#### WIDER COMMON PROPERTY OPPORTUNITIES ARE EXPECTED

Ketchikan, AK 99901

www.ssraa.org

# Spotlight falls again on the THAs

By **DAVE LANDIS** SSRAA General Manager

ach year at about this time, SSRAA notifies the fishing fleets of changes in our management of the Neets Bay Terminal Harvest Area. At the same time, we also include information on other THAs. Neets Bay will always be the most complex SSRAA harvest area—and sometimes the most contentious—but there is now a wider variety of harvest opportunities at SSRAA THAs than there ever has been. There will also be more coming on line in the near future.

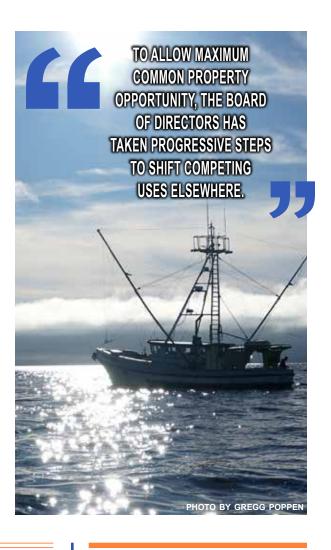
Although other THAs will increasingly take some of the spotlight from Neets Bay, Neets often seems to be in the forefront of fishermen's minds—and with good reason, when we look back at historical production. Neets chum releases over time have been at least double those of any other site. But two critical things set Neets apart from other THAs, and they are related to SSRAA's operations: most of our broodstock eggs are taken there; and the burden

of cost recovery for SSRAA's expenses is borne primarily at Neets.

To allow maximum common property opportunity at Neets when brood and cost recovery still need to be addressed, the Board of Directors has taken progressive steps over a number of years to shift some of these competing uses elsewhere.

To focus on each part of this puzzle, let's look first at broodstock. The hatchery at Burnett Inlet has such a good freshwater source that SSRAA decided bulk incubation of chum salmon made better use of that water than did rearing coho—which had been Burnett's primary purpose. We constructed a large incubation building and developed a sophisticated egg take system, allowing Burnett to take a good percentage of the broodstock load from Neets. In 2018, staff at Burnett took more than 50 million of the 150 million eggs we need systemwide; in 2019, we expect that number to increase and to match returns from a substantially larger chum

See 'Neets Bay' on 5



# Hatchery's outreach to public teaches with oohs and awes

# By **MATT ALLEN**Assistant Hatchery Manager Deer Mountain Hatchery

Some things are universal: laughs, startled sighs, screams, crinkled noses—and grins from ear to ear.

These reactions and more are expressed by those who visit Deer Mountain Hatchery. Though we have many enjoyable conversations and interactions in our outreach to the public, the most memorable are those where words are

Japanese exchange students from
Kanayama recently toured the hatchery and their crinkled noses said it all, in spite of the language barrier, when they sniffed our indoor rearing room's damp air, heavy with odors of fish and fish food: *It stinks*. I grant you it's an acquired smell, but the stench is forgotten in an opportunity to interact directly with our Chinook. The simple act of spreading a few pellets of fish feed elicits a response from 400 hungry chinook breaking the water to consume the morsels. Jumping back, startled by the sudden flurry of activity; trying to avoid getting splashed while simultaneously shrieking with excitement; smiling and laughing—it's all part of the experience for visitors. The reactions and emotions are nearly the same,



Connecting visitors to amazement: outreach at Deer Mountain Hatchery furthers understanding of salmon and produces 'wow.' PHOTO BY LIZ JONES

whether visitors are from Japan, Israel, Puerto Rico, New York or Ketchikan. It's about making a connection, and the more basic the connection, the better.

We participate in outreach events and hatchery tours throughout the year; it's not limited to busy tourism months. Each school year brings hatchery field trips, coho spawning demonstrations in November, Salmon in the Classroom from February to May, Da Vinci Night in April and the U.S. Forest Service Kids Fishing Derby in City Park every June.

A new outreach experience arose last January. Tessa See 'Outreach' on 8

# IN THIS ISSUE

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# Nominees sought for gear-group seats on the association Board of Directors

SSRAA encourages salmon fishers to turn in nominations for four gear seats on the Board of Directors.

One seine seat, one gillnet seat and two power troll seats come open in January 2020. Nominations are due Oct. 16, 2019.

Nominations must be in writing and must include the permit holder's name; address; vessel name; and phone number. Include a brief statement of interest with self-nominations; if you're nominating another fisher, provide a short summary of the nominee's background. Limited-entry permit holders nominate only people in their gear groups.

Nominees must be active southern Southeast commercial salmon permit holders.

If you're interested in serving on the SSRAA board of directors, or want to nominate a fellow gear-group fisher, please submit the nomination to: SSRAA

Attn: Liz Jones

14 Borch St., Ketchikan, Alaska 99901 You may also send a nomination by email to: lizj@ssraa.org.

For more information, call the association at 907-225-9605.



#### **SSRAA Board of Directors**

SEINERS		
Dan Castle	Ketchikan	F/V Little Lady
Leif Dobszinsky (PRESIDENT)	Port Townsend, Wash.	F/V Chasina
Nyle Thomas	Petersburg	F/V Barbara
Garret Vincentz	Ketchikan	F/V Lady Jane
GILLNETTERS		
Brennon Eagle	Wrangell	F/V Danegeld
Chris Guggenbickler (SECRETARY)	Wrangell	F/V Maranatha
David Klepser	Ketchikan	F/V Hannah Point
Bob Martin	Petersburg	F/V Sumner
POWER TROLLERS		
Tom Fisher (VICE PRESIDENT)	Ketchikan	F/V Aquarius
Pat Tyner	Craig	F/V Rauma
Brian Warmuth	Ketchikan	F/V Shannon Hope
Brant Widness	Ketchikan	F/V Alyeska
HAND TROLLER		
Craig Ring	Ketchikan	
APPOINTEES		
Russell Thomas	Ketchikan	Sport Fish
Paul Cyr (treasurer)	Ketchikan	Processor
Dennis Nickerson	Klawock	Native Corp.
Mike Painter	Ketchikan	Public at Large
Lynnette Logan	Craig	Chamber of Comm.
David Powell	Wrangell	Municipality
Sandy Souter	Kent, Wash.	Public at Large
John Yeager	Wrangell	Subsistence
The 21-member SSRAA Board of Dire	ctors includes 13 commercial fis	hers along with

The 21-member SSRAA Board of Directors includes 13 commercial fishers along with representatives of interest groups and the public.

**SSRAA Spawning News** is published by the Southern Southeast Regional Aquaculture Association, a private, non-profit aquaculture corporation based in Ketchikan, Alaska.

Our web site is www.ssraa.org.

This publication is mailed free to all limited-entry salmon permit holders for purse seine, drift gillnet, power troll and hand troll in Alaska Districts 1-8. It is also mailed free to any person interested in SSRAA.

To receive Spawning News, send a request with your name, your organization's name and your address to: Spawning News / 14 Borch St. / Ketchikan, AK 99901.

For changes of address for permit holders, notify: Commercial Fisheries Entry Commission / 8800-109 Glacier Highway / Juneau, AK 99801.

