

APPENDIX 18-A
Existing Social and Economic Conditions of
Tsawwassen First Nation Community

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March 9, 2015

ROBERTS BANK TERMINAL 2 PROJECT

18-A Existing Social and Economic Conditions of Tsawwassen First Nation Community

Submitted to:

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REPORT



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1.0 INTRODUCTION

1.1 Objectives

The Roberts Bank Terminal 2 Project (RBT2 or Project) is a proposed new three-berth marine terminal at Roberts Bank in Delta, British Columbia (B.C.) that could provide 2.4 million twenty-foot equivalent units (TEUs) of additional container capacity annually. The Project is part of the Port Metro Vancouver (PMV) Container Capacity Improvement Program (CCIP), a long-term strategy to deliver projects to meet anticipated growth in demand for container capacity to 2030. The Tsawwassen First Nation Treaty Lands (Tsawwassen Lands) are directly adjacent to the Project both by land and sea (Figure 1).

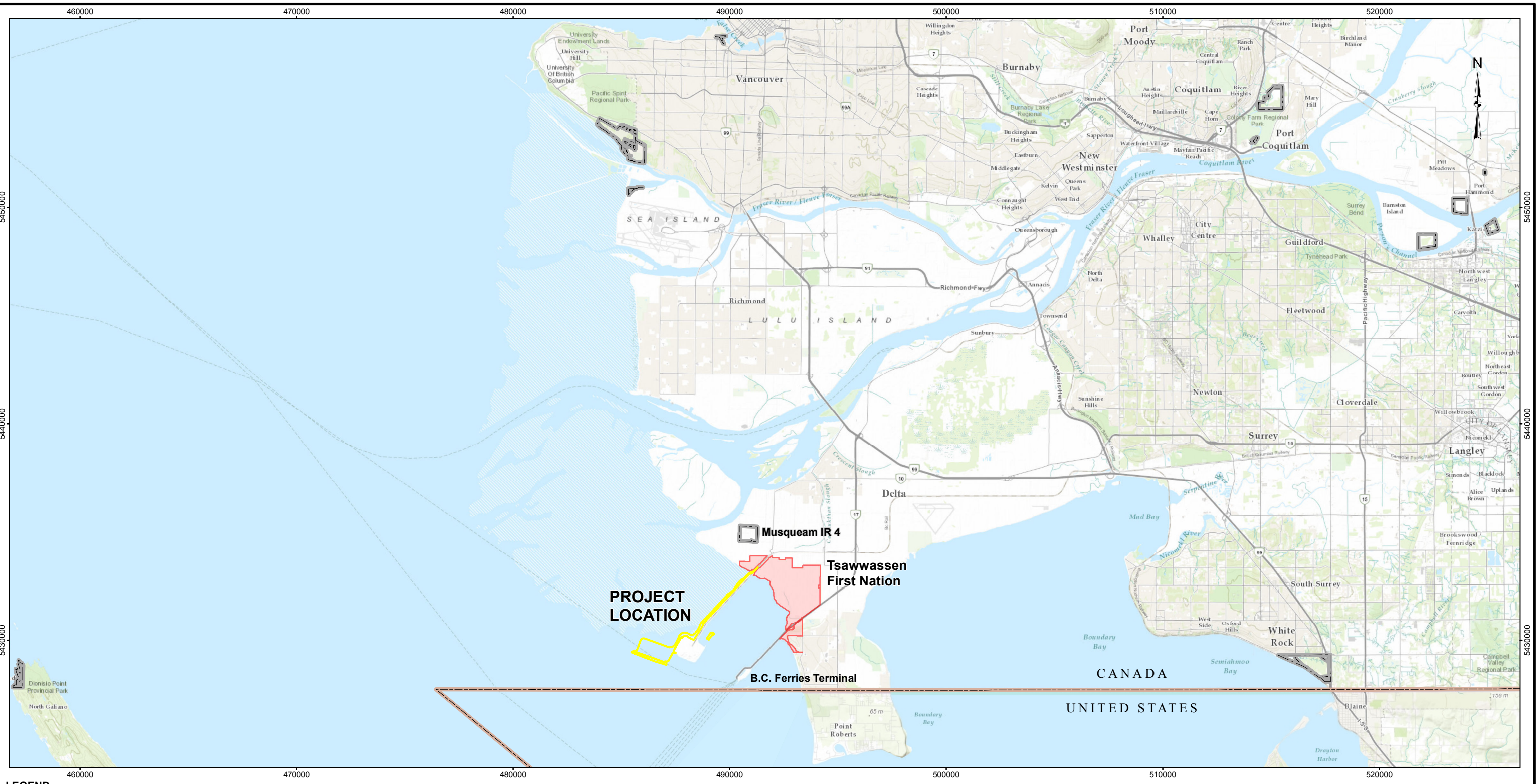
Port Metro Vancouver has retained Golder Associates Ltd. (Golder) to undertake socio-economic studies to inform a future effects assessment for the Project. The objective of the Existing Social and Economic Conditions of Tsawwassen First Nation Community Study (the study) is to describe the existing social and economic conditions of the Tsawwassen First Nation, and inform the Project Environmental Impact Statement (EIS). This study was completed by Golder in collaboration with the Tsawwassen First Nation with support from PMV. Golder would like to acknowledge and thank Sarah Lang (Tsawwassen Community Researcher) for her contribution to this study and report.

While this study provides baseline social and economic conditions of the Tsawwassen First Nation, it does not include an assessment of potential Project effects on baseline conditions. The data and perceptions obtained through this study informed the effects assessments in the following Economic and Socio-community EIS Sections:

- EIS Section 19 Labour Market
- EIS Section 20 Economic Development
- EIS Section 21 Marine Commercial Use
- EIS Section 22 Local Government Finances
- EIS Section 23 Services and Infrastructure
- EIS Section 24 Outdoor Recreation

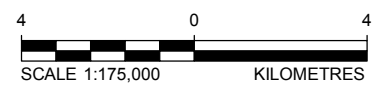
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- LEGEND**
- BOUNDARY OF PROJECT AREA
 - TSAWWASSEN FIRST NATION LANDS
 - INDIAN RESERVE
 - CANADA/U.S.A BORDER

REFERENCE
 TSAWWASSEN FIRST NATION LANDS AND FIRST NATION RESERVES OBTAINED FROM THE PROVINCE OF BRITISH COLUMBIA, COPYRIGHT © 2014. PROVINCE OF BRITISH COLUMBIA. ALL RIGHTS RESERVED. BASE DATA OBTAINED FROM ESRI, HERE, DELORME, TOMTOM, INTERMAP, INCREMENT P CORP., GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA, SWISSTOPO, MAPMYINDIA, © OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY
 DATUM: NAD83 PROJECTION: UTM ZONE 10



PROJECT		PORT METRO VANCOUVER ROBERTS BANK TERMINAL 2	
TITLE		TSAWWASSEN FIRST NATION LANDS AND THE PROJECT	
	PROJECT	13-1477-0042	FILE No.
	DESIGN	AT 27 OCT 2014	SCALE AS SHOWN
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REVIEW	RS 26 JAN 2015		

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1.2 Study Methods

The following are the steps that were implemented to complete the study:

- Introductory Meeting with Tsawwassen First Nation Representatives to provide an overview of the Economic and Socio-community Assessment for the Project; discuss Tsawwassen First Nation's interest in and areas for collaboration;
- Work with Tsawwassen First Nations Representatives to finalize the study scope and work plan;
- Identify and train a Tsawwassen First Nation Community researcher to assist with the study;
- Data Gathering including:
 - Secondary information, gathered through a number of publically available sources including:
 - The Tsawwassen First Nation Website;
 - Publically available Tsawwassen planning and policy documents;
 - Tsawwassen Laws and Regulations; and
 - The Tsawwassen Final Agreement.
 - Primary baseline data, gathered through interviews with Tsawwassen Departmental representatives to clarify social and economic information obtained from secondary literature; and, acquire additional information. Unless specifically stated, the responses to interview questions do not represent official statements of the Tsawwassen First Nation. The following topics were discussed during interviews:
 - Housing;
 - Economic Development;
 - Outdoor Recreation;
 - Training and Education;
 - Services and Infrastructure;
 - Fisheries; and
 - Jobs and Employment.
- Draft the Existing Conditions Report; and
- Provide the draft report to the Tsawwassen First Nations representatives for review.

The Tsawwassen First Nation provided Golder with several community based studies that, while not publically available, are referenced throughout this study. Information that was deemed confidential by Tsawwassen Leadership was redacted from the documents. These studies include:

- The 2012 Tsawwassen First Nation Social Well-being Study, and
- The Tsawwassen First Nation Labour Market Analysis and Employment Strategy.



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The Tsawwassen Social Well-being Study was an in-depth well-being study undertaken in 2012. All Tsawwassen First Nation Members (Members) 18 years of age and older were invited to participate in the study. One hundred fifty six of 260 eligible Members participated in the study for a 60% response rate. The study participants included Members living on and off Tsawwassen Lands (Tesluk, Jordan and Matthews, Ralph n.d.).

The Tsawwassen Labour Market Study was undertaken in 2010 to develop a baseline assessment of skills in the community and forecast public and private job markets potentially available to community Members. The study was open to all Tsawwassen Members aged 18 years and older with 118 of 258 eligible respondents participating for a 45.7% response rate. In addition, interviews were held with Tsawwassen community and regional stakeholders (Roslyn Kunin & Associates, Inc. 2010).

2011 Canadian Census and National Household Survey (NHS) profile data on Tsawwassen Lands were not used in this study as the geography of the census area includes the households living in 99 year leasehold lands. This population is larger than the Tsawwassen First Nation community and is different from a socio-economic profile perspective.

Golder worked closely with a researcher from the Tsawwassen community to collect the baseline data for this report. Training, mentoring, and capacity development were provided. A full day training session was held to introduce the Project, describe the objectives of the socio-economic study, and discuss the data collection approaches and methods. Throughout the data collection process, Golder team members provided mentoring, advice, and skill development. Following the training session, the Tsawwassen researcher confirmed the scope of the study with the Tsawwassen Administration and began soliciting secondary data from the department leads within the Tsawwassen Administration. Secondary data was reviewed by Golder and interview questions were developed to further understand the existing conditions and Project related concerns in the community. The researcher then identified the key informants knowledgeable about the key areas of interest for the study and scheduled one hour interviews with each. A representative of Golder attended each interview with the Tsawwassen researcher to co-facilitate the interviews. Golder provided interview notes back to the researcher to confirm the content. These notes became the primary data sources for this report.



2.0 EXISTING CONDITIONS

2.1 Governance Structure

The Tsawwassen First Nation is a modern Treaty Nation. On April 3, 2009, the Tsawwassen Final Agreement (TFA) was implemented, granting self-government over their Lands and Membership. The Tsawwassen Treaty Lands (Tsawwassen Lands) are located on the Strait of Georgia, approximately 25 km south of Vancouver, neighbouring the Corporation of Delta, the Tsawwassen Ferry Terminal, and Port Metro Vancouver's Deltaport facility.

The total area of the Tsawwassen Lands is 662 hectares. Under the TFA, the Tsawwassen Lands are comprised of the former reserve lands, total land holdings of the Tsawwassen First Nation include 372 ha of former provincial Crown land and subsurface rights. In addition, Tsawwassen owns 62 ha of land in Boundary Bay and on the Fraser River in fee simple, however jurisdiction of this land remains with the Corporation of Delta (Minister of the Department of Indian Affairs and Northern Development et al. 2011). In addition to transfer of lands as described, the TFA provides for self-government provisions including jurisdiction over land management, and aspects of health care, education, social assistance and child and family services. The Treaty also resolves Tsawwassen's title claim over its 10,000 km² traditional territory and hunting, fishing, and gathering rights in the territory.

As a Treaty First Nation, Tsawwassen has its own Constitution, Laws, and Regulations, clarifying the legal rights to lands and resources, and self-government. The Tsawwassen government is responsible for managing Tsawwassen Lands, resources, social services, and many other areas of jurisdiction previously held by the federal, provincial, or municipal governments (Minister of the Department of Indian Affairs and Northern Development et al. 2011). On April 3, 2009, the Tsawwassen Legislature passed 23 laws, including the *Constitution Act*, which sets out Tsawwassen's key governing structures.

Under the TFA, the Tsawwassen Legislature is the highest body in the Tsawwassen Government, consisting of 12 elected Tsawwassen Legislators and the elected Chief. The Legislature meets twice a week over each of two month-long sessions where laws are debated and the budget is passed (Tsawwassen First Nation 2013a). The four Legislators who receive the highest number of votes are appointed to the Executive Council with the Chief. The Executive Council meets each week to manage the day-to-day operations of the Government, debate proposed regulations, and fulfill the regular responsibilities of the Government (Tsawwassen First Nation 2013a).

Under the Tsawwassen Constitution, the role of the Advisory Council is to confirm all proposed laws, regulations, and other actions are reviewed by the Tsawwassen Membership in an open forum before they are passed or presented to the Executive Council for approval (Minister of the Department of Indian Affairs and Northern Development et al. 2011). All Members can participate in the Advisory Council.

The Judicial Council is responsible for hearing challenges on Tsawwassen laws, resolving disputes between Members and elected officials, making recommendations to courts on the sentencing of Members where requested, investigating financial irregularities, and other duties assigned by Tsawwassen Government (Minister of the Department of Indian Affairs and Northern Development et al. 2011). It is comprised of Tsawwassen Members and others with legal and judicial experience.

In addition, the Executive Council appoints a Consultation Committee that is consulted on issues that significantly and directly impact leaseholder interests, including various regulatory structures and Tsawwassen's



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economic development initiatives. The Consultation committee is made up of non-Members representing the leaseholders living on Tsawwassen Lands (Minister of the Department of Indian Affairs and Northern Development et al. 2011).

Under the TFA, the Tsawwassen Government assumes responsibility for delivering specific healthcare and education government programs and services previously provided by Canada or British Columbia (Minister of the Department of Indian Affairs and Northern Development et al. 2011). In this vein, Tsawwassen assumes jurisdiction for local government functions similar to a municipal government. These functions generally include land use planning, public works and infrastructure, environmental management, and economic development. The government is supported by a professional public administration system headed by the Chief Administrative Officer (CAO). The CAO is responsible for providing efficient management of the Nation's work force and is the link between the political and administrative levels of Tsawwassen Government (Tsawwassen First Nation n.d.a). The Tsawwassen Administrative Structure includes the following:

- Community Services Division inclusive of:
 - Health and Social Services; and
 - Education and Skills Development.
- Public Services Division, inclusive of:
 - Government Services Division;
 - Policy and Intergovernmental Affairs;
 - Natural Resources; and
 - Enforcement.
- Finance and Administration Division;
- Land and Municipal Services Division (includes public works, sewer and facilities); and
- Human Resources Department (Tsawwassen First Nation n.d.a).

2.2 Population and Demographics

As of 2014, there were 469 registered Members of the Tsawwassen First Nation, of whom, 190 live on Tsawwassen Lands (Table 1). Approximately 40% of Members are under 18 years old.

Table 1: Number of Tsawwassen Members as of April 10, 2014

Tsawwassen Members	469
Members aged 0-17 years	191
Adult Members (18 years and older)	278
Members living on Lands	190
Members living off Lands	279

Source: (Tsawwassen First Nation 2014a)



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Results of the 2012 Tsawwassen Social Well-being Study indicate that just over 50% of Tsawwassen Members 18 years and older lived on Tsawwassen Lands while another 11.9% lived in the Lower Mainland of BC, including the local communities of Delta, Ladner, Surrey, and Langley (Table 2).

