

Alaska Management 2018 Review and Considerations

Presented by:

Holly Carroll

ADF&G – Yukon River Summer Season management Biologist

YRP meeting, Anchorage, AK, December 2018





2018 Management and Inseason Assessment Review

Team Outreach

- Meetings held in season: Alakanuk, Kotlik, Tanana, Rampart and Eagle
- Visits funded by TCC: Grayling, Anvik, Shageluk, Holy Cross, Russian mission
- Hosted Educational Exchange from Canada

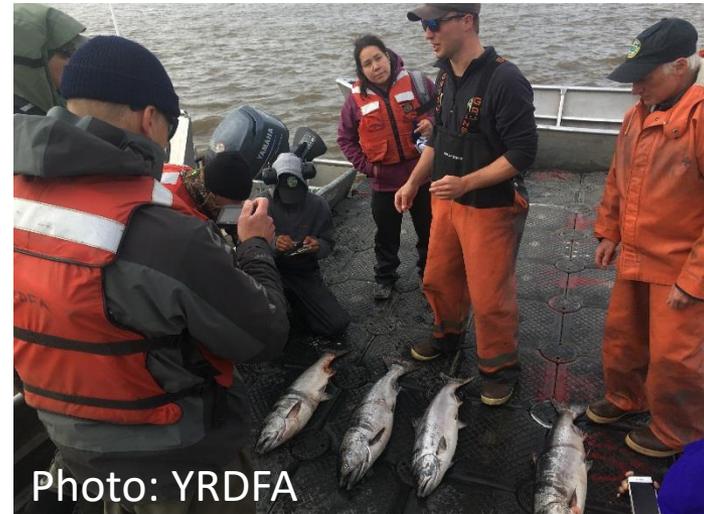


Photo: YRDFA

2018 Pre-season Chinook Outlook

- Chinook outlook: 71,000 – 103,000 Canadian-origin
- Drainage-wide: 173,000 – 251,000 Chinook



2018 Potential Allowable Catch Ranges

Canadian-Origin Chinook

JTC forecast : **71,000- 103,000**

Escapement Goal (IMEG): 42,500 – 55,000

	From	To
Total Allowable Catch	16,000	60,500
Canadian Allowable Catch (23% harvest share)	3,700	14,000
US Allowable Catch (77% harvest share)	12,300	47,000

2017 US harvest of Canadian-origin Chinook 21,000

Conservative management approach with potential for subsistence harvest similar to 2017

*numbers rounded to nearest 100

2018 Summer Chum Outlook

- Run outlook: 2.5 M
- Similar to last year's run size
- Sufficient for escapement goals and subsistence needs
- Potential surplus for commercial harvest of up to 1.4M fish
- Harvest will be affected by Chinook run strength

