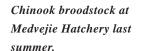
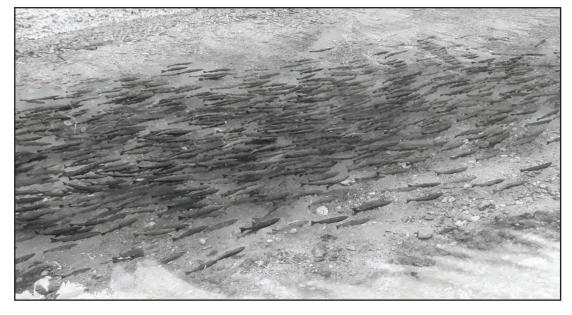
# FISH RAP

Change Service Requested

Highlighting releases, returns, policy and legislation affecting the Southeast Alaska salmon fisheries

Vol 38 No. 1 May 2020





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### Sawmill Creek Moves Towards Expansion

Originally designed as a coho rearing facility, NSRAA's Sawmill Creek Hatchery is in the planning phases of yet another expansion - this one, to add approximately 2 million chinook to the existing 50 million chum and 2 million coho currently reared at the facility. The long-term goal is to add a zero-check chinook program.

Such a dramatic increase in production numbers requires more than a simple addition to the building. NSRAA needed more land, permit approval for the increased production, and, perhaps the biggest challenge, access to more water.

This winter, NSRAA finalized a water agreement with the City of Sitka. One component of the agreement is to install a secondary water source intake that will provide the hatchery and the City of Sitka with an emergency backup water source when the dam is drained every five years. The partnership for that project will be funded through grants and treaty mitigation funds.

Engineering for the expansion was budgeted into NSRAA's current fiscal year. NSRAA General Manager, Scott Wagner, says staff will have basic building design and layout completed in time to present the board with cost options at its meeting in November.

"It will be decision time this fall on how to move forward," he explains.

After Alaska's chinook fishery suffered another round of cuts recently during Pacific Salmon Treaty negotiations, federal mitigation funds

#### Sawmill Creek Hatchery Expansion

Will allow NSRAA to increase Chinook production by:

- 2 million zero-check smolt
- Or 500,000 yearling smolt

became available to lessen the impact on commercial fisherman. Some of the monies are to be used for hatchery-produced chinook. Currently \$600,000 has been earmarked for NSRAA and the organization is pursuing additional funding for the Sawmill Creek Hatchery chinook expan-

Assuming NSRAA's cooperative agreement with NOAA allows the research facility, Little Port Walter, to continue its important salmon research work (see related article), NSRAA aims to eventually bring the Keta River chinook broodstock to Sawmill Creek to develop a zero-check chinook program there.

"The Keta River stock at Little Port Walter has a high propensity to zero-check naturally, which would greatly diminish our annual costs to produce chinook," Scott says. "You basically cut a year off operations costs." (Hatchery chinook are traditionally raised for 18 months before being released to sea. Under the zero-check program, chinook are released only six months after hatching.)

The proposed new building and expansion to the adjacent lot will be designed to rear chinook and include enough space to incubate up to 50 million chum. Meanwhile, staff is evaluating its options to begin rearing some chinook at the existing facility as early as this summer.



Sawmill Creek Hatchery. The new site is adjacent to the current hatchery.



A new water intake is installed at Medvejie. The thirty-foot-deep structure was designed in an attempt to improve water quality and to reduce pumping at the hatchery

### General Manager's Notes



While I had anticipated there might be a steep learning curve stepping into NSRAA's General Manager role, I never imagined I would need to deal with a global pandemic my first day on the job, March 15th. The impact to our staff, operations and financial outlook has been significant. Thankfully, I have taken the helm of a well-run and financially stable organization, with experienced and dependable staff to help me get through the hectic roller coaster of Covid-19.

One of the first decisions I made was to send all Sitka bunkhouse staff to their remote worksites prior to any potential outbreak in Sitka, or the implementation of a statewide travel ban. I was very concerned about the number of employees in the Sitka bunkhouse, and the fact that virtually everyone of our projects has staff in a communal living environment there. We asked them to get two weeks worth of food, be prepared to "hunker down" for an extended period of time, then sent them out to the five different rearing locations. Several hardy souls returned to town in late May – more than two months later – and two more return early June. That's dedication.

In general, operations have continued as normal as much as possible. Fortunately for us, our chum feed delivery and spring project setup was complete prior to Mid-March. Several larger capital projects experienced some delays due to supply issues related to Covid closures in the lower 48. For the most part, these are all back on track and moving along.

