



AQUACULTURE MANAGEMENT

**Fisheries and Oceans Canada (DFO)
Shellfish Aquaculture Management Advisory Committee (AMAC)
Verbatim meeting notes**

Meeting Date:	April 26, 2018, 9:00am – 4:00 pm
Location:	Best Western Westerly Hotel and Convention Centre, Courtenay
MEETING OBJECTIVES:	<ul style="list-style-type: none"> • Review of Action Items • Discuss and seek advice from committee members on initiatives and issues

Participants:

Facilitator Saul Milne

AMAC members:

Industry Licence-Holders

- Keith Reid, Odyssey Shellfish Ltd.
- Gordon McLellan, Mac's Oysters
- Barry Seeley, Clayoquot Sound Oyster Growers Association
- Daniel Rabu, Haida Seafood Products Ltd.
- Ed Bereziak, Aphrodite's Garden Oyster Company
- Larry Hesketh, Summer Breeze Aquaculture
- J.P. Hastey, Nova Harvest Ltd

Industry Associations

- Richard Harry, Aboriginal Aquaculture Association
- Darlene Winterburn, BC Shellfish Growers Association (BCSGA)

First Nations

None

Conservation and Environmental Non-Governmental Organizations (ENGOS)

- Dan Lisch, Friends of Baynes Sound
- Kimberly Dunn, World Wildlife Fund – Canada

Local Government

- William (Bill) Veenhof, Union of British Columbia Municipalities (UBCM) - AVICC South Coast Delegate (Nanaimo RD)

Ex-officio:

DFO

- Allison Webb, Director, Aquaculture Management Division (AMD)
- Brenda McCorquodale, A/Regional Manager, AMD
- Gabrielle Kosmider, Senior Coordinator, AMD
- Jennifer Mollins, Senior Coordinator, AMD
- Lisa Hedderson, Coordinator, AMD (taking notes)
- Adrienne Paylor, Regional Manager, Aquaculture Environmental Operations, AMD
- Shelley Jepps, Senior Biologist, AMD
- Chris Marrie, Biologist, AMD



Claire Doucette, Chief, C&P
Lorienna Melnick, Fisheries Protection Program
Myron Roth, Government of British Columbia
Ryan Greville, Manager, Navigable Waters Protection, Transport Canada (TC)
Ada Tam, Manager, Office of Boating Safety, TC
Sultan Virani, Inspection Officer, Office of Boating Safety, TC
Kristen Kirby, Senior Fish Inspection Specialist, Canadian Food Inspection Agency

Facilitator: Saul Milne

Observers: Richard Hardy, First Nations Fisheries Council (afternoon only)
Dorrie Woodward, Association of Denman Island Marine Stewards
Alex Munro, Taylor Shellfish (morning only)

Regrets:

ENGOS

Scott Wallace, David Suzuki Foundation

Local Government

Laurey Anne Roodenburg, Union of British Columbia Municipalities (UBCM) - NCLGA North Coast Delegate (City of Quesnel)

Materials distributed:

- 1 Shellfish AMAC Meeting Agenda (original and revised)
- 2 Draft November 2, 2017 Shellfish AMAC Meeting Summary
- 3 Shellfish AMAC recommendation and response log
- 4 Shellfish AMAC Terms of Reference (TOR)
- 5 [Shellfish Integrated Management of Aquaculture Plan](#) (link)
- 6 Overview of the Proposed Changes to the Fisheries Act
- 7 Transport Canada presentation - Canadian Navigable Waters Act
- 8 Transport Canada presentation - National Strategy to Address Abandoned and Wrecked Vessels
- 9 Transport Canada infographic – Do you want to remove an abandoned boat?
- 10 Transport Canada presentation – Marine Sewage
- 11 Transport Canada pamphlet “Preventing Marine Sewage Pollution from Small Vessels of <400 gross tons that carry ≤15 passengers”
- 12 Transport Canada pamphlet “Complying with Sewage Discharge Regulations”
- 12 First Nations Fisheries Council’s presentation on the Aboriginal Coordinating Committee (forthcoming)
- 13 Draft SF AMAC Environmental Performance Working Group TOR
- 14 DFO Debris Strategy

Meeting proceedings:

Introductions and Overview of Agenda (Saul Milne)

Saul called the meeting to order, welcomed the participants.