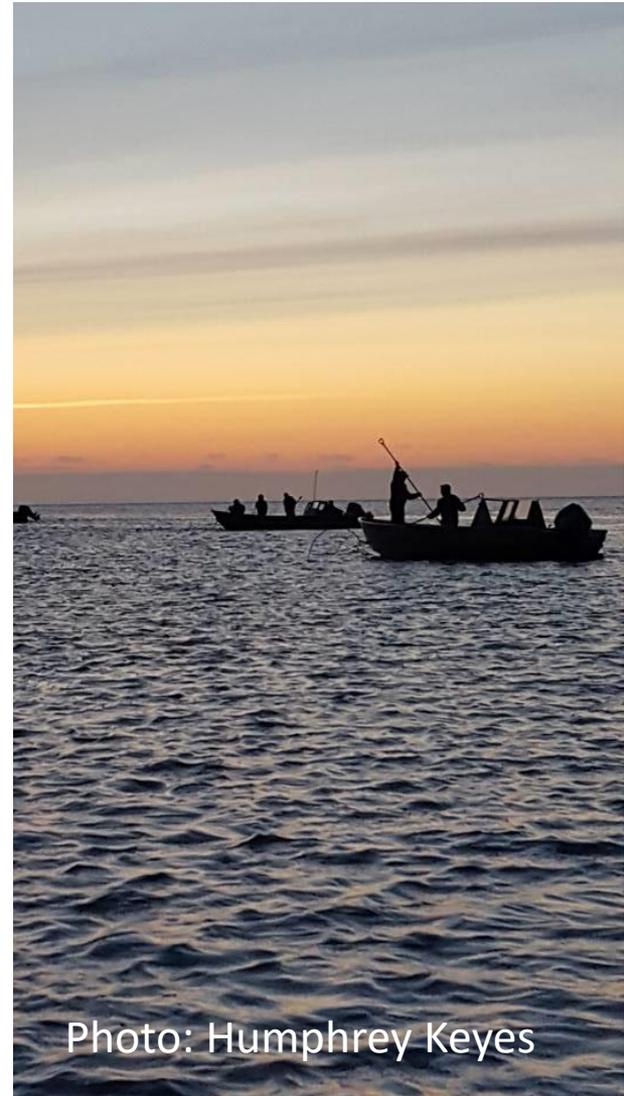


Photo: Humphrey Keyes

2018 Preseason Planning Meeting

An all-day meeting with fishermen, where we can share data, outlook and objectives. Information shared:

- Canadian-origin outlook and the need to provide a harvest share for Canada
- The outlook from Bering Sea juvenile research indicating need for continued conservation and harvest restrictions
- Data addressing concerns such as customary trade and changes to gear types through regulatory process
- Generation of ideas of ways fishermen can take conservative actions on their own- release of older fish, e.g. shift harvest to other species

2018 Preseason Planning Meeting

Fishermen work together and provide feedback that shapes management strategy and creates “buy-in”

- Need to allow Chinook-directed subsistence openings if abundance warrants
- Offer Chinook opportunity earlier in the run
- Less short/surgical openings, use reduced regulatory schedule and give plenty of notice
- Traditional knowledge shared with agency staff

2018 Inseason Run Assessment

Lower Yukon Test Fishery

- Started early in anticipation of early run
- high debris loads likely affected CPUE for first two pulses
- Fishermen reported challenging fishing conditions
- Relied more on Pilot Station sonar which was operating well and experiencing less problems with test fishery



2018 Subsistence Management Actions

Early season:

- Reduced regulatory subsistence fishing schedule (half of regulatory schedule in each district)
- Fishing periods cancelled and/or reduced to 6-inch gillnets (once first pulse detected at Pilot)

Once abundance indicated run above lower end of forecast:

- Some periods open with 7.5-inch to allow limited Chinook harvest with the exception of District 5

Once run timing indicated majority of run had passed:

- Regulatory schedule with 7.5-inch gillnets

2018 Summer Chum Commercial Management

- Use of selective gear for most of the season, but catch efficiency was low due to high water, debris, so longer periods were offered.
- Delayed use of 6-inch and smaller mesh gillnets until July (95% of Chinook had passed).
- No sale of Chinook allowed