Financially, I am thankful that the NSRAA board has been fiscally conservative and responsible over the years. Our reserves are invested very conservatively and the downturn in the market, while painful, was not catastrophic. NSRAA is in a unique position to weather the pandemic storm. While fish prices are not where any of us would like them to be, there are indicators that the world economy is stabilizing. People still need to eat. My hope is that markets will continue to open and improve in the next month and the chaotic uncertainty of the last several months will soon be a distant memory.

These are very challenging times and I would like to thank our dedicated staff, the NSRAA board and the fisherman who support our efforts. Best of luck this fishing season. Stay safe.

Seat Wagn

### Black Cod Stalk Medvejie Chum

When the Medvejie staff decided to relocate the net pens for its broodstock chum, the goal was to lessen the exposure to vibrio. Little did they realize the move would present an entirely new threat to the survival of the fry.

NSRAA raises and releases the broodstock for all its chum operations at its Medvejie hatchery, outside of Sitka. That's more than 40 million chum that, as adults, will be used to collect eggs for the next generation of NSRAA chum.

Typically, the chum are raised in net pens in front of the hatchery, by the chinook complex. But over the years, the incidence of vibrio -abacteria that can be deadly in a hatchery environment - has increased substantially at Medvejie.

"The chinook get it pretty bad," explains Cain DePriest, Medvejie Hatchery Manager. "Herring are carriers of vibrio and we think they may give it to the chinook and then the chinook give it to the chum."

NSRAA uses a dip immersion vaccine to protect the chinook from vibrio, but the sheer number of chum makes this unfeasible. Instead, staff chose to move the chum net pens away from the chinook, further out in Bear Cove.

The move and rearing went smoothly, but as the water warmed and the release date approached, the staff began to notice a large, black mass under the pens. When they went to investigate, first with a Go Pro and then divers, they discovered it was a huge mass of juvenile black cod.

Medvejie Report, cont. on page 3

### Northern Southeast Regional Aquaculture Association

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For a change of address notify: Commercial Fisheries Entry Com-

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Any interested party may also receive Fish Rap free of charge. Send your address to **NSRAA**.

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Scott Wagner Justin Peeler Dan Pardee **Deborah Lyons** 

Seine Gillnet Crew member

Troll

Bert Bergman William Bergmann John Blankenship Joe Cisney Vacant Stuart Dewitt Mitch Eide Mike Forbush Carl Johnson Eric Jordan Henrich Kadake, Sr. Brian Massey Dave Moore James Moore Yancey Nilsen Zachary Olson William Prisciandaro

Conservation Subsistence Seine Municipality Gillnet Seine Processor Interested Person Troll Native Org Sport Interested Person Troll Seine

Troll Gillnet Caleb Robbins Troll Rob Schwartz Gillnet Evans Sparks Gillnet Karl Wolfe Interested Person Chris Ystad Seine

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#### Medvejie Report, cont. from page 2

"There were thousands – anywhere from 10,000 to 50,000," Cain says. "Black cod are ferocious predators. If we were to release the chum, the cod would have eaten them right away."

NSRAA had to get approved for a permit to tow and release the fry away from Bear Cove to avoid potential losses to cod predation. As the staff began to tow the net pens for release, a group of sea lions arrived in Bear Cove.

"Sea lions are not normally a good sign, but this year it was a relief because they were focusing on black cod instead of our fry," he says. The number of black cod thinned after the sea lions had fed on them for two weeks, until there was no longer a sign of the fish.

Cain is thankful the staff was able to detect the black cod in time to avoid a significant loss and says that next year, they'll be sure to check under the net pens for cod in case the fish return.



Matt Golden heads out to the Bear Cove chum pens.

### NSRAA & NOAA Work Toward Cooperative Research at Little Port Walter

is in jeopardy and NSRAA is exploring options to save it.

Little Port Walter is the primary field research facility of Auke Bay Laboratory, located just over 100 miles south of Juneau, near the southeastern tip of Baranof Island. It has been host to a wide variety of fisheries research projects for more than 80 years, but continued budget cuts threaten the future of the facility.

Steve Reifenstuhl, NSRAA's former General Manager, began working with NOAA (National Oceanic and Atmospheric Administration) two years ago to ensure Little Port Walter could continue its important research work. The two organizations recently approved a draft cooperative agreement.

NSRAA has utilized research from Little Port Walter over the years to improve its hatchery production. The facility is currently working in cooperation with Alaska Department of Fish and Game (ADFG) to develop a new broodstock for chinook salmon from the Keta River, east of Ketchikan. The Keta River system naturally produces a component of zerocheck smolt that has intriguing potential for NSRAA, which has struggled to raise zero-check chinook for almost two decades.