The CFEC fax number is 907-789-6170. SSRAA uses mailing labels from the CFEC. If your address is wrong, please contact CFEC; SSRAA cannot correct your address for CFEC.

#### SSRAA solicits appointive board members

The input of Southeast Alaskans who aren't commercial fishers is important for the SSRAA Board of Directors; the association is soliciting new members.

Nominations are welcome from people who qualify in these categories:

Chambers of Commerce Native Corporations

**Processors** 

Sport Fishers

Chambers of Commerce
Elected municipal officers
Public at Large (2 Seats)
Subsistence users

Two-year terms on the board begin in January 2020. Nominations must be in writing and submitted to SSRAA, 14 Borch Street, Ketchikan, AK 99901, by Dec. 4, 2019. For more information call Liz Jones at the administration office (907) 225-9605 or send email to: lizj@ssraa.org.

#### **SSRAA Staff**

#### **ADMINISTRATION AND OPERATIONS**

Dave Landis

Bret Hiatt

Operations Manager

Bill Gass

Production Manager

Steve Reid

Assistant Production Manager

Cindy Walters

Executive Administrative Assistant

Administrative Assistant

Liz Jones Administrative Assistant
Jay Johnson LLC Accounting Services

#### **RESEARCH & EVALUATION**

Tessa Minicucci Research & Evaluation Manager

Stephanie Sanguinetti
Whitney Crittenden
Lead Research Technician
Sara Scott
Lead Research Technician

#### WHITMAN LAKE HATCHERY

Jay CreasyHatchery ManagerCody PedersonAssistant Hatchery ManagerMike MorenoLead Fish CulturistRyan PattenFish CulturistVacantMaintenance Technician

#### **NEETS BAY HATCHERY**

Craig Parry Hatchery Manager

Justin Rose Assistant Hatchery Manager

Eric Johnson Fish Culturist
Andrew Pung Fish Culturist
Clint Cole Fish Culturist

Annie McTurner Fish Culturist (10 month)

Benjamin Sipma Fish Culturist (10 month)

Richard Flagg Maintenance Supervisor

Daniel Perry Lead Maintenance Technician

James Adams Maintenance Technician (10 month)

#### **BURNETT INLET HATCHERY**

Charles CurritHatchery ManagerJon ThoringtonMaintenance SupervisorStephan SmithFish CulturistKaylie CarrFish Culturist (10 month)

#### **CRYSTAL LAKE HATCHERY**

Loren Thompson Hatchery Manager
Kevin Chase Assistant Hatchery Manager

Wesley Malcom Fish Culturist Eric Mattek Fish Culturist

#### NECK LAKE REARING AND HARVEST FACILITY

JR Parsley Facility Manager
Dolores Loucks Lead Fish Culturist
William Pattison Fish Culturist (10 month)

#### DEER MOUNTAIN HATCHERY

Matt Allen Assistant Hatchery Manager Michelle Leitz Lead Fish Culturist

#### KLAWOCK RIVER HATCHERY

Jeff Lundberg Hatchery Manager
Troy Liske Assistant Hatchery Manager
Sheldon Sammon Fish Culturist
Paul Young Fish Culturist

Jesse Knock Fish Culturist (10 month)
Stuart Cole Maintenance Supervisor

#### SPECIAL PROJECTS DEPARTMENT

Ted Addington Maintenance Manager
Jacob Arnold Lead Maintenance Technician
Jeremy Bethel Maintenance Technician

May 2019 **SSRAA Spawning News** 

## RPT okays permit alterations to boost chum and coho production

ADF&G commissioner's nod would affect programs at Burnett Inlet and Nakat Inlet

> By BILL GASS SSRAA Production Manager

SSRAA began an ambitious expansion project in 2014, when the Board of Directors chose to transition the Burnett Inlet Hatchery from a relatively small coho facility to a significant chum salmon producer. In the ensuing years, SSRAA made several attempts, with little success, to secure the permits needed to bring the facility to full production capacity.

Then came the spring 2019 meeting of the regional planning team (RPT). SSRAA presented two permit alteration requests (PAR) for chum to be released at Burnett Inlet and both proposals received favorable 6-0 votes. Ultimately.

the request to release more chum at Burnett was predicated on a recognition by SSRAA staff that, in order to ensure the stability of all SSRAA chum programs, it would be necessary to release more fish at the site.

Burnett Inlet is situated in such a way that returning fish have to pass through several traditional common property fisheries before entering the Burnett Inlet Harvest Area. Distant harvests by the commercial fleets are what SSRAA is all about, but those catches can impact our ability to recruit adequate broodstock.

The two chum PARs that received positive recommendation from the RPT increased the summer chum release at Burnett from 25 million eggs to 35 million, and increased the fall chum release from 6 million eggs to 10 million. If both requests are signed by the commissioner of ADF&G, Burnett Inlet will be permitted to collect 96 million summer chum eggs and 39 million fall

> chum eggs. The permits are structured for certain projects to receive eggs from either Neets Bay or Burnett, allowing flexibility and increasing the probability that all SSRAA programs will be stocked at full production goals. With no other

planned increases, SSRAA will have an annual chum production of approximately 240 million eggs that should yield 215 million fry (180 million summer and 35 million fall) for release.

At this spring's RPT meeting, SSRAA also

proposed two coho permit alterations and both were recommended for approval by the commissioner. An increase of 500,000 eggs intended to raise the release of fall coho at Nakat Inlet from 600.000 smolt to 1 million received a 6-0 vote, as did a request to raise the Klawock

Lake coho permit from 5 million to 5.5 million. Both of these proposals are linked to the mitigation portion of the Pacific Salmon Treaty Annex of 2018 and are intended to compensate the troll fleet for losses incurred as a result of the latest treaty negotiation. The Klawock production can come on line immediately, but the Nakat increase will require construction of a new freshwater rearing facility.

The RPT also recommended that a small triploid trout program be permitted at the Deer Mountain Hatchery to stock rainbow trout in two lakes on the Ketchikan road system.

Bringing Burnett Inlet to full production took more than five years and many difficult meetings, but the RPT process eventually worked as designed and the user groups of southern Southeast will have a more robust and sustainable hatchery program as a result. The SSRAA Board built in increased revenue for the association, redundant broodstock programs and distribution of new fish in an allocative way that will limit fleet movement while adding harvest opportunity to all groups.

**NUMBER** 

# PRODUCTION UPDATE

#### Spring 2019 releases are on track at SSRAA sites

The permits are structured for certain projects

to receive eggs from either Neets Bay or Burnett,

allowing flexibility and increasing the probability

that all SSRAA programs will be stocked

at full production goals

May 2019 brings another SSRAA rearing cycle to a close and at this point (April 30) it looks like 2019 will be a success. By site, date, species and stock, SSRAA will conduct 28 different releases before all of the approximately 205 million fish are swimming free in the ocean on June 1. By number, chum are the vast majority, accounting for 93 percent of total releases. By weight, chum comprise approximately 75 percent of the total biomass produced; this is due to the larger release size of yearling smolt. The first chum released were summer chum at Neets Bay on April 19. Other sites and species follow, until all fish are gone by May 31. A full accounting of all releases will be available on the SSRAA web site by the end of June.

Noteworthy for 2019 are Burnett Inlet and Port Asumcion. Burnett will release 23 million summer chum that were spawned at Burnett last summer. Port Asumcion will release 18 million summer chum, bringing the site to full permitted capacity.

