

Date: 11/24/2020

Clerk of the Trial Courts
By JO Deputy

Testimony of Charles O. Swanton (Retired ADF&G Deputy Commissioner/Alaska Commissioner for the Pacific Salmon Commission).

Address: 9224 Black Wolf Way, Juneau, AK 99801

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Subject: Information pertaining to a Fishing Violation received by Mr. Robert M. Thorstenson Jr. on August 25, 2019 within Crawfish Inlet.

Biographical Brief: My undergraduate academic training emphasized freshwater aquatic ecology and salmon fisheries science culminating in a B.S. in Biology and another B.S. in Fisheries Science from the University of Alaska, Fairbanks. I received an M.S. in Fisheries Science from the University of Washington (Fisheries Research Institute) specializing in stock separation techniques, salmon population dynamics and statistics. My tenure with ADF&G started in 1981 as a fisheries technician working on enumerating Chinook and Chum salmon on the Aniak River. After several field seasons spent on salmon stock assessment projects in the Arctic-Yukon-Kuskokwim region, multiple field seasons were spent counting salmon escapements on Kodiak Island, the Alaska Peninsula and Chignik. My first professional position was quantifying biological/production damages to sockeye, pink and chum salmon populations (Kodiak and Chignik Management Areas) resulting from over escapement caused by the 1989 Exxon Valdez oil spill. Professionally I have spent over 40 years studying, observing, quantifying and regulating salmon populations/stocks and salmon fisheries throughout Alaska. My research efforts have allowed me to measure and quantify pink and chum salmon spawning habitat for well over 50 streams on Kodiak Island, the Alaska Peninsula and Chignik along with conducting 100's of aerial (both fixed wing and helicopter platforms) and foot surveys indexing spawning escapements. During my 9 year tenure as the ADF&G Sport Fish Division Director, I supervised the Anadromous Waters Catalog program; as ADF&G Deputy Commissioner (2016-2018) I was responsible for supervising and approval of permitting specific to the statewide aquaculture programs (hatchery release sites, and programs inclusive of special harvest areas and Permit Alteration Requests). I retired from state service November 30, 2018.

The following an assessment relative to the violation being brought against Mr. Robert M. Thorstenson Jr. as an infraction of commercial fishing within closed

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waters of an identified anadromous salmon stream located within the Crawfish Inlet Special Harvest Area on August 25, 2019 at 6:00am.

Background Information:

Anadromous Waters Catalog, listings and general intent: Under Federal Territorial law (prior to 1960) certain protections were in place for safeguarding anadromous fish bearing streams. During the initial years of statehood certain provisions were replaced while others were modified to strengthen and broadened protections for the anadromous species inhabiting Alaska's rivers, lakes, and streams. In 1966 legislation created a mechanism for formal listing of the state's anadromous rivers, lakes, and streams (Statute 16.05.870). This law required ADF&G to specify the various rivers, lakes, and streams, or reaches of them that are important for spawning, rearing, or migration of anadromous fishes, an official listing was created and by reference codified under 5 AAC 95.010 of the Alaska Administrative Code, the "Catalog of Waters Important for Spawning, Rearing, or Migration of Anadromous Fishes," and "An Atlas to Catalog of Waters Important for Spawning, Rearing, or Migration of Anadromous Fishes," (referred to as the Catalog and Atlas or collectively as the AWC) were utilized to facilitate this specification. The Catalog provides a listing of water bodies important to the spawning, rearing, or migration of anadromous fish, while the Atlas is a map with location of the water body, the anadromous fish species found and the life history stage of the fish present.

Statutory changes made in 2008 (AS 16.05.871) now require that ADF&G "specify the various rivers, lakes and streams or parts of them" within the state that are important to the spawning, rearing or migration of anadromous fishes. These instruments are used to accomplish this specification and are presently adopted in regulation under 05 AAC 95.011. The Alaska Department of Fish and Game, Division of Sport Fish is the administrative agency responsible for the information contained within the Atlas and Catalog which includes reviewing and approving all proposed additions, subtractions or modifications to the stream listings.

