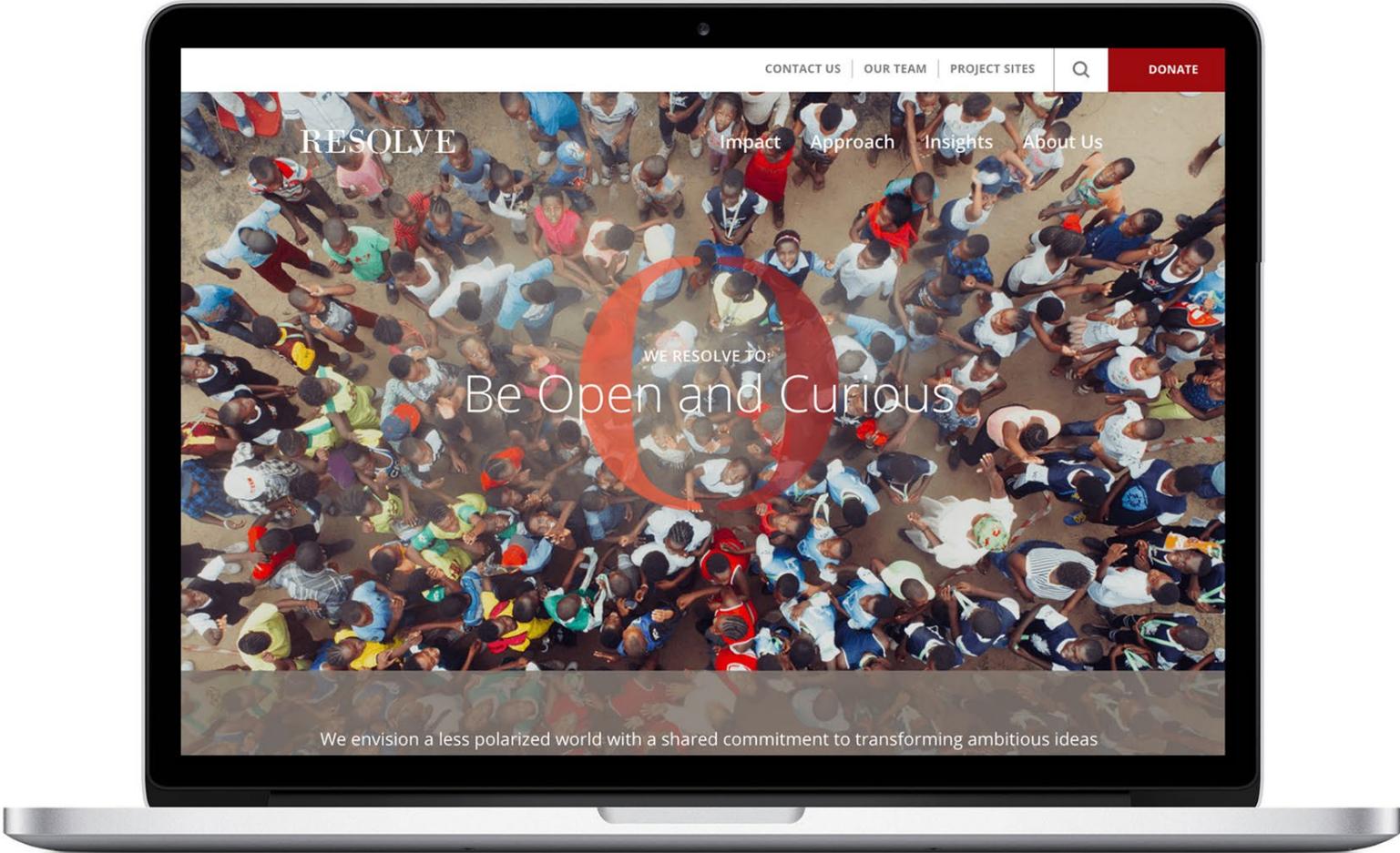
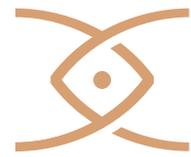


# Salmon Gold Overview for MSB Fish and Wildlife Commission





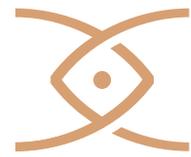




Nature



# Conservation



# Restoration

# Salmon Gold in the Supply Chains for Tiffany & Co. and Apple

## ALASKA Journal of Commerce

**Apple partners with RESOLVE to responsibly source gold for its products**

The modern gold rush is evolving.