Nakat Inlet has also seen an increase in summer chum for the first time since 1991, which brings the Nakat summer chum release to 13 million, up from 8

SSRAA transport vessels delivered 88 million chum fry, 3 million coho smolt 1.5 million chinook smolt to various locations throughout the region in 2019, logging more than 3,500 miles at sea. The chum fry are moved in February and March and all of the yearling fish are moved in April.

The new production year starts in July, when SSRAA conducts full-scale egg takes at both Burnett Inlet and Neets Bay in a push to collect 205 million summer chum eggs. Burnett will have the first 3-year-old summer chum from a release of 20,000,000 in 2017 to go along with 4- and 5-year- olds from 2015 and 2016.

There are no other significant changes to returns for 2019 from new production, except in Carroll Inlet, where the first 5-year-old chinook will return this summer. Over the next several years, new summer chum production will impact Port Asumcion, Nakat Inlet, Burnett Inlet and Kendrick Bay/McLean Arm; production shifts, primarily away from Neets Bay, will affect chinook returns to Neets, Carroll Inlet and Port Saint Nicholas. Watch the SSRAA forecast each year to gauge when and where production changes will be felt.

To the right is a projection of total releases for 2019.

#### PROJECTED SMOLT RELEASES FOR 2019 **SPECIES** SITE Summer Chum **Neets Bay** 63,000,000 Nakat Inlet 13,000,000

	Kendrick Bay	30,000,000
	Anita Bay	22,000,000
	Burnett Inlet	23,000,000
	Port Asumcion	18,000,000
Summer Chum total		169,000,000
Fall Chum	Neets Bay	16,000,000
	Nakat Inlet	4,000,000
	Burnett Inlet	3,000,000
Fall Chum total		23,000,000
Fall Coho	Whitman Lake	300,000
	Neets Bay	4,200,000
	Nakat Inlet	600,000
	Anita Bay	600,000
	Crystal Lake	120,000
	Klawock River	4,100,000
	Port Asumcion	350,000
Fall Coho total		10,270,000
Summer Coho	Whitman Lake	210,000
	Neck Lake	900,000
Summer Coho total		1,100,000
Chinook	Whitman Lake	550,000
	Neets Bay	300,000
	Anita Bay	450,00
	Deer Mountain	100,000
	Carroll Inlet	600,000
	City Creek	100,000
	Port St. Nicholas	300,000
	Crystal Lake	600,000
Chinook total		3,000,000
SSRAA GRAND TOTAL		206,370,000

# President's message

#### TO THE FLEETS

By **LEIF DOBSZINSKY**President of the

SSRAA Board of Directors

nce again, another summer salmon season is upon us. SSRAA staff has spent the winter raising the young fish, tinkering and resting for another big egg take goal this summer. The board spent four meetings hashing out budgets, permit alteration requests (PARs) and rotational calendars. With a few exceptions, it was business as usual.

The board took action on many items, with a few to note.

In the capital expenditures budget, a new egg take system will be designed and constructed at Neets Bay Hatchery. This system will be similar in design to the Burnett Inlet Hatchery system.

We accepted a DIPAC grant of \$2.1 million to offset cost recovery in summer 2019. The grant allowed us to set rotational calendars that allow opportunity, while working within king salmon restrictions from ADF&G.

PARs to finish off expansion at Burnett Inlet Hatchery and to provide future coho production were approved at the spring RPT meeting. With some decent survival rates and a little luck in the future, fleets will be able to reap the rewards of the increased chum releases and additional cost recovery options.



Leif Dobszinsky



I would like to commend my
fellow board members for
the significant time and effort
expended in shaping SSRAA's
present and future course.

... We are always seeking excellent individuals

appointed members.

to serve as elected or



Lastly, I would like to commend my fellow board members for the significant time and effort expended in shaping SSRAA's present and future course. I would like to thank everyone in sticking with the Burnett expansion. The project predates my two terms, and so filling out chum rearing capacity is a victory.

To the group that traveled to Anchorage for the Alaska Board of Fisheries hatchery committee meeting, thank you for grabbing the microphone and defending the RPT process.

**Finally, if any reader** is interested—whether you're a permit holder or community member— we are always seeking excellent individuals to serve as elected or appointed members of the SSRAA Board of Directors.

Safe Fishing ... Leif

# ADF&G posts gear-group stats for catches of hatchery salmon

The Alaska Department of Fish and Game presented allocations of hatchery-produced salmon estimated value in Southeast Alaska at the Southern, Northern and Joint Regional Planning Team (RPT) meeting in Juneau on April 10. The department announced preliminary 2018 and final 2017 enhanced salmon allocations and updated five-year rolling allocation averages.

#### Preliminary enhanced salmon allocation estimates for 2018:

- Seine, 53 percent
- Gillnet, 32 percent
- Troll, 15 percent

#### Preliminary rolling allocation averages (2014-2018) by gear group:

- ► Gillnet, 40 percent (target allocation range 24-29 percent)
- ► Seine, 44 percent (target allocation range 44-49 percent)
- ► Troll, 16 percent (target allocation range 27-32 percent)

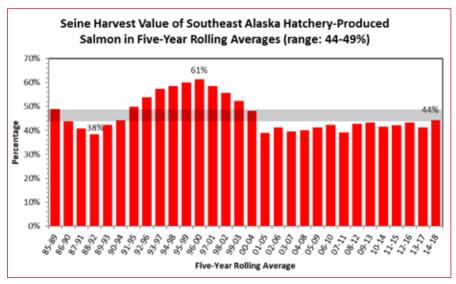
#### Final 2013-2017 rolling allocation averages by gear group:

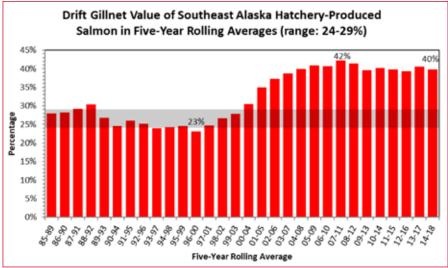
• Gillnet, 41 percent • Seine, 41 percent

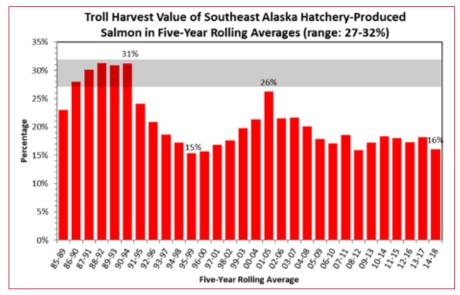
percent • Troll, 18 percent

Preliminary total ex-vessel value for all enhanced salmon in 2018 was estimated to be \$68.2 million. About \$36.2 million of hatchery-produced fish went to seiners; \$21.9 million to gillnetters; and \$10.1 million to the troll fleet.

A complete summary of the 2018 Alaska salmon enhancement program is available on the ADFG web site at: www.adfg.alaska.gov/index. cfm?adfg=fishingHatcheriesOtherinfo.reports. SOURCE FOR DATA: ADF&G







## 'Neets Bay'

CONTINUED FROM 1

release four years ago. Having Burnett as a secondary brood source also adds another critical component to SSRAA's long term success: having a backup source of broodstock if there should be a run failure or some other catastrophe affecting production at Neets Bay.

