



# 2019/20 Draft Salmon IFMP – Key Changes

FN Forum Meeting: March 12-14th, 2019  
Kamloops



## Outline:

### Key proposed changes to fishery management actions:

1. Fraser River Chinook
2. Southern Resident Killer Whales (PDF Handout)
3. Interior Fraser Steelhead (separate presentation)
4. Fraser River Sockeye Escapement Plan (separate presentation)
5. Interior Fraser Coho
6. Pacific Salmon Treaty Update
7. Salmon Allocation Policy
8. Commercial Salmon Allocation Framework



# 1. Fraser River Chinook: Proposed 2019 Fishery Management Approach

- Addressing poor stock status and declines in spawner abundance requires a precautionary approach to substantially reduce fishery mortalities to maintain these populations until productivity improves and pass as many Fraser Chinook as possible to spawning areas.
- Unless current productivities improve, fishery mortalities are expected to increase declines in spawner abundance.
- This will require additional reductions in fisheries impacts in times and areas where Fraser Chinook are encountered in Northern and Southern BC including commercial, recreational and First Nations fisheries.



# Fraser Chinook Management Objectives

## Fraser Spring 4<sub>2</sub>, Spring 5<sub>2</sub> and Summer 5<sub>2</sub>

Management Unit	Management Objective	Considerations	Proposed CDN Fishery Mortality Range
Spring 4 <sub>2</sub> Spring 5 <sub>2</sub> Summer 5 <sub>2</sub>	Maximize the number of returning Chinook reaching spawning grounds by reducing Canadian fishery mortalities to the greatest extent possible.	<p>Substantial reductions in fishery mortalities are required for Spring 4<sub>2</sub>, Spring 5<sub>2</sub> and Summer 5<sub>2</sub> Chinook given their poor stock status, extremely poor productivity and expectations for continued declines in spawner abundance.</p> <p>Any fishery mortalities will worsen spawner declines unless productivity improves. New measures are anticipated to affect commercial, recreational and FSC fisheries.</p>	<p>The magnitude of reductions in CDN fishery mortalities will depend on the management measures implemented. <b>Two scenarios are proposed that would aim to reduce total CDN fishery mortalities to less than 5% (Scenario A) or less than 10% (Scenario B).</b></p> <p>Recent CDN fishery mortalities averaged 14.5% (2013-2016) based on Spring 4<sub>2</sub> (Nicola) CWT indicator. Reducing fishery mortalities below 5% would require an overall 65% reduction.</p>



# Fraser Chinook Management Objectives

## Summer 4<sub>1</sub> chinook

Management Unit	Management Objective	Considerations	Proposed CDN Fishery Mortality Range
Summer 4 <sub>1</sub>	Precautionary reduction in fishery mortalities similar to 2018 to protect co-migrating Fraser Chinook stocks of concern.	<p>South Thompson Chinook were designated by COSEWIC as Not At Risk; however, productivity (R/S &lt;1) and fecundity has declined for this group since 2015 and there are concerns for the Maria Slough conservation unit given that fewer than 20 spawners returned in 2018.</p> <p>In addition, the migration of Summer 4<sub>1</sub> Chinook overlaps with other Fraser Chinook stocks of conservation concern, particularly Summer 5<sub>2</sub> chinook.</p> <p>Additional reductions in commercial and recreational fishery harvest opportunities will also need to be considered to support priority access for FN FSC fisheries in the Fraser River given expectations for very limited FSC fishery opportunities in 2019.</p>	<p>Reducing CDN fishery mortalities to 20% or less is proposed.</p> <p>Recent fishery mortalities average 27.5% (2013-2016) based on the Lower Shuswap CWT indicator. Reducing fishery mortalities to 20% or less would require a 25% or greater reduction.</p>