**Minjng Magazine** 

**Sustainability shining with Salmon Gold launch**  
Non-governmental organisation (NGO) Resolve has unveiled a new initiative for responsible gold sourcing, Salmon Gold, which it said will restore fish habitats in Alaska and western Canada

**Apple & Tiffany partnering with Alaskan gold environmental stewards**

by Mike Wuerthele  
Tuesday, August 13, 2019, 05:20 am PT (08:20 am ET)

Apple is partnering with environmental group RESOLVE to find new ways to responsibly source gold in Alaska for electronics manufacture.

**NATIONAL Jeweler**  
**What Is 'Salmon Gold,' and Why Is Tiffany Using It?**

FEATURE  
August 13, 2019

# Searching for gold with habitat restoration in mind



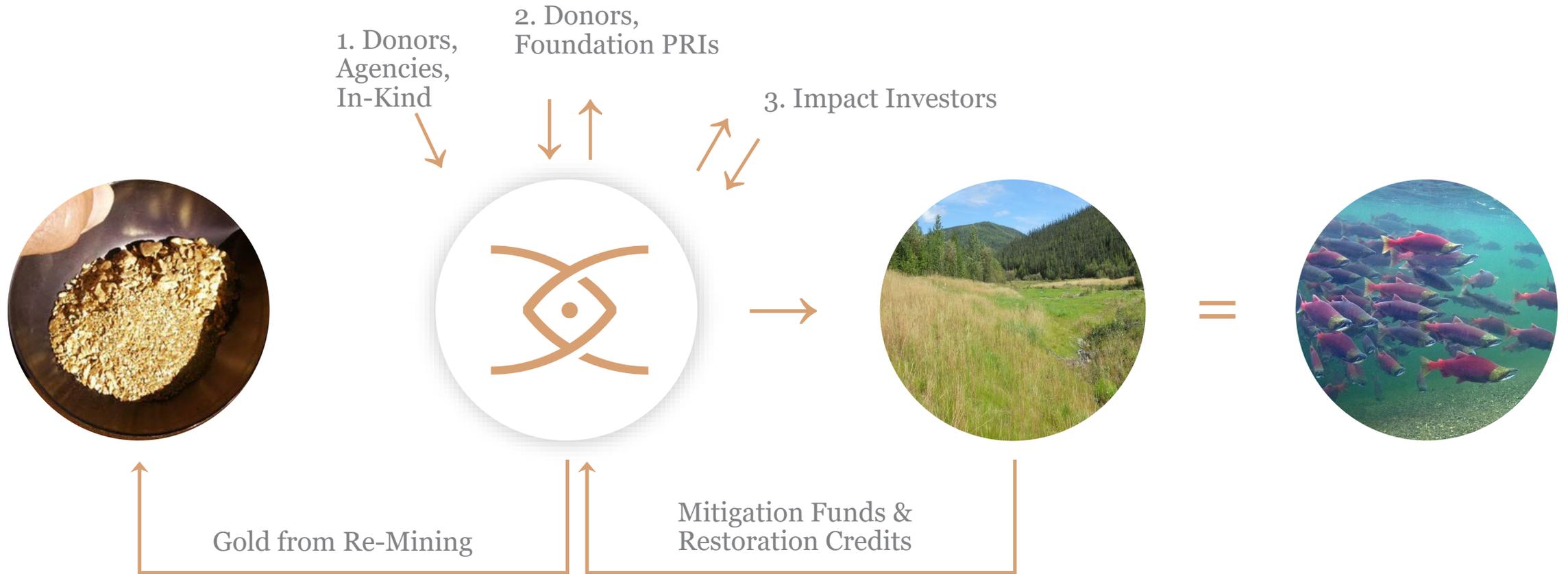
Our goal is to incentivize restoration at scale, brand relationships are the means not the end.



# About Salmon Gold



# Scaling Salmon Gold



# Stream Restoration in Alaska's Fortymile



*2016: 1 Year After Restoration*

# Sulphur Creek, Yukon Territory

## Sulphur Creek Restoration Plan

Yukon Heli Ski Ltd. in partnership with SalmonGold  
Dawson City, Yukon

Prepared by Mosquito Flats Design  
24 October 2019

### OVERVIEW

Yukon Heli Ski Ltd. has partnered with Salmon Gold to reclaim and restore stream habitat for salmonid species in the area. Salmon Gold is a non-profit organization that is forming partnerships with miners to “re-mine historical placer gold mine sites and restore fish habitat using sustainable techniques in Alaska, the Yukon Territory, and British Columbia (Salmon Gold Website, 2019).”

Yukon Heli Ski Ltd. operates a joint venture placer gold mine with Mammoth Holdings on Sulphur

wood forests.

