

MOWI[®]

Aquaculture Stewardship Council Certification

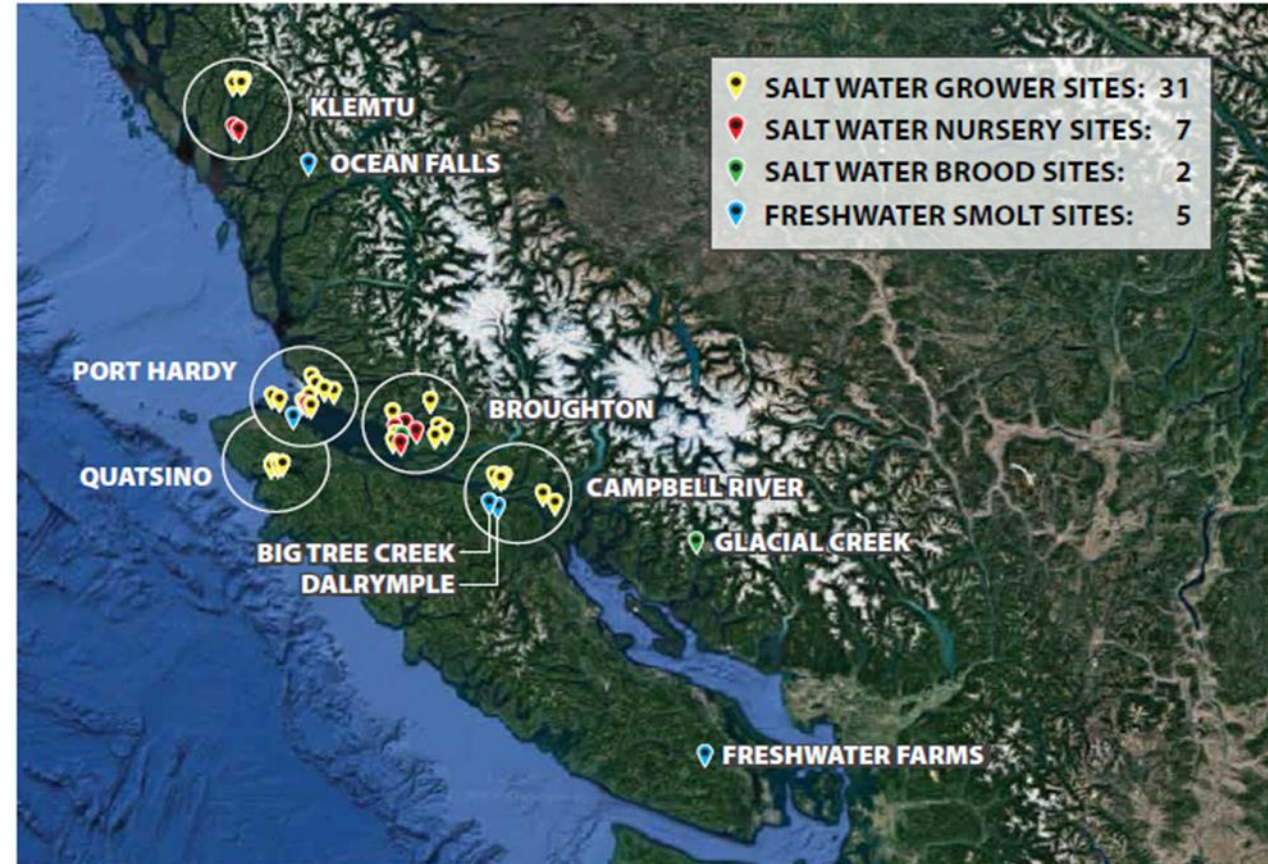
**Comox Valley Regional District
April 16, 2019**



Mowi Canada West

January 1st 2019 Marine Harvest changed its name to Mowi.

- Campbell River head office
- Processing plants in Klemtu, Port Hardy, and Surrey
- 600 total employees
- 45,000 tonne annual average harvest. Half of BC total harvest



Mowi Canada West - 2018

- Sales: ~\$320million CAD
- Distribution: 68% US, 31% Can, 1% Asia
- Wages: ~\$3.4 million per month payroll/benefits
- Supply chain: ~\$16 million per month
- 175 suppliers North / Central Vancouver Island.





The Aquaculture Stewardship Council (ASC) Certification

The ASC is an independent, international non-profit organisation. ASC creates credible, science-based standards through transparent, multi-stakeholder processes for a number of commonly farmed seafood products.

