

# FISH RAP

Change Service Requested

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

Vol 37 No. 1  
May 2019

*Chum fry are pumped aboard the F/V Nordic Lady at Hidden Falls for release across Chatham Strait.*



## Inside

Hatchery Reports	2
General Manager Notes	2
Board Member Profile	4
Market Report	5
Gunnuk Creek	6
THA Management	7
Staff Profile	8
NSRAA FY20 Budget	8

## NSRAA Forecasts Strong Chinook & Chum Returns

There are a lot of unknowns as NSRAA's salmon season opens, but the board and staff is hopeful its chum and chinook returns – especially those on the west side of Baranof Island – will be a bright point for fishermen this year.

If forecasts hold true, fleets could see more than 9 million chum at NSRAA and around 35,000 chinook returning to Medvejie.

“If the returns come in as forecast, 2019 would be the largest ever for us, in terms of total fish,” says NSRAA Operations Manager, Scott Wagner.

This year's forecast of 3.4 million chum for Crawfish Inlet nearly matches last year's unprecedented success at that site. Deep Inlet's return of 2.1 million is also above the long-term average. And though the forecast of 1.6 million chum at Hidden Falls may not seem like an impressive number, if it comes in near the forecast, it would be the largest return there since 2009.

“Regionwide, the marine conditions are favorable for chum salmon,” says Scott. Returns to NSRAA's facility on Chatham Strait have dropped dramatically in the past decade – likely due to heavy predation at the time fry are released into the ocean – prompting the organization to try new release strategies and expand production in other areas. “Hidden Falls chum are not responding as well as Crawfish Inlet or Medvejie, but the forecast is encouraging. We haven't had a return of more than 1 million there in five years.”

Though NSRAA's chinook numbers pale compared to chum, NSRAA General Manager, Steve Reifentuhl, is particularly hopeful for this year's chinook return.

“The Southeast Alaska wild stock returns have taken a pretty dramatic downturn in the last three years, which is putting restrictions on common property fisheries and created a fair amount of duress on the troll fisheries, in particular,” he says. “With that kind of backdrop, it's great to see that the Medvejie forecast is up considerably from the last couple years. We're hoping our chinook contribution will be a very significant factor to the troll fleet this year.”

“Last year, we forecasted 12,000 chinook at Medvejie and we got 24,000,” Scott says. “We doubled the forecast mostly due to 4-year-old chinook. Even if the chinook only return at forecast this year, it is still a significant improvement over the past few years.

The majority of NSRAA's chinook will return to Bear Cove, Halibut

Point and Crawfish Inlet (this year is the first chinook return at Crawfish Inlet), but even the forecast for chinook at Hidden Falls is up this year, at 1,900. The return of 1,300 chinook at Hidden Falls last year came in below the forecast of 1,500.

“The forecast went up, but whether they come in at forecast is an unknown, especially at Hidden Falls,” Scott adds.

It was thrilling to see the inordinate number of chum – 3.5 million fish, more than five times the forecast – return to Crawfish Inlet last year but the unexpected success has created some uncertainty with this year's forecast. Typically, only 2 to 15 percent of chum return as 3-year-olds and those returns give experts a good indication of ocean survival for the following season's 4-year-old return, which tend to range around 50 to 60 percent.

But last year's chum return at Crawfish Inlet threw off those numbers.

“We had so many 3-year-olds, it doesn't seem feasible to plug that number into the typical formula because it would result in a return too big,” Steve explains. According to the traditional formula, this year's return would be 20 million. “It's not possible. We don't believe that could ever happen.”

Assuming that last year's large portion of 3-year-olds (80 percent of the 2018 return) was indicative of a change in ratio between the age groups and that now that a larger portion are returning as 3-year-olds, the number for 4-year-olds would come down, NSRAA Data Analyst, Chip Blair ditched the traditional formula. He and Steve scrutinized the data, worked with the numbers and came up with a more conservative formula in hopes of a more realistic forecast for this year's chum return at Crawfish Inlet.

Nonetheless, the number is still remarkable: just under 3.4 million chum – nearly the return of last season. If it comes to fruition, it would lead to NSRAA's largest return ever.

Together with its other locations – Medvejie, Southeast Cove and Hidden Falls – NSRAA is forecasting 9 million chum this season.

*cont. on back page*

## Medvejie Staff Tackles Capital Projects

Last season's incredible chum return to Crawfish Inlet led to an unexpected surplus during NSRAA's cost recovery efforts. That excess not only allows NSRAA to forgo most cost recovery operations this year – allowing more time for the fleets – but it also enables the staff to tackle large capital projects at Medvejie Hatchery.

Medvejie's list of capital projects has grown substantially over the past several years as NSRAA continues to expand its production at the aging facility. The oldest of NSRAA's facilities, Medvejie Hatchery was built in 1981. In addition to the need to update the facility to allow for continued expansion, much of it is also in need of repair or replacement.

"It is an ambitious undertaking this year as the Medvejie staff try to improve as many aspects of the facility as possible," says Hatchery Manager, Adam Olson.

The biggest project the Medvejie staff will tackle this year is to replace the bulkhead and crane that serve the facility's freight operations. The original timber bulkhead was installed when the building was first constructed and is overdue for repair. That bulkhead will be replaced with a bulkhead constructed of steel and concrete, which will support a new

electric hydraulic crane.

The bulkhead replacement will coincide with the completion of the channel dredging project that began last year. Once completed, the excavation not only will allow for freight logistics at all tides, but also will increase the chinook broodstock holding area. (NSRAA is preparing to collect an additional 500,000 chinook eggs at Medvejie in the next few years, once the expansion at its Sawmill Creek Hatchery is completed.)