Table 2: Place of Residence, Members 18 years and Older [% of Members]

Area of Residence	Total	Males	Females
Tsawwassen Lands	50.8	56.3	46.1
Lower Mainland and Vancouver Island	11.9	10.9	12.8
Interior BC	7.7	5.9	9.2
Canada (not BC)	6.5	4.2	8.5
Washington State and the USA	23.1	22.7	23.4

Source: (Tesluk, Jordan and Matthews, Ralph n.d.)

While 190 Tsawwassen Members live on Tsawwassen Lands, Tsawwassen also has three sub-divisions with 99-year market housing leases where individuals from the broader community have purchased homes. As of 2011, approximately 460 of the 720 people living on Tsawwassen Lands live in the leasehold housing developments (Tsawwassen First Nation and AECOM 2009, Metro Vancouver 2010). The remaining 70 non-Members living on Tsawwassen Lands likely live with Members in Member housing.

Annual membership growth between 2009 and 2013 ranged from a low of 2.1% in 2011 to a high of 5.5% in 2010 (Tsawwassen First Nation 2014a). The majority of the growth has been through births, followed by membership enrollment of minors and adults previously registered with another First Nation.

Population projections calculated for the Tsawwassen Lands as part of the Metro Vancouver 2040 Regional Growth Strategy predict substantial growth largely due to market residential housing developments planned on Tsawwassen Lands. By 2041, the population living on Tsawwassen Lands is expected to grow more than 10 times its current size to 8,500 people (Table 3). These projections include both Tsawwassen Members and people living in the 99-year leasehold housing on Lands.

Table 3: Population Projections, Tsawwassen Lands^a

	2006	2021	2031	2041
Tsawwassen Lands	800	4,000	6,000	8,500

Source: (Metro Vancouver 2010)

^a Population counts are for all people living on Tsawwassen Lands, not just Tsawwassen Members. These figures take into account the over 450 people who currently live in the 99-year leasehold homes on Tsawwassen Lands as well as the projected future leasehold developments.

2.2.1 Age and Gender Distribution

The Tsawwassen community is generally a young community, with approximately 40% Tsawwassen Members under the age of 18 as of 2014. In comparison, 21.8% of Delta's and 19.0% of Metro Vancouver's population were under the age of 18 in 2011 while 35% of the Aboriginal population in Delta and 28.6% of the Aboriginal population in Metro Vancouver is under the age of 18.



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The working age population (18-64 years) is also comparatively younger than that of Delta and Metro Vancouver, with a large percentage of Members in the younger subset of the working age population (18-44 years). With nearly 40% of Tsawwassen Members under the age of 18, there will be a sizable working age population from the community entering the workforce in coming years.

Only 5% of the Tsawwassen population are of retirement age (65 years and older), in comparison to nearly 20% in Delta and 16.8% in Metro Vancouver (Table 4). However, only 7.1% of the Aboriginal population in the Corporation of Delta is 65 years or older, while 7.5% of the Aboriginal population in Metro Vancouver is 65 years or older.

Table 4: Age Distribution of Population Aged 18 years and Older [%]

Age	Tsawwassen Members (All Members) ^(a)	Aboriginal Corporation of Delta ^(b)	Total Corporation of Delta ^(b)	Aboriginal Metro Vancouver ^(b)	Total Metro Vancouver ^(b)
18-24	20.2	19.0	11.3	18.1	11.7
25-34	30.9	13.9	11.9	20.9	17.6
35-44	14.8	20.1	17.1	20.9	18.2
45-54	15.6	21.1	21.7	19.3	20.0
55-64	13.3	18.7	18.3	13.4	15.8
65-74	3.4	7.1	11.5	5.4	9.0
75-84	1.5	0.0	5.9	1.6	5.5
85 and older	0	0.0	2.4	0.5	2.3
Total	99.7	100.0	100	100.0	100

^(a) Data for 2012, this data includes all Tsawwassen Members, even those not surveyed as part of the 2012 Tsawwassen Social Well-being Study.

^(b) Data from 2011

Source: (Tesluk, Jordan and Matthews, Ralph n.d., Statistics Canada 2012a, b)

There are slightly more female Tsawwassen Members over the age of 18 than males (54% female compared to 46% male) (Tesluk, Jordan and Matthews, Ralph n.d.). This is similar to the gender distribution for both Delta and Metro Vancouver in which the gender distribution is approximately 52% female and 48% male (Statistics Canada 2012a, b).

2.2.2 Dependency Ratios

Quantitative dependency ratios cannot be calculated with the data available, but qualitatively, in the Tsawwassen community, child dependency will likely be the primary driver of dependency rates given that 40% of the Tsawwassen community is under the age of 18. This is in contrast to Metro Vancouver region where both child and elder dependency influence total dependency rates (Statistics Canada 2012a, b). To support Tsawwassen families, early childhood education and day care are provided on Lands to Members (Tesluk, Jordan and Matthews, Ralph n.d.).



2.3 Language

The Tsawwassen traditional language is Hunq'um'l'num. In Hunq'um'l'num, Tsawwassen means Land Facing the Sea. The 2012 Tsawwassen Social Well-being Study indicates that approximately 11% of Members speak, read, or write in the Tsawwassen traditional language (Tesluk, Jordan and Matthews, Ralph n.d.). Language classes aimed at different age groups are provided in the community, including weekly classes at the Smuyuq'wa' Lelum Early Childhood Development Centre for children aged 2-5 years and an evening community language class at the Youth Centre (Tsawwassen First Nation Representative 2014). Currently, language transcripts are being transferred to digital files to aid in maintaining and rebuilding Hunq'um'l'num language knowledge in the community (Tsawwassen First Nation Representative 2014).



3.0 LABOUR MARKET

3.1 Employment Profile

As of 2012, approximately 52.6% of working aged adults in Tsawwassen were employed while 16.0% were unemployed (Table 5). Unemployment rate in Tsawwassen is higher than rates recorded in both Delta and Metro Vancouver (for the total population base), but similar to the rate for the Aboriginal population in Metro Vancouver.

The community’s participation rate, (defined as the number of people either working or looking for work) is similar to all four comparator communities suggesting that while the unemployment rate is high in Tsawwassen, workers continue to look for work rather than becoming discouraged and leaving the labour force. Like the unemployment rate, the participation rate in the community is believed to have increased since 2012 as training and employment opportunities have provided Members with greater access to jobs (Tsawwassen First Nation Representative 2014).

Table 5: Employment Profile 2011 and 2012 [%]

	Tsawwassen (All Members) ^(a)	Aboriginal Corporation of Delta ^(b)	Corporation of Delta ^(b)	Aboriginal Metro Vancouver ^(b)	Total Metro Vancouver ^(b)
Employment Rate	52.6	62.1	62	59.2	61.4
Unemployment	16.0	9.5	6.3	12.6	7.1
Participation Rate	65.6	68.2	66.1	67.7	66.1

(a) Data for 2012

(b) Data from 2011

Source: (Tesluk, Jordan and Matthews, Ralph n.d., Statistics Canada 2013a, b, c)

The unemployment rate for Tsawwassen youth aged 16-24 is considerably higher than the rates for the Tsawwassen community as a whole as many Members do not have the skills or experience required to access the construction jobs currently available in the community (see Section 0) (Tsawwassen First Nation Representative 2014). Initiatives are being undertaken by the Tsawwassen Employment and Training Department to prepare youth to participate in construction jobs including heavy equipment operator training and courses to prepare Members to acquire entry level flagging jobs. The Employment and Training Department also works to forecast the types of employment the local market requires in terms of labour, to proactively provide Members with the training required to access new opportunities (Tsawwassen First Nation Representative 2014).

3.2 Labour Force Characteristics

Published labour force profile characteristics including Members’ skillsets and sector of employment are not currently available for the Tsawwassen community, however interviews with community Members indicate that many Tsawwassen Members are employed in the construction sector (Tsawwassen First Nation Representative 2014). As of 2012, there were 148 Tsawwassen Members between the ages of 18-64 (working age), and just over half of these Members live on Tsawwassen Lands, while the other half live in different parts of Canada and the US, including BC and Washington State (Tesluk, Jordan and Matthews, Ralph n.d.).



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The Tsawwassen Labour Force Analysis (2010) identifies the job preferences by occupation of Tsawwassen Members. The top two preferred occupations include cultural occupations and office jobs, with Deltaport jobs, fishing and retail tied for third (Table 6). By comparison, Tsawwassen Members indicated jobs they feel most skilled to perform include office jobs and fishing (tied), retail, and day care while jobs at Deltaport are tied for 9th. The difference between the job preference and perceived skill for Deltaport jobs was attributed to the training and educational focus in the community towards the jobs available through the development projects on Tsawwassen Lands as opposed to jobs off Lands (Tsawwassen First Nation Representative 2014). Tsawwassen representatives expect that as the construction phase ends on the Tsawwassen economic development projects (see Section 4.2), the employment opportunity focus will shift to jobs outside of Tsawwassen Lands, including Port related opportunities.

Table 6: Job Preference by Occupation, Tsawwassen Members (2010)^a

Occupation	Job Preference	Skill Level
Cultural	2.9	3.7
Office Jobs	3	3.2
Deltaport Jobs	3.2	4.2
Fishing	3.2	3.2
Retail	3.2	3.3
Agriculture	3.3	4.1
Daycare	3.3	3.6
Manufacturing	3.3	3.7
Property Management	3.3	4.2
Construction	3.4	3.8
Education	3.4	4.0
Elder Care	3.4	3.9
Land and Resource Management, Environmental Management	3.4	4.4
Marine Services	3.4	4.1
Tsawwassen First Nation Administration	3.4	3.9
Building Maintenance and Renovations	3.5	3.8
Tsawwassen First Nation Public Works	3.5	4.1
Health Care	3.5	4.0
Recreation	3.5	4.2
Social Services	3.5	4.3
Public Safety	3.8	4.5
Warehousing Jobs	3.8	3.9
Utilities	3.9	4.5
Transportation	4	4.4

^a This 2010 survey was open to all adult Tsawwassen Members. And 118 of 258 Members responded to the survey for a response rate of 45.7%. Respondents were asked to apply a rating scale of 1- 5 for each of the identified occupations. For job preference, a rating of 1 indicates a person's most preferred job and a rating of 5 indicates a person's least preferred job. For skill level, a rating of 1 indicates jobs a person feels the most skilled to perform and a rating of 5 indicates jobs a person feels the least skilled to perform.

Source: (Roslyn Kunin & Associates, Inc. 2010)



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When asked to rank their employable skills, Tsawwassen Members identified teamwork, work ethic, reading, communication skills, and problem solving as their strongest skillsets (Table 7). Areas where skills were perceived to be less developed include construction, handyman skills, and computer use.

Table 7: Self Ranking of Skills, Tsawwassen Members, 2010

Skill	Average self-rating (1 very experienced to 5 not experienced at all)
Teamwork	1.5
Work Ethic	1.5
Reading	1.8
Verbal Communications	1.9
Problem Solving	1.9
Writing	2.1
Training Others	2.3
Math	2.4
Supervising	2.4
Management	2.5
Computer Use	2.6
Handyman	2.9
Construction	3.3

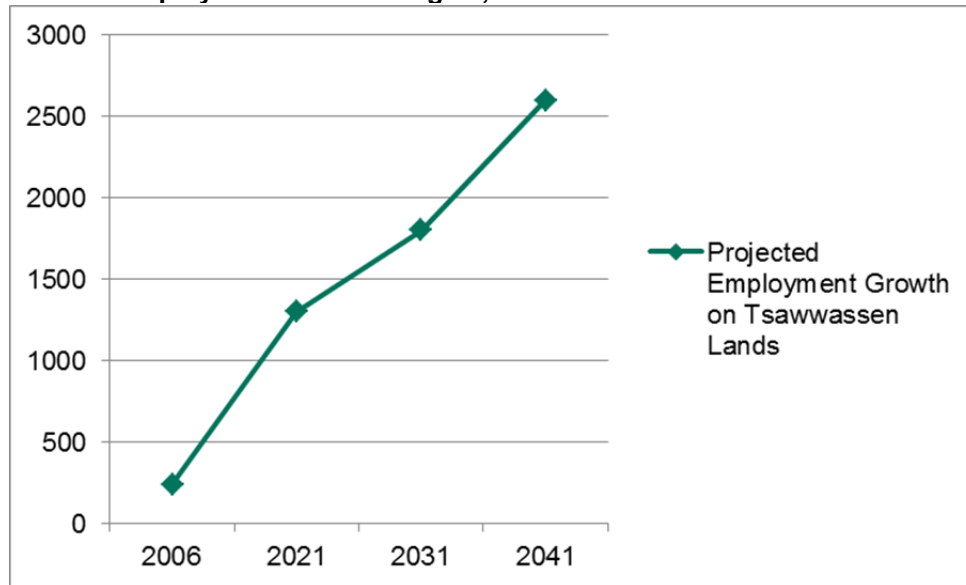
^a This 2010 survey was open to all adult Tsawwassen Members. 118 of 258 Members responded to the survey for a response rate of 45.7%. Respondents were asked to apply a rating scale of 1- 5 for each of the identified skills with 1 representing very experienced and 5 not experienced at all.

Source: (Roslyn Kunin & Associates, Inc. 2010)

The Metro Vancouver 2040 Regional Growth Strategy includes employment growth targets for the urban centres, including Tsawwassen Lands. By 2041, the target for jobs on Tsawwassen Lands is 2,600, which is over 10 times the number of the estimated jobs on Tsawwassen Lands in 2006 (Table 8). The largest growth in positions is projected to be between 2006 and 2021, which coincides with the timeline for the construction and operations of the retail and industrial developments on Tsawwassen Lands. The retail developments are expected to provide 4,200 permanent jobs by 2016 while the industrial developments would provide 1,500 permanent jobs by 2020 (see Section 4.2) Details on the types of positions are not available, but the positions are likely linked to the commercial and industrial developments currently planned in the Tsawwassen community.



Table 8: Employment Growth Targets, Tsawwassen Lands ^a



^a Includes all population living on Tsawwassen Lands, including Members and non-Members
Source: (Metro Vancouver 2010)

3.2.1 Barriers to Labour Force Participation

Barriers identified by Tsawwassen representatives as limiting Tsawwassen Members from obtaining preferred employment include educational attainment, union membership and transportation (Tsawwassen First Nation Representative 2014). Barriers to educational attainment, particularly high school completion and barrier to Members accessing training and employment opportunities are discussed in Section 3.4 (Tsawwassen First Nation Representative 2014).

Tsawwassen representatives note that Members have experienced difficulty joining the International Longshore and Warehouse Union (ILWU). As most jobs at the Roberts Bank Terminals are carried out by ILWU members, union membership is the first step to gaining employment (Tsawwassen First Nation Representative 2014).

Transportation is also a barrier identified by Tsawwassen representatives. Members often face challenges getting to work as many do not have a driver's licence or access to a vehicle (Tsawwassen First Nation Representative 2014). Public transit is limited on Lands, particularly in the early morning. In the past, a Tsawwassen Member created a business to provide a shuttle bus service to one of the work sites employing a number of Tsawwassen Members. This service was essential to a number of Members getting to and from work each day (Tsawwassen First Nation Representative 2014). The Tsawwassen Employment and Training Department is working on a program to support attainment of Members' driver's licences (Tsawwassen First Nation Representative 2014).



3.3 Education and Training

3.3.1 Educational Attainment

As of 2012, 66% of Tsawwassen Members 18 years or older have, at minimum, a high school diploma or certificate of equivalency (Tesluk, Jordan and Matthews, Ralph n.d.). Comparably, 84% of the total population 15 years or older in Delta and 85% of the total population 15 years or older in Metro Vancouver reported having, at minimum, a high school diploma or equivalent. Seventy-five percent of the Aboriginal population in Metro Vancouver aged 15 years or older reported having, at minimum, a high school diploma or equivalent. While this data is not directly comparable to the Tsawwassen community due to different age categories, generally total high school completion rates are lower in Tsawwassen than the Aboriginal and general population averages in Delta and Metro Vancouver.