Achieving Aquaculture Stewardship Council (ASC) Certification

- Gold standard in environmental certification
- Developed through 8 year dialogue process involving ENGOs, researchers and industry
- 23 Mowi Canada West marine sites are certified
- Extensive environmental monitoring including monitoring wild salmon.
- Treatment reduction target
- Commitment for 100% certification




Photo: Marine Harvest Canada

Marine Harvest Canada salmon farm first in North America to earn ASC certification

Buyers already committed to the limited volumes available.

Aquaculture Stewardship Council Guiding Principles



The ASC standard includes over 500 clauses that must be met to achieve certification

1. Comply with all **applicable national laws** and local regulations
2. Conserve **natural habitat**, local **biodiversity** and **ecosystem function**
3. **Protect** the health and genetic integrity of **wild populations**
4. Use resources in an **environmentally responsible** manner
5. **Manage disease** and **parasites** in an environmentally responsible manner
6. Develop and operate farms in a **socially responsible manner**
7. Be a **good neighbour** and conscientious citizen

Third Party Endorsement

- World's most influential seafood ranking
- June 2017: ASC certified salmon ranked as “good alternative”
- Sept 2017: All BC farm-raised Atlantic salmon recommended by seafood watch

Monterey Bay Aquarium Seafood Watch™

Atlantic Salmon
Salmo salar



© Monterey Bay Aquarium



British Columbia, Canada
Marine Net Pens

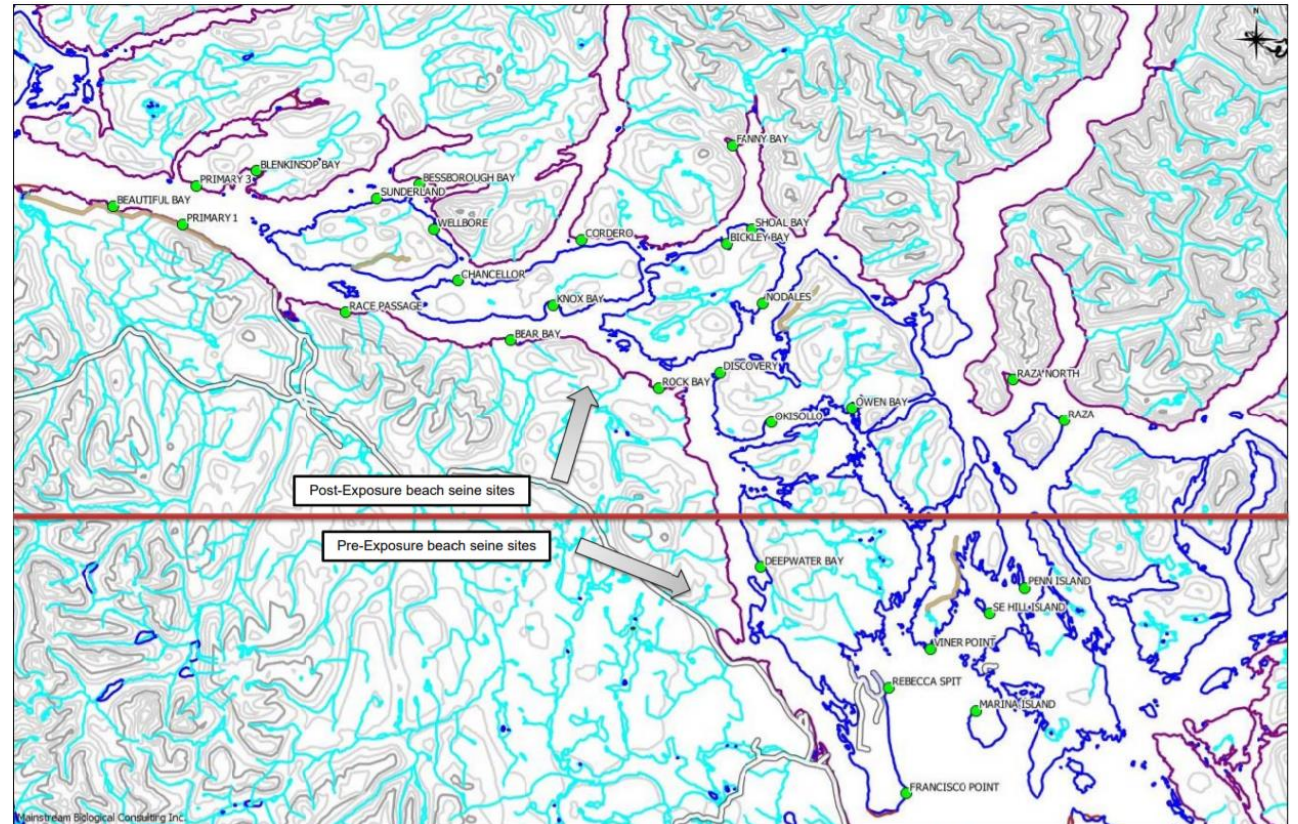
September 18, 2017
Seafood Watch Consulting Researcher

ASC Requirements for Wild Salmonid

Indicator 3.1.6 “In areas of wild salmonids, monitoring of sea lice levels on wild out-migrating salmon juveniles, with results made publicly available”.

