Southeast Region Stock of Concern and Action Plan Review



Andy Piston and Ed Jones

Oral Report RC - 3, Tab - 24

Written Reports:

Taku and King Salmon Rivers Chinook Salmon Stock Status and Action Plan – RC 4
Northern Southeast Outside Summer-run Chum Salmon Action Plan – RC 5
Hugh Smith Lake Action Plan – RC 6

Definition of Key Terms

Stock of Concern: Stock with a yield, management, or conservation concern.

Management Concern: Chronic inability, despite management measures, to meet escapement goals.

Chronic Inability: 4–5 year period.

Action Plan: Board and department develop goals and management actions to restore stocks to historical productivity.

Stock of Concern (SOC) Designation Process

What has happened:

- 1-Dept reviewed escapement goals.
- 2-Dept recommended SOC status.
- 3-Board reviewed and adopted SOC status.
- 4-Department drafted Action Plan.

What will happen:

- 1-Board and department will review Action Plan.
- 2-Board may take regulatory action.
- 3-Action Plan will be finalized by the board and implemented by the department.

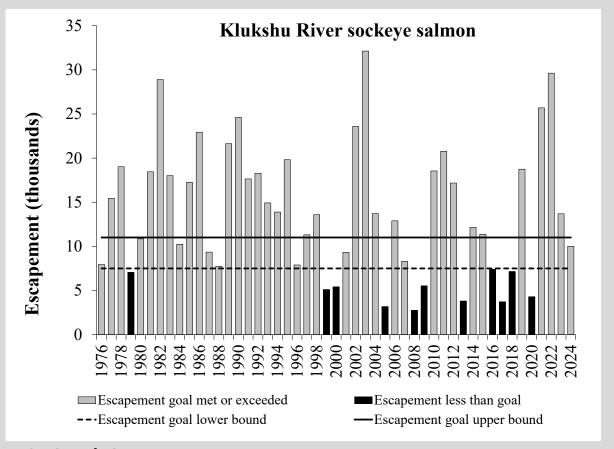
Stock Systems & Locations



- 5 existing SOCs continue
 - 4 king; 1 sockeye
- Delisted 4 existing SOCs
 - 3 king; 1 sockeye
- 2 recommended new SOCs
 - 1 sockeye; 1 chum

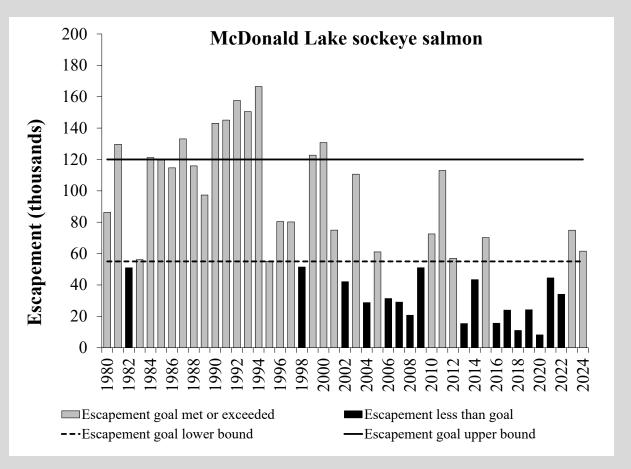
Klukshu River Sockeye Salmon Update

- Designated a stock of concern 2020 BOF work session.
- Delisted at the 2024 BOF work session.
- BEG: 7,500–11,000 fish.



