



# STAFF REPORT

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**Date:** March 13, 2012

**File No.:** DE/15-1

**To:** Denman Island Local Trust Committee  
For meeting of April 3, 2012

**From:** Courtney Simpson, Island Planner

**CC:** Chris Jackson, Regional Planning Manager

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**Re: Review policies and regulations regarding impacts of shellfish farming on the marine environment**

**Owner:** Local Trust Committee initiated project

## THE PROPOSAL:

The third priority on the Denman Island Local Trust Committee (LTC) work program is a review of policies and regulations regarding impacts of shellfish farming on the marine environment. The Denman Island Marine Stewardship Committee (DIMSC) has advocated for the LTC to review the Official Community Plan (OCP) in order to amend policies to better protect the marine environment from the impacts of shellfish farming. The LTC has further identified that Land Use Bylaw (LUB) amendments would be required as well. DIMSC has identified the following three actions as the highest priorities:

- Removal of predator netting from the beach
- Banning driving on the foreshore
- Banning beach modification

The purpose of this staff report is to explore what authority the LTC has to require the removal of predator netting from the beach and to restrict or regulate driving on the foreshore and beach modification.

Although there is an extensive history of the evolution of LTC policies and regulations regarding aquaculture, this information is reserved for a later staff report if necessary and is also available on request.

## SITE CONTEXT:

Shellfish aquaculture activity in the Denman Local Trust Area is located in Baynes Sound, between Vancouver Island and Denman Island bordered to the north by Comox Harbour and to the South by Deep Bay. Baynes Sound is one of the most significant commercial shellfish farming areas in the Province, and is also an ecologically diverse and important area; it is the most important waterfowl habitat in British Columbia after the Fraser River estuary, is an

important rearing habitat for salmonids and other fish species, and is a highly productive herring spawning area.<sup>1</sup>

## **CURRENT PLANNING STATUS OF SUBJECT LANDS:**

### Islands Trust Policy Statement:

#### *Part III Ecosystem Preservation and Protection:*

- 3.4.2 *It is Trust Council's policy that marine areas be protected and coastal zone management principles be defined in the consultation with agents of the Government of British Columbia, the Government of Canada, Crown corporations, municipalities, regional districts, non-governmental organizations, property owners and occupiers.*
- 3.4.4 *Local Trust Committees... shall, in their official community plans and regulatory bylaws, address the protection of sensitive coastal areas.*
- 3.4.5 *Local Trust Committees shall, in their official community plans and regulatory bylaws, address the planning for and regulation of development in coastal regions to protect natural coastal processes*

#### *Part IV Stewardship of Resources*

- 4.5.1 *It is Trust Council's policy that aquaculture is a valuable activity in the Trust Area if compatible with maintenance of ecosystems and community character*
- 4.5.3 *It is the position of Trust Council that development, activity, buildings or structures should not result in a loss of significant marine or coastal habitat, or interfere with natural coastal processes.*
- 4.5.4 *It is the position of Trust Council that development, activity, buildings or structures should not restrict public access to, from or along the marine shoreline.*
- 4.5.6 *It is Trust Council's policy that aquaculture should be directed to sites away from:*
- *Areas of recreational significance,*
  - *Aresa where an aquaculture operation would conflict with established or designated upland uses, and*
  - *Areas where an aquaculture operation would conflict with established or designated anchoorage or moorage.*
- 4.5.7 *It is the position of Trust Council that aquaculture related development, activity, buildings or structures should not result in site alteration*

### Official Community Plan (OCP)

Section C.3 of the OCP includes background text, objectives and policies related to marine environment. This entire section is relevant to the topic, but particularly relevant sections include:

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<sup>1</sup> Baynes Sound Coastal Plan for Shellfish Aquaculture, 2002 available at: [http://www.ilmb.gov.bc.ca/slrp/marine/south\\_island/baynes/index.htm](http://www.ilmb.gov.bc.ca/slrp/marine/south_island/baynes/index.htm)

*Objective 8 To recognise that aquaculture is a valuable activity in the Trust Area if compatible with maintenance of ecosystems and community character, to support shellfish aquaculture when practiced in a low-impact, environmentally sound manner and to encourage the employment of Island residents in the industry.*

*Policy 3 In the Water designation, zoning regulations should: ...*

- protect environmentally sensitive marine sites from development;*
- promote conservation, with the exception of areas used for shellfish aquaculture or transportation as of the date of adoption of this Plan and any areas rezoned for shellfish aquaculture purposes under Policies 14 and 15 of this section;*

Policies 4 and 5 were added in 2010 to address shoreline management including potential future adoption of a marine shorelands development permit area:

*Policy 4 The LTC should, through the use of zoning, the use of setbacks and, where there is supporting mapping, the use of development permit areas:*