Sulphur Creek has been mined since the beginning of the Klondike Gold Rush in 1898, first by hand methods, and then dredged by the Guggenheim family and Yukon Consolidated Gold Company. Current operations use gravity separation to concentrate the gold. This placer mine has been continuously mined since the 1970s. Historic placer mining has disturbed the stream channel and adjacent flood plain. The area is now comprised of an early seral stage vegetation community.





Fig. 1.20 Water let into reconstructed stream bed with anchored trees.



Fig. 1.21 Fish in riffle 24 hrs after water is let into reconstructed stream.

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# Approach



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# The Opportunity



# Salmon Gold: A Unique Partnership



RESOLVE, Tiffany & Co., Apple, Newmont, Donlin Gold, PAMP, the Nature Conservancy Alaska Chapter, Ogilvy, Trout Unlimited, DLA Piper, YHS, the Kowalski Family Foundation and others.

Stephen D'Esposito, RESOLVE | October 12, 2020

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**MATANUSKA-SUSITNA BOROUGH  
FISH & WILDLIFE COMMISSION RESOLUTION SERIAL NO. FWC20-04**

A RESOLUTION OF THE MATANUSKA-SUSITNA BOROUGH FISH AND WILDLIFE COMMISSION EXPRESSING ITS SUPPORT FOR THE ALASKA DEPARTMENT OF FISH AND GAME GRANT PROPOSAL TO ~~FURTHER STUDY THE~~CONDUCT MIXED STOCK ANALYSIS OF 2019 UPPER COOK INLET COHO SAMON HARVEST SAMPLES.

WHEREAS, the Matanuska-Susitna Fish and Wildlife Commission was created in 2007 to represent the interests of the borough in the conservation and allocation of fish, wildlife, and habitat; and

WHEREAS, the Fish and Wildlife Commission has been effective in representing these interests to political leaders, government regulators, and boards of fish and game; and

WHEREAS, the Matanuska-Susitna Borough has a vested interest in utilizing science-based standards and forward looking policies to help ensure a balance between the critical fish and wildlife resources of the region with other needs of the population, including responsible resource development; and

WHEREAS, the Matanuska-Susitna Borough is home to roughly 15% of the state's population and covers over 25,000 square miles. In addition to encompassing the two major river systems, the Matanuska and the Susitna, the borough also contains a multitude of lakes, rivers, and streams that comprise critical salmon spawning and rearing habitat; and

WHEREAS, the Matanuska-Susitna Borough has spent over \$8

million on salmon habitat restoration in the borough, replacing culverts and restoring up to 100 miles of streams; and

WHEREAS, healthy habitat not only supports our fish and wildlife, but ensures clean water for our communities and key economic opportunities for Alaskans; and

WHEREAS, the Matanuska-Susitna Borough Fish and Wildlife Commission was successful in convincing the Alaska Board of Fisheries at their February 2020 meeting to adopt a number of policies that will enhance returns of salmon to area waters; and

WHEREAS, economic studies in our region in 2007 and 2017 show the significant positive economic impact returning salmon have on the economy of the Matanuska-Susitna Borough; and

WHEREAS, the Matanuska-Susitna Fish and Wildlife Commission has previously supported other genetic studies of Upper Cook Inlet salmon stocks; and

WHEREAS, previous genetic work has resulted in better fisheries management; and

WHEREAS, the need for more genetic research is needed to further improve fisheries management of mixed stock salmon in Upper Cook Inlet.

NOW, THEREFORE, BE IT RESOLVED, that the Matanuska-Susitna Fish and Wildlife Commission expresses its support for the Alaska Department of Fish and Game's grant proposal to ~~study~~conduct the mixed stock analysis of 2019 Upper Cook Inlet coho salmon harvest

samples. Furthermore, the Matanuska-Susitna Fish and Wildlife Commission believes this project will result in better fisheries management that will benefit both salmon conservation and the people who enjoy this resource in the Matanuska-Susitna Borough.

ADOPTED by the Matanuska-Susitna Fish and Wildlife Commission  
this \_\_\_\_ day of October, 2020.