- Third party analysis of sea lice levels on wild salmonids in each production area.
- Samples taken before expected exposure to farms and after.
- Levels are found to be consistently below the threshold of harm.

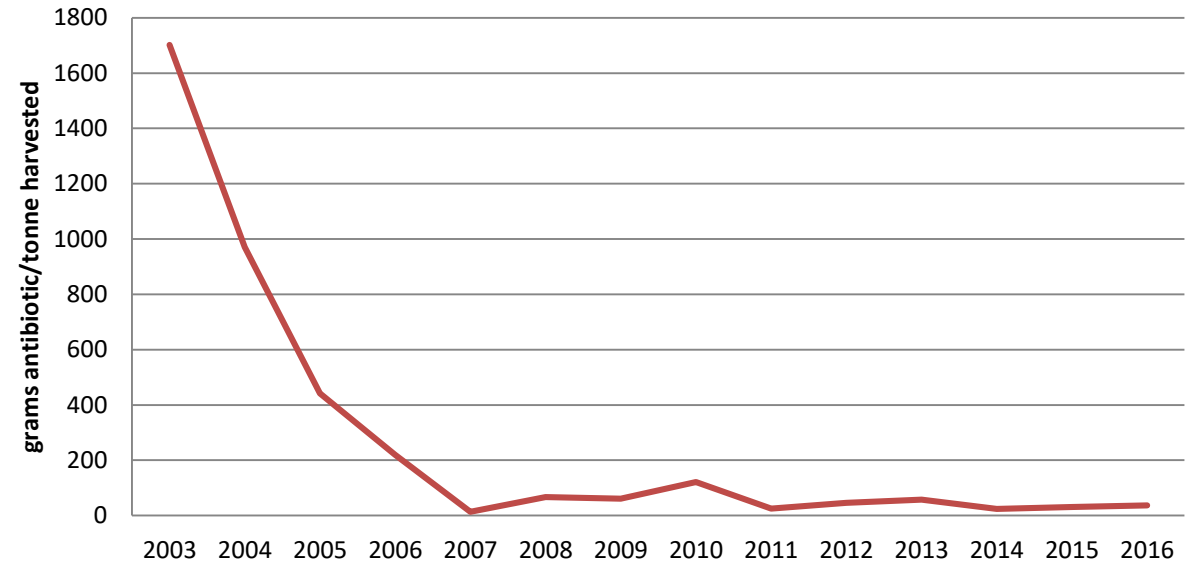
Species	Sample Location	Sample size (n)	Total number of lice observed	Total number of fish infested	Prevalence (%)	Abundance	Average Intensity
chum	Pre-Exposure	123	36	30	24.4	0.29	1.2
	Post-Exposure	599	25	24	4.0	0.04	1.0
pink	Pre-Exposure	125	38	29	23.2	0.30	1.3
	Post-Exposure	309	16	15	4.9	0.05	1.1



ASC requirements for antibiotic use

Indicator 5.2.9 “Number of treatments of antibiotics over the most recent production cycle”.

- ASC recognises that antibiotics may be required for proper management of salmonid health. However strict limits on use are a part of the ASC standard.
- Mowi strives to ensure the best health of our fish, and through husbandry improvements and vaccine development, a vast reduction in antibiotic use has been achieved.
- Mowi continues to further improve fish health, with the goal of eliminating the need for antibiotics in production.



