and of the resulting progeny 100 K would be put back into Port Graham River as unfed fry and the rest reared in net pens until they reach 2 gms.

**Stu** addressed the concerns for the genetics department. The issues primarily lie with the 100 K that would be put back into Port Graham River and the future collection of broodstock to ensure only non-hatchery crosses are put back into Port Graham River. Additionally, the small wild run could be overrun by returning enhanced fish and may affect the genetic diversity of the population.

**Glenn** indicated there are other management tools available to avoid the bycatch of chum salmon during the commercial and cost recovery harvests of pink salmon and he would like to try these first before looking at enhancing the chum salmon run. **Mark** indicated that when they were collecting broodstock last year in the SHA they did not collect any chum salmon. But the year prior when then they were collecting broodstock closer to the creek they caught more chums. It does seem that the chums stay out of the SHA so if fishing effort is focused in the SHA we might be able to avoid harvest chum salmon.

**Glenn** indicated they plan to increase their knowledge this year on the chum run at Port Graham by doing more sampling and surveys to get a better handle on run timing and where the fish are going.

**Brent** indicted that based on these discussions, he felt that the PAR should be tabled until the Board of Directors could discuss. **Steve** and **Mark** agreed.

**Brent**- motion to table the chum PAR until CIAA has an opportunity to get further direction from CIAA BOD.

**Steve**- second.

Port Graham Hatchery Chum PAR was unanimously tabled until further direction is received from CIAA.

#### **7.3.2 AMP**

**Caroline** indicated that the same changes to the broodstock calculation table also applied for this AMP and in light of the tabled Chum PAR, any language pertaining to the chum program would also be removed.

**Sam**- motion to approve the Port Graham AMP with the amended changes.

**Steve**- second.

Port Graham AMP with the amended changes was unanimously approved.

## 7.4 Trail Lakes Hatchery

### 7.4.1 AMP

**Caroline** indicated that the request to change the broodstock tables applies here as well. In addition, there is a change to the language and map to the Bear Lake SHA to reflect the decisions made at the December Board of Fish meetings.

**Steve**- motion to approve the Trail Lakes Hatchery AMP with the amended changes.

**Brent**- second

Trail Lakes Hatchery AMP with the amended changes passed unanimously.

### 7.4.2 Grouse Lake

**Gary** indicated that a new BOD member for the City of Seward (Jess Sweatt) had brought up concerns in regards to Grouse Lake and the lack of sockeye returns to the lake. **Brent** informed the RPT members that he had looked up some of the history in regards to Grouse Lake and there had been a hatchery on Grouse Lake back in 1924/25 and CIAA had done some enhancement work there as well. **Brent** also said he had mentioned Grouse Lake to Ginny Litchfield in regards to habitat degradation but had not heard anything further from her. CIAA may investigate into some type of habitat or enhancement project here in the future.

## 7.5 William Jack Hernandez SportFish Hatchery (WJHSH)

**Ethan** reminded the RPT members that the WJHSH AMP is provided for informational purposes only. The RPT members do not approve the AMP. **Brian** indicated that the only significant major change was the restarting of the artic grayling program.

## 7.6 Field Projects

**Caroline** provided a quick overview of the non-hatchery related projects. CIAA will be conducting smolt enumeration at Kasilof River as well as enumerations (smolt and adult) at Shell, Bear and Hidden Lake. Additionally there will be pike removal at Shell, Whiskey-Hewitt as well as working with Tyonek. **Lisa Ka'aihue** also added there would be limnology sampling at Bear, Hidden, Shell and Leisure lakes and fertilization at Bear and Leisure lakes.

**Ethan** asked if CIAA was still investigating into additional broodstock locations like Kirschner Lake and Port Chatham. **Gary** indicated that CIAA does have interest in pursuing but resources both financial and time will impact how much progress is made this summer. CIAA is working with the department to get on the ground at Kirschner to look around the lake for potential opportunities. **Glenn** indicated that the department is planning to fly over the Anderson Beach area where they had concerns for possible negative impacts by a sockeye program at Port Graham. **Caroline** indicated that with the development going on at the eastern shore of Resurrection Bay, CIAA may need to relocate the pens next year. **Sam** indicated that if the new location is within the existing SHA, CIAA would not need to submit a PAR.

## 7.7 Hidden Lake New Operational Plan (2018 – 2022)

**Caroline** reminded the ADFG members that a new plan would need to be drafted this fall. The most recent Hidden Lake report has been sent to USFWS but so far we have heard nothing from them in regards to the report or for drafting the new operation plan. CIAA anticipates the 1:1 hatchery to enhance fish as well as the straying to be the major issues of discussion.

