Welcome to the Clayoquot Sound Biosphere Reserve Region’s Vital Signs® 2016!

From Our Co-Chairs

We are pleased to present our 2016 Vital Signs report. Vital Signs is a valuable tool for understanding our communities and ecosystems.

Canada’s 18 biosphere reserves are leaders in creating sustainable communities, while conserving our natural and cultural heritage. At the international level, biosphere reserves are an integral part of the United Nations Educational, Scientific, and Cultural Organization (UNESCO) family. For the first time, we have aligned the local data in this report with the sustainable development goals of the United Nations in order to understand our local contribution to these international targets.

As a community foundation, the Vital Signs report informs our grant making and allows us to focus our programs and funding where they will make the biggest impact. We are proud to know that our biennial report has become a part of conversations at all levels of decision-making from kitchen tables to council chambers. We look forward to continuing the conversation with you.

From the Executive Director

This report provides a snapshot of our region in numbers, pictures, and stories. Bringing together data from a range of sources, this information describes the health of our region in areas that matter to us.

Grounded in the principle of hishuk ish ts’awalk, everything is one, Vital Signs can help us to understand the complex and changing systems in which we live. This marks our third report and while trends are emerging, the data doesn’t predict what the future will bring. We each have a role in creating healthy communities and ecosystems. I hope this report helps you to understand your experiences and observations, and is a starting point for positive action.

Vital Signs is a result of great collaboration. Dozens of community members who are experts in their respective fields contributed their knowledge, experience, and advice, and residents of all communities contributed via a number of local surveys. To everyone involved, we would like to express our sincere thanks. Together, we are building smart and caring communities.

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About Vital Signs®

Vital Signs is a community check-up conducted by community foundations across Canada that measures the vitality of our communities and identifies significant trends in a range of areas critical to quality of life. Vital Signs is coordinated nationally by Community Foundations of Canada and with special thanks to the Toronto Foundation for developing and sharing the Vital Signs concept. For more information visit: clayoquotbiosphere.org/vital-signs

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About the Clayoquot Biosphere Trust

The CBT stands on two pillars: we are both a biosphere reserve and a community foundation. As the only organization in Canada that encompasses both of these internationally recognized mandates, we are able to see the opportunities and challenges in our region through a unique lens.

Our Biosphere Reserve

Clayoquot Sound is one of Canada’s 18 UNESCO biosphere reserves. The CBT is the local organization responsible for upholding the spirit and intent of the UNESCO biosphere reserve designation. Biosphere reserves are places where people share a way of living with nature that builds a future we’re proud of. We model solutions for ecological sustainability, celebrate cultural and biological diversity, and encourage people to work together for healthier communities. Biosphere reserves foster and share scientific, indigenous, and local knowledge to balance the health of natural systems with the needs of our growing population.

Your Community Foundation

The CBT is one of 191 community foundations across Canada. As a community foundation, we act as champions for issues that matter and direct grants to everything from research and environment to the arts, community development, and recreation. We are governed by a board of directors representing all of our west coast communities. We work with local governments, organizations, schools, and businesses to identify priorities in our region and facilitate collaboration. We also work with donors keen to make a difference by matching their resources with local needs.

The Clayoquot Sound Biosphere Reserve Region

The Clayoquot Sound Biosphere Reserve Region, referred to as “our region” in this report, includes Hot Springs Cove, Ahousaht, Opitsaht, Tofino, Esowista/Ty-Histanis, Ucluelet, Hitacu, Macoah, and the ACRD-Area C. We often refer to our region as the “west coast” as we are the most western communities of Vancouver Island, BC. Our region is also part of the Alberni-Clayoquot Regional District (ACRD), which includes Port Alberni, the west coast, as well as the Sproat Lake-Alberni Valley area and Bamfield. Throughout this report, information specific to the west coast is used wherever possible, but, given our small population, the best available data is often for the entire Alberni-Clayoquot area. Note, that this data does not always include data from all west coast communities.
Highlights

Our Region

Population of our region (2011)\(^\text{47}\):

- **5,297**

Our region has a young population, with a median age of **34** compared to **42** in BC.