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MIKE WOOD, Chair

ATTEST:

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TED EISCHEID, Staff

(SEAL)

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**CHAIRPERSON**

Mike Wood

**VICE CHAIR**

Howard Delo

**MSB STAFF**

Ted Eischeid



**BOARD MEMBERS**

Amber Allen

Tam Boeve

Robert Chlupach

Andy Couch

Larry Engel

Tim Hale

*Ex officio:* Bruce Knowles

**FISH AND WILDLIFE COMMISSION**

**Memorandum**

October 15, 2020

**To:** National Fish and Wildlife Foundation

**Subject:** Matanuska-Susitna Borough Fish and Wildlife Commission support letter for the mixed stock analysis of 2019 Upper Cook Inlet coho salmon harvest samples

To whom it may concern,

The Matanuska-Susitna (Mat-Su) Borough Fish and Wildlife Commission (FWC) supports the Alaska Department of Fish and Game (ADF&G), Gene Conservation Lab’s proposal to genetically analyze coho salmon samples collected from the Upper Cook Inlet (UCI) commercial fishery in 2019. Flowing waters of the Mat-Su Borough contain some to the most productive coho salmon habitat in Cook Inlet. Each year, coho salmon returning to Mat-Su streams are harvested by the UCI commercial fishery, lowering the number fish available for sport harvest and reproduction. However, until recently the spatial and temporal harvest of individual coho salmon stocks in the commercial fishery has been unknown, limiting fishery manager’s ability to make informed management decisions to reduce the harvest of Mat-Su coho salmon stocks in season.

The Mat-Su Borough FWC has been very supportive of the Gene Conservation Lab’s past genetic work in Cook Inlet, including the ADF&G’s recent work with coho salmon. The borough funded a 3-year project to increase representation of the Mat-Su coho salmon populations in the Cook Inlet genetic baseline. This effort, which resulted in an updated baseline that now allows for proportional estimates in fishery mixtures individual mixed stock analysis estimates for the westside Cook Inlet, Yentna River, Susitna River, Deshka River, and Jim Creek coho ~~salmon~~ salmon stocks. The borough also funded the reanalysis of 4 years (2013-2016) of commercial fishery samples using the updated baseline ~~and finer scale stock groupings~~. The stock-specific harvest estimates for Susitna and Yentna ~~rivers~~ stocks, along with in-river sport harvest and abundance estimates for Susitna (2013-2015) and Yentna (2014 and 2015) rRivers (2014 and 2015), allowed the department to estimate exploitation rates for those rivers. The results from the reanalysis were published in the fall of 2019 to make them available prior to the Alaska Board

of Fisheries UCI Finfish meeting in February of 2020. These data were provided to help the board decide whether to accept or reject proposed regulatory changes to the UCI commercial fishery. We applaud this kind of targeted science that informs and benefits scientific-based fisheries management. Page 24

The proposed project will be a continuation of the ADF&G's efforts to better understand annual variation coho salmon stock compositions in the fishery in order to help inform management decisions and ~~will~~ provide for an additional estimate of overall run size for the Susitna River. Please take the Mat-Su Borough FWC's support into consideration when deciding whether to fund this proposed project.

Thank you.

---

Mike Wood, Chair

DATE- 28 September 2020

RE: Planning Doc/Draft Questions for Annual ADFG Fisheries Update

**FWC Preferred Dates**

AC moved we offer ADFG the following dates for a special fishery season 2020 update meeting: **Nov. 18**, Dec. 9, 10, or 16; LE seconded; Motion passed unanimously.

**ADFG Preferred Dates**

**Nov. 18**

**Location/Timing:** Assembly Chambers.

**Tentative Timing for FWC consideration:** 1-4 PM.

**DRAFT Questions (max. 2/FWC member by October 8<sup>th</sup>)**

1. Bruce Knowles:

a. ***What Option do you have to keep the legislators informed of fisheries management decisions/actions?*** I talked with a number of them at a candidates fund raiser the other evening and none were aware of the problem with the Pitman Robinson or Dingle - Johnson funding. Just an example.

b. 2020 10 6 2020 Numbers of salmon returning Shelikof Strait

During the late 1990s negotiation between the Cook Inlet Drifter and Kodiak commercial fishing groups, discussed numbers of one million additional sockeye salmon alone, not counting king, Coho, Pink and chum salmon that would be heading to Cook Inlet streams. This year's low returns does not reflect positively on the new management strategies implemented by the Board of Fish at the Kodiak meeting. ***What were the departments expectations for increased number numbers of salmon that would return to Chignik, Kodiak and Cook Inlet streams and what are your expectations 2021 and later? What are the dept. estimates for the Shelikof Strait salmon fisheries?***

2. Tam Boeve:

*No Questions*

3. Bob Chlupach

a. To quote, "One puzzling aspect is that the new recommended escapement goals don't appear to be related to the original goals for each system contained in that sub-basin. Also, several areas are being downgraded from having a biological escapement goal, BEG, to having a sustainable escapement goal, SEG."

