



October 31, 2025

To Fisheries and Oceans Canada

Minister Joanne Thompson, DFO.Minister-Ministre.MPO@dfo-mpo.gc.ca

Deputy Minister Annette Gibbons, annette.gibbons@dfo-mpo.gc.ca

SRKW inbox: DFO.SRKW-ERS.MPO@dfo-mpo.gc.ca

Dear Minister Thompson and Deputy Minister Gibbons,

We are writing to submit input on the DFO's decision regarding options presented on September 17 for enhanced measures to protect endangered Southern Resident killer whales. The MCC's submission is framed within three intersecting contexts: enhanced recovery efforts for endangered killer whales; recovery efforts for threatened, endangered, and at-risk spring and summer stream-type Chinook salmon returning to the Fraser River; and lastly, the structure, scale and management realities of the recreational Chinook fishery on British Columbia's south coast.

In 2025, the Government of Canada re-affirmed its commitment to stronger actions for Southern Resident recovery measures following the *Imminent Threat Assessment*, which concluded that SRKW are not recovering under existing actions and continue to face imminent threats to their survival. The Independent Science Panel Report on SRKW recovery,¹ released the same year underscored two essential needs;

- **Maintain low marine exploitation rates on Fraser stream-type Chinook (1- 5%)** or reduce higher rates to this level, until exploitation rate and recovery analyses identify appropriate targets. Fishery management measures focused on minimal mortality appear necessary during their migratory window between March and August.
- **Ensure priority access to prey by reducing underwater noise and vessel disturbance.**

¹Independent Science Panel on SRKW Recovery. 2025. Strengthening recovery actions for Southern Resident killer whales. <https://doi.org/10.70766/32.730>

Both efforts need to be in place throughout the migration window of spring and summer stream-type Chinook.

DFO has indicated that the annual review of recovery efforts will conclude in 2025, and that measures established this fall will define management actions going forward. It is therefore imperative that DFO implement effective recovery measures for Southern Residents and address the long-standing deficiencies associated with south coast marine recreational Chinook fisheries that undermine the recovery of suitable prey (older large fatty Chinook). This includes: the increasingly commercial character of these fisheries, DFO's limited capacity to monitor and regulate these fisheries at the necessary scale, their mixed-stock and mixed-maturation impacts (on rebuilding efforts for abundance and size), escalating fishing effort and efficiency, and mortality from extensive catch-and-release practices. In addition, the federal government has obligations to uphold priority access to First Nations under Section 35.

Currently, recreational Chinook and other salmon fisheries continue in areas and seasons that overlap with killer whale foraging, contributing competition, direct and indirect Chinook mortality, and cumulative foraging interference through underwater noise, vessel disturbance and competition for preferred prey.

The expanding marine recreational Chinook fishery in southern BC

The recreational fishery was the largest marine salmon fishery, by far, on the south coast in 2025, and second only to the north coast commercial seine catch of pink salmon for the whole of BC. Although frequently portrayed as a small-scale sport fishery, participation is increasingly facilitated by guides and charter operators who harvest salmon for commercial gain. Guides and charter operators, along with associated businesses, have also become the principal spokespeople and advocates for this sector in management and policy discussions. The activity is more accurately characterized as a commercially guided industry, rather than a traditional recreational fishery.

The commercial aspects of this fishery also have implications for how fishing effort and mortality are allocated under frameworks like the Salmon Allocation Policy and the Pacific Salmon Treaty. As a major commercial industry, requirements for oversight, monitoring and reporting in the guided fishery should align with those of the commercial fishery. These should include mandatory licensing and effort regulation for guides, fishery-independent monitoring, and data transparency requirements that reflect the economic scale, intensity of effort, and ecological impact of the industry. It also has compliance and monitoring implications proportional to the industry's footprint within critical habitat of SRKW.

Verifiable monitoring and compliance

Verifiable monitoring and compliance in recreational Chinook salmon fisheries are essential to ensure that harvest limits, size restrictions, and seasonal or area-based closures designed to protect at-risk salmon populations and SRKWs are effective. Unlike commercial fisheries, or neighbouring Washington State's recreational fisheries, the B.C. recreational sector lacks fishery-independent, verifiable monitoring such as test fishing, onboard cameras or observers to monitor catch, handling practices, and releases—despite many vessels on the water operating as commercial, profit-driven enterprises.