Post Season Assessment

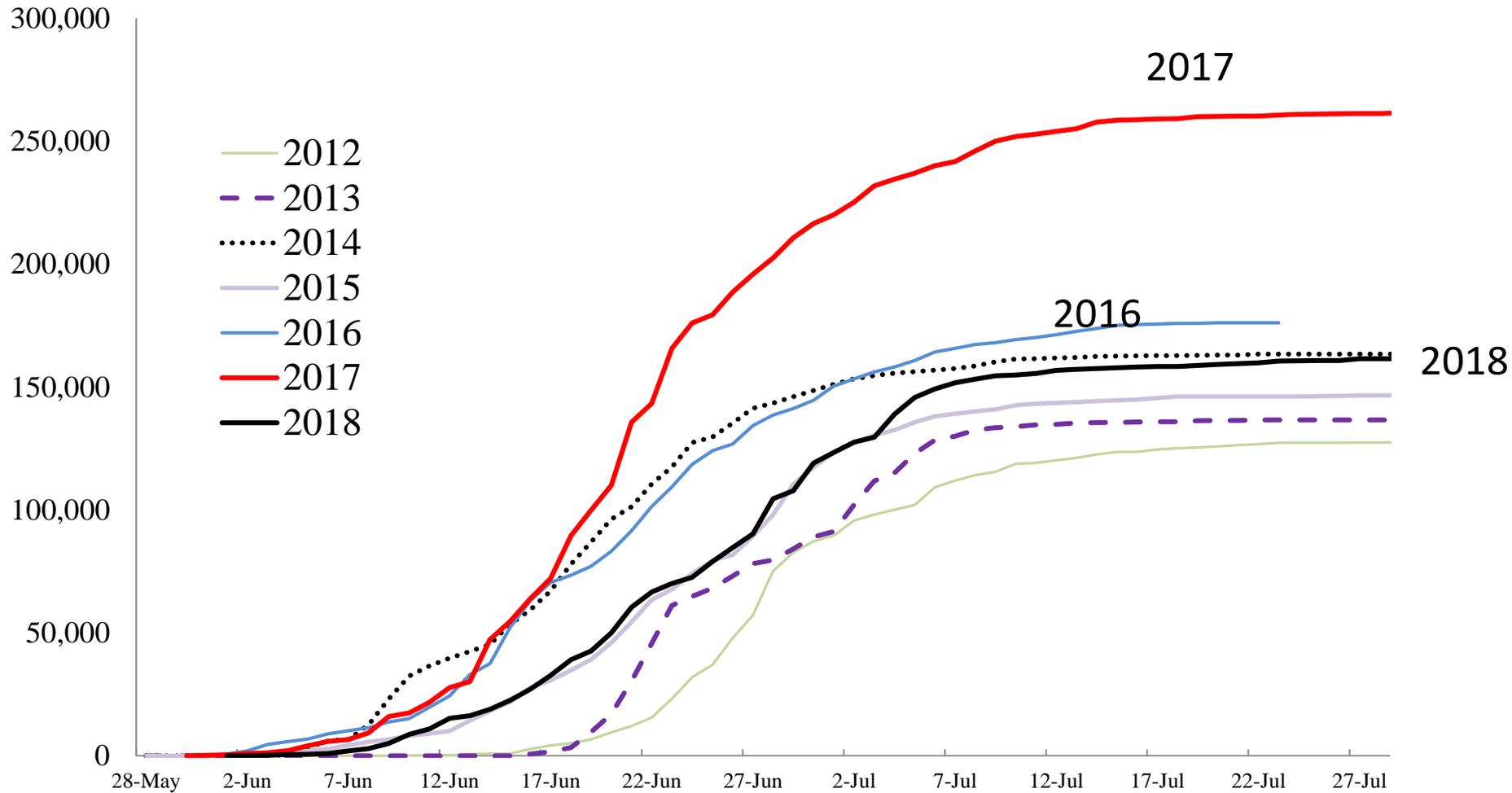


2018 Pilot Station Sonar

- Chinook estimate : 161,800
- C.I. range: 137,300 – 186,400
- Summer Chum: 1.6 million
- C.I. range: 1.5 – 1.7 million
- Genetic Stock ID in test fishery(Funded by YRP R&E) sampled approximately 553 Chinook
- Chinook run timing at Pilot was about 2 days later than average, and at Eagle 2 days later than average



Cumulative Chinook Passage at Pilot Station Sonar



Mainstem Summer Chum Commercial Harvest

Gear	Summer Chum Harvested	Chinook Released Alive	Chinook Kept for Personal Use
Dip Net & Beach Seine and Y4 wheels (selective)	370,700	12,300	
Gillnet	202,600		3,100
Total	573,300		

(not including any salmon caught in Fall, or the Tanana River)