***Is the BEG and SEG still being used?***

***At what point does the department quit depending on estimations and model tweaking and establishing model projections from boots on the ground hard core data?***

b. ***How did this year's return of King salmon fit, as compared to prior projections per the four sub-basin strategy; Yentna, Deshka, Talkeetna, and Eastside Susitna Rivers? Same question, but, drainage by drainage management basis?***

4. Larry Engel:

Historically fewer than 10% of the Kenai River sockeye salmon entered the river in August. However, during the period 2014 -2019 approximately 46% of run arrived in August. This year 62% of the Kenai River sockeye arrived in August (nearly 500,000 fish during a four day period in mid August).

a. ***Does this change in entry pattern impact management of the commercial fishery? If so please identify adjustments to management.***

b. ***Have you considered extending the Anchor Point off-shore test fishery into August to better accommodate this later entry pattern?***

5. Howard Delo:

A phrase I used when working for the ADF&G, Sport Fish Access Program went: "Fishing is fun, but only if you can get to the water!"

a. ***What projects and actions are being pursued by the department to improve angler access to the Mat-Su's rivers and lakes?***

b. ***What about maintenance of existing facilities? Why has the boat launch area of Susitna Landing not been dredged for nearly four years, resulting in a silted in launch area only accessible to smaller and shallower draft boats?***

Context: I tried to get out on the Kashwitna River this past silver salmon season and was barely able to get out of the launch, after about a half-dozen tries, because of the silt conditions. I was using a 20-foot Thunder Jet inboard, which is a heavy boat. I have accessed the Kashwitna in years past through this launch with no problem whatsoever.

After retrieving the boat back onto its trailer (I never did get to fish), I spoke with the concession operator about the situation. He told me he had been unable to find a contractor who met permit requirements to dredge the launch and that the cost would be around \$16,000 to dredge it annually. He went on to say that he only made about \$1600 per year on boat launch fees.

I didn't see any "larger" boats on site that day, either sitting on trailers or on the river fishing, other than my own. Perhaps the small revenue for launching was because the boats sized to run the Susitna Drainage (like mine) could not access the river from this site.

The state used to cover the cost of annual dredging at Susitna Landing as a service to the anglers using the site to access the Susitna Drainage to fish. Why did that change? When will the launch finally be dredged?

I cannot use this site until the launch is adequately dredged to allow larger, inboard engine boat access.

6. Amber Allen

a. *What is our King Season going to look like next year?*

7. Mike Wood

a. *How will ADFG continue to manage sockeye returns to Larson Creek?*

8. Andy Couch

a. There are several objectives to commercial management of salmon stocks within the Northern District of Upper Cook inlet, ***please prioritize the following eight objectives so the public can better understand ADF&G management actions, using a #1 for the highest priority*** *Feel free to provide insight as to Department priorities and direction provided by the Board of Fisheries at the 2020 Upper Cook Inlet Board of Fisheries meeting.*

- A. Attainment of each coho salmon escapement range minimum level.
- B. Attainment of each Northern sockeye salmon escapement range minimum level
- C. Attainment of the mid-point of each Department established Northern Cook Inlet sockeye and coho salmon escapement range
- D. Staying within the upper bound of one or more Northern Cook Inlet sockeye salmon escapement range(s)
- E. Providing shared sockeye, chum, and pink salmon harvest opportunities in Northern Cook Inlet waters / drainages for commercial and inriver users,
- F. Minimizing Northern District commercial coho harvest during July.
- G. Providing reasonable coho salmon sport and guided sport harvest opportunities at Little Susitna River, Deshka River, Fish Creek, Jim Creek
- H. Maximizing Northern District commercial salmon harvests during the first week of August.

b. During 4 of the past 5 years (including 202) the conservative sport and guided sport coho salmon fishery on the Little Susitna River has had to be restricted and or closed in efforts to attain the minimum coho salmon escapement level. During the past two years the Larson Creek sport sockeye salmon fishery had to be closed inseason in efforts to attain the minimum sockeye salmon escapement level, and despite those sport closures

the Larson Creek minimum sockeye salmon escapement level was still not attained in either 2019 or 2020. *How does the Department plan to adjust commercial salmon management in Northern Cook Inlet to address these ongoing issues?*

.

