



SOUTHERN RESIDENT KILLER WHALE INDIGENOUS AND MULTI-STAKEHOLDER ADVISORY GROUP (IMAG) AND TECHNICAL WORKING GROUP MEETING

September 17, 2025



MEETING PURPOSE

1

SHARE PROPOSED UPCOMING MEETINGS AND MILESTONES

2

PROVIDE MID-SEASON UPDATES ON OUTREACH AND EDUCATION

3

PRESENT AND DISCUSS THE SOUTHERN RESIDENT KILLER WHALE PREY MEASURE OPTIONS (CONSULTATION UNDERWAY)

4

RECEIVE UPDATES ON OTHER SOUTHERN RESIDENT KILLER WHALE RECOVERY MEASURES AND EFFORTS



2025 IN-SEASON & PLANNING UPDATES



Key Meetings & Milestones for 2025-26

Joint IMAG-TWG Meeting:

September 17, 2025.

Consultation Period on 2026 Prey

Measures: September 17 to
October 31, 2025.

**Letter to First Nations regarding
Salmon IFMP Planning Process:** TBC
– likely November.

**MMR amendments pre-publication
in Canada Gazette 1 public
consultation period:** Fall 2025 (TBC)

Joint IMAG-TWG Meeting: TBC – Likely
February or March.

Draft 2026-27 Salmon-IFMP:
TBC - distributed via email for review.

**Communications on implementation
of 2026 Management Measures, as
well as updates on other longer-term
recovery efforts, as relevant.**

Fall 2025

Winter 2026

Spring 2026



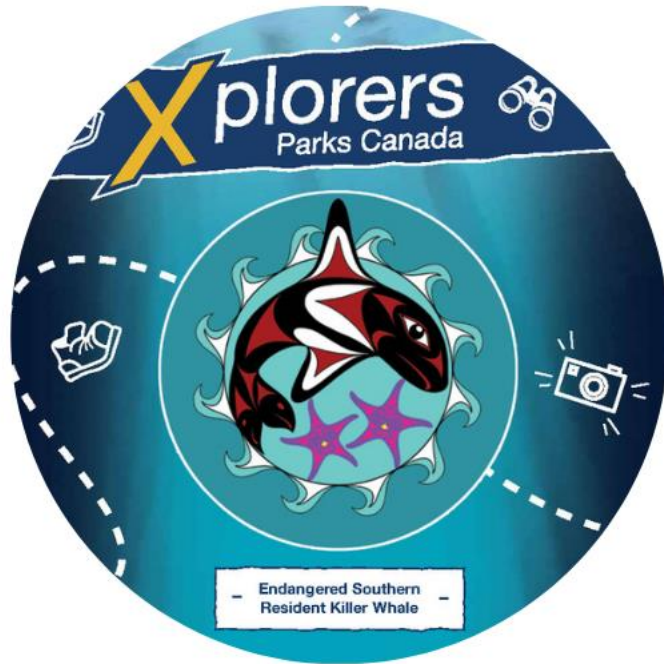
Outreach & Education

Mid-Season Update





Year two of a 2-year Outreach & Education strategy based on three key elements:



Adapt outreach & education material

to meet changing management measures and feedback.



Target recreational mariners

especially American recreational boaters.



Strengthen Collaboration

with First Nations, stakeholders and other government entities.

Outreach & Education Mid-Season Update

Key Contact Highlights between June 1, 2025 and August 15, 2025:

In-person
contacts
6,158

Non-personal
contacts
4,224

Distributed
printed materials
12, 876



Salmon Escapement Trends Update

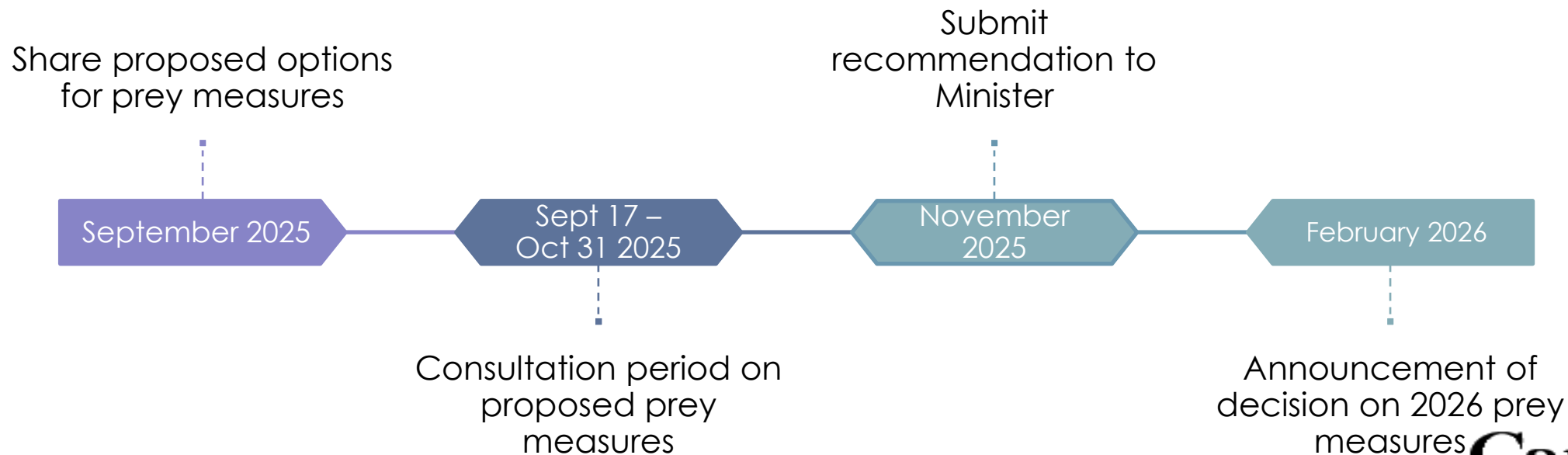


PROPOSED MEASURES TO ADDRESS PREY AVAILABILITY



PREY MEASURES APPROACH: 2026

- DFO is consulting on proposed prey measures for 2026 now, rather than in the winter (as done in previous years). This allows for consultation on the incremental measures proposals and respects timelines under the Emergency Order decision announced in March 2025.
- Consultation includes potential adjustment options for the existing area-based salmon closures and the potential implementation of a new chinook closure measure.
- All feedback received, both past and in the upcoming consultation period, will be used to inform recommendations to the Minister.





PROPOSED AREA-BASED FISHING CLOSURE OPTIONS

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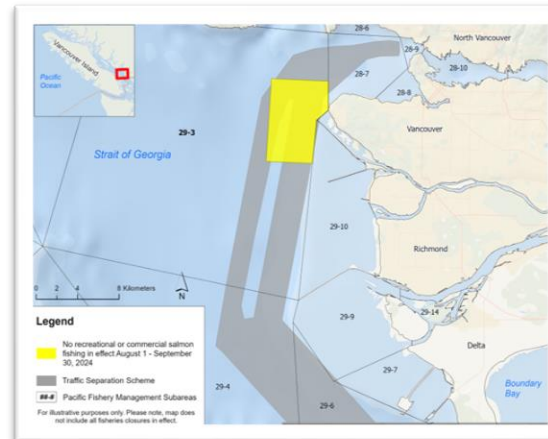
PREY MEASURES APPROACH: **AREA-BASED FISHING CLOSURES**

- In 2024, DFO consulted and implemented area-based fishing closures that would apply to 2024 and 2025. DFO is now seeking feedback on expanding the long-term approach to help provide greater stability and clarity.
- As part of this year's consultation on potential adjustments for 2026, we are seeking feedback on applying the 2026 seasonal closures in a consistent manner in future years, until new scientific or management information becomes available that would warrant a review or change.
- The seasonal closures would continue to be communicated annually through the South Coast Salmon Integrated Fisheries Management Plan, Fishery Notices, and associated consultation processes.
- Should new and significant information arise, we would reconvene and seek input through established advisory groups, including the Multi-Nation Group, Indigenous and Multi-Stakeholder Advisory Group and the Prey Technical Working Group.