In conjunction with these projects, the staff also plans to relocate the fish ladder to facilitate access to the bulkhead and a better approach to the raceways. The staff will add a flat staging section to the ladder.

The staff will also begin work toward improving its water supply system to increase the capacity to collect gravity-fed water from Medvejie Creek and the ability to pump during periods of low flow. The water improvements are anticipated to take several fiscal years to complete.

"It is sure to be a very busy year, as all NSRAA sites gear up for the season," Adam says. "We are looking forward to the first returns of 2019."



### General Manager's Notes

In 2013, the NSRAA board voted to invest significant capital to expand chum salmon production at new, as well as dormant, locations: Crawfish Inlet and Thomas Bay (the former) and Southeast Cove/Gunnuk Creek (the latter). Borrowing \$6 million has risk, much as NSRAA's original startup loans in the late 1970s, except now we know investing in chum salmon typically pays dividends, as long as ocean conditions are favorable.



Six years ago, we modestly predicted that 2018 would be the first year for fishermen to realize an initial return on our recent investment in expanded chum production. Of course, we now know last year's return went well beyond that, was multiples of the original loan value, and, incredibly, allows NSRAA to skip chum cost recovery this year. One exception to this is Southeast Cove, near Kake, where the State of Alaska is in the final year of a contractual obligation with Trident to harvest chum. Even at Southeast Cove, fishermen will get a harvest opportunity for the initial late

June/early July openings. Schools of chum were already reported at Southeast Cove in late May, where the forecast is 1.77 million fish. Trident and NSRAA's intention is to get half of the return to fishermen, as long as the forecast holds up.

NSRAA's chum and chinook forecasts are on a steep incline for 2019, although prices seem to be on the way down due to the massive Russian pink return last year, possible additional Chinese tariffs on reprocessed salmon for export, and glutted roe markets. There is a repetitive nature in these events: inordinately high salmon prices in 1988 -- when a sockeye was worth more than a barrel of oil -- were followed by price declines for a decade; conversely, proportionately high survival of 3-year-old chum frequently is the precursor to favorable cycles of 4-year-olds the following year, as we saw in the mid and late-1990s. With any luck, the price decline cycle will be short-lived, and the high marine survival will stay with us for several years.

The new chum production is expected to increase NSRAA's historical contribution to fishermen by 35% to 40%. Alaska's enhancement program was designed to take out some of the dramatic fluctuations in wild stock harvests, and for much of the past three decades, it seems to be fulfilling that mission.

Fishermen live with many unknowns; as they build their business plans, they know there is always uncertainty lurking in the shadows, whether it be policy makers or salmon predators.

Best of luck in the coming fishing season.

Northern Southeast Regional Aquaculture Association

## FISH RAP

Vol. 37 No. 1  
May 2019

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

NSRAA  
1308 Sawmill Creek Road  
Sitka, Alaska 99835  
Phone: (907) 747-6850  
Fax: (907) 747-1470  
E-mail: [firstname\\_lastname@nsraa.org](mailto:firstname_lastname@nsraa.org)  
Web: [www.nsraa.org](http://www.nsraa.org)



General Manager  
President  
Vice President  
Secretary/Treasurer

Steve Reifentstahl  
Justin Peeler  
Dan Pardee  
Deborah Lyons

Seine  
Gillnet  
Crew member

**Mailing List:** Fish Rap is mailed free to all limited entry salmon permit holders in the Southeast Alaska gillnet, seine, and power/hand troll fisheries. Fish Rap is published biannually.

**For a change of address notify:**  
Commercial Fisheries Entry Commission  
8800-109 Glacier Highway  
Juneau, Alaska 99801

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

Bert Bergman	Troll
William Bergmann	Conservation
John Blankenship	Subsistence
Maegan Bosak	Municipality
Joe Cisney	Seine
Stuart Dewitt	Gillnet
Mike Forbush	Processor
Carl Johnson	Interested Person
Eric Jordan	Troll
Henrich Kadake, Sr.	Native Org
Brian Massey	Sport
Tom Meiners	Seine
Dave Moore	Interested Person
James Moore	Troll
Yancey Nilsen	Seine
Zachary Olson	Troll
William Prisciandro	Gillnet
Caleb Robbins	Troll
Evans Sparks	Gillnet
Lars Stangeland	Gillnet
Karl Wolfe	Interested Person
Open	Seine

FISH RAP STAFF:  
Chip Blair - Editor [chip\\_blair@nsraa.org](mailto:chip_blair@nsraa.org)  
Lu Snyder - Writer [www.lusnyder.com](http://www.lusnyder.com)

©2019 NSRAA

## Hidden Falls Works to Reverse Recent Returns

To say that NSRAA's employees are hard-working, dedicated and determined might be an understatement, particularly those at Hidden Falls Hatchery, where the salmon returns have dropped dramatically over the past ten years. The staff there has worked tirelessly to reverse disappointing returns and remains hopeful that, eventually, it will succeed.

Jon Pearce, Hidden Falls Hatchery Manager, was optimistic as this spring came to a close. The chum reared at the facility this winter grew well and hit their target size earlier than usual, allowing the staff to release the fry at some of the earliest dates in the history of the program.

NSRAA board and staff believe the disappointing returns at Hidden Falls are likely the result of predation on the fry at the time of release. In an effort to minimize potential predation, the staff has utilized a variety of new release strategies, including towing a portion of the fry to open water to avoid whales feeding on releases near shore.