## **8.0 Discuss time/place for next meeting**

December 7, 2017 at 10 am at CIAA Headquarters.

## **10.0 Additional Public Comment**

**Beaver Nelson** indicated that as the Tutka and Port Graham hatcheries reach capacity there will be resources to start up Eklutna Salmon Hatchery. To this end, CIAA will be asking for assistance in finding locations in the Upper Cook Inlet where enhancement may occur. **Gary** indicated that prior to Eklutna's operations being suspended enhancement did occur at Coal Creek and Chuitna Bay.

## **10.0 Adjourn**

**Sam-** made a motion to adjourn.

**Brent-** second.

Motion passed.

Meeting was adjourned at 11:54 am.

## **Hatchery Status Report for December 7, 2017**

### **Eklutna Salmon Hatchery**

- During an inspection of the Eklutna Hatchery it was discovered there is a wiring issue with the power lines coming into the building – it's on the power company side of the electrical service and will be addressed as time allows.
- ADF&G has proposed making several small improvements to the hatchery to facilitate their smolt release projects. CIAA will meet with ADF&G to coordinate the improvements.
- No change on the land lease issue. CIAA will contact DNR, the surveyor and the Mat-Su Borough next month to keep the process going.

### **Trail Lakes Hatchery**

- Staff activity has focused on rearing FY16 stocks, egg picks on FY17 stocks, routine maintenance, winterizing equipment, assisting Port Graham Hatchery staff, and preparing plans for the 2018 saltwater rearing, transfers, and releases.
- Hatchery Manager Tom Prochazka retired on October 31, 2017. Assistant Hatchery Manager, Kristin Bates has been promoted to Hatchery Manager, and Fish Culturist Jennifer Mevissen has been promoted Assistant Hatchery Manager. The Culturist position is open for internal recruitment.
- The cement raceways were coated with a smooth, nontoxic finish.
- The domestic wastewater has been separated from the hatchery discharge and a new “biocycle” wastewater treatment system has been installed.
- Current production status is attached.

### **Tutka Bay Lagoon Hatchery**

- The fry line to the net pens froze last spring and temporarily delayed transfer of fry from the hatchery. A new fish pump, egg take trailer, fish lift, carcass dumper, and redesigned weir were installed to improve hatchery fry transfer and egg take operations. The equipment worked well, but a few modifications and several repairs are still needed to the equipment.
- JTAK Food Safety was contracted to assess the egg take process for future DEC approved carcass/egg sales. JTAK identified some minor changes that will need to be made and has submitted a proposal to assist CIAA with the DEC permit application. CIAA's goal is utilization of the broodstock carcasses.
- In response to the recent shed fire, new fire-fighting equipment was purchased and has been installed at Tutka Bay Lagoon Hatchery.
- Assistant Hatchery Manager, Jeff Sidely resigned. We are currently reviewing candidates to fill this position.
- September flooding compromised the weir near the end of the egg take and egg take operations were shifted to the net pens to complete the egg take.
- Hatchery staff is currently picking FY17 pink salmon eggs. Survivals have been lower than expected and will likely not exceed 60%. High sediment loads is one of the factors believed responsible for the poor survival rate.



- CIAA has addressed a plugged process water supply line and is currently addressing a plugged domestic wastewater system. The old bunkhouse will need to be removed and a new storage building constructed to complete improvements to the domestic wastewater treatment system. Contractors have been called in to assist with problems.
- Current production status is attached.

### **Port Graham Hatchery**

- The water line to the hatchery triplex housing has been insulated from freezing and a satellite television system has been installed. Repairs/modifications have been made to the heating system.
- The Bruin Bay and Port Graham pink salmon egg picks have been completed. Survivals of the Bruin Bay pink salmon stock have been a disappointing 23%. Survivals of the Port Graham pinks salmon have been better at 70%.
- We are currently seeking candidates to fill the Hatchery Manager position and will conduct an on-site interview a potential candidate later this week.
- Meagan Kerr was hired as the Fish Culturist on September 8, 2017. Meagan is the acting Assistant Hatchery Manager.
- Current production status is attached.

### **Other Activities**

- Recruitment and interviews were completed for the Hatchery Operations Manager position. Two good candidates were identified; both have been offered the position and declined the offer.
- A second recruitment effort after other vacancies are filled is being considered.