Review of Shellfish AMAC Terms of Reference (ToR) and Discussion (Saul Milne)

Reviewed TOR and selection process for appointing new AMAC members. New members were introduced and welcomed.

Review notes and outstanding action items from last meeting (Brenda McCorquodale)

Brenda reviewed last meetings notes and the Recommendation and Response Log.

Sector Check-Ins

- INDUSTRY UPDATE:
 - Darlene reported that the BCSGA is working to address the norovirus outbreak in Baynes Sound, looking at the cause and prevention of future outbreaks. Larry reported that the norovirus outbreak has stopped sales and revenue coming into shellfish farms.
 - Keith asked about whether adding geoduck to an existing licence should require First Nations consultation.
 - Daniel reported that Pacific Coastal Shellfish recently concluded a land based sea urchin/cucumber trial and are eagerly awaiting an integrated management framework on sea cucumber and urchin, to facilitate culturing these species in the marine environment.

- ABORIGINAL AQUACULTURE ASSOCIATION UPDATE:
 - Richard recommended more involvement from First Nations in the AMAC and suggested that the Aboriginal Aquaculture Association might be able to assist.

- PROVINCE OF BC UPDATE:
 - Fisheries and Aquaculture Clean Technology Program (FACTAP) provincial support to the program is ongoing.
 - The [OASISS](#) (Ocean Acidification Shellfish Industry Seed Supply) which included the BaSEIC project (Baynes Sound Environmental Intelligence Collaboration) was \$125K from the province with cash and in-kind contributions from the BCSGA, VIU and the Hakai Institute
 - BC provided \$75K in funding to the BCSGA to complete a the “BCSGA Food Safety & Business Risk Mitigation Project” study on the economic impact of the 2016/2017 Norovirus outbreak and to look at options for the development of business risk management programs (i.e. crop insurance) for shellfish growers.
 - The BC Seafood Expo and Tradeshow will focus on First Nations capacity building, and encouraged industry to come and network with First Nation to create partnerships.
 - From the Province of BC’s perspective, Myron attends the AMACs, which provides direction on policy issues. At the Shellfish Aquaculture Industry Advisory Panel (SAIAP), BC sends lands officers as the focus is on operational business issues.

- ENVIRONMENTAL AND CONSERVATION NGO UPDATE: None
- FIRST NATIONS UPDATE: None.
- LOCAL GOVERNMENT: None

DFO update (Allison Webb)

Allison was introduced as the new /returning Director of Aquaculture Management. Updated on

- FACTAP: 6 projects were funded. New applications are reviewed on a rolling basis.
- Aquaculture Act consultations: Input from last meeting was provided to Ottawa. It will be discussed at the Canadian Council of Fisheries and Aquaculture Ministers discussions. Additional comments are welcome.

Gabrielle updated on Canadian Shellfish Sanitation Program (CSSP).

National Integrated Shellfish Committee (NISC) meeting on February 7-8 in Ottawa

- Key discussions were held on
 - Amendments to the [CSSP manual](#) to incorporate [Safe Food for Canadians Regulations](#) are underway. The new regulations come into force later this year
 - alternate service delivery to accommodate program expansion are being considered by senior management as part of a long term sustainability framework
 - foreign audits

1. Chile (completed in March 2018)
 2. 2016 US Audit of Canada – still have not received final report
- National CSSP [shellfish harvesting map](#) is now online
 - Link shared with SF AMAC, promotional materials available
 - Received one-time funding for CSSP support, and purchased materials that will be distributed at the BC Seafood Festival, via the BCSGA and other ways:
 - Onboard waste containment buckets, stick thermometers, sample logbooks for general record keeping and record keeping specific to oyster for raw market in support of compliance with Section 12 of PAR COL
 - Pacific Region Integrated Shellfish Committee (PRISC) meeting was held April 18-19
 - Norovirus/ Vibrio cholera update and discussion on both days
 - Updates on vessel discharge, wet storage and return to ground WGs
 - Industry asked if Canada audit's the USA's National Shellfish Sanitation Program. Gabrielle responded yes.
 - Gabrielle presented a geoduck update, that DFO has received 14 new applications and one amendment application since the Integrated Geoduck Management Framework (IGMF) was approved in Spring 2017. One application has been rejected (outside parameters of IGMF, due to tenure size)
 - Industry asked about timeframes for reviewing a geoduck application. DFO responded that the service standard for a major amendment is 365 days, which includes new applications and amendments to add a species.

