



**SHELLFISH  
AQUACULTURE MANAGEMENT ADVISORY COMMITTEE (AMAC)  
Summary Notes (DRAFT)  
Best Western Westerly Hotel and Conference Centre  
1590 Cliffe Ave, Courtenay, BC  
March 11, 2015**

**AMAC members:**

Aquaculture Industry:

Keith Reid – Odyssey Seafoods

Ed Bereziak – Aphrodite's Garden Oyster Co.

Aquaculture Association:

Roberta Stevenson, BC Shellfish Growers Association

Environmental/Conservation Organizations:

Edina Johnston (alternate to Shelley McKeachie) - Association for Responsible Shellfish Farming

Dan Lisch (alternate to Norm Prince) – Friends of Baynes Sound

First Nations:

Julie Carpenter - Central Coast Indigenous Resource Alliance (Central Seat)

Katie Beach – Okanagan Lower Fraser First Nation (Interior Seat)

Local Government:

Bill Veenhof, AVICC Director, Area H Nanaimo RD

Fisheries and Oceans Canada:

Diana Trager, Director, Aquaculture Management

Gabrielle Kosmider, Senior Aquaculture Management Coordinator

Brenda McCorquodale, Senior Aquaculture Management Coordinator

Michelle Manning, Aquaculture Coordinator

**Observers in Gallery:**

Alex Etchell, FNFC

David Stirling, AAA

Chad Armond, QARS

Jim Meldrum, A-tlegay

Krista Rusel, A-tlegay

Penny White, CCIRA

**Facilitator:** Craig Darling - Accord Canada



## Discussion Summary and Action Items:

### Welcome and Opening Remarks

Craig Darling facilitated introductions and an overview of the agenda. No one indicated they have to leave early and there were no questions or comments about agenda

### Review of AMAC notes and action items from October Meeting

Brenda McCorquodale reviewed the meeting notes and the recommendation and response log.

There was discussion related to a number of items in the R&R log:

- Roberta asked for an update on science priorities and asked for an update on Terry Sutherland's Carrying Capacity study.
- Edina Johnston asked for an update on the gear tagging program. DFO noted that it has been discontinued. Ms. Johnston stated that there need to be further review of this issue as derelict gear continues to be an issue.
- Suggested to offer to have BC participate via telephone if that will help to engage them.
- Edina Johnston again asked for consideration of an Islands Trust representative appointment to the committee. Bill Veenhof noted that his mandate through the UBCM includes representation for the Islands Trust.
- Julie Carpenter noted that some of the comments on the R&R are getting cut off and noted a couple of people's names are spelled wrong. Brenda McCorquodale to correct.

### Director of Aquaculture Update

Diana Trager provided the following updates:

- Geoduck Framework has not been approved yet and there is no further update to provide at this time.
  - Edina Johnston asked if Haida Gwaii has gone ahead with geoduck in absence of the framework. Diana stated that if so DFO is not aware.
- Terms of Reference review requirement is approaching this year. It is anticipated that we may have a more structured process to look at this at the next meeting, but if anyone has any ideas/ comments/ suggestions please pass them on.
- Freshwater/ Land-based advisory process and Integrated Management of Aquaculture Plan update provided. Committee members were asked for their thoughts.
  - Katie Beach noted that not all Freshwater/ Land-based aquaculture takes place on private land – she believes there would be interest in these discussions, particularly with respect to lake-based culture.
- Committee members agreed that they are supportive of this committee dealing with shellfish aquaculture from hatchery to grow-out (including land-based components).



- Katie Beach noted that a couple of presentations for this meeting were not circulated ahead of time, and noted that there is a commitment from DFO to circulate materials in advance.
- Julie Carpenter asked if clam garden issues can be discussed at the AMAC table?
- Craig Darling suggested that observer participation could be revisited during the evaluation of the Terms of Reference.

#### Update on Pacific Aquaculture Regulations proposed fee schedule and multi-year licensing regulatory amendments

Diana reviewed the powerpoint presentation.