Collection of fish for cost recovery revenue has also changed over time. There are now eight lots of SSRAA fish for processors to bid on, with a number of smaller-volume lots. But that will change soon as well, and larger lots will be available, perhaps even rivaling the big Neets Bay summer chum block. For example, the summer chum release at Port Asumcion on Baker Island will be dedicated to cost recovery. That release was recently bumped up to 20 million fish, from 8 million, and will provide a substantial new source of revenue for the corporation when the first returns come back. Because Asumcion is also

a release site for Klawock River coho, we will actually see the first Port Asumcion cost recovery later this year, when adult coho return. Next year, age-3 summer chum from the release of 8 million will be harvested and the youngest age class from the subsequent release of 20 million chum will come back the following year. By 2022, we fully expect that Port Asumcion will generate a substantial portion of cost recovery for SSRAA—again, taking some of the load off of Neets Bay and providing fishing opportunity for the fleets.

Looking forward to the summer of 2019 at Neets Bay, there will be two notable factors increasing common property opportunities. First of all, the forecast for summer chum is quite good. Based on the huge age-3 chum class in the summer of 2018, forecasters predict that the age-4 fraction of this returning brood year will be correspondingly large. This is certainly good news for those interested in harvest opportunity, cost recovery and broodstock as welland the real trick will be to manage all of these uses to the optimum benefit of all concerned. Secondly, we are very

fortunate this year to be positioned to receive a cost recovery offset grant of \$2.1 million from DIPAC. This means that SSRAA can lower the cost recovery goal at Neets Bay to allow additional common property fishing in the bay. A big thank you goes out to DIPAC for their tremendous generosity and foresight.

This summer's common property opportunity at Neets Bay can be seen in the rotational calendars that are included in this edition of the Spawning News. When compared to last year's calendar, there are essentially two additional rotations for both net groups, with harvest extended all the way out to July 6. For the past several years, Neets fishing in July was simply not possible due to the need for cost recovery to begin. In addition to this early-season opportunity, there will be an all-out push to finish up cost recovery and collect broodstock so that the net gear groups can get into the bay for late-season rotations. The most likely time for this is the latter half of August—but as usual, the fish and the weather both need to cooperate in order for us to announce openings. We will also try



PHOTO BY MATT ALLEN

**Looking forward to** the summer of 2019 at

Neets Bay, there will be two notable factors increasing common property opportunities



PHOTO BY GREGG POPPEN

to give as much notice as we can prior to ADF&G's announcements, but managing the bay's uses can also require short time frames to come into play.

After the summer chum season winds up in late August or early September, the fall chum season at Neets Bay will begin. There is some good news for fall fishing. We intend to conduct very little cost recovery, essentially just the amount that is incidental to broodstock management. And the broodstock goal at Neets has lessened somewhat, too, because Burnett Inlet also releases these fish and we intend for that site to be the primary collection point for fall chum. The added benefit of increased fall chum net opportunity at Neets Bay is that sometimes a large volume of SSRAA coho are caught alongside the chum, and even though we have not forecast a large coho return in 2019, coho runs are notoriously difficult to predict accurately.

And what about troll opportunity? The chum troll target—a number set before the season and typically pegged at 200,000 fish—has been doubled to 400,000 this year. If there is considerable effort and the fish and the weather cooperate, an ex-vessel harvest value of \$4 million for the troll fleet at Neets Bay is not difficult to imagine. The summer of 2018 also saw the first chum troll effort at Burnett Inlet, which we expect again this year in a limited fashion outside the special

harvest area. But the small physical size of the terminal area at Burnett seems to be the greatest limiting factor at that particular location.

We also expect that Klawock River coho will present good troll harvest opportunity, along with that from the traditional coho and chinook release sites of Neets Bay, Whitman Lake, Whale Pass, Nakat Inlet, and Anita Bay. We even expect to see chinook caught in the fisheries from the small release at Deer Mountain Hatchery on Ketchikan Creek.

Port Asumcion and Carroll Inlet chinook also present some of the newest SSRAA troll opportunities that fishermen can begin to access. Carroll Inlet in particular will come on strong in the next couple years as the full complement of age classes returns together. The first return of Carroll fish occurred last year as a small run of age-4 kings.

Whatever gear you use, whatever species of salmon you're looking for and wherever you choose to fish, our hope is that you will be safe and successful in 2019. And may SSRAA salmon have strong returns for this year, next year and beyond!

# CALENDAR CESTING 2019

#### **TERMINAL HARVEST AREAS**

#### **NEETS BAY T.H.A. OPENING**

For details, please see G.M. Dave Landis' article on page 1.

#### **KENDRICK BAY T.H.A. OPENING**

The return at Kendrick Bay in 2019 is expected to be approximately 1,031,700 summer chum (722,200 common property and 309,500 terminal). Kendrick Bay is an exclusive purse seine fishery. Kendrick Bay will be open on Saturday, June 15, 2019, and will remain open through Monday, Sept. 30, 2019.

#### **NAKAT INLET T.H.A. OPENING**

The Nakat Inlet THA opens Saturday, June 1, 2019, and is an exclusive gillnet/troll fishery. Projected returns are 254,500 summer chum (127,300 common property and 127,300 terminal); 197,100 fall chum (69,000 common property and 128,100 terminal). The expected coho return is 19,600 (13,700 common property and 5,900 terminal). The THA will remain open until Sunday, Nov.10, 2019.

#### ANITA BAY T.H.A. OPENING

The Anita Bay THA will open Saturday, June 1, 2019. Gear access changes throughout the opening until it closes on Sunday, Nov. 10, 2019. The expected return for summer chum is 535,800 (267,900 common property and 267,900 terminal); for chinook, 15,700 (4,700 common property and 11,000 terminal); and for coho, 9,200 (6,400 common property and 2,800 terminal).

#### **CARROLL INLET T.H.A. OPENING**

Carroll Inlet THA will be open Saturday, June 1, 2019, through Sunday, June 30, 2019. Gear access changes throughout the opener. The expected chinook return is 8,000 (4,000 common property and 4,000 terminal).