Hatchery chinook are traditionally raised for 18 months and released at 20 grams, whereas zero-check chinook are raised for only six months and released at approximately 5 grams. The shortened timespan before



Whitney Frazier measures out the morning feed at Bear Cove.

The future of Alaska's oldest year-round biological research station release translates to a significant savings in food and operation costs, but ocean survivals determine whether the savings are actually worthwhile.

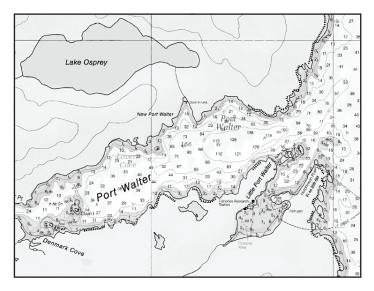
> The survivals for NSRAA's zero-check chinook (a broodstock from Andrews Creek, a tributary of the Stikine) have vacillated from better than average to decent and dismal. The Keta broodstock offers the potential for increased survival and cost savings. NSRAA has been working with Little Port Walter to move some of the Keta broodstock to its Hidden Falls Hatchery to test larger production numbers.

> If the facility were to close, "all the work that went into developing this broodstock will disappear," says NSRAA General Manager, Scott Wagner.

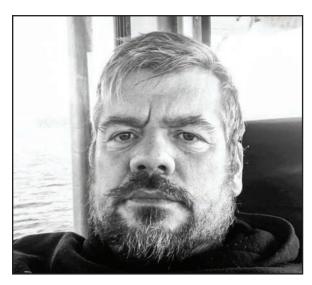
> Should the NSRAA board decide to help fund the Little Port Walter facility, the organization would take responsibility for all daily operations of all fish culture related activities, such as rearing, tagging and eggtakes. NSRAA staff would also be involved in planning research projects that would benefit commercial fisheries.

> Ultimately, any costs NSRAA shoulders to help Little Port Walter will fall to the fleets. Under the current uncertain economic climate, in the industry and worldwide, it is not a time for the organization to take on significant debt, Scott acknowledges, so NSRAA is exploring ways to develop additional rearing and release sites in the vicinity of Little Port Walter as an alternative means to fund the cooperative project. Specifically, NSRAA is exploring the possibility of a coho lake rearing project at Osprey Lake and a remote chum release site in nearby Big Port Walter.

> "My current hope is that Pacific Salmon Treaty mitigation funds will become available to bridge the gap between initializing operations at Little Port Walter and when returns would finally materialize from new production in the area to cover operation costs," Scott says.



### Board Member Profile: Yancey Nilson



NSRAA Seine Representative Yancy Nilson

Yancey Nilson can't imagine a life without fishing. He's never day-dreamed about another career, never considered quitting when things got tough. As the fourth generation of fishermen in his family, this is all he's ever known.

"I've spent my whole life on the boat," Yancey says. "I have nothing to compare it to."

Tragically, Yancey's great-grandfather was lost at sea off the coast of Vancouver Island. Only his boat was ever found, yet

his son and grandson – and eventually, Yancey, too – chose the same life, despite its inherent risks and uncertainties.

Yancey's family fished and crabbed the Pacific, from Washington to Southeast Alaska, until shortly after Yancey was born. They moved from Bellingham to Petersburg when he was just an infant. Growing up in a fishing family has its ups and downs, he admits.

"You miss your dad a lot when you're a kid and you miss your kids a lot when you're the dad. But it's also great... you spend more time as a

family when your kids come out with you on the boat."

Yancey's father gillnetted for salmon and had a seine boat for fishing king crab. When Yancey was 19, his dad asked him: Do you want the gillnet boat or the seine boat?

"Heck, I wanted the big boat," Yancey laughs as he explains why he chose to seine for salmon instead of gillnet like his father. "I don't know if that was the right move in the long run, but that was the cool thing to do."

Neither Yancey nor his father had ever seined for salmon. Yancey hadn't even worked on a seine boat as a deckhand, so they hired a captain to run the boat that first season. When the captain decided to retire after that season closed, Yancey was ready to take over. Almost 30 years later, he's never once regretted that decision.

"You either love it or you hate it," he says of being a commercial fisherman. Yancey loves it so much, he'll tell you he's never worked a real job in his entire life.

"I'm not saying I don't work," he says. "I've just never had to work a real job."

Though he has caught a lot of NSRAA's fish over the years, Yancey never really paid attention to the details of how the organization was run and the finances and politics involved. Concerns among his fleet prompted him to run for a seat on the board almost two years ago. The board meeting this spring was his third as an NSRAA board member.