# Fraser Chinook Management Objectives

## Fall 4<sub>1</sub> chinook

Management Unit	Management Objective	Considerations	Proposed CDN Fishery Mortality Range
Fall 4 <sub>1</sub>	<p>Fraser Fall 4<sub>1</sub> (Harrison) Chinook is the only Fraser management unit with an approved management objective.</p> <p>The management objective is to achieve the spawning escapement goal range of 75,100 to 98,500 spawners.</p> <p>A precautionary reduction in CDN fishery mortalities is proposed, similar to 2018.</p>	<p>Since 2012, the escapement goal has not been achieved, with the exception of 2015, and the COSEWIC stock status is threatened. Given declines in productivity (<math>R/S &lt; 1</math>) and recent average fishery mortalities, spawner abundance may not reach the lower bound of the escapement goal range in 2019.</p> <p>Additional reductions in commercial and recreational impacts will need to be considered.</p>	<p>Reducing CDN fishery mortalities to 13% or less is proposed.</p> <p>Current fishery mortalities average 17% (2013-2016) based on the Harrison CWT indicator. Reducing fishery mortalities to 13% or less would require a 25% or greater reduction.</p>



# Fishery Scenarios

- Department has proposed **initial scenarios for discussion purposes; alternative fishery scenarios and/or management actions contained within a scenario may be considered based on feedback received.**
- Fishery scenarios outline management actions for commercial, recreational and First Nations fisheries that meet conservation objectives
- Scenario(s) consider approaches to provide very high protection to Spring 4<sub>2</sub>, Spring 5<sub>2</sub> and Summer 5<sub>2</sub> chinook.
- Additional management actions to support fishery mortality reductions for Summer 4<sub>1</sub> and Fall 4<sub>1</sub>.
- Additional scenarios have been identified based on responses received to Feb. 5 letter.



# Scenario A - Summary

This approach would aim to reduce total Canadian fishery mortalities to **less than 5%** for Fraser Spring 4<sub>2</sub>, Spring 5<sub>2</sub> and Summer 5<sub>2</sub> Chinook.

- **Commercial-** troll fisheries in Northern BC (Area F) and the West Coast of Vancouver Island (Area G) to remain closed through July (Area G; *loss of significant harvest opportunity in April/May*) and to July 17 (Area F; *loss of significant harvest opportunity, usually opens June 20*)
- **Recreational-** Marine recreational Chinook fisheries along migration corridors in southern BC would be Chinook non-retention (*typical limit is 2/day*). Recreational fisheries in the Fraser River would remain closed to fishing for salmon to August 23, followed by Chinook non-retention if there are openings for other species (*extension of recent closed period by 3 weeks and no chinook opportunity*).
- **First Nations-** First Nations FSC fisheries opportunities for Fraser River chinook would be restricted to unplanned events or very limited communal fisheries (*significant further restrictions*).

For fisheries following the Summer 5<sub>2</sub> migration, fishery measures would target reductions similar to 2018 for Summer 4<sub>1</sub> and Fall 4<sub>1</sub> Chinook





## Scenario B - Summary

Aim to reduce Canadian fishery mortalities **to less than 10%** for Fraser Spring 4<sub>2</sub>, Spring 5<sub>2</sub> and Summer 5<sub>2</sub> Chinook.

- **Commercial-** troll fisheries in Northern BC (Area F) and the West Coast of Vancouver Island (Area G) to remain closed through July (Area G) and to July 10 (Area F).
- **Recreational-** Southern BC marine recreational fisheries would have reduced daily limits and/or hatchery-marked retention depending on time/location. Recreational fisheries in the Fraser River would remain closed to fishing for salmon until August 23.
- **First Nations-** First Nations FSC fisheries would have management actions similar to 2018 (i.e. no new reductions).



# First Nations Responses

- Substantive action needs to take place to ensure the persistence of Fraser River Chinook stocks and the management approach needs to reflect priority for First Nations rights-based fisheries based on Section 35.1 of Constitution Act, case law (R. vs Sparrow) and respect principles in UNDRIP.
- As long as there are conservation concerns, and until First Nations food, social, and ceremonial needs are met, no other fisheries should be allowed to impact the stocks or runs of concern. First Nations do not expect to meet FSC needs for Chinook in 2019.
- All recreational salmon fisheries that may impact Fraser Chinook must be managed in a closed until-open regime like other salmon harvest sectors.
- The Fraser Chinook Zoned Approach Framework should include a Zone “0”, a management scenario that closes all fisheries except for the rights-based fisheries that would be invoked in situations of serious conservation concern i.e. 2019.