- Roberta Stevenson asked if there be any exceptions to paying these fees?
  - Diana Trager noted that all commercial licence holders will have to pay a fee. The flat administrative fee is charged at every licence renewal. The access-to-resource fee is paid annually.
- Keith Reid asked if it will be possible to pay everything up front.
  - Diana Trager stated that DFO is still looking at this to see if there is a simpler way to handle this.
- Roberta Stevenson asked if there is a protocol for tenure holders who are not utilizing their licence.
  - Diana Trager stated that at present DFO is not reviewing diligent use, however this could be something discussed in the future.
- Katie Beach and Julie Carpenter asked if First Nations can obtain fee exemptions.
  - Diana Trager stated that this would have been something that would need to be brought up as a part of the User Fee Act review. Diana stated that she has not heard anything about this request, but she will confirm that there are no exemptions on fees.
- Keith Reid stated that DFO needs to make the payment systems very easy. Ed Bereziak stated that he was concerned about DFO systems not being ready to accept payments and urged DFO to ensure that the systems are workable before initiating fees.
- Julie Carpenter asked if there has there been any discussion on minimum tenure sizes to start fee (i.e. starting at 10 ha).
  - Diane Trager stated that was not proposed, but noted that small fees are not ideal and DFO is interested in looking into making this more simple.
- Roberta Stevenson stated that she wanted to commend DFO on the consultation that occurred about user fees. From her perspective, 5\$/ha is a very fair fee.
- Katie Beach stated that she was concerned about a comment related to First Nation consultation on the User Fee Act.



- Brenda McCorquodale provided update on FN consultation that was completed re: User Fees.
  - April 2012 discussion document mailed to First Nations
  - May 2012 – FNFC assists in hosting meeting
  - Out of those a couple of requests for additional meetings with specific First Nations
  - June 2012 – meetings with the First Nations who wanted more direct consultation
  - Nov 2013 – Revision sent out to First Nations as per the Canada Gazette I
- Keith Reid asked if the Minister can revise a multi-year licence conditions only for Conservation concerns?
  - Diana Trager noted that amendments can be made for conservation reasons or upon the request of a licence holder.
- Katie Beach asked if carrying capacity information will be considered a conservation reason.
  - Diana Trager stated that it would depend on the specifics of the issue and options for management responses - but noted that if it is related to conservation issues, then we can amend licences.
- Keith Reid stated research done around the world shows that BC can most probably handle a lot more culture. Katie Beach and Keith had a discussion related to what carrying capacity means and about issues like algae blooms and the appropriateness of different sites for various types of culture.
- Edina Johnston stated a concern that micro-plastics and other things getting into our shellfish that we are not testing for.
- Julie Carpenter requested that a list of carrying capacity work that has been done be circulated to the group. Bill Veenhof stated that he would be happy to approach VIU to ask if they have documents they can share.
- Keith Reid asked, if a tenure expires in 3 years but a licence is renewed for 9 years, how is this managed?
  - Gabrielle Kosmider stated that a facility cannot operate without tenure. So if tenure expired, province would contact DFO and DFO would cancel the licence.
- Roberta Stevenson stated that June 18, 19 there will be workshops about SF aquaculture (info available Comox Valley Economic Development Website) including speakers on carrying capacity.

(lunch)

Presentation and Discussion session on science presentation on Ocean Acidification

Dr. Debbie Ianson delivered a presentation via conference line on Ocean Acidification (OA).

- Bill Veenhof asked if raw or treated sewage outfalls are preferable with respect to OA.