West Coast population by age, 2011\(^\text{47}\):

- **0 - 4**: 12%
- **5 - 9**: 8%
- **10 - 14**: 4%
- **15 - 19**: 4%
- **20 - 24**: 8%
- **25 - 29**: 12%
- **30 - 34**: 8%
- **35 - 39**: 4%
- **40 - 44**: 4%
- **45 - 49**: 8%
- **50 - 54**: 12%
- **55 - 59**: 8%
- **60 - 64**: 4%
- **65 - 69**: 8%
- **70 - 74**: 4%
- **75 - 79**: 8%
- **80 - 84**: 4%
- **85+**: 8%

Proportion of residents that identify as aboriginal\(^\text{21}\):

- **17%** Alberni-Cayoquot Area
- **7%** Vancouver Island
- **5%** BC

Living Wage

A Living Wage is the income a family requires to meet its basic needs and to maintain a decent standard of living. Working families that do not earn a living wage may face tough choices, such as deciding between paying rent or buying healthy food.

Learn more at clayoquotbiosphere.org/vital-signs

- Our region’s Living Wage is **$19.27** per hour.
- Minimum wage in BC is **$10.85** per hour.

Minimum wage in BC is **$10.85** per hour.

- **40%** of our region earns less than or close to minimum wage.
- **67%** of our region earns less than our Living Wage.

Earnings for a family of four with both parents working 35 hours a week and making a Living Wage:

- **$70,143**
Our communities are rural and remote. Some people in our region must travel outside their communities by boat or car for everyday needs, such as buying groceries or seeing a doctor.

The west coast land and soil is also unsuitable for agriculture, but local gardening is becoming more popular in our warm year-round climate.

In our region, an individual working 40 hours a week and earning minimum wage would need to spend 42% of their after-tax income on housing (one-bedroom rental) and more than 20% on eating a healthy diet. This leaves $621 a month for all other expenses including utilities, transportation, healthcare, clothing, and more.

The average monthly cost of a nutritious food basket for a family of four on Vancouver Island has gone up 16% in the last five years, and the cost of food on the west coast is already higher than the island average.

Food Security

Given our region’s remote location, we rely on shipping in the majority of our food, which can result in higher food costs.

Transportation

Our communities are rural and remote. Some people in our region must travel outside their communities by boat or car for everyday needs, such as buying groceries or seeing a doctor.

Sample return trip costs are:

- $10 Opitsaht
- $33 Macoah
- $40 Ahousaht
- $164 Hot Springs Cove

There is no public transit in our region.

Many local initiatives are being piloted with success to improve transportation options for residents and decrease costs for families.

Climate Change

In our region, we rely on our environment for our economy, culture, and well-being. Changes in climate, and in particular rainfall and our watershed, will have an impact on our relationship with our ecosystem.

Rainfall is increasing in cooler months and decreasing in warmer months, contributing to a decrease in the number of salmon returning to rivers.

Our driest summer months coincide with intensive tourism, but increased water conservation measures in our communities are helping to protect fresh water sources.

In Tofino, resort accommodation use of potable water, almost as much as local residents who use.

Food Security

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Climate Change

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- In Tofino, resort accommodation use of potable water, almost as much as local residents who use.
Belonging and Leadership

Having a strong sense of belonging leads individuals to better health, education, and employment outcomes. And it leads to strong communities too, ones that are likely to be safer, more resilient, with higher volunteer participation, and strong cultural ties.

Be-long-ing \( (n) \): Being part of a collective “we.”

In 2015, 32 registered charities were active on the west coast. Overall, they had 72 part-time employees and 26 full-time employees and contributed over $3.8 million in annual expenditures to the west coast economy. These figures have not changed significantly since 2012.¹

In 2016, female elected officials filled more than one-third of the seats in public office, within our region. 25% in 2014

While this percent is higher than the 27% of seats held by women in Canada’s 25 largest cities, it’s lower than the 47% of seats held by women in BC cities.²

In 2010, $3 million
In 2012, $4 million
In 2015, $3.8 million

Since 2014, 49 students have graduated from the west coast chapter of Leadership Vancouver Island. After completing the program, the alumni reported that over feel more empathy and understanding for other cultures and over talk to more people in their community and surrounding communities.³

An increase of 10% over 10 years.²

Voter Turnout for municipal elections decreased from 46% in 2011 to 41% in 2014. Provincial average was 33%.

Percentage of people in our region who feel satisfied with their life.

While this showed a decrease of the turnout was significantly higher than the provincial average.¹

Clayoquot Sound Biosphere Reserve Region
British Columbia

80
75
70
65
60

79%
69%

An increase of 10% over 10 years.²

Individuals can now apply for CBT project funds to support community events or projects that bring people and neighbourhoods together. In 2015, the CBT Neighbourhood Small Grants Program provided to help fund 12 community projects including a beach cleanup and a gardening workshop.