Bill C-68 Fisheries Act proposed amendments (Loriena Melnick)

- A powerpoint presentation was delivered provided.
- A member asked if pollution in the Fisheries Act includes sewage.

ACTION: DFO (Loriena Melnick) will provide clarification pollution reference in the new purpose section of the Fisheries Act, and its linkage to Section 36.
- A member asked if additional fees will result for industry. DFO said not for aquaculture.
- In a proposed equivalency of laws approach, where other laws that exist that are more restrictive than the federal regulations, the Fisheries Act may stand down, in order for First Nations governing bodies will be more in control of resources.

ACTION: Saul asked that Committee be provided with examples of how an equivalency of laws approach has worked, such as the Northern development agreements. Loriena to provide more information.
- Industry asked if ecologically sensitive areas restrictions could impact aquaculture, where significant aquaculture takes place in estuaries
- Industry asked for more information about how aquatic invasive species regulations could impact aquaculture
- Industry noted concern about sea lion population in Baynes Sound, and interference with aquaculture rafts. DFO will continue to follow up and bring forward any updates on marine mammals including sea lions and their interactions with aquaculture.
- There was disappointment expressed that the new Fisheries Act does not enable aquaculture.
- The BCSGA is planning a workshop on these proposals and a written submission.

Transport Canada regulatory update (Ryan Greville and Ada Tam)

- Ryan gave an update provided on [Bill C-69](#) - An Act to enact the Impact Assessment Act and the Canadian Energy Regulator Act, to amend the Navigation Protection Act and to make consequential amendments to other Acts.

- Clarification that shellfish tenures are located within navigable waters, and aquaculture infrastructure is considered structure that requires Transport Canada approval. Gabrielle will invite Transport Canada to a SAIAP to discuss details on aquaculture infrastructure, Transport Canada approvals, and new aquaculture markings proposals.
- Update provided on [Bill C-64](#), Abandoned, Wrecked, and Hazardous Vessels Act.
- Funding will be available to remove abandoned float homes and vessels.
- Prior to Ada Tam's presentation, CFIA/DFO gave contextual update, for considering TC presentation on marine sewage discharge regulations.
 - Norovirus cases as of April 23, 2018: 86 clusters involving 222 cases reported, including reports received from outside of Canada. This information includes 33 clusters involving 102 cases reported by Washington State, California and Minnesota in the USA for consumption dates range from March 15 to April 15. 36 clusters are single source. Four shellfish aquaculture sites from area 14-8 have been closed to shellfish harvesting. Areas 13, 14, 15, 23 and 24 have been implicated, with most from sub-area 14-8.
 - Following last year's update, DFO had an internal Vessel Discharge Working Group under Pacific Region Interdepartmental Shellfish Committee review these concerns, and shared information with the herring fishery.
- Ada provided a presentation on marine sewage discharge regulations.
- Ada noted that sewage discharge rules vary by the size of vessel. Herring vessels require a holding tank if it's fitted with a toilet. Holding tanks are typically 40L to 240L. TC can do target spot inspections upon request where issues have been identified or pro-active random spot checks.
- TC indicated that the burden of proof for cause related to sewage spills is on the Crown, such as collecting fecal matter, and/or by linking it to an individual via a DNA test.
- Industry raised concern that this year, no herring boats used the pump out in Baynes Sound. As boats stayed in Deep Bay harbour with six crew members for two weeks with no holding tank large enough to hold their waste, Industry feels they must have been discharging into the marine environment. No location within Baynes Sound is further than 3 miles from shore to discharge legally.
- Feedback that industry is looking to TC to patrol and enforce the marine sewage regulations when the herring fleet is in Baynes Sound, due to significant economic loss and human health impacts for shellfish aquaculture.
- Ideas put forward by industry about additional actions include:
 - tagging shut vessel sewage outflow valves, to be removed and replaced when they dump.
 - Inspecting the contents of holding tanks, and comparing to vessel occupancy and recent locations with GPS locator.
 - Adding dye in the holding tank.
- Industry expressed concern about economic loss to shellfish aquaculture not only for sites contaminated with sewage, but BC-wide, as well as impacts on the reputation of BC shellfish.
- Industry proposed considering an anchoring exclusion zone around shellfish aquaculture sites.
- **ACTION:** Transport Canada (Ada Tam) to share information on the designated sewage area process.
- Transport Canada stated that holding tanks do not have a bypass, and may discharge the holding tank either above board into a pump out facility, or under the waterline into the water when outside of 3 nautical miles from shore.