"With our "tow/no-tow" release strategy, we were able to keep the overall biomass low enough in the bay that whale presence and predation was at the lowest I have seen it in the last five years," Jon explains. That might translate to healthier returns when those fish come back.

The staff at Hidden Falls has been working with Trygve Westergard on the F/V Nordic Lady to perform these important tow releases, as well as to test the practicality of tow releases and densities in the hold for 22-24 gram coho, and to bring 110,000 chinook to Gunnuk Creek for release there. It is the second year of chinook releases from Gunnuk Creek.

"Hopefully all the time, effort and money spent on this tow release strategy works and we'll start having better marine survival," Jon says. "This season, Hidden Falls chum have the highest forecasted return that we've seen in years."

This is the first round of otolith marked chum to return since the staff at Hidden Falls began marking the "tow/no-tow" fish to identify which release strategy was used. Though NSRAA plans to collect and examine data from these tagged fish over a number of years, even this first year of data can give the organization an indication whether one release strategy is more effective than another so that it can adjust future releases accordingly.

## NSRAA to Expand Sawmill Creek Hatchery

NSRAA is in the initial planning stages to expand its facility and increase its chinook production at Sawmill Creek Hatchery, on the edge of Sitka. The expansion is part of the organization's ongoing efforts to increase the troll fleet's share of NSRAA's salmon catch.

"The trollers are below their allocation," explains NSRAA General Manager, Steve Reifentstahl. "Chinook is a highly desirable fish for them."

NSRAA has already obtained a lease agreement from the City of Sitka for the land adjacent to the hatchery, and the necessary permits from Alaska Department of Fish & Game (ADFG) to raise an additional 500,000 chinook at Sawmill Creek, but plans for construction are currently stalled over insufficient water supply for the increased production.

"The big hurdle is an agreement on the water with the City of Sitka," Steve says.

The facility currently gets its water from Blue Lake through the City of Sitka and cannot increase production without additional water. Steve and NSRAA Operations Manager, Scott Wagner, have been in discussions with city officials, but were still ironing out details by the end of May.

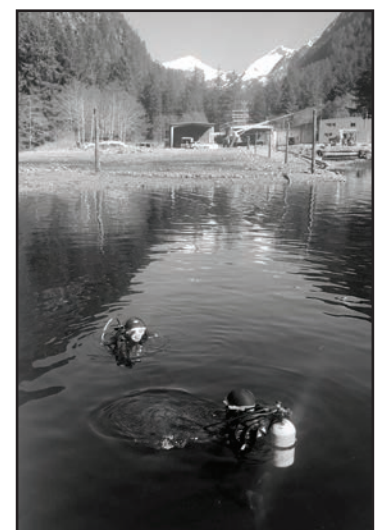
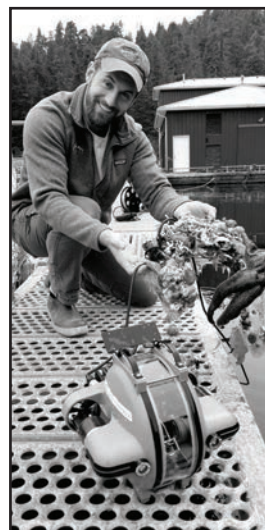
Steve feels optimistic, despite the delay. "I feel like we'll get to an agreement. It may not be in the next month, but I think, eventually, we'll get there," he says.

The staff at NSRAA is also exploring options, such as the installation of a recirculation system, to decrease the amount of water required for the expansion, and awaiting cost analyses of those options.

Once the water issue is resolved, NSRAA can move forward with construction plans. Steve estimates the expansion will cost approximately \$3- to 4-million. The board has yet to decide how it will pay for the expansion.



*Sawmill Creek Hatchery Manager Rebecca Olson feeds her coho fry a couple of weeks prior to the birth of her son, Jackson. Congratulations to Rebecca and Adam. Jackson joins a brother, Carter.*



*Environmental Monitoring Program: Left: Ben Adams uses NSRAA's ROV to monitor the sea floor below net pens at Hidden Falls. Right: Adam Olson and Matt Golden in the water for an inspection prior to chum releases at Medvejie.*

If construction began next year and was completed by August of 2021, NSRAA would be able to collect the total permitted amount of eggs, almost immediately, from the chinook that return to NSRAA's Medvejie Hatchery, for a return as soon as 2025.

Most chinook are raised at the hatchery for 18 months before they are released into the ocean, but staff plans to raise a portion of those fish as zero-check chinook. That means that instead of raising the fish for 18 months to the traditional release weight of 20 grams, they would only raise them for six months and release them at a weight of approximately 5 grams.

Theoretically, "you could raise 2 million zero-check chinook in the time it takes to raise 500,000 with traditional methods," Steve explains. NSRAA has experimented with zero-check techniques over the past 20 years or so, with results ranging from decent to dismal. "It's still a work in progress."

The chinook permitted for the Sawmill Creek expansion could be released at Medvejie, Deep Inlet or Crawfish Inlet. Crawfish Inlet is the newest location for NSRAA's chinook release and seems like the ideal place for these additional chinook, but the staff at NSRAA will review ocean survival data for those chinook before making a final decision.

"If we get decent marine survival and the trollers are able to access and harvest the chinook in Crawfish Inlet, then we may release most of them there," Steve says.

NSRAA has included space for additional chum incubation in the facility design should it decide to pursue permits to do so in the future.

## Board Member Profile: Bert Bergman

Bert Bergman was 12 years old when his father decided to move the family from their home near Astoria, Oregon to Edna Bay, on Kosciusko Island, among the Alexander Archipelago Islands. Though he lived there for less than a decade, those years shaped Bert's life as a troller.

