Comox Valley REGIONAL DISTRICT

Staff report

DATE: February 26, 2018

FILE: 3010-01

TO: Chair and Directors
Electoral Areas Services Committee

FROM: Russell Dyson
Chief Administrative Officer

Supported by Russell Dyson
Chief Administrative Officer

R. Dyson

RE: **Update from Senior Government Agencies on Unused Aquaculture Tenures and Updated Harmonized Application Forms**

Purpose
To provide an update to the Electoral Areas Services Committee as directed in the February 28, 2017 motion from the board for staff to coordinate this update.

Recommendation from the Chief Administrative Officer:
For information purposes only.

Executive Summary

- On February, 28 2017 the board passed the following two motions:

  "THAT the board formally request to the Ministry of Forests Lands and Natural Resource Operations and the Department of Fisheries and Oceans that harmonized application forms better clarify how proposed industry comply with local government zoning, in light of the review of that form now underway;

  AND FURTHER THAT a progress report be provided to the electoral area services committee from the aquaculture management advisory committee on their work to examine under used tenures and debris."

- Representatives from the two agencies of Fisheries and Oceans Canada and the Ministry of Forests Lands and Natural Resource Operations and Rural Development are intending to make a brief presentation on the topics noted in the above two motions.
- The work follows a July 29, 2014 motion:

  "THAT staff be requested to research how to initiate a "Baynes Sound Coastal Plan" and produce a set of recommendations that will enable the Comox Valley Regional District to work with the province and other agencies to produce a "Baynes Sound Coastal Plan."

- A discussion paper call the *Baynes Sound Initiative* was generated in response to explore challenges faced by local government to support the industry along with industry jurisdictional and operational issues (Appendix A)
- The presentation today will address the two outstanding questions raised by the board.

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Stakeholder Distribution (Upon Agenda Publication)

Lesley Fettes, FLRNRORD	✔
Brenda McCorquodale, Fisheries and Oceans Canada	✔
David Critchley, Islands Trust	✔

Attachments: Appendix A – "Discussion paper, *Baynes Sound Initiative*"

Comox Valley Regional District
Baynes Sound Initiative
Discussion Paper

Executive Summary

In 2013 the Comox Valley Regional District (CVRD) received an application to rezone a proposed new shellfish tenure from aquaculture one (AQ-1) to aquaculture two (AQ-2) in order to enable more intensive operations. The public hearing, required by the *Local Government Act* (RSBC, 2015, c. 1) (LGA) for rezoning applications generated significant opposition from residents in electoral area "A" of the CVRD. Residents were concerned about such operations adjacent to a populated residential area, and cited concerns about noise and accumulation of industry-debris on beaches.

The CVRD board adopted a resolution to rezone the property on August 26, 2014 but also passed a motion to complete an area plan, in partnership with other stakeholders and government agencies, in order to assist in balancing the interests of the residential users and the aquaculture industry interests in Baynes Sound. CVRD staff formed an interagency working group to clarify the jurisdiction shared by a number of agencies. This included the federal Department of Fisheries and Oceans (DFO), the BC Ministry of Forestry, Lands and Natural Resource Operations (FLNRO) and Transport Canada. A representative of Denman Island also sat on the committee to represent planning and zoning framework of Islands Trust, which is separate from that of the CVRD. The scope of work for that working group is attached to this paper as schedule 1.

On the whole, shellfish growers have been present in Baynes Sound for more than 100 years, and represent an important industry in terms of employment and production. The CVRD planning framework contains numerous policies to support the industry including the CVRD regional growth strategy, the official community plan and zoning bylaw. Over the course of several meetings, the working group explored a number of issues and came to a number of shared conclusions.

Initial concerns included unused tenures in light of potential for new tenures for intensive operations, continued debris on the beach, a voluntary versus mandatory code of best practices and challenges to the CVRD for bylaw enforcement. Over the course of working through the issues, it would appear that many, if not most of these concerns appear to be waning in significance rather growing in significance. The BC Shellfish Growers Association (BCSGA) and the BC Ministry of Agriculture also appear to offering increasing support to managing some of the issues going forward.

While some unspecified capacity remains in existing tenures for operators to increase the level of their production and the intensity of their existing operations given the provisions granted in their management plans, on the whole it would appear that Baynes Sound is nearing full occupancy, and significant growth of the shellfish industry in the Baynes Sound, other than K'ómoks First Nation interests, is not seen as likely.

The existing CVRD zoning framework, though rationalization of what are currently five separate zones could be considered to better clarify where any new operations are best located. Best

management practices (BMP) as provided for in the BCSGA Environmental Management Code of Practice may assist agencies in responding to complaints or bylaw infractions.

The BC government, through the Farm Industry Review Board (FIRB), is expected to table a new regulatory framework, perhaps as early as 2017, which may include *prescribed aquaculture operations*. The FIRB has a recently renewed mandate to consider aquaculture under the *BC Right to Farm Act* and the development and use of *prescribed aquaculture operations* is likely to assist in resolving disputes once a complaint has been made to the FRIB.