"I wanted to see what was going on," he says. "And you know what? I found NSRAA was probably doing exactly what it was supposed to be doing all along. It's way more complex than a person would think. That said, it's a very well run organization."

### t Recovery + Broodstock Medvejie's Bulkhead Upgraded with New Concrete Structure



After the old log bulkhead was removed, the site was prepped for the new concrete panels.



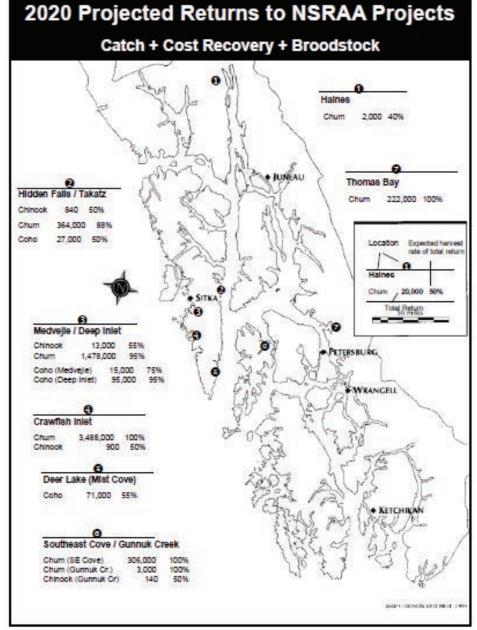
The fish ladder was removed.



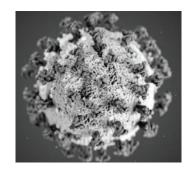
Much of the work had to be done during negative tides. Pumps were needed to dewater the site during base preparation.



Concrete panels in place. The fish ladder will be re-installed to the left of the bulkhead.



### One Question Looms Large Amidst Market Uncertainties



After an unprecedented nationwide shutdown, amidst worldwide economic uncertainty, and with fears of an outbreak of the new coronavirus among small fishing towns throughout Alaska, it's hard to imagine a salmon season opening with more unknowns.

"Nobody knows what's going to happen later today, let alone six months from now," admits NSRAA General Manager, Scott Wagner.

As the industry awaits the return of this year's salmon, the list of questions is long: How will the shutdown affect demand? Will prices drop drastically? Can we process all the fish? Who will buy it? Yet, despite all the looming questions, for most fishermen, perhaps the biggest one remains the same: will the fish come?

"Hatchery managers are probably more uncertain about their predictions this year, than ever, after the crazy couple of years we've just finished," says a Southeast Processing Manager that asked to remain anonymous.

When asked his concerns for the salmon season amid the pandemic, NSRAA board member and Petersburg seine fisherman, Yancey Nilson, says simply, "The same concerns as I would have without the pandemic: Are the fish going to return?"

Of all the questions, that may be the one for which there is no answer until the salmon finally begin to appear.

Commercial fleets are accustomed to the ups and downs of prices and, certainly, the recent shutdown is not promising for this season's salmon prices.

"Already, from last year to this year, the value has definitely gone down a significant amount," Scott says. "That's going to affect fishermen. That's going to affect everybody."

"Right now, there is so much uncertainty – for the Alaska seafood industry and for the whole world," says Ashley Heimbigner, of Alaska Seafood Marketing Institute (ASMI). "Everyone is closely watching to see how consumers are changing their behaviors and how we can best support our partners amidst these completely unprecedented times.

Prior to the COVID-19 crisis, approximately two-thirds of Alaska seafood expenditures were made in the food-service base, she explains. As restaurants across the nation and worldwide were forced to close in response to the pandemic, the demand has shifted, with "a relative uptick" in the retail base, as more consumers eat at home.

Alaska salmon products, like pink, that are traditionally frozen may be able to react to the change fairly easily, but whether there will be enough demand for the higher price point seafood normally served fresh in high-end restaurants remains to be seen.

"Those are the products that may see frozen formats for the first time ever this year," Ashley says.

Meanwhile, the approach of the salmon season amid the COVID-19 crisis has spawned controversy as small towns along Alaska's coast brace for potential outbreaks – often, without the necessary medical infrastructure to support them. The anxiety was already so high by mid-May in Bristol Bay that some leaders wanted to call this year's harvest off.

Fortunately, Governor Michael J. Dunleavy has deemed salmon fish-

### Congratulations to the 2020 NSRAA Scholarship recipients!

Marirose Evenden Ellie Barker / Hahlen Behnken Barkhau eries "essential business" – salmon cannot be left in the ocean to be caught and processed once the virus has passed, after all. The state mandated 14-day self-quarantines for incoming fishermen, workers and other travelers in an effort to mitigate potential outbreaks. Processors and hatcheries have added their own precautions, including anticipated campus lockdowns and revamped workstations to allow for adequate physical distance between employees.