2018 Summer Chum Escapement

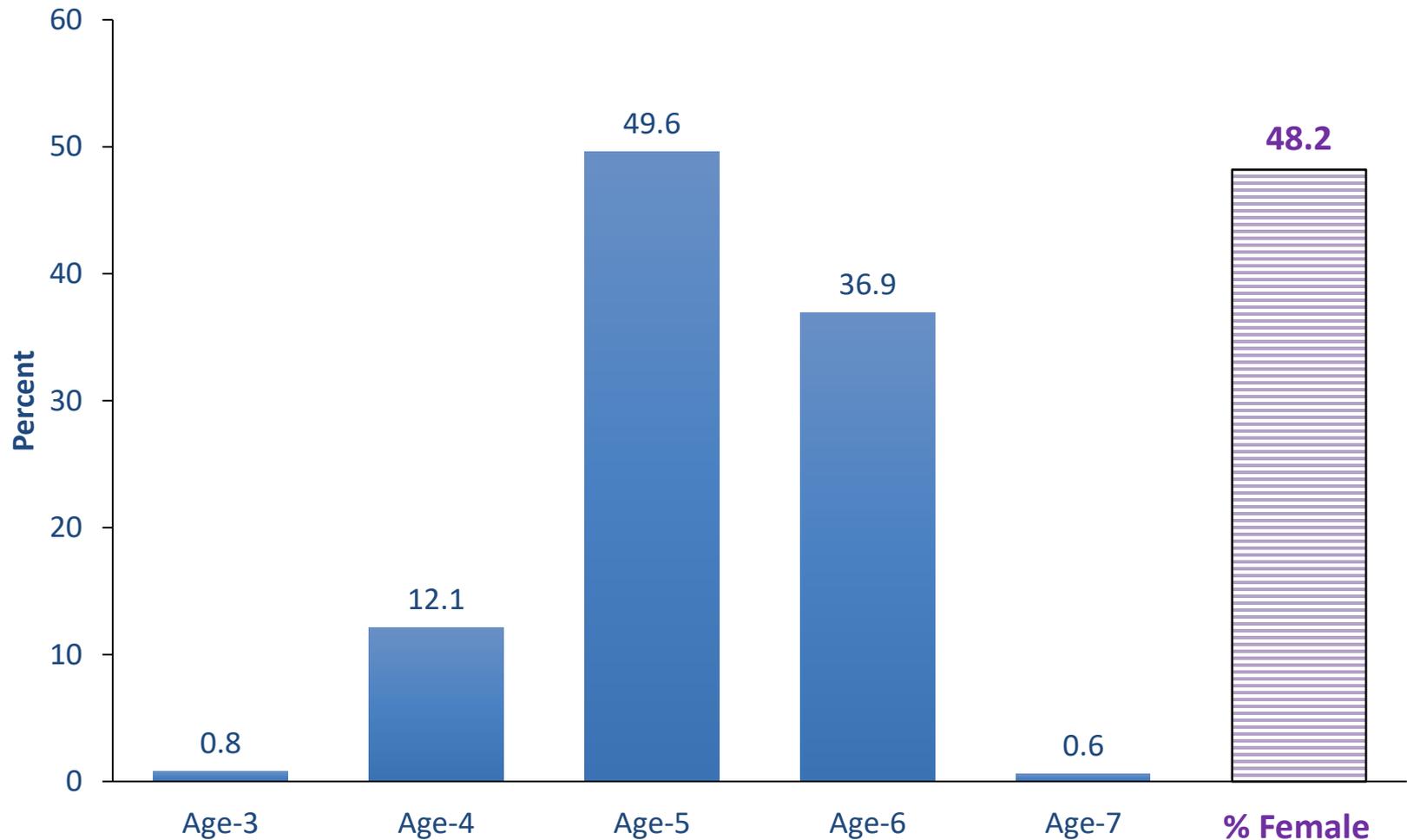
Escapement project	Current goal	2018 Estimate
EF Andreafsky River Weir	>40,000	36,300
Anvik River Sonar	350,000 – 750,000	305,000
Drainage-wide	500,000 – 1,200,000	~1.5 Million +

Mixed stock analysis indicates Lower summer chum stocks were weaker than normal, and the middle and Tanana stocks were stronger than average and possibly later than average