Nomination and evaluation process:

The water bodies listed within the AWC specify which streams, rivers, and lakes are important to anadromous fish species and therefore afforded protection under AS 16.05.871. Water bodies not identified or cataloged within the Catalog and Atlas are not afforded that protection. At present it is believed that well over half of the likely anadromous fish bearing waterbodies within Alaska are not identified nor have been evaluated for their importance for anadromous fish species (salmon, trout, char, whitefish, lamprey, smelt, and sturgeon) and are therefore not afforded protection under this statute. In order to be evaluated, a stream nomination must be received from a qualified observer (ADF&G staff, natural resource contractor or qualified observer) with the nomination being based on observation and identification of an anadromous fish regardless of life history stage (Adult, egg, fry or presmolt). Most nominations come from ADF&G fishery or habitat biologists while conducting research or other remote field activities.

The ADF&G is charged with receiving, reviewing, and processing anadromous water body nominations and making appropriate changes to the Atlas and Catalog. A modification within the nomination/application process can take several forms: (1) adding new water bodies; (2) adding species to previously cataloged streams; (3) extending or truncating species distribution (upstream or downstream) in a waterbody; (4) deleting a water body or a portion of one; (5) updating survey data on cataloged water bodies; and (6) revising stream channels, labeling errors, or identifying barriers to fish movement.

Nominations, upon receipt by ADF&G go through an extensive review and verification process. Field observations are not necessarily verified by ADF&G staff but rather rely upon the credibility of the observing party. Many of the listings were the results of development or proposed development projects that took place from about 1970 through the 1990's.

There have been several concerted efforts within the last 10-15 years primarily in Western Alaska (Kuskokwim and Yukon River drainages) to add additional streams to the Catalog that were either assumed or were not part of earlier investigations. Contemporary efforts for evaluation (either adding, modifying/updating or subtracting listings) typically predate or are associated with development projects (Susitna/Watanah Dam, Donlin/Pebble mine) or other resource extraction activities. Owing to limited fiscal resources, many of the current listings that were cataloged back in the 1970's have not been re-evaluated nor updated and likely will not be unless additional development activities are proposed or extensive fiscal resources are allocated to this endeavor.

The Catalog and Atlas respectively currently contain over 17,000 streams, rivers, or lakes throughout Alaska. Based upon thorough surveys of a few drainages it is believed that as previously stated well less than 50% of the water bodies used by anadromous fish species in the state have been surveyed and cataloged. Additionally, many of the streams in Southeast Alaska, owing to geography and remoteness of many of the small/medium sized streams received "blanket" nominations employed based on scant actual observational/survey data and have not been verified by actual ground truthing observations.

Crawfish Inlet

There are two identified Anadromous Waters Catalog (AWC) streams located proximate to the head of Crawfish Inlet, identified within the Catalog as streams: 113-33-10020 (this is the stream close to where Mr. Thorstenson's infraction took place, while a second stream (113-33-10030) is located at the head of the Bay. While investigating the nature of these streams and the AWC nominations that were purportedly available on the ADF&G AWC web site, I detected a glitch in the system which did not allow me to review the nomination forms that typically accompany Catalog listings. In turn, I contacted Mr. Joe Giefer with ADF&G who is responsible for the Anadromous Waters Catalog and its oversight. I explained the problems incurred with my query and he agreed to investigate these streams and assist me with obtaining the nomination forms and other pertinent information. The following email was received on 1/30/2020 from Mr. Giefer:

Hi Charlie,

It wasn't just you Charlie, the links to the Nom forms are giving me problems as well, didn't work at first, then worked, then not working again. But I was able to look at the streams you called about before it stopped working again.

I think your request is for one of the regions where the AWC lacks nominations being submitted since it was created.