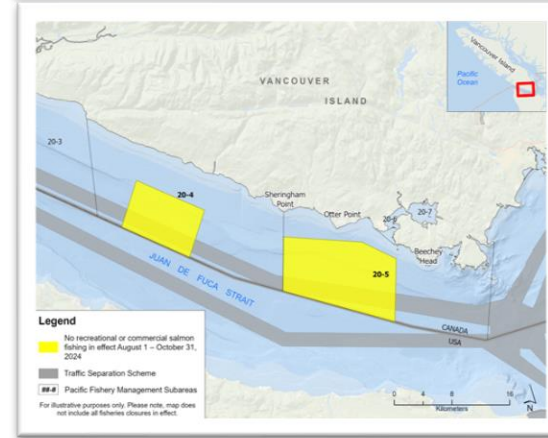
OVERVIEW OF EXISTING FISHING CLOSURES

Commercial and recreational salmon fishing closures in key foraging areas, including:

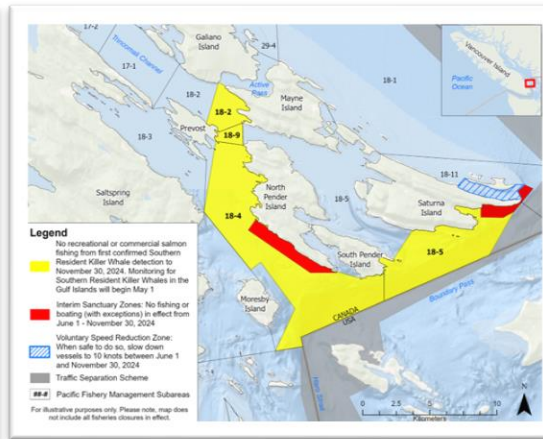
Mouth of Fraser River - in a portion of Subarea 29-3 from August 1 to September 30.



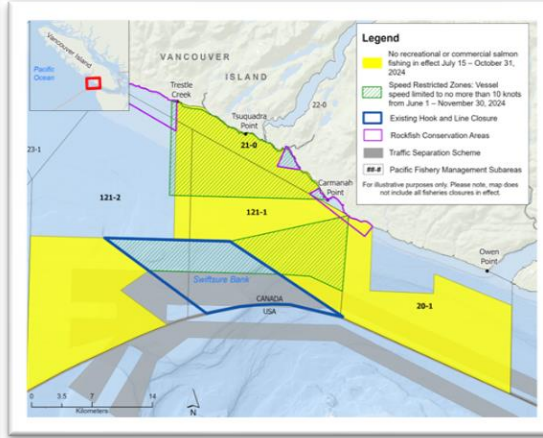
Juan de Fuca - in a portion of Subareas 20-4 and 20-5 from August 1 to October 31.



Gulf Islands - in Subareas 18-9 and portions of 18-2, 18-4 and 18-5 from May 1 to November 30, 2025. Monitoring for Southern Resident Killer Whales in the Gulf Islands will begin on May 1. Closures were triggered on July 16 in 2025.



Swiftsure Bank - in a portion of Subareas 21-0, 121-1 and 121-2 from July 15 to October 31.



Indigenous food, social and ceremonial harvest is not prohibited in these closures.



ENGAGEMENT & CONSULTATION APPROACH TO DATE

Since 2018, DFO has engaged and consulted annually on prey management measures, gathering a wide variety of input and feedback. Some of the main avenues for receiving feedback include:

- Southern Resident Killer Whale Advisory Groups:
 - The Multi-Nation Group,
 - The Indigenous and Multi-Stakeholder Advisory Group, and
 - The Prey Technical Working group;
- Bilateral meetings with First Nations, stakeholders, the BC provincial government, and US counterparts;
- Feedback letters and emails;
- GOC enforcement officer updates;
- External Reports (e.g., First Nation Marine Guardians reports and Straitwatch reports); and
- Public surveys.

DFO has reviewed all prey-related feedback received to date, through the listed avenues above, as well as others, in the development of the prey measure options that are being consulted on for 2026.



CONSIDERATIONS FOR ADJUSTMENTS TO AREA-BASED SALMON FISHING CLOSURES

Prioritize protection of areas where Southern Resident Killer Whales are known to be present and foraging.

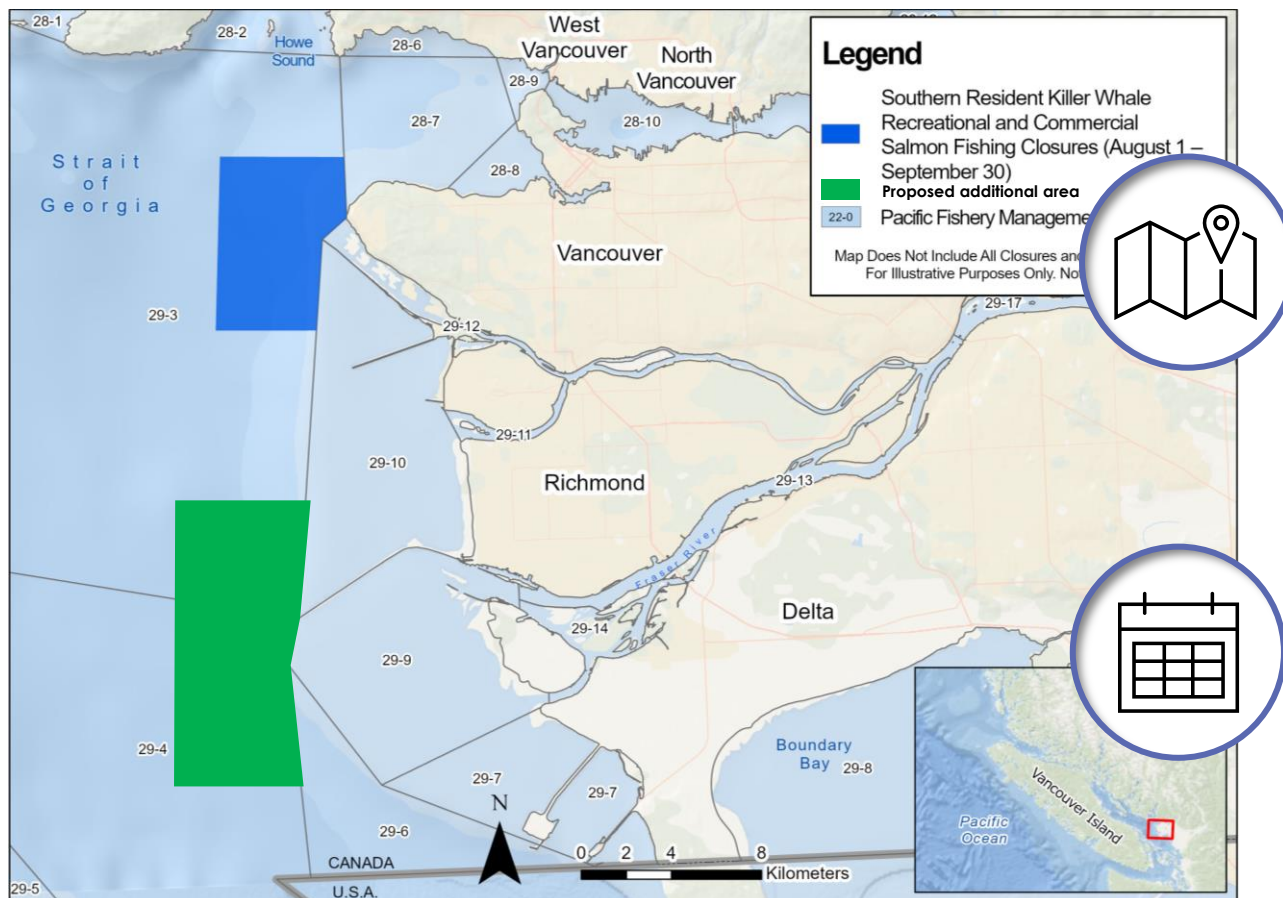
- Fine-scale foraging data exists in Swiftsure Bank and in the Juan de Fuca Strait.
- The same level of detail currently does not exist in the Southern Gulf Islands or at the mouth of Fraser River (greater reliance on presence data).