Local government zoning has not always been readily evident to applicants seeking new aquaculture tenures. DFO and FLNRO staff advise that a review of the harmonized application form and guidebook, currently underway, may lead to inclusion of additional information regarding local government zoning. These agencies also appear to be reviewing unused and under used tenures and more information will inform all levels of governments as to the capacity for new tenures. The electoral areas services committee (EASC) could also benefit from an update from either DFO or FLNRO on progress of their work to investigate these under used tenures.

Next logical steps involve consultation with the wider community, as better public awareness of the shared jurisdictional responsibilities, roles and tools would be helpful.

Recommendations going forward

1. Maintain status quo which is to continue to designate the majority of areas in the Baynes Sound AQ-1 zone until local governments can better identify the level of intensity associated with new and existing applications for deepwater tenures.
2. Formally request to FLNRO and DFO that harmonized application forms better clarify how proposed industry comply with local government zoning, in light of the review of that form now underway, and that a progress report be provided to the EASC on their work to examine under used tenures and work to limit debris on beaches.
3. Request the BC FIRB to present its proposed new framework to the CVRD board, including details of the *prescribed aquaculture operations* that may be used in future dispute resolution processes under the newly established BC FIRB.
4. Encourage the promotion of better education and public awareness of agency roles and mandates in the community. This could be timed to occur around the time that the FIRB mandate comes into being.

Background

The shellfish industry has been present in the Baynes Sound for more than 100 years. It is an important industry in a region where resource based jobs are scarce and population growth is increasingly reliant on in-migration of retired persons. CVRD staff have been advised that the existing 75 shellfish tenures in Baynes Sound employ nearly 600 people, though real data is consistently difficult to obtain. Historically, tenure ownership has been fragmented though there would appear to be a trend recently towards consolidation of tenures by several large producers. Provincially, the industry generated 10,200 tonnes of shellfish in 2014, yielding $22.1 million in farm

gate sales[1]. Close to 80 per cent of all shellfish produced in BC is in Baynes Sound, by 19 per cent of shellfish tenure holders. During the 2015 presence of *Vibrio parahaemolyticus*, the industry sustained a $50,000 loss per day, or $1.5 million in total profits. Additional losses included numerous temporary lay-offs and lost wages.

A number of issues may constrain future growth of this industry; issues not seemingly apparent a hundred years ago. This includes ocean warming, ocean acidification, limited access to new tenures, and most recently, conflicts between the industry and the upland residential communities. With the growth of upland residential uses in electoral areas that are not serviced by a sewage system, the industry is also increasingly vulnerable to contamination from failing septic fields and sewage.

Jurisdiction

The January 2008 Hinkson decision of the BC Supreme Court resulted in the provincial legislation pertaining to regulation and licensing of fish farms operated in marine waters being deemed ultra vires to the federal *Fisheries Act*. It established Canada's exclusive jurisdiction for managing the fish farms as a fishery, and the province's role as owner of the land, enabling the province to issue tenures.

The *2010 Canada BC Agreement on Aquaculture Management* was put in place to enable the DFO and FLNRO to administer a harmonized application process for all aquaculture licenses and tenures in accordance with that agreement, and to approve management plans. The *BC Land Act* provides for provincial ownership of the land and water below the high water mark.

Federal shellfish aquaculture licenses are approved by DFO for nine years and the maximum term for provincial tenures issued by FLNRO is 30 years, with licenses of occupation issued for 20 years. The Pacific Aquaculture Regulations provide for a *Condition of License,* which states the obligations of each license holder, standards and protocols for the operation of aquaculture facilities. Operators view their operations as farms versus fisheries, and hence, have indicated support for provincial legislation to address fish farming versus harvesting of a federal fishery, or a federal Aquaculture Act. While such regulatory changes could potentially address some industry constraints, this paper does not explore those options.

DFO has established the shellfish Aquaculture Management Advisory Committee (AMAC) along with a Shellfish Aquaculture Industry Advisory Panel (SAIAP) to coordinate and manage issues. Recently, two sub-committees have also been formed by the AMAC to look at underutilized tenures and accumulation of debris on beaches. Local governments have a representative on AMAC as appointed through the Union of BC Municipalities and The Association of Vancouver Island and Coastal Communities.

Transport Canada is the federal department responsible for navigation within scheduled waterways in Canada, and regulates the building and placement of aquaculture structures (works) associated with aquaculture facilities pursuant to the *Navigation Protection Act* (NPA).

[1] "Fast Stats 2014, Agriculture & Seafood", BC Ministry of Agriculture.

The BC *Local Government Act* provides authority to local governments to regulate land uses in marine areas within its boundaries by zoning. Zoning includes establishing where certain uses can occur, versus how the industry can operate. A robust CVRD policy framework in the CVRD regional growth strategy and rural Comox Valley official community plan (OCP) contain policies to support growth of the aquaculture industry. Section 806-810 of the Comox Valley zoning bylaw currently includes five different zones pertaining to aquaculture, as outlined in chart 1 at the end of this paper.

The BCSGA adopted an *Environmental Management Code of Practice* in 2013 as an industry standard. While this code serves as a voluntary code of practice, and is therefore not uniformly applied, the approximate 180 members of the BCSGA represent more than 300 tenures, and for the most part operators appear to be complying with the code.