So while these streams are in the AWC catalog, they were added at the inception of the AWC catalog (early 70's I believe?) based on direct input from area staff and legacy data. These are what are now call unsubstantiated streams, as no one has ever submitted more current fish presence data. All this original AWC information and files still exists, but it's never been

organized or scanned to be easily referenced, just in a room here for safe-keeping as far as I know.

On a whim I checked out neighboring streams and its pretty much the same across Crawfish Inlet. The closest nomination I could find is for a stream on nearby Lodge Island. It appears in 2009-10, J Johnson used some Comm Fish Escapement data to "substantiate" many of the streams in this region, and in this instance I'm talking hundreds of streams all over SE Alaska. However it doesn't look like it was applied to the two streams you are interested in.

This is an area that really needs additional nominations, I will be sure to pass that on to SE staff in case they have the opportunity.

Sorry not really what you are looking for. Please let me know if you have any additional questions or data requests and I'll be glad to help.

Regards,

Joe Giefer

Habitat Biologist III

Anadromous Waters Catalog (AWC)

Alaska Dept. of Fish & Game

Division of Sport Fish – RTS

333 Raspberry Road, Anchorage AK 99518

907-267-2336

As can be deduced from this correspondence there is a lack of extant biological verification regarding these streams and the fact that the two within Crawfish Inlet as well as many others throughout Southeast Alaska were placed into the AWC without direct or indirect biological verification is professionally troubling. This activity appears, at least for SE Alaska streams based on the information provided by Mr. Giefer to be more commonplace than either the public or for that matter, ADF&G staff recognize. At the time I approved the Crawfish Inlet Special Harvest area (ADF&G Memorandum dated April 30, 2014) as the Director of Sport Fish, I was certainly unaware of the paucity of data available relative to the purported AWC streams within this SHA. With my involvement setting up

and being briefed on the establishment of the Crawfish Inlet SHA there was little or no discussion specific to the Anadromous streams that had been previously identified within the geographical boundaries designated for the Crawfish Inlet SHA, and certainly not at the Commissioner's office level which is where final approval occurs.

Summary:

The overall purpose of identification and protections afforded to Anadromous Waters (streams, lakes and rivers) within Alaska is directly related to conservation of wild salmon stocks and protection of the freshwater habitat they rely on to persist. The impetus for these protections under Alaska law (Statutory and Regulatory) was the direct result of poor or nonexistent protections afforded by the federal territorial government prior to statehood in addition to the diminished overall productive health of the salmon stocks inherited at statehood. This is the primary intent of these laws and the closed water boundaries imposed for protection of Alaska's wild salmon stocks throughout state waters. During the mid-1970's through the early 1980's Alaska's wild salmon stocks rebounded in productivity and it is largely accepted that protections afforded by the Anadromous Waters designations (closed water areas around streams and enforcement of those boundaries) were paramount to the wild salmon stocks recovery. Unfortunately, AWC streams located within or proximate to designated special harvest areas offer an element of complexity to managing for maximizing harvest of enhanced fish while ascribing to afford protections to wild stocks where they occur both spatially and temporally. The lack of pertinent biological information pertaining to the two AWC streams within the Crawfish Inlet SHA should have allowed for liberal if not complete relaxation of closed water boundaries around these streams while the fishery was being prosecuted to maximize the Chum Salmon harvest in 2019. The fact that for the stream where the violation was purported to have taken place was void of salmon and that it has no documentation suggesting that it supports anadromous wild salmon in light of the violation, is itself bordering on criminal. The primary intent of SHA's is to afford cost recovery fishery opportunities to the various non-profit regional aquaculture corporations and also maximize salmon harvests for the common property fisheries and users as dictated by various allocation plans approved by the gear group users and Alaska Board of Fisheries.

Fishermen and processors are reminded that all salmon, including steelhead, commercially harvested but retained for personal use and not sold, must be reported on fish tickets at the time of delivery.

This will be the last scheduled purse seine announcement. Any further fall chum salmon opportunities will be announced in a stand-alone announcement.