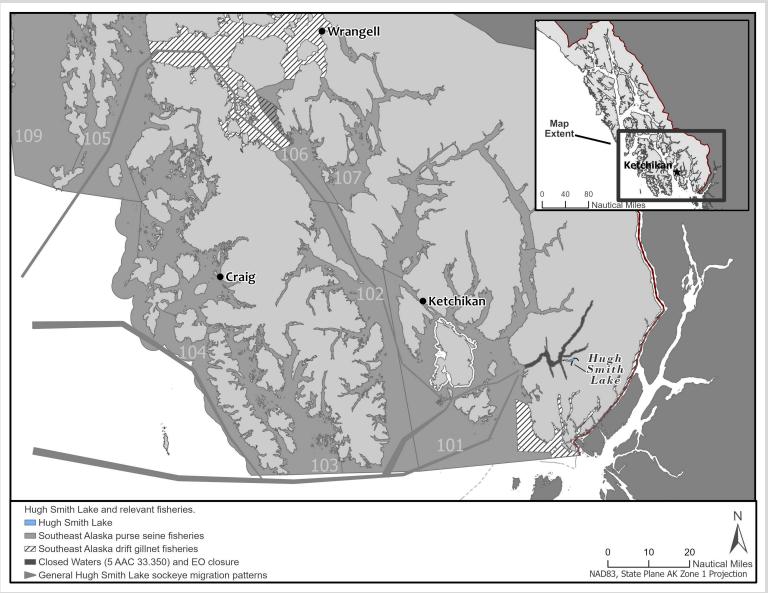
McDonald Lake Sockeye Salmon UPDATE

- Designated a stock of concern in 2018.
- SEG: 55,000–120,000 fish.



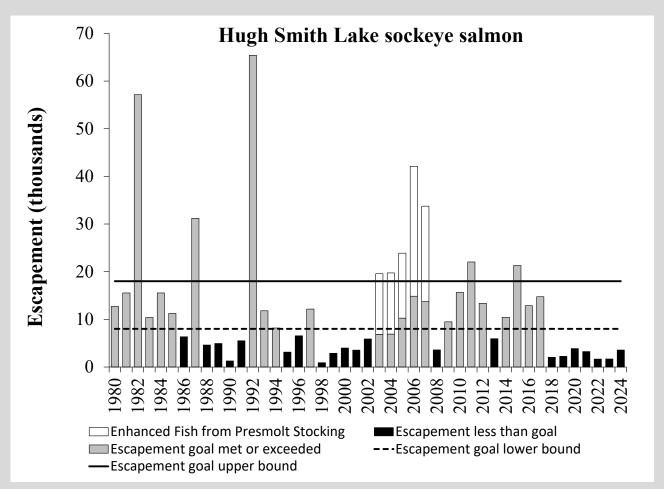


Hugh Smith Lake Sockeye Salmon



Hugh Smith Lake Sockeye Salmon

- Previous stock of management concern, 2003–2006.
- OEG: 8,000–18,000 fish.

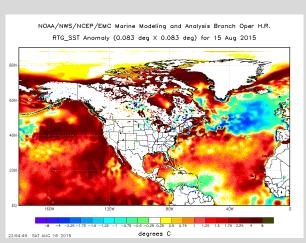


Hugh Smith Lake Sockeye Salmon

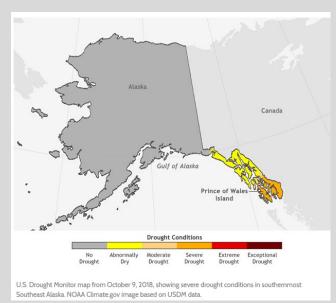
- The 2013 and following brood years had very poor survival.
- Marine heat wave from late fall 2013 through 2016, and 2018 and 2019, impacted many salmon stocks in SEAK.
- Drought conditions in 2018 negatively impacted small escapement that year.
- Reduced size at age and signs of poor growth observed on scales.

Improved smolt counts in 2023 and 2024, and jack count

in 2024.







Hugh Smith Lake Action Plan:

Action Plan Recommendation:

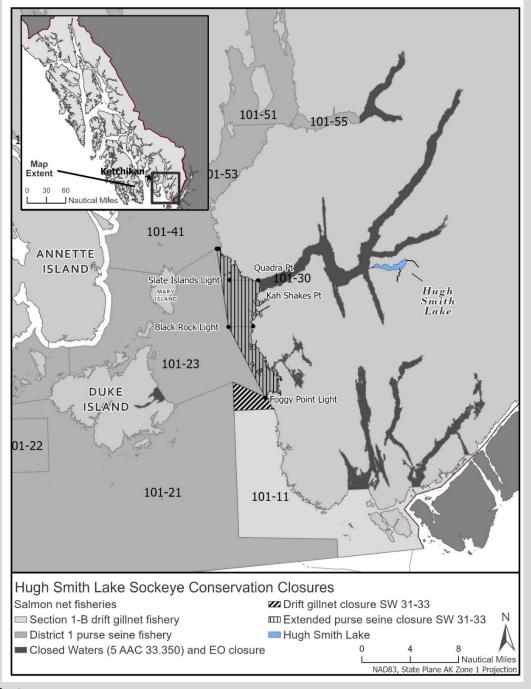
• 3 alternatives for reducing harvest related to the 2003 action plan.

