



## **Notice of a Public Open House Regarding a Proposed Finfish Aquaculture Site Located in Fortune Channel**

**Y**ou are cordially invited to attend an open house June 14 hosted by Mainstream Canada at the Weigh West Marine Resort Harbour Lounge, 634 Campbell Street, Tofino, BC from 4 p.m. to 8 p.m.

Also in attendance will be government representatives to answer questions about the application.

The purpose of the open house is to provide information about activities that may occur at or in the vicinity of the proposed finfish aquaculture application located at Plover Point in Fortune Channel. Mainstream Canada has submitted an application to occupy Crown foreshore for the purpose of finfish aquaculture and the related works associated with that purpose.

The open house is an important opportunity for Mainstream Canada to share information regarding the geographical placement of the site and details of the proposed operation.

This open house will also be an opportunity for the public, interest groups and agencies to provide written comments on this application.

We look forward to meeting with you on the evening of June 14.

Light refreshments will be served.

For more information including a Q&A about the application please visit:

[www.mainstreamcanada.com](http://www.mainstreamcanada.com)



MAINSTREAM  
CANADA

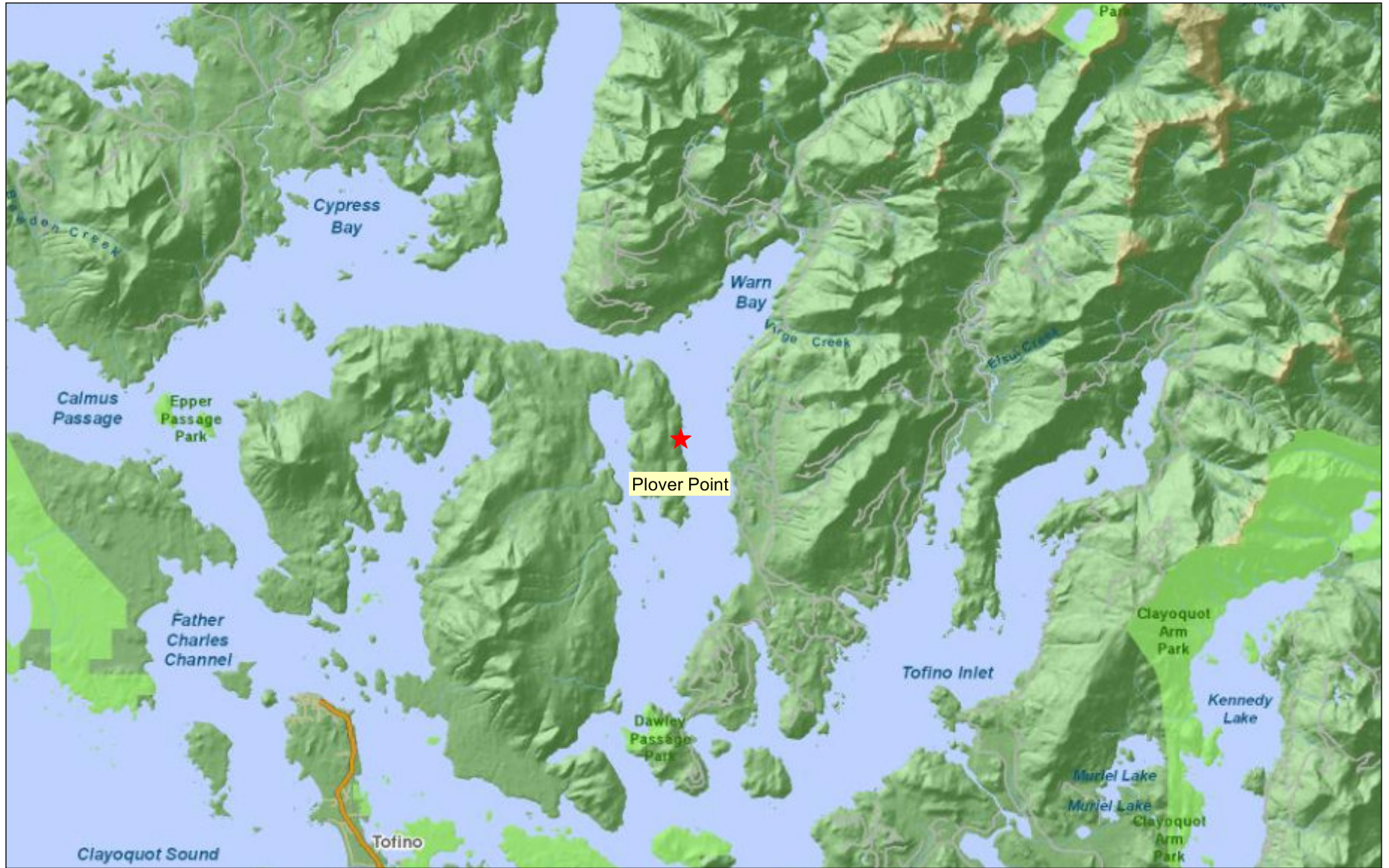
# West Coast operations

2011



*Our focus is sustainable aquaculture.*

# Plover Point Aquaculture Facility



Scale: 1: 150,000  
BCGS Mapsheet(s): 92F .022





# PLOVER POINT LOCATION MAP

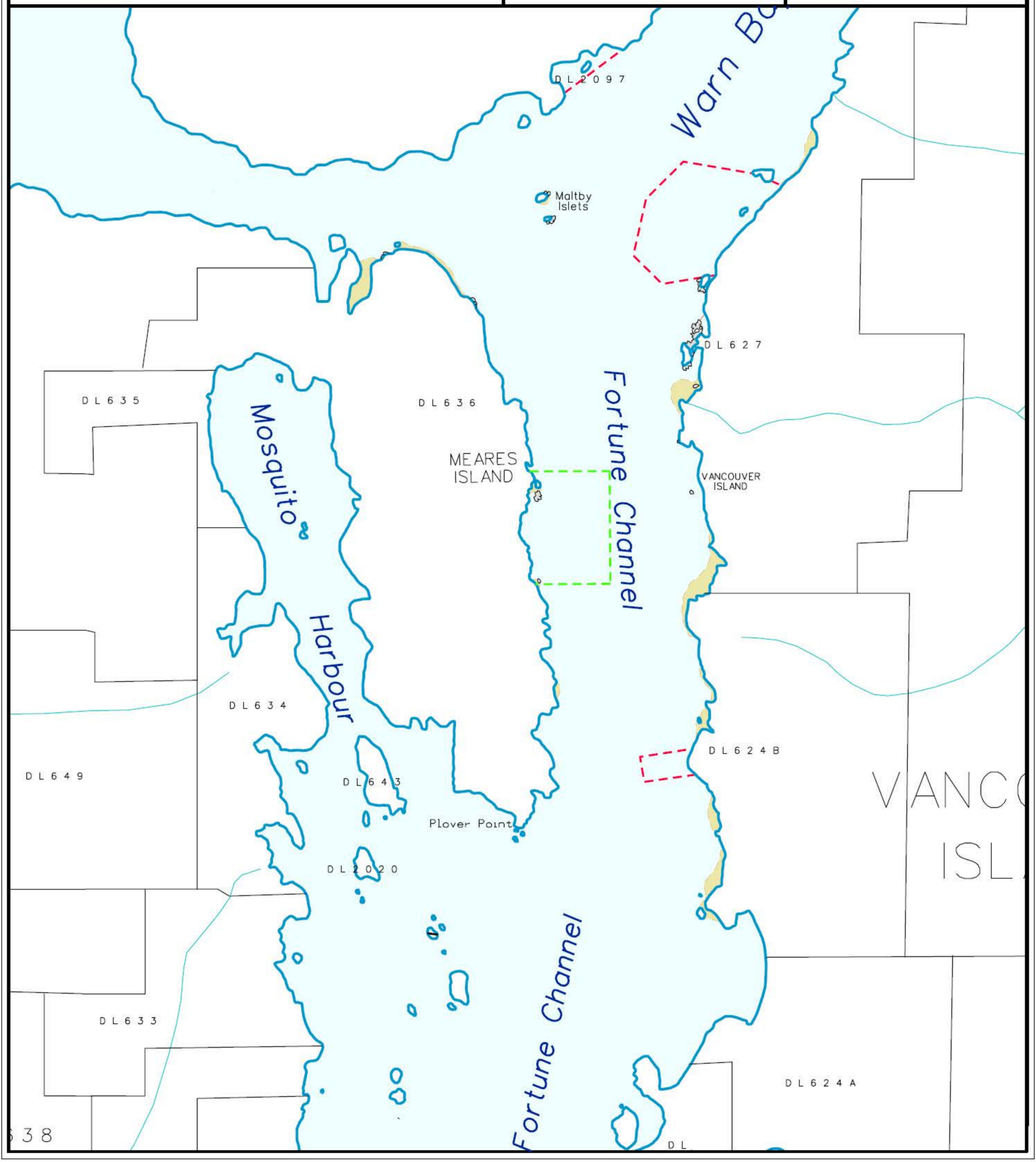
- PROPOSED TENURE ---
- APPROVED FINFISH TENURE ---
- APPROVED SHELFISH TENURE ---
- PARK ---
- CADASTRAL ---