**PORT GRAHAM HATCHERY - PRODUCTION SUMMARY AS OF 12/5/17**

BY	Species	Stock	Green	Eyed	Hatched	Fry/Smolt	Release Site	Target Size (gm)	Target Release #	Current or Release Size (gm)	Released or Transferred	
16	Pink	Port Graham					Port Graham	0.60	6,000,000	1.03	6,060,000	6/7/17
17	Pink	Port Graham	33,223,500	22,755,600			Port Graham	0.60	64,000,000			
17	Pink	Bruin Bay	1,448,900	335,700			Port Graham	0.60	3,000,000			
		<b>Total</b>	<b>34,672,400</b>	<b>23,091,300</b>	<b>0</b>	<b>0</b>					<b>6,060,000</b>	

**TUTKA BAY LAGOON HATCHERY - PRODUCTION SUMMARY AS OF 12/5/17**

BY	Species	Stock	Green	Eyed	Hatched	Fry/Smolt	Release Site	Target Size (gm)	Target Release #	Current or Release Size (gm)	Released or Transferred	
16	Pink	Tutka					Tutka Lagoon	0.60	53,000,000	0.55	54,245,400	5/17 & 6/17
17	Pink	Tutka	123,548,100				Tutka Lagoon	0.60	20,000,000			
							Tutka Bay	0.60	80,000,000			
		<b>Total</b>	<b>123,548,100</b>	<b>0</b>	<b>0</b>	<b>0</b>					<b>54,245,400</b>	

\* Egg pick at TBLH is incomplete as of 12/5/17

**TRAIL LAKES HATCHERY - PRODUCTION SUMMARY AS OF 12/5/17**

BY	Species	Stock	Green	Eyed	Hatched	Fry/Smolt	Release Site *	Target Size (gm)	Target Release #	Current or Release Size (gm)	Released or Transferred	
15	Sockeye	Bear Lake					Bear Creek (S) <sup>1</sup>	7.5 - 15.0	1,540,000	7.12	288,000	3/7&8/17
							Resurrection Bay (S)	7.5 - 15.0		15.80	1,528,000	5/22/17
15	Sockeye	English Bay					Port Graham (S)	7.5 - 15.0	90,000	14.70	86,000	5/25/17
							Tutka (S)	7.5 - 15.0	500,000	13.70	356,000	5/25/17
15	Coho	Bear Lake					Bear Creek (S)	10.0	50,000	13.30	54,000	6/6/17
16	Sockeye	Bear Lake				1,475,900	Bear Lake (F)	0.5	2,400,000	0.59	2,468,000	6/1&2/17
							Resurrection Bay (S)	7.5 - 15.0	1,540,000	2.05		
16	Sockeye	Tutka					Leisure Lake (F)	0.3	1,400,000	0.25	1,387,000	6/20/17
							Hazel Lake (F)	0.3	935,000	0.25	834,000	6/21/17
							Kirschner Lake (F)	0.3	260,000	0.25	260,000	6/16/17
							Tutka (S)	7.5 - 15.0	500,000	0.97		
16	Sockeye	Shell Lake				58,600	Shell Lake (S)	7.5	58,000	1.29		
16	Coho	Bear Lake					Bear Lake (F)	1.0	148,000	1.08	125,000	6/6/17
							Bear Creek (S)	10.0	65,000	3.99		
17	Sockeye	Bear Lake	5,117,000	5,007,000			Bear Lake (F)	0.5	2,400,000			
							Resurrection Bay (S)	7.5 - 15.0	1,540,000			
17	Sockeye	Hidden lake	1,265,900	1,184,911			Hidden Lake (F)	Unfed	1,062,500			
17	Sockeye	Tutka	5,544,100				Leisure Lake (F)	0.3	2,000,000			
							Hazel Lake (F)	0.3	1,250,000			
							Kirschner Lake (F)	0.3	250,000			
							Tutka (S)	7.5 - 15.0	500,000			
17	Sockeye	Shell Lake	30,000	18,879			Shell Lake (S)	7.5	125,000			
17	Coho	Bear Lake	668,900	463,296			Bear Lake (F)	1.0	450,000			
				61,742			Bear Creek (S)	10.0	50,000			
<b>Total</b>			<b>12,625,900</b>	<b>6,735,828</b>	<b>0</b>	<b>2,223,900</b>					<b>7,386,000</b>	

\* (F) - Fry stocking; (FF) - Fall Fry Stocking; (S) - Smolt stocking

<sup>1</sup> BY15 Bear Lake sockeye - 288,000 were released early into Bear Creek. The remainder (1,528,863) were transferred to net pens in Resurrection Bay.