Collecting verifiable data on catch and effort is limited by the Department's unwillingness to adopt international best practices for monitoring and managing fisheries. These are practices that Canada has agreed to put in place — and expects in neighbouring countries — but are as yet unimplemented in Canada.

The Department's monitoring capacity is insufficient to capture the full spatial and temporal extent of fishing activity along an extensive coastline that is effectively open year-round. The one fishery-independent measure previously attempted—reference fisheries—has been discontinued after its third year without meeting its chief objective: to verify catch, releases, and stock composition in south coast recreational fisheries.

Fishing effort and released Chinook

In 2024, 182,351 Chinook were retained on the south coast (a 20% increase relative to the last 5 years) and 280,481 Chinook were released. DFO estimates that 20% of these released fish would die, adding another 56,000 to the total mortality. However, recent studies suggest that smaller, wounded salmon (the most commonly released in BC's south coast recreational fisheries) experience release mortality rates between 20% and 34% percent,² meaning between 56,000 and 95,000 mortalities are possible.

An excessive amount of Chinook are released and dying under the current management approaches in marine Chinook fisheries that include Mark Selective fisheries, Chinook non-retention, Chinook closures, slot limits and sublegal size limits.

² Release mortality in Pacific salmon fisheries along the homing migration and recommended best practices to maximize welfare and survival Prystay, T.S., E.L. Lunzmann-Cooke, S.D. Johnston, K. Zinn, B.J. Hendriks, S.J. Cooke D.A. Patterson and S.G. Hinch.

As of August 2025, a total of 155,442 Chinook have been kept this year, a 20% increase relative to the last 5 years. The number of Chinook released as of August 2025 is up to 281,400, an 18% increase relative to the last 5 years.

As with 2024, applying a 20% post-release mortality rate to the total estimated Chinook released suggests mortality of an additional 56,000 Chinook, but up to 95,000 is possible depending on the extent of sublethal encounters. Importantly, these releases only reflect areas where creel surveys occurred. Time and areas not surveyed rely on fisher-dependent iREQ surveys.