#### JUNE 2019 - NEETS BAY

Terminal Harvest Area (THA) Rotation Calendar—5AAC 33.370

July 1, 2019THA Expands to Chin Point. No Fishing Out to Chin Point in June 2019

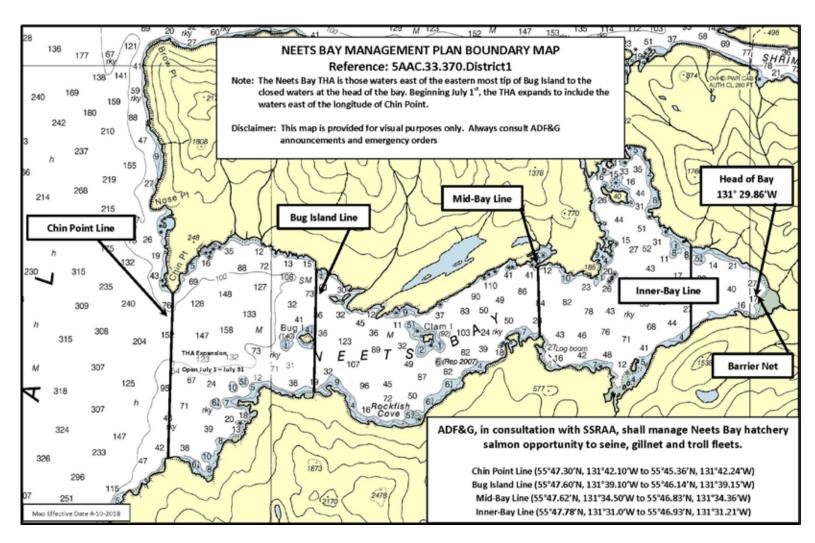
Sun	Mon	Tue	Wed	Thu	Fri	Sat
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						CLOSED to a FISHERS
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9	10	11	12	13	14	15
		CLOSED T	O ALL FISHERS		· .	Troll Only
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16 (stat 25)	17	18	19	20	21	22
		Troll			T	roll
	Noon Insid	Gillnet Noon le Mid-Bay Line		Seine Noon Mid-Bay Line		Sillnet Noon Bug Island
23	24	25	26	27	28	29
			Troll			Gillnet .
Noon Sei	Ne Noon ug Island		illnet Noon Bug Island		Seine Noon	30

#### July 2019- Neets Bay

Terminal Harvest Area (THA) Calendar—5AAC 33.370

Troll Chin Point to Bug Island—Cost Recovery Inside Bug Island

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
		eine <sub>Noon</sub> Bug Island	Noon C	Froll Sillnet Noon Bug Island		aine Noon Bug Island
7	8	9	10	11	12	13
	-		→ Troll ←	-	<b></b>	
		COST	RECOVERY-W	ithin SHA		
14	15	16	17	18	19	20
	-		→ Troll ←		-	
		COST	RECOVERY-W	ithin SHA		
21	22	23	24	25	26	27
	-		Troll +		<u> </u>	
		COST REC	OVERY—Within S	HA—Through July 31		
28	29	30	31			
-	→ Troll—thr	ough July 31				
COS	ST RECOVERY-	-Within SHAThe	rough July 31			



#### June 2019 - Anita Bay

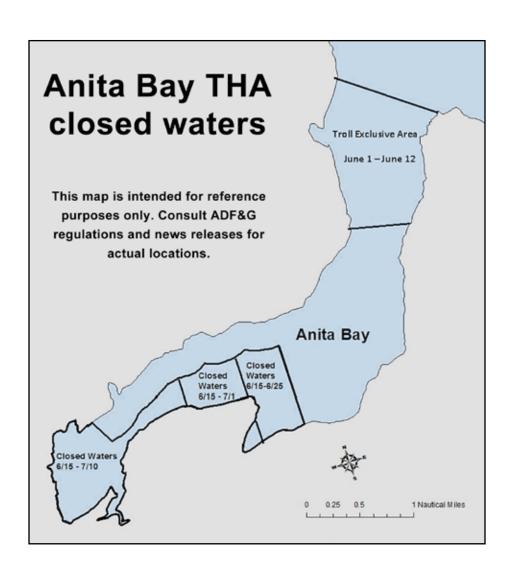
Terminal Harvest Area Rotation Calendar

Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
						OPEN CONTINUOUSL TO ALL FISHERS
2	3	4	5	6	7	8
-	-	OPEN COM	NTINUOUSLY T	O ALL FISHERS	-	-
Tro	oll Exclusive Area b	etween May closu	re line and THA b	oundary line at mo	uth of bay June 1	-June 12
9	10	11	12	13	14	15
←—	OPEN CONTINUOUSLY TO	ALL FISHERS		-	Troll	<u> </u>
-	— Troll (as describ	ped above) ———	Ends Noon	Neon S	Seine Moon	Gillnet Noon
16	17	18	19	20	21	22
		-	Troll —			
Gillnet Noon	Noon S	eine Noon	Neon (	Gillnet Noon	Noon	Seine Noon
23	24	25	26	27	28	29
		-	Troll —			Noon Seine No
Noon G	illnet Noon	Noon S	Seine Hoon	Noon G	illnet Noon	30

#### July 2019- Anita Bay

Terminal Harvest Area Rotation Calendar—5.AAC 33.383

Sun	Mon	Tue	Wed	Thu	Fri	Sat
	1	2	3	4	5	6
				Troll	•	
	Noon Gi	linet Noon	Noon S	eine Noon	Noon (	Gillnet Noon
7	8	9	10	11	12	13
			Troll	-		
Noon Se	ine Noon	Noon Gi	linet Noon	Noon S	eine Noon	Gillnet
14	15	16	17	18	19	20
			Troll			
illnet voon	Noon St	eine Noon	Noon Gi	linet Noon	Noon S	eine Noon
21	22	23	24	25	26	27
		-	Troll —	-		
Noon Gil	Inet Noon	Noon S	eine Noon	Noon Gil	Inet Noon	Seine Noon
28	29	30	31			-
Seine	Noon Gil	linet Noon	Seine	9		





See the following page for the Carroll Inlet terminal harvest area opening

#### August 2019- Anita Bay

Terminal Harvest Area Rotation Calendar—5 AAC.33.383

Sun	Mon	Tue	Wed	Thu	Fri	Sat
				1	2	3
				-	Troll	
				Seine	Noon	Gillnet Noon
4	5	6	7	8	9	10
		-	Troll —	-		
Noon	Seine Noon	Noon	Gillnet Noon	Noon 5	Seine Noon	Gillnet
11	12	13	14	15	16	17
		-	Troll	-		
Gillnet Noon	Noon 5	Seine Noon	Noon (	Gillnet Noon	Noon	Seine Noon
18	19	20	21	22	23	24
		-	Troll -	-		
Noon G	Sillnet Noon	Noon	Seine Noon	Noon C	Sillnet Noon	Seine
25	26	27	28	29	30	31
		-	Troll -	-		
Seine	Noon C	Gillnet Noon	Noon	Seine Noon	Noon Gil	Inet Noon Rotation

#### September 2019- Anita Bay

Terminal Harvest Area Rotation Calendar

Sun	Mon	Tue	Wed	Thu	Fri	Sat
1	2	3	4	5	6	7
←		OPEN CON	TINUOUSLY TO	ALL FISHERS -		<u> </u>
		1	1		1	
8	9	10	11	12	13	14
	•	1		1	1.0	1.4
		OPEN CON	TINUOUSLY TO	ALL FISHERS —		
15	16	17	18	19	20	21
←		OPEN CON	TINUOUSLY TO	ALL FISHERS -		
	1	1	1		1	
22	23	24	25	26	27	28
<b>←</b> OP	EN CONTINUOUS	LY TO ALL FISHEI	RS Until closed on	November 10 or by	/ Emergency Orde	r (EO)
29	30					
	TINUOUSLY TO FISHERS					
<b>←</b>	November 10 or by EO					
	+					