This includes two mayors and one chief.⁴

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2012 $4 million
2015 $3.8 million

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In 2016, 73.3% of surveyed youth in our region participated in an arts-related activity within the past month (e.g., drawing, painting, carving, and/or playing a musical instrument). This is an increase of 7% since 2014.9

In 2015, the CBT contributed $28,200 towards arts and culture projects. This included funding for a Cultural Expo and Nuu-chah-nulth audio lessons.

59% of the population in our region are registered borrowers at a public library in Tofino or Ucluelet. This has increased 2% since 2013.11

21% of residents age 19 and under are registered borrowers, which is up from 18% in 2013.11
Health and Wellness

Women and families on the west coast must leave the region to give birth. This can incur high costs and separate families from their social support networks in the region.\textsuperscript{20}

<table>
<thead>
<tr>
<th>Year</th>
<th>Total births to women from the west coast\textsuperscript{20}</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>83</td>
</tr>
<tr>
<td>2008</td>
<td>77</td>
</tr>
<tr>
<td>2009</td>
<td>81</td>
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<tr>
<td>2010</td>
<td>85</td>
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<td>2011</td>
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<tr>
<td>2012</td>
<td>71</td>
</tr>
<tr>
<td>2013</td>
<td>83</td>
</tr>
<tr>
<td>2014</td>
<td>70</td>
</tr>
<tr>
<td>2015</td>
<td>76</td>
</tr>
</tbody>
</table>

Where west coast women gave birth in 2014 - 2015\textsuperscript{20}

- Nanaimo: 58
- Victoria: 19
- Comox: 6
- Port Alberni: 44
- Lower Mainland: 9
- Cowichan: 2
- Tofino: 1
- Other: 7

In 2015, the rate of birth to teen mothers (<20 years old) is almost four times higher in the Alberni-Clayoquot area than in BC. The BC rate has been declining since 2011, while the Alberni-Clayoquot has remained constant.\textsuperscript{21}

Life expectancy in the Alberni-Clayoquot area has risen over the past 20 years, but it is still below that of Vancouver Island and BC.\textsuperscript{22}
The rate of infant mortality is a key indicator of a society’s overall health and well-being. It measures mortality of babies less than one year old.\textsuperscript{21}

Our region has four full-time and two part-time family physicians. As well as their regular practice, these physicians also service the Tofino General Hospital.\textsuperscript{25}

West coast communities have 6 family physicians for 5,297 residents.\textsuperscript{25}

If our region had the same number of doctors per capita as the Central Vancouver Island region or BC, we would have 12 physicians.\textsuperscript{26}

94\% of residents in our region report having a regular doctor (compared to 85\% in BC), but only 26\% think they could see their doctor on the same day for an urgent issue. 42\% of residents have visited the ER for a non-emergency because of challenges accessing their family doctor.\textsuperscript{25,26,27}

Emergency room (ER) use is high on the west coast. In the summer, the number of visitors to our region can be five times greater than the number of residents, with ER visits increasing dramatically. Visits to the ER have also been increasing in shoulder seasons.\textsuperscript{21, 23, 24}

Comparison of the number of monthly emergency room visits at Tofino General Hospital\textsuperscript{21,23,24}

94\% of residents in our region report having a regular doctor (compared to 85\% in BC), but only 26\% think they could see their doctor on the same day for an urgent issue. 42\% of residents have visited the ER for a non-emergency because of challenges accessing their family doctor.\textsuperscript{25,26,27}
Economy

Residential building permits issued in Tofino and Ucluelet for single-dwelling units

Residential housing is in high demand on the west coast; construction may not be keeping up with demand.

Business licences for Tofino and Ucluelet were for accommodation services.

There are over 350 short-term vacation rentals listed on Airbnb in our region.

In the past five years, business licences have been issued for:

- 26% in 2015
- 27% in 2013
- 22 new Charter/tour businesses
- 19 new Food/beverage services

Parks Canada estimates there were over 940,000 visits to Pacific Rim National Park Reserve in 2015, with the majority occurring between April and October. More than double the number of people visit during the months of July and August than during December to March.