Reduce prey competition and disturbance from recreational and commercial salmon fishing, while balancing opportunities to harvest.

- Exploitation rates of Chinook salmon, the primary prey for Southern Residents during summer months, has been reduced significantly across a broad number of measures that work to address conservation.
- Potential impacts related to release mortality in existing non-retention Chinook fisheries.



OPTIONS FOR POTENTIAL ADJUSTMENTS IN THE MOUTH OF THE FRASER RIVER



Spatial Adjustments Options:

1. Maintain status quo boundaries (BLUE).
2. Expand closures to include protection of an additional area where Southern Resident Killer Whale occurrence is high (Additional area outlined in GREEN).
3. Other recommendations?

Temporal Adjustment Options:

1. Maintain status quo: closures from August 1 to September 30.
2. Extend closure timing from June 1 to November 30 to provide additional protection during high temporal overlap with preferred prey stocks.
3. Other recommendations?

***Seeking input on potential adjustments for 2026 and consistent implementation of 2026 measures until new information is received.**



MOUTH OF THE FRASER RIVER: CONSIDERATIONS FOR POTENTIAL ADJUSTMENTS

SPATIAL CONSIDERATIONS

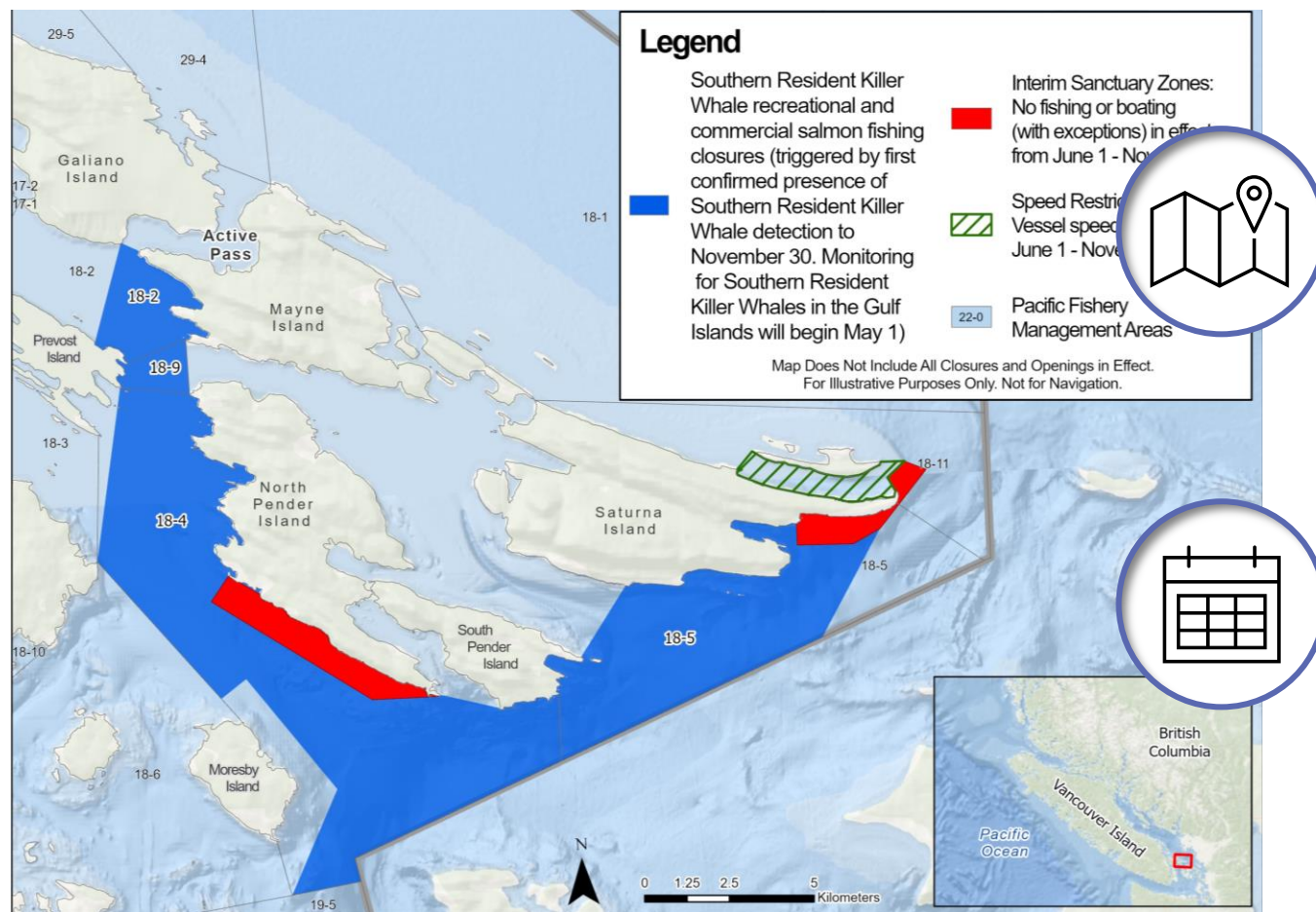
- Considering a spatial expansion in this area is in light of the 2025 Emergency Order decision and the concerns around limited foraging data for the area.
- DFO is using published occurrence data, along with other information, to suggest the potential new area for closure.
 - Southern Resident occurrence is high (70-90%) from June to September in a large portion of southern Strait of Georgia, around the mouth of the Fraser River, with peak occurrence (90%) in this region noted from July to September ([Thornton et al. 2022](#))
- Fishing activity is high in the area; there is an increase following the end of the 'no Chinook fishing' measure on September 1.

TEMPORAL CONSIDERATIONS

- Priority Chinook and Chum stocks migrate through the area in significant numbers approximately from June to November.
- Providing additional time for Southern Residents to access their prey with reduced competition and disturbance from harvesters will increase the likelihood that these whales can meet their energetic needs during critical foraging periods.
- Existing protection for Chinook occurs in this area (no fishing for Chinook until September 1); however, other salmon stocks of prey do not have the same protections.



OPTIONS FOR POTENTIAL ADJUSTMENTS THE SOUTHERN GULF ISLANDS



Spatial Adjustment Options:

1. Maintain status quo boundaries (**BLUE**).
2. Extend fishery closure into Tumbo Channel (overlap with voluntary Speed Reduction Zone) (**GREEN HATCHED**).
3. Other Recommendations?

Temporal Adjustment Options:

1. Maintain status quo: trigger closure protocol with monitoring beginning May 1 and first confirmed detection triggers area to close until November 30.
2. Begin monitoring period earlier, March 1, to protect Southern Resident Killer Whales observed to be foraging in the area earlier.
3. Other Recommendations?