#### JUNE 2019 - Carroll Inlet

Terminal Harvest Area (THA) Rotation Calendar—5AAC 33.371

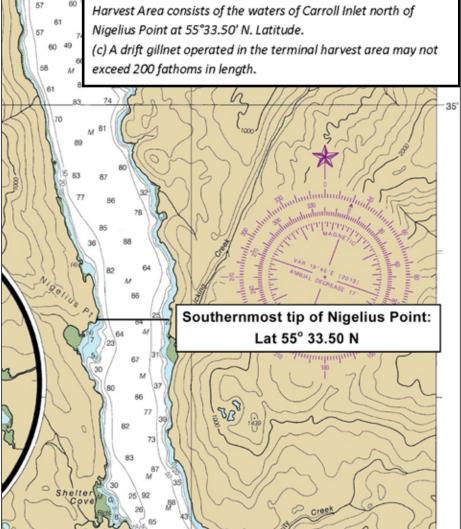
Sun	Mon	Tue	Wed	Thu	Fri	Sat
						1
						Open To All Users
2	3	4	5	6	7	8
-		<del></del>	Open To All U	lsers ←		<del></del>
9	10	11	12	13	14	15
Oper	To All Users	until noon on	12th		Troll	
				Noon S	eine Noon	Gillnet Noon
16	17	18	19	20	21	22
			Troll			
Gillnet Noon	Noon S	Seine Noon	Noon Gil	Inet Noon	Noon S	Seine Noon
23	24	25	26	27	28	29
		-	→ Troll →	_	-	Noon Seine Noo
	Gillnet Noon		Seine Noon		Cillmot	JU
Noon	Gilliet Noon	Noon	Seine Noon	Noon	Gillnet Noon	

## Carroll Inlet Management Plan Boundary Map Reference: 5AAC.33.371.District 1

Note: On January 19, 2018 The Alaska Board of Fisheries readopted the Carroll Inlet Terminal Harvest Area Salmon Management Plan The printed regulations are not yet available; however, the accepted Board language follows:

(a) This management plan distributes the harvest of hatchery produced king salmon in the Carroll Inlet Terminal Harvest Area between the purse seine, troll and drift gillnet fleets.

(b) The department, in consultation with the Southern Southeast Regional Aquaculture Association (SSRAA), shall manage the Carroll Inlet Terminal Harvest Area from June 1 through July 1 for troll gear, purse seine and drift gillnet gear to provide for the harvest of hatchery- produced king salmon during periods established by emergency order. The Carroll Inlet Terminal Harvest Area consists of the waters of Carroll Inlet north of Nigelius Point at 55°33.50' N. Latitude.





School children learned the innards and outs of fish anatomy and egg take from Matt Allen during their hands-on exploration of Deer Mountain Hatchery. PHOTO BY LIZ JONES

## Outreach CONTINUED FROM 1

Minicucci, Whitney Crittenden and I were part of a STEM event for the Girl Scouts. We operated three work stations helping young girls to learn about salmon anatomy, salmon culturing and how to operate a remotely operated vehicle (ROV). The best-laid plans changed quickly as parents, chaperones, Scout mentors, younger Scouts and SSRAA personnel tried to contain escalating excitement. At some point you have to make a choice: go with the flow or battle the current. I went with the flow. After two hours of educational chaos—chasing chinook fry with an ROV, feeding fish, sampling fish and learning salmon anatomy—the adults, SSRAA staff included, were looking for a break. Scouts reluctantly gathered for the last scheduled event of the day. As thank-yous went all around, the Scouts presented us with a few boxes of cookies, which we accepted gratefully and consumed contentedly.

The enthusiasm, level of participation and general lack of concern about cold water and slimy, smelly fish tells me that any one of the girls could find herself in Alaska's aquaculture industry, if she wished.

It is our hope that experiences like these can inspire future career paths, and at the very least promote a healthy respect for and better understanding of salmon and their importance to Alaska.

#### **CREEK CLEANUP**

The annual cleanup of Ketchikan Creek by the Coast Busters, with participation from Deer Mountain staff, was postponed in February but was recently carried out by a dedicated team of three. Nearly 160 pounds of trash and debris was removed from the creek corridor, which will soon be used by outmigrating smolt Chinook and returning adults.

#### **AQUACULTURE A LA FRANCAISE**

In May, we will talk with a French journalist from ARTE for a show called "*Invitation au Voyage*." The program focuses on culture, history, discovery and art. ARTE will visit several coastal communities in Alaska to learn about the historical significance of salmon and the role of hatchery enhancement. ARTE visited Neets Bay several years ago for similar programming focusing on the hatchery but also demonstrating salmon interconnectedness in nature and Southeast communities.

Coming up in January 2020 is a program that's new for SSRAA, but an old one for Deer Mountain. A cooperative agreement between ADF&G and SSRAA again brings triploid rainbow trout to the hatchery, and soon thereafter to waters of City Park, Carlanna Lake and Lake Harriet Hunt. The goal is to build upon those fishing opportunities that already exist on our road system and to diversify our own program by creating more experienced fish culturists.

We look forward to pursuing new outreach opportunities and strengthening existing connections in 2019. Please reach out if you wish to tour the facility, or stop on by when we open our doors for the summer, which will be no later than July 1.

# FINANCIALS

BALANCE SHEET	2018	2017
CURRENT ASSETS: Cash and cash equivalents	\$ 9,359.	,738 \$ 8,111,936
Other current assets		,421 349,871
Total Current Assets	9,721	
PROPERTY, FIXTURES and EQUIPMENT, net	15,033	,547 15,156,396
OTHER ASSETS	258.	,651 257,679
TOTAL ASSETS	25,013,	,357 23,875,882
LIABILITIES and NET ASSETS		
Current liabilities	1,350,	
Long term liabilities  Total Liabilities	8,360, 9,711,	
NET ASSETS	15,302	,053 15,014,303
TOTAL LIABILITIES AND		15,014,303
NET ASSETS	\$ 25,013,	357 \$ 23,875,882
INCOME STATEMENT		
REVENUE		
Fish harvest revenue	\$ 7,971	
Grant revenue, fisheries enhancement tax	1,581,	
Contract and agreement revenue	584,	,294 477,592
DIPAC cost recovery income	400	- 500,000
Tours Other		,635 165,260 ,120 84,589
Total operating revenue		
OPERATING EXPENSES		
Hatchery operations	7,721	,113 9,026,681
General and administrative expenses	2,356	,
Total operating expenses	10,077,	,58011,313,164_
Change in net assets from	om operations 287	,750 (3,116,671)
NET ASSETS, BEGINNING OF YEAR	15,014	,303 18,130,974
NET ASSETS, END OF YEAR	\$ 15,302	,053 \$ 15,014,303
CASH FLOWS		
NET CASH (USED FOR) PROVIDED BY OPERAT	TING ACTIVITIES \$ 1,574	,963 \$ (2,213,231)
NET CASH USED FOR INVESTING ACTIVITIES	(1,088,	,495) (2,387,644)
NET CASH PROVIDED BY FINANCING ACTIVITI		,334 2,661,017
NET DECREASE IN CASH	1,247,	,802 (1,939,858)
CASH AND CASH EQUIVALENTS	A	000 40.054.704
Beginning balance	8,111,	,936 10,051,794
Ending balance	\$ 9,359	,738 \$ 8,111,936

An organization as big and complex as Southern Southeast Regional Aquaculture Association has a lot of moving parts, and moving personnel—from board members to hatchery staffs. Here are some recent changes in career staff that we want you to know about.

#### **Charlie Currit**

#### Manager

#### **Burnett Inlet Hatchery**

Charlie Currit landed at Burnett Inlet Hatchery with a salmon-culturing resumé that spans the Alaskan coastline from Klawock to Cook Inlet—and spans about half his lifetime.