Bert's family arrived in Edna Bay in the early 1980s, just as the town was transitioning from a logging camp into a town. Families who moved there to homestead worked together to build a town at the same time they built their homes.

"It was really a pioneer experience, where everything was built from the ground up: the first roads, the first dock, the first school," he says. "Everybody relied upon each other to get by during those first years. There was a real sense of community spirit – a 'we can build it', can-do attitude."

Bert has fond memories of his time in Edna Bay. "It was a good place to be a young man. If you had your rifle and a motorcycle, you were free." Though he cannot envision living there again, Bert credits Edna Bay's trolling culture for teaching him how to work hard and keep a good attitude, regardless of the circumstances.

"It gave me an appreciation for hard work, which is a cornerstone of trolling," Bert says. "You work long and hard and you don't always do well, but if you have a good attitude and keep at it a long time, then you tend to make something of yourself."

Like many of his Edna Bay friends, Bert bought his first hand troller in high school. He joined the Seafood Producers Cooperative (SPC) a year later. He gave college a shot, but soon returned to fishing and bought his father's power troller. "I got drawn into the culture and family that surrounds the fishing community."

Now 48, Bert can't imagine doing anything else. "Probably 20 years ago, I would have said if I weren't a fisherman, I'd want to be a politician,



Troller & NSRAA board member, Bert Bergman.

but I'm not sure that sounds like a noble endeavor anymore. I think I'm going to keep fishing."

Even retirement doesn't appeal to him much.

"I had a friend ask me when I was going to retire," Bert says. "I was kind of puzzled. Retire? I can't imagine going through a season and not fishing. I don't think I'm ever going to retire. But at the same time, I kind of feel like I've been mostly retired most of my life. I guess that's the nice thing about what I'm doing is that I want to keep doing it. I'm a terminal troller."

But sometimes Bert wonders if he'll even have the chance to fish for the rest of his life. He doesn't question his physical capacity to continue, but, rather, the increasing politics around fishing and – even more significantly – the changes in the ocean.

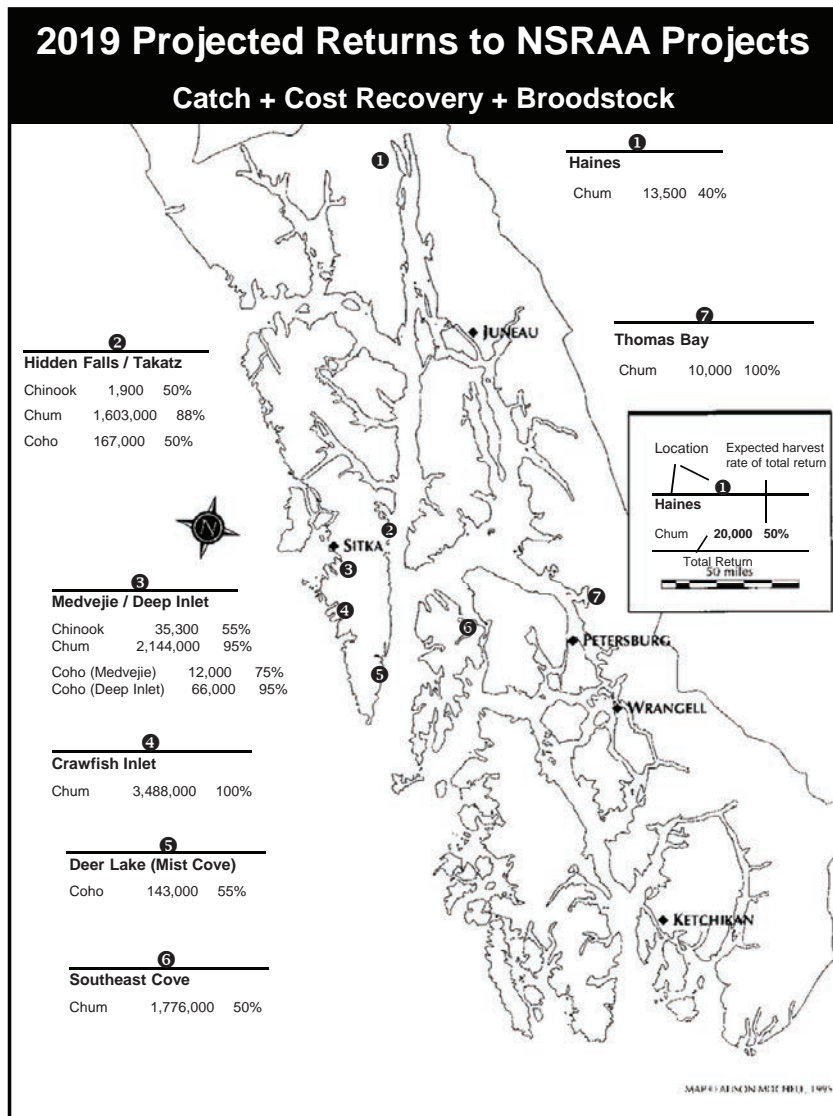
"I worry that the ocean is in a transition we haven't seen before," he explains. "But the ocean also seems to have a capacity to surprise me – just when I think I've got the pattern figured out, a new curveball comes and there's a rebirth and it keeps giving."

It's those worries, in part, that led him to run for the NSRAA board in 2015. Fish politics isn't fun, but it's necessary.