***Seeking input on potential adjustments for 2026 and consistent implementation of 2026 measures until new information is received.**



SOUTHERN GULF ISLANDS: CONSIDERATIONS FOR POTENTIAL ADJUSTMENTS

SPATIAL CONSIDERATIONS

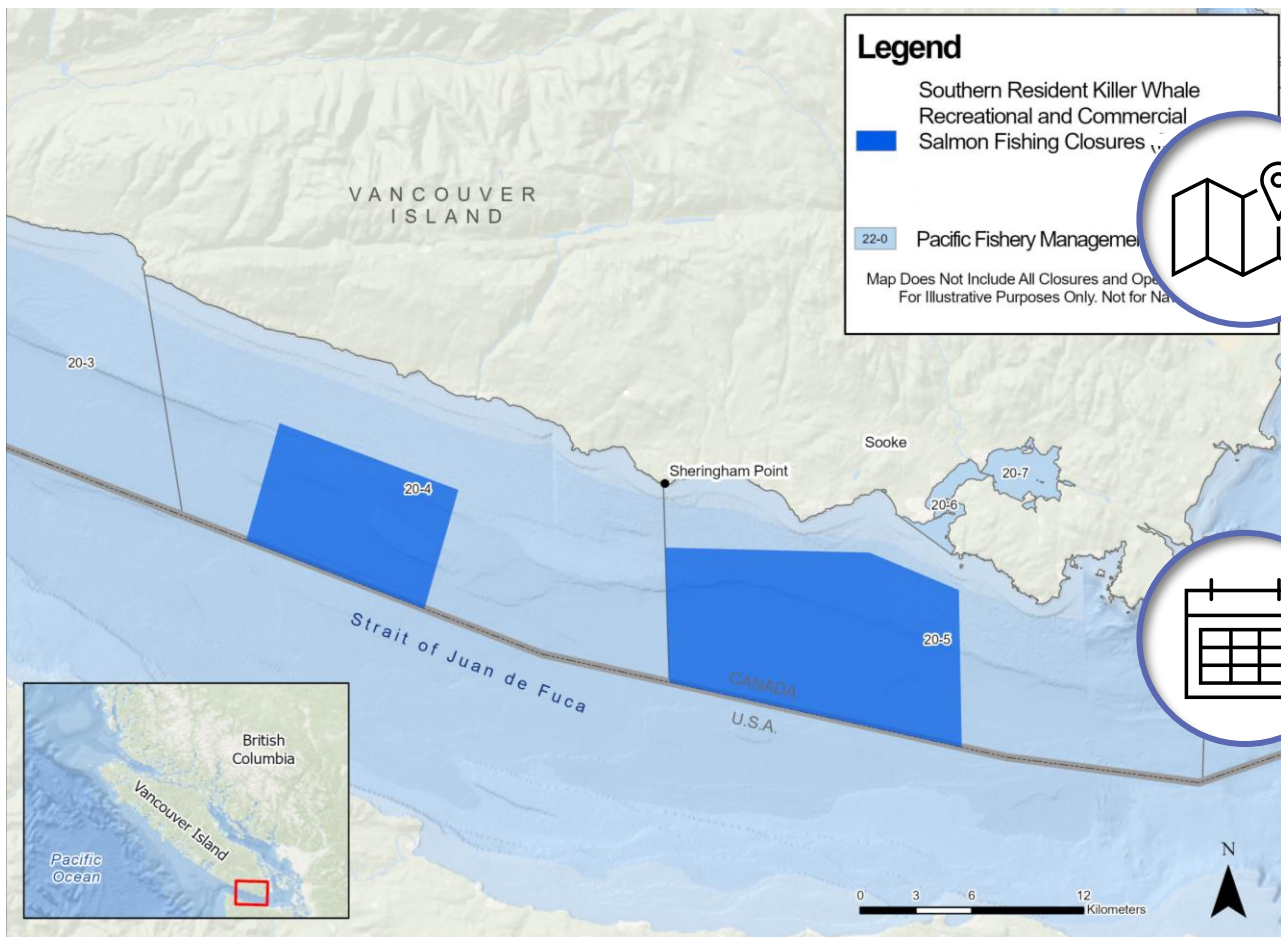
- First Nations and Stakeholders have been reporting Southern Resident presence and salmon fishing activity in Tumbo Channel.
 - External recommendation to have Tumbo Channel included within the SGIs fishing closure; DFO is assessing this option and bringing it forward for the 2026 consultation period.
- Southern Resident occurrence is high in the SGIs throughout the summer, with 90% likelihood from June to September and 70-80% into October ([Thornton et al. 2022](#)).
 - Some studies suggest low Southern Resident Killer Whale presence and habitat use in Tumbo Channel ([Shields 2023](#); [Thornton et al. 2022](#)).

TEMPORAL CONSIDERATIONS

- [Shields \(2023\)](#) indicates concentrated SRKW presence in this area throughout the year, including winter and spring, which supports the need for earlier monitoring.
- Earlier monitoring and potential closure would capture the period when feeder and migratory fish, including herring, are present in the area, providing Southern Residents to access to prey beyond Chinook.
- Expanding the monitoring period continues the dynamic approach that reduces the risk of imposing closures when whales are absent, while being able to increase protection if they arrive earlier.
- Potentially provides more time for Southern Residents to access their prey with reduced competition and disturbance from harvesters, increasing the likelihood of the whales meeting their energetic needs during critical foraging periods.



OPTIONS FOR POTENTIAL ADJUSTMENTS IN THE STRAIT OF JUAN DE FUCA



Spatial Approach Options:

1. Maintain status quo boundaries (**BLUE**). No new information to suggest changes are needed.
2. Other Recommendations?

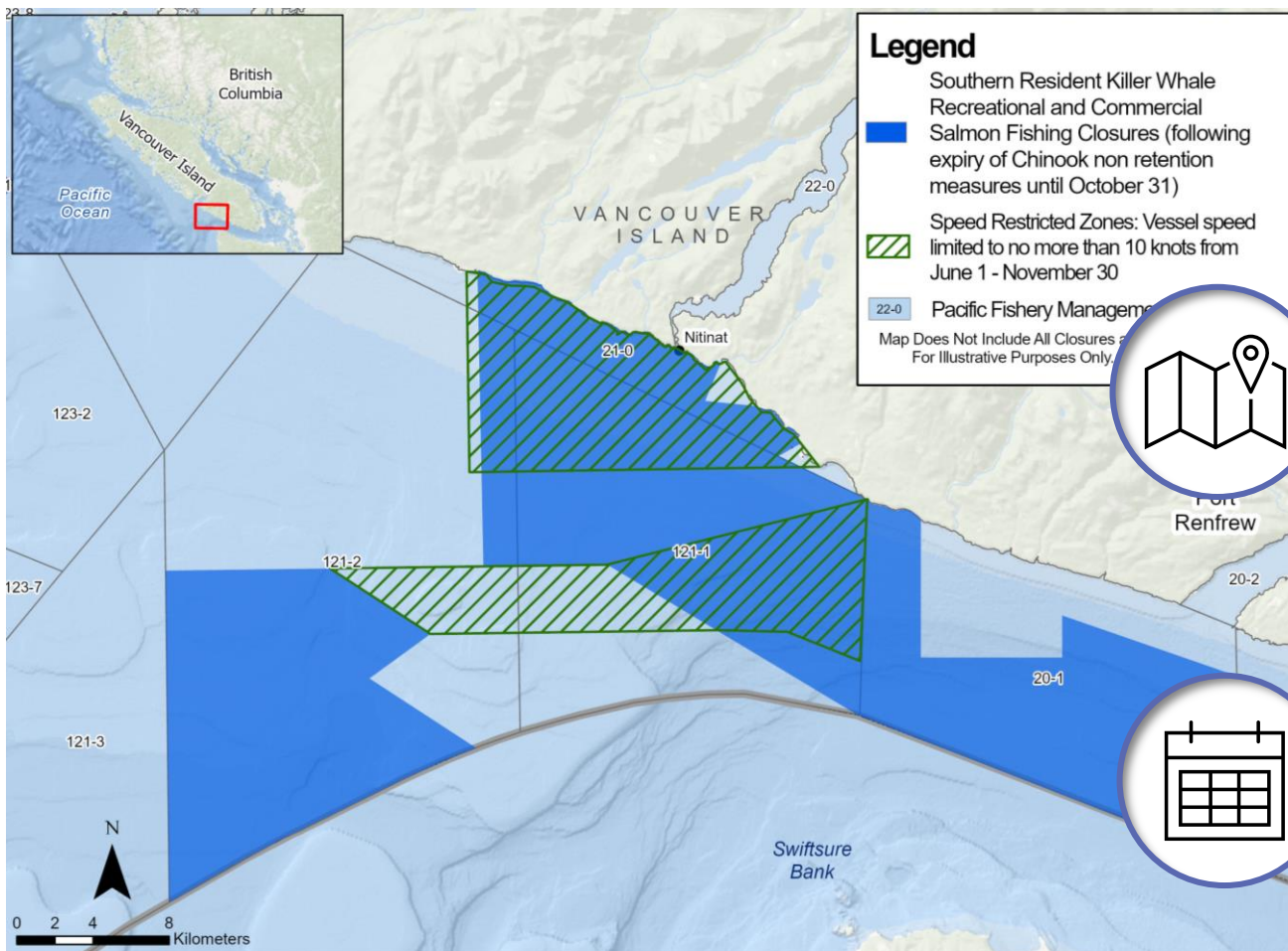
Temporal Adjustment Options:

1. Maintain status quo: August 1 to October 31.
2. Closures begin June 1 until October 31 to provide protection to Southern Resident Killer Whales when foraging in the area earlier in the summer.
3. Other Recommendations?