May remove the SOC designation:

 When the OEG range is met or exceeded in 3 consecutive years or is met or exceeded in 4 of 6 consecutive years.

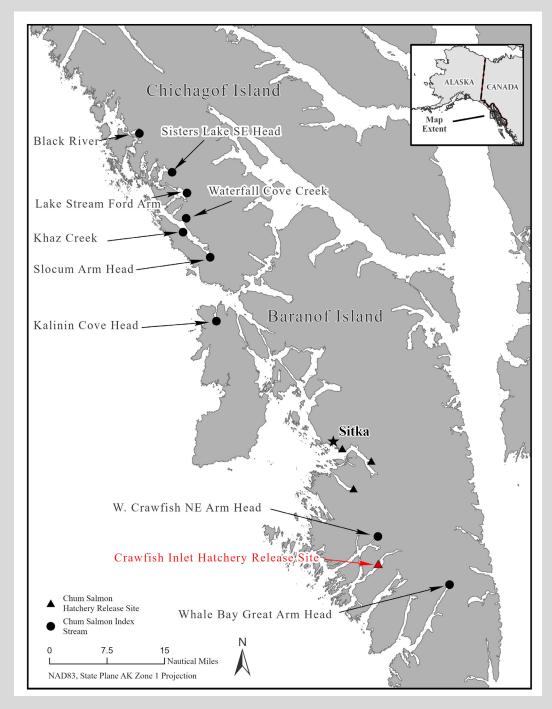
Regulatory proposals:

 Proposal 167: Increase the legal length of purse seine by 50 fathoms.

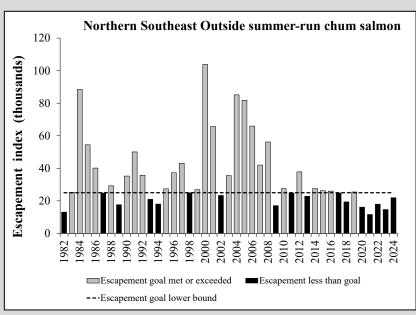




Northern
Southeast
Outside
Summer-run
Chum Salmon



Northern Southeast Outside summer-run chum salmon:



Northern Southeast Outside summer-run chum salmon

90

80

70

60

40

30

20

10

Escapement goal met or exceeded

—Escapement less than goal

---Escapement goal lower bound

Current escapement index and lower bound SEG

Revised escapement index and lower bound SEG

 Revised Index (19,500 fish): removed 1 index stream (West Crawfish NE Arm Head); recalculated SEG based on remaining 8 index streams.

Northern Southeast Outside Summerrun Chum Salmon Action Plan:

Action Plan Recommendation:

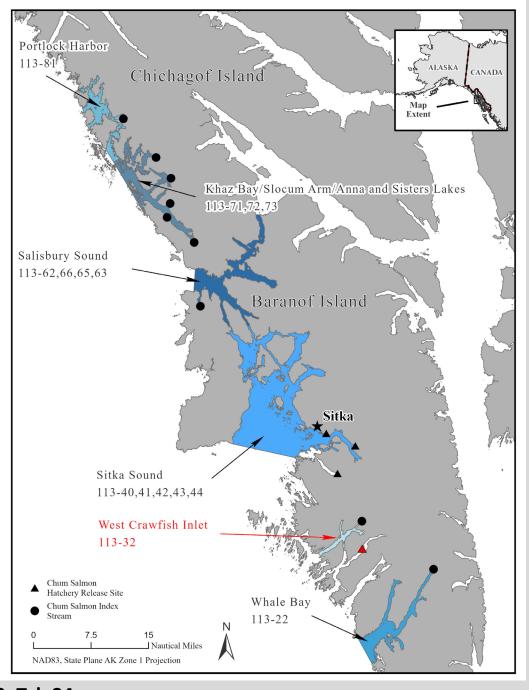
- Use EO authority to manage commercial fisheries based on overall salmon abundance and use time and area restrictions during statistical weeks 27–34 in District 113 (outside subdistricts) to reduce wild chum salmon harvest.
- Three options for Crawfish Inlet hatchery chum salmon releases.