As of 2010, 88 Members (or 74.5% of respondents) reported undertaking formal education beyond high school (Table 9). The most common form of post-secondary education included some college or university training; with fewer Members reported receiving a college or university diploma. Seven Members hold a university degree while 23 hold diplomas or certificates. Fourteen Members report taking trades or vocational training, while another twelve reported holding other certificates.

Table 9: Formal Education Beyond Secondary School, Tsawwassen Members 2010^a

Type of Education	Tsawwassen (all Members)
None	46
Some trades/vocational training	14
Some college/university	32
Diploma or certificate	23
University Degree	7
Other	12
Total^b	134

^a This 2010 survey was open to all adult Tsawwassen Members. 118 of 258 eligible Members responded to the survey for a response rate of 45.7%.

^b Members could identify all formal education undertaken. As some Members have taken multiple types of formal education, the total is greater than the number of respondents.

Source: (Roslyn Kunin & Associates, Inc. 2010)

Members also reported holding a number of basic skills certifications that are often qualifications for entry level positions in the construction and service industries. Table 10 shows the type of certificates held by Tsawwassen Members.



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Table 10: Type of Certification Achieved by Tsawwassen Members, 2010

Certificate Held	Tsawwassen (all Members)
First Aid	69
Food Safe	50
Other	38
WHIMIS	36
Trade Certificate	18
Heavy Equipment Operator ticket	7
Total	218

^a This 2010 survey was open to all adult Tsawwassen Members. 118 of 258 eligible Members responded to the survey for a response rate of 45.7%.

^b Members could identify all certificates achieved to date. As some Members have achieved multiple certifications, the total is greater than the number of respondents.

Source: (Roslyn Kunin & Associates, Inc. 2010)

An interview with a Tsawwassen community representative indicated that Tsawwassen Members are pursuing studies in the following disciplines:

- Engineering;
- Pastoral studies;
- Forestry Resource Technician;
- Guitar Building;
- Bachelor of Business Administration;
- Associates Art Degree;
- Dental Technician;
- Social Services related degree;
- Business Administration in Finance and Services;
- Accounting Technician;
- Marine Program at BCIT School of Transportation;
- Corporate Board Training; and
- Apprenticeship through Pile Drivers, Bridge, Dock and Wharf Builders Local 2404 (Tsawwassen First Nation Representative 2014).



3.3.2 Training Needs

As of 2010, over 80% of Tsawwassen Members indicated they are interested in taking training of some kind (Roslyn Kunin & Associates, Inc. 2010). Training needs in the community range for basic high school completion to further training for those with university education. Training initiatives focus on providing Members with the skills and qualifications to move into and beyond entry level positions.

Key areas of training often requested by Members include:

- Management skills training;
- Small business training;
- Leadership training;
- IT training (provided through a joint venture with Indigena Solutions);
- Trades certification (e.g., pipe fitting, sheet metal workers);
- Logistics and distribution warehouse manager training;
- College and university training;
- Level 3 First Aid; and
- Driver training for Class 1-7 licences (Tsawwassen First Nation Representative 2014).

3.3.3 Post-Secondary Training and Educational Resources

Registered Tsawwassen Members 18 years and older are eligible for post-secondary funding to attend any accepted post-secondary institution or Industry Training Authority accepted program of study (Tsawwassen First Nation 2010). Funding is provided by the Nation and is available to support tuition costs, books and supplies, specialized equipment, travel support, commuter travel, living allowance, and entrance testing requirements.

The Tsawwassen Gateway Skills Centre provides employment and training programs within the Tsawwassen community (TEDC 2014). Skills training is also available through the Aboriginal Skills Group and the First Nations Employment Society (TEDC 2014). Programs provided to date include heavy equipment operator training, construction and warehouse training, IT training, first aid, driver training (Tsawwassen First Nation Representative 2014). Tsawwassen is currently developing a partnership with Kwantlen Polytechnic University for basic education upgrades and Post-Secondary Education (Tsawwassen First Nation Representative 2014).

Through the social services programs, Tsawwassen also provides support to Members transitioning out of the social assistance and into the workforce. Support includes basic equipment required for work, bus passes so Members are able to get to work, and support with job searches.

Through their joint venture partnership with Matcon, Tsawwassen Construction/Matcon, Members can access on the job training and mentorship as part of their daily work. Where needed, Matcon partners with Tsawwassen Gateway Skills Centre to provide project or skill specific training. Past experience has shown that on-the-job



mentoring has been one of the most successful forms of training for Tsawwassen Members (Tsawwassen First Nation Representative 2014).

In 2004, the Tsawwassen First Nation and the Vancouver Port Authority (Port Metro Vancouver) signed a Memorandum of Agreement in relation to the Deltaport third berth expansion (DP3) and the development of Terminal 2 (RBT2). Part of this agreement included a fund Tsawwassen has specifically dedicated for education and training for Port related occupations. Three Members are currently accessing the fund and undertaking the following training:

- Marine Program at BCIT which involves chart work, pilotage, marine commercial, navigation safety and will result in the ability to obtain a ticket to operate tugboat and marine certificate;
- Corporate Board Training at Institute of Corporate Training. This Member has been appointed to a Board organized by Port Metro Vancouver; and
- Bridgework apprenticeship through Pile Drivers, Bridge, Dock and Wharf Builders Local 2404 (Tsawwassen First Nation Representative 2014).

Tsawwassen representatives indicate there is some uncertainty as to whether or not jobs will be available once training is complete. The following were identified as ways to support port related employment opportunities for community members:

- Communication with port operators in the region about the types of potential long term careers available;
- Holding regular “Fairs” with different port operators and employers illustrating various port-related career opportunities to Members;
- Tours of port facilities for interested Members or school field trips;
- A video detailing the types of jobs available at all phases of the project; and
- Job shadowing.

3.4 Barriers to Training and Education

Relatively low educational attainment (as described in Section 3.3.1) can make it difficult for Members to access the training and education required for the jobs available and of interest to them. Some Members struggle to meet the minimum educational pre-requisites required for some training initiatives, including basic high school completion.

Barriers to education and training are prevalent in many First Nations communities. Analysis of data collected through the 2012 Aboriginal Peoples Survey found barriers to high school completion for First Nations People living off reserve often fell into three categories, personal experiences, family related experiences, and school related experiences (Bougie et al. 2013). Personal reasons included poor grades, skipping classes or arriving late, having friends with at risk behaviors, and lower participation in after school activities such as sports, the arts, groups or clubs, volunteering, or having a part-time job. Family related experiences often included parents



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who are less engaged with their schooling, students not living with their family, and having parents or siblings who did not complete high school. Negative school related experiences often included racism, bullying, prevalence of drugs, or violence within the school, and less available support from teachers or guidance counsellors (Bougie et al. 2013).

The 2012 Tsawwassen Social Well-being Study asked Members specifically about their experience in school. Approximately half of those participating in the study indicated that they felt they were treated differently in school by other students because they are a First Nation person, while approximately 40% felt they were treated differently by school administrators (Tesluk, Jordan and Matthews, Ralph n.d.). Examples of negative treatment included stereotyping, bullying, and social isolation, while some Members felt they were treated differently in a positive manner as they were given access to additional programs that focused on aboriginal culture (Tesluk, Jordan and Matthews, Ralph n.d.). While the implications of these experiences on educational completion have not been examined specifically in the Tsawwassen community, these experiences reflect the barriers to education identified by Bougie et al. (2013).

For some Members, barriers to training and education are linked to the lasting effects of the residential school system (Tsawwassen First Nation 2015). Residential school survivors and their families can find it difficult to attain the education and skills required to access jobs and participate in training initiatives due to the long-term legacies of the residential school system, including personal trauma, compromised family systems, loss of language, culture and tradition, domestic abuse, substance abuse, and a general mistrust in the education system (Indigenous Foundations at the University of British Columbia 2009).

Access to transportation has been identified as a barrier to training and education as some Members face challenges getting to training sites when they are located off Lands. Public transit is limited on Lands and many Members do not have driver's licences or access to vehicles, limiting their ability to get to training and then in turn to work sites once training is complete.

In addition, Tsawwassen representatives highlighted that while funding for training covers the cost of the actual training, it often does not include funding for Members' living expenses. As full time training initiatives often require Members to quit their existing employment in order to pursue further training, the loss of income, even if it is minimum wage, is seen as a barrier to education.



4.0 ECONOMIC DEVELOPMENT

4.1 Tsawwassen First Nation Economic Development Corporation

The Tsawwassen First Nation Economic Development Corporation (TEDC) is the business arm of the Tsawwassen First Nation, and is an incorporated business owned in whole by the Membership. TEDC is managed by a Board of Directors who are appointed directly by the Tsawwassen Executive Council. TEDC supports the “development of a sustainable economy, the creation of job opportunities for Tsawwassen Members, and increased revenues for TFN programs and services” (TFN Economic Development Corporation 2014). TEDC also supports training and job opportunities for Tsawwassen Members as part of development agreements and safeguarding an environmentally and culturally sustainable nature of development on Tsawwassen Lands (Tsawwassen First Nation Representative 2014). Economic development projects undertaken by TEDC are discussed in the following sections. TEDC also works to educate developers and potential business partners on the Tsawwassen governance structure jurisdiction as it relates to business contracts. Tsawwassen representatives note it is often necessary to acquaint business partners with unique situation of the Tsawwassen as an urban treaty Nation in British Columbia with municipal-like jurisdiction over their Lands.

4.2 Economic Development Projects

Over the next five to ten years, the Tsawwassen First Nation expects its development and land management policies will increase employment on Lands (Tsawwassen First Nation Representative 2014). The Tsawwassen Land Use Plan (2009) provides a general statement of the broad objectives guiding the long-term vision of land use of Tsawwassen Lands, including market housing, commercial enterprise, and industrial economic development initiatives. The Tsawwassen Residential/Commercial Enterprise Area Neighbourhood Plan (2011) provides further detail on the framework established for Residential/Commercial Enterprise Area zoning in the Land Use Plan, including market housing economic development initiatives. This plan permits three kinds of residential housing types, including singled detached, townhome, and apartments. Based on the area of land zoned as residential in the Preferred Land Use Concept in the neighbourhood plan, the total estimated number of potential housing units is 1,864 of which 1,584 are single detached or townhomes while the remaining 280 are apartments (Tsawwassen First Nation 2011). These units would be available on the open market. The first housing development under this land use plan is the Tsawwassen Shores development. Tsawwassen Shores is a market housing development which includes 71 homes over two phases (Aquilini Development and Construction Inc. n.d.). As of June 2014, Phase One which consists of 42 homes is sold out and nearing completion. Phase Two will include an 29 additional homes which are available for pre-sale (Aquilini Development and Construction Inc. 2014).

The Tsawwassen Mills and the Tsawwassen Commons projects (both under construction on Tsawwassen Lands) will further support economic development and job opportunities. Tsawwassen Mills is a 111,500 m² enclosed retail development with 16 anchor tenants, and a 1,100 seat food court while the Tsawwassen Commons is a 15,000 m² outdoor retail space (Ivanhoe Cambridge 2014). The Tsawwassen Mills project is expected to create an average of 1,600 construction jobs, reaching 4,500 jobs at peak construction. During operations, up to 3,000 full and part-time retail, entertainment, hospitality, and support jobs will be available at



Tsawwassen Mills (Ivanhoe Cambridge n.d.). In total, the two projects are projected to provide 6,500 construction jobs followed by 4,200 retail jobs when the mall opens (Kerr 2014).

Tsawwassen First Nation Industrial Lands Master Plan (2009) identifies the preferred development use of 135 ha of land zoned as industrial. The preferred concept identified in the Master plan includes a two phase intermodal and rail service yard to service the neighbouring Port developments. This concept is projected to create 1,000 construction jobs, approximately 1,500 new permanent operations jobs by 2020, and \$110 million in associated wages (Parsons Brinckerhoff 2009). Industrial developments currently underway include the Tsawwassen Gateway Logistics Park which includes a Container Examination Facility. Expected to open in the summer of 2015, the project is expected to provide jobs to Tsawwassen Members both during construction and operations (Port Metro Vancouver 2013).

4.3 Member Business Profile

Member owned businesses in the community include the following:

- Shark Bite Marine Tug and Charter, owned and operated by a Tsawwassen Member and currently employs 1 - 2 people;
- Raven Contracting, owned and operated by a Tsawwassen Member and employs 15 - 20 people. Raven contracting often partners with the Matcon to bid on work through a joint venture called Ravcon;
- Omega Steel, owned and operated by a Tsawwassen Member and is part of a joint venture partnership with Harris;
- A shuttle bus business which helps get Members commute to worksites;
- Spirit Wellness provides Cranial Sacral Therapy as well as Haida designed clothing and art;
- Dean's Baskets, Unique Terrariums & More which specializes in flower baskets and unique planters; and
- 9 Members engaged in various art forms, including beading; carving; cedar weaving; glass etching, and painting (Tsawwassen First Nation Representative 2014).

Tsawwassen has community partnerships with the following businesses:

- Tsawwassen Matcon Civil Joint Venture; and
- Indigena Solutions (Tsawwassen First Nation, Accenture, and CAPE Fund) (TFN Economic Development Corporation n.d.).

Tsawwassen also has Memorandum of Understandings with Global Container Terminals Canada (formally Terminal Systems Inc.) and FortisBC establishing collaboration between the organizations (TFN Economic Development Corporation n.d.).



Tsawwassen Members also lease land to local businesses. Some of these businesses include:

- Splashdown Waterpark;
- Park'N'Go; and
- Pattison Outdoors Advertising (Tsawwassen First Nation Representative 2014).

To support development of Member businesses, the Small Business Grant Program (currently a pilot project) was initiated by Tsawwassen First Nation. The program provides grants and business training to Members to start or expand their businesses and focuses on capacity development. The program also provides funding for TEDC to purchase supplies and equipment for Member-run businesses. Currently two Members have signed contribution agreements and are accessing the funding as part of the Program.

4.4 Business Agreements and Contracts with the Port Metro Vancouver

In 2004, the Tsawwassen First Nation and the Vancouver Port Authority (now PMV) signed a Memorandum of Agreement in relation to the Roberts Bank Port Facility, and Roberts Bank Port Facility Expansion including the third berth at Deltaport. Under the job provision of the Memorandum of Agreement, PMV will make available an operational port-related position.

The 2004 Memorandum of Agreement also includes a provision for a \$10,000,000 Joint Venture Investment Fund for the purposes of providing capital to joint venture investments by TFN and PMV. The JVIF will be equally owned and jointly controlled by TFN and PMV and investments will be in Port related activities. To date, discussions between the parties are ongoing but no funds have been invested.

In Addition, the 2004 Memorandum of Agreement includes the \$1,000,000 Development Fund managed directly by Tsawwassen to fund education, training, and business development for Tsawwassen Members specifically for Port related employment and business opportunities. Tsawwassen allocated twenty percent of the fund to education and training while the remainder is allocated for business development. To date, three Members have accessed the development funding. In order for applications to be approved, Members must bring forward plan/proposal to Tsawwassen Loan Committee which is made up of three non-Tsawwassen representatives from banking community for approval. Tsawwassen representatives note that the Port related nature of the Development Fund has limited Members accessing funding for their businesses as not all existing or prospective Tsawwassen businesses have linkages to port activities (Tsawwassen First Nation Representative 2014).

The current tendering process was identified by Tsawwassen representatives as a barrier in securing port related contracts, who indicate that PMV's Procurement policy does not give adequate consideration to the Aboriginal content of a contractor's bid (Tsawwassen First Nation Representative 2014). Consideration of Aboriginal content in the tendering process was identified by Members as best practice in corporate social responsibility used by other major corporations in BC. PMV's Procurement Policy (specifically Appendix 2 – Sustainable Procurement Guidelines, Section 3.0 Aboriginal Procurement) references special treatment in procurement implementation undertaken by PMV for businesses that meet PMV's Aboriginal business definition (Vancouver Port Authority 2013). The Aboriginal component of the Procurement Policy is not mandatory and does not apply to PMV's suppliers.



