

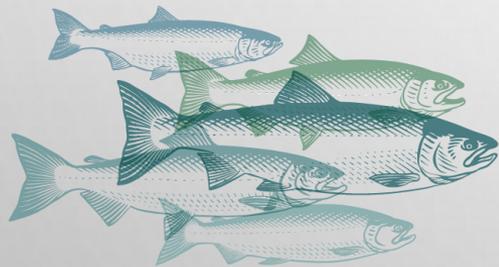
A CRITICAL PACIFIC SALMON POLICY ISSUE

A PRESENTATION TO THE SPORTS FISHING INSTITUTE
OF BC

BY

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22 NOVEMBER, 2018



WILD SALMON
FOREVER



ABOUT WILD SALMON FOREVER

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- ❖ We are a network of over 500 individuals who share a common interest in protecting a vital shared heritage in British Columbia – our wild salmon
 - Primarily business owners, entrepreneurs, executives and professionals
 - We also include two former Fisheries ministers (John Fraser and David Anderson), and a number of retired justices, among our members
 - Overall, our membership profile mirrors the business and public leadership of British Columbia

- ❖ Founded shortly after the previous federal government announced, in Fall 2013, that it was going to expand the open net pen Atlantic salmon farming industry along the Pacific coast, notwithstanding the recommendations of the Cohen Commission that such operations could be having a significant deleterious effect on wild salmon stocks.

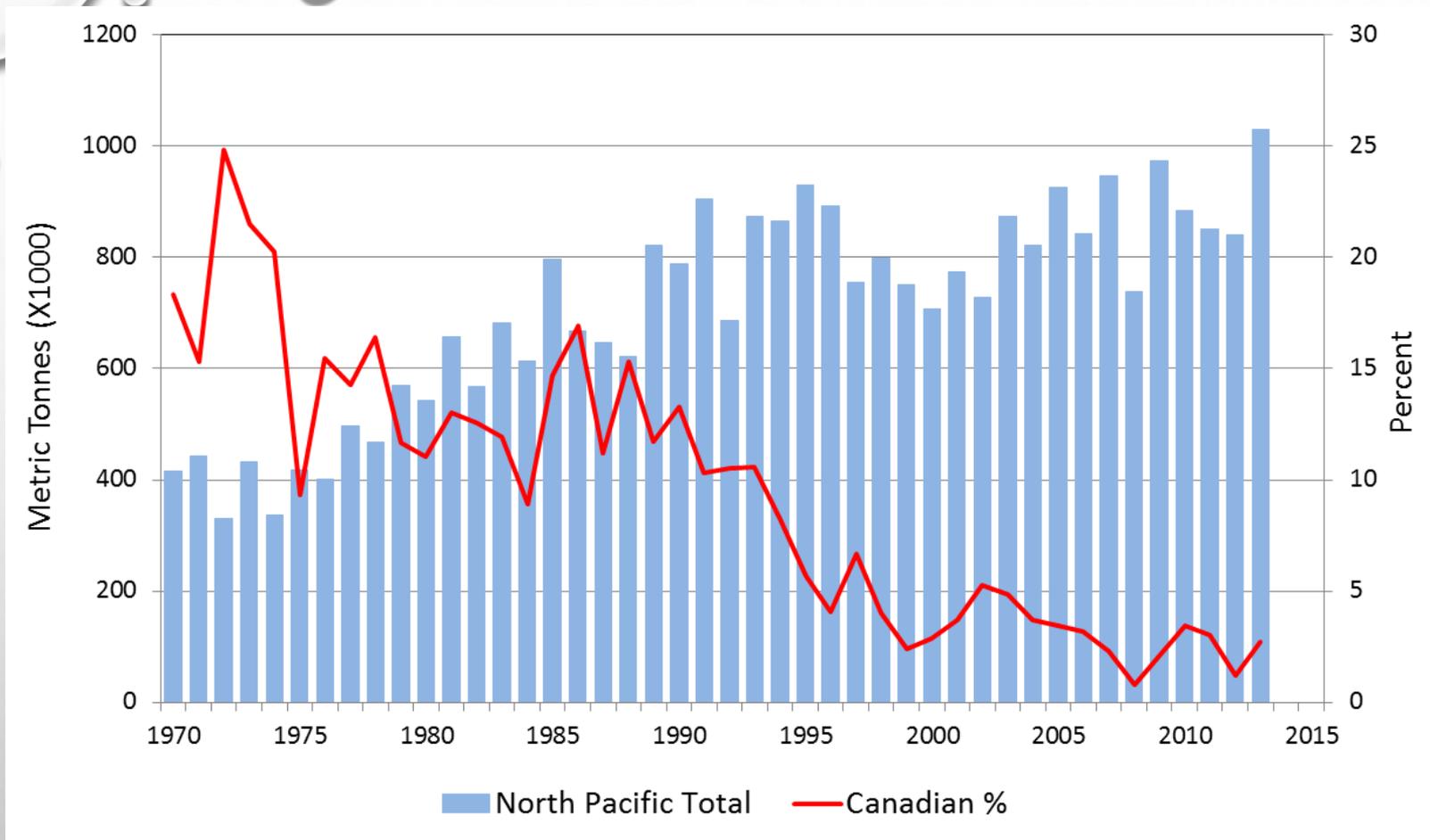
- ❖ We are not activists: we do not organize protests, media events or stunts to embarrass governments – we are committed to a respectful and productive dialogue in pursuit of public policy change based on available scientific understanding.