Chinook Age Composition

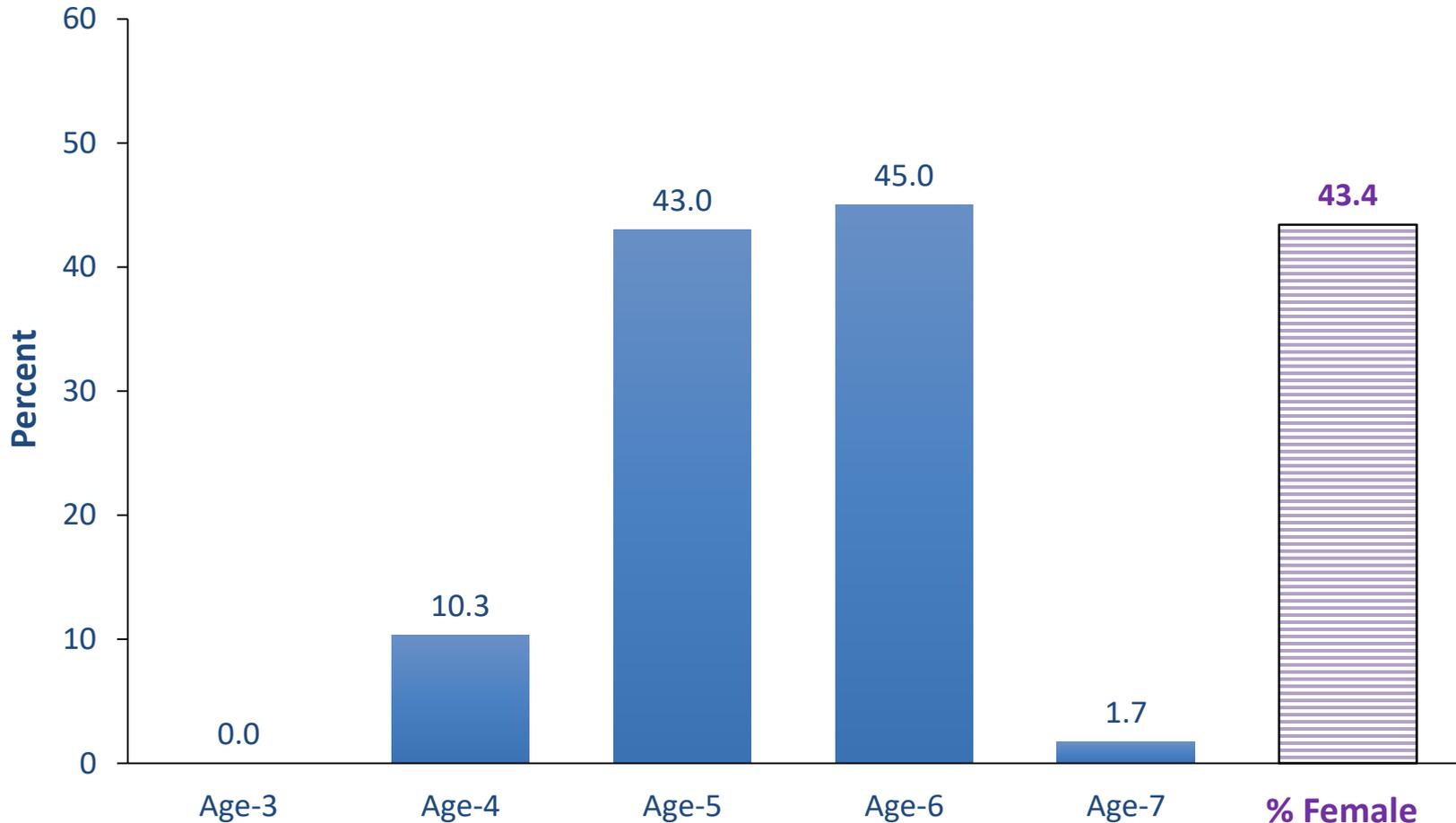


Chinook Age Composition Pilot Station



- Includes Lower River, Middle River, Upper US and Canadian stocks

Chinook Age Composition at Eagle Sonar



- Slightly above average female composition
- Chinook were about 11 mm smaller than 2005-2017 average length

2018 Chinook Escapement

Escapement project	Current Goal	2018 Estimate
EF Andreafsky River Weir	2,100 – 4,900	3,972
WF Andreafsky River Aerial	640 – 1,600	455
Anvik River Index Aerial	1,100 – 1,700	1,109
Nulato River Aerial	940 – 1,900	870
Chena River Tower	2,800 – 5,700	4,227*
Salcha River Tower	3,300 – 6,500	4,053*

* Preliminary inseason tower count expanded with sonar for missed days.

2018 Chinook Border Objective

Current IMEG

42,500 – 55,000

2018 Eagle Sonar Estimate

57,839

(43% ♀, ~ 24,900 ♀)

Border passage= sonar count, minus AK harvest above
e.g. 500-1,000

Pre-season Estimated Canadian **harvest share** (20-26%) TAC
e.g. 3,700 – 14,000

Border objective = Border passage required to meet IMEG range
and provide 20% -26% Canadian Harvest share
e.g. 46,200 - 69,000

Results to Come...

- Harvest estimates
- 2018 Canadian spawning escapement estimate
- 2018 Total Canadian-origin Chinook run
- Stock and age composition of Chinook subsistence harvest
- 2019 forecast

Stories from the river...



Holy Cross- Photo by Dave Walker

Cultural vibrancy

Stories from the river...

Changing practices

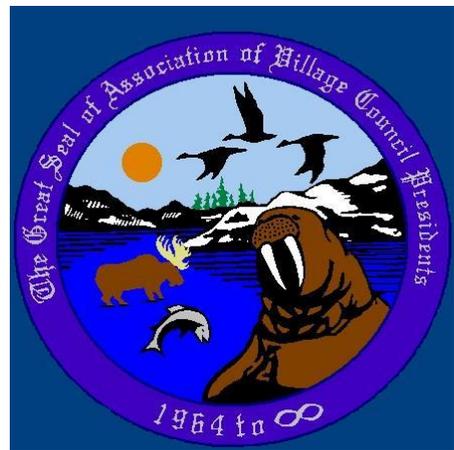


Stories from the river...



**Providing for the
whole community**

With gratitude to our fishermen, tribes and agencies for working together to sustain our salmon for the future



Questions?