# First Nations Responses

- **Many groups support management measures that will achieve fishery mortalities less than 5% for Fraser Spring 4<sub>2</sub>, Spring 5<sub>2</sub> and Summer 5<sub>2</sub> chinook**; however, there are concerns that DFO cannot adequately measure evaluate, monitor or enforce proposed measures in Scenario A or B.
- Deep and meaningful consultation should include open and clear discussion of all objectives and constraints being considered in the decisions to meet objective of maximizing spawners to the grounds.
- Concerns that fishing effort may shift to areas not covered by proposed fishery measures and lead to over-harvest of other Chinook populations (e.g. Area 11).
- Some concern scenarios A and B could result in economic impacts and job loss for band members related to local development/marina business on Vancouver Island, but also concerns about impact on ecotourism (e.g. wildlife viewing)/ Indigenous cultural tourism business from loss of species if significant actions are not taken.



# First Nations - Fishery Scenarios Proposed

- Most feedback identified the requirement for additional commercial and recreational fisheries measures including:
- **Commercial:**
  - Chinook non-retention
  - Closed until a later date (Aug 31)
- **Recreational:**
  - Mark selective fisheries not supported given concerns about mark rates / release mortalities:
  - Chinook non-retention
  - Closed to salmon fishing
  - Reduced Annual Chinook Limit
  - Manage fishery with a closed until open regime
  - Limited openings focussing on terminal fisheries
- **First Nation:**
  - Harvest plans TBC – further consultation required
- *Specific proposed measures outlined in separate summary table*



# Sport Fishing Advisory Board (SFAB)

## Response

- Unanimously opposed to Scenario A in the draft DFO letter
- Scenario A would result in complete and permanent devastation of the British Columbia public recreational fishery resulting in significant and immediate impacts including the near elimination of the \$1.1 billion in revenues that help support coastal communities and the well over 9,000 people employed in the sector
- Alternate measures or suites of measures are available to protect the stocks of concern; measures proposed in Scenario A are not necessary where stocks of concern are less prevalent
- Angling public and its service infrastructure have becoming increasingly aware of sample options [*fishery scenarios A and B*] presented and the sector is beginning to suffer the impacts of uncertainty as it regards to opportunity
- **Recommend implementation of Scenario B with some modifications intended to reduce the recreational impact**



# SFAB –Fishery Scenario Proposal

- Johnstone Strait and Strait of Georgia North
  - Apr 1 to August 29, 1 Chinook/day (with option for terminal fisheries).
  - Aug 30 to Dec 31, 2 Chinook/day.
- Strait of Georgia South and Juan de Fuca
  - Apr 1 to July 31, 1 chinook/day; hatchery marked only
  - Aug 1 to Aug 29, 1 Chinook/day (with option for terminal fisheries)
  - Aug 30 to Dec 31, 2 Chinook/day
- Fraser River Tidal and Non Tidal
  - Jan. 1 to August 23 , No fishing for salmon.
  - Aug. Aug 23 to December 31, 1 Chinook/day
- Freshwater Regions
  - closed to fishing for salmon except in some areas where fisheries on other stocks or species may take place.
- *Specific proposed measures outlined in separate summary table*



# Commercial Fishery Responses

- **Area G Harvest Committee**
  - Impact in a May fishery on early run chinook is very minimal and request a May fishery for 100% percent of Area G pre-season AABM Chinook TAC
  - Reduction in the recreational catch in WCVI AABM limits from 2 to 1 a day in June and July and overall annual limit change to 10 Chinook per year
- **Riverfresh Wild BC Seafood**
  - Kamloops Lake demonstration fishery should be accorded the same opportunity as the area F troll fishery - we propose the same allocation reductions and that the demo fishery remain closed until Sept 4
  - Economic impact of a closure to this commercial fishery would be devastating
  - No impact on stocks of concern, would undermine the commercial fisheries access element of the PICFI intended to provide FN with greater access to commercial fishing opportunities