But will that be enough?

we can do this."

Industry experts worry that the seafood processors may suffer outbreaks similar to those experienced by meat processing plants across the United States this spring. By late May, more than 215 meat processing plants across the nation had reported COVID-19 outbreaks, forcing some to shutdown. According to a U.S. Centers for Disease Control and Prevention (CDC) report, the meat processing facilities were more vulnerable to outbreaks due to difficulties with physical distancing and hygiene within the workspace, as well as crowded living and transportation conditions – all issues that threaten commercial fleets and salmon processors.

"My main concern is if our cost recovery processor has to shut down for some reason, where will that leave us?" Scott explains. "There are huge implications. It would be like if you have ten pork plants and two close. Do the other pork plants have the capacity to take on that extra demand? That would be the worst case scenario: to lose capacity because all the processors close. All that fish has to go somewhere."

The ability to process is a concern echoed among fishermen as well. "When I've talked to fishermen the past few months, not that many people asked about price," says the Southeast Processing Manager. "Initially, it was: 'Are you going to be able to do this? This is my life.' We're trying to get rid of all that uncertainty. Can we do it? The answer is 'Yes,

Ultimately, though, none of that matters without the fish; not the price, nor the processors preparedness.

"If you take the total numbers of fish there are and how much share people think they'll get and multiply that by what some of the rumors have been about price, and it doesn't come out so good," he continues. "With the big inventories and the smaller volumes we've had recently, I think the uncertainty, for some fishermen, is: Can I make it as a fisherman this year? We're getting into a tight financial crunch for fishermen."



Aaron Young and Ashley Eder assist in a chum fry transfer at Crawfish Inlet.

### Scientific Survey Offers Insight Into Salmon At Sea

When NSRAA releases millions of salmon fry into the ocean each spring, it's with the hope – and maybe some prayers – that a large portion will survive the open waters and return to spawn. But what really happens once the juvenile fish disappear into the Pacific? No one really knows.

"It's kind of a big, black hole," says NSRAA Data Analyst, Chip Blair. "We don't really know where the fish necessarily travel once they get out into the gulf, and they're out there for three to five years."

That unknown is part of what fueled a recent expedition to study salmon on the high seas of the North Pacific Ocean.

Salmon experts have always believed Pacific salmon from the various countries – United States, Canada, Russia, Japan and Korea – come together in the Gulf of Alaska before returning to their natal streams to spawn. But where exactly do they go? What do they eat? What conditions do they face along the way? How do water temperatures affect survival?

The goal of the International Gulf of Alaska Expedition was to collect samples of salmon, identify their rearing areas, examine their stomach contents, and determine the condition and abundance of salmon. Researchers from each of the countries participated in the expedition in hopes to shed some light on the mystery of the open waters.

Though it would take several years of data to collect enough information to identify any patterns or significance, the preliminary data collected during last year's expedition still offers scientists and salmon experts an insight into the life of salmon at sea that may eventually be used for further understanding of salmon populations.

Perhaps most surprising was that 80 percent of the salmon otoliths sampled during the expedition were unmarked. (Otoliths are ear bones that can be used to determine the age of a fish. Hatcheries can mark their fish by manipulating the water temperature during incubation).

"We don't know if they were wild fish or unmarked hatchery fish from another country," says Chip. "All hatcheries in Southeast Alaska now otolith mark all of their chum. About 70 percent of the Southeast Alaska harvest is hatchery chum, so one of the things we'd like to learn about is where those fish came from. Additional genetics work that is being done as part of the study may provide some answers."

Of the hatchery chum salmon collected from Southeast – 9.4 percent – the greatest portion were chum from NSRAA. All combined, the organi-

zation's various projects accounted for 62 percent of the Southeast Alaska hatchery salmon collected during the expedition, with 43 percent of those from Crawfish Inlet alone.

Chip is hopeful those numbers might be an indicator of a strong return to Crawfish this year, but there isn't enough information to know for sure. "It gives us a better understanding of where the fish travel, but a one-time snapshot like this doesn't help a whole lot," he says.

There was a second expedition this year, the data from which may offer even more insight to salmon in the Northern Pacific.

"In theory, if it's done annually, it could be a much better predictor of upcoming seasons," says NSRAA General Manager, Scott Wagner. "The more science, the more information you have, the better to understand how the whole system works."

### NSRAA Welcomes New Board Member Chris Ystad

NSRAA welcomed Chris Ystad (pronounced yeh-stahd) to its board of directors this spring.