May remove the SOC designation:

 When the BEG range is met or exceeded in 3 consecutive years or is met or exceeded in 4 of 6 consecutive years.

Regulatory proposals:

Proposal 167: Increase the legal length of purse seine by 50 fathoms.



King Salmon Stocks of Concern in Southeast Alaska

Alaska Board of Fisheries, Ketchikan, Alaska February 2025



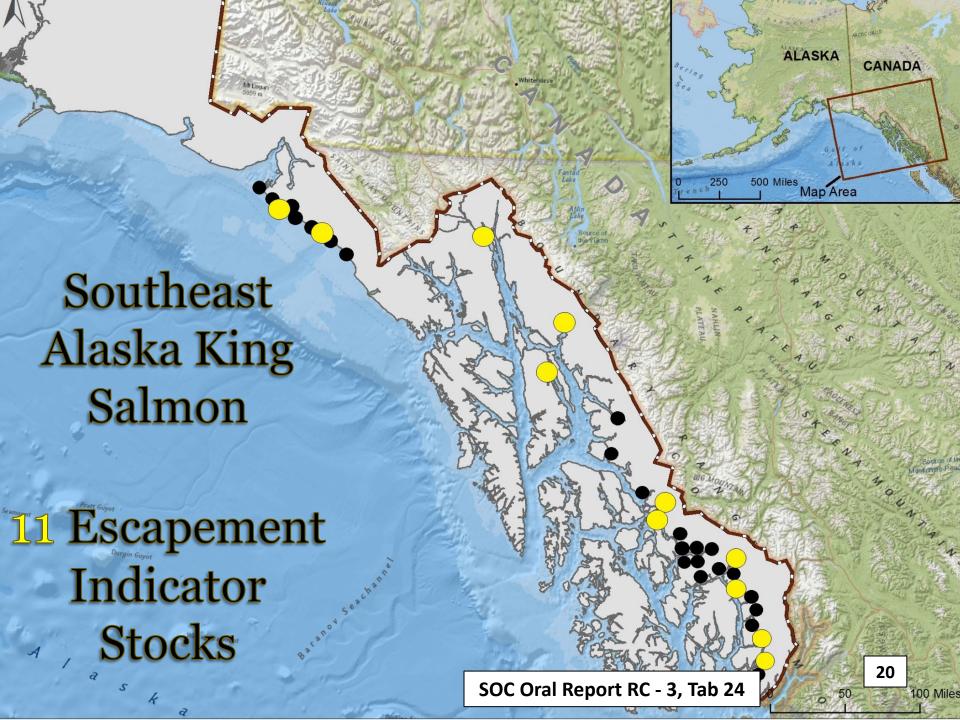




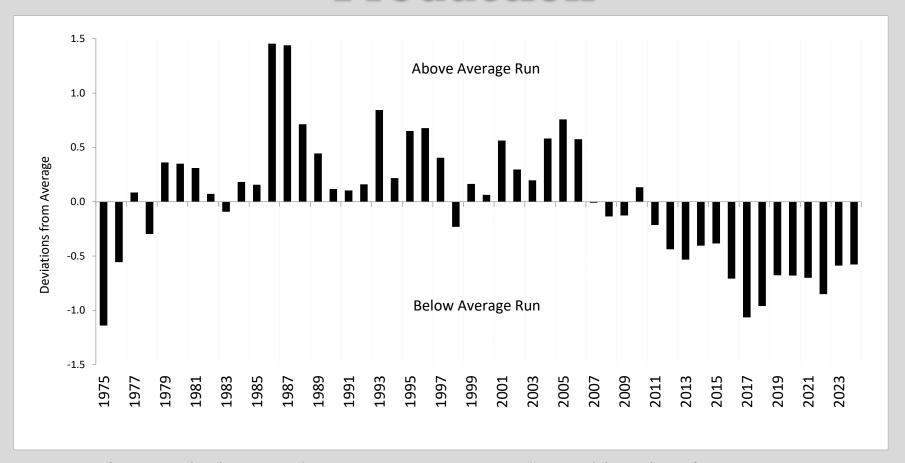


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Southeast Alaska King Salmon Production