N

**SCALE 1:40000**

0 400 800 1200m

PREPARED BY:  
**Sommet Mapping Services**  
 sommetms@telus.net





# PLOVER POINT

## TENURE LAYOUT

- PROPOSED TENURE ---
- CAGE (30M)
- WORK FLOAT
- MORT FLOAT
- ACCOMMODATION / FEED BARGE

- SHORELINE
- BATHYMETRY
- DEPTH (METER) 23.8
- SANDBAR
- ROCKS

N

**SCALE 1:5000**

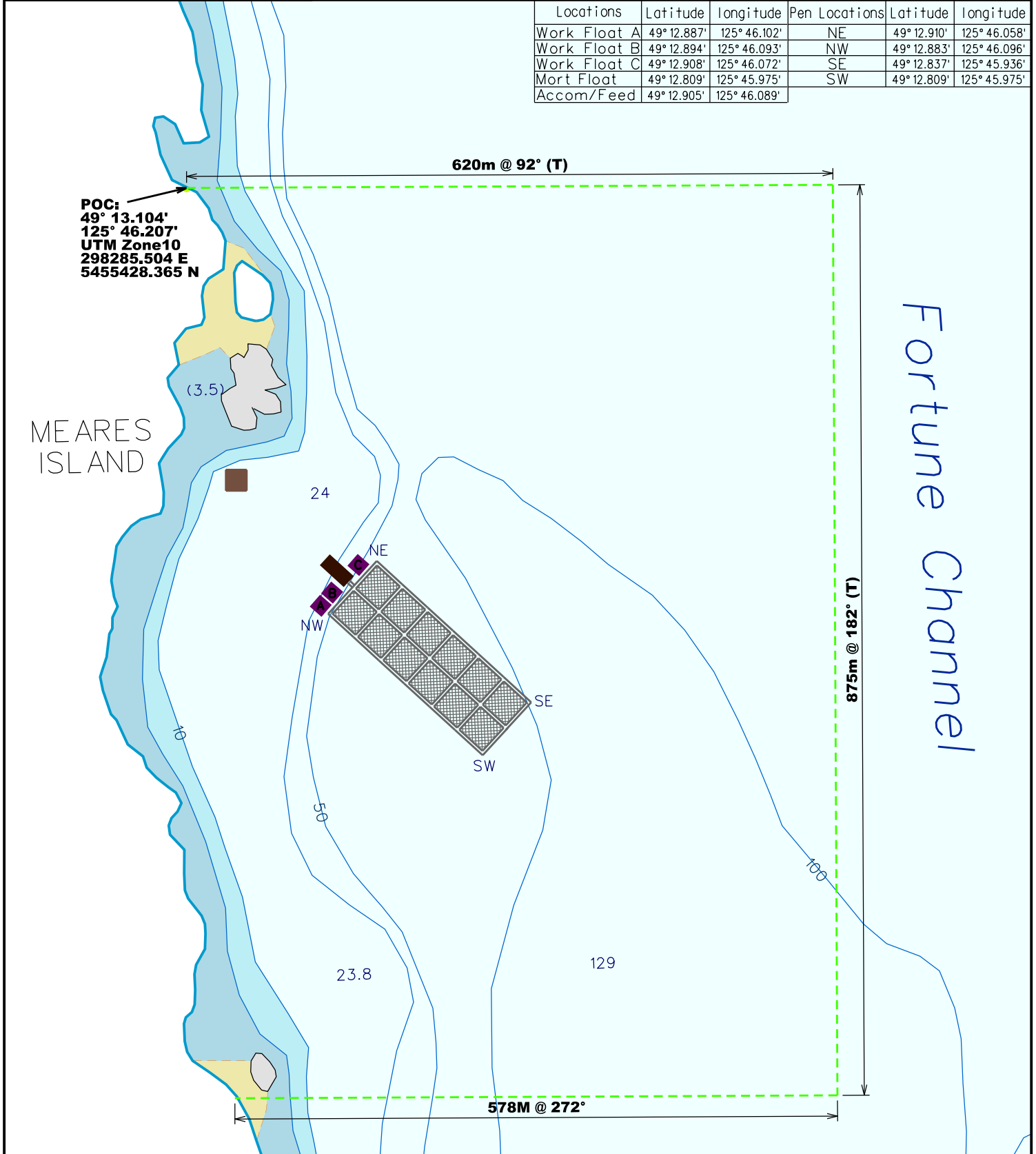
0 50 100 150 200m

BC Albers Projection NAD83  
BCGS: 92P.022 NAUTICAL CHART: 3673  
Date: Jan. 18, 2011 Revised:

PREPARED BY:

**Sommet Mapping Services**  
sommetms@telus.net

Locations	Latitude	Longitude	Pen Locations	Latitude	Longitude
Work Float A	49° 12.887'	125° 46.102'	NE	49° 12.910'	125° 46.058'
Work Float B	49° 12.894'	125° 46.093'	NW	49° 12.883'	125° 46.096'
Work Float C	49° 12.908'	125° 46.072'	SE	49° 12.837'	125° 45.936'
Mort Float	49° 12.809'	125° 45.975'	SW	49° 12.809'	125° 45.975'
Accom/Feed	49° 12.905'	125° 46.089'			





## **Mainstream Canada**

61 – 4<sup>th</sup> Street.  
Tofino, British Columbia, Canada  
V0R 2Z0. Tel (250) 725-1255 Fax (250) 725-1250

# **Plover Point Site Tenure Application Q&A**

**Mainstream Canada has applied for a new farm site near Plover Point, which is located in Clayoquot Sound south of our existing Fortune Channel farm.**

### **Have First Nations been consulted?**

Yes. The farm site is in Ahousaht First Nation territory. The Ahousaht people have a protocol agreement with Mainstream Canada, so they have been involved in discussions about the farm site from beginning to end. The Ahousaht First Nation supports our application.

### **How do First Nations benefit?**

Plover Point was identified in our protocol agreement with the Ahousaht First Nation as a potential location for a new site. As well, the protocol agreement states that this will be a replacement for our Cormorant site on the west edge of Cypress Bay north of Meares Island. The Cormorant site will be made available to the Ahousaht First Nation to use for their own aquaculture activities.

### **Who is Mainstream Canada?**

Mainstream Canada is one of the biggest salmon farming companies in B.C. We have 27 farm sites on the West and East Coasts of Vancouver Island, including 14 in the Clayoquot Sound area near Tofino. We employ approximately 250 people in coastal communities.