Annual number of visits to Pacific Rim National Park Reserve

NUMBER OF PERMITS FOR PORT ALBERNI AND OUR REGION

NUMBER OF PERMITS FOR BC

<table>
<thead>
<tr>
<th>British Columbia</th>
<th>Port Alberni</th>
<th>Our Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>50</td>
<td>38</td>
<td>25</td>
</tr>
<tr>
<td>38</td>
<td>25</td>
<td>13</td>
</tr>
<tr>
<td>25</td>
<td>13</td>
<td>0</td>
</tr>
<tr>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Number of permits issued in Tofino and Ucluelet for residential units.

In 2013, 27% of business licences were for accommodation services.

In 2015, 26% of business licences were for accommodation services.

Food/beverage services

19 new food/beverage services

Residential building permits issued in Tofino and Ucluelet for single-dwelling units.
Impact on Food Security

Food security exists when everyone in a community has physical and economic access to adequate amounts of nutritious, safe, and culturally-appropriate food. Eat West Coast is an initiative of the Clayoquot Biosphere Trust that acts as a hub for community-driven food security in our region by helping to bridge gaps in our food systems so that everyone gets the food they need.

**Food Bank on the Edge**

The food bank sees an average of 7 new clients per month. Even though food distribution is increasing, donations have gone down. West coast children in grades 4 and 7 eat dinner with their families most days of the week (5 to 7 days) and maintain that behaviour through to grade 12. While 90% of children in grades 4 and 7 from our region eat breakfast on a regular basis, only half continue to do so when they are in secondary school.

**In the summer there are farm-direct local fresh produce markets in three communities.**

**As of 2016, a community garden exists in 7 of our 8 communities: Tofino, Hitacu, Ahousaht, Opitsat, Esowista/Ty-Histanis, ACRD-Area C, and Hesquiaht (for Hot Springs Cove).**

**In 2012, a comparison of 10 healthy food items showed that food prices were 13% to 21% higher on the west coast than in Port Alberni. In 2016, west coast prices are 8% to 17% higher, but the cost rose significantly for both regions.**

**Eat West Coast a program of the Clayoquot Biosphere Trust has invested over $100,000 since 2010 to support food security and food system projects in the region.**

**In 2015, over 60,000 lbs. of farm direct fresh produce from Vancouver Island farms was brought to west coast restaurants, grocers and families by the Tofino Ucluelet Culinary Guild, up from 40,000 lbs. in 2014.**

**As of 2016, the Alberni-Clayoquot Regional District produced a report on shellfish and aquaculture and will feature marine foods in the 2017 Islands Agriculture Show.**

**As of 2016, 3 out of 6 schools have gardens with planning underway for the other half to launch in 2017. Our schools are also starting new breakfast, snack, and hot lunch programs in 2016-17.**

**The first ever West Coast Farm and Garden Show was held in February 2015 by the Tofino Community Food Initiative, with over 300 attendees.**
Youth Vital Signs

The west coast region is one of the youngest communities in Canada. Youth input into programs and services is vital to build a happy and healthy community for everyone.

Our Youth Vital Signs focuses primarily on ages 13 to 19. The CBT’s youth survey is conducted every two years in Ucluelet and Maaqtsis secondary schools and all information is drawn from the survey unless otherwise noted.

Belonging and Leadership

87% of youth strongly agreed or agreed with the statement “I am a happy person.”

63% of youth don’t feel they have a say in how their community is run. In 2014, less than half felt this way.

81% I belong in my community

98% I have people in my life who care about me

19% I volunteered recently

91% I enjoy spending time with my family

Arts, Culture, and Recreation

22% of youth participated in cultural activities or events in the last month.

93% of youth participate in activities that bring them happiness.

TOP FIVE PASTIMES:
- went to the beach
- went for walk or run
- played sports with friends (not organized)
- did a hobby or craft
- created art, such as a painting, drawing, or carving

Environment

In the 2015-16 school year, 108 students from five schools developed the skills to identify and track animals, act safely around wildlife, and prevent negative human-wildlife interactions through the Connecting Students with Wildlife program, a partnership between co-founders Bob Hansen and Keltie Minton, the Raincoast Education Society and the CBT. The students gathered for the first regional wildlife science symposium to share their experiences and hear from wildlife ecologists.

In the last month, more than half of youth...

Surfing is the recreational activity most often associated with our region.

When asked what they liked most about living on the west coast, youth overwhelmingly choose our environment.
Health

80% participate in physical activity most days of the week and 91% say they are active and physically fit.