"It's hard because there's a lot of money at stake," Bert says. "The tensions are high. It's difficult to go into a place and have to argue with neighbors over money. That seems petty, but it's the nature of the beast. I'm not sure I really like to do it, but it has to be done. I have a lot of respect for people who step up and try to do the right thing, even if we don't agree on everything. Over time, some of the best friends I've got are people I've served with on the board."

Often, the representatives of the different gear groups may be divided as they each try to protect their own interests, but ultimately, they must work together to ensure that NSRAA can continue its work to raise fish for the benefit of all the fleets.

"That's our main business (at NSRAA)," says Bert. "That's why we're there. That should be our focus: to grow fish."



**Congratulations to the 2019 NSRAA  
Scholarship recipients!**

Nikki Box  
Brandon Castle / Anna Frazier

## Market Report: Season Opens With Uncertainty

Southeast Alaska is forecasting a record number of chum this year – 18 million – equal to the forecast for pink, but if fishermen aren't exactly excited, it's no wonder; there are a number of factors threatening to push prices down this season.

While low to average forecasts for coho, sockeye and king may keep prices for those species strong this season, pink and chum prices may not fare as well. In addition to the ongoing trade conflict with China, this year's pink and chum catch may have to compete with a leftover supply from last year.

"There's been some anecdotal information shared in the market place that there is existing inventory from last year," says Jeremy Woodrow, Alaska Seafood Marketing Institute (ASMI) Communications Director.

"That existing inventory can limit any price improvement if this year's harvest needs to compete with last year's supply," explains Garrett Evridge, Economist with McDowell Group in Anchorage.

It all comes down to supply and demand. While shortages of Alaska coho, sockeye and king drove prices up last season – kings to record levels – and low to modest returns may keep them high again this year, the large supply of pink and chum may outweigh demand.

Russia, Alaska's main competitor for pink salmon, had a record-breaking pink harvest in 2018, accounting for 80 percent of the global supply of pink salmon, according to Garrett.

"We don't know yet where keta or pink prices are going this summer, but there is more downside risk than upside right now," he says. "We could be in a situation in 2019 where there's a large global supply of pink salmon and that could push prices lower."

Alaska's record chum forecast could create similar problems for that species as well.

"Supply is a big factor," Garrett says. "We see that manifest in our outlook for pink salmon, but we also see it in keta/chum, where the forecasted 2019 volume would be an all-time record for Alaska – about 18 percent above the 2017 record. The market is looking at a large influx of supply for both keta and pink."

Those prices could drop further by the ongoing trade war with China, a key reprocessing market for Alaska seafood.

"Tariff and trade disputes impact primarily pink and keta because so much of those higher volume species are sent overseas for additional processing," Garrett says.

President Trump's proposed tariffs on Chinese imports to the U.S.

could have a double impact on Alaska salmon sent to China for reprocessing and then returned to the United States for domestic sales.

"We would effectively be tariffing our own product," Garrett explains. "That is a threat."

"I think it's safe to say that the ongoing trade conflict with China is impacting some of this inventory and impacting prices as well," says Jeremy.

ASMI received a \$5.5 million federal grant to use, over three years, toward its foreign marketing efforts to counter the impact of the tariffs on Alaska seafood sales overseas.

"Along with bolstering our efforts in existing markets, such as Japan, we're also increasing our efforts in China to keep demand there high – because China is and will be an important foreign market for Alaska seafood," Jeremy explains. "We're also increasing our efforts in Eastern and Northern Europe, and we're looking at opening a Southeast Asia market, for growing domestic market, as well as a reprocessing sector."

"It's great to explore new opportunities, especially if we can increase demand for Alaska seafood products in multiple different foreign markets; that creates better competition and competition usually leads to higher prices," Jeremy says. "But as great as an opportunity it does present, it took us 20 years to build the China market and the China reprocessing sector. These shifts don't happen overnight, unfortunately."

No one knows for sure how pink and chum prices will fare this season – there are so many factors that can influence prices, including strength of the U.S. dollar and foreign currency rates, as well as farmed salmon prices – but the general consensus is one of caution.

"We always have to be cognizant of what currency rates are doing," says Garrett. "Because so much of our seafood is exported, the value of currencies has a material impact."

But of all the possibilities, he says, the biggest uncertainty is how the market would handle large pink and keta salmon harvests and, a close second, what will happen with trade disputes.

"That's really a big challenge because we export so much of our salmon," he says.

Jeremy is quick to find an optimistic take, however.

"The Alaska Department of Fish & Game forecasts are up, especially for chum in Southeast Alaska," he says. "So, if there's a time to have a dip in price, it's great to have that while you have high volume."

## NSRAA to Resume Haines Project

Four years after the NSRAA board decided to put its spawning projects in Haines on hold, it hopes to resume its work in the area.

"The board directed us to try to partner and collaborate with any local organization in Haines who would be willing to help," explains NSRAA Operations Manager, Scott Wagner.

NSRAA has been working to enhance salmon populations in the Haines area for several decades. The organization has used a variety of enhancement techniques, including sockeye lake stocking, and chum and sockeye streamside incubation, with varying degrees of success.

"We can't control the fisheries side of it as we do our other terminal harvest areas because Haines is a wild system, so you're at the whim of the wild stocks," Scott explains. "The performance of our projects there are affected by the fleets' ability to intercept those chum among the wild stock."

In 2015, due to a combination of lackluster results and limited finances, the board agreed it was best to put the Haines spawning projects on hold and focus its efforts elsewhere, specifically its three newest release sites: Southeast Cove, Crawfish Inlet and Thomas Bay.