### **Why are we applying for a new farm site?**

Another farm site in the Clayoquot Sound region will give us more flexibility in managing our production. Another site will allow us to increase fallow times at existing sites while maintaining current levels of production. It will not necessarily increase our production, although we would eventually like to do that because there is huge market demand for our product and not enough supply to meet it.

This site will allow us to maintain our production and provide opportunities for sustainable growth in order to provide economic benefits to Ahousaht and maintain a profitable business.

### **Why can't you increase production?**

Our existing sites are currently producing as much salmon as they are permitted while still maintaining a minimal environmental impact. As well, due to the past moratorium on approving new farm sites by the government, we have not been allowed much flexibility in managing our production. With new applications we must follow very strict guidelines and procedures, which is a long and involved process.

### **What is the process to get a new site?**

As part of the application process, we have done extensive environmental monitoring of the area. We have also done a habitat interaction report which is a study of all possible impacts and interactions the farm site could have in the area. Comments from local stakeholders will be reviewed by both provincial and federal government departments.

For more detailed information about the site application process, visit DFO's website for information about the federal government's role: <http://www.dfo-mpo.gc.ca/aquaculture/aquaculture-eng.htm> and visit the B.C. agriculture ministry's website for information about the provincial government's role: <http://www.dfo-mpo.gc.ca/aquaculture/aquaculture-eng.htm> For a criteria checklist visit here: [http://www.al.gov.bc.ca/clad/tenure\\_programs/programs/aquaculture/finfish/criteria\\_for\\_siting\\_new\\_finfish\\_aquaculture\\_facilities.pdf](http://www.al.gov.bc.ca/clad/tenure_programs/programs/aquaculture/finfish/criteria_for_siting_new_finfish_aquaculture_facilities.pdf)

### **What kind of environmental studies have you done?**

We have done extensive monitoring of the ocean currents, using current monitors to measure tidal strengths and water flows. The results show the water flow makes this an excellent farm site.