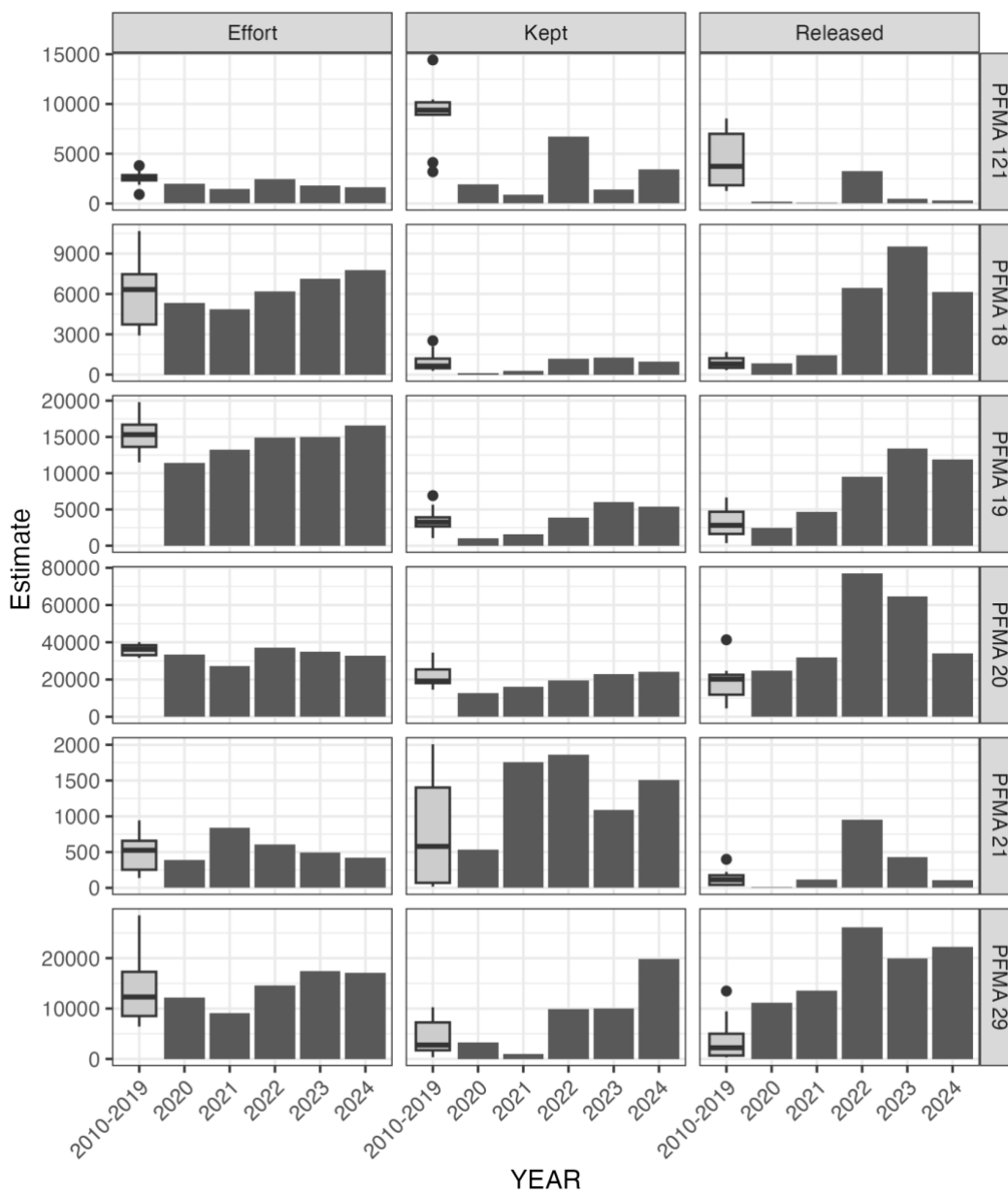


Figure 1. Fishing effort, kept catch and releases within SRKW critical habitat are broken into management areas (PFMAs) that stretch between the Fraser River (Area 29) and southwest Vancouver Island (Area 121). Despite the implementation of measures to improve the quality of SRKW critical habitat, fishing activity (effort, kept catch and releases) has generally not decreased since measures were effectively in place by 2020 and in some areas, fishing activity has actually increased. Complete information for 2025 was not available at this time.

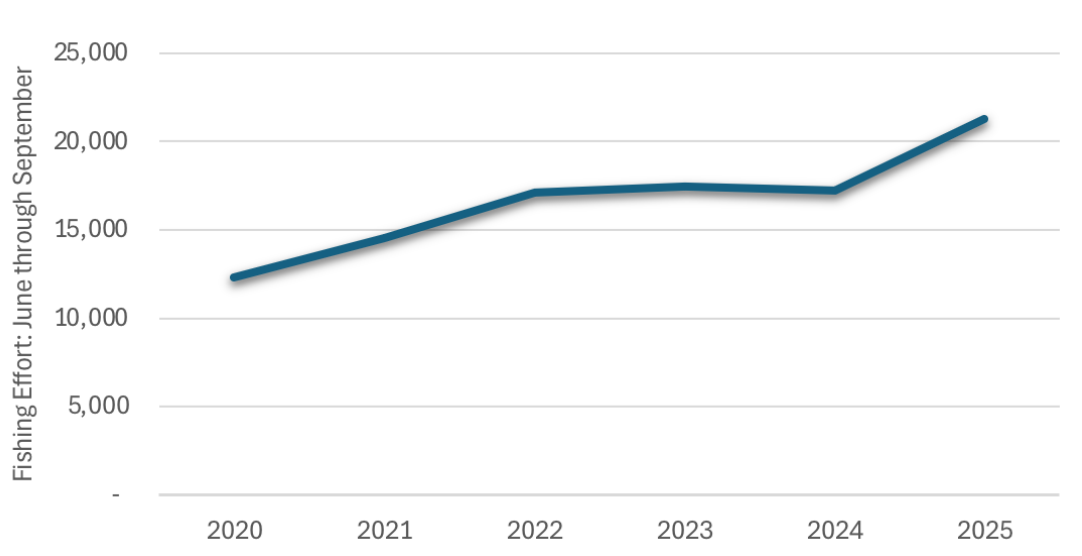


Figure 2. The increase in recreational fishing effort in SRKW critical habitat since 2020, when measures to reduce vessel noise, disturbance and competition came into place. Data source: DFO Creel reports

Since 2019, when measures to improve foraging conditions in SRKW critical habitat came into effect (i.e., to reduce vessels, vessel disturbance and competition for Chinook in Areas 29, 18, 19, 20, and 121) effort, kept catch and releases have not necessarily decreased, and in some places substantially increased between 2020 and 2024, relative to the base period 2010-2019, when no SRKW measures were in place.