Issues facing local government

CVRD zoning:
The majority of the CVRD coastal area is zoned to permit intertidal aquaculture by way of AQ-1 zoning.[2] Of the tenures in the Comox Valley, 66 are zoned AQ-1, nine are zoned AQ-2 to permit deepwater operations, two properties are zoned aquaculture four (AQ-4) and one property is zoned upland aquaculture facility one (UAF-1). No properties are zoned aquaculture three (AQ-3). The primary difference between AQ-1 and AQ-2 is that AQ-1 is primarily located in the inter-tidal area and this zone prohibits structures on the surface of the water. AQ-2 zoning allows for structures up to one metre (3.3 feet) above the surface of the water and disallows any floating or fixed structures as detailed in chart 1. Use of rafts, as provided for in AQ-2 provides for more optimal use of a tenure with more efficiencies and higher product yields. AQ-1 traditionally generates a lower yield of product, both in terms of volume and value. As noted, there has only been one recent request to convert to AQ-2. The CVRD receives only infrequent enquiries regarding rezoning to allow for more intensive operations, (i.e. AQ-2 zoning).

In the harmonized process administered by DFO and FLNRO, some physical structures such as work floats for product handling, even including living accommodation or nursery infrastructure may be allowed in management plans approved by DFO. This includes structures known as FLUPSY, Floating Upwelling Systems. These structures may employ a generator on a regular basis to push water up and through the rack of shellfish baskets in order to provide on-going nutrients to the shellfish seed. In so doing, FLUPSYs can generate ongoing noise, up to 24 hours a day, seven days a week. These, unlike operations that are inter-tidal in areas zoned AQ-1, are considered more intensive operations. Some operators generate high levels of noise, debris and unsightly operations and while these may be the minority, these are the ones that generate complaints about the industry as a whole.

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[2] Most clams are grown in the intertidal area. Intertidal systems comprise both bottom (beach) culture, where shellfish are planted directly in the substrate, and near-bottom (epibenthic) culture, where they are suspended over the substrate by means of racks, bags, and other equipment. Oysters may be farmed in the intertidal zone, including their nursery rearing on shell cultch before grow-out in deeper water.

Increasingly, oyster and other bivalve culture have been moving to off-bottom systems which utilize floating rafts, buoys, and longlines to suspend shellfish above the ocean floor. Deepwater oysters can grow at a faster rate than intertidal oysters, although they are typically moved to the beach for defouling and hardening prior to sale. In BC, currently all commercial mussel and scallop farming is done using suspended culture systems. (http://www.pac.dfo-mpo.gc.ca/consultation/aquaculture/index-eng.html)

Local government is limited in its planning and zoning framework to the *location* of uses and structures, and zoning cannot be used to regulate the *practice* of the industry. The more specific a zoning regulation is to the *practice* of aquaculture, the greater the risk of the regulation being deemed ultra vires given the constitutional division that provides exclusive authority over management of the fishery to the federal government. Similarly, an OCP can regulate the *location* and not the *practice* of aquaculture. This limits the role a local government can play to mitigate, manage and prevent conflicts between shellfish farms and upland users by use of typical planning strategies. Defining exactly *what* is proposed in an aquaculture operations is critical to determining *where* a new tenure should be located and in considering what zoning is appropriate.

It has been difficult for local governments to obtain actual data on what each operation is doing in its deliberation of whether and where to set aside new areas in its zoning for operations when reviewing provincial referrals. Shellfish aquaculture licences do not specify an upper harvesting limit in terms of capacity, or tonnes of product. When reviewing applications for aquaculture licences, DFO assesses a maximum allowable production for the application area based on a calculation of intertidal or sub-tidal (50 tonnes/ha) or deepwater (200 tonnes/ha). The Maximum Allowable Production is recorded as part of the site management plan and DFO staff review the updated production information submitted annually as a condition of licence, against the maximum allowable production in the management plan. The data is not disaggregated, for privacy reasons, and so it is difficult to link noise levels to any specific kind of license or application. This makes locating a tenure difficult.

DFO tracks actual production through annual reporting; however, due to privacy provisions local government is not able to obtain information for each licence and this makes it difficult for a local government to link the level of intensity with the zoning to make decisions about location.

In the harmonized application form for a new licence there is a single box to check regarding local government zoning. There does not appear to be a requirement for the applicant to demonstrate that they have reviewed the zoning and understood any limitations, and there is little to no follow up to determine if they have spoken to the local government, other than the referral documents from the province to the local government. DFO and FLNRO staff advise that a review of the harmonized application form and guidebook is currently underway and future changes may include additional information about where to find more information on zoning, thereby encouraging applicants to contact local governments prior to applying.

Access to tenures is another area that generates complaints to local government. Aquaculture management plans do not require the farmer to identify where and how they access their operations, and while most gain access by boat from a public dock, intertidal tenures are generally accessed along the beach, no provisions to prohibit operators from driving on the beach are in the agreements or conditions in the licenses, even when alternatives such as a dock are available. Zoning does not address access, as again, it could be construed to be pertaining to the practice of the industry, yet complaints are often made to the CVRD regarding operators driving on the beach.

