



AQUACULTURE MANAGEMENT

Fisheries and Oceans Canada (DFO)
Shellfish Aquaculture Management Advisory Committee (AMAC)
Meeting notes

Meeting Date:	April 30, 2019, 9:00am – 4:00 pm
Location:	Crown Isle, 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

Shellfish AMAC members:

Industry Licence-Holders

Keith Reid, Odyssey Shellfish Ltd.

Barry Seeley, Clayoquot Sound Oyster Growers Association

Daniel Rabu, Haida Seafood Products Ltd.

Ed Bereziak, Aphrodite's Garden Oyster Company

Alex Munro, Taylor Shellfish Canada (Fanny Bay Oysters) and Raincoast Sea Farms Inc.

Industry Associations

Steve Pocock, BC Shellfish Growers Association (alternate)

Conservation and Environmental Non-Governmental Organizations (ENGOS)

Scott Wallace, David Suzuki Foundation

Dan Lisch, Friends of Baynes Sound

Local Government

Daniel Arbour - Union of British Columbia Municipalities (UBCM) – Association of Vancouver Island and Coastal Communities (AVICC) South Coast Delegate (Electoral Area A, Baynes Sound / Denman & Hornby Islands, Comox Valley Regional District)

Gord Klassen - Union of British Columbia Municipalities (UBCM) –North Central Local Government Association (NCLGA) North Coast Delegate (City of Fort St John)

Ex-officio

DFO

Brenda McCorquodale, A/Director and Regional Manager, Aquaculture Resource Management

Gabrielle Kosmider, Senior Coordinator, Aquaculture Resource Management

Jennifer Mollins, Senior Coordinator, Aquaculture Resource Management

Andre Youssef, Aquaculture Programs

Chris Marrie, A/Senior Biologist, Aquaculture Environmental Operations

Claire Doucette, Chief, Conservation and Protection

Tammy Kier, Coordinator, Aquaculture Resource Management

Dr. Chris Pearce, Science

Dr. Terri Sutherland, Science

Alistair Struthers, Director, National Aquaculture Management



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Canada

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Canada

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Ed Porter, Manager, National Aquaculture Management
Dean Medeiros, Manager, National Aquaculture Management
Myron Roth, Government of British Columbia
Kevin Romanin, Government of British Columbia

Regrets:

Industry - Gordon McLellan, Mac's Oysters
JP Hastey, Nova Harvest Ltd
ENGOS - Kim Dunn, World Wildlife Fund - Canada

Materials distributed:

1. Shellfish AMAC Meeting Agenda
2. October 4, 2018 Shellfish AMAC Meeting Summary
3. Shellfish AMAC recommendation and response log
4. Precautionary Approach / Framework for Aquaculture Risk Management presentation
5. Aquaculture Act presentation
6. Norovirus Action Plan
7. SF AMAC terms of reference
8. Baynes Sound work by Terri Sutherland
9. DFO Pacific Region Reconciliation and Partnerships Branch email
10. News summary email
11. DFO Science presentation (Chris Pearce)

Meeting proceedings:

Introductions and Overview of Agenda (Saul)

Saul called the meeting to order.

Review notes and outstanding action items from last meeting (Jennifer)

Jennifer reviewed last meetings notes and the Recommendation and Response Log. AMAC members expressed concerns about lack of sea cucumber framework and lack of process to evaluate new species for aquaculture.

Action: Discuss shellfish priorities for AMAC at a future AMAC meeting

Sector Check-Ins

• **INDUSTRY UPDATE:**

- Daniel Rabu is concerned that red rock clam predation is a significant issue, he suggested a SAIAP working group on this topic. He also recommended the BCSGA recognize the efforts of the herring industry, perhaps in a letter.
- Alex reported that industry is happy with the prevention of norovirus closures in Baynes Sound this year, due to herring fishery, aquaculturists, DFO and TC work. Seed availability better this year, but still importing from Chile. Concern with sea lion population and impact on aquaculture gear.
- Barry expressed concern with float homes installing near aquaculture tenures, and no resolution from BC FLNRO other than warnings. Some seed cultch imports from USA have been deferred. Concern with multiyear delay in tenure transfers with BC.

• **AQUACULTURE ASSOCIATION UPDATE:**

- Daniel Rabu reported new and existing sites are being assessed for geoduck.

