Deep Bay Marine Field Station

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Centre for Shellfish Research
Vancouver Island University
VIU – University of Coastal Communities

Visionary Goal

Through the promotion of excellence in learning, we inspire our students and the people of Vancouver Island and coastal British Columbia as a trusted educational partner in the search for sustainable cultural, economic, environmental and social prosperity.
**Economic Impact (released today)** $406 Million

[www.viu.ca/impact](http://www.viu.ca/impact)

<table>
<thead>
<tr>
<th>Total Impact of Annual Operating Expenditure</th>
<th>Total Impact of Capital Projects</th>
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</thead>
<tbody>
<tr>
<td>Annual Expenditure</td>
<td>Capital Projects</td>
</tr>
<tr>
<td>Total Gross Output</td>
<td>Total Gross Output</td>
</tr>
<tr>
<td>$214.9 million</td>
<td>$75.5 million</td>
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<tr>
<td>Total GDP (Value Added)</td>
<td>Total GDP (Value Added)</td>
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<tr>
<td>$115.2 million</td>
<td>$31.7 million</td>
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<tr>
<td>Total Jobs (Person Years)</td>
<td>Total Jobs (Person Years)</td>
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<tr>
<td>1,730</td>
<td>532</td>
</tr>
<tr>
<td>Total Tax Revenue</td>
<td>Total Tax Revenue</td>
</tr>
<tr>
<td>$20.8 million</td>
<td>$6.7 million</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Impact of Student/Visitor Expenditure</th>
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<tbody>
<tr>
<td>Annual Expenditure</td>
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<tr>
<td>Total Gross Output</td>
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<tr>
<td>$116 million</td>
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<tr>
<td>Total Jobs (Person Years)</td>
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<tr>
<td>833</td>
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<tr>
<td>Total Tax Revenue</td>
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<td>$10.9 million</td>
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Why do we care about shellfish?

The links between industry, academia and conservation are obvious for shellfish; they indicate sustainable coastal communities. When we lose shellfish and shellfish industries, it is a sure sign that environmental degradation threatens the very essence of coastal communities with their strong sense of place and the sustainable use of its resources.

What motivates us – thinking globally

• How will we feed a world destined for 10 billion people?
• More than 85% of global fish stocks fully or over exploited
• We require 80 MMT or another global ocean by 2030 for future population estimates.
• Aquaculture now 50% of all seafood consumed - must double
• How do we meet this demand sustainably?
• Will this create opportunities for coastal BC?
What motivates us – thinking locally

- Supporting change from resource “extraction” economies to “knowledge based” resource economy
- Supporting the 100+ year shellfish farming industry
- Opportunities for First Nations
- Promoting industry sustainability
  - Environmental
  - Economic
  - Social
- Preserving marine ecosystems
- Low carbon industries
Thinking locally – drawing linkages

Responsible Coastal Development

Healthy Marine Ecosystems

High Quality Food

Sustainable Industry

CSR
Walking the talk – Green Research Facility

- One of Canada’s greenest buildings
- Platinum LEED certification 2013
- 2011 National Sustainable Architecture and Buildings Award and more…
Public education and community programming
Project based funding - Who funds us?

- Government Agencies
- Environmental NGOs, Conservation Organizations
- Industry and commercial clients
- Provincial and Federal academic research grants
- Public and private donors
- Funds raised through public education and event hosting activities.
Multiple Streams of Engagement

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Facebook: VIUDeepBay
Blog: www.viudeepbay.com
Opportunities to increase public education
Projects relating to climate adaptation

1) Monitoring and education regarding climate change and ocean acidification (DBMFS)
2) Ecosystem monitoring and research – Dr. Sarah Dudas (Canada Research Chair)
3) Genomics approach to determining environmental stress in shellfish – Dr. Helen Gurney-Smith
4) Development of shellfish farming economic opportunities (low carbon)
5) New technology projects – i.e. oyster nursery powered by renewable energy
6) Carbon Sequestration in Estuaries – Project Watershed (proposed).
Green Shores Approach to Foreshore

Sediment control

Slope stability

2000 yr old archaeology