While a significant majority of operators comply with zoning and take measures to prevent upland conflicts, CVRD bylaw complaints generally come from more intensive operations. Tenures in the inter-tidal area generate different complaints, generally relating to driving on the beach and in some cases this would appear to be the only option to access tenures.

Some operators have separate licences for both inter-tidal and deepwater operations enabling them to alternate production between inter-tidal and deepwater operations. As maximum allowable production for each site is calculated for combined culture types combined, without being able to look at impacts as a function of level of intensity, this presents another challenge for a local government to link the production values with the level of intensity of the operation in order to make decisions about location. Generally, when making application for an aquaculture operation a prospective grower applies for an aquaculture licence and also submits a management plan to DFO, which includes a statement of tenure size in hectares and the estimated biomass production measured in tonnes. Shellfish operators generally apply for multi-species licences which could allow for the production of more than one species on a single shellfish farm.

Management plans provide the shellfish grower with discretion to choose the proportion of its tenure that will be allocated to the production of each species, and in term to determine how intensive their operations will be. This makes a local government analysis of a proposed new tenure difficult when it tries to make a decision on zoning. There is a significant price difference between shucked oysters (which includes fully removing the meat from the shell), oysters in the shell or oysters in the half shell. There are also shaped oysters, where the producer takes some effort to create a shell with a desired form and shape. In order to grow anything more than oysters in the half shell, the grower must carry out an increasingly intensive process that involves regularly chipping away at the outer edge of the oyster shell in order to encourage growth of a deeper and more round cup. This requires specialized equipment such as oyster tumblers to remove bio-fouling and to chip off the thin edge of the shell, and is generally a far more intensive operation (and noisy) than would be that of producing shucked oysters. This means that AQ-2 proposed operations could potentially become fairly intensive operations, even though not all may, and this again makes a local government decision on where to locate such operations through its zoning functions.

Residents express ongoing concerns about debris that lands on the beaches of Denman Island from shellfish operations. The Association of Denman Island Marine Stewards, (ADIMS) is a registered organization with the "Great Canadian Shoreline Clean Up" sponsored by the Vancouver Aquarium. ADIMS submits annul reports to the Great Canadian Shoreline Clean Up, and cites that 90 per cent of the three of four tons collected annually are plastics related to the shellfish industry. It is believed that BMP could limit use of some materials, such as styro foam, required marking of gear and materials, and possibly serve as a vehicle to encourage the use of newly emerging technologies to mitigate this problem. The BCSGA invests and assists in beach clean-up on a regular basis on behalf of its members. As well, management plans require gear to be marked, though operators indicate that it is neither practical nor reasonable to do this. Efforts are taken by most operators to reduce loss of gear, for good business reasoning, yet unmarked and unidentified shellfish equipment continues to make its way to local beaches at a financial cost to industry and environmental cost to the community and the ecosystems.

CVRD staff conducted two site visits in the summer of 2015 to document the global positioning system coordinates of a sample of operations and to verify the tenure management area and structure height. That visit confirmed some siting and operational anomalies. A number of license holders operate outside the tenure boundaries provided for in their licence. Some bylaw infractions were observed including the presence of structures (i.e. sheds, covered work areas) in excess of the one metre height allowance provided for in AQ-2 zoned areas. (Note stacked oyster baskets would not be considered structures.) As noted, a number of licensed tenures were lying vacant and not in operation, possibly adding pressure to issue new licencing and tenures in new areas. A range of

practices and standards appear to exist, generating numerous bylaw complaints from a minority of operators who produce what some would cite as excessive noise from radios, non-muffled generators and lighting, and those who access their tenures by driving on the beach or use substandard or non-secured equipment that easily breaks up and ends up on beach or shoreline, often Denman Island given ocean currents. No best management practices are included in the licencing or management plans to specify a required standard, and while there is a voluntary code of practice promoted to its members by the BCSGA, this is not uniformly applied.

Again, while most operators appear to comply with the BCSGA code of practice, there are some who do not, and those operators generate ongoing bylaw complaints to the CVRD. In July 2015, the CVRD received a petition signed by 10 residents complaining of noise from Ship's Point, one of the most densely populated areas of Baynes Sound. CVRD bylaw compliance officers have met with the operator and determined that the building expansion in question is a mobile work float that moves from raft to raft, offering a work station and shelter from harsh weather conditions. The operator indicates that the work float was included in the tenure management plan and approved by FLNRO in one of the nine areas that provides for AQ-2 zoning.

The CVRD strives for a compliance based working relationship with aquaculture lease holders. The "Electoral Areas Noise Control Regulations Bylaw, No. 102, 2010" guides its response, but it is difficult to time and catch an operators who disregards the bylaw. Further, Bylaw No. 102 can be applied to address only some aspects of noise, not including noise linked to the operations of a tenure early in the morning or late at night when tides make operations favourable. This can leave adjacent upland residential users vulnerable to an operator who makes no effort to curb noise, smoke or drifting debris. Generally, most operators are cooperative, with respect to loud music, the radio etc. at early hours when tides make work favourable, but some have demonstrated limited cooperation leading to ongoing complaints. The CVRD currently has little or no relationship with industry representatives until a matter becomes a bylaw enforcement issue, and this is not optimal.