• **ENVIRONMENTAL AND CONSERVATION NGO UPDATE:**

- Dan Lisch noted that he attended the Baynes Sound / Lambert Channel Forum and is on

working group to explore alternative materials and equipment to reduce shellfish aquaculture debris.

- FIRST NATIONS UPDATE: None.
- LOCAL GOVERNMENT:
 - Daniel Arbour reported Brenda attended AVICC meeting last month. Concern about how one local government representative can keep in contact with all local governments. AVICC concerned about ocean plastics and microplastics. Sooke issue with water classification closure due to sanitary conditions versus clean water tests.

Precautionary Approach / Framework for Aquaculture Risk Management (Alistair / Ed)

- Alistair and Ed introduced concepts and approaches for the Framework for Aquaculture Risk Management, which will be posted for public comment in the near future.

Aquaculture Act (Dean)

- Dean updated on regulatory work and timelines, including engagement strategy. Aquaculture Act feedback is due by December 21, 2019. Attendees can follow up with the presenters or any DFO Regional Aquaculture staff

Feedback:

- An AMAC industry representative concerned Precautionary Approach may confine the shellfish aquaculture sector, as similar policies have impacted shellfish aquaculture in California and Washington State.
- An AMAC industry representative recommended that the Aquaculture Act specifically recognize aquaculture fish as private property.
- A local government representative encouraged Aquaculture Act engagement to recognize and include local governments.

Action: DFO to provide continuing updates on the Aquaculture Act.

Shellfish Aquaculture Science (Chris)

- Chris reviewed recent work in microplastics, urchin culture, sea cucumbers, invasive species and geoduck

Shellfish Aquaculture Science (Terri)

- Terri reviewed recent work in Baynes Sound benthic makeup, hydrodynamics, microplastics, chlorophyll and phytoplankton production and gaps for creating carrying capacity analysis
- An AMAC industry representative said Galicia Bay, Spain's shellfish aquaculture overexpansion experience has been used to create 200 MT/ha limit in Canada when BC regulated production.
- An AMAC industry representative concerned about potential aquaculture applications being rejected by BC FLNROD due to carrying capacity questions.

Action: Terri Sutherland's presentation to be shared with AMAC members

Province on BC Update (Myron Roth)

- Three projects expected from Genome BC process. A norovirus and a vibrio virus diagnostic study, and a norovirus epigenetics study.
- The Oyster Recovery Seed Reimbursement – 860K out of a possible 1 Million dollars was allocated
 - 122 out of 129 applications received were funded
- BC has committed to matching funds for Fisheries and Aquaculture Clean Technology Adoption Program (FACTAP) and the British Columbia Salmon Restoration and Innovation Fund (BCSRIF) programs. FACTAP funded 35 projects approved for 4.5M dollar

Science Discussion (Saul)

- Generally, AMAC members appreciated science updates, and would prefer a more streamlined reporting consisting of the scientific question addressed and the study's conclusions (without methodology reporting)
- Some AMAC members concerned that DFO science is not widely accessible and DFO should improve on how science work is communicated to the general public.
- BCSGA AGM has scientific component.
- AMAC advises to continue having science in future meetings as relevant.

Action: AMAC meetings to have materials provided in advance, members expected to read materials, and presentations will briefly summarize materials in order to have sufficient discussion on how the material relates to the different representatives' sectors and DFO aquaculture management.

DFO update (Brenda)

- DFO has new Director General of Aquaculture Management – Alexandra Dostal. Alix is visiting the region in May, and will have a shellfish aquaculture tour and meeting the BCSGA. Also, many staffing changes to our regional staff.
- BC Salmon Restoration and Innovation Fund is reviewing applications.
- Gwaii Haanas National Marine Conservation Area Reserve will not allow aquaculture
- An industry representative remarked that an area approach like the Marine Protected Areas are more likely to infringe in First Nations rights, rather a preferred approach of targeted protections for specific species.

Baynes Sound / Lambert Channel Forum (Jennifer)

- Kim absent. Jennifer reported that she, Dan Lisch and Alex Munro attended last Forum in Spring. Plans to meeting again in Fall, with report this Summer. Three working groups formed, one of shellfish aquaculture alternative methods to reduce debris.
- A few AMAC members recommended building on alternative methods for aquaculture work already completed.
- A local government member asked about the relationship, if any, between the Baynes Sound / Lambert Channel Forum and the Baynes Sound Initiative.
- DFO's Chris Pearce volunteered himself as a resource for the Baynes Sound/Lambert Channel Forum's working group on shellfish aquaculture alternatives to reduce debris.