5.0 MARINE RESOURCE USE

Fishing and seafood harvesting are highly valued in the Tsawwassen community for their economic and social contributions. Tsawwassen representatives highlight that fishing and seafood harvesting bring the community together, support sharing of culture among generations, and provide an opportunity for the transference of knowledge between generations. Salmon especially is very important to the diet and physical health in the community.

Tsawwassen has a commercial fishery for crab and salmon. The commercial salmon fishery is allocated through the Tsawwassen Harvest Agreement (THA) as well as through commercial salmon and crab licences. The THA is referenced under clause 102 of the Fisheries chapter in the TFA, and while it came into effect at the same time as the TFA, it is not part of the TFA. The current term of the THA is 25-years, at which point, the Tsawwassen have the option to renew the agreement for another 15 years. Following that 15 year period, the Tsawwassen have the option to renew the agreement for further 15 year periods in perpetuity (Government of Canada et al. 2010). With one year's notice, any party to the agreement may reduce the commercial allocation percentages, number of licences, or terminate the agreement, with fair recompense to the Tsawwassen (Government of Canada et al. 2010). The THA includes allocations for commercial salmon fishing which are discussed in detail in Section 5.1 below. In addition, the TFA includes provision of the Tsawwassen Commercial Crab Fund and Tsawwassen Commercial Fish Fund for the purpose of increasing the commercial fishing capacity of the Tsawwassen First Nation. While the commercial fishery is not a Treaty right, the commercial fishing right under the THA acknowledges the traditional harvest of crab and salmon by the Tsawwassen, including the trading of fish as part of the traditional economy.

The Tsawwassen Fisheries Department has a food fish program that provides an allocation of salmon to Members each year. In 2013, adult Members were eligible for 15 pieces of Sockeye while children were eligible for 5 pieces through this program (Tsawwassen First Nation Representative 2014). When the salmon return is small and the Tsawwassen allotment is limited, the Tsawwassen Fisheries Department purchases food fish from other Nations and distributes them to the community to allow Members to maintain their diet (Tsawwassen First Nation Representative 2014).

5.1 Fisheries and the Tsawwassen Final Agreement

Under the TFA, the Tsawwassen have the right to harvest fish and crab for domestic (food, social, or ceremonial) purposes in the Tsawwassen Fishing Area and bivalves from the Tsawwassen Intertidal Bivalve Fishing Area (shown in Figure 2). Appendix J of the TFA outlines Tsawwassen's annual allocations for fish and aquatic plants, including Sockeye, Chum, Pink, Chinook, and Coho salmon. Crab is considered a non-allocated species and is regulated through the number of traps per vessel (maximum of 50).

The THA outlines a Commercial Allocation for salmon. Under the current THA, which has a term of 25 years, Tsawwassen is guaranteed 0.78% of the Canadian Total Allowable Catch (CTAC) of Fraser River Sockeye Salmon, 0.78% of Fraser River Pink Salmon, and 3.27% of the Terminal Commercial Catch¹ of Fraser River

¹ The terminal commercial catch for Fraser River Chum salmon means the amount of Fraser River Chum salmon that are available for harvest for commercial, experimental, and demonstration fisheries in Pacific Fisheries Management Area 29 and within the Fraser River, but excludes test fisheries and food, social, and ceremonial fisheries (Government of Canada et al. 2010).



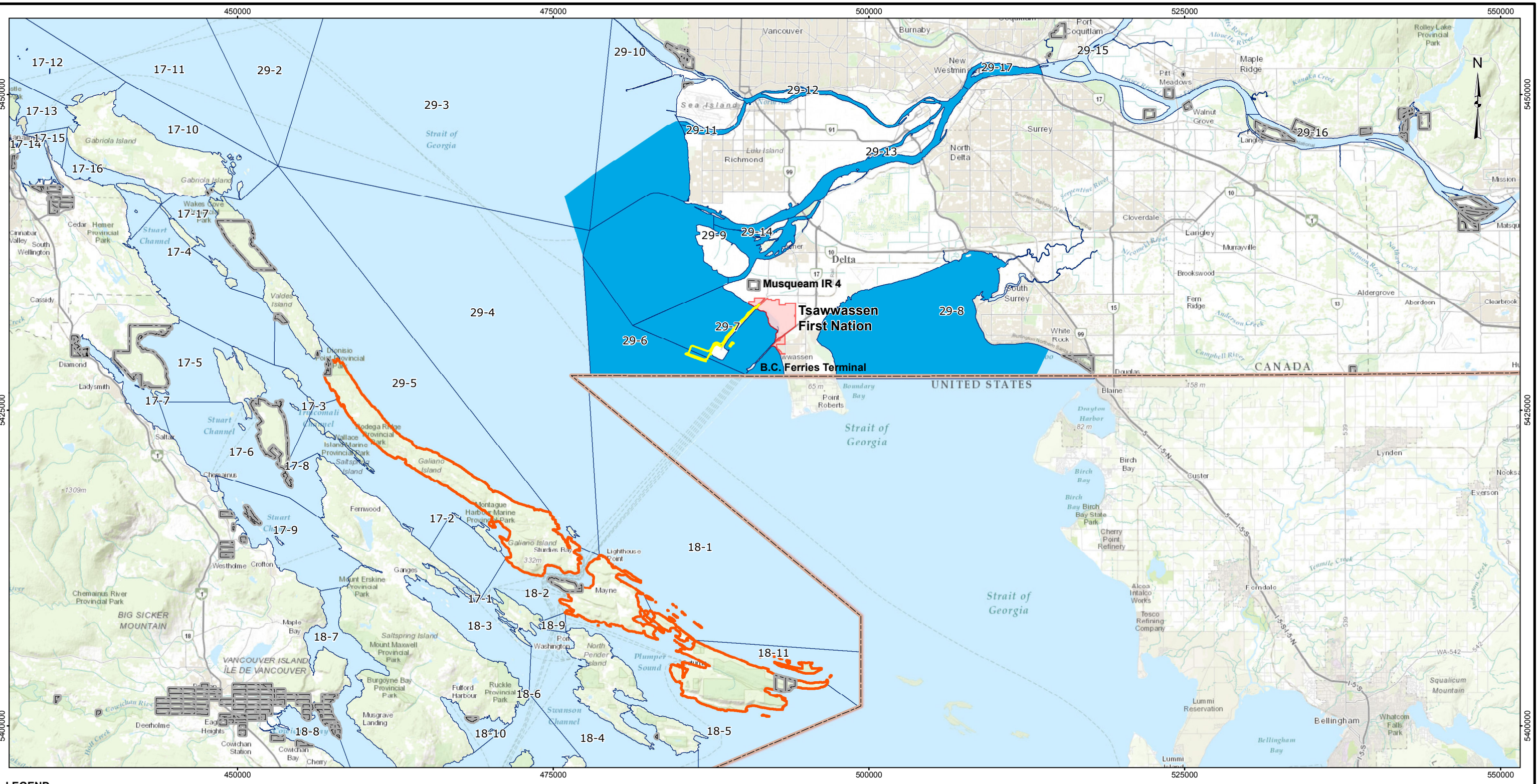
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Chum Salmon (Government of Canada et al. 2010). The THA does not allocate crab for commercial harvesting purposes. The THA provides a process for Tsawwassen to relinquish existing Crab Management Area I or J commercial crab licences in exchange for communal commercial crab licences (Government of Canada et al. 2010).

As indicated in Section 5.0, the through the TFA, Tsawwassen Commercial Fish Fund and Tsawwassen Commercial Crab Fund provides the Tsawwassen with funding to increase the commercial fishing capacity of the Nation. To date, four commercial crab and two commercial salmon licences have been purchased through this fund.

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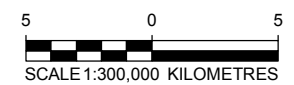


- LEGEND**
- BOUNDARY OF PROJECT AREA
 - TSAWWASSEN FIRST NATION LANDS
 - FIRST NATION RESERVE
 - TSAWWASSEN FISHING AREA
 - TSAWWASSEN INTERTIDAL BIVALVE FISHING AREA
 - DFO FISHERIES MANAGEMENT AREA
 - CANADA/U.S.A BORDER

REFERENCE

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DATUM: NAD83 PROJECTION: UTM ZONE 10



PROJECT	PORT METRO VANCOUVER ROBERTS BANK TERMINAL 2			
TITLE	TSAWWASSEN FISHING AREA AND TSAWWASSEN INTERTIDAL BIVALVE FISHING AREA			
	PROJECT	13-1477-0042	FILE No.	
	DESIGN	AT	27 OCT 2014	SCALE AS SHOWN
	GIS	RH	26 JAN 2015	REV. 0
	CHECK	AT	26 JAN 2015	FIGURE: 2
REVIEW	RS	26 JAN 2015		

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5.2 Fisheries Management

The Tsawwassen Fisheries are managed by the Tsawwassen Natural Resources Department, which are responsible for licencing and enforcement, as well as for a yearly fishing plan, conservation, and consultation with Fisheries and Oceans Canada (DFO) and other First Nations. During the fishing season, Tsawwassen staff conducts random inspections of Tsawwassen fishing vessels to verify compliance with rules and regulations. Seasonal monitors are employed each year to verify the number of fish and crab caught. Under the THA, every fish or crab that is caught is required to be counted, verified, and reported to DFO.

Under the TFA, the Tsawwassen First Nation is required to develop a Tsawwassen Annual Fishing Plan to assist in the planning for Tsawwassen fisheries. To facilitate the planning and management of the Tsawwassen First Nation fishing rights, a Joint Fisheries Committee (JFC) was formed consisting of one representative from each of the federal government, B.C. Government, and Tsawwassen First Nation. The JFC is required to meet a minimum of twice yearly to review the Tsawwassen Annual Fishing Plan and to conduct a postseason review of Tsawwassen First Nation’s fisheries (Blakley et al. 2013).

5.3 Domestic Fishing and Crab Harvesting

The Tsawwassen Fishing Right Allocation for salmon for domestic purposes is calculated based on the CTAC. Therefore if there is a poor salmon return and the CTAC is limited, the Tsawwassen allotment is proportionally limited. Consequently, the success of the salmon fishery in Tsawwassen is directly tied to the strength of the salmon run in the Fraser River each year. For example, the low return of Sockeye in 2009 was considered devastating to the community. The 2010 Sockeye run was the biggest in memory and the community flourished both socially and financially (Tsawwassen First Nation Representative 2014). However, while it is hard on the community when fisheries are closed due to poor returns, there is recognition that it is important to allow fish stocks to rebuild and Tsawwassen works closely with other First Nations in the region to manage the fishery (Tsawwassen First Nation Representative 2014).

Tsawwassen had domestic allocations for Chinook, Sockeye, Coho, Chum and Pink (odd years only) salmon. The final in-season salmon domestic allocation is detailed in Table 11 for 2009-2012.

Table 11: Tsawwassen Final In-Season Domestic Salmon Fishery Allocations, 2009-2012

	2009	2010	2011	2012
Chinook	900	625	625	625
Sockeye	830	15,226	10,894	7,047
Coho	500	500	500	500
Chum	2,576	2,576	2,576	2,576
Pink	2,500	n/a	2,500	n/a

n/a – not applicable
Source: (Blakley et al. 2010, 2011, 2012, 2013)



A crab allocation for domestic purposes is not outlined in the TFA, but under the TFA, each vessel may use up to a maximum of 50 traps to harvest crab. Domestic crab harvesting may occur year-round for domestic purposes, although it is recommended that harvesters reduce fishing effort during the soft-shell period to reduce mortalities of undersized crabs (Blakley et al. 2013). There were four licences issued for domestic crab harvest for the time period from 1 January to 31 December 2012 eligible to target Dungeness, Graceful, and Red Rock crab species traps (Blakley et al. 2013). In 2012, 24,441 Dungeness crab were harvested under domestic licences (Blakley et al. 2013). No Graceful or Red Rock crab species were harvested.

5.4 Commercial Salmon and Crab Harvesting

Each year, DFO issues licences for the THA agreement allocation of Sockeye, Chum, and Pink salmon (odd years only). In 2012, no THA licences were issued for Sockeye or Pink salmon. Tsawwassen was authorized to sell 12,029 Chum salmon in 2012, however only 11,451 were harvested (Blakley et al. 2013). Salmon fishing under the TFA is confined to the Tsawwassen Fishing Area (Government of Canada et al. 2010). Sockeye salmon are harvested in late July and throughout August while the Pink fishery takes place in September and the Chum fishery takes place in October. Members indicate most salmon fishing undertaken by the community takes place at the mouth of the Fraser River, and little salmon fishing occurs in close proximity to the Project (Tsawwassen First Nation Representative 2014). In addition, Tsawwassen currently holds four commercial Area E salmon licences, one of which is tied to an Area D licence. Table 12 below shows the Tsawwassen Salmon Allocation and Harvest information for 2009 to 2012. As the life-cycle of the salmon is four years, the data in Table 12 provides a snapshot of one return year of four different salmon runs in the Fraser River. The salmon harvest and allocation data should therefore not be compared year to year, as the more accurate comparison is four year increments².

Table 12: Tsawwassen Commercial Salmon Allocation and Harvest, 2009-2012

	2009	2010	2011			2012
	Chum	Sockeye	Sockeye	Pink	Chum	Chum
Allocation	8,113	97,981	7,262	64,780	4,220	12,029
Harvest	3,416	98,315	5,337	45,271	2,243	1,720
Sold	-	71,464	1,590	44,449	2,194	171

- Data not available

Source: (Blakley et al. 2010, 2011, 2012, 2013)

Tsawwassen First Nation has four commercial crab licences under the TFA, two of which harvest in in Area I (Tsawwassen First Nation Representative 2014). The Tsawwassen First Nation intends to move the other two crab licences for other management areas to I when the re-selection process occurs in 2016 (Tsawwassen First Nation 2014b). Tsawwassen crab harvesters indicate that the productivity of Area I have been limited over the past two years. While the price of crab is high, the harvest has been too small to be economically viable in Tsawwassen’s opinion, particularly as the price of fuel continues to rise. Concerns have been brought forward

² Comparable data four years prior and following the years shown in Table 12 are not available.



that the Project footprint is located on the prime crab harvesting grounds in Area I. Tsawwassen representatives recommend that female crabs be relocated before construction commences (Tsawwassen First Nation Representative 2014).

5.5 Other Fisheries

Tsawwassen has a small 100lb allocation for eulachon in 2014. The harvested eulachon will be distributed among the Elders in the community. While eulachon is a very important fish culturally to the Tsawwassen, eulachon is considered a species at risk and harvest is subject to conservation restrictions. Even though Tsawwassen's allocation for eulachon is small, it is not always attainable due to conservation concerns.

Tsawwassen is interested in expanding their community fisheries to other species, including prawns, halibut, and shellfish, however the areas where these fisheries occur are located in territories that overlap with other First Nations. Cultural protocols are required to gain permission from other First Nations to fish in overlapped territory. Work on these protocols has been initiated, but they are in the early stages of development.



6.0 GOVERNMENT FINANCE

The TFA requires Tsawwassen, the province of British Columbia and Canada to negotiate and attempt to reach agreement on a Fiscal Financing Agreement (FFA) describing the financial relationship among government parties (Minister of the Department of Indian Affairs and Northern Development et al. 2011). The FFA establishes funding amounts from Canada and British Columbia to Tsawwassen to support agreed-upon government programs and services, as well as TFA implementation activities (Minister of the Department of Indian Affairs and Northern Development et al. 2011). Included in the FFA are terms, conditions, and reporting requirements for transfer payments within includes payments from Canada for federally-supported programs and services, including: education, social development, health, physical works, local government, and non-commercial fisheries. An Own Source Revenue Agreement OSRA, establishes the contribution Tsawwassen makes from their own source revenue for programs and services in the FFA (Minister of the Department of Indian Affairs and Northern Development et al. 2011).