Transport Canada, in its administration of the *Navigation Protection Act* administers, regulates the building and placement of works in Canadian scheduled waterways where those works could interfere with navigation. Two issues emerge from this. Tenure operators sometimes use vessels to store materials and equipment for their tenure, which can provide a negative image of the industry overall. Residents associate this use as part of the tenure, which it may or may not be. In addition to sometimes appearing as unsightly, some uses of the tenure may be conducted on these vessels, such as basket washing, operation of generators, noise, lighting and even potentially residential use. There would appear to be challenges to agency coordination, resulting in some occasions where vessels could be abandoned but perceived to be part of an active aquaculture operation.

Looking Forward

While the industry is supported as having an historic place in Baynes Sound there is a perception that additional intensive operations in the primarily residential area around Baynes Sound will lead increased and ongoing complaints about noise, smells, accumulation of debris on beaches. This raises the question as to whether or not the CVRD should consider creating additional areas that support intensive operations as provided for in the AQ-2 zoning, or limiting growth of the more intensive uses by limiting AQ-2 zoning.

While not all operations with AQ-2 zoning employ FLUPSYs, generators or have residential provisions, the zoning provides for them to do so. The rafts provide for more efficiencies and limiting wooden rafts by way of zoning restrictions has been estimated as potentially reducing overall production of the industry by as much as 70 per cent.[3] Current AQ-2 zoning provides for rafts and on-raft FLUPSYs, generators, etc. all in the same zone. While all AQ-2 operations are deemed as more intensive, this is not always the case because, as previously noted, most operations appear to operate well under what they are licenced to do. Hence, even without the issuance of more tenures, the existing tenures in the Baynes Sound could increase the intensity of their operations based on the current underused licences. Similarly, while the AQ 2 provides for rafts, not all operators employ the more intensive operations with FLUPSYs,

CVRD staff are advised by the agencies that other than First Nation interests, the industry may be fully developed in the Baynes Sound and there is little expectation for a significant number of new tenures to be issued. What is possible, however, is that existing operators could increase the intensity of their operations given existing provisions in tenures and management plans to do so. This is an important consideration for the CVRD when looking at site specific zoning for any new tenure.

There is also existing unused capacity in existing tenures that are not in operation or are underused. Agencies could seek to ensure growth in the Baynes Sound shellfish industry occurs by way of more fulsome use of existing tenures versus the issuance of new ones, as many tenures are not in operation. The 2015 *BC Agriculture and Seafood Strategic Growth Plan* identifies a goal of increasing seafood production, including shellfish by 14 per cent or 13,000 tonnes.[4] Clearly much of this increase will be in the finfish sector but put in context of the current scale of aquaculture in Baynes Sound, and given the relative shellfish production in BC and the relative number of sites in this area, this could equate to as many as 25 new sites in Baynes Sound. The reported production from 2015 in Baynes Sound was 16,412 tonnes, which equates to an average of 15.7 tonnes produced per hectare. With the average size of a tenure in Baynes Sound at 10 ha, and with 27 sites reporting no sales in Baynes Sound in 2015 it could be argued that infill or optimum use of existing tenures is a more efficient use of the area instead of the issuance of new tenures.

As noted, the two working groups recently struck under the Terms of Reference of the Shellfish Aquaculture Industry Advisory Panel (SAIAP) may assist in addressing two key specific issues that the panel has raised as priorities for discussion. Neither of these committees have had their initial meetings yet; however, staying current on their findings will be useful to the CVRD.

Upcoming dispute resolution process by BC Farm Practices and Protection Act

Some changes are anticipated within the next year to expand the provincial role in management of the industry, and this may be helpful. Subsequent to the Hinkson decision, when a follow up BC Court ruling rendered sections of the *British Columbia Farm Practices Protection Act* (FPPA), (the "right to farm act") ultra vires as pertaining to aquaculture. This suspended the mandate of the BC Farm Industry review board to consider conflicts pertaining to aquaculture. The province is now considering an amendment to the regulatory framework to FPPA to provide for an expanded mandate of FIRB that will enable application to aquaculture. This includes the creation of an

[3] Analysis of the zoning Bylaws for Shellfish Aquaculture and Assessment of their Economic Impact: Cortes Island, Area I, Regional District of Comox-Strathcona, Kingzett Professional Services Ltd., prepared for BC Ministry of Agriculture, Fisheries and Food, February 2004, page 20.

[4] BC Agrifood and Seafood Strategic Growth Plan, 2015, page 15.

arbitration platform similar to other farm operations and to include a definition of "*prescribed aquaculture operations*". This will lead to a formalized process for that board to receive complaints on noise or odour from the adjacent residential community and to establish a quasi-judicial decision making process to rule on how operations are conducted.