***Seeking input on potential adjustments for 2026 and consistent implementation of 2026 measures until new information is received.**



OPTIONS FOR POTENTIAL ADJUSTMENTS IN SWIFTSURE BANK



Spatial Approach Options:

1. Maintain status quo boundaries (**BLUE**). No new information to suggest spatial changes are needed.
2. Other Recommendations?

Temporal Adjustment Options:

1. Maintain status quo: July 15 to October 31.
2. Closures begin June 1 until October 31 to provide protection to Southern Resident Killer Whales when foraging in the area earlier in the summer.
3. Other Recommendations?

***Seeking input on potential adjustments for 2026 and consistent implementation of 2026 measures until new information is received.**



JUAN DE FUCA STRAIT & SWIFTSURE BANK: **CONSIDERATIONS FOR POTENTIAL ADJUSTMENTS**

SPATIAL CONSIDERATIONS

- Since the adjustments made for 2024 & 2025, DFO has seen no new data to suggest potential adjustments to the spatial boundaries; the existing boundaries provide extensive coverage in these areas.
- Current fishing closures protect areas where Southern Residents are documented to be foraging for significant portions of time when in the area.

TEMPORAL CONSIDERATIONS

- Fraser Chinook Spring & Summer 5(2) stocks, which are a priority prey for Southern Residents, migrate through Swiftsure Bank and the Juan de Fuca Strait in significant numbers from late May into early November.
- Providing additional time for Southern Residents to access their prey with reduced competition and disturbance from harvesters will increase the likelihood that these whales can meet their energetic needs during critical foraging periods.
- While existing closures provide some protection, they do not currently align with the full temporal window of Chinook migration through these key foraging areas.
- Extending the timing of closures would better reflect the overlap between Fraser Chinook migration and Southern Resident presence, ensuring consistent access to high-quality prey throughout the season.



QUESTIONS & DISCUSSION PERIOD



PROPOSED SOUTHERN RESIDENT KILLER WHALE CHINOOK CLOSURE OPTIONS



PREY MEASURES APPROACH: SOUTHERN RESIDENT KILLER WHALE CHINOOK CLOSURES (NEW)

- Following the 2025 decision to decline the Emergency Order, the Government of Canada proposed regulatory and non-regulatory measures to improve prey availability. This included considering (1) adjustments to existing area-based salmon fishing closures, as well as exploring (2) a new chinook rolling closure measure.
- To advance item #2, DFO is considering changes to the existing Chinook non-retention measures that come into effect each spring to recreational and commercial Chinook fishery closures for a portion of their usual implementation period.
 - I.e., Non-retention would end early and shift into Chinook closures on June 1 within Southern Resident Killer Whale Critical Habitat.
- DFO committed to consider and consult on this potential measure and will be considering all feedback and input through this consultation period, as well as input from previous consultation, prior to finalization of the 2026 prey management measure approach.



PROPOSED SOUTHERN RESIDENT KILLER WHALE CHINOOK CLOSURES

DESCRIPTION

- Commercial and recreational Chinook closures that align with Fraser Chinook Spring 5(2) and Summer 5(2) stock migrations through Southern Resident Killer Whale critical habitat.
- Aims to reduce fishing competition for Southern Residents' prey of importance during peak migration periods, with the intent of improving Southern Resident Killer Whale prey availability.

APPROACH

- The key Chinook stocks of importance for Southern Resident Killer Whales were identified through DFO scientific assessments and other publications.
- Best available data was used to determine when and where the identified stocks migrate through the critical habitat.
- **Consulting on transitioning existing Chinook non-retention measures to become Chinook closures beginning June 1 and remain in place until the existing Southern Resident Killer Whale area-based fishing closures come into effect.**
- The June 1 start date was selected to align with peak Chinook migration, Southern Resident Killer Whale presence data, and existing management measures, while minimizing early-season fishery impacts.

CONSIDERATIONS

- Closures would not apply to Indigenous FSC harvest or areas approved for Mark Selective Fishery openings.
- Implementation will be complementary to the existing area-based salmon closures and Chinook non-retention measures.
- If recommended and approved for 2026, implementation would proceed on an interim basis, and subsequent implementation would be subject to annual review.



MANAGEMENT MEASURE TIMING SEQUENCE

Chinook only; occurring broadly
across Southern Resident Killer
Whale Critical Habitat

All Salmon; occurring within precise
Southern Resident presence and/or
foraging areas

STEP 1

Existing Chinook non-retention measures from April 1 to May 31

*change = non-retention ends earlier than usual to shift into Chinook closures

STEP 2

NEW Chinook Closure replaces Chinook non-retention measure within Southern Resident Critical Habitat

Swiftsure Bank: June 1 – July 14
Juan de Fuca Strait: June 1 – July 31
Southern Gulf Islands: June 1 – July 31
Mouth of the Fraser: NO CHANGE
Chinook Closures already exist in this area from April 1 – August 31

STEP 3

Existing Southern Resident Killer Whale area-based fishing closures for all Salmon are implemented for the same time period that was in place for 2025.

Swiftsure Bank: July 15 – October 31
Juan de Fuca Strait: August 1 – October 31
Southern Gulf Islands: Trigger Protocol closures starting as early as May 1 – Nov 30
Mouth of the Fraser: August 1 – Sept 30

Measure sequencing is based on seasonal timing

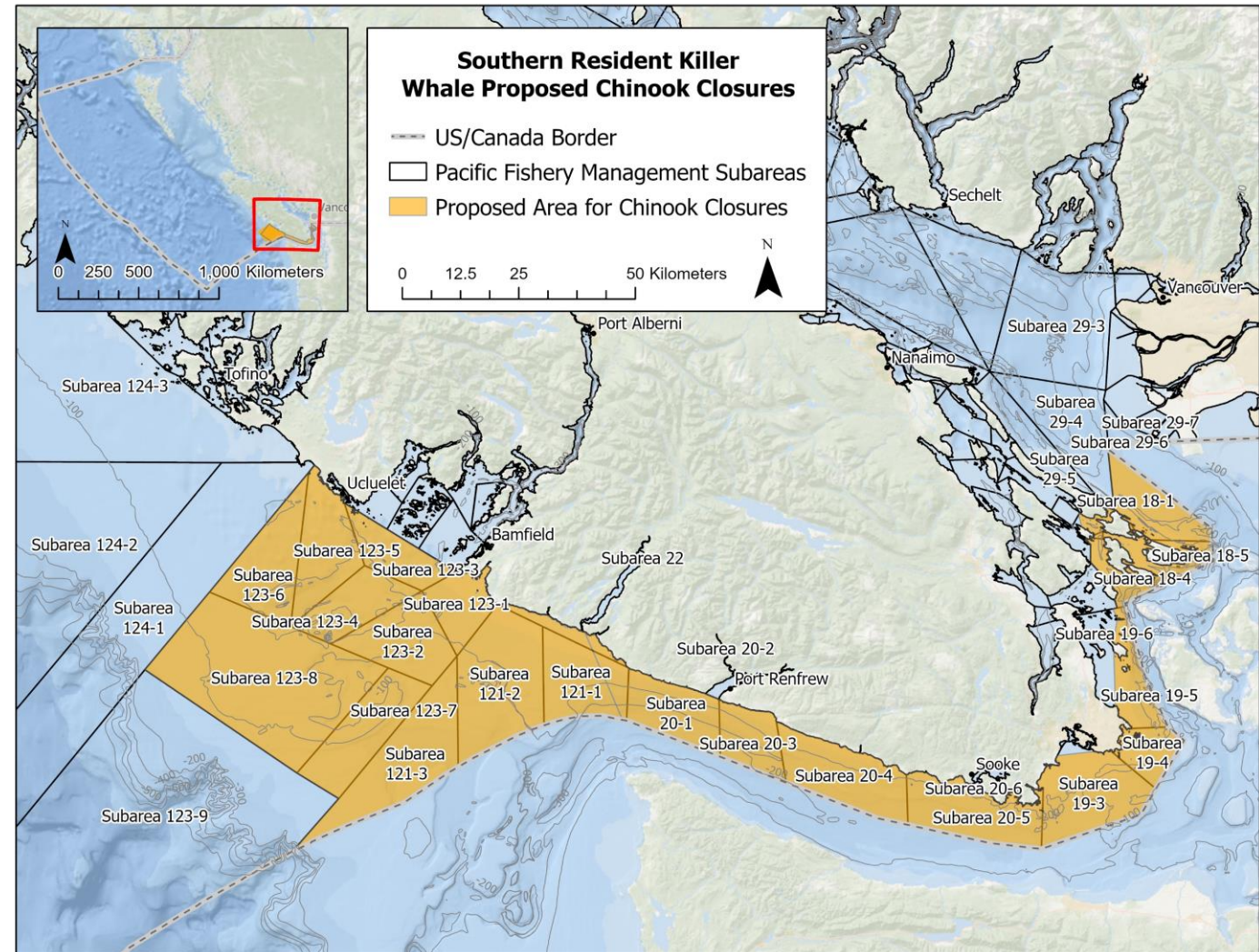
Sequential timing: each measure begins the day after the previous one ends, with no overlap.