Field Projects Update for Regional Planning Team Meeting  
December 7, 2017

2017 Smolt Migrations

Site	Species	Stock	Estimated total
Bear Lake	Sockeye	Bear Lake	1,195,967
	Coho	Bear Lake	98,473
Hidden Lake	Sockeye	Hidden Lake	254,883
	Coho	Hidden Lake	23,288
Shell Lake	Sockeye	Shell Lake	15
	Coho	Shell Lake	6
Kasilof River	Sockeye	Tustumena Lake	3,804,302

2017 Adult Counts

Site	Species	Stock	Estimated total
Bear Lake	Sockeye	Bear Lake	42,000
	Coho	Bear Lake	2,753
Hidden Lake	Sockeye	Hidden Lake	10,032
Shell Lake <sup>a</sup>	Sockeye	Shell Lake	575 <sup>b</sup>
Paint River <sup>a</sup>		<i>Video footage not yet reviewed</i>	

a. Count made via video weir.

b. This is the largest return to Shell Lake since 2011. They were mostly 3-year ocean fish resulting from the release of nearly 90,000 sockeye smolt in 2014.

Details on hatchery contribution, age, etc. are not yet available for all of the above projects.

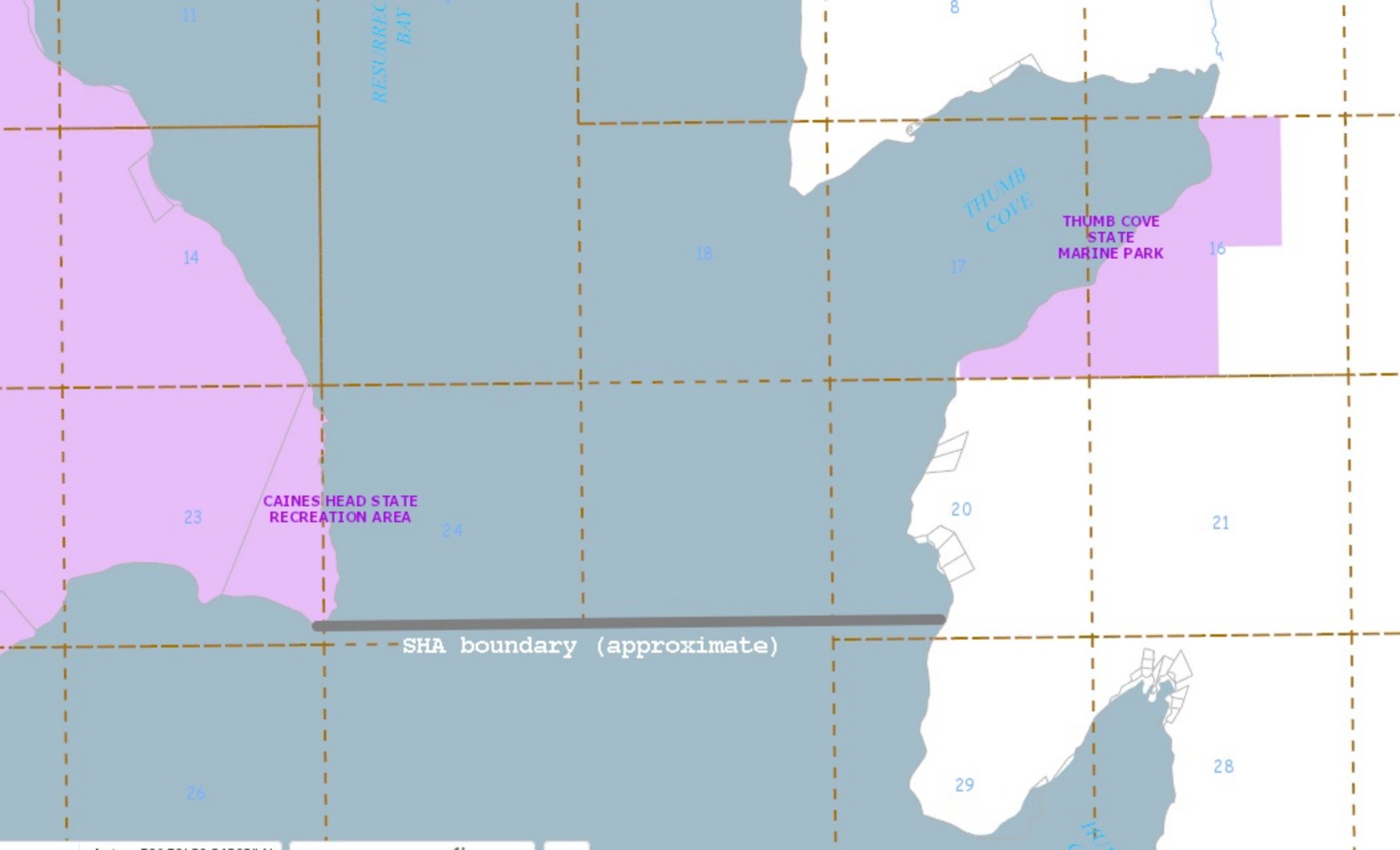
Other Field Projects in 2017

- Limnology completed at Bear, Hidden, Leisure, and English Bay lakes
- Fertilization completed at Leisure and Bear lakes
- 784 invasive northern pike were harvested at Shell Lake
- Assisted ADF&G in setting up their video weir at Packers Lake
- Assisted with additional *Elodea* prevention work at Beck Lake
- Worked with USGS, UAF, Tyonek and Tribal Conservation District to ground truth CIAA's 2015 northern pike eDNA sampling
  - Confirmed pike populations in Three-mile, Chuit, and Second lakes
- 325 northern pike were harvested from Whiskey Lake and 40 pike from Hewitt Lake in May
- Completed fidelity sampling at Hidden Lake
- Opened and closed the Paint River Fish Ladder
- Visited Kirschner Lake to conduct site survey for placement of a smolt trap should that project go forward in 2019
- Surveyed for beaver dams and notched dams at Shell Creek, Talachultna Lake, and Hidden Creek
- Monitored and adjusted flow control structures as needed at Daniels Creek, Packers Lake, Bear Lake, and Marten Lake

### Field Project Program Changes for 2018

All of the 2017 projects outlined above are planned for in some capacity for 2018. Following are the program changes for 2018:

- “Hewitt and Whiskey Lake Pike Suppression” is a new project funded by the Alaska Sustainable Salmon Fund. ADF&G is taking the lead on this project. This is a project to suppress northern pike on Whiskey/Hewitt for three years: 2018, 2019, and 2020. CIAA will run the seasonal field camps and northern pike harvesting/data collection; ADF&G will provide an estimate of the juvenile salmon rearing in Hewitt Lake in the fall of each year.
- Operate the Delight Lake adult weir.