# Pacific Marine Conservation Caucus (MCC) Response

- **Scenario A approaches the necessary actions to protect endangered Fraser River Chinook salmon; only limited incidental mortality supported**
- any targeted fishing on endangered Fraser Chinook is not appropriate
- very limited mortality available should be prioritized to achieving FN rights-based fishing
- Scenario B clearly in conflict with federal conservation policy and all credible definitions of sustainable fishing
- High uncertainty in the monitoring and regulation of marine recreational fisheries; unlikely that a fishing mortality cap of 10% can be achieved in Scenario B
  - problem is further compounded by increasing evidence that estimates of Fishing Related Incidental Mortality (FRIM) used to calculate total fishing mortality (including releases) are too low





## Next Steps

- DFO has summarized responses received and alternative fishery scenarios that have been proposed.
- A summary of feedback will be made available in early March for IHPC (March 7) and FN meetings (e.g. FN Forum - March 12-14)
- The Department will make a decision on potential options in March to support implementation of measures beginning in early April.
- Decisions on fishery management measures will be communicated by Fishery Notice(s) and a letter will be sent outlining planned fishery measures for 2019.



## 5. Interior Fraser Coho

- Survival rates for coho remain variable and are well below historic highs in most areas; still in *low productivity regime* requiring lower exploitation rates.
- **Interior Fraser Coho** are key constraint on management of Southern BC fisheries; proposed continuation of precautionary management approach similar to pre-2014 for southern BC fisheries.
- ***The objective for Interior Fraser River coho (including Thompson River coho) is to manage Canadian fisheries in a highly precautionary manner with fisheries management measures similar to those in place prior to 2014. This approach is expected to achieve an overall exploitation rate in Canadian waters within the 3 – 5 % range.***



## 5. PST Chapter 5 (Coho) Updates

- New Chapter language maintains current 20% IFR Coho MU ER cap for *low* status (in place since 2002). Note: each country's share of the 20% ER cap (10% each) may be managed to lower ERs based on domestic planning (e.g. Canada implemented 3-5% ER on IFR Coho MU in most years).
- ER Caps for *moderate* and *abundant* status categories for the IFR Coho MU are lower than in the previous Chapter language, given uncertain data and analysis, and reflecting a strong precautionary interest heard during consultations.
- No change to US shares of the IFR Coho MU ER Caps.
- An improvement from *Low* to *Moderate* or *Abundant* status would be based on a combination of marine survival rates and spawner abundance for IFR Coho MU.
- Canada required to inform US of IFR Coho MU status category in March of each year.
- The status determination approaches for SoG and LF Coho have not been completed. Completion of this work is planned as part of the implementation of the new Chapter.



## 5. Interior Fraser Coho

- The Department has received a recommendation from the Integrated Harvest Planning Committee members to consider increasing the Canadian domestic exploitation rate within the low status zone to utilize more of Canada's PST exploitation rate cap of up to 10%.
- This recommendation was supported by commercial, recreational and MCC members subject to additional fishery monitoring and stock assessment activities to assess impacts on southern BC coho populations.
- The Department is seeking additional feedback on this proposal.

### Questions to Consider:

- Do you support an increase in CDN ER within the low status zone for IFR coho?
- If so, under what conditions?



## 5. Southern Coho Fishery Planning Considerations

- Given the low status of Interior Fraser and other southern BC Coho populations, the relatively high uncertainty of forecast returns, and limited stock assessment, it is difficult to move forward until the following issues are resolved:
  1. Review of existing fishery planning tools which rely heavily on historic data and do not evaluate impacts on stocks other than Interior Fraser Coho
  2. Additional stock assessment information to evaluate:
    - consequences of wild coho retention on all southern coho populations
    - spawner trends for Strait of Georgia and Lower Fraser coho
  3. Discussion of access and allocation guidelines
- The Department is reviewing opportunities to collect additional stock assessment information that could support future decision making.



## 6. Pacific Salmon Treaty

- The revised versions of Annex IV, Chapters 1, 2, 3, 5, and 6 (plus current text for Chapters 4, 7, and 8) have been posted at:  
<https://www.psc.org/publications/pacific-salmon-treaty/>.
- Please note that Chapters 1, 2, 3, 5, and 6 are not yet formally in force, but the Parties have agreed to provisionally apply them as of January 1, 2019.