Currit was hired as hatchery manager at Burnett Inlet in August 2018.

He was born in Ketchikan and lived in Southeast until he was 5, when his parents resettled in southern Oregon. Currit was about 20 when his parents bought property near Thorne Bay in a land auction. "I was part of the bunch that moved to Oregon for a time, though we always wanted to return," he said. Other branches of the family were rooted in Ketchikan and Prince of Wales Island; many members were involved in the timber industry.

Currit went to work at the Klawock Hatchery in the summer of 2003. "I've been in the field ever since," he noted. In five years of salmon-

rearing OJT, he advanced to assistant manager at Klawock while enrolling in the University of Alaska Southeast (UAS) fisheries technology program with SSRAA's then-production manager Rod Neterer as one of his instructors. He learned that the career path suited his principal interests: the Alaskan lifestyle; producing salmon; and starting a family. He met his wife, Sadie Jansson, during

He learned that the career path suited his principal interests: the Alaskan lifestyle: producing salmon; and starting a family.

the stint with Prince of Wales Hatchery Association and by the time he made a career move, two children went with the couple

Currit joined NSRAA's Medvejie Hatchery staff as a fish culturist in 2008 and a year later earned his associate's degree in fish tech. A third child joined the brood. They moved to Trail Lakes Hatchery on Cook Inlet, where he was assistant manager. Child number four was born in Soldotna. DIPAC brought Currit to Juneau to manage their hatchery and its two dozen personnel rearing chum, chinook and coho. Currit was at DIPAC for approximately four years—and for exactly one more child.

Currit took over Burnett Inlet Hatchery last summer. He said SSRAA's operation there is less farflung than DIPAC's complement of a hatchery; four remote chum rearing sites that are co-located with coho rearing facilities; plus three chinook rearing sites. "I don't need to coordinate between the remote sites associated with Burnett's satellite fish propagation, giving me ... better focus and hands-on management," Currit said.

He and his wife share focus on five kids from 12 to 2 years old and enjoy a way of life that he says is close to paradies. "Truth be told, my driving force to be out here has to do with being able to live the truly remote lifestyle, being hands-on with fish rearing, the ability to homeschool the kids and be able to constantly go fishing," Currit said.

There's also the greater good to keep him going to work amid incubator trays and raceways. "I think hatcheries are very important here," Currit said. "What we do benefits people—the economy and the ecology of Alaska."



Charlie Currit



Tessa Minicucci

#### Tessa Minicucci

#### Manager

#### Research and Evaluation

Tessa Minicucci earned two college degrees in fish and fisheries before returning to her hometown as SS-RAA's manager of research and evaluation.

Minicucci joined the staff in June 2018—but her experience with fish goes back to her earliest years. Her father was a biologist with ADF&G and schooled her in Southeast Alaska's outdoor life.

"I was lucky. I got to see my dad go out and do all this fun stuff. Not a lot of people get to do that—fishing, diving, flying around," she said.

Minicucci spent her teens in Michigan and after high school enrolled at Michigan State, with two career paths in sight. "In college, I looked at at fisheries and medicine. I decided to go with fisheries and I never looked back," she said. During her work toward a bachelor's degree in zoology with specialization in marine biology and marine resource management, Minicucci came home to southern Southeast to work for SSRAA: one summer as a port sampler and another as a tagger.

She pursued a wide-ranging college program—the best parts outside lecture halls. She investigated algae in an MSU lab, visited the Galapagos Islands for field work and, in a program linked to Western Washington University, examined ocean acidification's effects on phytoplankton. "I learned that I would always rather be out in the field," she

Minicucci took her newly inked bachelor's degree to Juneau in 2012. She worked for ADF&G and the Sitka Sound Science Center over the next several years, focusing on tagging salmon in wild systems, such as the Taku River.

In 2015, Minicucci enrolled in the master's program at the UAF College of Fisheries and Ocean Sciences. Again, she went far afield. She participated in research on wild chum salmon in the Kuskokwim River system, analyzing factors from climate to possible interaction with salmon from Russia and Asia. That work, which was incorporated into her master's thesis, included two weeks in Kamchatka on Russia's Far East, studying fisheries with Russian professors.

But in academia, there's field work and then there's findings. "I learned a lot about statistics," she said.

Minicucci earned her master's degree in 2018 and took over SSRAA's research and evaluation program. "I think I bring a good balance between fisheries knowledge and the academic-statistical background," she said.

She aims to use her wide experience in Alaskan fisheries—the personal, academic and occupational parts—to further the aquaculture mission. "One of my goals is to work with other agencies, such as Fish and Game and NSRAA and others, to improve people's knowledge about SSRAA's contributions to the industry."

## Craig Parry

#### Manager

#### **Neets Bay Hatchery**

Craig Parry milked cows before he stripped salmon eggs and he raised trout in the desert before he reared Alaskan salmon.

For about two years, he's been managing Neets Bay Hatchery—standing on a long academic and practical



career in aquaculture.

Parry grew up in northeastern Arizona and enrolled at a community college. He met Camille at the school and they married soon after. When he went to the University of Arizona in Tucson, his eye was on a veterinary career. "I started out pre-vet, but then I decided I didn't want to stay in school for eight years—so I went to my next choice and that was game and fish," Parry said. That's where milking comes into the story. UA had about 300 cows in a research-oriented dairy operation and he worked in the program while earning a bachelor's degree.

His degree was in fish and wildlife management, with emphasis on fisheries. The first posting of his aquaculture career was in the high desert near Sedona, Ariz. Far from the town's tourism economy and natural splendor, Arizona Game and Fish cultured unglamorous but threatened native fish species of the Colorado River basin: razorback suckers, Colorado pike minnows and others.

Parry moved to Alaska and went to work for Prince William Sound Aquaculture Corp. for about a decade. He managed one of the two remote hatchery sites where the family lived. But he and his wife, with a fast-growing family, looked back to the desert Southwest. Parry took a job managing a state hatchery in New Mexico that reared trout, catfish and walleye. "The reason we left Alaska the first time was, we thought our kids were missing something" in remote-hatchery life, he said. But town life wasn't better, after all. The hatchery stint and Parry's four years in the oil fields of New Mexico and Texas didn't stand in for Alaska.

The brood returned to Southcentral Alaska and Parry hired on as assistant manager at Cook Inlet Aquaculture Association's Port Graham pink hatchery. Once again, the Parrys were off the road system, homeschooling kids and raising salmon. By the time Parry took the Neets Bay Hatchery manager position in June 2017, the couple had seven children, from 20 years old to 7—four born in Alaska and three in Arizona. One of the older two who've left the house (or hatchery) is studying psychology in college.

Parry loves the way of life. "It's laid-back and slowed-down," he said. "It's all about the work and family, and being undistracted. If you want a distraction, you have to bring it."

# Cody Pederson

#### **Assistant Manager**

#### Whitman Lake Hatchery

**Cody Pederson** was one of *those*: he got to Alaska as soon as he could. After high school in the Puget Sound region, he fished commercially in Western and Southcentral Alaska. But aquaculture may have been imprinted on him when he was very young, leading him from commercial catches to hatcheries.