Investments in Fish Health

- Canada's largest aquaculture vessel
- Sea lice and gill health treatments
- Holds 3,000 cubic metres of water
- Reverse osmosis creates its own fresh water



Investments in Fish Health

- Significant investments in non-medicinal sea lice treatments
- Mechanical removal of sea lice with Important tool in Integrated Pest Management
- Hydrolicer began treatments in spring 2018



Working with First Nations

- Agreements with 13 First Nations Governments
- Engaging First Nations owned businesses as suppliers
- Building inclusive workforce reflective of community
- Developing First Nations monitoring programs

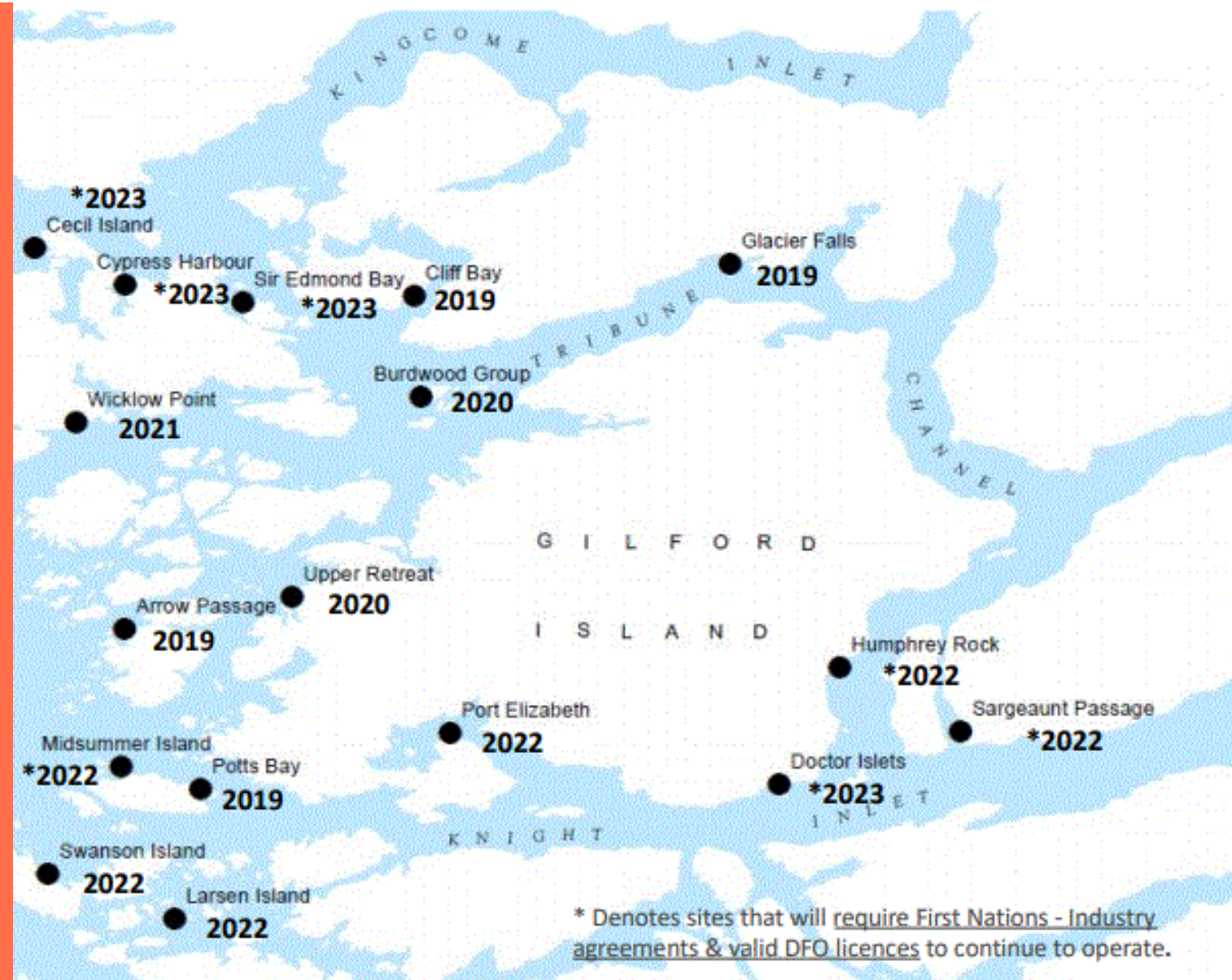




**Broughton Recommendations
December 14, 2018**

Jointly Supported Recommendations

- Orderly transition of salmon farms 2018 to 2023. Four of twelve Mowi farms may remain if there is First Nations Agreement
- Three farms decommissioned, nine tenures have been renewed
- First Nations oversight through Indigenous Monitoring and Inspection Plan
- Wild salmon restoration projects
- Increased First Nations Capacity
- \$143-million BC Salmon Restoration and Innovation Fund to support such projects



Mowi farms Glacier Falls, Arrow Passage and Potts Bay are currently being decommissioned

Community Support

- **Mowi helps over 140 community organizations every year**
 - **Tsolum River Society**
 - **Snow to Surf**
 - **Comox Bay Sailing Club**
 - **BC Seafood Festival**



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THANK YOU