

**Pacific Marine Conservation Caucus
Comments on Draft 2015 Integrated Fisheries Management Plans for Salmon**

Submitted to Jeff Grout, DFO

**Prepared by
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The comments below are further to those provided in person to DFO at the March IHPC meetings, the April 9 meeting between DFO and MCC reps, and other recent discussions. Where any discrepancies exist, please defer to the comments below.

Skeena sockeye – Reduction in aggregate exploitation rate consistent with recommendations made by Lake Babine Nation.

The MCC has changed its recommendation from supporting the 2009 aggregate harvest rules with added protections for weak stocks to support for the aggregate harvest rule proposed by the Lake Babine Nation, which we understand to be accurately summarized as:

Babine River sockeye, being the largest wild population in the Skeena aggregate, should have its own escapement goal. The interim goal is a 60% probability that the 2015 escapement of Babine River sockeye is greater 202,000. We say “interim” because internal consultations continue.

If DFO chooses not to accept the harvest rate proposal put forward by LBN and supported by the MCC, then we request a continuation of the 2009 harvest rules with specific provisions that restrict harvests in weeks 7-5 and 8-1 remaining in place.

Our reasons for supporting the LBN position are as follows:

1. At least three Skeena sockeye CUs are in the WSP red zone and subject to considerable mixed stock fishing pressure. An aggregate harvest rule at 2009 levels does not provide adequate protection for some key stocks of conservation concern – specifically Babine River sockeye, Morice / Bulkley Sockeye, and Bear River sockeye.
2. With the exception of Kitwanga, which is out of date, rebuilding plans have not been drafted for Skeena sockeye CUs below their lower benchmark, much less

approved by First Nations in whose territories the at-risk CUs are located. These rebuilding plans should identify current harvest impacts, target rebuilding timelines and objectives, and exploitation rates required to meet rebuilding objectives. Increasing harvest rates prior to developing and implementing rebuilding plans from CUs in the red zone would be counter to the intent of the WSP, obligations to First Nations, and Marine Stewardship Council certification conditions.

3. Overfishing of at-risk CUs in the absence of formal WSP Strategy 4 consultations would be at odds with the WSP. Both the WSP and the Cohen Commission call for Strategy 4 discussions to determine how to balance conservation and other interests in the management of mixed stock fisheries. This has not occurred.

4. There is substantial opposition from First Nations

5. New information on Alaskan exploitation rates in English et al. (2012) suggests that Alaskan exploitation rates are much higher on later timed sockeye CUs than previously reported, and there is significant variation between odd and even years. It may be that Canadian mixed stock exploitation rates are already too high for later timed sockeye CUs when Alaskan and FSC exploitation rates are taken into consideration.

6. Continued harvest on populations below their lower benchmarks without rebuilding plans in place would put Marine Stewardship Council certification at risk.

7. Capacity to harvest surpluses of sockeye are expanding in terminal fisheries, drastically mitigating economic losses due to foregone catch in the mixed-stock marine fishery.

8. DFO has provided no details in the draft fishing plan or IHPC process on how it will protect key weak stocks of concern.

Skeena River pink salmon fisheries

If any pink fisheries are to take place in Area 4 where chum and/or sockeye are being discarded, international best practices and recent evidence from other north coast pink-targeted fisheries with substantial discards indicate that 100% observer coverage would be appropriate. Furthermore, because DFO appears to be considering such fisheries, a discard mortality study involving telemetry should be conducted in the 2015 fishery.

Area 9 Chinook

Very little supporting evidence exists to indicate that the Rivers Inlet Chinook CU (#37) is healthy and can sustain existing levels of harvest. Chuckwalla/ Killbella

Chinook are identified as a “stock of concern” according to DFO’s 2014 post season review. As a conservation measure that allows recovery and rebuilding, we urge DFO to not open the Chinook recreational fishery in Rivers Inlet until July, once most of the Chuckwalla - Killbella Chinook have passed through. This would begin the necessary rebuilding that this CU warrants.

Area 9 sockeye

The MCC holds that a commercial fishery on Rivers Inlet sockeye is premature, as this CU has not demonstrated the necessary level of rebuilding required to consider a commercial fishery. We request that one full generation of rebuilding to MSY escapement goals be demonstrated before a fishery is considered. Cox-Rogers and Sturhahn (2005) determined this escapement target to be 600,000 at MSY. Further, escapement goals and conservation benchmarks have not yet been agreed to by the Wuikinuxv Nation. These consultations must occur and escapement goals be agreed to. Furthermore, low escapements in these populations challenge dependent wildlife populations, including Grizzly Bears (Levi et al. 2012).

Requested wording changes in the Northern IFMP

7.5 Skeena River Decision Guidelines

7.5.1 Background

Skeena salmon are taken in many northern BC and southern Alaskan fisheries. In BC, directed fisheries on Skeena sockeye occur in net fisheries in Areas, 3, 4, and 5; beach seine fisheries on the Skeena main-stem, a dip-net fishery at the Babine Counting Fence, and in front of the Fulton and Pinkut spawning channels in Babine Lake. Pink salmon fisheries....