Action: BC will provide information on the referrals process to local governments to Daniel Arbour.

Aquaculture Environmental Operations update (Chris)

- DFO inspected 33 shellfish aquaculture sites last year in Baynes Sound, Okeover Inlet and Discovery Islands, found all 33 sites non-compliant. 31 of these sites are now compliant, and working with the 2 outstanding sites. This year, inspected shellfish sites in Prince Rupert area, of which the one noncompliant site was quickly resolved.
- Chris reported that he is the Pacific Region technical advisor for debris and ghost fishing, which is funding two projects on converting fisheries/aquaculture waste plastics into usable material, and removing fisheries and aquaculture debris from remote areas.
- Chris has heard a significant increase in complaints regarding shellfish aquaculture in Baynes Sound, particularly regarding debris.

Action: Dissolve the SF AMAC working group on environmental performance, given that there are similar initiatives ongoing such as the Baynes Sound Lambert Channel Forum with WWF-Canada and Islands Trust.

Canadian Shellfish Sanitation Program and Norovirus Action Plan update (Gabrielle)

- Gabrielle gave an update on the Norovirus Action Plan and related follow up items.
- Gabrielle reported that the Pacific Region Intergovernmental Shellfish Committee (PRISC) Meeting

was held in April 2019 and the National Intergovernmental Shellfish Committee (NISC) Meeting in February 2019. Key topics at both were Alternative Service Delivery and the Norovirus Action Plan

- Gabrielle reported that she attended the PAC RIM Shellfish Sanitation meeting in the USA, where the FDA presented on their two of priorities shellfish traceability through record keeping and tagging and time-temperature controls for Vibrio. DFO presented the 2018 Norovirus outbreak on behalf of the Government of Canada
- Transport Canada has been active in Comox Harbour, Deep Bay and French Creek issuing deficiency notices to vessels without sewage holding tanks.

Conservation and Protection (C&P) Update (Claire)

- Claire reported high level of focus on shellfish aquaculture monitoring, due to human health and access to market concerns. C&P is using a three pillar approach, including education, an opportunity to come into compliance, followed by enforcement action.
- The focus of fishery officer effort will be on shellfish traceability, tagging and reporting for at least the next year
- DFO encourages the public to report Fisheries violation through the ORR: Observe, Record, Report phone line at: 1-800-465-4336.
- An AMAC industry representative expressed concern about the about the spot check model of compliance checks by DFO, recommending instead prescheduled inspections, with licence holder on site for debris related checks. DFO (AEO) is committed to pre-scheduling when time and circumstances allow, and has taken this approach during the Prince Rupert inspections earlier this year.

Roundtable (All)

- An AMAC industry representative said that non-compliance with regulations is an industry concern, and the BCSGA has a traceability and tagging working group.
- An AMAC industry member is concerned about the lack of a sea cucumber framework
- An AMAC local government member indicated that may start a local government caucus to coordinate on SF AMAC communications.
- A few AMAC members indicated that the SF AMAC discussions should remain at a higher level.
- Some concern from AMAC members that there was too much on the agenda, and prefer more time for discussion.
- Discussion on shellfish aquaculture licence fees invoicing concerns
- A few AMAC members indicated interest in contributing more to the Aquaculture Act

Next meeting: November 20, 2019 (tentative)

Summary of action items:

1. Discuss shellfish priorities for AMAC at a future AMAC meeting
2. DFO to provide continuing updates on the Aquaculture Act.
3. Terri Sutherland's presentation to be shared with AMAC members
4. AMAC meetings to have materials provided in advance, members expected to read materials, and presentations will briefly summarize materials in order to have sufficient discussion on how the material relates to the different representatives' sectors and DFO aquaculture management.
5. BC will provide information on the referrals process to local governments to Daniel Arbour.
6. Dissolve the SF AMAC working group on environmental performance, given that there are similar initiatives ongoing such as the Baynes Sound Lambert Channel Forum with WWF-Canada and Islands Trust.