Now that fish are returning to each of those locations this year, and, in part, thanks to the tremendous success of NSRAA's Crawfish Inlet cost recovery efforts last season, the board has the latitude to revisit the Haines

project. Rather than restart is as it was, however, the board wants to explore options to better manage the project.

Of all the tactics NSRAA has used to increase salmon enhancement in the Haines area over the past 30 years, the most successful – though not quantifiable – was its efforts to improve chum spawning habitat through the construction or extension of spawning channels on the Chilkat and Klehini Rivers.

But overseeing a remote project like this can be difficult and expensive. For this reason, NSRAA's board and management team hope to partner with a local organization in Haines. Scott has been in discussions with the Chilkoot Indian Association, which has a long history of balancing salmon fishing with environmental stewardship, to see if the two organizations could collaborate.

"We want to try again but with a different operating strategy," says Scott. "We are trying to find something that works to keep additional production there, but not at an economic loss to fishermen."

Haines is a large gillnetting community. If resumed, the Haines enhancement project would primarily benefit the gillnet fleets in that area.

"We are looking at restarting the Herman Creek spawning channel incubation boxes," he says. "Those have been our most successful to date and are much simpler to operate than the 17-mile incubation boxes."

## Gunnuk Creek Prepares for First Incubation

Spirits are high among the staff at NSRAA's Gunnuk Creek Hatchery, and with good reason: the chum reared in net pens there grew well and were released earlier than usual; forecasts are promising for this season's chum return to Southeast Cove; and – perhaps most importantly – the facility is nearly ready to receive its first round of chum eyed-eggs for incubation this fall.

It's been two years since NSRAA purchased the Gunnuk Creek Hatchery from the State of Alaska. The facility was previously owned and operated by Kake Nonprofit Fisheries Corporation, which closed operations due to bankruptcy. NSRAA board and staff knew refurbishing the dilapidated facility would be a large undertaking requiring significant financial risk, but agreed it was a worthwhile investment to increase production for the fleets away from the Sitka area.

The hatchery depends on a watershed from a heavily logged area of the Tongass National Forest that is prone to erosion, drastic temperature fluctuations and low water flow. NSRAA worked with engineers to design a complex water system to remove solids and tannins, kill any bacteria, fungi or protozoa and keep the water at a consistent temperature optimal for incubation and rearing. The water system also includes a recirculation system to prevent water shortage issues.

Though NSRAA hoped to finish facility updates in time to incubate eggs last fall, facility construction and the installation of the new water system was behind schedule and those eggs were incubated at Hidden Falls instead. In February, NSRAA staff transferred approximately 16 million chum fry to Gunnuk Creek and 39 million to Southeast Cove to be reared in net pens. The fry grew well and were released a couple weeks earlier than normal, due to warmer than usual waters this spring.

Approximately 109,000 chinook were also transferred from Hidden Falls to Gunnuk Creek in mid-May. They will be held in saltwater pens near the outflow of Gunnuk Creek for a few weeks to imprint them on the location where they will return as adults.

“Those chinook will go directly to trollers and to sport fishing,” explains Gunnuk Creek Hatchery Manager, Ryan Schuman. “We won't collect broodstock for eggtake. We hope they return to Gunnuk Creek for the community to utilize.”

With the latest generation of Gunnuk Creek salmon headed out to the ocean and staff preparing for this season's return and the hatchery's first incubation season at the hatchery, Ryan feels optimistic about the months ahead.

“We've already seen some jumpers out in front of Saginaw Bay and a chum adult at Southeast Cove,” he says. “It's too early to make any real prediction but it's definitely a good sign.”

NSRAA staff plans to transfer 10 million eyed chum eggs to Gunnuk Creek in October. Those fry will be released next spring, along with an additional 10 million chum that will be transferred from Hidden Falls to the Gunnuk Creek net pens next February.



Steve Reifentstahl prepares the net for Chinook beach seining at Medvejie Hatchery.

NSRAA 2019 Return Projections									
Site	Projected Return	Range Low	High	Commercial	Sport	Cost Recovery	Brood Stock	2018 Return	2018 Forecast
<b>Chum</b>									
Hidden Falls	1,603,000	993,000	2,402,000	1,403,000	-	-	200,000	361,326	593,000
Medvejie/Deep Inlet*	2,144,000	1,310,000	2,985,000	2,044,000	-	-	100,000	1,536,017	1,250,000
Crawfish Inlet	3,448,000	1,888,000	5,008,000	3,448,000	-	-	-	3,481,165	681,000
Southeast Cove	1,776,000	888,000	2,664,000	888,000	-	888,000	-	186,659	143,000
Thomas Bay	10,000	5,000	15,000	10,000	-	-	-	-	-
Haines Projects	13,505	6,753	20,258	5,402	-	-	-	33,400	33,400
	<b>8,994,505</b>	<b>5,090,753</b>	<b>13,094,258</b>	<b>7,798,402</b>	<b>-</b>	<b>888,000</b>	<b>300,000</b>	<b>5,598,567</b>	<b>2,700,400</b>
<b>Chinook</b>									
Hidden Falls	1,900	1,100	5,300	1,200	200	-	500	1,350	2,000
Medvejie	35,300	17,100	57,800	19,062	1,765	10,473	4,000	24,115	12,700
	<b>37,200</b>	<b>18,200</b>	<b>63,100</b>	<b>20,262</b>	<b>1,965</b>	<b>10,473</b>	<b>4,500</b>	<b>25,465</b>	<b>14,700</b>
<b>Coho</b>									
	<i>Marine Survival:</i>	<i>6%</i>	<i>4%</i>	<i>10%</i>					
Hidden Falls	167,000	111,200	278,000	61,150	4,000	91,850	10,000	24,909	191,000
Deer Lake	143,000	95,200	238,000	76,650	2,000	64,350	-	42,246	153,000
Lake Stocking	-	-	-	-	-	-	-	99	1,000
Medvejie	12,000	8,200	20,500	7,800	1,200	-	3,000	13,934	12,000
Deep Inlet	66,000	43,900	109,700	59,400	6,600	-	-	86,169	54,000
	<b>388,000</b>	<b>258,500</b>	<b>646,200</b>	<b>205,000</b>	<b>13,800</b>	<b>156,200</b>	<b>13,000</b>	<b>167,357</b>	<b>411,000</b>
<b>ALL SPECIES TOTALS:</b>	<b>9,419,705</b>	<b>5,367,453</b>	<b>13,803,558</b>	<b>8,023,664</b>	<b>15,765</b>	<b>1,054,673</b>	<b>317,500</b>	<b>5,791,389</b>	<b>3,126,100</b>