Summary of ADF&G Emergency Order Protections for Streams 113-33-10020 and 113-33-10030 (Crawfish Inlet head stream):

The summary and listing of various emergency orders issued for Crawfish Inlet from 2018-2020, along with the justifications for the various closed water designations indicate that in the instance of stream No. 113-33-10020 that the restrictions were unwarranted and certainly not justified based on extant or historical biological information regarding wild salmon stocks in this area. The apparent reasoning for having the 200yard restriction surrounding this stream, I believe stems from this area and the hatchery chum salmon returns being allocated to the troll user group as a means to balance inequities within the enhancement allocation plan that dictates how enhancement produced fish are to be apportioned between the troll, gillnet and purse seine gear groups. What transpired both in 2018 and again in 2019 was simply that the troll gear group affirmed that this gear type simply does not possess the capability to harvest large volumes of chum salmon in a protracted time frame. The approximate 350,000 fish harvest by the troll fleet in 2018 when compared to the 3 plus million fish return is a case in point and was again affirmed in 2019 when about 150,000 fish were harvested by troll gear when compared to a harvest of about 2 million chum salmon. A small portion of the overall harvest was taken by cost recovery efforts to offset production costs incurred by the private non-profit hatchery operator. The unsettling observation was that these restrictions were relaxed in 2020 owing to the lack of pink salmon throughout the area, however pink salmon catches during the record chum salmon harvests for both 2018-2019 were deminimis when compared to chum salmon. This fact alone should have promoted less stringent closed water restrictions within Crawfish Inlet.

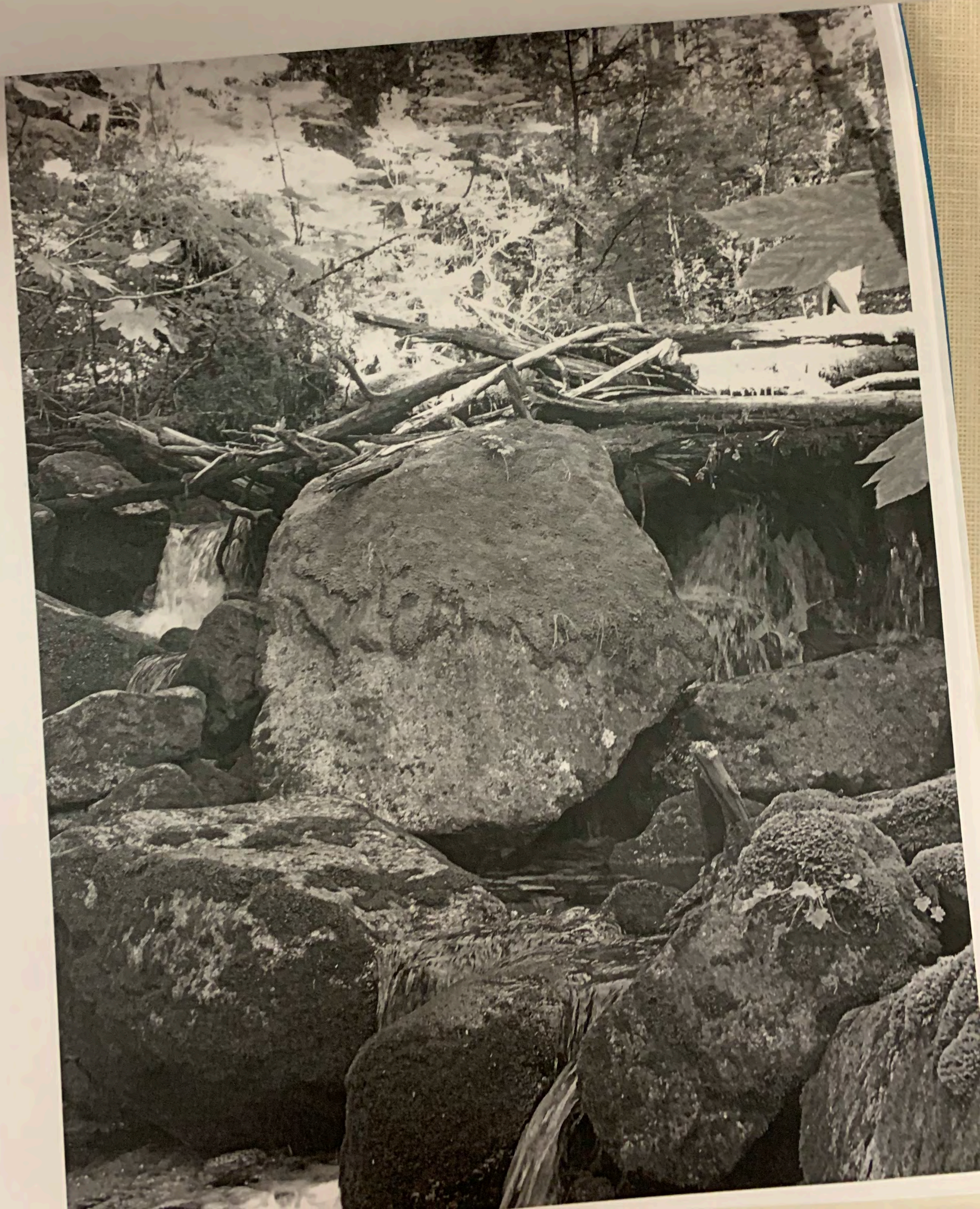
Being both a scientist and long term salmon management professional we are reluctant as individuals and within ADF&G as an agency at being wrong or having generated a poor estimate or regulatory decision. This is in most cases not a function of failing objectivity or clarity of judgement, but more specifically a fear of losing credibility with the public we serve. Another factor to take into account was the unheralded fry-to-adult survival that was first experienced during the 2018 return. This event, precipitated by ocean environmental conditions that were highly favorable to this chum salmon release were perhaps the highest on record for any hatchery