**Mouth of the Fraser exception, one month overlap due to both measures being existing measures.*



CHINOOK CLOSURES PROPOSED AREAS

- The shift from Chinook non-retention to Chinook closures would take place in a majority of the Southern Resident Killer Whale Critical Habitat.
 - This would apply to commercial and recreational harvest only and would not apply to Indigenous FSC harvest OR areas approved for Mark Selective Fishery openings.
- PFMA sub-areas proposed for inclusion are not yet finalized. Feedback is welcome during this consultation period.
- No change proposed for Mouth of the Fraser as Chinook Closures already exist throughout PFMA 29's sub-areas (April 1 to August 31).





POTENTIAL BENEFITS & LIMITATIONS

Overarching Potential Benefits

- Provides Southern Resident Killer Whales with more accessibility and abundance of their preferred prey, beyond the existing area-based salmon closures;
 - Supports access to Chinook during a time when area-based fishing closures are not in effect yet.
- Mitigates potential impacts of physical and acoustic disturbance beyond existing annual measures.
- Reduces potential impacts of non-retention fisheries, which can alter prey behaviour and mortality of Chinook.
- Provides targeted protection of primary prey while maintaining harvester access to other salmon species.
- Advances the Emergency Order proposed incremental measure to address the prey availability imminent threat during a biologically critical time window for Southern Resident Killer Whale.

Overarching Potential Limitations

- As Chinook non-retention measures already exist, and they significantly reduce Chinook fishing effort, the incremental benefit of transitioning this measure to a closure may be limited.
- Compliance and enforcement on Chinook-specific closures may be challenging while harvest for other salmon species continues.

PROPOSED PREY MANAGEMENT MEASURE OPTIONS

UNDER CONSIDERATION

Option 1

STATUS QUO

- Southern Resident Killer Whale area-based fishing closures remain the same as 2025;
- No Chinook closures for prey availability are implemented; existing non-retention measures in effect, as communicated through the Salmon IFMP.

Option 2

EXISTING AREA-BASED FISHING CLOSURES (MAY INCLUDE SPATIAL AND TEMPORAL ADJUSTMENTS) & NO NEW CHINOOK CLOSURE MEASURE

- The area-based fishing closures are implemented, potentially with spatial and temporal adjustments;
- No Chinook closures for prey availability are implemented; existing non-retention measures are in effect, as communicated through the Salmon IFMP

Option 3

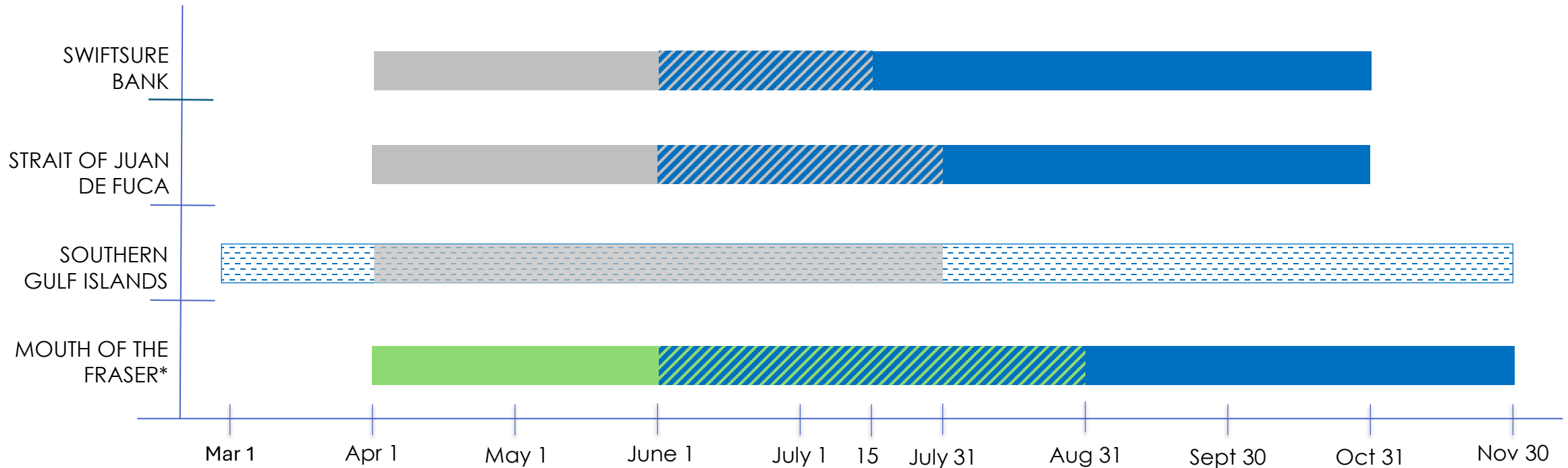
EXISTING AREA-BASED FISHING CLOSURES (MAY INCLUDE SPATIAL ADJUSTMENTS) & NEW CHINOOK CLOSURE MEASURE

- The area-based fishing closures are implemented, potentially with spatial adjustments (no temporal adjustments considered); and
- Transition existing non-retention measures to Chinook closures (during key period) within portions of Southern Resident Killer Whale critical habitat.



TIMING OVERLAP OF MEASURES UNDER OPTION 2

OPTION 2: AREA-BASED SALMON CLOSURES (MAY INCLUDE SPATIAL AND TEMPORAL ADJUSTMENTS) & NO CHINOOK CLOSURES



Measures occurring broadly across Southern Resident Killer Whale Critical Habitat

- Existing Chinook non-retention
- Chinook Closure (*Existing measure in the Southern Strait of Georgia)

Measures occurring within existing Southern Resident Killer Whale presence and/or foraging areas

- SRKW Area-based fishing closures
- Area-based fishing closures (Triggered start date)
- Potential overlap of measures



OPTION 2: EXISTING CLOSURES (WITH POTENTIAL ADJUSTMENTS) & NO NEW CHINOOK CLOSURES - TIMING BREAKDOWN

Swiftsure Bank

- Existing Chinook Non-Retention: April 1 – July 14
- Existing Area-based Fishing Closures for all salmon:
 - If Status Quo: July 15 – October 31
 - **If temporally expanded:** June 1 – October 31

Juan de Fuca Strait

- Existing Chinook Non-Retention: April 1 – July 31
- Existing Area-based Fishing Closures for all salmon:
 - If Status Quo: August 1 – October 31
 - **If temporally expanded:** June 1 – October 31