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OPEN NET PEN FARMING

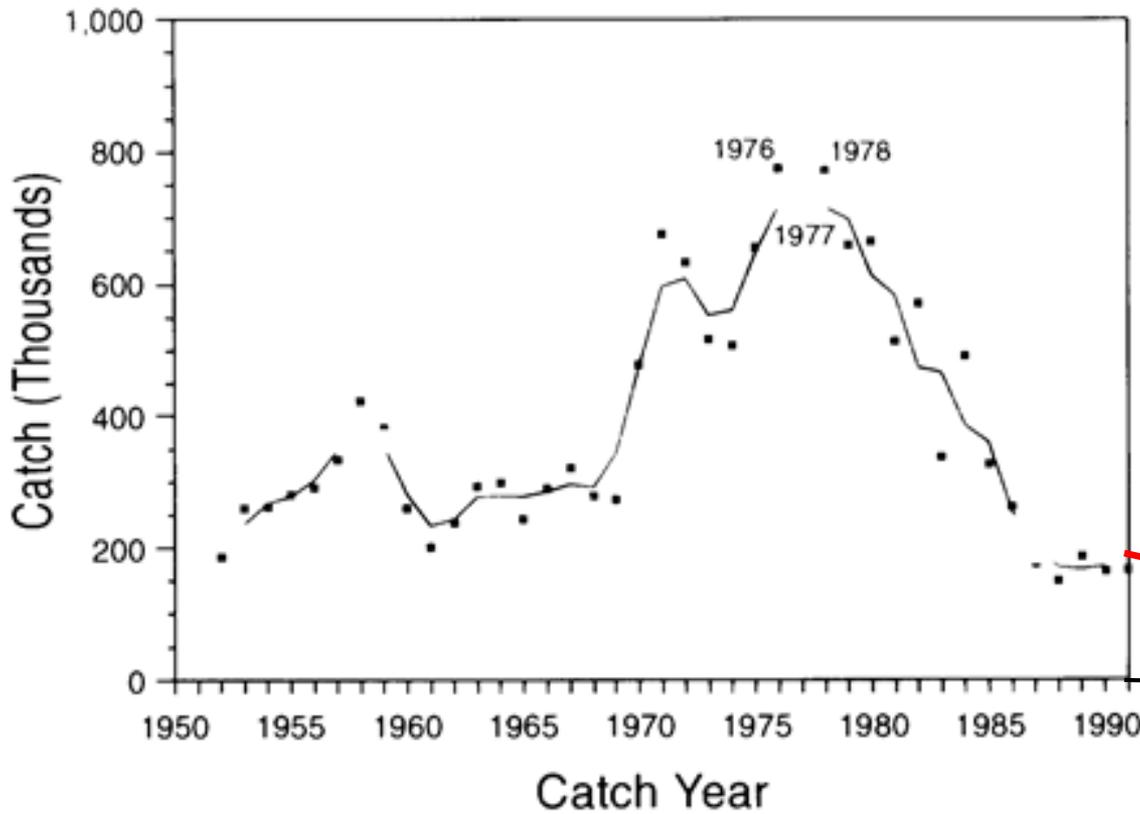
- Uses open ocean to provide clean water and passes out polluted water and detritus
- Acts as breeding farm for sea lice, which then attach to outmigrating wild smolts
- Free interchange of viruses and other diseases (e.g. PRV)
- Unnatural salmon density favours genetic changes which increase the virulence of viruses (e.g. ISA, PRV)
- Escapes e.g. 150,000 to 300,000 recent escape from Puget Sound (more of a problem in the Atlantic Ocean than here)
- Pollutes the sea floor under the ONP's
- Lower capital cost than land based closed containment systems, but lacks ability to optimize variables such as salinity, acidity and temperature of the water, and to control uptake of disease (e.g. Red tides, sea lice, PRV (HSMI)).
- Many first nations opposed to open net pen aquaculture
- Closed containment Atlantic salmon farms developing very rapidly – **Kuterra** a real pioneer; **Atlantic Sapphire** in Miami leading large scale production in North America.