Pederson was promoted to assistant hatchery manager at Whitman Lake Hatchery in 2018 after several years as a culturist.

He grew up in Gig Harbor, Wash., where elementary school kids made annual field trips to nearby Minter Creek chinook salmon hatchery. "We got our first opportunity to see salmon *not* in the ocean," he said.

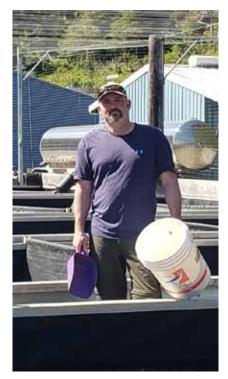
His initial season of Alaskan commercial fishing was on crab and pollock boats out of Dutch Harbor. He worked on a tender in Prince William Sound—primarily carrying pinks harvested for hatchery cost recovery. He met hatchery personnel, getting a feel for the human side of hatchery work and lifestyles. Another commercial fishing season was fateful: working on a cod longliner, he met a federal fisheries observer named Sarah, a native of Michigan. They married after that, but Pederson kept fishing.

"I realized at some point that I wanted to get into hatcheries," he said. "I'd still be in fisheries, but I wouldn't be away from home nine months of the year. I decided that wasn't conducive to family life."

He got an associate's degree in fisheries tech at Bellingham Technical College. During those studies, he worked a four-month paid internship at DIPAC in Juneau. He followed up with a 10-month hatchery job for the Washington State Department of Fish and Game, but at



Craig Parry



Cody Pederson



Justin Rose

'Commercial guys stopped in ... and said thank you. They'd been ... catching third-year adult returns. It felt good having them come in and thank us for our hard work. And we're appreciative of what they do ...'

the end, WDF&W had no full-time openings.

But SSRAA had an open culturist post and the couple moved to Neets Bay Hatchery in 2011. "Our idea was that we'd stay there," he said. "But we had a baby, and when an opportunity for a promotion came up" the threesome decamped for the road system at Whitman Lake Hatchery in 2012. Their daughter is now 7.

Pederson likes the diversity of fish and of responsibilities at Whitman Lake Hatchery. "We don't just feed fish every day," he said. "We work with

every site in our system"—whether by providing fish for remote rearing or by managing transport of smolts and fry.

Pederson has a soft spot for commercial fishing, but he's solidly tied to shore now. "If I wasn't married I might still be on a boat, but this career keeps me involved in fisheries and with fishermen," he said.

The Carroll Inlet chinook program closes that circle. "Commercial guys stopped in at Whitman Lake and said thank you," Pederson said. "They'd been out there on Carroll and were catching third-year adult returns. It felt good having them come in and thank us for our hard work. And we're appreciative of what they do for our economy and our community."

#### Justin Rose

#### Assistant Manager Neets Bay Hatchery

Justin Rose has friends to thank for the pivot points in his aquaculture career.

One friend's referral got him an entry-level job at a trout farm. Another buddy's wedding brought him to a Southeast Alaskan hatchery site and a new fascination.

Rose has been assistant manager at Neets Bay Hatchery since May 2018.

He said his boyhood in North Dakota wasn't more outdoorsy than the ordinary, but one fish-related feature stands out. "My grandfather had a trout pond that he stocked every year" with hatchery fish, Rose said.

He studied water treatment and wastewater treatment at college. But a friend called and recruited him. "I got a job at a trout farm in Wisconsin. My best friend worked there and he recommended me," Rose said. That post introduced him to the world of incubation trays and raceways. It also acquainted him with Debby, a woman on the processing side of the commercial trout operation. They married in Wisconsin. After he raised trout for six years, a friend's nuptials gave his aquaculture career another turn.

"I came up here to a friend's wedding and I really liked it. He got married in a sort of park over at the side of Crystal Lake Hatchery," Rose said. "When I got home to Wisconsin, I started applying everywhere" in Alaska's hatchery system.

Port Armstrong Keta answered and Rose worked more than 12 years on Baranof Island, producing chinook, coho, chum and pink salmon. He said he and his wife love the remote hatchery way of life. He also acquired a hand troll permit and rigged a 17-foot Boston Whaler for small-scale commercial fishing—catching naturally produced salmon as well as fish that he'd reared for Port Armstrong.

The Neets Bay post opened in 2018 and Rose and his wife made the move to Revilla Island. His move itself was an only-in-Alaska event. "A fish tender picked me up in Port Armstrong and he loaded up pallets of our stuff and my boat. He dropped it all at Neets Bay on his way to Ketchikan. I barely missed a day of work" between Port Armstrong and SSRAA, he said. "That's different from most people's work moves, I guess."

Rose still has the Whaler, but he and his wife have added a 32-foot Grand Banks boat to their fleet for longer cruises.

# **SSRAA** forecast for 2019 returns

# All species / All sites



Species	Site	5 YR	4 YR	3 YR	CP	Terminal	Total
	Neets	24,600	1,424,800	462,000	516,100	1,395,300	1,911,400
	Nakat	13,200	186,700	54,600	127,300	127,300	254,500
S. Chum	Anita	5,500	433,400	96,900	267,900	267,900	535,800
	Kendrick	1,800	862,500	167,400	722,200	309,500	1,031,700
	Burnett	6,600	58,700	136,900	101,100	101,100	202,100
	Neets	7,400	319,800	18,000	86,300	258,800	345,100
F. Chum	Nakat	1,900	186,700	8,400	69,000	128,100	197,100
	Burnett	1,100	42,200	20,400	31,800	31,800	63,700
TOTAL		62,100	3,514,800	964,600	1,921,700	2,619,800	4,541,400

			Site			Total					
Species	Site	Low	Point	High	Low	Point	High				
	Neets	1,525,800	1,911,400	2,297,000							
	Nakat	98,300	254,500	410,300							
S. Chum	Anita	395,700	535,800	675,900	2,918,500	2,918,500	3,935,500	4,952,900			
	Kendrick	746,800	1,031,700	1,316,600							
	Burnett	151,875	202,100	253,125							
	Neets	89,900	345,100	600,700							
F. Chum	Nakat	107,300	197,100	287,300	234,800	605,900	975,800				
	Burnett	37,620	63,700	87,780							
TOTAL					3,153,300	4,541,400	5,928,700				

Species	Site	6 YR	5 YR	4 YR	CP	Terminal	Total
Chinook	Whitman	300	6,000	2,900	2,800	6,400	9,200
	Neets	200	7,800	8,200	4,900	11,300	16,200
	Anita	900	10,300	4,500	4,700	11,000	15,700
	Crystal	500	1,900	700	1,600	1,500	3,100
	Port St Nick	300	1,400	700	700	1,680	2,400
	Carroll Inlet		5,000	3,000	4,000	4,000	8,000
TOTAL		2,200	32,400	20,000	18,700	35,880	54,600

Species	Site	CP	Terminal	Total
	Whitman	8,200	2,700	10,900
	Neets	88,800	38,100	126,900
F. Coho	Nakat	13,700	5,900	19,600
r. Collo	Anita	6,400	2,800	9,200
	Crystal	2,700	1,200	3,900
	Klawock	137,000	58,700	195,700
S. Coho	Neck	20,400	8,800	29,200
S. Collo	Whitman	7,300	3,100	10,400
TOTAL		284,500	121,300	405,800