As well, we have done a benthic baseline study of the seafloor below where the sea cages will float. Third-party contractors took hundreds of samples – nearly 100 kilograms worth – and performed hours of ROV (remote-operated vehicle) surveys to establish an accurate reading of the natural status of the seafloor, so we can accurately measure what impacts the farm will have on it.

Important habitat in the area, including kelp, eelgrass and shellfish beds, have been noted several hundred feet away from the site. The farm is not expected to have an impact on them.

### **How deep is the site?**

Accurate bathymetry performed at the location shows the ocean floor beneath the proposed farm site varies from 230-330 feet in depth, and consists of mostly mud.

**What kind of life is down there?**

Sunlight fails to penetrate much deeper than 100 feet so there is limited life on this section of ocean floor.

**Will the farm impact wild salmon runs?**

According to government regulations, new farms must be sited at least one kilometre away from any fish-bearing streams in the area. All the nearby fish bearing streams have been studied as part of the application so we have a good idea of what kinds of wild fish are in the area. We are confident that our proposed farm poses no threat to wild fish in the area. Wild salmon sea lice monitoring programs already covers this area. As well, Mainstream Canada has extensive sea lice monitoring programs for its farms. This site will be included in those programs.

**What other wildlife has been considered?**

All known wildlife and their habitat in the area, from herring to sea lions to shellfish to marbled murrelets to kelp and eelgrass beds, have been considered in the site application. It's not expected the farm will have an impact on them.

**How will you keep sea lions and seals out?**

We will use predator nets to discourage sea lions and seals from trying to enter the salmon pens. We are also considering some alternatives, such as a different mesh size in the nets, to keep them out.

**How big is the farm?**

The management plan for the farm is to grow approximately 3,000 tonnes of fish. That would mean roughly 600,000 smolts entered into the site. Current construction plans call for 12 sea cages to hold the fish (please note: earlier versions of this Q&A had an erroneous number). The farm would take up a surface area of 1.25 hectares. For a comparison, if all our farm sites in the Clayoquot Sound region were the same size as this farm (some are smaller) they would all take up a surface area smaller than the main runways at the Tofino airport.

**Will this farm create new jobs?**

Yes. Five or six people are needed to manage one farm – farm workers and site managers – and approximately six people will be employed full-time installing the site. As well, approximately 87 jobs will be positively impacted, as the site will produce more fish to be processed at our PNP processing plant in Tofino, and will also mean more work for the divers and contractors who regularly service our farm sites. It is our policy to try and recruit new employees who live in the area, so we will hopefully be able to create new jobs in the Ahousaht-Tofino-Ucluelet region.

**When do you hope to start using the site?**

We hope to have the first group of smolts entered into the site by the spring of 2012.

**Why not closed-containment?**

Currently closed-containment technology does not represent a viable alternative, especially related to energy usage and fish health. We believe that present technology for open net pens allows for sustainable aquaculture, and we aim at demonstrating this in our operations through management of environmental impacts.

We are also not convinced that closed-containment salmon farming is socially sustainable. Large-scale closed-containment farms big enough to grow 3,000 tonnes of fish – the equivalent capacity of one of our farms – would have to be built closer to processing plants and markets to compensate for the increased costs of farming on land, and would also require a large and steady supply of electricity and fresh water. Coastal communities, such as the Ahousaht territory in which we operate, are ideal for ocean net pen farms, but not for large-scale land-based farms. Shifting to land-based closed-containment farms away from Ahousaht territory would have negative social impacts on the Ahousaht people. It would result in a loss of employment and wages they rely on to feed their families.

However, we are following the development of closed-containment aquaculture, and will consider testing of new concepts and explore the possibilities of closed-containment fish farming.

We are already very familiar with the technology proposed for land-based closed containment aquaculture systems. We use recirculating aquaculture systems (RAS) technology in our land-based hatcheries, which grow our fish from egg to smolt size for the first year of their lives. We know what the technology can and cannot do at this point in time, and although we will continue to explore the possibility of closed-containment farming, we believe the present technology for open net pens is the most sustainable way to farm salmon.