Southern Gulf Islands

(with potential spatial adjustment)

- Existing Chinook Non-Retention: April 1 – July 31
- Existing Area-based Fishing Closures for all salmon:
 - Trigger Protocol Start, as early as May 1 – November 30
 - **If temporally expanded:** Trigger Protocol Start, as early as March 1 – November 30

Mouth of the Fraser

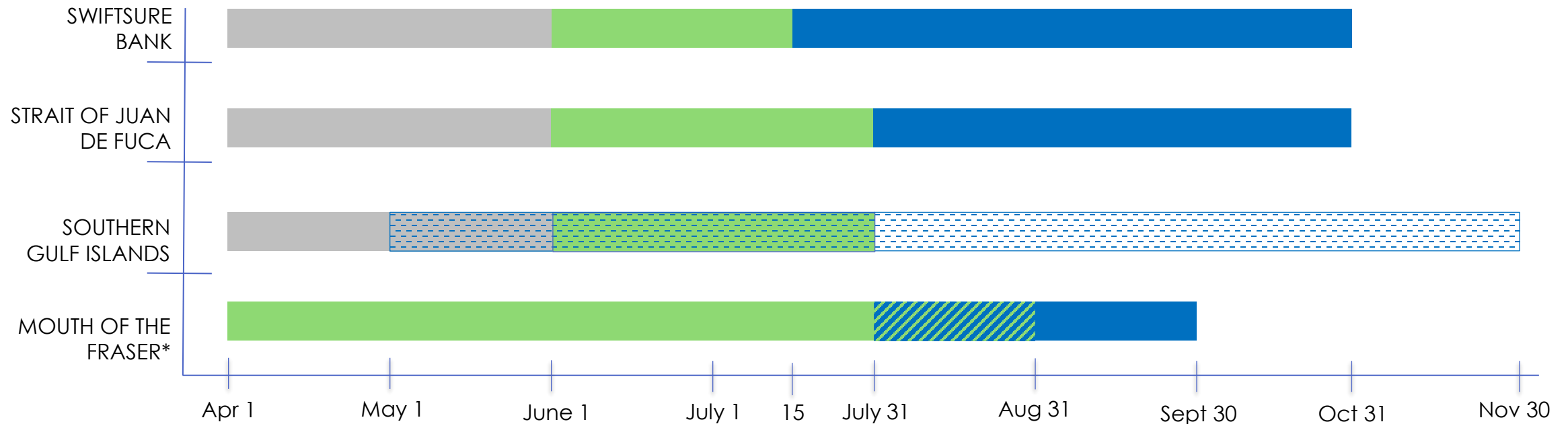
(with potential spatial adjustment)

- Existing Chinook Closure: April 1 – August 31
- Existing Area-based Fishing Closures for all salmon:
 - If Status Quo: August 1 – September 30
 - **If temporally expanded:** June 1 – November 30



TIMING OVERLAP OF MEASURES UNDER OPTION 3

OPTION 3: AREA-BASED SALMON CLOSURES (MAY INCLUDE SPATIAL ADJUSTMENTS) & CHINOOK CLOSURES



Measures occurring broadly across Southern Resident Killer Whale Critical Habitat

- Existing Chinook non-retention
- Chinook Closure (*Existing measure in the Mouth of the Fraser)

Measures occurring within existing Southern Resident Killer Whale presence and/or foraging areas

- SRKW Area-based fishing closures
- Area-based fishing closures (Triggered start date)
- Potential Overlap of measures



OPTION 3: HARMONIZED MEASURE APPROACH - TIMING BREAKDOWN

Swiftsure Bank

- Existing Chinook Non-Retention*: April 1 – May 31
(***measure ends early** to shift into new chinook closure)
- **New** Chinook Closure: June 1 – July 14
- Existing Area-based Fishing Closures for all salmon:
July 15 – October 31

Juan de Fuca Strait

- Existing Chinook Non-Retention*: April 1 – May 31
(***measure ends early** to shift into new chinook closure)
- **New** Chinook Closure: June 1 – July 31
- Existing Area-based Fishing Closures for all salmon:
August 1 – October 31

Southern Gulf Islands

(with potential spatial adjustment)

- Existing Chinook Non-Retention*: April 1 – May 31
(***measure ends early** to shift into new chinook closure)
- **New** Chinook Closure: June 1 – July 31
- Existing Area-based Fishing Closures for all salmon:
Trigger Protocol Start, as early as May 1 –
November 30

Mouth of the Fraser

(with potential spatial adjustment)

- Existing Chinook Closure: April 1 – August 31
- Existing Area-based Fishing Closures for all salmon:
August 1 – September 30



KEY AREAS FOR DISCUSSION & FEEDBACK

We are seeking your input to shape and strengthen the proposed options for the Southern Resident prey management measures. Your feedback will support decision making, while ensuring consideration of ecological, cultural, and socio-economic factors.

1. Preferred approach for the prey management measures in 2026.
2. Feedback on the area-based fishing closure adjustments:
 - Considerations on potential spatial and temporal adjustment options; and
 - Following 2026, implementation of area-based fishing closures to remain status quo until new information becomes available to reconsider spatial & temporal applications.
3. Feedback on the proposed new Chinook Closure measure.
4. Other Key Considerations regarding:
 - Socio-economic impacts or benefits;
 - Compliance & on-water safety;
 - Benefits and/or impacts to Southern Resident Killer Whales;
 - Any other concerns related to these measures.



QUESTIONS & DISCUSSION PERIOD



KEY UPCOMING MILESTONES FOR THE PREY MANAGEMENT MEASURES PROCESS



Please submit any feedback on the potential prey management measures by **October 31**, or sooner to the Southern Resident Killer Whale Inbox at **DFO.SRKW-ERS.MPO@dfo-mpo.gc.ca**.

Requests for bilateral meetings can also be sent to the Southern Resident Killer Whale Inbox.



UPDATE ON WORK TOWARDS A PHASED-IN APPROACH TO SCRUBBER DISCHARGE PROHIBITIONS IN SOUTHERN RESIDENT KILLER WHALE CRITICAL HABITAT



SCRUBBERS – PLANNED APPROACH

- Transport Canada is working to phase-in prohibitions on the discharge of washwater from exhaust cleaning systems (scrubbers) in SRKW critical habitat.
- This work is part of the broader collaborative Government of Canada approach to address the recovery of the SRKW.
- Scrubber prohibitions will be informed by targeted consultations. These will:
 - Confirm and expand on data gathered to date;
 - Identify potential impacts to mitigate, where possible; and
 - Define the scope and phase-in / implementation timelines.

SCRUBBERS – BACKGROUND AND TIMELINES

Canada's Regulatory Framework

- Transport Canada has a comprehensive regulatory regime in place for the protection of the marine environment under the *Canada Shipping Act, 2001*.
- Discharges from exhaust gas cleaning systems (scrubbers) have been regulated in the *Vessel Discharge and Dangerous Chemical Regulations (VPDCR)* since 2013.

Global Standards

- The North America Emission Control Area (ECA) was established in 2015 setting a limit of 0.1% of sulphur content in marine fuel.
- In 2020, the Global Sulphur Cap came into effect. The allowable sulphur content in ship fuel was reduced from 3.5% to 0.5% worldwide (outside of ECAs).
- Under the International Convention on the Prevention of Pollution from Ships (MARPOL) and the *VPDCR*, vessels must use low sulphur fuels or a scrubber system to achieve compliance.

SCRUBBERS – TYPES OF SYSTEMS

Scrubbers reduce the level of sulphur emissions into the atmosphere from ship engines and come in the form of open-loop, closed-loop or hybrid systems to comply with international standards.