Chris joins the board as an at-large seine representative. Originally from Astoria, Oregon, Chris always felt drawn to the fishing industry. He first came to Sitka as a deckhand during college. "I did it once and just loved it," he says. "It was natural to me." He moved to Sitka as soon as he graduated from college.

Now 37, Chris is preparing for his fourth season on his own boat. He ran for the board position because "NSRAA has been a huge part of my fishing career. I wanted to give back what I could and be involved with the industry and the organization." While he is a seine representative, Chris says he did not come to the position with an agenda.

"I just want to be part of the process and be good for the organization as a whole," he says.

	Projected	Rang	ie.			Cost	Brood		
Site	Return	Low	High	Commercial	Sport	Recovery	Stock	2019 Return	2019 Forecas
hum									
Hidden Falls	364,000	181,500	845,000	164,000	-	-	200,000	239,881	1,603,000
Medvejie/Deep Inlet*	1,478,000	772,000	2,186,000	1,378,000	-	-	100,000	1,430,764	2,144,000
Crawfish Inlet	1,579,000	806,000	2,358,000	929,000	-	650,000	-	2,039,239	3,448,000
Southeast Cove	306,000	153,000	715,000	306,000	-	-	-	953,681	1,776,000
Gunnuk Creek	3,000	2,000	4,000	3,000	-	-	-	-	-
Thomas Bay	222,000	147,000	295,000	222,000	-	-	-	-	10,000
Haines Projects	2,000	1,000	3,000	800	-	-	-	13,505	13,505
	3,954,000	2,062,500	6,406,000	3,002,800	-	650,000	300,000	4,677,070	8,994,505
hinook									
Hidden Falls	842	428	2,149	142	200	-	500	601	1,900
Gunnuk Creek	142	74	246	128	14	-	-	-	-
Medvejie	10,697	5,615	26,921	5,776	535	386	4,000	18,004	28,628
Crawfish Inlet	905	403	1,987	860	45		,	216	890
Halibut Point	2,328	1,256	5,963	2,212	116			1,595	5,734
	14,914	7,776	37,266	9,118	911	386	4,500	20,416	37,152
oho									
Hidden Falls	27,000	20,300	40,600	10.800	4,000	2,200	10,000	24,541	167,000
Deer Lake	71,000	35,700	124,100	28,400	4,000	38,600		47,912	143,000
Lake Stocking	-	-	,	-	-	-	-	368	7,400
Medvejie	15,000	10,600	21,900	10,500	1,500	-	3,000	11,223	12,000
Deep Inlet	95,000	31,100	173,700	85,500	9,500	-	-	38,676	66,000
•	208,000	97,700	360,300	135,200	19,000	40,800	13,000	122,720	395,400
ALL SPECIES TOTALS:	4,176,914	2,167,976	6,803,566	3,147,118	19,911	691,186	317,500	4,820,206	9,427,057

<sup>\*</sup> Cooperative Project with SJH

NOTE: Projections for Medvejie/Deep Inlet are for total returns (NSRAA + SJH fish).

Chum cost recovery goals for 2020 will be between 500,000 and 800,000 fish.

## NSRAA Responds to Pandemic

Alaska may have largely been untouched by the United States' initial COVID-19 outbreak and it was among the first states to reopen, but the effects of the pandemic remain a grave concern for many as the salmon season opens.

Though NSRAA was deemed an essential business, the organization took a proactive approach to business as the spread of the novel coronavirus became a threat in March. All non-essential employees, such as the office staff in Sitka, were directed to work from home as much as possible, and non-essential work, like tagging fish, was suspended. Employees at the hatcheries and remote projects were no longer allowed to leave the site on their days off.

"We were concerned that if someone got the virus at one of the remote locations, like Hidden Falls, it would have a huge impact on the hatchery and taking care of our fish," explains Chip Blair, NSRAA Data Analyst.

Alyssa Tomczyk has worked for NSRAA for three years. She works on the Southeast Cove barge outside Gunnuk Creek Hatchery, by the village of Kake. Like many of her co-workers, she is accustomed to working remotely, but the stay-in-place requirement meant she could not even venture into Kake for two months, and it would be almost three months before she could return to Sitka.

Though the long months of isolation came with ups and downs, Alyssa tried to keep a good attitude. "I realized you can't always change your situation," she says. "You have to do your best, the next day is going to come and you just have to keep going."

While Alyssa enjoyed the anticipation of her first bowl of ice cream in three months, NSRAA continued to make changes to its operations in preparation for salmon season to mitigate the potential spread of the virus within its facilities and the City of Sitka.

"For the summer, the big concerns are with the fisheries," Chip Blair explains. "In Sitka, one processor has about 400 people coming from out-of-state who will live in dormitories. It's a small, isolated community. An outbreak would have an effect on NSRAA, but a larger impact on Sitka."