- CIAA is preparing to request permit(s) required to build a cabin at the Paint River site to allow for an on-the-ground crew to count adults returning. The building of a cabin is in the operational and site development plans for the fish ladder.
- CIAA will not be taking samples for limnology at English Bay lakes in 2018.





## Fact Sheet

### Spruce & Porcupine Glacier Public Use Cabins

#### Thumb Cove State Marine Park



Alaska Department of  
**NATURAL  
RESOURCES**

Division of Parks & Outdoor Recreation  
May 2014

The **Spruce Glacier** and **Porcupine Glacier Public Use Cabins** are located within Thumb Cove State Marine Park on the east side of Resurrection Bay, approximately seven and one-half miles from Seward. The cabins are located at the extreme ends of the beach near the hillsides. If approaching from the water, the **Spruce Glacier Cabin** is on the left-hand (or east) side of the beach; the **Porcupine Glacier Cabin** is on the right-hand (or west) side of the beach. A wheelchair accessible boardwalk leads from the beach berm to the **Spruce Glacier Cabin**, approximately 300' back from the steep, cobbled beach.

Salmon fishing, hiking and spectacular scenery and wildlife viewing are some of the recreational opportunities available within this marine park.

**Accommodations:** The **Spruce Glacier Cabin** is fully wheelchair accessible upon reaching the boardwalk. Wheelchair-assisted access will be necessary from the beach landing to the boardwalk. Both cabins have two sets of full size bunk beds with a capacity to sleep eight people, with the two lower bunks being accessible. A table, benches, and counter are furnished, along with a wood stove. An ax and saw may not be available at the cabin due to thefts, so plan on being equipped to split and cut your own wood.



The closest fresh water source to the **Spruce Glacier Cabin** is not accessible to all users. So bring enough fresh water for your stay if you are unable to access the stream. The small stream located on the hillside is directly east of the cabin. The stream empties onto the beach by a very large boulder past the eastern-most barge wreck. To reach it you must walk out near the shore.

At the **Porcupine Glacier Cabin** the closest fresh water source is a small stream coming off the hillside directly adjacent (west) to the cabin. The stream is located on the hillside facing the bay. To reach it you must walk out onto the shore, so plan on filling any water containers at anytime except at the highest tide. Please boil or treat all water before drinking.

The latrine is located almost directly behind the cabin. Plan on providing your own toilet paper should none be found at the latrine.