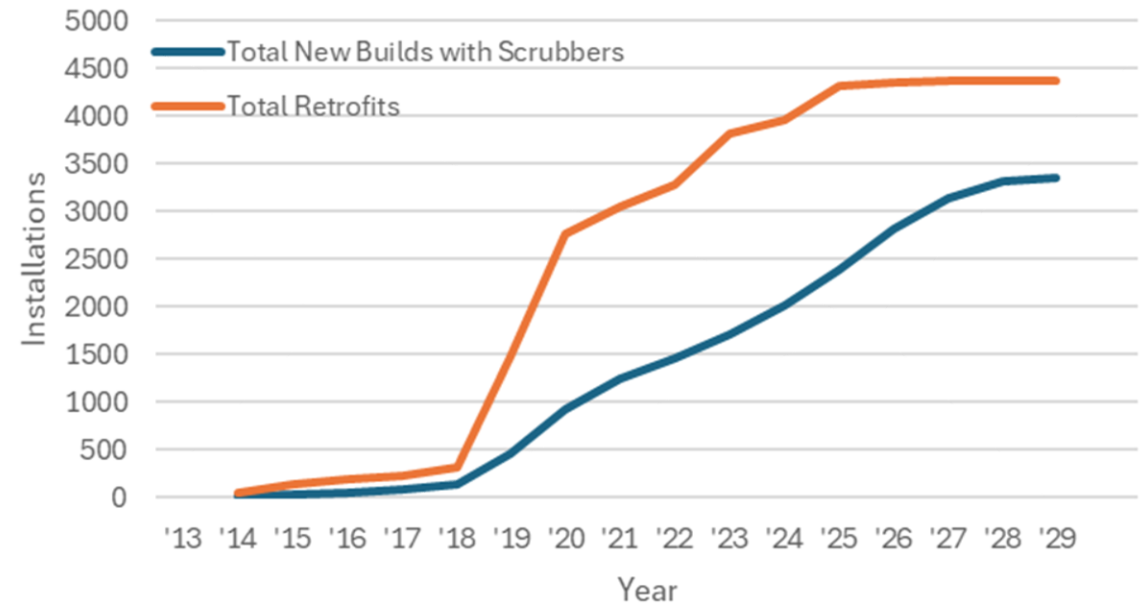
- **Open-loop systems** use a continuous stream of naturally alkaline seawater to wash exhaust gases. The washwater is then immediately discharged back into the sea.
- **Closed-loop systems** recirculate treated washwater. Most of the solid waste is stored onboard the vessel and disposed of at certified waste management facilities on shore (if available). The liquid in the holding tank can be treated as per the IMO guidelines and discharged along with “bleed-off” discharged throughout the process.
- **Hybrid systems** can toggle between open-loop and closed-loop.



SCRUBBERS – 2023/24 FIGURES

- There are an estimated **6,434** vessels operating with scrubbers worldwide.
- An estimated **1,217** vessels with scrubbers transited through Canadian waters on the West Coast.
- In terms of vessel on the West Coast operating in Canadian waters:
 - Bulk carriers: **285** (274 open-loop, 11 closed-loop)
 - Containerships: **149** (79 open-loop, 70 closed-loop)
 - Tankers: **58** (56 open-loop, 2 closed-loop)
 - Cruise ships: **31** (18 open-loop, 13 closed-loop)

Global Estimated Totals





SCRUBBERS – LET'S TALK TRANSPORTATION

- Transport Canada launched an [online consultation](#) on the topic of vessels using scrubber systems in Canadian waters from November 19, 2024 to January 19, 2025.
- 930 comments were received from members of the general public, environmental non-governmental organizations, the marine industry, members of Indigenous communities, and several U.S. citizens, as well as those submitted anonymously.
- Response themes include:
 - Environmental Impacts
 - Scientific Research
 - International Considerations
 - Economic Considerations
 - Communication and Consultation



SCRUBBERS – NEXT STEPS

- Publish results of Let's Talk Transportation – Scrubbers online fall 2025 (targeting).
- Begin targeted consultation with impacted stakeholders and First Nations in fall 2025 to support measure development.
- Continue to study:
 - Environmental impacts with different types of scrubber systems in the Canadian context.
 - Discharges from scrubber systems in SRKW critical habitat.
 - Economic impacts of potential measure implementation.
- Contribute to the ongoing work at the International Maritime Organization to evaluate and develop harmonized rules and guidance on the discharge of scrubber washwater in the aquatic environment.



QUESTIONS & DISCUSSION PERIOD



SOUTHERN RESIDENT KILLER WHALE RECOVERY MEASURES: UPDATES AND NEXT STEPS



RECOVERY MEASURES: UPDATES AND NEXT STEPS

Identifying Interim Underwater Noise Objectives within Southern Resident Killer Whale Critical Habitat

- Analysis of acoustic data is continuing and DFO anticipates having more information to share on the proposed approach later in 2025.

Marine Mammal Regulation Amendment Process

- The ongoing process to amend the MMR of the *Fisheries Act* is on track, targeting pre-publication in Canada Gazette 1 in Fall 2025.
- Canadians will have an additional opportunity to review and provide feedback on the proposed regulations during pre-publication in the Canada Gazette I, before the amendments are finalized.
- Notifications will be sent to Treaty First Nations, Multi-Nation Group Members, and IMAG-TWG members to seek formal input during the comment period.
- Canada is proposing an increased approach distance to 1000 metres for Southern Resident Killer Whales.

Prey Availability

- DFO's consultation period on Prey Measures is occurring from September 17 – October 31, 2025.
- Following this, DFO will submit the recommendations to the Minister on adjustments to the measures with an announcement expected in early 2026.



RECOVERY MEASURES: UPDATES AND NEXT STEPS

Transport Canada Physical & Acoustic Disturbance 2025 Measures

- Will recommend re-establishment of measures to reduce physical and acoustic disturbance from general vessels in Southern BC coastal waters (Speed Restricted Zones and Vessel Restricted Zones).
- Continue public communication and education of the measures to support awareness and compliance efforts.
- Throughout the 2025 season, TC will continue to review new information, including whale presence data, studies and research, and AIS and non-AIS vessel activity to determine if future adjustments are needed.

Scrubbers

- Begin targeted consultation with impacted stakeholders in fall 2025 to support measure development.
- Continue to study:
 - Environmental impacts with different types of scrubber systems in the Canadian context.
 - Discharges from scrubber systems in SRKW critical habitat.
 - Economic impacts of potential measure implementation.

ECCC Contaminants

- Pollutants Affecting Whales and Their Prey Inventory Tool (PAWPIT) is working towards launching an update that would contain Whales Initiative data for 2018-2021.
- Environmental contaminant monitoring and enforcement work is ongoing under the Whales Initiative.
- A Southern Resident Killer Whale Contaminants Technical Working Group Meeting is being planned for fall/winter 2025.



RECOVERY MEASURES: UPDATES AND NEXT STEPS

Outreach & Education

- Develop an integrated outreach & education strategy post March 2026.
- Update outreach toolkits (printed materials, programs and online content) with new management measures and regulatory amendments.

Enforcement & Compliance

- DFO Fishery Officers and Parks Canada Wardens have been actively conducting education and outreach, monitoring and surveillance and taking enforcement action in support of the Southern Resident area based fishing closures in the Gulf Islands, Swifsure, Juan de Fuca and mouth of Fraser River. In addition, incidents of disturbance under the *Marine Mammal Regulations* or harassment under the *Species at Risk Act* are being addressed and responded to.
- Transport Canada Whale Enforcement Unit, supported by the Canadian Coast Guard Marine Mammal Desk, are addressing issues of non-compliance under the Interim Order for the Protection of the Killer Whale, including vessel restricted zone and speed restricted zone violations.



MEMBER UPDATES & OPEN DISCUSSION



ADDITIONAL SLIDES

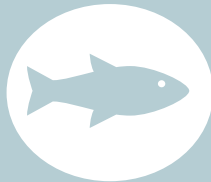


STOCKS OF FOCUS

Fraser Chinook Spring 5(2) & Summer 5(2)

Key component of diet

Consistently found in Southern Resident Killer Whale scat/diet studies.



Seasonal importance

Migration overlaps in space and time with Southern Resident Killer Whale presence and foraging behaviour.



High nutritional value

High lipid content is critical for Southern Resident Killer Whale energy needs.