There is also uncertainty around the level of release mortality in BC's marine Chinook fisheries that is associated with non-retention, mark-selective fisheries, slot limits, and release of sub-legal Chinook. This mortality is from Chinook caught, landed, and released that then die before spawning. All of these management strategies are implemented to notionally reduce fishing impacts, rather than closing fisheries.

As angling effort, retained catch, and release rates—often involving sublegal or wild fish—remain high and are rising, the underestimation of release mortality by the department underscores the urgent need for enhanced assessment and accountability mechanisms.

Effective monitoring and licensing

Chronic budget limitations, low institutional commitment within the department and the recreational sector to improve monitoring, the underestimation of total fishing mortality and the absence of fishery-independent monitoring has left us without a comprehensive data set to accurately evaluate or assess south coast recreational fisheries.

Given that a significant proportion of the recreational sector is comprised of unregulated guides that—according to their lobbyists—generate substantial economic benefits, it is reasonable to expect guides to be licensed, and that guide licensing fees and activities should contribute to scientifically defensible levels of fishery-independent monitoring, as is standard in other commercial fisheries and industries. Moreover, regulation of participation in the guided-fishing industry (through guide licensing), and management of guided effort (through location-specific rod days) has been in place for freshwater fishing guides in B.C. for decades. The continued failure to introduce any such measures in the marine recreational industry represents a serious oversight in managing a fishery with significant ecological and economic implications.

Non-compliance

In the summer of 2025, DFO and US cross-border enforcement officers inspected 90 vessels over 8 days between May and August in the southern waters of the Salish Sea. Officers **found evidence of persistent non compliance in 1 out every 3 recreational fishing boats checked**, issuing 34 Fisheries Act violations including illegal hooks, illegal retention of wild Chinook and coho salmon, and fishing during closures, among other violations³.

Morrow (2021)⁴ examined compliance within a Juan de Fuca fishery closure intended to protect SRKW critical habitat in 2020. From more than 1.5 million photographs taken from shore between August 1 – October 31, 2020, the study identified 486 fishing vessels (46.4% of all vessels). Of these, 90.6% (369 vessels) were observed fishing within the closed area. Morrow concludes that DFO's current aerial and creel-based monitoring approaches are insufficient to detect or quantify such widespread non-compliance. These findings support calls for major improvement to enforcement presence, including opportunities for camera-AIS technological monitoring.

Population growth and future pressure

³<https://www.canada.ca/en/fisheries-oceans/news/2025/09/dfo-pacific-region-wraps-up-successful-operation-sea-dog-2025.html>

⁴Morrow, Ben. Evaluating applications of shore-based camera monitoring to improve estimates of effort, retention, and compliance of recreational salmon fisheries. 2021. Master of Science Thesis. University of Victoria.

SRKW habitats are located adjacent to Greater Vancouver and Greater Victoria: two areas experiencing major population growth, and associated increases in recreational fishing effort.

The Vancouver Island & Coast economic region (not including Greater Vancouver) grew from about 803,000 people in 2014 to 947,000 in 2024, an 18% increase (Statistics Canada). The population of B.C. is expected to grow to almost 7 million by 2046, or by 21.4%. Metro Vancouver is expected to grow by 27%, while Greater Victoria is expected to grow by almost 17%.

In the much shorter time period of 2020 to 2024, the number of saltwater resident fishing licences issued has grown by almost 20% to 333,000. If the fishing licence sales keep pace with the expected population growth, this number could swell to 400,000 by 2046.

Fishing effort in SRKW critical habitat (Figure 2) has been growing at a higher pace than the growth in population and sale of resident fishing tidal water fishing licences. Southern Resident critical habitat consists primarily of Pacific Fisheries Management Area (PFMA) 29, 18, 19, 20, 121 and 123. Since 2019, recovery measures for SRKW and Chinook salmon have been in place in these areas

Some have suggested that increasing release requirements for Chinook could discourage fishing effort. This is unlikely. Most recreational fisheries that have moved to catch and release have quickly adjusted to the new normal. This is already observed in the current increase in effort in SRKW habitats, in the face of regulations requiring non-retention.