7.5.2 last bullet

The fishery will be managed to be consistent with the intent of the weekly aggregate harvest rates employed in pre-season discussions with First Nations and stakeholders .

These constraints required to protect weak sockeye and chum stocks will be maintained even if late season sockeye run size upgrades indicate a remaining allowable harvest.

In-Season Decisions

DFO may reserve sockeye allocation for seine vessels to allow for an incidental harvest of sockeye during a directed pink fishery. Stock composition will be considered when determining the allowable harvest.

7.5.4 Skeena River Issues

Add a bullet

Catch Reporting and Compliance Monitoring measures consistent with *Enhanced Monitoring* in DFO's Catch Reporting and Compliance Monitoring Framework will be required for harvest opportunities in August

Early timed Fraser Chinook

Fraser River Spring 4₂ and Spring and Summer 5₂ Conservation Units

Despite the ongoing work of the Strategic Planning Committee for Southern BC Chinook, the MCC urges DFO to implement interim recovery goals for Fraser spring and summer 5₂ and 4₂ Chinook, prior to the strategic plan completion in 2017. Recent escapements show that 40% MSY has been met only once in the last 8 years. There is a disturbing lack of meaningful effort even to reach MSY targets.

Interim rebuilding objectives would reflect the findings of the Independent Science Panel Report assessing the status and decline of Southern BC Chinook (Riddell et al. 2013) and CSAP's preliminary findings on status. Such a plan would also incorporate the finding of Velez-Espino et al. (2013) who concluded that fisheries reductions and closures would improve vital rates and recovery trajectories of SARA listed endangered southern resident killer whales. These whales target early and mid-timed Fraser Chinook in the spring and summer (Ford et al. 2010).

The outlooks for 2015 are as follows:

- Spring 4₂ - modest improvements over brood, however the 2011 brood was low. Abundance is expected to remain low, and not be as high as returns in 2014.
- Spring 5₂ - continued overall low escapements due to depressed parental abundance and unfavorable marine conditions.
- Summer 5₂ - modest improvements over parental brood, but overall continued low escapements due to depressed parental abundance and unfavorable marine conditions.

All of these outlook units are expected to remain at low levels of escapement/abundance. As such, precautionary and rebuilding management measures should be implemented. Further restrictions to directed or incidental exploitation are advised.

In the absence of agreed upon recovery targets at Smax (a goal where both Chinook and SRKW recovery are being maximized), meeting minimum escapement targets of

MSY is proposed in the interim. However, the 2015 IFMP places Zone 3—an abundance level allowing directed First Nations, recreational and commercial fisheries—at terminal returns above 85,000. After in-river exploitation, spawner escapement would be approximately 60,000. This level of escapement is less than one-half of the likely Smsy for the Spring and Summer 5₂ Chinook aggregate. In fact, 60,000 is just above 40% Smsy (55,000 spawners).

Rebuilding is unlikely to occur when the management reference points are so low. In addition, it appears that there is still over 40% total exploitation on these populations in most years (Table 1), despite returns below Zone 3. In 2012, when the terminal run size was approximately 37,000, in-river exploitation was 28%.

Table 1: Terminal run size, escapement and exploitation rates for the period 2008-2013 for Spring and Summer 5₂ Chinook (based on table 5-1b pg. 58 in the 2015 IFMP).

Year	Reconstructed Terminal Run Size	Escapement	Marine ER	Terminal ER	Total ER
2008	52,941	40,474	19%	24%	43%
2009	76,385	56,867	19%	26%	45%
2010	48,980	39,722	19%	19%	38%
2011	48,030	34,079	19%	29%	48%
2012	37,140	26,430	19%	29%	48%
2013	38,550 ^a	30,103 ^b	19%	22%	41%

Notes: ^a in-season terminal run size, ^b escapement index

The MCC is proposing important increases in the terminal run size limits for Zones 1, 2 and 3 and several changes to management regulations. Management actions must be taken to begin rebuilding these CUs. Past failure to meet MSY targets, ongoing unacceptably low escapements and reference points, and continued exploitation on these depressed populations are undoubtedly perpetuating the decline and low abundance of these early stream-type Chinook. This approach is not acceptable for Chinook recovery or for southern resident killer whale recovery.

The MCC is proposing that concrete management actions in the Zone 1-3 approach be taken for Spring and Summer 5₂ chinook management units (Table 1) for the 2015 IFMP.

Zone limit rationale:

1. Smsy for Spring/Summer 5₂ Fraser chinook is approximately 138,000 (80,000 Spring 5₂ and 57,000 Summer 5₂).

2. Zone 3: Spawners likely to be greater than 100,000 (still below Smsy), which implies a terminal run size of approximately 150,000 to allow First Nations and Fraser River recreational opportunities.
3. Zone 2: Spawners likely to be above 40% Smsy (55,000). This implies a terminal run size of approximately 75,000 to allow for ~ 25% in-river exploitation.
4. Zone 1: Spawners likely to be below 40% Smsy (55,000). Any terminal run-size under approximately 75,000 is unlikely to allow an escapement of more than 55,000, given the in-river exploitation rates in Table 1.