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salmon release in Alaska and possibly throughout the pacific rim. This return was completely unexpected and required unprecedented modifications to the fishing regime that was generally accepted for this location, that being a large amount of time afforded to the troll fishery with the potential for a late season "mop up" type fishing opportunity for the purse seine fleet. What actually transpired was unusual by allowing the purse seine fishery into this area sooner and for a longer period of time than originally anticipated. It also should be noted that the 2018 season up to this area opening was extremely poor for purse seine fishermen which resulted in a large amount of boats and gear focusing on this area to perhaps salvage the season. The resulting harvest certainly in most cases rescued these fishermen from substantial financial hardship.

Biological/Physical Characterization of AWC Stream No. 111-33-10020



that it would be a complete barrier to upstream passage at greater flows than what was experienced when this picture was taken.

Summary of photographic and physical onsite evaluation of AWC stream No. 113-33-10020

Based on what I would hesitantly describe as expert opinion regarding salmon streams in Alaska, I found this stream to have very little suitable spawning gravel for either pink or chum salmon and virtually no available suitable rearing habitat for juvenile Coho salmon. Pink and Chum salmon prefer shallower gradient streams with an abundance of small to medium size gravel (0.66-13.75 cm diameter gravel size); very little gravel of this size is located within the stream reaches below the barrier to upstream passage located about 100 meters upstream from the mouth. On several occasions where I did find suitable gravel, I reached into the gravel in an attempt to find eggs that might have been deposited by previous spawning activity; I found none. As a matter of record in surveying this stream there was none whatsoever sign of any anadromous salmon that might have previously used this stream for spawning purposes; I did not observe any fish of any type in the stream, nor at the stream mouth in salt water. This was quite surprising for it being identified as a salmon spawning stream as is typical for streams to harbor other species such as sculpin that inhabit such streams and typically feed on salmon flesh or residual eggs. This stream at the time of this survey (September 2, 2019; approximately 12PM) was devoid of any sign of salmon spawning or having spawned in this stream. As is typical for salmon bearing streams, carcasses or skeletal remains are retained either within the stream or proximate the stream mouth, and again there was no sign of salmon anywhere within this stream or the adjacent tidewater areas. It is my general opinion that this stream holds little to no potential for salmon species that are identified within the

The photo directly above is approximately 100 meters upstream from the mouth of the stream and is a barrier to upstream passage for all fish. It is also my assessment that it would be a complete barrier to upstream passage at greater flows than what was experienced when this picture was taken.