9. Tim Hale (just added to FWC on 10/6/2020)  
*No questions.*

## October 14 Joint Assembly Meeting

1. Assembly members my names is Larry Engel.

A. I am here today to acquaint you with the Mat Su Fish and Wildlife Comm. (which I am a member) and to briefly touch on a few of our recent activities and achievements. After hearing this discussion we are hopeful that the Municipality might consider creating a similar fish and wildlife group to represent the residents of Anchorage.

a. **Before going further, however, I would like to bring to your attention the booklet titled-- *It Takes Fish to Make Fish*.** I will be referring to pages in that booklet during this discussion.

B. Our Comm. consists of 8 volunteers ,including two assembly members. Members are appointed by the mayor and confirmed by the Assembly for a three year term.

C. The Comm. was formed in 2007 to represent the interests of the Borough in the conservation and allocation of fish, wildlife and supporting habitat.

D. We participate in such "arenas" as the Boards of Fisheries and Game, and the North

Pacific Fishery Management Council (NPFMC). And on a regular basis keep our Assembly, local legislators and general public informed about fish and wildlife issues. We hold public meeting at least monthly thorough out the winter. See **Insert 1** in the booklet

2. An increased awareness of the social, economic and environmental importance of the Boroughs fish and wildlife resources were key factors in the formulation of the Comm.

A. In 2007 , for example, the Alaska Dept. of Fish and Game (ADFG) released a report that estimated sport fish spending was 1.4 billion dollars statewide with \$733million here in Cook Inlet.

B. Many borough residents further believe the varied social benefits of fish and wildlife exceed economic values---“ these resources are an important reason we live in Alaska”. And a growing number of borough residents want to have a significant say in the conservation and allocation of fish and wildlife resources.

3. Since I only have a few minutes to familiarize you with the Commissions activities and goals. – I will touch briefly on a couple of important salmon issues that we are working on. A more detailed

discussion of our activities can be found in the our booklet.

A. Cook Inlet supports a complex mixed stock commercial salmon fishery that consist of approximately 1,300 permit holders. Annually about 75% of the Inlet's salmon harvest is taken by the commercial fishery.

B. Commercial management problems are created by overlapping run timing and great differences in stock abundance and productivity. The inlets funnel shape adds further to the problem of achieving adequate escapement of northern bound salmon. **See Insert 2** of the booklet.

C. The mixed stock commercial fishery has and continues to be managed primarily to maximize the harvest of large and very productive Kenai and Kasilof River sockeye stocks –often to the detriment of less numerous and productive northern bound salmon. **See page 15** of the booklet.

a. The naturally less productive Susitna sockeye produce 1.5 returning offspring per spawner whereas Kenai sockeye produce 4.5 fish per spawner. Obviously Susitna sockeye can not sustain the same high harvest rate as very

productive Kenai stock. **Page 14** shows difference habitat for the two stocks

D. Many Mat Su borough residents believe the health of northern salmon runs and fisheries are being placed at risk by overfishing in the 125 mile long mixed stock commercial fishery.

4. The Mat-Su Fish and Wildlife Comm. believes the establishment of discrete harvest zones, that focus on abundant and valuable Kenai and Kasilof sockeye, are necessary to insure the sustainability of northern salmon .

A. **Insert 3** shows how Bristol Bay, the worlds most successful salmon fishery, utilizes discrete harvest zones. Recently the Comm. has successfully encouraged the Alaska Board of Fisheries (BOF) to adopt discrete harvest practices for Cook Inlet.

B. A conservation corridor concept that features the use of discrete harvest zones is now in place for Cook Inlet.( **See cover page of booklet**). This new management practice reduces but does not totally eliminate the mixed stock harvest. Future genetic information should be helpful in improving discrete management. **Page 11** of the booklet shows how Kenai sockeye presently triggers the use of the inshore harvest zones.

5. The federal take over of the management of the Cook Inlet commercial fishery is an additional issue of considerable concern to our Comm.

A. Two Cook Inlet commercial fishing groups recently filed complaints that the State's management of salmon in the federal waters of Cook Inlet is not in compliance with federal standards (Magnuson-Stevens Act). The Ninth Circuit Court of Appeals agreed and mandated the off-shore (federal) waters salmon management plan for the inlet be rewritten.

B. The NPFMC recently formed a committee that included stakeholders from the affected area to help develop options for required plan amendments. The Mat Su Comm. requested a presence on the stakeholder committee but only individuals with commercial interests were chosen.

C. The Comm. position regarding this issue is simple---to the maximum extent possible, continue to delegate management authority over Cook Inlet federal waters to the State of Alaska and minimize federal intrusion into the current management process. **See Insert 5** for a map of Cook Inlet federal waters. Increasing or restoring the mixed stock harvest in offshore waters would

seriously impact current management that features discrete stock inshore harvesting.