Table 2: MCC Proposed Fraser Spring and Summer 5₂ Chinook Management Zone Approach

MSY Escapement Spring & Summer 5 ₂ Chinook	Zone	Predicted Return to the Fraser River	MCC proposed Actions
138,000	3	Greater than 150,000 likely spawners over 100,000	Managed to meet terminal run size of 150,000. Spawners still likely to be at or below target of Smsy, and far below Smax. <ul style="list-style-type: none"> • Directed FN fisheries allowed • Areas 18-20, retention of 1 unmarked chinook per day is allowed • Area 29-6,7,9,10, retention of 1 chinook (likely unmarked) is allowed
138,000	2	75,000 to 150,000 Likely spawners above 40% Smsy (55,000)	Spawners much lower than Smsy but above 40% Smsy. Managed for reduced exploitation and minimal harvest. <ul style="list-style-type: none"> • FN FSC directed fisheries subject to abundance and consultation • Areas 18-20, no retention of unmarked chinook until July 1st. • Areas 29-6,7,9, 10 – no chinook retention until July 16th • Management actions to reduce by-catch or incidental harvest in commercial fisheries
138,000	1	Below 75,000,	Populations well below MSY levels.

		Spawners likely below 40% Smsy (55,000)	<p>Much caution is required to avoid further declines.</p> <ul style="list-style-type: none"> • Any exploitation would be limited to FN FSC fisheries • Consultation with FNs in circumstances where conservation is required • Areas 18-20, no retention of unmarked chinook until July 1st. • Areas 29-6,7,9, 10 – no chinook retention until July 27th • Severe management actions to reduce by-catch or incidental harvest in commercial fisheries.
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Fraser sockeye

The MCC strongly prefers option 1 (no TAM levels exceeding 60%).

Given the risk-prone approach to in-season management of the fishery demonstrated by the Fraser River Panel in 2014—when 65% TAMs were in place—the 60% TAMs under option 1 are likely far too high to provide a buffer against likely under-escapements due to unprecautionary in-season management decisions that seem to be the norm.

Spawning escapements in 2014 fell 19% short of the official in-season targets, a difference of 1.4 million fish. However, if Canadian and US fishermen had caught their full allocations, the shortfall relative to in-season escapement targets would have been nearly 3 million.

It is estimated that 60% of the endangered Cultus Lake sockeye run was caught in the 2014 fishery, roughly 20% higher than the intended harvest rate schedule based on the estimated run-size (which was itself inflated by the FRP relative to PSC recommendations). The recovery goal was 3152 successful spawners but according to the latest estimate, only 2594 of the endangered fish successfully spawned. This is an unacceptable and inexcusable outcome in a year of relatively high abundance and suggests that the 2014 harvest rate increase, which is proposed as well for 2015, was a bad decision and should not be repeated.

Besides Cultus, other Fraser sockeye CUs are in the red zone (e.g. Bowron, Nadina), without rebuilding plans in place, and should not be subjected to increased mixed-stock exploitation rates until rebuilding plans have been developed in consultation with First Nations and stakeholders and are being implemented.

Table 3: Summary of catches, escapements, and management success metrics for Fraser River sockeye in 2014
(Source: DFO and PSC)

	Early summer runs	Mid summer runs	Late summer runs	Total Fraser sockeye
In-season escapement target	665,300	2,835,000	3,780,000	7,280,300
Sockeye spawners counted	643,900	2,861,000	2,375,487	5,880,387
Portion of total allocations not caught by fishermen	137,400	385,200	1,049,700	1,572,300
Number of spawners if entire allocations had been caught	506,500	2,475,800	1,325,787	4,308,087
Spawning escapement shortfall relative to in-season target	-3%	+1%	-37%	-19%
Spawning escapement shortfall if all fish allocated to fishermen had been caught	-24%	-13%	-65%	-41%

Interior Fraser River coho

While DFO has done a great deal of work supporting the planned 20% ER on IFR coho, it is based on a 3-year geometric mean estimate of abundance. Hence, while it includes 2014 in its 2015 abundance and spawning estimates; it gives it relatively little weight. It also doesn't incorporate the state of the ocean and marine ecosystem or estimate impacts if 2015 is similar to 2014. The planned 20% ER is not precautionary enough to ensure sufficient likelihood of meeting rebuilding targets in 2015 and beyond.

Spawner abundances on the low end of the estimate will not permit FSC fisheries which must take priority over mixed-stock harvest regimes.

Area E demonstration fisheries

The MCC strongly supports the Area E proposals to test the utility of seine gear in demonstration fisheries in 2015.

References:

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