For reference, take a look at the following studies.

*Land-based aquaculture is not currently economically sustainable.*

DFO recently published a study which examined the economic feasibility of several different closed containment technologies. It concluded that the only system which could grow salmon to market size, and generate profit, was the RAS system we use in our hatcheries. However, such systems would be prohibitively expensive and only create a four per cent return on equity and two per cent return on investment after three years.

Read the study online: <http://www.dfo-mpo.gc.ca/aquaculture/lib-bib/nasapi-inpasa/BC-aquaculture-CB-eng.htm>

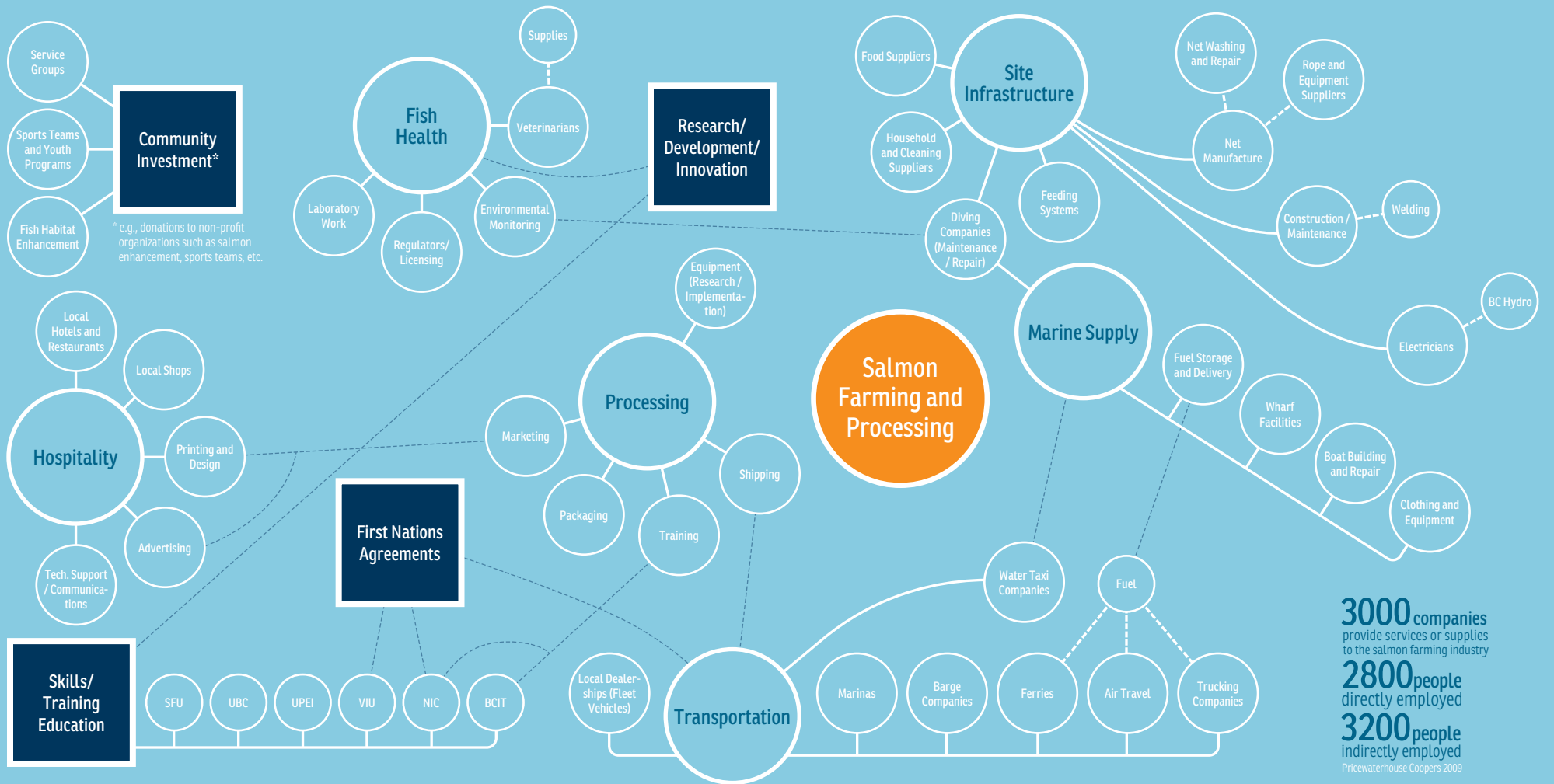
*Environmental impacts of land-based aquaculture*