6. In closing, there is little question that the Mat-Su Fish and wildlife Comm. has become a will recognized and respected entity in the conservation an allocation of fish and wildlife. Our citizens now have a much loader voice in fish and wildlife issues. Hopefully some day we will have an opportunity to work collectively with a similar group that represent the Municipality of Anchorage. If any one would like more detailed information about our Comm. or our activities please let us know.

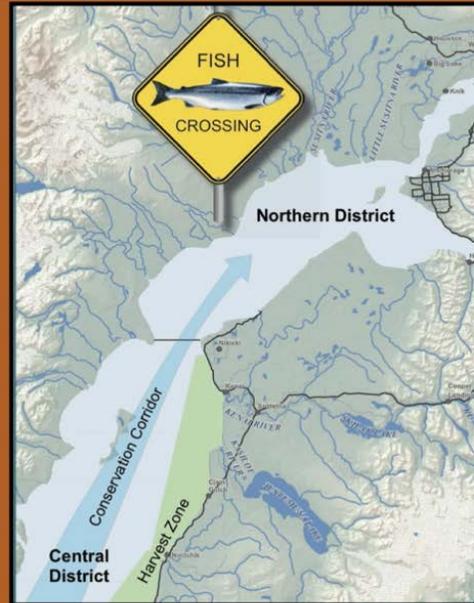
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To: Theodore Eischeid  
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[Screen Shot 2020-10-12 at 3.37.23 PM.png](#)  
[Screen Shot 2020-10-12 at 3.37.14 PM.png](#)  
[Screen Shot 2020-10-12 at 3.37.50 PM.png](#)

## Conservation Corridor Depends on Scientific Research

- Migration patterns and timing
- Escapement goals
- Exploitation rate
- Return per spawner