\* Cooperative Project with SJH

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

Southeast Cove assumes 50% cost recovery and 50% CPH.

Crawfish Inlet assumes 0% cost recovery and 100% CPH.

# New Plans for this Year's THA Management

Thanks to an unexpectedly successful 2018 chum return (and corresponding lucrative cost recovery), NSRAA doesn't need to perform any chum cost recovery operations this year, which means those fish that would normally go to cost recovery will instead go directly to the fleets.

"The vast majority of this 9 million chum forecast is expected to go to common property harvest – and to the good fortune of fishermen, I hope," says Steve Reifentstahl, NSRAA General Manager.

The one exception to this rule is at Southeast Cove, where Trident Seafoods is in its final year of a long-term cost recovery contract with the State of Alaska that began when the state took over the bankrupt Gun-nuk Creek Hatchery. According to the contract, Trident can harvest 100 percent of the fish released from the hatchery when it was run by Kake Nonprofit Fisheries Corporation. This final year of the contract would allow Trident to harvest any returning six-year-olds.

"There are very, very few chum that return as 6-year-olds," Steve explains. "I made a deal with Trident and they are willing to split the harvest so fishermen can benefit this year."

There are an estimated 1.77 million chum salmon forecasted to return to Southeast Cove. Trident will harvest 890,000 – roughly half the forecast. The remainder will go to the fleets.

"It's the first time we've put common property openings at Southeast Cove," Steve says.

There are other firsts under this season's terminal harvest plan.

NSRAA is expecting its first round of returns at its newest remote release site, Thomas Bay. The return of 10,000 represents 3-year-old chums and will give the organization a good indication of marine survival for the fish released there.

Nearly 3.4 million chum are forecasted to return to Crawfish Inlet – that's nearly the same amount that surprised NSRAA and the fleets last season. Because last year's return was such an overwhelming success, the THA management plan there has changed.

"We're still managing Crawfish Inlet for troll priority, but we also have to make sure we harvest all the fish at least once a week to minimize straying of the chum as they return," Steve explains. "There will be a seine opening at least once a week there to keep those fish cleaned up."

"Additionally, if we get to the peak of the run like last year, and we're just overwhelmed by fish (the fleets caught a record 1 million fish in just one day there last year), if I see that happening again, I'll have to put two seine openings at Crawfish Inlet," he says. "Fish quality declines quickly when you have that many fish. If I see that coming, I want to harvest 1 million fish in two days, spread out, with days in between."

## NSRAA Welcomes Two New Board Members

NSRAA welcomed two new members to its board at its meeting this spring: Yancey Nilsen and Joe Cisney.

Yancey, 47, is from Petersburg. He's been on boats since before he could walk. A commercial salmon fisherman for more than 25 years, Yancey ran for an At-Large Seine seat because "I think everyone should jump up and volunteer for these boards every once in a while," he says. "I'm concerned for the future of hatcheries, in general, not necessarily just my gear group."

Joe also ran to be an At-Large Seine representative. Though he now lives in Greenbank, Washington, Joe was born and raised in Petersburg and lived there until he was 40. He and his wife moved to Greenbank seven years ago to be closer to family. "I've been running a seiner nearly 30 years and enhanced chum are a part of my business," Joe says. He fishes in Alaska and the Puget Sound and crews for halibut and black cod. Joe chose to run for the NSRAA board to help ensure the future success of the hatchery programs.

The forecast estimates roughly 1.6 million chum returning to Hidden Falls Hatchery.

"If that forecast comes to pass, that is going to be a huge event for the seiners – and for me, to see a big return there again," says Steve. "It's the forecast in which I have the least confidence because it's been so long since we had a decent return there, but that's the one I'm rooting for."

## THA Schedules - 2019

Deep Inlet	Sun	Mon	Tue	Wed	Thu	Fri	Sat
	Seine	Gillnet	Gillnet	Gillnet	Seine	Seine	Troll
<i>Begin: Sunday, June 2, 2019</i>							
Hidden Falls	Sun	Mon	Tue	Wed	Thu	Fri	Sat
	Seine				Seine		
<i>Begin: Sunday, June 16, 2019</i>							
Southeast Cove	Sun	Mon	Tue	Wed	Thu	Fri	Sat
	Seine				Seine		
<i>Begin: Sunday, June 16, 2019</i>							
Thomas Bay	Sun	Mon	Tue	Wed	Thu	Fri	Sat
	Seine				Seine		
<i>Begin: Sunday, June 16, 2019</i>							
Crawfish Inlet	Sun	Mon	Tue	Wed	Thu	Fri	Sat
	TROLL PRIORITY - SEINE 1 OR 2 DAYS a WEEK as required to maintain quality						
<i>Begin: Late July</i>							

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



Commercial seining returns to Southeast Cove in 2019.