Currently the FPPA convenes a BC FIRB with the mandate to hear complaints on odour, noise, dust or other disturbances from farm operations. This body determines whether a farmer is following "normal farm practice", and resolves disputes through an informal process. FIRB can also ultimately hold a hearing and issue a binding decision. No date on when this is expected but provincial representatives from the BC FIRB advise it can be expected in 2017. The BC Ministry of Agriculture has drafted several guidance documents for best practices for industry on the livestock/crop side and we are advised that the province plans to work on similar guidance documents for shellfish, once the FIRB process is reinstalled and applicable to aquaculture. CVRD staff have been advised that shellfish operators will retain the responsibility to take reasonable steps to mitigate the impacts of their operations on adjacent users, in accordance with proposed new "*prescribed aquaculture operations*".

This has the potential to be a useful framework to resolve disputes, though the work carried out by FIRB will remain an "after the fact" resolution process, once an issue has escalated to a formal complaint with FIRB. Ideally, the industry and upland users would be better served by effective communication and a proactive framework that mitigates and prevents conflicts in advance of them becoming formal complaints to FIRB, by way of good planning practices.

Recommendations going forward

1. **Maintain status quo which is to continue to designate the majority of areas in the Baynes Sound AQ-1 until local governments can better identify the level of intensity associated with new and existing deepwater applications.**

   The need to pre zone areas to allow for AQ-2 zoning does not seem prudent. The expectations for new tenures is seen as low, and there appears to be existing capacity in underused and unused tenures now. It is difficult for the CVRD to link productivity with size and numbers of tenure so making a decision as to where to locate these operations remains difficult. Residents are likely to oppose areas being rezoned near them to allow for AQ-2 operations, and there is not a lot of pressure from industry to rezone. This option does not change the situation where more intensive operations need to be carefully located in response to any application to rezone and in that case, a site by site decision would need to be made by the board on the rezoning application.

   Most areas are currently zoned for AQ-1, allowing intertidal longlines, and where a zoning amendment is required for AQ-2, or rafts. This means retaining current zoning, making exceptions to allow more intensive zoning, where appropriate, upon application. This allows the CVRD to consider each application based on the practices provided for in its licence and any site specific consideration. In each case, the CVRD board could include specific conditions in its board motion in response to agency referrals and request that those conditions or best practices be included in the aquaculture licenses issued by DFO and FLNRO.

2. **Streamline CVRD zoning to determine if all five zones are required, as part of CVRD zoning review currently underway.**

   The Comox Valley zoning bylaw review is currently underway and expected to be completed in fall 2017.

3. **Formally request to FLNRO and DFO that harmonized application forms better clarify how proposed industry comply with local government zoning, in light of the review of that form now underway, and that a progress report be provided on their work to examine under used tenures to the EASC.**

   The application form currently asks whether the operations will be intertidal, subtidal or deepwater and also the type of infrastructure on site (i.e. longlines, rafts). Beyond that, clarification to the operator regarding local zoning may assist in their decision to produce shucked oysters or if the product involves oysters in the half shell, fully shelled oysters and if any shaping will occur, (i.e. more intensive operations) would require amendments to the licence application.

   More information on progress towards these improvements would be helpful and a request to these agencies to provide this update to the EASC would be useful.

4. **Request the BC FIRB to present its proposed new framework to the CVRD Board, including details of the *prescribed aquaculture operations* that may be used in future dispute resolution processes under the newly established BC FIRB**.

   The creation of "*prescribed aquaculture operations*", will likely be an improvement as the FIRB represents an independent body that will use objective criteria to make a binding decision. Some dialogue between the EASC and FIRB could lead to a better understanding of how and when FIRB may come into being.

5. **Encourage the promotion of better education and public awareness of agency roles and mandates in the community. This could be timed to occur around the time that the FIRB mandate comes into being.**

Chart 1

Aquaculture Zoning – Bylaw No. 2781, Comox Valley Zoning Bylaw, 2005

806 Aquaculture One (AQ-1)

1. Principal Use

On any lot:

i) Shellfish aquaculture, provided that no structures, except those allowed for in (ii) below, are permitted on the site;

ii) Private or public boat ramps or wharves, excluding any such facilities associated with private yacht, boating or similar recreational clubs, and any facilities that are offered for commercial gain.

2. Lot Area

i) Shall be in accordance with the site license of occupation or lease issued by the jurisdiction having authority.

3. Setbacks

i) No yard minimum shall apply.

807 Aquaculture Two (AQ-2)

1. Principal use

On any lot:

i) Shellfish aquaculture;

ii) Private or public boat ramps or wharves, excluding any such facilities associated with private yacht, boating or similar recreational clubs, and any facilities that are offered for commercial gain.

2. Conditions of use

i) No structures, excluding navigational aids or wharves, shall extend more than 1.0 metres (3.3 feet) in height above the surface of the water at any point in time;

ii) No floating or fixed structures may prevent access by an upland owner to water or over the surface of water to navigable areas.

3. Lot Area

i) Shall be in accordance with the site license of occupation or lease issued by the jurisdiction having authority.

4. Setbacks

i) No yard minimum shall apply.