As stipulated in the TFA, Tsawwassen, the province and Canada entered into a Tax Treatment Agreement which establishes the technical tax treatment rules. This agreement is given force and effect under federal and provincial settlement legislation (Minister of the Department of Indian Affairs and Northern Development et al. 2011).

Details of Tsawwassen Government revenues for fiscal years 2010 – 2013 are summarized in Table 13. Transfers received from Aboriginal Affairs and Northern Development Canada were the primary contributor to the total revenues during this period. Other primary revenue sources have varied considerably between fiscal years.

Table 13: Tsawwassen Government Revenues, 2010-2013^a

Revenues (% of total revenues)	Year			
	2010	2011	2012	2013
Total Revenue	32,483,409	19,002,006	15,851,755	7,542,718
Aboriginal Affairs and Northern Development Canada	4,618,032 (14.2%)	12,994,030 (68.4%)	9,455,247 (59.6%)	3,200,282 (42.4%)
Investment Income	71,119 (0.2%)	697,744 (3.7%)	54,988 (0.3%)	1,091,196 (14.5%)
Property Tax	676,844 (2.1%)	684,204 (3.6%)	674,715 (4.3%)	577,553 (7.7%)
Other	630,509 (1.9%)	680,623 (3.6%)	1,170,129 (7.4%)	503,698 (6.7%)
Permit and Registry Fee	211,824 (0.7%)	80,855 (0.4%)	367,471 (2.3%)	364,444 (4.8%)
British Columbia	813,621 (2.5%)	1,623,922 (8.5%)	1,974,927 (12.5%)	317,218 (4.2%)
Lease and Rental	359,833 (1.1%)	367,457 (1.9%)	311,015 (2.0%)	307,927 (4.1%)
Vancouver Port Authority (Port Metro Vancouver)	-	324,461 (1.7%)	811,738 (5.1%)	263,000 (3.5%)
Interest on TFA Receivable	367,678 (1.1%)	322,198 (1.7%)	288,809 (1.8%)	252,271 (3.3%)



18-A EXISTING SOCIAL AND ECONOMIC CONDITIONS OF TSAWWASSEN FIRST NATION COMMUNITY

Revenues (% of total revenues)	Year			
	2010	2011	2012	2013
Economic Development	294,925 (0.9%)	295,011 (1.6%)	161,630 (1.0%)	258,719 (3.4%)
Share of Business Enterprise	57,669 (0.2%)	607,632 (3.2%)	354,378 (2.2%)	209,809 (2.8%)
Housing Program	160,561 (0.5%)	147,373 (0.8%)	129,395 (0.8%)	106,372 (1.4%)
Utilities	73,542 (0.2%)	106,313 (0.6%)	77,289 (0.5%)	77,101 (1.0%)
First Nations Employment Society	272,893 (0.8%)	70,183 (0.4%)	20,024 (0.1%)	13,128 (0.2%)
Ministry of Transportation	804,933 (2.5%)	-	-	-
Tsawwassen Final Agreement	23,069,426 ^b (71.0%)	-	-	-

^(a) Data for fiscal years post Tsawwassen Final Agreement Ratification.

^(b) Funding provided through the Tsawwassen Final Agreement

- No revenues reported.

Source: (Tsawwassen First Nation n.d.b, n.d.c, 2013b)

Expenditures for the years 2010-2013 are summarized in Table 14. Primary expenditures between 2010 and 2013 have been relatively consistent, with majority of expenditures allocated to administration, lands and municipal services and amortization.

Table 14: Tsawwassen Government Expenditures, 2010-2013

Expenditures (% of total expenditures)	Year			
	2010	2011	2012	2013
Total Expenditures	10,309,210	7,220,619	9,997,474	11,616,935
Administration	2,258,066 (21.9%)	2,492,026 (24.4%)	2,696,996 (25.9%)	3,084,138 (26.5%)
Lands and municipal	2,642,695 (25.6%)	2,609,670 (12.6%)	2,886,788 (27.7%)	2,993,641 (25.8%)
Amortization	1,345,058 (13.0%)	1,274,986 (12.5%)	1,257,722 (12.1%)	1,322,031 (11.4%)
Education	680,797 (6.6%)	1,072,765 (10.5%)	1,035,281 (9.9%)	1,041,536 (9.0%)
Social Development	674,892 (6.5%)	385,396 (3.8%)	418,154 (4.0%)	539,566 (4.6%)
Health	-	306,039 (3.0%)	311,964 (3.0%)	272,594 (2.3%)
Economic Development	708,931 (6.9%)	807,809 (7.9%)	898,451 (8.6%)	822,174 (7.1%)
Share of Business enterprise loss	-	-	-	720,955 (6.2%)



18-A EXISTING SOCIAL AND ECONOMIC CONDITIONS OF TSAWWASSEN FIRST NATION COMMUNITY

Expenditures (% of total expenditures)	Year			
	2010	2011	2012	2013
Taxation	-	680,623 (6.7%)	424,280 (4.1%)	343,466 (3.0%)
Distribution and Community Benefits	535,540 (5.2%)	273,280 (2.7%)	262,500 (2.5%)	252,029 (2.2%)
Housing Program	135,031 (1.3%)	157,678 (1.5%)	106,952 (1.0%)	114,776 (1.0%)
Interest on final agreement debt payable	153,514 (1.5%)	140,600 (1.4%)	125,653 (1.2%)	110,029 (0.9%)
Fisheries	872,317 (8.5%)	-	-	-
Employment	302,369 (2.9%)	-	-	-

^(a) Data for fiscal years post Tsawwassen Final Agreement Ratification.
 - No expenditures reported.

Source: (Tsawwassen First Nation n.d.b, n.d.c, 2013b)



7.0 SERVICES AND INFRASTRUCTURE

7.1 Housing

7.1.1 Housing Type

There are four types of housing on Tsawwassen Lands:

- Member owned Community Housing;
- Government Rental Housing;
- Social Housing; and
- 99-year leasehold market housing.

Community housing on Falcon Way and Tsawwassen Drive is the primary place of residence for Tsawwassen Members living on Tsawwassen Lands. There are 70 Member owned homes on Falcon Way and Tsawwassen Drive. These homes are privately owned by Members, but there are restrictions as to whom these homes can be transferred to (Tsawwassen First Nation Representative 2014). Under the *Lands Act*, the Member owned community housing on Tsawwassen Drive and Falcon Way are considered Tsawwassen Fee Simple Interests that can only be held by Tsawwassen Members. While homes are owned by Members, they can be rented to others. As this type of rental is private, there is no formal tracking of the number of rental homes, however, according to the Tsawwassen Quality of Life report, 50% of Members living on Tsawwassen Lands rent their homes (Tsawwassen First Nation Representative 2014).

The Tsawwassen Government owns and rents four farm houses, acquired by the Government as part of the TFA, but only one is rented to a Tsawwassen Member.

The Tsawwassen social housing program provides rental housing to Members in need at a cost based on their income. Currently, there are 18 social housing units, 12 of which are single family homes while the remaining six are a sixplex multi-family dwelling. All of the social housing units are occupied. Currently, there are six families on the wait list for social housing. As there is little turn-over in the rental housing, the wait for social housing can be extremely long. Once a home is rented through the social housing program to the same Member for 25 years, the home is considered owned and is no longer part of the social housing stock (Tsawwassen First Nation Representative 2014).

In addition, the Tsawwassen have developed market housing as part of their economic development initiatives. These homes are sold on the open market through 99-year leases on Treaty Lands in which the Tsawwassen have taxation authority. Most of these houses are not owned by Members. Currently, there are three completed developments, Tsatsu Shores a four story condominium complex with 81 units and approximately 200 residents, Stahaken, a single family dwelling neighbourhood with 73 lots and approximately 200 residents, and Tsawwassen Beach Lots, a single family dwelling neighbourhood with 25 lots, and approximately 60 residents (Tsawwassen First Nation and AECOM 2009). Currently, a new market housing development, Tsawwassen Shores, is under construction on Tsawwassen Lands. The Tsawwassen Shores is a market housing development which includes 42 lots over two phases (Aquilini Development and Construction Inc. n.d.).



18-A EXISTING SOCIAL AND ECONOMIC CONDITIONS OF TSAWWASSEN FIRST NATION COMMUNITY

There are few vacant homes in the Tsawwassen Community Housing, but vacant lots are available for sale to Members. As a result, if Members want to move onto Tsawwassen Lands, new homes need to be constructed. Even for Members who already own land, there are a number of barriers associated with construction identified by Tsawwassen representatives, including:

- Pre-construction costs to prepare lots for construction, including:
 - Soil filling;
 - Geotechnical analysis; and
 - Land survey.
- Qualifying for a mortgage:
 - Completion of construction required before the bank will approve the mortgage, including the foundation (4 step process);
 - Down payment for home construction; and
 - The Tsawwassen Government is required to guarantee the mortgage (Tsawwassen First Nation Representative 2014).

Limited availability of community housing units and limited rental housing are barriers to Members wishing to move on to Tsawwassen Lands.

7.1.2 Housing Conditions

Adequate housing is defined by the Canadian Mortgage and Housing Agency (CMHC) as housing that does not require major repairs according to residents (CMHC 2014). The 2012 Tsawwassen Social Well-being Study suggests that 30% of Members living on Tsawwassen Lands believe their homes require major repairs and therefore are considered to have inadequate housing. In comparison, the 2011 NHS data for the surrounding region suggests substantially lower percentages of home requiring major repair (Table 15).

Table 15: Housing Quality [%]

	Tsawwassen (on Lands) ^(a)	Aboriginal Corporation of Delta ^(b)	Total Corporation of Delta ^(b)	Aboriginal Metro Vancouver ^(b)	Total Metro Vancouver ^(b)
No repairs or minor repairs needed	70	92.3	94.0	88.8	93.4
Major Repairs needed	30	8.4	6.4	12.6	7.1

^(a) Data for 2012

^(b) Data from 2011

Source: (Tesluk, Jordan and Matthews, Ralph n.d., Statistics Canada 2013a, b, c)



18-A EXISTING SOCIAL AND ECONOMIC CONDITIONS OF TSAWWASSEN FIRST NATION COMMUNITY

As housing is primarily privately owned, there is no formal tracking of the types of major repairs needed for housing. Members can apply for a grant to support the cost of major repairs once every 15 years. Flooding is a common concern brought forward by Members to the Lands Department. Many of the older homes in the community were built low and are susceptible to flooding.

Social housing is inspected each year by the Lands Department. Currently, Tsawwassen representatives estimate that 60% of social housing is in need of repair, including painting, and new flooring (Tsawwassen First Nation Representative 2014). Major problems requiring repair include defective plumbing or electrical wiring, and structural repairs, which are all are funded through the CMHC. Repairs considered “cosmetic” (e.g., flooring, painting) are not covered by CMHC funding (Tsawwassen First Nation Representative 2014).

7.1.3 Ownership

While most of the community housing on Tsawwassen Lands is considered owned, approximately 50% of Tsawwassen Members living on Tsawwassen Lands rent their homes privately from other Members (Tesluk, Jordan and Matthews, Ralph n.d.). This is similar to the average for Aboriginal people in Metro Vancouver, but substantially lower than the averages for the Corporation of Delta, Aboriginal people living in the Corporation of Delta, and Metro Vancouver (Table 16).

Table 16: Housing Ownership Profile

	Tsawwassen (on Lands) ^(a)	Aboriginal Corporation of Delta ^(b)	Corporation of Delta ^(b)	Aboriginal Metro Vancouver ^(b)	Total Metro Vancouver ^(b)
Rent	51	60.9	19.0	55.1	34.5
Own	49	39.1	81.0	43.8	65.5
Band Housing	0	0	0	1.1	0.04

^(a) Data for 2012

^(b) Data from 2011

Source: (Tesluk, Jordan and Matthews, Ralph n.d., Statistics Canada 2013a, b, c)

While there are vacant lots available for sale to Members, barriers to construction, as identified above, prevent many Members from building.

7.1.4 Housing Affordability

Affordable housing is defined by the CMHC as total housing cost that is less than 30% of before tax household income. For renters, housing cost includes rent as well as payment for electricity, fuel, water, and municipal services, while for owners, includes mortgage payments, property tax, condominium fees, as well as payment for electricity, fuel, water, and municipal services (CMHC 2014). The 2012 Tsawwassen Social Well-being Study indicates that 11% of Tsawwassen Members living on Tsawwassen Lands lack affordable housing while 13% are at risk of lacking affordable housing (Tesluk, Jordan and Matthews, Ralph n.d.). Inversely, compared to Delta and Metro Vancouver, the proportion of Tsawwassen Members living on Tsawwassen Lands with access to affordable housing is substantially higher (23.5% of Delta’s Aboriginal population, 40.4% Metro Vancouver’s



Aboriginal population and 33.4% of Metro Vancouver's total population lack affordable housing) (Tesluk, Jordan and Matthews, Ralph n.d., Statistics Canada 2013a, b, c).

Community housing on Tsawwassen Lands is considered affordable for those who are currently housed on Lands, however affordability is an issue for those looking to move into the community (Tsawwassen First Nation Representative 2014). Many Members live in the surrounding communities as opposed to their preference of living in the community due to the challenges associated with building new housing on Lands. Rental family homes in the surrounding communities such as Delta and Ladner are often very expensive.

Those living in social housing units in the community pay rent proportional to 25% of their income while those living on pension pay 12.5% of the pension. All social housing tenants are required to pay for their own utilities. As social housing becomes owned once it is rented to the same Member for 25 years, there is concern among some residents that when they come to own their unit, they will be responsible for repair and maintenance, including cost (Tsawwassen First Nation Representative 2014).

7.1.5 Housing Plans and Development

The Tsawwassen Land Use Plan (2009) provides a general statement of the broad objectives guiding the long term vision of land use of Tsawwassen Lands. The land use plan includes eight land use designations that apply to Tsawwassen Lands including designations for the Tsawwassen community (for Tsawwassen Members) and Residential/Commercial Enterprise.

The Land Use Plan identifies 48 ha of land for the Tsawwassen community, including 65 existing residential housing units for Tsawwassen Members (Tsawwassen First Nation and AECOM 2009). While further development of housing in the Tsawwassen Community Area will depend on certain factors, including willingness of Members to sell their land to other Members, the plan provides for a density of 15 units per ha or approximately 720 units housing 1,800 Members (Tsawwassen First Nation and AECOM 2009). The Tsawwassen Lands Department are currently developing a specific neighbourhood plan for the Tsawwassen Community Area (Tsawwassen First Nation Representative 2014).

The Tsawwassen Residential/Commercial Enterprise Area Neighbourhood Plan (2011) details the framework established for Residential/Commercial Enterprise Area zoning in the Land Use Plan. This plan permits three kinds of residential housing types in areas designated as Residential, including singled detached, townhome, and apartment. Based on the area of land zoned as residential, the total estimated number of potential housing units is 1,864 of which 1,584 are single detached or townhomes while the remaining 280 are apartments (Tsawwassen First Nation 2011). The Tsawwassen Shores is a market housing development that includes developing 42 lots over two phases (Aquilini Development and Construction Inc. n.d.).

7.1.6 Housing Needs Projections

The Metro Vancouver Regional Growth Strategy includes a projected total number of dwelling units in Metro Vancouver in 2021, 2031, and 2041. The number of dwelling units predicted for Tsawwassen Lands includes both Member homes and market housing.