- Protect the remaining integrity of the foreshore, shoreline, and natural coastal and intertidal processes;*
- Discourage uses that disrupt natural features and processes;*
- Allow for natural erosion and accretion processes, without endangering structures;*
- Encourage owners of shoreline properties to retain, whenever possible, natural vegetation and natural features on areas adjacent to the foreshore; and*
- Discourage filling, deposit, excavation, or removal of foreshore and seabed materials, except for maintenance of navigational channels and existing facilities.*

*Policy 5 The LTC should only give consideration to permitting structural modification of the shoreline, such as seawalls, where it can be demonstrated to be necessary to support or protect a permitted or existing use or structure. Preference should be given to shoreline protection measures that have a lesser impact or enhance ecological functions, including vegetation enhancement, drainage control, anchor trees, and gravel placement. Shoreline stabilization that interrupts natural processes is discouraged. Native vegetation which helps stabilize banks, reduce erosion and provide habitat should be retained or enhanced.*

*Advocacy Policy 2 Fisheries and Oceans Canada is encouraged:*

- to monitor aquaculture practices to ensure compliance with regulations intended to protect the marine environment;*
- to protect herring spawning areas; and*
- to prohibit discharge of sewage from private and commercial vessels travelling in Baynes Sound or Lambert Channel.*

- Advocacy Policy 3 The Ministry of Agriculture and Lands is encouraged:*
- to give prior notification to the Local Trust Committee and adjacent upland owners when existing aquaculture tenures come up for renewal;*
  - to develop, in cooperation with the Denman Island community and the shellfish industry, provincial standards for the guidance of local government for shellfish aquaculture through the Farm Practices Protection (Right to Farm) Act that encompass aquaculture structures, motor vehicles, noise, lighting, beach litter, and toilet facilities for workers;*
  - to minimise the excavating, removal or moving of sand, gravel, rock or other natural deposit from the foreshore or the addition of these or other materials to the foreshore; and*
  - to increase dialogue on aquaculture practices and community interests with the Local Trust Committee through a community engagement program.*

*Advocacy Policy 4 The British Columbia Shellfish Growers Association is encouraged to develop an educational brochure to inform the public and residents about the shellfish aquaculture industry and the vulnerability of coastal water to pollution.*

*Advocacy Policy 5 The Comox Valley Regional District is encouraged to require sewage pump-out stations for marinas.*

### Land Use Bylaw

Under Denman Island Land Use Bylaw (LUB), 2008, the Water 1 zone covers most of the water area where public utilities, non-commercial boat anchorage and moorage, and marine parks are the only permitted uses.

The Water 3 zone covers the area of aquaculture leases current at the date of adoption of the bylaw. The intent of this type of zoning is to require that any new or expanded aquaculture operations apply for rezoning.

The LUB is silent on driving on the foreshore and the use of predator netting, however structures such as seawalls are not permitted within the setback area (section 2.3(3)). A variance would be required for a seawall to be lawfully constructed.

### Islands Trust Fund:

According to the 1996 Memorandum of Agreement between the Denman Island Local Trust Committee and the Islands Trust Fund Board, any proposed bylaws will be referred to the Islands Trust Fund.

### Regional Conservation Plan:

The Regional Conservation Plan, 2011-2015, does not identify any conservation goals for Baynes Sound.

### Sensitive Ecosystems and Hazard Areas:

As described in the Site Context section of this report, Baynes Sound is a sensitive marine ecosystem.

### Archaeological Sites:

According to the provincial archaeological database, there are numerous First Nations archaeological sites on the Denman Island coastline.

### Other:

The authority for permitting shellfish aquaculture in British Columbia has recently changed from being solely held by the Integrated Land Management Bureau (ILMB) of the Province to now being divided between the Province and Fisheries and Oceans Canada (DFO). ILMB remains responsible for issuing a lease for use of Crown land, but DFO is now responsible for issuing a permit with respect to fish and fish habitat considerations that were previously taken into account by the Province in their consideration of the Crown lease.

**Predator netting** is a plastic netting used to cover clam beds to protect them from predators such as crabs, snails, and birds. The typical practice is to remove this netting for harvest, however DIMSC has documented a significant amount of predator netting that is unmaintained, poorly secured, and found balled up on shore or fouled in deep water. The Baynes Sound Coastal Plan for Shellfish Aquaculture, 2002, identifies a low to moderate potential for negative impacts from the use of predator netting, but notes that there is some uncertainty with this, that further study is required, and that approval for any predator netting would be contingent on a site-specific monitoring program.

DIMSC is concerned about the use of predator netting at all, and cites a study that questions its effectiveness<sup>2</sup>. However DIMSC identifies the more immediate concern of the discarded predator netting that is a hazard for fish, animals, birds, boats and swimmers. The authority to regulate use of predator netting by aquaculture operators appears to currently be with DFO rather than with ILMB. Regulation would be through conditions on licenses to operate the aquaculture operations from DFO, and enforcement of these conditions.