**TENT CAMPING IS NOT PERMITTED** within 400 feet of the cabin. There are three designated campsites on the beach with fire rings.

**Access:** The cabin can only be reached by private boat, floatplane, or commercial water taxi service. If using a private boat, please use the caution necessary for coastal Alaskan waters with respect to tides, weather, currents and your party's abilities and experience level. The waters of Resurrection Bay are generally choppy in afternoons and can become hazardous to small watercraft. Two mooring buoys are available at Thumb Cove SMP. These buoys are for all Thumb Cove SMP users and are on a first-come/first-served basis. Boats 30ft or longer use these buoys at their own risk during low tides. If pulling a kayak, inflatable or small skiff ashore, be sure to secure your boat to avoid losing it at high tide or to surf conditions.

A charter boat shuttle service is available at Miller's Landing at Lowell Point. Arrangements can be made with them for drop-offs and pick-ups at Thumb Cove SMP. Call 224-5739 for rates and taxi schedule.

**Reservations:** The cabins rental fee is \$70/night. Reservations can be made on line at [www.alaskastateparks.org](http://www.alaskastateparks.org), in person at our Public Information Center offices located in Anchorage, Fairbanks, and Juneau or at the nearest State Park office. Alaska residents can make reservations 7 months to the day in advance of the first night stay and non-residents 6 months to the day in advance, Monday through Friday beginning at 10:00 a.m. Alaska time. Advance reservations cannot be made on weekends or State holidays, but can be made the next business day. All other cabin reservations can be made 24 hours a day, 7 days a week. Reservations are from noon to noon.

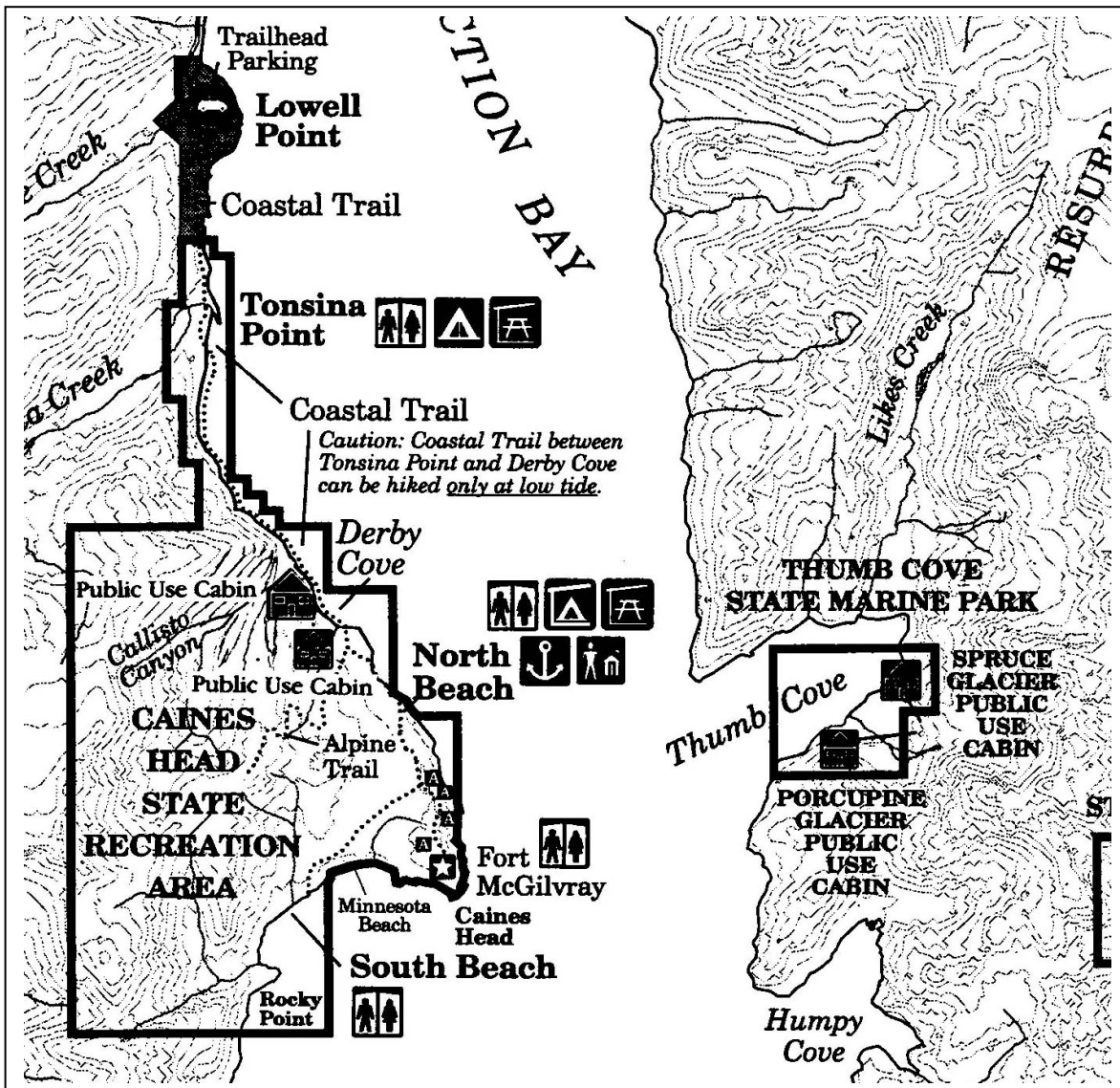
Reservation requests can also be mailed or faxed. Credit cards (MasterCard/Visa/Discover) are accepted for payment when making reservations on line, mailing or faxing reservation requests or when paying in person at our Anchorage, Fairbanks or Juneau offices.