While the social distancing guidelines could prove challenging within NSRAA's work environment, the staff continues to approach these challenges with innovation and determination, says NSRAA Operations Manager, Adam Olson. The staff has erected partitions between tagging workstations, employees will use protective equipment, and will limit exposure with processing plant personnel.

Employees, like Alyssa, will enjoy a window to come to Sitka in June, but NSRAA General Manager, Scott Wagner, says remote staff with have another lockdown in mid-July, two weeks prior to spawning season, and sites, like Hidden Falls, will also be closed to visitors.

"Things change day to day," he says. "We will reassess, but that's our current plan going into the season. If somebody gets sick, it could definitely impact operations."



The commercial fishing industry is working around the clock with community leaders, state officials and healthcare professionals to set safety plans for the upcoming fishing season. Commercial fishermen take their role as food providers within Alaska's mandated critical infrastructure very seriously. We are dedicated to safe, responsible seafood businesses, fishing communities and the essential workforce keeping our food system intact. We will share more information as it develops and wish you the best as you prepare for the coming season.

Visit Ufafish.org for more COVID-19 information

### THA Schedules - 2020

	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Deep Inlet	Seine	Gillnet	Gillnet	Gillnet	Seine	Seine	Troll
<b>Begin: Tuesday, Ju</b> No Cost Recovery s			m broodsto	ock needed a	at Medvejie	-	
Hidden Falls	Sun	Mon	Tue	Wed	Thu	Fri	Sat
illuueli ralis	Seine				Seine		
Begin: Sunday, Jun	e 21, 2020	)					
**No 2020 Hidden			_				
Courthoast Covo	Sun	Mon	Tue	Wed	Thu	Fri	Sat
Southeast Cove	<u> </u>						
	Seine				Seine		
Begin: Sunday, Jun		Mon	Tue	Wed	Seine	Fri	Sat
	e 21, 2020		Tue	Wed		Fri	Sat
Begin: Sunday, Jun	Sun Seine e 21, 2020	Mon			Thu Seine		
Begin: Sunday, Jun	Sun Seine e 21, 2020	Mon	Tue Tue	Wed	Thu Seine Thu	Fri Fri	Sat
Regin: Sunday, Jun Thomas Bay Regin: Sunday, Jun Crawfish Inlet	Sun Seine e 21, 2020 Sun Seine sun Seine	Mon Mon	Tue	Wed	Thu Seine Thu Seine	Fri	Sat
Begin: Sunday, Jun Thomas Bay Begin: Sunday, Jun	Sun Seine e 21, 2020 Sun Seine e 21, 2020 Sun Seine th cost rec	Mon  Mon  overy; will	Tue  open to s  shout the re	Wed eine upon	Thu Seine Thu Seine completion	Fri n of cost re	Sat ecovery

See NSRAA's website for THA maps, return timing, and further details.

### NSRAA Remembers Coray Harvey



Coray working on the smolt weir at Deer Lake.

NSRAA was saddened by the loss of its employee, Coray Harvey, this winter.

Originally from Pennsylvania, Coray came to Sitka to work with NSRAA at the suggestion of his friend, Woody Cyr. The two went to college together in New York and Woody was already working for NSRAA. Coray joined the staff five years ago as a seasonal employee at the Medvejie Hatchery and eventually worked his way to a full-time position as Assistant Project Leader at Deer Lake, where he worked closely with Woody.

"Coray was reliable to a fault," says Woody. "He was extremely intelligent and able to figure out how to do or fix just about anything – particularly things he knew nothing about."

Coray was passionate about his work and being in nature, says Woody. When he wasn't working, he enjoyed fishing, hunting, and working with wood and leather.

Woody has since left NSRAA to try his hand at commercial fishing. As he prepares for his first season, Woody says there's not a day that passes that he doesn't think of Coray. "With every project I do, I think 'Coray would really enjoy working on this project' or 'Coray would be able to do this so much better than me."

"Coray was a dedicated, conscientious employee, liked by all, who worked his way up in the organization over several years," says NSRAA General Manager, Scott Wagner. "One of his favorite places to be was out at camp at Deer Lake enjoying the solitude and fishing opportunities in his down time."

Coray is survived by his parents, brothers and extended family. NSRAA sends condolences to his family and friends.

### NSRAA Staff Profile: Kenny Gray



NSRAA Maintenance Manager Kenny Gray, fishing with his son, Caleb.

Kenny Gray joined the NSRAA team as a fish technician, but his real passion is working with his hands and streamlining systems.

