Southern Resident Killer Whale -Chinook Prey Availability

Potential Management Actions for Consideration

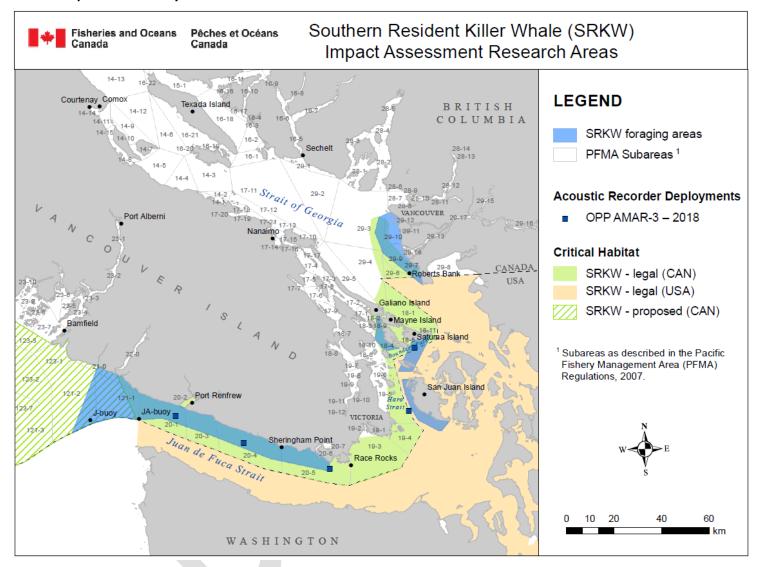
This document provides a summary of possible management actions that could be considered by
Area based on feedback provided on the DFO Discussion Paper. These are intended to outline
possible options for further discussion and may be further adjusted based on feedback received on
the conference call.

General Considerations for all options:

- Further bi-lateral consultation has been requested by First Nations to discuss potential impacts of
 proposed management measures on FN FSC fisheries; DFO is proposing that FN FSC fisheries would
 be exempt from proposed actions pending completion of consultations. In the interim, First Nations
 consideration to avoid salmon fishing in proposed areas on a voluntary basis or to cease fishing if
 killer whales are in the vicinity could be considered. (expect very low effort)
- Additional reductions in chinook harvest are under consideration and would complement actions identified here. Proposed conservation approach for Fraser River chinook includes:
 - The draft 2018/19 Salmon Integrated Fisheries Management Plans identify additional fishery management measures proposed for 2018 fisheries to address conservation concerns for many BC Chinook Salmon populations
 - O DFO is proposing a precautionary reduction in exploitation rates (in the range of 25% to 35%) for specific chinook stocks of concern, including all Fraser River chinook populations (including Spring 4₂, Spring 5₂, Summer 5₂, Summer 4₁ and Fall 4₁), to align exploitation rates with current stock productivity, support conservation and promote rebuilding.
 - While specific measures have not been confirmed, it is expected existing chinook conservation measures will need to remain in effect and include additional measures to achieve proposed 25-35% reduction targets for Fraser Chinook.
- Commercial fisheries for non-salmon and other vessel activity (e.g. recreational boaters, whale watching, etc.) are NOT included in proposed measures at this time (additional consultation is required with these groups)
- Under potential management actions by Area, there are recreational proposals identified. However, the SFAB has passed the following motion with respect to the proposed measures outlined below:
 - SFAB Motion: MB-01-02-18: Whereas: The SFAB recognizes the opportunity to aid in recovery of SRKW's and have consulted with our community in good faith based on the understanding that all sectors would be asked to take similar measures. The SFAB is concerned that no additional measures will be taken by other sectors which renders the sacrifices made by our sector ineffective. The SFAB SRKW committee urges DFO to ensure that measures taken to provide protection for SRKW's from competition for prey and physical and acoustic disturbance are applied to all boating related activity in areas where the recreational fishery is facing restrictions to provide these protections. In the event that

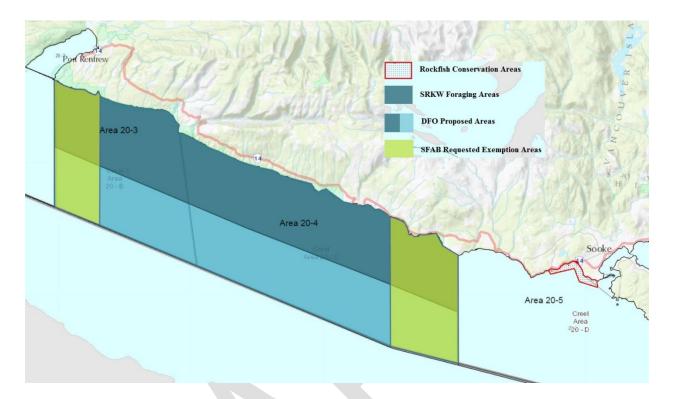
DFO in unable to do this, that the SFAB advises DFO that the implementation of the bubble is the only acceptable measure that it will recommend.

Proposed Actions by Area:



1. Juan de Fuca

- i) DFO Proposed Approach May 1 to Sept. 30 Finfish closure for recreational fishery to address fishery removals and disturbance from recreational vessels fishing for salmon and other finfish in Subareas 20-3 and 20-4. No commercial salmon fishery permitted in area.
- ii) Recreational proposal- May 1 to Sept 30th No fishing for salmon (or alternately May 1 to June 30th no fishing for salmon and July 1 to September 30 finfish closure). Reduce area to exclude west of Providence Cove in 20-3 and east of Fossil Point in 20-4.
- iii) MCC and FN proposals- In addition to DFO proposed approach for Subareas 20-3 and 20-4, include Subareas 20-1, 20-5 and 21/121.