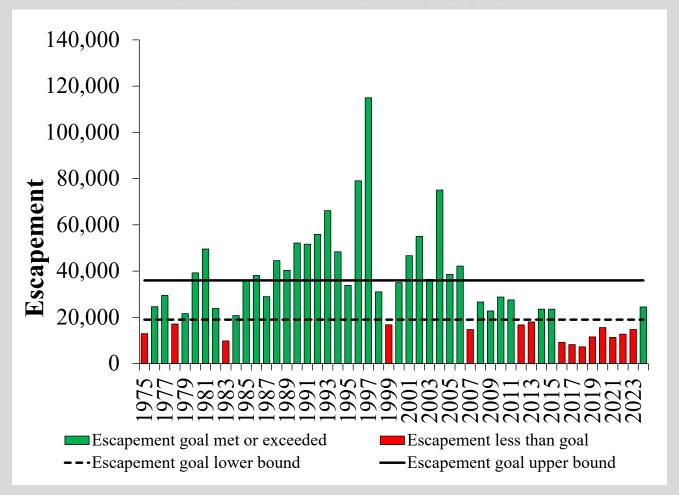
In Southeast Alaska, production is at unprecedented low levels (11 indicator stocks in Southeast Alaska)

Southeast Alaska King Salmon Stocks of Management Concern

- In 2017, <u>three</u> king salmon stocks were designated as a Stock of Management Concern (Chilkat, King Salmon, and Unuk).
- In 2020, <u>four</u> more king salmon stocks were added (Taku, Stikine, Andrew, and Chickamin).
- In 2024, three were delisted resulting in <u>four</u> Southeast king salmon stocks being designated as a Stock of Management Concern (Taku, King Salmon, Stikine, and Andrew).



Taku River Stock

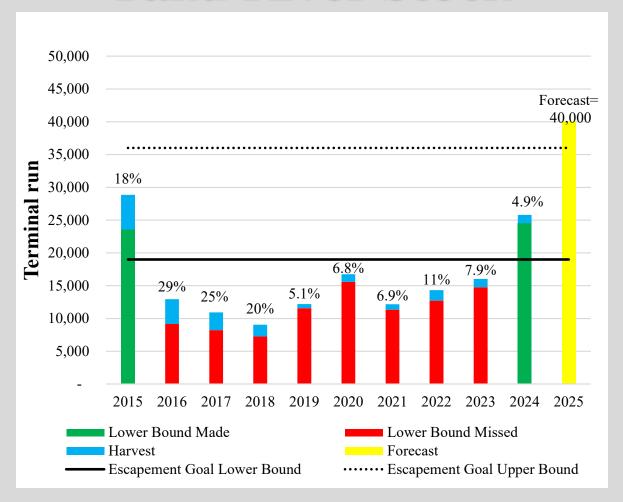


Designated a Stock of Management Concern in October 2020 and escapements have been less than the lower bound of the escapement goal in five of the most recent six years, 2019 to 2024.