- It was noted that the Deep Bay pump out station has hose size adapters.
ACTION: DFO to work with the Pacific Region Interdepartmental Shellfish Committee to coordinate a committee with TC, Environment and Climate Change Canada, DFO, First Nation and municipalities to address sewage in shellfish aquaculture.

Aquaculture Coordinating Committee, First Nations Fisheries Council (FNFC) update (Richard Hardy)

ACTION: FNFC presentation to be shared with Committee

- A powerpoint presentation was delivered
- Richard Hardy responded to a question from Myron by inviting the Province of BC to participate in Tier 2 discussions, as have been invited but have not attended. Most Tier 2 discussions are DFO and First Nations. Management roles and development of policies or legislation should include discussion on rights and title. For example, the IGMF – how does the BC treaty table process link to policy development.
- Feedback that the members see great value in having First Nations at the AMAC table. On operational issues like FACTAP, norovirus, food safety, the First Nations voice is critical at AMAC to address these issues.

Baynes Sound-Lambert Channel Ecosystem Forum 2018 & Advisory Committee (Kim Dunn)

- The forum on May 22 and 23 will explore the jurisdictionally complex and ecologically significant aspects of Baynes Sound and Lambert Channel, taking an integrated approach with dialogue. The first day will identify issues, and the second day will identify short term wins, longer term solutions, and an action plan for going forward. The forum will be producing a report which will be shared with the AMAC. K'omoks First Nation advised which First Nations to invite. The Comox Valley Regional District and Islands Trust are involved. Topics include pollution, plastics, debris, herring fishery (non sewage perspective).

ACTION: WWF Baynes Sound and Lambert Channel forum invitation be shared with Committee

Shellfish AMAC Working Group on Environmental Performance (Gabrielle Kosmider)

- Overview provided, starting a working group to clarify roles and responsibilities.
- Feedback that 'environmental performance' may be inaccurate, if focus is on outreach and education.
- BCSGA [Environmental Management Code of Practice](#) could inform this work
- The local government representative recommended banning Styrofoam
- Concern of how to handle aquaculture debris, and the public's role

ACTION: DFO to coordinate a Shellfish AMAC Working Group on aquaculture debris

Roundtable, topics for next meeting

- Baynes Sound carrying capacity study results will be presented at a CSAS meeting this summer.
- October 16 conflicts with several members. DFO will find a new date.

Summary of action items:

- 1 DFO (Loriena Melnick) will provide clarification pollution reference in the new purpose section of the Fisheries Act, and its linkage to Section 36.
- 2 Saul asked that Committee be provided with examples of how an equivalency of laws approach has worked, such as the Northern development agreements. Loriena to provide information.
- 3 Transport Canada (Ada Tam) to share information on the designated sewage area process. **[Comment: Complete]**

- 4 DFO to work with the Pacific Region Interdepartmental Shellfish Committee to coordinate a committee with TC, Environment and Climate Change Canada, DFO, and First Nations and municipalities to address sewage in shellfish aquaculture. **[Comment: Process has begun]**
- 5 FNFC (Richard Hardy) presentation to be shared with Committee **[Comment: Complete]**
- 6 WWF-Canada (Kim Dunn) Baynes Sound and Lambert Channel forum invitation be shared with Committee **[Comment: Complete]**
- 7 DFO to coordinate a Shellfish AMAC Working Group on environmental performance

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