Half say they don't get enough sleep.

87% eat dinner with their family most days of the week.

90% of youth say they have a healthy lifestyle.

In addition to physical activity, a good night’s sleep combined with sharing meals with family members and starting the day with a healthy breakfast are important factors for positive physical and mental health outcomes in youth.

Half say they don’t eat breakfast regularly and 10% say they never eat breakfast.

Our youth are starting to eat healthier. From 2012 to 2016 they reported eating more fruits and veggies and less junk food on a daily basis.

88% can prepare a healthy meal on their own.

Housing and Transportation

I missed...

- a sport, club, or event 36%
- school 10%
- work 6%

...because I had no way to get there.

I hitchhike

12% → 15% → 24%

2012 → 2014 → 2016

When asked what they don’t like about living on the west coast, youth mostly pointed to the lack of transportation, the isolation, and lack of access to stores and recreational opportunities.

Economy

51% of youth work in the summer only compared to 41% in 2014.

85% it wasn’t hard to find a job.

29% work year-round.

Why do youth work?

- spending money
- save for travel
- university/college fund
- learn a new skill
- pay for sports and equipment

Children and youth living in poverty

30%

25%

20%

15%

10%

5%

0%

<6 years old

<18 years old

West Coast

BC

Safety

I feel safe...

in my community 94%

at school 96%

98% at home

Based on the low-income measure after-tax threshold.
Learning

School enrolment 2015-16\(^{13,14}\)

- Ucluelet Elementary: 191 students
- Wickaninnish Elementary: 203 students
- Maaqtusiis Elementary: 129 students
- Maaqtusiis Secondary: 60 students
- Ucluelet Secondary: 146 students
- Heartwood Tofino: 7 students
- Hesquiaht Place of Learning: 7 students

Number of students enrolled\(^{13}\)

<table>
<thead>
<tr>
<th>Year</th>
<th>Elementary schools</th>
<th>Secondary schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011/12</td>
<td>339</td>
<td>255</td>
</tr>
<tr>
<td>2012/13</td>
<td>449</td>
<td>289</td>
</tr>
<tr>
<td>2013/14</td>
<td>467</td>
<td>244</td>
</tr>
<tr>
<td>2014/15</td>
<td>487</td>
<td>219</td>
</tr>
<tr>
<td>2015/16</td>
<td>523</td>
<td>206</td>
</tr>
</tbody>
</table>

Note: Does not include Hesquiaht Place of Learning or Heartwood Tofino.

Six-year completion rates show how many students graduate from grade 12 within six years of starting grade 8. This information is only available for School District 70, which includes Ucluelet Secondary. Students who drop out or move to another school district are not captured.\(^{13}\)

Average annual cost of university undergraduate tuition\(^{15}\)

- ROYAL ROADS UNIVERSITY: $7,718
- UNIVERSITY OF VICTORIA: $5,262
- VANCOUVER ISLAND UNIVERSITY: $4,177

Six-year completion rates

- BC, overall
- School District 70, overall
- BC, Aboriginal
- School District 70, Aboriginal
The Middle Years Development Instrument looks at the well-being of grade 4 and 7 students across many indicators of health. Overall well-being of children during these years establishes a student’s lifelong identity and sets the stage for adolescence and adulthood. On the west coast, students are thriving in grade 4, but by grade 7 the percentage of students with a low overall well-being more than doubled.

First-time grade 12 graduation rates:

- West Coast - Maaqtusiis and Ucluelet Secondary
- BC School District 70

<table>
<thead>
<tr>
<th>Year</th>
<th>West Coast</th>
<th>BC School District 70</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010/11</td>
<td>19%</td>
<td>27%</td>
</tr>
<tr>
<td>2011/12</td>
<td>49%</td>
<td>9%</td>
</tr>
<tr>
<td>2012/13</td>
<td>43%</td>
<td>43%</td>
</tr>
<tr>
<td>2013/14</td>
<td>43%</td>
<td>43%</td>
</tr>
<tr>
<td>2014/15</td>
<td>43%</td>
<td>43%</td>
</tr>
</tbody>
</table>

An indication of the graduation success of our west coast students can be seen in grade 12 graduation rates, which shows the percentage students who start grade 12 for the first time and graduate in the same year.