## 7. Salmon Allocation Policy

- The Department is initiating a review of the Salmon Allocation Policy (1999) according to the direction of the BC Supreme Court in the recent BC Supreme Court decision in *Ahousaht Indian Band and Nation v Canada (Attorney General)*, 2018.
- An independent facilitator (Tawney Lem Consulting Inc.) has been contracted to work with DFO and key parties to develop a TOR to guide the process and scope of the review.
- Meetings are being scheduled over the coming months to allow for early exploration of objectives and principles for the review as well as suggestions for a Terms of Reference.
- This SAP review is expected to take 2.5 years.



# 8. Commercial Salmon Allocation Framework

- CSAF proposals received by January 28<sup>th</sup> were included in the draft IFMP. Proposals received and not yet assessed are outlined below:

Group	Demonstration Name	Area
SCC: Gitanyow	NC: Nass and Meziadin Sockeye *changes for 2019*	3
SCC: Metlakatla	NC: Skeena Sockeye	4-9, 4-12, 4-15
SCC: K'omoks	NC: SC: Terminal Chum	14-4, 14-5, 14-7, 14-9, 14-10
SCC: Snuneymuxw	NC: SC: Terminal Chum	TBD
CSAB: Area G	SC: Barkley Sockeye	23
CSAB: Area H	SC: Inside Chum - Cape Lazo	14
CSAB: Area H	SC: Mainland Inlet Pink & Chum - Broughton	12





# Commercial Salmon Allocation Framework

- The Department is currently evaluating proposals internally and will be engaging with the proponents to finalize.
- In consideration of results of the assessment as well as feedback received through IFMP consultations, successful proposals will be included in the final IFMP.

***\*Proposals deemed successful as well as existing proposals already included in previous IFMPs, will be implemented SUBJECT to a final fishing plan being approved in the area\****



# Commercial Salmon Allocation Framework

- Additional work in progress through the CSAF small group process (includes CSAB, SCC and DFO participants) includes:
  - Supporting local area collaboration
  - Exploratory discussions on principles/evaluation framework to consider dual fishing pilots



# 2019 IFMP Timelines:

Activity	Timeline
DFO letter identifying potential changes under consideration for 2019/2020 IFMPs to inform subsequent IFMP planning meetings.	Dec 10, 2018
Deadline for written submissions from First Nations and advisory groups on issues identified by the Department. Proposals for demonstration fisheries and any additional discussion items for the 2019/2020 Salmon IFMPs are also requested.	January 17, 2019 CSAF – January 28, 2019
Integrated Harvest Planning Committee Meetings to review and discuss potential changes to IFMPs and opportunity for focussed discussion on key IFMP issues.	Northern - Prince Rupert (February 5, 2019)  Southern IHPC – Vancouver (February 6, 2019)
Release draft IFMPs for public review & comment	February 25, 2019
IHPC meetings to review draft IFMP	Northern IHPC – Prince Rupert (March 6, 2019); and,  <b>Southern IHPC – Vancouver (March 7, 2019)</b>
Deadline to submit comments on draft IFMP	<b>April 6, 2019</b>
Final IHPC Meeting – Opportunity for final discussion on IFMP feedback.	<b>April 24-25, 2019 Vancouver</b>
Target for public release of 2019/20 salmon IFMP	<b>June 2019</b>