- Dr. Ianson stated that treatment definitely helps.
- Keith Reid asked if hatcheries in the straight of Georgia would be best advised to draw water in the top 30 feet and set up May – October.
  - Dr. Ianson stated yes, terms of acidity.
- Roberta Stevenson stated that Shellfish Aquaculture production has declined by 12% since 2003 (presentation said it was growing). Roberta offered to send Debbie some statistics. Ms. Stevenson noted that access to seed is one of the primary reasons for decline.
  - Dr. Ianson thanked Dr. Ianson and noted that she would love to have more statistics regarding trends in the shellfish industry.
- Julie Carpenter noted that Central Coast First Nations of the Central Coast are concerned due to existing high acidification due to upwelling, and are very interested in this.
- Dan Lisch asked if releasing sewage into Baynes Sound or going out farther out into the ocean and asked how much difference would it make.
  - Dr. Ianson stated that she is not an expert on treatment at all. She noted that any location with poor flushing is a bad place for an outfall. She noted that there is technology which can remove carbon/acidity from sewage, and more detailed treatment options may be reviewed.
- Edina Johnston asked if anyone is looking at other carbon producers like boats/ships?
  - Dr. Ianson stated that this would be a good area of research.
- Edina Johnston asked what potential negative effects could be of a high density of shellfish aquaculture in small area.
  - Dr. Ianson stated that other research is being done on 3D modelling, and more work would need to be done to determine this.
- Katie Beach asked if there is any evidence that iron and calcium loading could be used to counter acidity. Any evidence that this would help?
  - Dr. Ianson stated that there may be some merit in looking at calcium loading via shell debris – she would like to do more calcium sampling in the near shore area. In terms of iron fertilization, she stated that there is enough natural iron on the coast and this is likely not a great idea.
- Keith Reid stated that he is aware of sewage treatment systems that exist that turn sewage into drinking water but when water is measured at the end, it is free of fecal coliforms and bacteria and has high acidity (pH = 3).
  - Dr. Ianson stated that she would be interested in further information on this.

Committee members agreed that they found the presentation useful and of interest.

#### Shellfish Management Discussion

Gabrielle Kosmider provided an update on changes relating to licences and management. She passed around a mock-up of Site Management Plan. There were a number of comments and



questions which have been captured in the recommendation and response log. Industry representatives thanked Gabrielle for her work on reducing the complexity of the management requirements.

#### Update on Proposed Aquaculture Activities Regulations

Diana Trager provided a verbal update on the AAR. She noted the purpose is to clarify conditions under which aquaculture activities can be conducted, and to regulate the deposit of substances into water when various aquaculture activities occur. The draft regulations are available for review online at the links provided. They are likely more directly related to marine finfish aquaculturists. She noted about 1500 comments have been received, and the department has gone through them all and incorporated changes where required. DFO is currently finalizing regulations to go to Canada Gazette II sometime this spring for implementation in 2015.

#### Update on Oyster Access Licenses for Spat Collection

Lauren Lavigne (Chair of I&T Committee), Shane Peterson (I&T officer) & Corey Jackson (Regional Manager of Aquaculture Programs) joined via telephone. Diana Trager delivered the presentation.

- Roberta Stevenson asked if the new procedures will apply to the east coast?
  - Diana Trager stated that the presentation is in relation to the Pacific.
- Roberta Stevenson asked what the life span will be for a permit?
  - Diana Trager stated that she will follow-up on this.
- Bill Veenhof asked if this will increase the number of people out collecting spat.
  - Diana Trager noted that you need to be an aquaculture licence holder to collect spat.

Shane Peterson told members that DFO will welcome their further thoughts or feedback. Roberta Stevenson and Shane Peterson agreed to follow up.

#### Next Steps and Future Meeting(s)

Keith Reid noted concern among the industry related to the issue of derelict vessels. Craig Darling, the facilitator, consulted the members who were in consensus that derelict vessel are a concern. The table by consensus asked DFO to advise the Minister that this is a problem that needs to be addressed. Diana noted that she does not directly advise the Minister but she will pass on the advice and recommendations of the committee to senior DFO management.

Keith Reid asked about whether commercial vessels are allowed to flush sewage close to shore, and if not how to get the government to enforce compliance. DFO will follow up.

Julie Carpenter stated that First Nations would like to see more information from DFO on environmental monitoring.

Participants asked for an update on the sea cucumber framework. Diana Trager stated that there is no update at this time. DFO is working with science to try to find containment solutions. Committee would like an update on Sea Cucumber this at future meetings.



Julie Carpenter asked how provincial planning processes will be integrated into the IMAP. DFO responded that they will likely not be integrated as they relate to areas of provincial jurisdiction and DFO has not been a participant. DFO noted the planning processes will be most relevant for areas of provincial jurisdiction and decision-making.

Roberta Stevenson asked for more information on the BCARP all staff meeting. Diana Trager stated that at the workshop the aquaculture group heard information related to the view and visions of various groups and group developed their own vision which was basically to support the growth of the industry in a sustainable way.

Roberta Stevenson asked if NASAPI being updated/re-written. DFO to follow up.

Meeting adjourned.

DRAFT