Students that are low to medium well-being:

- Grade 4 West Coast: 19%
- Grade 4 BC: 27%
- Grade 7 West Coast: 49%
- Grade 7 BC: 9%

Students that are medium to high well-being:

- Grade 4 West Coast: 77%
- Grade 4 BC: 73%
- Grade 7 West Coast: 51%
- Grade 7 BC: 43%

Students that are thriving:

- Grade 4 West Coast: 54%
- Grade 4 BC: 43%
- Grade 7 West Coast: 43%
- Grade 7 BC: 43%

To understand the influences on well-being, the Middle Years Development Instrument also looks at the assets in children’s lives in four key areas that support positive development.

<table>
<thead>
<tr>
<th>Category</th>
<th>West Coast Grade 4</th>
<th>West Coast Grade 7</th>
<th>BC Grade 4</th>
<th>BC Grade 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult relationships</td>
<td>91%</td>
<td>77%</td>
<td>86%</td>
<td>77%</td>
</tr>
<tr>
<td>Peer relationships</td>
<td>86%</td>
<td>66%</td>
<td>86%</td>
<td>84%</td>
</tr>
<tr>
<td>Nutrition and sleep</td>
<td>71%</td>
<td>71%</td>
<td>67%</td>
<td>67%</td>
</tr>
<tr>
<td>After school activities</td>
<td>90%</td>
<td>82%</td>
<td>87%</td>
<td>85%</td>
</tr>
</tbody>
</table>
Between 1991 and 2014, the Strawberry Isle Marine Research Society determined that 12 groups of Bigg’s (transient) killer whales regularly return to Clayoquot Sound. The groups below were sighted in at least 13 of the 25 years.

**Environment**

Change in eelgrass meadows is a key indicator of environmental health in marine ecosystems. In 2014, the Strawberry Isle Marine Research Society, in collaboration with the Raincoast Education Society, found that the area of the Grice Bay eelgrass meadow increased since 2011. Future research could explore why the eelgrass meadows are expanding and whether more wildlife species are using the habitat.

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Between July 1, 2015 and July 31, 2016 reported wildlife sightings in our region were double those reported during the same period in 2013-14.

<table>
<thead>
<tr>
<th>Year</th>
<th>Sightings 2013-14</th>
<th>Sightings 2015-16</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>20</td>
<td>14</td>
</tr>
<tr>
<td>2016</td>
<td>42</td>
<td>108</td>
</tr>
</tbody>
</table>

In 2016, over 2,100 egg masses for this species were counted compared with 1,300 in 2011, an increase of 62% in the last 5 years.

In 2016, the Strawberry Isle Marine Research Society determined that 12 groups of Bigg’s (transient) killer whales regularly return to Clayoquot Sound. The groups below were sighted in at least 13 of the 25 years.

**Sightings of most loyal groups of Bigg’s killer whales**

- **Ted’s Gang** (T1041s)
- **Big Mommas** (T109s)
- **The Runaways** (T09As)
- **T069s Wakana** (T011s)

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Thanks to the research of the Association of Wetland Stewards for Clayoquot & Barkley Sounds, Swan Lake, near Pacific Rim National Park Reserve, is now recognized as the most productive breeding site for northern red-legged frogs in all of Canada.

Unlike other areas of British Columbia where populations of northern red-legged frogs are declining, the west coast has not been invaded by the American bullfrog, a major predator. Report sightings of American bullfrogs to:

- BC Frogwatch (env.gov.bc.ca/wld/frogwatch/)
- or the Association of Wetland Stewards for Clayoquot & Barkley Sounds (Facebook)

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Between 1991 and 2014, the Strawberry Isle Marine Research Society determined that 12 groups of Bigg’s (transient) killer whales regularly return to Clayoquot Sound. The groups below were sighted in at least 13 of the 25 years.
Water conservation programs will likely be an important strategy to mitigate climate change vulnerability on the west coast. In Tofino, stage 2 watering restrictions and the **20% Challenge** helped to reduce the maximum daily demand from 4,836 m³ per day in 2014 to 2,443 m³ in 2015, a reduction of nearly 50% and a savings of 10,000 m³ of water.\(^{34}\)

The maximum daily total count of western sandpipers during the northward migration was 12,295 in 1988, compared with 51,527 in 2011. During the southward migration, the count was 3,812 in 1988 and 11,622 in 2011. In 2016, as many as 37% of all western sandpipers counted on the west coast were feeding in the Tofino Wah-nah-jus Hilth-hoo-is Mudflats, a significant migratory habitat that meets the population count criteria for inclusion within the Western Hemisphere Shorebird Reserve Network.\(^{33}\)