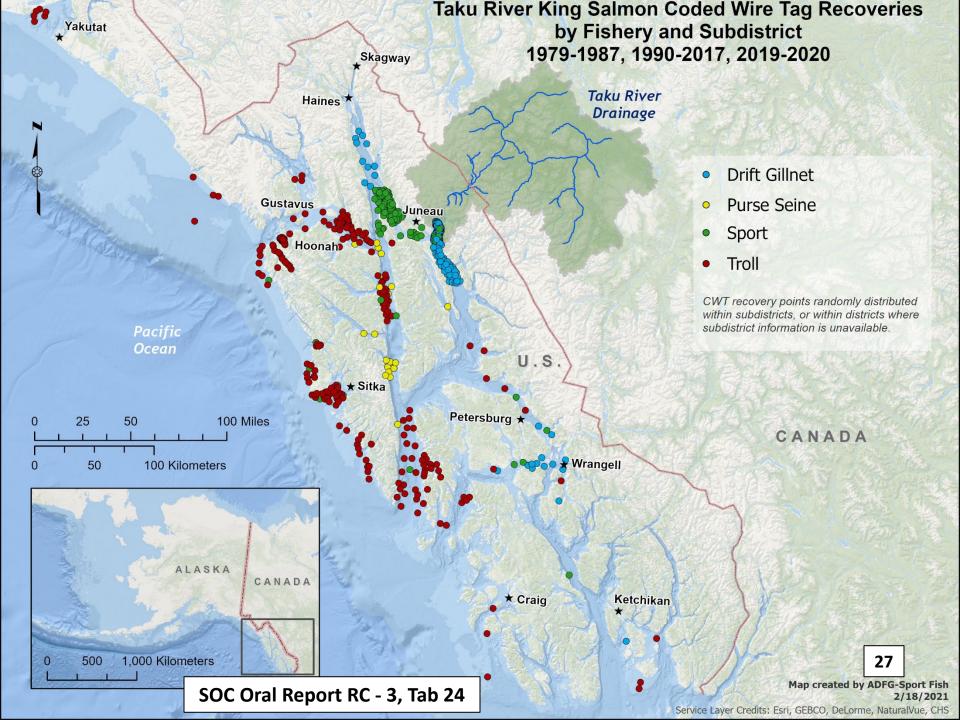
Taku River Stock

- > Taku River is near the town of Juneau
- Transboundary river stock
- Largest run of king salmon in Southeast Alaska
- Outside rearing stock and in Southeast are accessible to harvest March through July
- Standardized aerial observer counts date back to 1973; markrecapture preferred method
- > 1-4% of the spring smolt are marked and tagged
- Estimates of marine harvest, exploitation, smolt abundance, and marine survival
- Half the spawning escapement is inriver by third week of May

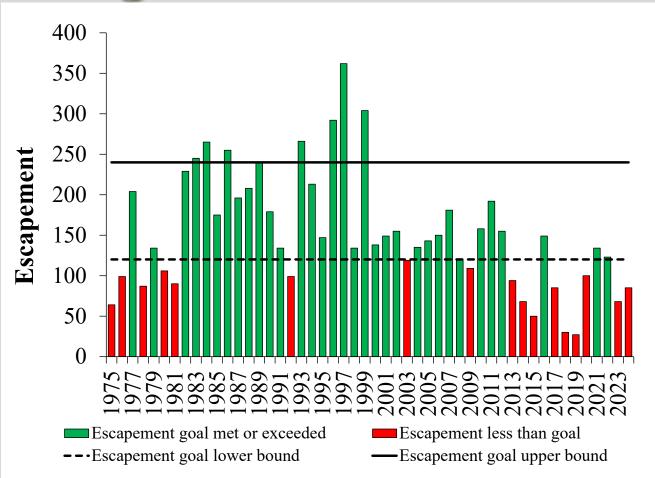
Taku River Stock



Harvest, escapement, and run of Taku River king salmon, 2015-2024, with the terminal run forecast for 2025. Harvest rate is shown as a percent for each year.



King Salmon River Stock

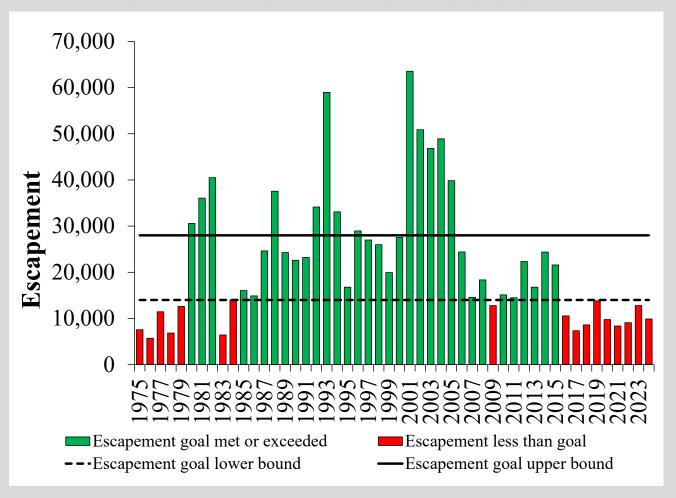


Designated a Stock of Management Concern in October 2017 and escapements have been less than goal in four of the most recent six years, 2019 to 2024.