Table 1. Growth in fishing effort in PFMAs 29, 18, 19, 20 and 121 between 2020 and 2025 relative to the previous 5 year average. Source: DFO creel reports.

Pacific Fisheries Management Area	Increase in fishing effort, 2020 to 2025
29 - Fraser Estuary & Georgia Strait	73.8%
18 - Southern Gulf Islands	49.6%
19 - Haro Strait	38.6%
20 - Juan de Fuca Strait	9.6%
21 - Port Renfrew to Swiftsure Bank	30.7%

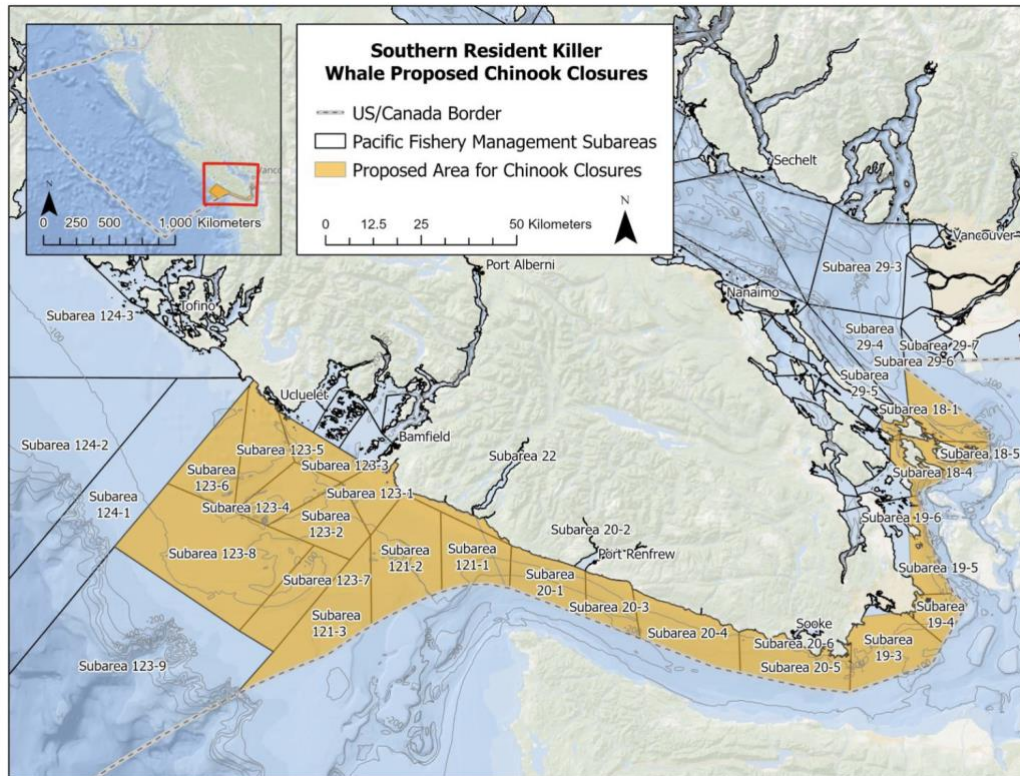


Figure 3. The majority of SRKW critical habitat (gold) overlaps with PFMA 18, 19, 20, 121 and 123. SRKW critical habitat at the mouth of the Fraser (Area 29) in Georgia Strait is not shown in gold. Measures throughout SRKW critical habitat to reduce fishing effort and disturbance, as well as to prevent harvest of endangered Fraser Chinook, have been in place since 2019. Map source: Fisheries & oceans Canada

Emerging technologies and catch efficiency

A long-standing adage in BC's recreational salmon fishery is that 10% of anglers catch 90% of the fish. New technology—including artificial-intelligence-enabled fish finders, high-resolution sonar, and real-time data sharing—is poised to alter this dynamic fundamentally. Advanced systems from major manufacturers now integrate AI algorithms to identify species, size, and movement in real time, dramatically increasing detection and catch efficiency. These technologies will likely raise catch per unit effort (CPUE) across the fleet, leading to faster catch accumulation and elevated total mortality, even under current regulations. Moreover, increased use of high-frequency sonar adds to underwater acoustic disturbance in SRKW foraging habitat, potentially exacerbating the threats that recovery measures aim to mitigate.