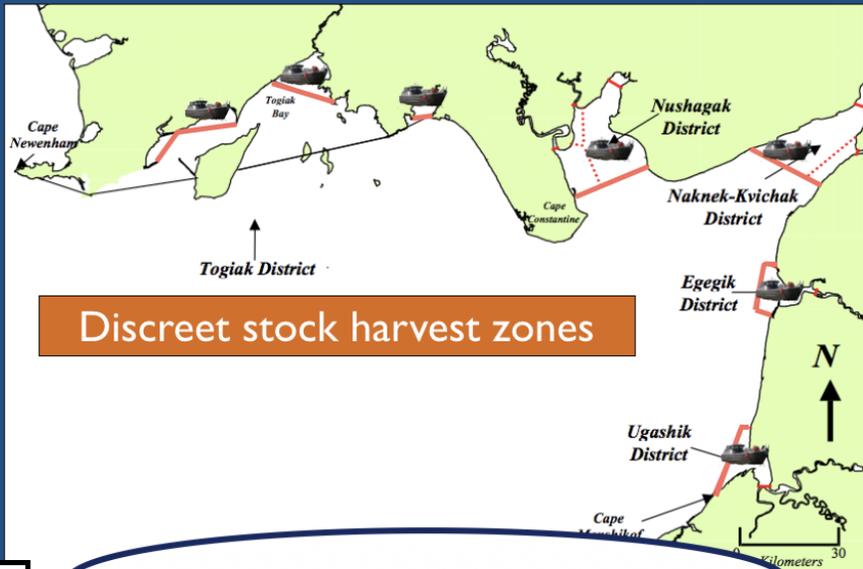


Insert 4



# Just Like Bristol Bay Fisheries

Commercial fishery subdistricts

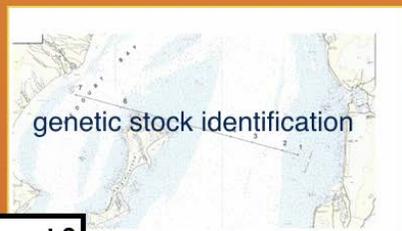


Insert 3

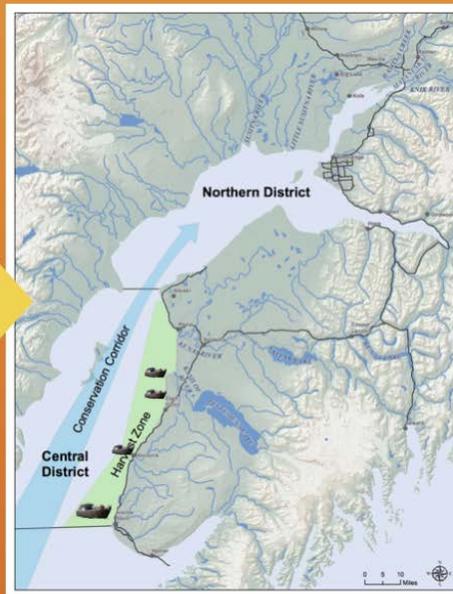
World's most successful salmon fishery

## WHERE AND WHEN

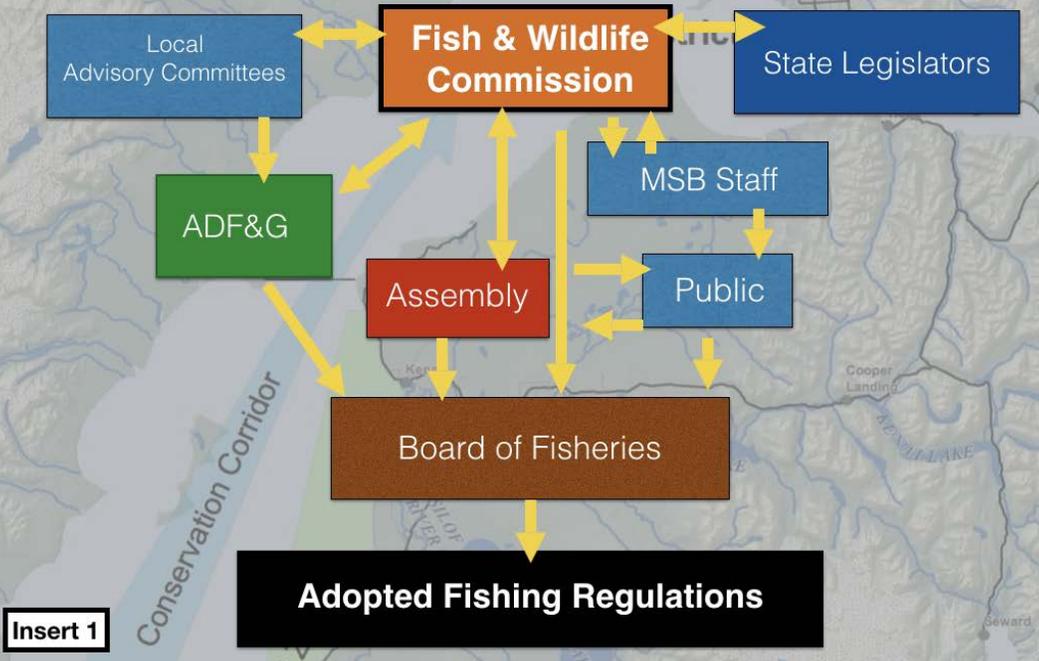
### Salmon Run is Critical in Mixed Stock Fishery



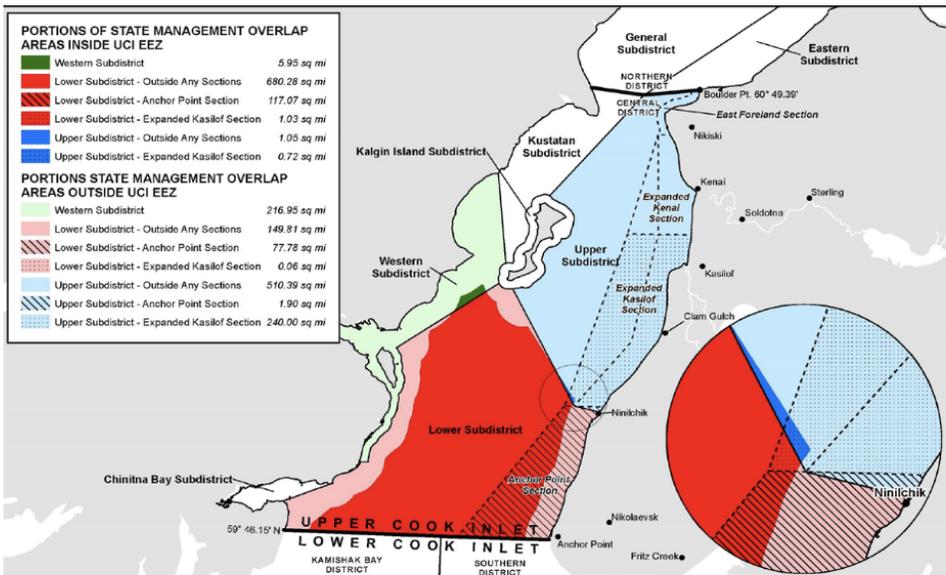
Insert 2



### Fish Commission Provides Increased Transparency In Regulation Process



Insert 1



Insert 5