For a study on how land-based aquaculture could affect the environment, please take a look at "**Assessing alternative aquaculture technologies: life cycle assessment of salmonid culture systems in Canada**" which concludes that "*while the use of these closed-containment systems may reduce the local ecological impacts typically associated with net-pen salmon farming, the increase in material and energy demands associated with their use may result in significantly increased contributions to several environmental impacts of global concern, including global warming, non-renewable resource depletion, and acidification.*"

Read the study online: [http://sres.management.dal.ca/Files/Tyedmers/LC\\_Impacts.pdf](http://sres.management.dal.ca/Files/Tyedmers/LC_Impacts.pdf)

*For more information, or if you have further questions, please contact*

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Cluster development focuses on inter-connected businesses to create economic growth – here's what it looks like in salmon farming communities.

## **Ewos Canada Ltd (dba Mainstream Canada)**

### **West Coast Operations**

- We have 14 farm sites and one processing plant in the Tofino area, and operate in Ahousaht First Nation territory with the permission of the First Nation through our protocol agreement.
- One-third of all our employees live in the Ucluelet/Tofino/Ahousaht area. That's about \$4.2 million paid annually in salaries and benefits to those workers.
- Number of people employed at Pacific National Processing (PNP) plant: about 55.
- Number of those employees who live in the Tofino/Ucluelet/Ahousaht area: about 35.
- Average wage: \$17 per hour, plus benefits. Benefits plan includes 100 per cent regular dental coverage, 100 per cent prescription drug plan, 100 per cent MSP coverage and life insurance.
- The PNP plant is located in downtown Tofino. It is served by eight local businesses, including a trucking company, a water taxi, a seafood business, waste and refuse disposal companies, marine supply and hardware stores. It is also served by local contractors.
- Annually, we spend more than \$200,000 on repair and maintenance contractors to serve the plant, and also spend roughly \$1.2 million on other services and goods, much of which are sourced locally.
- Number of people employed at our West Coast farm sites and Tofino office: 97. Number who live in the Tofino/Ucluelet/Ahousaht area: 40. That's 41 per cent of our West Coast farm workers and our Tofino office staff who live in Tofino, Ucluelet and Ahousaht.
- We have 14 farm sites north of Tofino. They are served by 55 West Coast-based vendors, including harvest boats, net cleaners, shuttles, freight and trucking companies, divers, waste disposal and recycling businesses, Internet providers, trades people, suppliers, the Co-op and local resorts.
- Annually, we spend roughly \$1.9 million on fuel, \$60,000 on crew transport, \$300,000 on repair and maintenance boats, \$1.4 million on anchoring and net installation, \$1.1 million on sea transport, \$2 million on harvest boats and more than \$600,000 on other services to maintain those farm sites. The total rough annual cost to maintain our 14 farm sites, not including worker wages and benefits, is more than \$7.5 million which is almost all spent on businesses in the Alberni-Clayoquot region.
- Overall between Mainstream Canada and Pacific National Processing, Ewos Canada Ltd spends roughly \$17 million per year in the Alberni – Clayoquot Regional District.

## **2010 Sponsorships and donations**

- Mainstream Canada donated \$50,000 to the Ucluelet Aquarium project, which will be an educational asset and tourist attraction for West Coast communities.
- Mainstream Canada spent \$11,100 on sports sponsorships and equipment for Ahousaht sports teams and athletes.
- MSC donated \$10,000 to help buy a portable ultrasound machine at the Tofino hospital.
- MSC donated \$5,000 to support Chinook enhancement in the Sarita River.
- MSC donated \$1,000 towards the Bedwell River Chinook Recovery program.
- MSC sponsored a \$1,000 scholarship for a graduating Ucluelet high school student.
- MSC sponsored two young ladies from Ahousaht for \$1,000 each to go on a missions trip with Youth With A Mission.
- MSC donated \$500 to help fund the Ucluelet-Tofino late bus for high school students.

## Plover Point

### Direct Job Creation in Tofino Area

- Construction and installation of facility - 6 people
- Site crew – 5 people
- Maintenance crew – 2 people
- Feed & Fuel delivery – 3 people
- Net changing crew – 6 people
- Harvest Crew – 10 people
- Processing (PNP Ltd) – 55 people