In 2015, the average daily outfall of untreated sewage flowing into the Clayoquot Sound marine ecosystem was 1,583 m³ [from outfalls in Tofino and Ahousaht]. This is over half the volume of an Olympic-sized swimming pool.\(^{34}\)

The impact of tourism on **summer water use** is a growing concern for drought vulnerability. The peak of summer tourism comes when water levels are at their lowest; the accommodation sector is a large water user in summer months. In Tofino, commercial accommodations used nearly one-third of the water supply in 2015.\(^{34}\)

The work of the **Raincoast Education Society**, local awareness of the importance of eelgrass meadows for shorebird migration habitat is growing; however, shorebird disturbance on beaches from people and unleashed dogs continues to be a concern during the spring and fall migrations.\(^{32}\)

The following categories were used to measure water distribution in Tofino:

- **Non-revenue water**: 16%
- **Residential**: 32%
- **Commercial**: 29%
- **Accommodation**: 13%
- **Institutional**: 9%
- **Processing**: 1%
The goal of the workshop was to provide younger people with fire safety skills they could then teach other members of their family. 

In May 2016, the community of Ahousaht held a two-day training course on firefighting and home fire safety for senior high school students and interested residents.

Raising the level of pet-care awareness believed to lower the number of animals showing aggressive behaviour. The CARE Network in partnership with Ahousaht First Nation and animal welfare organizations, has held animal care clinics in Ahousaht to provide veterinary services and education on pet care and health. This project helped to increase the number of Ahousaht youth who feel safe in their community.

In the 2016 CBT Youth Survey, the number of youth who reported they felt unsafe walking alone in areas on the west coast (mostly due to aggressive dogs). 

| Crime rates for Tofino, Ucluelet, and Ahousaht RCMP detachments |
|-----------------|-----------------|
|                  | 2014 | 2015 |
| Assaults         | 100   | 144   |
| Property crime   | 275   | 355   |
| Drug crime       | 49    | 33    |
| Dangerous and impaired driving | 78    | 120   |
| Public nuisance  | 538   | 562   |
| Collisions       | 75    | 107   |

Community members in our region volunteer with public safety organizations such as local fire departments and search and rescue teams.

In the 2016 CBT Youth Survey, the number of youth who reported they felt unsafe walking alone in areas on the west coast decreased from 44% in 2014 to 29% in 2016.
July 2016 was the hottest year on record globally. As air temperatures rise in the Pacific Northwest, water levels in our rivers are declining. Rainfall precipitation is now higher in cooler seasons, causing more frequent flooding and increased erosion in salmon spawning habitat. These conditions, together with other stressors, are driving down the number of salmon returning to rivers in Clayoquot Sound. Over the next 10 years, salmon will likely become even more vulnerable to threats such as increased fishing, and increased exposure to predation, marine contaminants, diseases, and invasive species. In an effort to restore salmon habitat and support salmon recovery, local organizations have formed the Clayoquot Sound Salmon Roundtable to develop a collaborative stewardship approach.36

Over the last 10 years, the number of salmon returns, for all species, have declined in the rivers of Clayoquot Sound. In the few years that show an increase, local fish hatcheries enhanced salmon to prevent population extinction. But government funding for salmon enhancement ceased in subsequent years. The mean number of returns is 707 coho smolts per year. This is an average increase of 32% since 2007.39

Twenty years of salmon habitat restoration in Lost Shoe Creek is showing results. The Central Westcoast Forest Society’s salmon smolt trap monitoring indicates that riparian ecosystem restoration may have a positive impact on coho salmon returns. Estuaries provide important feeding habitat for juvenile salmon as they transition from the river to the ocean. But more frequent spring flooding is contributing to a loss of this critical habitat. Between 1994 and 2012, the area of salt marsh habitat located at the mouth of Tranquil River has decreased by nearly 30% due to washouts.40

Estuary habitat classification (ha)

<table>
<thead>
<tr>
<th>Tranquil River Estuary habitat classification (ha)</th>
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<td>1.74</td>
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</tbody>
</table>
Housing

For a single person in our region who works 40 hours/week and earns minimum wage, 40% of their income is used for rent. According to Canada and Housing guidelines, rent should not exceed 30% of income.44, 45