# NEW: Glass Sponge Reef Closures in Howe Sound

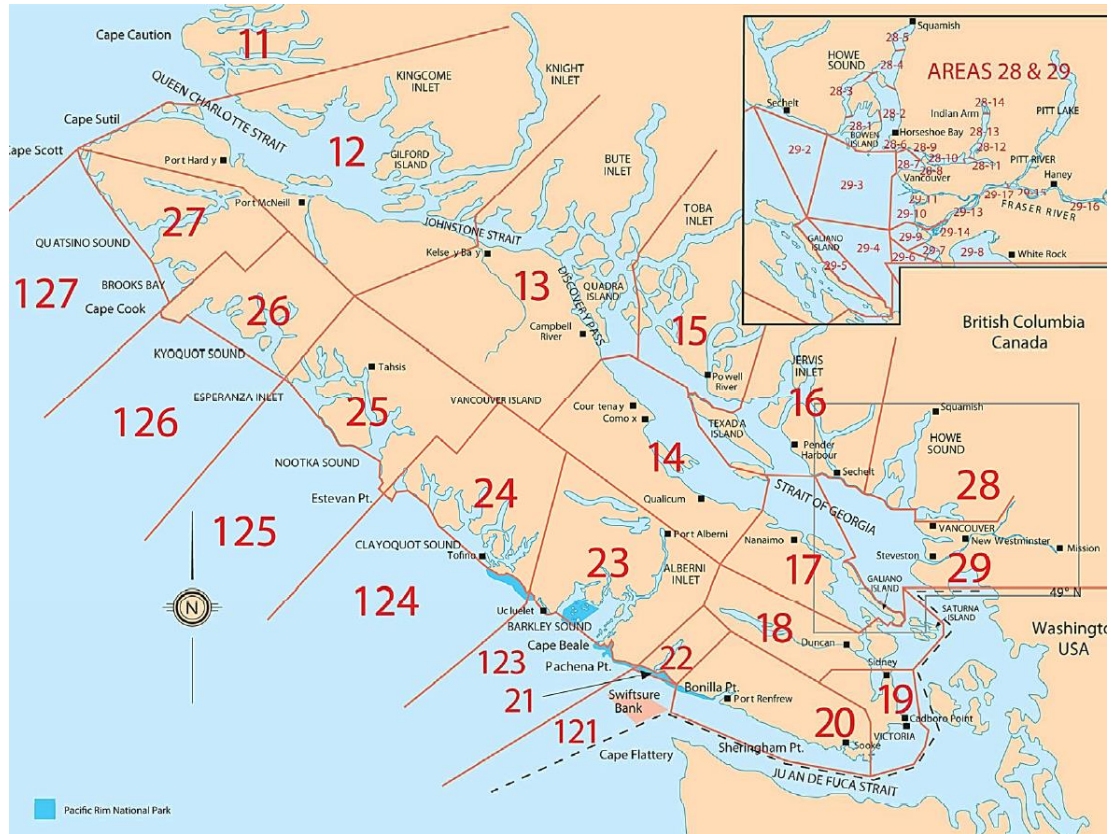
- Effective April 1, 2019 all commercial, recreational and First Nations food, social and ceremonial (FSC) bottom-contact fishing activities for prawn, shrimp, crab and groundfish, as well as the use of downrigger gear for recreational salmon trolling (restricted via Condition of Licence) are prohibited within portions of Subareas 28-2 and 28-4 to protect nine Howe Sound glass sponge reefs, as marine refuges. This includes prohibition of the following fishing activities:
  - prawn and crab by trap;
  - shrimp and groundfish by trawl;
  - groundfish by hook and line; and
  - use of downrigger gear in recreational salmon trolling.
- Downrigger gear is generally used at shallow depths, which poses a risk of physical contact with several of the reefs in Howe Sound if inaccurately deployed. Photographic evidence suggests that the weighted cannonballs and steel cables used for recreational downriggers can incidentally contact and damage these sponge reefs.
- These eight new closures are in addition to the nine areas closed in the Strait of Georgia and Howe Sound in 2015. However, the downrigger restriction only applies to these new closures. Nine remaining areas in Howe Sound require ground-truthing to assess their ecological significance and may be closed in the future.
- More information is available at <http://www.dfo-mpo.gc.ca/oceans/ceccsr-cerceef/closures-fermetures-eng.html>.