Reservations are not accepted over the phone. However, changes or cancellation can be done by phone or in person. A change to or cancellation of a reservation for a Public Use Cabin must be done at least 48 hours in advance of the start of the reservation in order for the customer to receive a credit. If making a change or cancellation by phone, the cabin reservation number must be provided. If done in person, the original reservation must be presented. If the cancellation or change of a cabin reservation is due to a family emergency or severe weather conditions, the 48 hour notification requirement may be waived. Otherwise, without the 48 hour notification, a reservation cannot be cancelled or changed and a credit issued. Cabin credits are good for one year from date of issue. Refunds are not issued.

**CHECK IN/ CHECK OUT TIME IS 12 NOON**

For more information contact the Alaska Department of Resources at the following locations:

Alaska State Parks Kenai/Prince William Sound Area Office PO Box 1247 Soldotna, AK 99669 Phone: 907-262-5581	Dept. of Natural Resources Public Information Center 550 West 7 <sup>th</sup> Ave., Suite 1260 Anchorage, AK 99501-3557 Phone: 907-269-8400 Fax: 907-269-8901 TDD: 907-269-8411	Department of Natural Resources Public Information Center 3700 Airport Way Fairbanks, AK 99709 Phone: 907-451-2705 Fax: 907-451-2706 TDD: 907-451-2770
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# STATE OF ALASKA

## DEPARTMENT OF FISH AND GAME

### DIVISION OF COMMERCIAL FISHERIES

**BILL WALKER, GOVERNOR**

3298 Douglas Place  
Homer, AK 99603-7942  
PHONE: (907) 235-8191  
FAX: (907) 235-2448

### MEMORANDUM

TO: Bill Templin, Chief Fisheries Scientist, Division of Commercial Fisheries  
Jack Erickson, Regional Research Coordinator, Central Region  
Chris Habicht, Genetics Section, Division of Commercial Fisheries

FROM: Ted Otis, Lower Cook Inlet Area Finfish Research Biologist  
Glenn Hollowell, Lower Cook Inlet Area Finfish Management Biologist

DATE: 1 December 2017

SUBJECT: *Lower Cook Inlet Pink Salmon Otolith Sampling Summary, 2017*

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Lower Cook Inlet staff received data requests from the public, media, and the Marine Stewardship Council for results of pink salmon otolith sampling in 2017. The text, table, and map below provide a response to those data requests.

In 2017 Lower Cook Inlet staff continued a fourth year of sampling pink salmon otoliths as part of baseline data collection associated with two recently restarted hatchery production programs. Otolith sampling of harvest and escapement allows for a complete assessment of hatchery programs and wild stock performance. Beginning in brood year 2012, otoliths of all pink salmon cultivated at the Tutka Bay Lagoon Hatchery and Port Graham Hatchery were thermally marked. Otolith sampling associated with these programs is comprised of two components: 1) sampling otoliths from pink salmon commercial harvests (purse seine and set gillnet) in the Southern District, and 2) sampling otoliths from spawned out pink salmon carcasses in streams throughout the Southern and Outer districts (Figure 1). This is an ongoing work that is intended to continue as the two programs come up to full production levels.