King Salmon River Stock

- King Salmon River is located just south of Juneau on Admiralty Island
- Only island population in Southeast
- Inside rearing stock and accessible to harvest throughout the year
- Standardized observer counts date back to 1975 and a weir was operated from 1983 to 1992 to ground truth the observer counts
- Half the spawning escapement is inriver by the first week of July
- Smolt are not tagged so direct estimates of harvest are not available and nearby hatchery releases are used as surrogates

Stikine River Stock

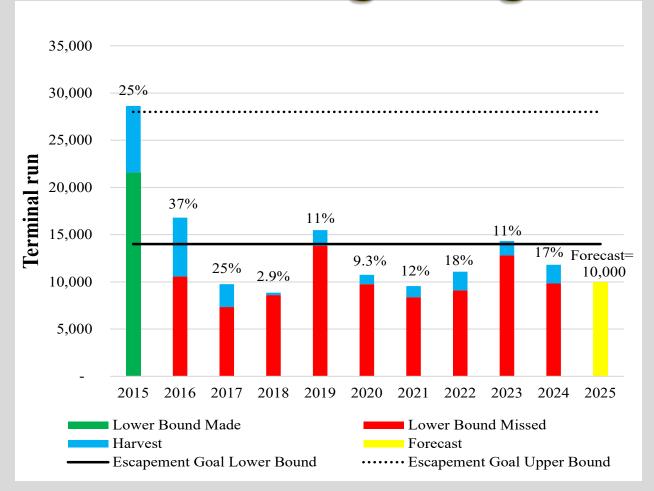


Designated a Stock of Management Concern in October 2020 and escapements have been less than goal in the six most recent years, 2019 to 2024.

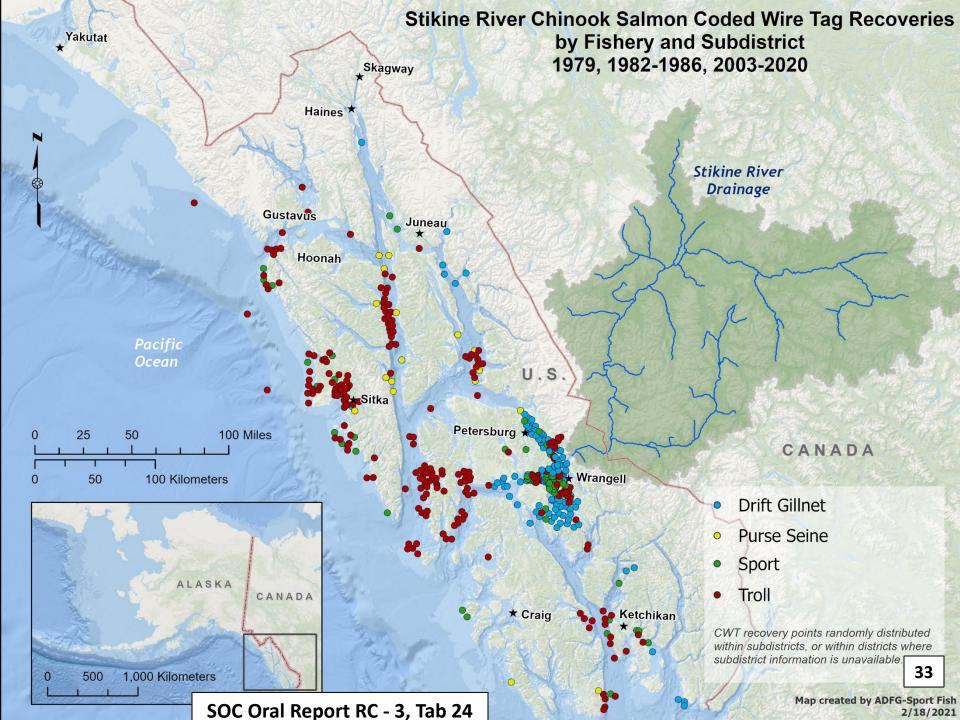
Stikine River King Salmon

- > The Stikine River is near the towns of Petersburg and Wrangell
- Transboundary river stock
- Second largest run in Southeast Alaska
- Outside rearing stock and in Southeast are accessible to harvest March through July
- Estimates of escapement using expanded index weir counts are available back to 1975; mark-recapture preferred method
- > 1-4% of the spring smolt are marked and tagged
- Estimates of marine harvest, exploitation, smolt abundance, and marine survival
- Half the spawning escapement is inriver by first week of June