"I love making things work for the people that are using them," Kenny says. "That's been my goal: to streamline and make things less labor intensive for people."

You might say Kenny got the Alaska bug just by growing up in Maine, where he spent much of his childhood in a small town fishing, hunting, hiking and camping. Fishing was his favorite past time.

"To me, Alaska was always the next best thing from Maine – bigger fish, more remote, more opportunities," he explains. "It was always intriguing to me."

Kenny worked for a commercial gillnetter out of Cordova for a summer after high school, but returned to Maine when the season ended and worked for DISH network, installing TV and satellite for the next seven years. He and his wife, Keri, talked about eventually moving to Alaska, but didn't exactly have a plan on how to get there.

Then one day, Keri applied for a job as a schoolteacher in Sitka. "It was out of the blue," Kenny says. She got the job, and within three weeks, the couple had packed their belongings and travelled to their new home. Neither had been to Sitka before.

"It was beautiful, unbelievable," Kenny says of Sitka. "The mountains, the scenery, the small town atmosphere – it fit us to a T."

Kenny called NSRAA to see if they had a job opening, and thus began his career with the organization. In the decade since, Kenny has made his way from fish technician to Maintenance Manager.

Ask Kenny to describe a typical day in his position and he laughs. "Expect the unexpected" has become his motto. As Maintenance Manager, he oversees all NSRAA's sites, including the Sitka office, Medvejie, Hidden Falls, Sawmill Creek and Gunnuk Creek hatcheries, and every remote project. Suffice it to say, he travels a lot – often three weeks in a month.

"Travel is probably the biggest challenge of the position – my son has gotten really good at Facetiming," he says. "Secondary, is making things work in a remote place where you don't always have the right part."

But the rewards far outweigh the challenges. Though Kenny no longer works directly with the fish, he still uses them to measure his success.

"When we have a successful brood year or a successful incubation, that makes it all worthwhile," he says.

### First Returns to Gunnuk Creek

This summer marks the first chum and chinook returns to Gunnuk Creek Hatchery since NSRAA took over the facility.

The projections may be modest – approximately 3,000 chum and 150 chinook – but it's "the next major step toward becoming a fully functioning, year-round, fully operational facility," explains Hatchery Manager, Ryan Schuman.

It's been more than six years since salmon were released from Gunnuk Creek Hatchery under its previous ownership. NSRAA purchased the facility from the State of Alaska in 2017. For more than three years, the focus has been to renovate and repair the dilapidated facility and build a dependable water system. It was the biggest project in NSRAA's history.

While the size of this first return may not seem impressive, it is a major accomplishment nonetheless – it marks all the work it has taken to get here. The smaller return numbers are ideal as the staff works to perfect its fish ladder and gauge the ideal water flow to get fish to return into the facility.

The fish returning this year will be primarily three-year-old males that were incubated at NSRAA's Hidden Falls Hatchery and then transported as fry to net pens at Gunnuk Creek before being released in 2018. There may be some fish returning left over from those released from the hatchery before NSRAA took over, Ryan explains.

Once the staff has sampled the fish to determine the portion of NSRAA-raised fish, it can turn its focus on expanding the capacity of its incubation. If all goes well, NSRAA will incubate roughly 20 million eggs at Gunnuk Creek this fall.

"We are ramping things up in a gradual and measured way, which allows us to find and adjust any problems in the new water treatment and recirculation systems while minimizing potential loss," he says. "We'll take similar steps over the next few years until we reach our full permitted capacity of 65 million."

#### NSRAA FY21 Budget

Projected Income - FY21

	Projected income - F121	
Year	Income Source	Amount
2019	Enhancement tax	\$1,902,438
Revenue - Fi	ish sales / Assessment tax:	
2020	- Amount required from Chum	\$4,000,000
2018	- Excess 2018 chum CR	\$1,000,000
2019	Loan Reserve Fund	\$3,574,875
Cost Recove	ery	
2019	- Chum	\$5,151,524
2019	- Chinook	\$114,211
2019	- Coho	\$202,157
2019	- Incidental species	\$3,312
2019	- Roe	\$44,730
2019	- Carcass	\$77,622
Other Rever	nue / Funds from Reserves	
2019	Rental Income	\$42,000
2019	Investment Earnings (net of fees)	\$580,000
2019	NSE account (DIPAC)	\$0
2019	From Unrestricted Reserves	\$0
	Total	\$16,692,869

#### **Projected Expenses - FY21**

Expense Source	Amount
Operational Budget	\$8,381,561
Capital Budget	\$606,900
Operational & Capital Loan Payments	\$3,574,875
Surplus to FY22	\$4,129,533
Total	\$16,692,869