18-A EXISTING SOCIAL AND ECONOMIC CONDITIONS OF TSAWWASSEN FIRST NATION COMMUNITY

Table 17: Projected Total Dwelling Units, Tsawwassen Lands

	2006	2021	2031	2041
Tsawwassen Lands	300	1,900	2,900	4,400

Source:(Metro Vancouver 2010)

In addition, the Metro Vancouver Regional Growth Strategy includes projected housing demand in 2021 for owned and rental dwellings for the general population. In Tsawwassen, the total demand is projected to be 700 housing units by 2021. Of these units, 500 are expected to be owned while 200 are rental. All of the rental units are expected to be affordable rental units, not market rental. Half are expected to be for low income households while the other half are moderate income rentals.

Table 18: Municipal Estimated Housing Unit Demand 2021 by Household Income Status

	Total Demand	Ownership Demand	Rental Demand	Total Affordable Rental	Low income rental	Moderate income rental	Market rental
Tsawwassen First Nation	700	500	200	200	100	100	0
Corporation of Delta	3,000	1,900	1,100	800	400	400	300
Metro Vancouver	185,600	120,700	64,900	46,800	21,400	25,400	18,100

Source:(Metro Vancouver 2010)

7.1.7 Housing Issues

Key housing issues identified by Tsawwassen representatives include:

- If Members do not own land, it is hard to move onto Tsawwassen Lands as there is little to no rental housing. This is a barrier for Members who want to move back to the community with the intention of finding employment. Members have stated in the past that their interest in pursuing employment at Roberts Bank port operations is linked to their desire to move back to Tsawwassen Lands.
- The market housing that is available on Tsawwassen Lands is expensive and out of reach for many Members.
- There are lots for sale to Members, but due to the barriers to construction, not many Members attempt to build.
- There are few housing options for youth who want to move out of their parent's homes.
- Barriers to social housing include a general lack of this housing type. There are plans to build additional social housing units, but none are in the developmental stage.



7.2 Water and Waste Infrastructure

Drinking water is provided to Tsawwassen through the Metro Vancouver drinking water system. New water piping infrastructure will be required to connect the new developments on Tsawwassen Lands to the Metro Vancouver water network, including upgrades to the Metro Vancouver connection points (Tsawwassen First Nation Representative 2014). Tsawwassen is aware of the required upgrades and will address the needs with Metro Vancouver as they further their community planning (Tsawwassen First Nation Representative 2014).

Waste water is currently treated at an existing sewer plant on Tsawwassen Lands. A new sewer plant is currently planned for construction on Tsawwassen Lands and is expected to be operational by 2015 (Tsawwassen First Nation 2013c). The new plant will service Tsawwassen Lands and developments specifically, however, Tsawwassen representatives indicated that the plant could be expanded to create more capacity if needed (Tsawwassen First Nation Representative 2014).

Tsawwassen currently has a Drainage and Irrigation Service Agreement in place with the Corporation of Delta. This agreement outlines maintenance responsibility for existing drainage and cost sharing agreements for new drainage infrastructure (Urban Systems 2013). Rainwater management is addressed by Metro Vancouver through the Greater Vancouver Sewerage and Drainage District (Urban Systems 2013).

Currently, solid waste is collected from the Tsawwassen Community housing and Administration by Waste Management of Canada. The three leasehold strata developments are responsible for their own waste collection and disposal (Tsawwassen First Nation Representative 2014). Waste collected by Waste Management Canada is disposed of in one of the Metro Vancouver waste management sites. Construction waste is the responsibility of developers. Tsawwassen representatives indicate while current waste management services meet the needs of the Tsawwassen community and Administration, services will need to grow and expand as the community grows (Tsawwassen First Nation Representative 2014).

Tsawwassen currently does not supply municipal services to the Roberts Bank Facilities.

7.3 Health and Social Services

7.3.1 Health and Social Services in Community

The Tsawwassen First Nation provides public health, counselling, and family support services to the following groups:

- Status and non-Status Tsawwassen Members living on Tsawwassen Lands;
- Status First Nations who are not Tsawwassen Members but live on Tsawwassen Lands; and
- On Lands “Indian Families” where one adult is a Status First Nation, but not necessarily a Tsawwassen Member (Tsawwassen First Nation Representative 2014).

Counselling and family support services are also provided to Members who live off lands, in close proximity to Tsawwassen Lands (e.g. Delta) but not to Members who are geographically distant from Tsawwassen Lands. Social assistance is only provided to on-Lands Members regardless off-lands Members’ proximity to



Tsawwassen (Tsawwassen First Nation Representative 2014). Tsawwassen works with the Ministry of Child and Family Development, Fraser Health Authority, and the First Nations Health Authority to integrate and coordinate provision of services to Members between the different organizations (Tsawwassen First Nation Representative 2014).

Primary health care (i.e. family doctor) is not available on Tsawwassen Lands. Eighty-four percent of Members living on Tsawwassen Lands reported having a regular doctor, while 74% of all members reported they never have problems accessing routine medical care (Tesluk, Jordan and Matthews, Ralph n.d.). All emergency health and hospital services and secondary health services such as dental, vision care, and prescription drugs are accessed off Lands, primarily in Delta.

Tsawwassen also maintains a number of community facilities that support community health and well-being, including the Tsawwassen Youth Centre, Recreation Centre, and Elders Centre. The Recreation Centre provides a venue for community gatherings, and indoor sport activities. The Youth Centre is home to youth programming in the community and includes an outdoor skate park, pool table, TV, and computer room. The Elders Centre provides a place for Tsawwassen Elders to meet, socialize, and participate in activities, including Elders lunches (Tsawwassen First Nation 2014b).

7.4 Emergency Services

7.4.1 Emergency Services in Community

Emergency police and fire services are provided through the Delta Municipal forces, the Delta Police Department and Delta Fire while ambulance service is provided by BC Ambulance. Tsawwassen signed five-year term agreements with these providers to meet the capacity demands in their community.

Delta Police respond to serious policing concerns on Tsawwassen Lands, including breaches of the Criminal Code and respond to 9-1-1 calls within the community (Tsawwassen First Nation n.d.d). There is also a Peace Officer and two bylaw officers employed by the Tsawwassen First Nation.

The role of the Peace Officer is to enforce Tsawwassen Law or regulations. The Peace Officer responds to non-urgent complaints or concerns within the community such as noise, vandalism, dumping, or nuisances. The Peace Officer can also issue tickets under Tsawwassen Acts, including the Fisheries, Wildlife, Migratory Birds and Renewable Resources Acts, as well as the Fisheries Regulation (Tsawwassen First Nation n.d.d). The Peace Officer works closely with the Delta Police but is not integrated into their organization.

The closest fire hall to the Tsawwassen community is Hall 2, which is located approximately seven minutes away. Hall 2 is staffed by three firefighters and one officer 24 hours a day, seven days a week and has two engines (Delta Fire n.d.).

Tsawwassen representatives indicate that as the community grows, there is recognition of the need to expand services, however no plans in place to date (Tsawwassen First Nation Representative 2014).



8.0 MARINE AND LAND-BASED OUTDOOR RECREATION

8.1 Marine based recreation

The Tsawwassen currently hold evergreen lease water lots on the waterfront directly adjacent to the Treaty Lands (Figure 3) and two lots adjacent to the Roberts Bank Causeway³ (Tsawwassen First Nation Representative 2014). The water lots are primarily recreational in nature and are not used for commercial purposes. No docks, facilities, or infrastructure exist at these sites, but the foreshore and waters of these lots are regularly used by Members.

The Tsawwassen have an ocean going canoe that is used for ocean and river journeys. The canoe is launched from the beach on the south side of the Ferry causeway. From the launch location, the team often paddles to Canoe Pass for river based journeys. Currently, the route from the boat launch to Canoe Pass traverses through the footprint of the proposed Roberts Bank Terminal 2 Project (Figure 3). As the waters in and around the Tsawwassen community are very shallow, followed by a steep drop-off and a busy shipping lane, the Canoe Skipper must direct the canoe in a path that avoids the shallow waters as well as the busy vessel traffic. Tsawwassen representatives identified concern about the safety of the Canoe Team if vessel traffic increases with the Roberts Bank Terminal 2 Project.

Tsawwassen does not have a dock on their Lands, so public docks on the Ferry Causeway and Brunswick Point in Canoe Pass are used by both Tsawwassen fishers and recreational users (Figure 3). Both docks are very busy, especially in the summer.

8.2 Land Based Recreation

The outer sea dike on the Tsawwassen waterfront is commonly used for walking, running, biking, and duck hunting. A trail along the dike starts at a gate near Highway 17 and continues to Canoe Pass (Figure 3). As the Deltaport causeway transects the trail mid-way, recreational users must cross both the Deltaport Causeway and the railroad tracks in order access the second half of the trail. While the crossings have the required safety precautions for highway and rail rights of way, there is no marked crossing for recreational users. Tsawwassen representatives expressed concern regarding safety at the rail crossing as recreational users cross the tracks at unmarked crossings. The visibility of oncoming trains in the vicinity of the dike trail is limited which further increases concern regarding safety.

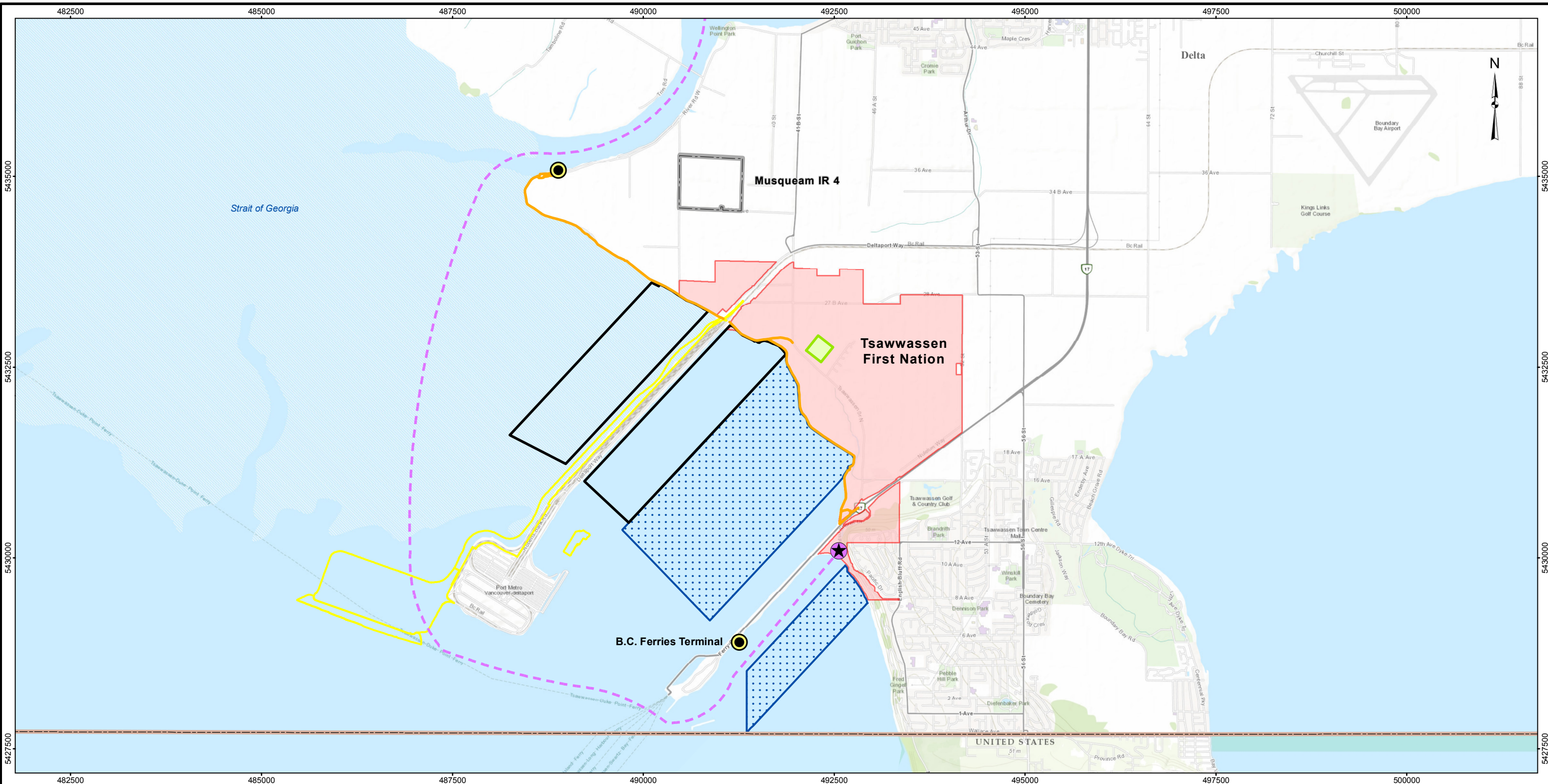
The water lots on the south side of the Deltaport causeway are popular places for dog walking and bonfires. These areas are used both by Tsawwassen Members and the broader community.

Plans are underway to build a sports field on the north section of Tsawwassen Drive (Figure 3). This project is part of the Tsawwassen Government's Capital Plan and is a development priority of the Legislative Assembly (Tsawwassen First Nation Representative 2014). Other future plans include construction of the Great Blue Heron Way, a multi-use trail proposed along Tsawwassen Drive which would connect the community to the other walkways on the Experience the Fraser Project. This walkway would cater to all forms of non-motorized travel (Tsawwassen First Nation Representative 2014).

Tsawwassen currently has a five-year agreement in place with the Corporation of Delta to allow Members to access pools and other recreational facilities in Delta as none of these types of indoor recreational facilities currently exist on Tsawwassen Lands.

³ The water lots adjacent to the Roberts Bank Causeway are currently pending transfer of possession from PMV as part of the 2004 Settlement Agreement

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LEGEND	
	BOUNDARY OF PROJECT AREA
	TSAWWASSEN FIRST NATION LANDS
	INDIAN RESERVE
	TSAWWASSEN FIRST NATION WATER LOTS
	CROWN FEDERAL LANDS TO BE TRANSFERRED, ASSIGNED OR SUBLEASED TO TSAWWASSEN FIRST NATION
	FUTURE SPORTS FIELD
	CANOE ROUTE
	WALKING TRAIL
	CANADA/U.S.A BORDER
	CANOE LAUNCH
	DOCK

REFERENCE
 FUTURE WATER LOT BOUNDARIES OBTAINED FROM WORLEY PARSONS. RECREATION DATA OBTAINED BY GOLDER ASSOCIATES LTD. THROUGH INTERVIEWS WITH TSAWWASSEN FIRST NATIONS, 2014. TSAWWASSEN FIRST NATION LANDS, WATER LOTS AND FIRST NATION RESERVES OBTAINED FROM THE PROVINCE OF BRITISH COLUMBIA, COPYRIGHT © 2014. PROVINCE OF BRITISH COLUMBIA. BASE DATA OBTAINED FROM ESRI, HERE, DELORME, TOMTOM, INTERMAP, INCREMENT P CORP., GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDNANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA, SWISSTOPO, MAPMYINDIA, © OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY.
 DATUM: NAD83 PROJECTION: UTM ZONE 10



PROJECT		PORT METRO VANCOUVER ROBERTS BANK TERMINAL 2	
TITLE		TSAWWASSEN FIRST NATION OUTDOOR RECREATION	
	PROJECT	13-1477-0042	FILE No.
	DESIGN	AT 27 OCT 2014	SCALE AS SHOWN
	GIS	RH 26 JAN 2015	REV. 0
	CHECK	AT 26 JAN 2015	FIGURE: 3
REVIEW	RS 26 JAN 2015		

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8.3 Commercial Land Based Tourism

Tsawwassen First Nations representatives did not identify any commercial land or marine based tourism activities (Tsawwassen First Nation Representative 2014).