**Driving on the foreshore** is a convenient way for aquaculture operators to reach their intertidal leases and deliver equipment and supplies directly to the site. Without road access, intertidal leases would be reached by boat. The Baynes Sound Coastal Plan for Shellfish Aquaculture, 2002 identifies that driving on the beach has the potential for significant environmental impacts in some cases, and that mitigation may be required. The LTC may have zoning authority to regulating driving on the foreshore.

The **beach modification** activities that DIMSC has raised concerns about include channeling of streams, creating rock walls, fencing, and installing metal structures. The Baynes Sound Coastal Plan for Shellfish Aquaculture, 2002, calls for an immediate stop of stream channeling, and it is unclear if this continues to be practised on Denman Island. Creating rock walls to

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<sup>2</sup> Letter dated January 20, 2012 from DIMSC to Andrew Thompson, Regional Director, DFO Aquaculture Division. Available in February 28, 2012 Denman Island Local Trust Committee agenda package.

contain shellfish beds, installing fencing and installing metal structures are undertaken as part of the shellfish operation, could be regulated by the LTC through zoning.

### **COMMUNITY INFORMATION MEETING(S):**

As this project proceeds, at least one community information meeting (CIM) will be recommended. Staff does not recommend scheduling a CIM before this project is moved higher on the top priorities list and staff can dedicate more time to properly prepare for one and following up afterwards.

### **STAFF COMMENTS:**

The Local Trust Committee has the authority to zone areas of land and water for different uses and densities. The installation of structures such as predator netting, rock walls, fences, and metal structures falls under the LTC's authority to regulate use. Regulating an activity such as driving on the beach is also possible through zoning.

While it is possible for the LTC to enact a bylaw that prohibits driving on the beach and does not allow predator netting, rock walls, fences and metal structures, it is unlikely that the shellfish aquaculture industry, ILMB, or DFO would support any of these regulations. While they may support improving industry practices in these areas in general, they would likely be opposed to the local government imposing the regulations. The support of other government agencies is an important step in the adoption of a bylaw amendment. Further, if the LTC were somehow able to enact these prohibitions, bylaw enforcement of non-compliance would be difficult if not impossible given the predicted pressures by ILMB and DFO.

Although it may seem tempting to attempt to effect change on the practices of the aquaculture industry through zoning given that years of advocacy work from DIMSC and the LTC has not been effective, staff cannot recommend this approach due to its small chance of success and high chance of creating conflict with other government agencies. If the LTC does wish to take this approach knowing that there could be significant conflict, staff can provide advice on a strategy in a further staff report.

Staff recommends that the LTC can continue to advocate for ILMB and DFO to enforce best operational practices on the shellfish industry that address the concerns discussed in this report. Currently an advocacy opportunity exists through the meetings organized by the Association of Vancouver Island Coastal Communities (AVICC) for consultation with DFO on the new aquaculture management framework. The first meeting was held in November, 2011, and the next meeting will be held at the AVICC conference in Ucluelet on April 14, 2012.

The LTC could continue with this project as an advocacy project, asking staff to conduct further research into the issues, researching contacts at ILMB and DFO, and liaising with DIMSC. Or, the LTC could remove this project from the top priorities list and continue to support DIMSC in their advocacy efforts. DIMSC may be more experienced and better positioned than staff to advise the LTC on when and where their advocacy efforts will have the most effect.

Staff would like to suggest that as an alternative to pursuing the specific aquaculture-related concerns of DIMSC where the LTC has limited authority and limited chance of success, the LTC could instead focus a project on marine shorelands planning pursuant to OCP policies 4 and 5 in section C.3 the Marine Environment. The project would be supported by strategy 2.3.2 of the 2008-2011 Islands Trust Council Strategic Plan: "develop and implement new land use planning

tools for shoreline and marine protection”. Such a project could involve reviewing the new shoreline classification mapping for Denman, organizing public education and consultation events on the importance of protecting the shoreline area, and potentially adopting a development permit area for marine shorelands. Given that mapping is already available, and a development permit area has recently been drafted and undergone peer and legal review for another local trust committee, the cost beyond use of staff time and regular public meeting costs would likely be low.

**RECOMMENDATIONS:**

Based on the above considerations, staff recommends that the Denman Island Local Trust Committee:

1. remove “Review of OCP section C3 with a view to addressing the impacts of shellfish farming on the natural marine environment and residential properties, and review of associated LUB regulations” from the work program; and
2. add “Marine Shorelands Planning” to the work program with the activity column reading “review of shoreline mapping, public education, and consideration of development permit area”.

Prepared and Submitted by:

*Courtney Simpson*

March 19, 2012

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Courtney Simpson, MCIP, Island Planner

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Date

Concurred in by:

*Chris Jackson*

*March 19, 2012*

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Chris Jackson, MCIP, Regional Planning  
Manager

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Date