Average rent of one-bedroom housing in Ucluelet and Tofino.46

Note: 2016 data for January to mid-August only

Average number of available rental units per month in Ucluelet and Tofino

Note: 2016 data for January to mid-August only

Referrals to the West Coast Transition House

In 2017, Westcoast Community Resources Society will open two units of safe, affordable housing for families fleeing abuse and at risk of homelessness. This is the first supportive housing of this kind in the region. Tenants will have access to a range of supports including counselling and outreach services.
In our region, there is no public transportation that would enable people to buy groceries, see a doctor, or go to work. 13% of respondents to the CBT’s 2014 regional survey said that lack of transportation regularly affected their ability to get to appointments or work. 17% indicated that transportation affected their ability to participate in social events. Here’s a snapshot of a few efforts underway in our region that are helping to address this issue.48

In 2015, the Alberni-Clayoquot Health Network collaborated with local organizations and the Wheels for Wellness Society to provide transportation to medical appointments outside the west coast region (more than 60 km). An average of 30 people per month accessed this service in the spring of 2016.49

In May 2016, a group of students from the west coast chapter of Leadership Vancouver Island developed an 11-day pilot project to test the ridership demand between the communities of Hitacu, Ucluelet, Esowista, Ty-Histanis, Tofino, and Opitsaht.

Two telehealth stations, one in Tofino and one in Hitacu, provide remote medical appointments for local patients. A total of 273 people have used the telehealth system since 2006, saving thousands of dollars in transportation costs and many hours of travel time.50

In 2012, the District of Tofino tested a free shuttle bus for summer visitors to reduce parking and traffic congestion. The service was a major success and had the added benefit of providing a temporary public transit system for local people.

In 2015, use of the shuttle by local residents increased by 44%, with an average of 25 local riders per day.51

In 2016, a group of students from the west coast chapter of Leadership Vancouver Island developed an 11-day pilot project to test the ridership demand between the communities of Hitacu, Ucluelet, Esowista, Ty-Histanis, Tofino, and Opitsaht.
Our Progress Towards Sustainable Development

The Clayoquot Sound UNESCO Biosphere Reserve is one of 669 designated sites in the Man and the Biosphere Programme in 120 countries worldwide. As part of a global network, our goal is to promote sustainable development using local knowledge, collaborative partnerships, multi-level governance, and scientific research.

Here’s a quick snapshot of how our work at the CBT is a natural fit with eight of the 17 United Nations sustainable development goals to end poverty, fight inequality, improve education, initiate partnerships, and tackle climate change.71

The Living Wage calculation, published by the CBT in November 2015, has catalyzed new conversations about poverty within the west coast region and helped prioritize actions to improve our health and well-being, including the need for fresh food at a lower cost for households with budgets beneath the living wage.

To address this need, our Eat West Coast program, in collaboration with the Tofino Ucluelet Culinary Guild, initiated the Ahousaht Monday Market in an effort to supply fresh fruit and vegetables to a remote community.

Salmon have long been a keystone species on the west coast, linking the ocean to the forest. However, local salmon returns have been steadily declining as a result of habitat damage in river ecosystems caused by heavy logging in the late 1960s and ’70s, the ongoing changes in the marine environment such as sea temperature rise, and declining water levels in river basin ecosystems. Local organizations involved in the Clayoquot Salmon Roundtable are collaborating to develop a long-term salmon recovery and watershed restoration plan for Clayoquot Sound.

In 2015, a unique field-based wildlife ecology program, Connecting Students with Wildlife, was offered to grade 6 and 8 students throughout the region. Now run as a partnership between Bob Hansen and Keltie Minton, the Raincoast Education Society, and the CBT, the goal is to reduce harmful human-wildlife encounters on the west coast and to increase awareness of wildlife ecology.
For this report we used existing data from local, provincial, and national sources, as well as our own Clayoquot Biosphere Trust youth survey (completed by 172 youth ages 12-23). We were constrained by the lack of updated long form census data from Statistics Canada, with the most recent National Household Survey available data from 2011. Wherever possible, we used data sources specific to the communities of our west coast region.

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Vital Signs® is a community checkup conducted by community foundations across Canada that measures the vitality of our communities and identifies significant trends in a range of areas critical to quality of life. Vital Signs is coordinated nationally by Community Foundations of Canada and with special thanks to the Toronto Foundation for developing and sharing the Vital Signs concept. For more information visit: www.vitalsignscanada.ca The Vital Signs trademark is used with permission from Community Foundations of Canada.