808 Aquaculture Three (AQ-3)

1. Principal Use

On any lot:

i) Shellfish aquaculture;

ii) Private or public boat ramps or wharves, excluding any such facilities associated with private yacht, boating or similar recreational clubs, and any facilities that are offered for commercial gain.

2. Accessory Uses

On any lot:

i) Sorting, grading and storage facilities for shellfish aquaculture excluding seafood processing.

3. Conditions of Use

i) No structures, excluding navigational aids or wharves, shall extend more than 1.0 metres (3.3 feet) in height above the surface of the water at any point in time except that one floating enclosed structure not exceeding 12.0 metres^2 (129.2 feet^2) in floor area and not exceeding 4.5 metres (14.8 feet) in height is permitted as a structure for storage, sorting or grading;

ii) No floating or fixed structures may prevent access by an upland owner to water or over the surface of water to navigable areas.

4. Lot Area

i) Shall be in accordance with the site license of occupation or lease issued by the jurisdiction having authority.

5. Setbacks

i) No yard minimum shall apply.

809 Aquaculture Four (AQ-4)

1. Principal Use

i) On any lot:

a) Finfish aquaculture;
b) Shellfish aquaculture;

c) Private or public boat ramps or wharves, excluding any such facilities associated with private yacht, boating or similar recreational clubs, and any facilities that are offered for commercial gain.

ii) On any upland lot:

a) One single detached dwelling.

iii) On any upland lot 2.0 hectares (4.9 acres) or larger:

a) Two single detached dwellings.

2. Accessory Uses

On any lot:

i) Sorting, grading and storage facilities for aquaculture.

3. Conditions of Use

i) No seafood processing is permitted except for the stunning and bleeding of fish grown on site.

ii) No structure below the natural boundary of the sea shall extend more than 8.0 metres (26.3 feet) in height above the surface of the water at any point in time.

iii) No floating or fixed structures may prevent access by an upland owner to water or over the surface of water to navigable areas.

iv) Any upland use associated with a permitted foreshore use shall satisfy the requirements of Bylaw No. 2782 being the "Floodplain Management Bylaw, 2005".

4. Lot Area

i) Minimum lot areas for the foreshore area shall be in accordance with the site license of occupation or lease issued by the authority having jurisdiction.

ii) The minimum lot area permitted for upland areas shall be 2.0 hectares (4.9 acres).

5. Setbacks

i) Structures shall be sited 7.5 metres (24.6 feet) from all property lines except that when a property abuts a foreshore lease or license of occupation no yard minimum applies to the area abutting the water area, except for buildings used for habitation or storage of goods damageable by floodwaters which shall also be subject to the provisions of the Bylaw No. 2782 being the "Floodplain Management Bylaw, 2005".

810 Upland Aquaculture Facility One (UAF-1)

1. Principal Uses

On any lot or portion of any lot zoned UAF-1 only the following principal uses are permitted:

i) Upland invertebrate hatchery;
ii) Offices;
iii) Outdoor storage;
iv) Saltwater and freshwater storage for aquaculture and hatchery purposes;

v) Wholesale establishments.

2. Accessory Uses

i) On any lot or portion of any lot zoned UAF-1, only residential accessory use is permitted.

3. Density

i) On any lot, residential use is limited to one single detached dwelling and secondary suite, or one single detached dwelling and one carriage house, or one single detached dwelling and one secondary dwelling limited in area to 90.0 metres^2 (968.8 feet^2).

4. Conditions of Use

i) All permitted uses listed in "upland invertebrate hatchery", shall be subject to the following conditions:

a) No merchandise shall be displayed outdoors on any upland aquaculture facility;

b) No mechanized processing is permitted on site;

c) No retail sales are permitted on site;

d) Any upland use associated with a permitted foreshore use shall satisfy the requirements of Bylaw No. 2782, being the "Floodplain Management Bylaw, 2005";

e) All activities shall be in compliance with Bylaw No. 102, being the "Electoral Areas Noise Control Regulations Bylaw No. 102, 2010";

f) No structure below the natural boundary of the sea associated with an upland aquaculture facility shall extend more than 8.0 metres (26.3 feet) in height above the surface of the water at any point in time;

g) No floating or fixed structures associated with an upland aquaculture facility may prevent access by an upland owner or general public to water or over the surface of water to navigable areas.

ii) Upland aquaculture facilities shall be subject to the following parking requirements:

a) All required off-street parking spaces should be used only for the purposes of accommodating the vehicles of customers and employees and shall require 1.0 parking space for every 100.0 square metres (1,075 square feet) of gross floor area;

b) Off-street parking, loading areas and ingress and egress points shall be located so as not to interfere with other on-site vehicular and off-site traffic movements abutting the streets;

c) No parking, loading or storage areas shall be located within 1.5 metres (4.9 feet) of any property line.