Summary of photographic and physical onsite evaluation of AWC stream No. 113-33-10020

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listing (Pink, Chum and Coho salmon) for either spawning or rearing purposes.

Overall Summary:

My belief in the sanctity of the Anadromous stream/waters program, its genesis and intent is that next to the limited entry program instituted in the early 1970s for the purposes of limiting commercial fishing power, it forms the basic underpinning of Alaska's success in sustainable salmon fisheries management when compared to other countries (Canada) and Western States (Washington and Oregon) involved with salmon management.

For the first time since 1985, following my approximately 40 year career with ADF&G, I participated in the July 2019 troll fishery and also purse seined for salmon within both the Deep inlet and Crawfish SHA fisheries in 2019, shortly after the incident occurred with Mr. Thorstesen. My belief is strident regarding safeguarding salmon streams and the attendant closed water areas that are employed to protect staging wild salmon stocks and escapements. I came to Alaska just as wild salmon stocks were rebounding out of a rather bleak period of productivity in the late 1960's-1970's. A portion of cause of this poor salmon production period was imparted owing to poor ocean survival; however the other root cause was overharvest of certain stocks in certain locations owing to "Creek Robbing". It became a concerted effort on behalf of management biologists thru education of fishermen on the need for adequate escapement, coupled with stream guards and the diligent efforts of the Fish and Wildlife protection Division of the Alaska State Troopers that diminished and thwarted the salmon piracy efforts of a few. Mr. Robert Thorstenson Jr. was a primary advisor on Southeast Alaska purse seine concerns related to the pacific salmon treaty during my tenure as Alaska's commissioner. I found him to be honest, pragmatic and highly adept council on these matters and quite frankly, the most knowledgeable fishermen on the history of the SE commercial salmon fisheries of anyone I have had contact with. It is without comprehension that Mr. Thorstenson would knowingly violate a closed water boundary that protects wild salmon stocks.

It is my believe that what has been assembled represents information that may not be sufficient to resoundingly dismiss the fishing violation that was meted out to Mr. Thorstenson, but rather offers some mitigating facts that can not be ignored

when viewed in its totality. The irregularity of the closed water boundaries, especially within a Special Harvest Area specifically designed to maximize harvest of hatchery chum salmon; confounding information specific to closed water areas around two AWC streams one that had wild salmon present and the other void of fish and specifically the inability of ADF&G to affirm that perhaps some attention the boundaries should have been afforded prior to this area being designated, the latter of which I can hold myself partially accountable. The element of this case which I can not speak to but which I did get to experience first hand was the inconsistency of the GPS systems utility in this location and the lack of specificity that exists around the exact location of the closed water boundary.

While collecting information on the salmon stream in question and the closed water boundaries surrounding this stream I was on the Magnus Marten's fishing vessel in the middle of Crawfish Inlet when all the navigation systems failed and the vessel was without power. This experience was rather disconcerting as we were adrift for approximately 3 minutes until satellite communications resumed. This event took place not 300 yards from the mouth of the salmon stream where the violation was cited as having occurred, and there were no other vessels in the vicinity. I have reviewed the video and photographic evidence submitted and found it rather astounding that anyone could detect where a closed water area was located, especially given the number of vessels concentrated in the rather limited geographical area. It is my belief that the penalty, given the circumstances surrounding this violation should be limited in scope at the very least and at best dismissed with warning to the cited violators.

This affidavit is submitted voluntarily on November 24, 2020 by:

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