"Why all the fuss about AI in fish finders? For starters, they increase our chances of a successful catch. No more spending hours in a spot with no action. With AI-driven accuracy, we can be more

efficient, ensuring we're casting our lines where the fish genuinely are. Brands like Lowrance, Hummingbird, and Garmin have rolled out fish finders that use AI algorithms to give anglers an edge. The Garmin Panoptix LiveScope offers real-time scanning sonar, giving you a live image of what's below. It's like watching a high-definition TV show where the fish are the stars." - <https://fishingmanitoba.com/ai-technology-sport-fishing-innovation/>

Failure to incorporate expected increased effort due to population growth and enhanced fishing capabilities due to the introduction of new technologies within the SRKW recovery strategy will result in catch, competition, underwater noise and disturbance all increasing when DFO's stated objective is to reduce them.

The options DFO has put forward for discussion fail to incorporate expected increases in fishing effort and CPUE. The result is that Options 1 and 2 would inevitably produce an increase in Chinook mortalities, competition, and greater noise and disturbance. While Option 3 is more restrictive on paper, it leaves SRKW habitats open for salmon fishing. It does nothing to control the amount of effort. With ineffective monitoring and no control over effort, measures such as the proposed 'no Chinook fishing' in Option 3 are acknowledged to have poor compliance and do little to improve life for endangered Southern Resident killer whales.

Conclusion: MCC's Proposal to Manage Recreational Fishing in SRKW Habitats

The MCC recognizes the importance of recreational Chinook fishing in Southern B.C., but access comes with serious responsibilities and accountability when it fails to further recovery of an endangered population.

The amount of fishing effort is the one fishery-independent metric that DFO and the sector can measure and manage. Currently there are no fishery-independent monitoring tools to accurately assess, monitor, manage, or control retained catch or releases, but DFO does have the ability to observe and regulate effort. However, DFO does not do this, because it would require a limit on the number of fishing licences issued. The three options DFO has put forward will not limit impacts of recreational fishing relative to the required improvement in SRKW habitat, given the ongoing increases in angler effort and fishing effectiveness.

DFO and the sector need to introduce measures that will limit fishing effort below the 2020-2022 ceiling *within* the fishing season. This could include closed times and/or days, introducing and managing daily access permits, restricting access of guides on the weekends, or other measures the sector may want to consider.

As such, fishery-independent monitoring must be in place in all fisheries. A greater understanding of compliance, the number of fish retained, the number released, marked versus unmarked, size of released fish, and stock composition, is required to manage the fishery and

ensure it is not compromising SRKW habitat and recovery objectives. As such, the objective should be to limit retained catch and releases to no higher than the period between 2020 and 2022.

If these measures are employed, the MCC would support Option 2. On the other hand, if the sector and DFO are unwilling to incorporate limits on effort and implement fishery-independent monitoring, they need to close all SRKW habitat to salmon fishing between March and Aug 15.

As stated above, access to habitats critical to SRKW recovery come with specific responsibilities and accountabilities. If DFO and the sector fail to address their responsibilities and accountabilities in a robust, effective, and verifiable manner; the sector's access must be restricted. As we have illustrated in some detail, the current proposals put forward by DFO fail to support the recovery of SRKWs, amounting to little more than rolling over the status quo.

In conclusion, the MCC stresses that continued access to Chinook fisheries within Southern Resident killer whale habitats must be tied to stronger accountability and measurable limits on fishing activity. Since DFO lacks fishery-independent tools to monitor catch and releases, it should instead cap fishing effort in SRKW areas at or below the 2020–2022 average levels, regulate guided fishing effort, and implement verifiable, independent monitoring of all recreational fisheries. Without these controls, technological advances and unlimited licence sales will increase impacts on SRKW. The MCC supports DFO's Option 2 only if these limits and monitoring systems are adopted; otherwise, it urges a full closure of SRKW habitats to salmon fishing from March 01 through August 15 to safeguard this endangered population.

Sincerely,

Aaron Hill, Watershed Watch Salmon Society
Misty MacDuffee, Raincoast Conservation Foundation
Nathan Meakes, SkeenaWild Conservation Trust

On behalf of the Pacific Marine Conservation Caucus