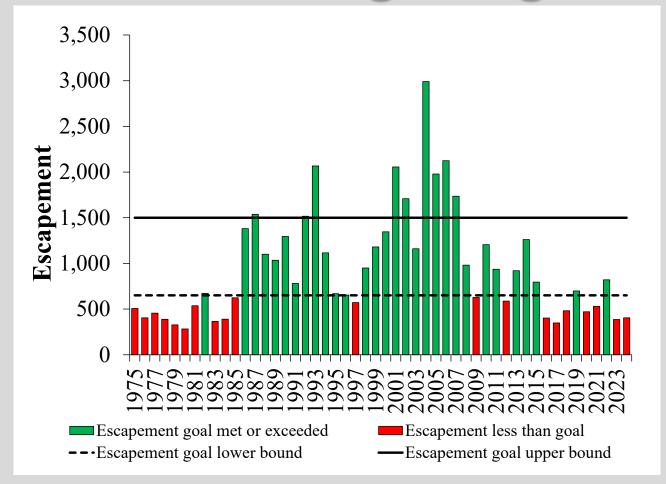
Stikine River Large King Salmon



Harvest, escapement, and run of Stikine River king salmon, 2015-2024, with the terminal run forecast for 2025. Harvest rate is shown as a percent for each year.



Andrew Creek Large King Salmon

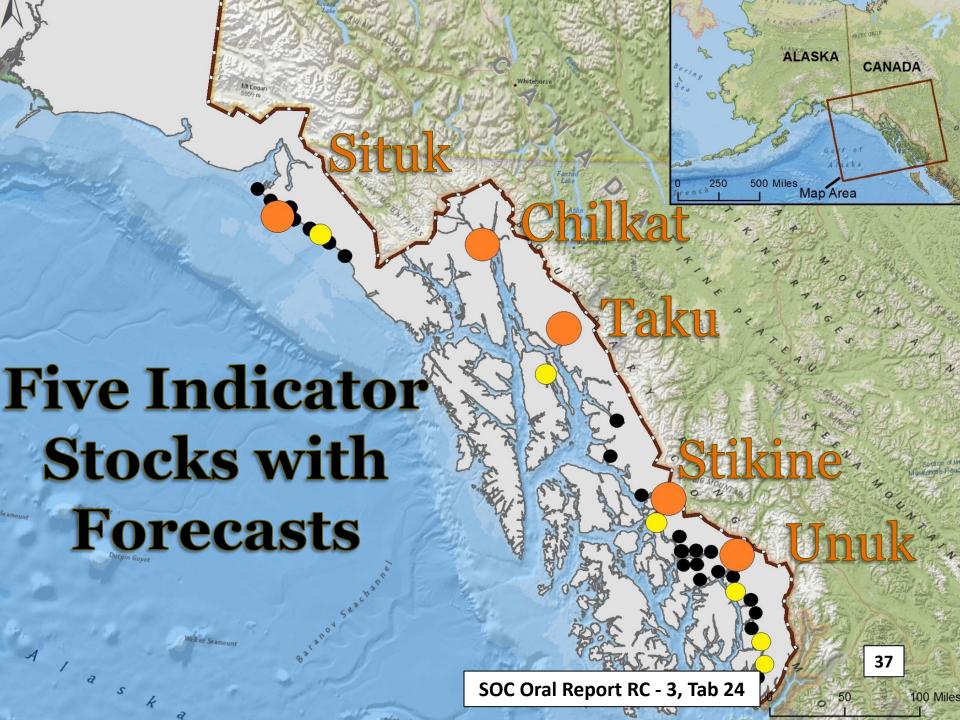


Designated a Stock of Management Concern in October 2020 and escapements have been less than goal in four of the most recent six years, 2019 to 2024.

Andrew Creek King Salmon

- Andrew Creek is located near the towns of Petersburg and Wrangell and is a tributary in the lower Stikine River
- Inside rearing stock and accessible to harvest throughout the year
- Standardized observer counts date back to 1975 and a weir was operated from 1976 to 1984 to ground truth the observer counts
- Used as a brood source in the Southeast enhancement program
- Half of the spawning escapement is inriver by the first week of July
- Smolt are not tagged so direct estimates of harvest are not available and nearby hatchery releases are used as surrogates





King Salmon 2025 Run Forecasts

	Escapement goal		Run	Run
Stock	Lower bound	Upper bound	Forecast	Component
Situk	450	1,050	750	Total
Chilkat	1,750	3,500	3,000	Total
Taku	19,000	36,000	40,000	Terminal
Stikine	14,000	28,000	10,000	Terminal
Unuk	1,800	3,800	2,600	Total

Except for the Stikine River stock of king salmon, the forecasts for king salmon runs in 2025 are at or above the lower bound of the escapement goal range.