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APPENDIX 18-B
Existing Social and Economic Conditions of
Musqueam First Nation Community

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March 9, 2015

ROBERTS BANK TERMINAL 2 PROJECT

18-B Existing Social and Economic Conditions of Musqueam First Nation Community

Submitted to:
Musqueam First Nation
6735 Salish Drive
Vancouver, BC
V6N 4C4

Port Metro Vancouver
100 The Pointe, 999 Canada Place
Vancouver, BC Canada V6C 3T4

REPORT



Report Number: 1314770042-087-R-Rev1

Distribution:

1 copy - Port Metro Vancouver
2 copies - Musqueam First Nation
2 copies - Golder Associates Ltd.





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1.0 INTRODUCTION

1.1 Objectives

The objective of the Existing Social and Economic Conditions of Musqueam First Nation Community Study (the “Study”) is to describe the social and economic conditions of Musqueam First Nation (the “Musqueam”) to inform the Roberts Bank Terminal 2 Project (the “Project”) Environmental Impact Statement (EIS). The data and perceptions obtained through this study informed the following Economic and Socio-Economic EIS Sections:

- EIS Section 19 Labour Market;
- EIS Section 20 Economic Development;
- EIS Section 21 Marine Commercial Use;
- EIS Section 22 Local Government Finances;
- EIS Section 23 Services and Infrastructure; and
- EIS Section 24 Outdoor Recreation.

This study was completed by Golder Associates Ltd. (Golder) in collaboration with the Musqueam First Nation (Musqueam) and support from Port Metro Vancouver (PMV) as outlined in the “Musqueam Indian Band Community Assessment Work Plan” (Port Metro Vancouver 2013). Golder would like to acknowledge Sandra Fossella (Musqueam Community Researcher) for her contribution to this study and report.

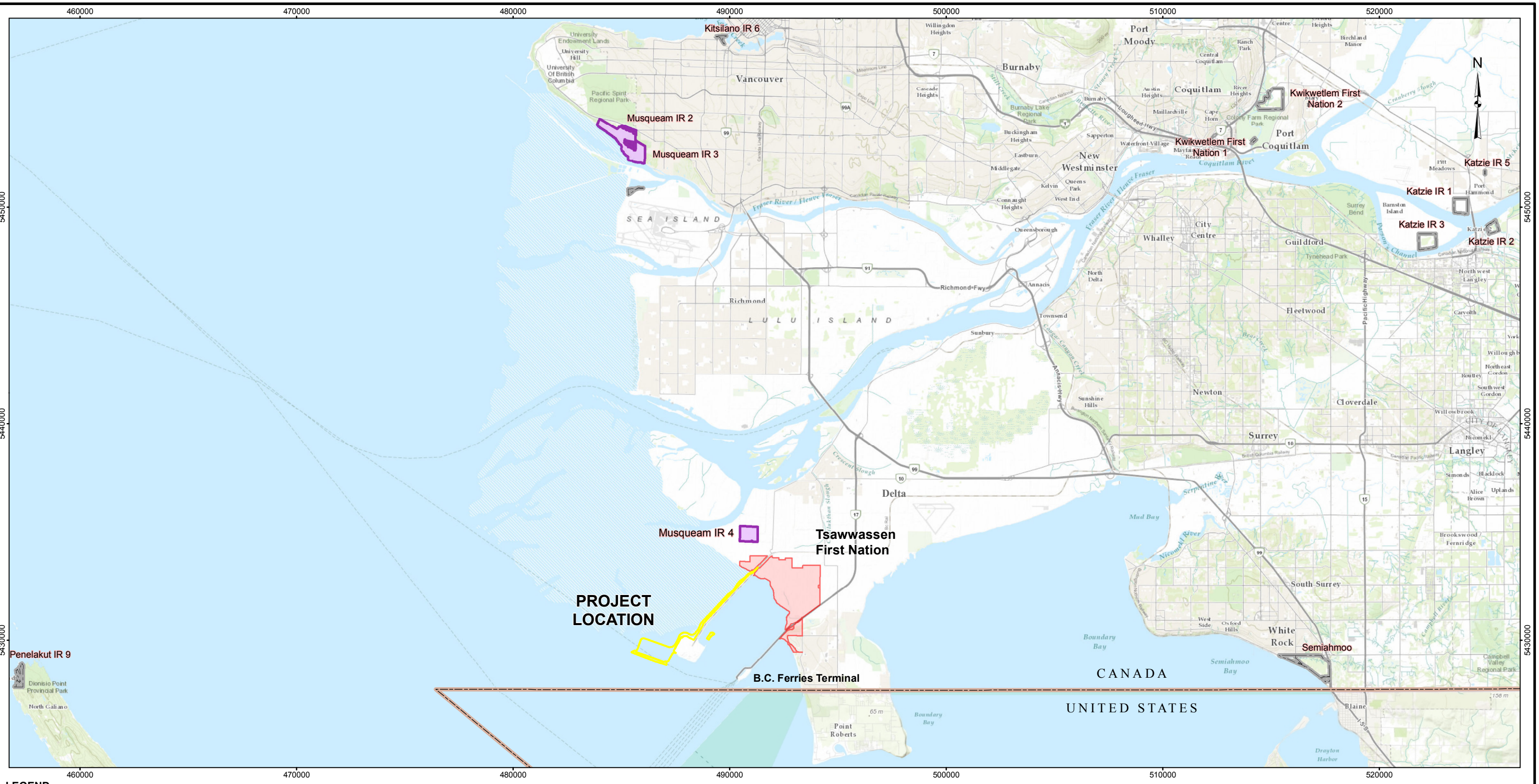
1.2 The Roberts Bank Terminal 2 Project and Musqueam First Nation

The Project is a proposed three-berth marine container terminal that would provide additional container shipping and handling capacity on the west coast of Canada. There are currently four terminals with container handling infrastructure located within the boundaries of Port Metro Vancouver: Deltaport Terminal (currently Canada’s largest container terminal), Fraser Surrey Docks, Vanterm and Centerm. The Project is part of PMV’s Container Capacity Improvement Program (CCIP), which is PMV’s strategy to help meet anticipated demand for container capacity in BC until 2030.

Please refer to Figure 1 showing the location of Musqueam’s IRs 2, 3, and 4 in relation to the Project.

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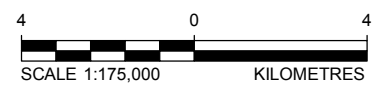


- LEGEND**
- BOUNDARY OF PROJECT AREA
 - MUSQUEAM INDIAN RESERVE
 - TSAWVASSEN FIRST NATION LANDS
 - FIRST NATION RESERVE
 - CANADA/U.S.A BORDER

REFERENCE

TSAWVASSEN FIRST NATION LANDS AND FIRST NATION RESERVES OBTAINED FROM THE PROVINCE OF BRITISH COLUMBIA, COPYRIGHT © 2014. PROVINCE OF BRITISH COLUMBIA. ALL RIGHTS RESERVED. BASE DATA OBTAINED FROM ESRI, HERE, DELORME, TOMTOM, INTERMAP, INCREMENT P CORP., GEBCO, USGS, FAO, NPS, NRCAN, GEOBASE, IGN, KADASTER NL, ORDANCE SURVEY, ESRI JAPAN, METI, ESRI CHINA, SWISSTOPO, MAPMYINDIA, © OPENSTREETMAP CONTRIBUTORS, AND THE GIS USER COMMUNITY

DATUM: NAD83 PROJECTION: UTM ZONE 10



PROJECT		PORT METRO VANCOUVER ROBERTS BANK TERMINAL 2	
TITLE		MUSQUEAM INDIAN RESERVES AND THE PROJECT	
	PROJECT	13-1477-0042	FILE No.
	DESIGN	AT 27 OCT 2014	SCALE AS SHOWN
	GIS	RH 28 JAN 2015	REV. 0
	CHECK	AT 28 JAN 2015	FIGURE: 1
REVIEW	RS 28 JAN 2015		

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1.3 Study Methods

The following steps were implemented to complete the study:

- Introductory Meeting with Musqueam representatives to provide an overview of the Economic and Socio-community Assessment for the Project as well as discuss Musqueam's interest in and areas for collaboration on the existing socio-economic conditions study (the study).
- Following the meeting, Golder worked with Musqueam representatives to finalize the study scope and work plan.
- During the introductory meeting, Musqueam expressed an interest for a Musqueam Community researcher to work with Golder on the study.
- Golder provided training and capacity development to a Musqueam Community researcher. A full day training session was held with the Musqueam Community researcher to introduce the Project, describe the objectives of the study, and discuss the data collection approaches and methods. Throughout the data collection process, Golder provided mentoring, advice and skill development to the Musqueam Community researcher.
- Golder worked with the Musqueam Community researcher to collect primary and secondary data:
 - Secondary information was gathered through publically available sources including:
 - Musqueam First Nation Website;
 - Documents produced by Musqueam First Nation;
 - Musqueam First Nation's Newsletters;
 - Musqueam Comprehensive Land Claim (1984);
 - R. v. Sparrow [1990];
 - Comprehensive Fisheries Agreement; Amendment;
 - Cohen Commission: Commission of Inquiry into the Decline of Sockeye Salmon in the Fraser River, Final Report, Vols. 1, 2, 3;
 - *Contemporary Musqueam Use of the South Fraser Delta*: Preliminary Draft (2014), prepared by Woolman;
 - Reconciliation, Settlement and Benefits Agreement (signed 2008 by Musqueam and British Columbia);
 - Legislation (e.g., *Indian Act*);
 - Statistics Canada Census Community profile (Census profile data on Musqueam First Nation IR 2 were considered, however, a low response rate of 32% in the latest 2011 Household Survey is noted);
 - National household survey profiles (Statistics Canada); and
 - Local Media articles.



- Primary data was collected through interviews with Musqueam departmental representatives to clarify information obtained from secondary literature, and to acquire additional information. The following topics were discussed through interviews:
 - Housing;
 - Economic Development;
 - Outdoor Recreation;
 - Training and Education;
 - Services and Infrastructure;
 - Fisheries; and
 - Jobs and Employment.

The Community researcher identified community members knowledgeable about key areas of interest and scheduled one hour interviews with each. A Golder representative and the Community researcher attended each interview. Golder provided interview notes back to the Community researcher and persons who participated in interviews to confirm the content. Results from interviews comprised primary data sources for this report.

- Golder drafted the “Existing Social and Economic Conditions of the Musqueam First Nation Community” Report.
- Golder provided the draft report to the Musqueam for review and comment.

In January 2014, Golder received a Musqueam research permit (titled “Agreement to Conduct Research Within Musqueam Traditional Lands”) from PMV (who had received the permit from the Musqueam First Nation), for conducting research with the Musqueam First Nation for the existing social and economic conditions study. On January 28, 2014, Golder signed this research permit and provided a sign copy to Musqueam. On May 15, 2014, PMV received from Musqueam First Nation, and provided to Golder, a Research Permit titled “Musqueam Indian Permit to Conduction Research Within Musqueam Traditional Territory” (Permit Number MIB-14-112-MB).



2.0 EXISTING CONDITIONS

2.1 Introduction: Musqueam First Nation

The Musqueam Declaration dated June 10, 1976 states:

“We, the Musqueam people openly and publicly declare and affirm that we hold aboriginal title to our land, and aboriginal rights to exercise use of our land, the sea and fresh waters, and all their resources within that territory occupied and used by our ancestors, namely:

- The lands, lakes and streams defined and included by a line commencing at Harvey Creek in Howe Sound and proceeding Eastward to the height of land and continuing on the height of land around the entire watershed draining into English Bay, Burrard Inlet and Indian Arm;
- South along the height of land between Coquitlam River and Brunette River to the Fraser River, across to the South or left bank of the Fraser River and proceeding downstream taking in the left Bank of the main stream and the South Arm to the sea, including all those intervening lands, islands and waters back along the sea shore to Harvey Creek;
- AND the sea, its reefs, flats, tidal lands and islands adjacent to the above described land and out to the centre of Georgia Strait.

We, the Musqueam people, are members of the Musqueam Indian Band and/or persons of one quarter Musqueam Indian Ancestry descended from those həŋqəmihəm speaking people who from time immemorial occupied used and gained their livelihood from those lands, waters and seas described above” (Musqueam First Nation 2011a).

Musqueam’s asserted traditional territory includes all of present day Vancouver, extending north-west up Howe Sound and east up the Fraser Valley. The First Nation’s ancient name is xʷməθkʷəy̓əm, and means “People of the River Grass and relates back to the grass (məθkʷay) that grows in the Fraser Estuary in the tidal flats and marshes” (Musqueam First Nation 2011a:38, b). Musqueam Members have lived, and continue to live, on the banks of what is currently known as the Fraser River for thousands of years, with fishing central to their way of life. Historically they travelled, traded and inter-married with Nations up and down the coast of present day British Columbia and in Washington State (Musqueam First Nation 2011a).

First recorded contact with non-Aboriginal peoples occurred in 1791 and 1792 and settlement was established by the mid-1800s. Over time, three small parcels of reserve lands have been set aside for Musqueam Members. Today, Musqueam’s three reserves, totaling 254.20 ha (0.2% of their traditional territory) are located in Vancouver, Richmond, and Delta, British Columbia (Musqueam First Nation 2011a). Their main reserve (IR No. 2), and population centre, is situated in the south-west corner of City of Vancouver, on 190 ha along the Fraser River. Currently, approximately 610 Members live on 65 ha of Musqueam IR No. 2; the remaining 125 hectares are leased out under five long-term leases that were mostly negotiated in the 1950s and 1960s. Sea Island IR 3 (6.5 ha) fronts the southeast side of MacDonald Slough, adjacent to the City of Richmond. The land is currently vacant and subject to development restrictions due to its proximity to YVR (Vancouver Airport). Further because it is unprotected by dikes, IR 3 is subject to flooding. Musqueam IR 4 (57.2 ha), is surrounded by the City of Delta. The IR includes two un-serviced homes. The farmland is leased out to a private farmer (Aboriginal Affairs and Northern Development Canada 2013a); (Metro Vancouver 2014; (Musqueam Indian Band 2009); (Musqueam First Nation 2011a); (Musqueam First Nation 2010).

Musqueam’s fee simple lands include:

- Fraser Arms Property (48 ha);



- UBC Golf Course (59 ha);
- Block F – University Endowment Lands (8 ha);
- Block K – a 13.8 hectare parcel adjacent to IR 2;
- Bridge Point Lands (3 ha); and
- Glenlyon Building – Burnaby (2.42 ha) (Aboriginal Affairs and Northern Development Canada 2013a); (Metro Vancouver 2014; (Musqueam Indian Band 2009); (Musqueam First Nation 2011a); (Musqueam First Nation 2010).

Members continue to consider themselves to be “stewards of the lands, waters and living creatures within and around the Fraser River” (Musqueam Indian Band 2006:21). In 1984 (*Guerin v. The Queen*, [1984] 2 S.C.R. 335) and 1990 (*R. v. Sparrow*, [1990] 1 S.C.R. 1075) Musqueam won two landmark Supreme Court of Canada legal cases that served to recognize and provide legal protection for Aboriginal rights. In 1984, Musqueam Band Member Ronald Sparrow was charged under s. 61(1) of the *Fisheries Act* for fishing with a net longer than permitted by his food fishing license. The fishing which gave rise to the charge took place on in Canoe Passage, which is part of the area subject to the Band’s licence. His arrest and subsequent court case led to a precedent-setting decision made by the Supreme Court of Canada that set out criteria to determine whether governmental infringement on Aboriginal rights was justifiable, providing that these rights were in existence at the time of the *Constitution Act*, 1982 (Musqueam First Nation 2011a); (Lexum 1990); (Lexum (Supreme Court of Canada) 1984).