iii) Upland aquaculture facilities shall be subject to the following landscaping requirements:

a) Except for points of ingress and egress, landscaping is required for the screening and enhancement of every upland aquaculture facility. The

landscaping shall be maintained with lawns, shrubs, trees or other suitable landscaping of a type and location to the satisfaction of any one of the CVRD officers;

b) All landscaping should constitute a minimum of 5% of the site subject to such minor variations as any one of the CVRD officers may approve;

c) Loading areas, garbage containers and recycling containers shall be screened to a height of at least 2.5 metres (8.2 feet) by a landscaping screen, a solid decorative fence, or a combination thereof;

d) Where the upland aquaculture facility is situated on a lot having a boundary in common with any abutting property zoned under part 700 "residential zones", and/or the Agricultural Land Reserve (ALR) on and along the full length of such boundary or portion of the boundary: a solid fence and/or a landscaped area measuring no less than 3.5 metres (11.5 feet) in width throughout its length and used only for the purpose of cultivating ornamental trees, shrubs, flowers and grass to the satisfaction of any one of the CVRD officers;

e) Each UAF-1 zone shall be allowed one freestanding sign for each street frontage of the business. The freestanding sign shall be permitted in landscaped areas only and located on the same lot as the facility. The height of the sign, including support structures, shall not exceed 6.0 metres (19.7 feet) and the area of any one face shall not exceed 4.5 square metres (48.4 square feet). The freestanding sign should not be illuminated;

f) All lighting used throughout the property including for signage, yards and buildings are to be in accordance with regional district 'Dark Sky' policies.

iv) All other permitted uses listed in section (1), "principal uses", shall be subject to the following conditions:

a) No parking, loading or storage areas shall be located within 1.5 metres (4.9 feet) of any property line;

b) All outdoor storage or supply yards shall be screened from any abutting property.

5. Siting and Height of Buildings and Structures

The setbacks required for buildings and structures within the UAF-1 zone shall be as set out in the table below:

		Required Setback			
Type of Structure	**Height**	**Front yard**	**Rear yard**	**Side yard**	
				Frontage <31m	**Frontage >31m**
Principal	10.0m (32.8 ft)	7.5m (24.6ft)	7.5m (24.6ft)	1.75m (5.8ft)	3.5m (11.5ft)
Accessory	4.5m-or less (14.8ft)	7.5m (24.6ft)	1.0m (3.3ft)	1.0m (3.3ft)	1.0m (3.3ft)
Accessory	6.0m-4.6m (19.7ft-14.2ft)	7.5m (24.6ft)	7.5m (24.6ft)	1.75m (5.8ft)	3.5m (11.5ft)

Except where otherwise specified in this bylaw, no building or structure shall be located in any required front and side yard setback areas. [Part 400, Siting Exceptions, of this bylaw and Bylaw No. 2782 being the "Floodplain Management Bylaw, 2005" may affect the siting of structures adjacent to major roads and the natural boundaries of watercourses and the sea, respectively.]

6. Lot Coverage

i) The maximum lot coverage of all buildings and structures shall not exceed 50% of the total lot area.

7. Subdivision Requirements

i) The minimum lot area permitted shall be 2.0 hectares (4.9 acres).

Baynes Sound Initiative
Scope of Work

The Comox Valley Regional District (CVRD) initiated the Baynes Sound planning initiative in January 2015. This work is in response to a commitment in the rural Comox Valley official community plan. A key objective of the work is to balance the interests of the residential users and the aquaculture industry interests in the Baynes Sound area. This initiative will assist the CVRD in managing zoning requests for aquaculture tenures in the Baynes Sound area. The CVRD will fulfill the role of secretariat for the initiative and arrange agendas, meeting minutes, etc.

It will take approximately 12 to 16 months to complete.

Several agencies with a current role in administering and issuing aquaculture interests in Baynes Sound have been involved in defining the scope of the initiative and establishing this project scope. This includes Fisheries and Oceans Canada (DFO), the BC Ministry of Agriculture and the BC Ministry of Forests, Lands and Natural Resource Operations (FLNRO).

Objectives include:
To clarify the roles and responsibilities of government agencies with a role in administering operations and leases, including the Comox Valley Regional District, Fisheries and Oceans Canada, Transport Canada, the BC Ministry of Forests, Lands and Natural Resource Operations and the BC Ministry of Agriculture.

To clarify and streamline the zoning requirements in the Baynes Sound area.

To provide the community with appropriate information regarding the range of agencies with a role in administering the aquaculture industry.

To ensure that the public is aware of ongoing and current information relating to non-compliant users and enforcement strategies.

To foster an awareness of emerging technologies in the aquaculture industry and encourage the use of best practices and sustainable technologies through effective liaison with Vancouver Island University and the BC Shellfish Growers Association.

To promote the face of the industry through current economic data, shellfish grower metrics and statistics.

Outcomes include:
- A work plan to outline individual tasks and roles with timelines for each agency.
- A public consultation schedule to clarify how to communicate this work to stakeholders along with a timeline.
- Engagement with K'ómoks First Nations (KFN).
- Establishing jurisdictional clarity for the public, the industry and all agencies of government.

- The creation and endorsement of best practices that clarify and manage issues and address upland user interests.
- Clarifying the role of the federal department of Fisheries and Oceans.
- A zoning framework that can support industry requirements while managing upland concerns including debris, noise, fumes.
- A stronger local presence for the industry in an effort to increase public awareness and acceptance of aquatic food production and fish farming in Baynes Sound.