# ANNEXES

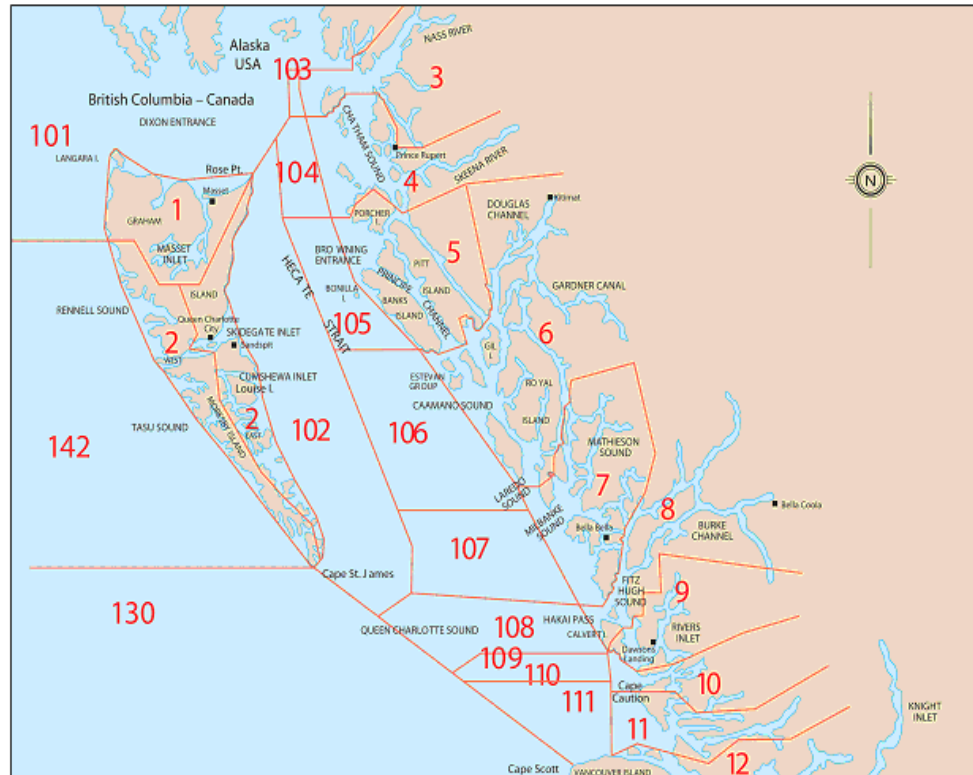


# Southern BC PFMA Maps





# Northern BC PFMA Maps





# PST Reference Points and ER Caps for the IFR

## Coho MU

	Low	Moderate	Abundant
<b>Survival</b>	$S \leq 0.03$	Three consecutive years $0.03 < S \leq 0.06$	Three consecutive years $S > 0.06$
		and	and
<b>Escapement</b>	Monitored in CU's and subpops but no thresholds	Three consecutive years: <ul style="list-style-type: none"> <li>• Half of subpops in each CU &gt; 1000; or</li> <li>• Aggregate MU esc. objective (e.g., 27,000)</li> </ul>	Three consecutive years: <ul style="list-style-type: none"> <li>• All IFR subpops in each CU &gt; 1000; or</li> <li>• Aggregate MU esc. objective (e.g., revised 40,000)</li> </ul>
<b>ER cap (US/Can)</b>	<b>0.20</b> (0.10/0.10)	<b>0.30</b> (0.12/0.18)	<b>0.45</b> (0.15/0.30)

Previous approach included ER caps of 20% for low; 40 for moderate and 65% for abundant





## Summary of AABM chinook harvest reductions

Southeast Alaska (SEAK) AABM Fishery	
Abundance Index (A.I.)	Reduction to Current Catch Limits
A.I. less than 1.805	-7.5%
A.I. between 1.805 and 2.2	-3.25%
A.I. greater than 2.2	-1.5%

West Coast of Vancouver Island (WCVI) AABM Fishery	
Abundance Index (A.I.)	Reduction to Current Catch Limits
A.I. less than 0.93	-12.5%
A.I. between 0.93 and 1.12	-4.8%
A.I. greater than 1.12	-2.4%

**AABM Forecasts** and coded wire tag (CWT) based total mortality distributions available in late March / early April.



## Summary of ISBM Chinook harvest reductions

Canadian ISBM Fisheries	
Canadian Indicator Stocks	Reductions of 0-5% from the average exploitation rate (ER) from the 2009-2015 period. ER limits are not specified for any other stocks.
Southern U.S. Indicator Stocks	Reductions of 12.5% from the average ER from the 2009-2015 period.

U.S. ISBM Fisheries	
Canadian Indicator Stocks	Reductions of 5% from the average exploitation rate (ER) from the 2009 - 2015 period.
Southern U.S. Indicator Stocks	Reductions of 0-15% from the average ER from the 2009-2015 period.