North Pacific salmon commercial catch (blue bars) and the Canadian percent of that catch (red line) 1970-2013

TOTAL CATCH OF CHINOOK SALMON IN THE STRAIT OF GEORGIA SPORT AND COMMERCIAL FISHERIES 1952 -1991

Overhead courtesy of
Dr. Richard Beamish,
Larkin Lecturer, UBC, 2015



Red dashed line shows
decline continues to 2015

2015



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OUR POLICY OBJECTIVE

An orderly and realistic transition from current unsustainable practices to sustainable (closed containment) aquaculture in a way that protects jobs, economic growth and regional development

PROGRESS AT ATLANTIC SAPPHIRE

- First 800,000 eggs “stocked” within 10 days (by end of November!)
- First sales in 3Q, 2020
- Will achieve 10,000 tonnes p.a. starting in 2Q, 2020
- Planned capacity 90,000 tonnes p.a. [Total BC production ~92,000 t.]

- Construction in progress.
Photo from August 2018.



- Roofing now extended past the smolt tanks.
Photo from October 2018.





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POSSIBLE TOPICS FOR QUESTIONS

- IS THERE A REAL DANGER WE WILL LOSE OUR ICONIC SALMON RUNS AND SUFFER THE ECOLOGICAL CONSEQUENCES?
- IS SALMON FARMING A GOOD BUSINESS? IS IT A MAJOR EMPLOYER?
- WHAT ARE OPEN NET PENS (ONP'S) AND WHY MIGHT THEY BE A PROBLEM?
- WHY ARE FIRST NATIONS UPSET? ARE THEY ALL UPSET?
- ISN'T NORWAY BIG IN THIS BUSINESS? HOW ARE THEY DOING? WHERE AND WHY IS BC DIFFERENT?
- DFO IS THE MAJOR REGULATOR. WHERE DOES DFO STAND?
- WHERE DID MR. JUSTICE BRUCE COHEN STAND?
- WHAT ARE THE KNOCKS AGAINST ONP'S? (IN BC, MAINLY SEA LICE AND VIRUSES)
- **IS KUTERRA A FAILED EXPERIMENT OR A VERY SUCCESSFUL PILOT PROGRAM?**
- WHY IS THIS ISSUE SO CONFRONTATIONAL? HOW WILL IT BE RESOLVED?

TRUTH OR FICTION?

- “It [ie. Transition of all Canadian Atlantic salmon production currently produced using open net pens to land based closed containment systems] would also require us to pave over huge tracts of land – about 159 square kilometres, approximately the size of 28,000 Canadian football fields, to bring all the salmon being farmed in Canada on land.”

Source: OpEd Vancouver Province, Aug. 9, 2018 Author: John Paul Fraser, Exec. Dir. BC SFA

Real Answer: Worst case (Kuterra Pilot): 5.4 sq. Km Best case: (Atlantic Sapphire): 0.54 sq. km. ~100 Canadian football fields

- Article written by Randy Shaw in the Vancouver Sun on August 6, 2018. Prof. Tony Farrell (UBC) quoted as saying that land based closed containment salmon aquaculture systems require 500 to 1000 times more energy input than open net pen systems.

Real Answer: Worst case: (Kuterra Pilot) 163; Best case: ?, Relevance: Not very.

Lesson: There is a cost to keeping the environment clean.

- **Most inexcusable fiction:** “Kuterra is an expensive failure”.

FOR FURTHER INFORMATION:

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