## NSRAA Staff Profile: Ilona Mayo



You might be surprised to learn that NSRAA's Office Manager, Ilona (pronounced Ih-lah-nah) Mayo, is from New York – she doesn't have the accent or the attitude. She's a quiet and kind presence, assisting visitors and staff at NSRAA's main office in Sitka.

Ilona grew up playing in the woods in Saugerties, a sleepy little historic town along the Hudson River, between Poughkeepsie and Albany, just west of the Connecticut and Massachusetts border. But that was only part of her childhood.

Ilona's father alternated between working on the pipeline and commercial fishing in Alaska, so when she wasn't in New York with her mother, Ilona was in Alaska with her father. Other than a couple years in Fairbanks, most of that time was spent working on her father's boat, as they moved between Juneau, Sitka and Pelican. While that might sound idyllic, Ilona's love for fishing – or any time on the water, for that matter – was largely tempered by her tendency to get seasick.

Eventually, Ilona chose to make Sitka her home. Her father and several siblings were there already and she was drawn to the friendly people, the lifestyle, and Sitka's mountains, trails, and the ocean. Though she is no longer so prone to seasickness, Ilona would prefer to pick berries than fish if she has the choice.

"I think I'm semi-addicted to picking berries," Ilona half-jokes. It's part the meditative nature of the process, as well as the resulting bounty, which she uses for jams, pies and smoothies.

In the 26 years that she's called Sitka home, Ilona has raised four children (now ranging in age from 14 to 25), worked various jobs, and ran her own daycare. When she first saw the ad for a position with NSRAA, Ilona was not familiar with the organization.

"My father knew about NSRAA, of course," she says.

In her 13 years with NSRAA, Ilona has moved up from secretary to office manager. Her time working accounts payable prompted her to go back to school to study business administration and accounting. She earned that degree, her second (she had already earned a bachelor's of arts before she moved to Alaska), last fall.

"NSRAA is a good place to work," Ilona says. "The people are good and the cause is good."

### NSRAA PICNIC Medvejie Hatchery

Saturday, July 13, 2019

Boat transportation is  
provided from  
Crescent Harbor.

Call us at 747-6850  
for tickets.

Two sessions:  
9am - 12:15  
12:30 - 4:00



Visitors enjoy grilled king salmon at Medvejie.

## NSRAA Forecasts Strong Returns

*cont. from front page*

"For chum salmon, the forecast looks almost off-the-charts amazing," Scott says.

The chum return includes NSRAA's first-ever return to its new location at Thomas Bay (a modest 10,000 3-year-olds are expected there) and an estimated 1.7 million chum at Southeast Cove.

"This season is the first common property opening in history at Southeast Cove," Scott explains. "Since the Gunnuk Creek facility was opened, sometime in the early 1980s, there has never been a common property opening."

This will be the final year of a long-term contract between Trident Seafoods and the State of Alaska for cost recovery at Southeast Cove. Though it has no obligation to do so, Trident has agreed to take only 50 percent for cost recovery, leaving the remainder for the fleets.

"It's going to be a very busy season," says Scott. "The benefit this year is that (thanks to the unexpected success of cost recovery at Crawfish Inlet last year) we don't need to do any cost recovery at Crawfish or Deep Inlet, so that simplifies the fisheries side of things – there are no closures needed there."

"There's a lot of excitement about Southeast chum this year, from Ketchikan to Juneau to Sitka," says Steve. "Everyone had a large number of 3-year-olds in 2018, which has led to really good forecasts for chum salmon this year. The total forecast for chum salmon in Southeast Alaska is 18 million fish. That's the biggest forecast we've ever seen in this region. To give perspective, the forecast for harvested pink salmon is also 18 million this season. I don't believe there's ever been a year when the chum salmon forecast was equal to the pink salmon forecast."

"In a year when the pink salmon forecast is low and the chinook forecast for wild fish is low, these chum salmon are going to be important for all gear groups," he says. "This kind of forecast has created a lot of buzz and a lot of excitement. It will supplant what fishermen otherwise would have caught. It could be, when we look back at the season, that it saves the season, much like it did last year with the Crawfish program."

## NSRAA FY20 Budget

Projected Income - FY20		
Year	Income Source	Amount
2018	Enhancement tax	\$2,474,374
Revenue - Fish sales / Assessment tax:		
2019	- Amount required from Chum	\$0
2018	- Excess 2018 chum CR	\$12,012,492
2018	Into Loan Reserve Crawfish & SE Cove	-\$3,574,875
2018	Into Operational & Capital Reserve Fund	-\$1,000,000
2018	- Chinook	\$99,172
2018	- Coho	\$204,907
2018	- Incidental species	\$4,287
2018	- Roe	\$39,610
2018	- Carcass	\$128,528
Other Revenue / Funds from Reserves		
2018	Rental Income	\$42,000
2018	Investment Earnings (net of fees)	\$308,136
2018	NSE account (DIPAC)	\$0
2018	From Unrestricted Reserves	\$0
<b>Total</b>		<b>\$10,738,631</b>

Projected Expenses - FY20	
Expense Source	Amount
Operational Budget	\$8,061,866
Capital Budget	\$805,900
Net pens - Expanded 4.0	\$800,000
Loan Repayment Funding	\$1,070,865
<b>Total</b>	<b>\$10,738,631</b>