Similar to the previous three years, pink salmon from Tutka and Port Graham Bay hatcheries were found to have spawned in 11 of the 16 Lower Cook Inlet streams surveyed (Table 1). Port Graham Hatchery marks were found in samples at low levels (1%) in three streams. Tutka Bay Lagoon Hatchery marks were found in 10 of the 16 streams at widely varying proportions (1%–87%) with highest proportions generally found closest to release sites. In addition, Prince William Sound hatchery-produced pink salmon were found at levels similar to previous years (2%–70%). Hatchery-marked pink salmon (Prince William Sound and Lower Cook Inlet combined) outnumbered unmarked pink salmon on 5 of the 16 streams sampled, including three small streams sampled in response to public reports of unusually high escapements (i.e., Beluga Slough, Fritz Creek, Lou's Creek). Preliminary escapement indices (either peak count or area-under-the-curve) derived from periodic ground surveys were estimated to provide context to the proportions of hatchery marks in the samples (Table 1).

cc: Prince William Sound Aquaculture Corporation, Cook Inlet Aquaculture Association, Valdez Fishery Development Association

Table 1.- Preliminary percentages of thermally marked pink salmon otoliths in samples from Lower Cook Inlet streams and commercial fisheries, 2017.

	Port Graham Hatchery, (LCI)	Tutka Lagoon Hatchery, (LCI)	LCI hatchery total	Armin F. Koernig Hatchery, (PWS)	Cannery Creek Hatchery, (PWS)	Wally Noerenberg Hatchery, (PWS)	Solomon Gulch Hatchery, (PWS)	PWS hatchery total	unmarked otoliths <sup>1</sup>	Total otoliths sampled	Preliminary 2017 escapement index
LCI streams											
1. Beluga Slough <sup>2</sup>		1.4%	1.4%	30.2%	14.6%	10.4%	1.0%	56.3%	42.4%	288	2,500
2. Fritz Creek <sup>2</sup>			0.0%	40.6%	20.8%	5.2%	3.1%	69.8%	30.2%	96	2,000
3. Humpy Creek			0.0%				1.6%	1.6%	98.4%	191	71,073
4. China Poot		1.1%	1.1%	4.3%	2.1%	2.1%	2.1%	10.6%	88.3%	94	2,379
5. Sadie Cove		4.2%	4.2%	2.1%			12.5%	14.6%	81.3%	96	5,790
6. Tutka Head End Creek <sup>2</sup>		33.9%	33.9%				5.8%	5.8%	60.3%	189	19,786
7. Tutka Lagoon Creek <sup>2</sup>		87.4%	87.4%	0.5%	1.6%	0.5%		2.6%	9.9%	191	61,369
8. L. Tutka Bay (Lou's Ck.) <sup>2</sup>	1.0%	12.5%	13.5%	25.0%	14.6%	9.4%		49.0%	37.5%	96	3,000
9. Barabara Creek		2.1%	2.1%	4.2%			14.2%	18.4%	79.5%	190	25,002
10. Seldovia River			0.0%	3.7%	1.0%	0.5%	7.3%	12.6%	87.4%	191	27,025
11. Port Graham River	1.1%		1.1%	2.1%			3.2%	5.3%	93.7%	95	20,642
12. English Bay River	1.1%	2.9%	4.0%	9.2%	12.1%	1.7%	6.9%	29.9%	66.1%	174	30,000
13. Dogfish Lagoon Creeks			0.0%	13.3%	2.2%	1.1%	34.4%	51.1%	48.9%	90	13,331
14. Port Chatham			0.0%	29.2%	13.5%	4.2%	1.0%	47.9%	52.1%	96	44,291
15. Port Dick Creek		2.1%	2.1%	3.2%	1.1%			4.2%	93.7%	95	62,098
16. Port Dick-Island Creek		1.0%	1.0%	9.0%	3.5%	2.0%	3.5%	18.1%	80.9%	199	22,579
Commercial harvest, (Southern District)											Total harvest
Purse Seine	1.0%	26.7%	27.7%	0.6%	0.5%	0.2%	0.8%	2.1%	70.2%	1,154	352,000
Set Gillnet	0.5%	15.6%	16.1%	4.2%	0.5%	1.0%	6.3%	12.0%	71.9%	192	44,000

<sup>1</sup>Unmarked otoliths- otoliths without discernable hatchery thermal marks.

<sup>2</sup>Denotes streams where 100% of the otoliths were read a second time to evaluate reader agreement.

Figure 1. Map of Southern and Outer districts of Lower Cook Inlet, illustrating the locations of pink salmon hatcheries (denoted by asterisks\*), pink salmon index streams, and the 16 streams that were targeted for otolith sampling in 2017 (numbers correspond with those in Table 1).