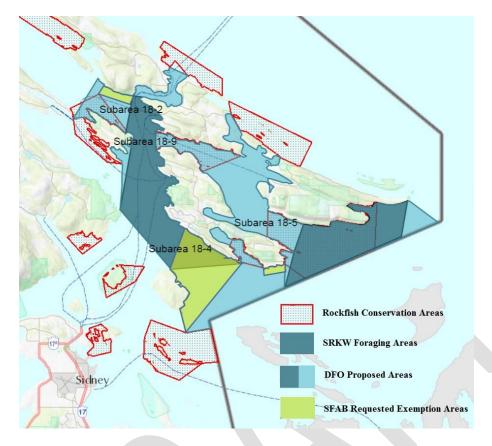


Additional considerations:

- Existing chinook conservation measures for recreational fisheries:
 - March 1 through June 15th, two chinook per day which may be wild or hatchery marked between 45 and 67 cm or hatchery marked greater than 67 cm in Subareas 19-1 to 19-4 and 20-4 to 20-7.
 - Zone 1: June 16th through July 13th, two chinook per day which may be wild or hatchery marked between 45 and 85 cm or hatchery marked greater than 85 cm.

2. Gulf Islands

- i) DFO Proposed Approach May 1 to Sept. 30 Finfish closure in Subareas 18-2, 18-4, 18-5 and 18-9 for recreational fishery to address fishery removals and disturbance from recreational vessels fishing for salmon and other finfish. No commercial salmon fishery permitted in area.
- ii) Recreational proposal May 1 to Sept. 30th No fishing for Salmon and exclude 3 areas within 18-2 and 18-4 (including Pender Bluffs). Allow commercial sockeye directed fishing opportunity in area off Pender Bluffs.



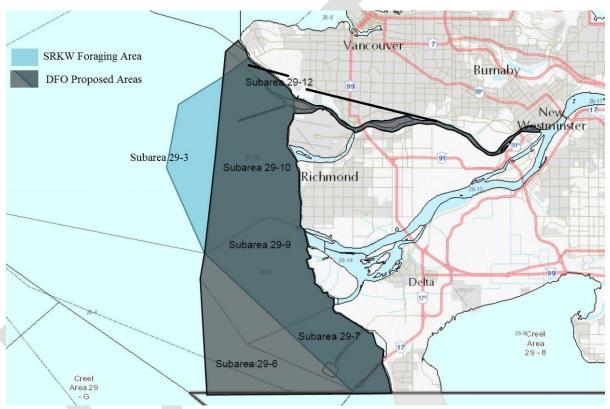
Additional considerations:

Existing chinook conservation measures for recreational fisheries:

- Subareas 18-1 to 18-6, 18-9 and 18-11, 19-5, and those portions of Subareas 29-3 to 29-5 that lie southeasterly of a line from a point on the east side of Valdes Island located at 49 degrees 05.562'N and 123 degrees 39.989'W then extending approximately 57 degrees True to the North Arm Jetty Light located at 49 degrees 15.440'N and 123 degrees 16.778'W.
- Zone 1: Commences the Monday following the first Saturday of May each year through June 15th, two chinook per day of which only one may be greater than 67 cm. The minimum size limit is 62 cm. (This measure is to protect Spring 42 chinook.) June 16th to July 13th, two chinook per day between 62 cm and 85 cm.
- Historically there has been some commercial fishing effort for Area B and H in this area.
 2010 was last year this area opened with limited observed effort in the area. No effort in
 2014 even though area was opened.

3. Area 29 - Mouth of Fraser River

- DFO Proposed Approach May 1 to Sept. 30th Fin fish closure in Subareas 29-6, 29-7, 29-9 and 29-10. Proposed modification to exclude Subarea 29-12 (Area is primarily a log storage area and also extends upstream to tip of Lulu Island). Commercial fishery use expected to be limited to some short sockeye directed fisheries that will generally avoid this area (see additional considerations)
- Recreational proposal Modification for Subarea 29-6 (May 1 to July 31 no fishing for salmon; Aug.1 to Sept. 30 chinook non-retention).
- *First Nations and MCC* in addition to DFO proposed approach, include 29-3, 29-4 and 29-5 in finfish closure or no salmon fishing.



Additional considerations:

- **Further study of SRKW use of the mouth of the Fraser River required.
- Commercial salmon fishery use in vicinity of area includes: Area B sockeye/pink chum fisheries outside 45m contour; Area H would primarily fishing in Area 29-3 and 29-4; and Area E fishery (portions of 29-9 and 29-10 opened; primarily vessels drifting across boundaries for these areas on an ebb tide)
- Existing chinook conservation measures for recreational fisheries:

- Fraser River Mouth (Subareas 29-6, 29-7, 29-9 and 29-10). Effective January 1 until July 31, there is no fishing for chinook in the above noted areas.
- Also see measures listed for Gulf Islands which includes portions of Subareas 29-3 to 29-5.

4. Voluntary Measures

- Approach distance: suggestion to implement a requirement for vessels to maintain a 'bubble zone' around SRKW extending to 200m - 400m as SRKW are highly mobile
- Communications voluntary actions in the presence of Killer Whales. Guidelines?
 Communication outreach for marine mammal safety
- Change settings on fish finders to higher frequency (80 vs. <u>220Hz</u>) when killer whales are in the vicinity.