2.2 Governance and Organization

VISION

“The Musqueam, a proud and unified people, will as a self-governing nation, work together to ensure enhanced quality of life for all generations of our people to develop a sustainable, self-reliant, vibrant community that is built upon the historical and traditional values of our community” (Musqueam First Nation 2011c)

MISSION

“The Musqueam, through transparent and accountable leadership, will assert the right to govern ourselves, for the benefit of all generations of our people, and exercise that right by building capable governing institutions and economies that match our culture through strong leadership” (Musqueam First Nation 2011c)

The Council of the Musqueam Indian Band are the elected officials of the Band, under Section 74 of the *Indian Act*. Section 81 of the *Indian Act* grants the Council the powers to make by-laws over reserve lands, and the Band Council is entrusted by the Band Membership to represent the Band’s perspectives and goals at the reserve, district, provincial, and national levels. Ultimately, the Council answers to the Band Membership and the Minister of Aboriginal Affairs and Northern Development Canada (AANDC). At the commencement of each term, the Musqueam Band Council is required to swear an oath of service to the Musqueam Indian Band for the Band’s welfare and advancement. The current chief of the Musqueam Indian Band is Wayne Sparrow (Musqueam First Nation 2011d).



18-B EXISTING SOCIAL AND ECONOMIC CONDITIONS OF MUSQUEAM FIRST NATION COMMUNITY

Musqueam's organizational structure includes the following Departments:

- **Administration** – “helps support and coordinate the work of all other Musqueam Departments;”
- **Education** – “strive to make a positive difference in the lives of our students. Whenever possible we integrate Musqueam culture into our programs. ... ;”
- **Employment & Training** – “provides employment and training programs and services that address in a holistic and culturally appropriate manner, the various needs of the Musqueam people;”
- **Facilities and Recreation** – “provides service and accessibility first and foremost to Musqueam members and their families, and then to external clientele, when it comes to recreation facilities, cultural gathering spaces and meeting rooms;”
- **Finance** – “produce relevant information and provide fiscal guidance for both internal and external parties to the highest standards;”
- **Fisheries** – “protect and enhance the inherent fishing rights of the Musqueam Indian Band, consistent with the “Sparrow” Supreme Court ruling. ...work to ensure aquatic resource protection through consultation and negotiation with the Department of Fisheries and adjacent First Nation communities. ...perform fisheries management co-operatively with DFO. ...engage in economic development, by examining fish sale opportunities and other species allocation transfers, creating business partnerships with the Sliammon and Tseil-Waututh First Nations, and conducting employee training;”
- **Health** “works to provide all members access to basic health, mental health, home and community care programs to assist them in living healthier, longer lives;”
- **Housing** – “manage activities related to housing for the Band;”
- **Lands** – “responsible for Reserve Lands and Environment Management Program (RLEMP), on behalf of Musqueam Indian Band under the authority of the Indian Act, as delegated by the AANDC;”
- **Language and Culture** – “provide services and coordinate resources to develop educational tools and learning environments whereby the Musqueam people will have increased accessibility to learn their ancestral language;”
- **Public Works** – “builds, operates and maintains the physical infrastructure that supports our Community ...Community grounds, including our parks and sports fields;”
- **Safety and Security** – “tasked with building a responsive, reliable, and valuable emergency management service for the Community;”
- **Social Development** – “assists people on reserve in maintaining a basic standard of living to prevent dependency by developing family strengths. ...provide financial support ... assist recipients in accessing services that will enhance their ability to assume responsibility for their own affairs;”
- **Taxation** – “performs duties required under the assessment and taxation bylaw and any other duties as required, effectively implementing and administering these bylaws and other bylaws of the band, when so directed by Council;”



- **Treaty, Lands and Resources** – “work with Council, Community and Administration to build a stronger, healthier, self-governing and self-sustaining Musqueam Nation;”
- **Council and Community** – “Our Council provides our political leadership. It is important that they embody Musqueam values, including Respect, Pride, Inclusiveness, Honorability and Unity. ”(Musqueam First Nation 2013).

Musqueam is in Stage 4 (Negotiation of a Framework Agreement) of the six-stage BC Treaty process. The parties at the Musqueam table (Musqueam, Province of BC, Canada) signed a Framework Agreement in April 2005. Currently Musqueam is not participating in the negotiation process (A. R. C. S. Metro Vancouver 2014); (Musqueam First Nation 2011a).

2.3 Language

Although English is the language of business and government among Musqueam Members, *hən̓q̓əmi̓ñəm̓*, the Coast Salish language traditionally spoken in and around Vancouver, remains an important element that brings Members of the Community together. Currently, half of Musqueam Members are able to say *hən̓q̓əmi̓ñəm̓* words and approximately one third can read *hən̓q̓əmi̓ñəm̓* words. Musqueam has a Language and Culture Department, which in accordance with strategic objectives set out by Chief and Council, provides services and coordinates resources to develop educational tools and learning environments where Community Members will have increased opportunities to learn their ancestral language (Musqueam First Nation 2013).

Promoting fluency of the *hən̓q̓əmi̓ñəm̓* language is an important objective of Musqueam. Research undertaken by the Musqueam Language and Culture Department reveals that nearly all of their Members want to learn *hən̓q̓əmi̓ñəm̓*. To address this objective, the Musqueam Language Application being developed by the University of British Columbia (UBC) IT, in partnership with UBC First Nations Language Program, provides mobile language lessons and resources. In 2011-2012, twelve Members participated in language programs (department, UBC, other) (Musqueam First Nation 2013).

Musqueam recognizes that culture is one of their strengths. The community is expanding the language programs offered, with storytelling and photos, encouraging traditional and cultural protocols, and continuing to “Musqueamize” their Traditional Territory with art, signs, symbols, information and Musqueam names (Musqueam First Nation 2011a).

2.4 Population and Demographics

Based on the 2012 Annual Report (2013) there are 1,167 Band Members with 649 Members (55%) living on reserve (Table 1). Their population has been growing between 2% and 5% annually and is projected to increase with a projected population of 2,300 in 2030 (Musqueam First Nation 2011a; Musqueam First Nation 2013). Since 2012, the Musqueam population has increased, however actual counts were not available at time of writing.



18-B EXISTING SOCIAL AND ECONOMIC CONDITIONS OF MUSQUEAM FIRST NATION COMMUNITY

Table 1: Population Profile of Musqueam Members, 2012

Age - Years	Total Number
0-9	190
10-19	230
20-29	215
30-39	130
40-49	145
50-59	140
60-69	70
70-79	35
80+	12
TOTAL	1,167

Source: (Musqueam First Nation 2013).

2.4.1 Age and Gender Distribution

The Musqueam's Membership is generally younger than the general population as well as the Aboriginal population within the Metro Vancouver area. As of 2012, approximately 36% Musqueam Members were under the age of 19. The potential for a relatively large, young workforce will continue as youth age into the workforce. In comparison, 25% of Delta (general population), 22% of Metro Vancouver (general population), and 32% of the Metro Vancouver Aboriginal population was under the age of 19 in 2011 (Table 2). The working age population (19-64 years) is also comparably younger than that of Delta and Metro Vancouver, with a large percentage of Members in the younger subset of the working age population (19-44 years).

Table 2: Age Distribution, Musqueam First Nation (2012), Delta (2011) and Metro Vancouver (2011)

	Musqueam First Nation Members (a)	General Population of Delta (b)	General Population of Metro Vancouver (b)	Aboriginal Population of the Greater Vancouver Regional District (b)
Total Population [%]				
0-19	36.0	24.6	21.6	32.5
20 years and older	64.0	75.4	78.4	67.5
Adult Population (747 of 1167) [%]				
20-39 years	46.2	28.2	35.9	31
40-59 years	38.1	42.1	39.3	27
60 years and older	15.7	29.6	24.8	9

(a) Data for 2012

(b) Data for 2011

Source: (Musqueam First Nation 2013); (Statistics Canada 2012a)(Statistics Canada 2012b); (Metro Vancouver 2012) (Statistics Canada 2013a).



18-B EXISTING SOCIAL AND ECONOMIC CONDITIONS OF MUSQUEAM FIRST NATION COMMUNITY

Females comprise 54% and males comprise 46% of the Musqueam population Table 3. This is similar to the gender distribution for the general population of Delta and Metro Vancouver where the gender distribution is approximately 52% female and 48% male (Musqueam First Nation 2013); (Statistics Canada 2012a, b).

Table 3: Population Profile for Musqueam First Nation: Gender Distribution

Age - Years	Females	Males	Total Number
0-9	110	80	190
10-19	115	115	230
20-29	100	115	215
30-39	70	60	130
40-49	80	65	145
50-59	80	60	140
60-69	40	30	70
70-79	20	15	35
80+	10	2	12
Total	625	542	1,167

Source: (Musqueam First Nation 2013).



3.0 LABOUR MARKET

3.1 Employment Profile

The Musqueam departmental representative noted that the unemployment rate does not reflect under-employment in the Musqueam Community. He noted that, “[not enough hours, not enough skills, not enough income” is a concern in the community even for some who are currently employed (Musqueam First Nation Representative 2014); (Musqueam First Nation 2011a). Statistics Canada’s 2011 Household Survey estimates 53.6% of working aged adults on Musqueam IR 2 were employed while 11.8% were unemployed Table 4. The unemployment rate on IR 2 is higher than unemployment rates for the general population of Delta and Metro Vancouver, but similar to the rate for the Aboriginal population in Metro Vancouver. The representative from the Musqueam Employment and Training Department indicated that the Statistics Canada unemployment rate does not accurately reflect the current unemployment rate in the community, and that there is limited capacity within the department to compile unemployment rates. Since the 2011 Census was collected, a large portion of Musqueam youth has entered the labour force. As not all of these young people have found employment, the unemployment rate in the Community may be higher than the 11.8% rate recorded by Statistics Canada.

The participation rates (i.e., the number of people either working or looking for work), is similar to all three comparable communities (i.e., Corporation of Delta, Aboriginal Metro Vancouver, Total Metro Vancouver) suggesting that while the unemployment rate is high in Musqueam; workers continue to look for work rather than becoming discouraged and leaving the labour force. However, as is the case with unemployment rates, the Musqueam Employment and Training Department does not have the capacity to determine participation rates (Musqueam First Nation Representative 2014).

Table 4: Employment Rates (2011) [%]

	Musqueam First Nation ^(a)	Corporation of Delta ^(a)	Aboriginal Metro Vancouver ^(a)	Total Metro Vancouver ^(a)
Employed	53.6	62	59.2	61.4
Unemployed	11.8	6.3	12.6	7.1
Participation Rate	60.8	66.1	67.7	66.1

(a) Data from 2011
Source: (Statistics Canada 2013a; Statistics Canada 2013b; Statistics Canada 2013c).

3.2 Labour Force Characteristics

The Musqueam Employment and Training Department works in collaboration with the Musqueam Education Department, Musqueam Capital Corporation, Musqueam Social Development Department, and Musqueam Health Department to meet Members’ needs. Musqueam acknowledges that education is fundamental to “individual and Community success, as well as Nation building” and education has been identified as one of the Community’s top priorities (Musqueam First Nation 2011a:69). Musqueam takes a comprehensive view of what education programming is required, at the preschool to post-secondary, as well as adult education levels. The Community is developing programs that support the whole person – culturally, emotionally, physiologically, and spiritually, including programs to address some of the root causes (e.g., residential school syndrome) of barriers to learning, and asking parents and the Community as a whole to be part of the solution. In 2011, between, 60% and 75% of Musqueam youth graduated from high school (Musqueam First Nation 2011a). This rate is higher



18-B EXISTING SOCIAL AND ECONOMIC CONDITIONS OF MUSQUEAM FIRST NATION COMMUNITY

than the Provincial Aboriginal graduation rate (i.e., 50%) but lower than that for non-Aboriginal students in Vancouver (at 85%) (Musqueam First Nation 2011a).

The Musqueam Employment and Training Department’s labour profile records Musqueam Members’ work history, current labour profile, and provides a general picture of Member’s previous work experiences. The labour profile indicates that 55 - 60 Members are involved in heavy construction and have experience with that type of work. Of those 55-60 Members, approximately 40 to 45 are Band Members and the remainder are Community Members (e.g., spouses of Band Members). A number of these Members (both Band and Community) work as labourers and carpenters, two Members are apprenticing electricians, and two Members are welders (Musqueam First Nation Representative 2014). Members report holding a number of basic skills certifications that are often qualification for entry level positions in the construction and services industries including:

- Crane Operator;
- Class 3 Heavy Equipment Operator;
- Class 3 w/air Machinist;
- Electrical 2;
- First Aid;
- Forklift Operator;
- Level 1, 2, 3, and 4 Carpentry;
- Level B and C Welding;
- Property Management;
- Training Certified Flagger (TCP); and
- WHMIS (Musqueam First Nation Representative 2014).

Table 5 provides an overview of Members’ skills in various capacities, including construction.

Table 5: Musqueam: Members’ General Skills Profile

Type of Skill	Details of Work Undertaken
Restaurant/Food	Food and Catering
Trades	Mechanic, Welder, Steel Fabricator, Machinist, Iron Worker, Carpenter
Traffic Control/Flagging	Traffic Control/Flagging
Labourers	Moving Forklift Operator, Warehouse Worker, Shore Worker, Forest Worker, Rail Crew, Pilot Driver, Painter
Skilled Labourer	Crane Operator, Heavy Equipment Operator
Office/Administrative/Business Services	Office Management, Document Control, Employment Facilitator, Administrative Assistant, Reception, Clerical, Computer Skills



18-B EXISTING SOCIAL AND ECONOMIC CONDITIONS OF MUSQUEAM FIRST NATION COMMUNITY

Type of Skill	Details of Work Undertaken
Fishing	Fishing
Archaeology	Archaeological Field Worker
Education	Arts and Science, Child Care, Early Childhood Education
Legal/Public Protection	Security
Transportation	Driver/Truck Driver
Health & Safety/First Aid	Recreational Leader, First Aid, Food Safe
Environmental Monitors	n/a
Computer/IT	n/a
Sales/Service	n/a
Social/Community/Public Services	n/a

n/a – information not provided.

Source: (Musqueam First Nation Representative 2014).

Members are also preparing for future employment by attending post-secondary institutions. A representative of the Musqueam Education Department confirmed that Musqueam Members are currently obtaining degrees in the following areas:

- Bachelor’s degrees in general studies;
- Bachelor’s degrees in history;
- Bachelor’s degrees in sciences;
- Degrees in nursing;
- Theatre;
- Music; and
- Law (Musqueam First Nation Representative 2014).

Based on interviews undertaken, currently law is the most common degree pursued. Young Musqueam Members are taking an interest in Musqueam land issues and legal issues. The history of Musqueam’s fishing cases (i.e., Guerin, Sparrow) has contributed to generating an interest in law. Currently Musqueam has six or seven lawyers (Musqueam First Nation Representative 2014).

3.2.1 Barriers to Employment

The main barriers limiting Musqueam Members from obtaining preferred employment, as identified by Musqueam departmental representatives, include the following:

- General education or training levels;



- Responsibilities for children prevent people from working;
- Inability or desire to relocate due to a very strong sense of connection with the Community;
- Lack of Aboriginal awareness within workplaces (e.g., family and Community ties that require Members to miss work when a Community Member passes); and
- Public transit is limited, especially early in the morning as many construction shifts start before 8:00 AM (Musqueam First Nation Representative 2014); (Musqueam First Nation 2011a).

A shuttle or partnerships for a Musqueam bus could further assist Members to take advantage of job opportunities (Musqueam First Nation Representative 2014).

3.3 Education and Training

3.3.1 Post-Secondary Training and Educational Resources

Musqueam receives funding from Aboriginal Affairs and Northern Development Canada (AANDC) to support elementary, secondary, and post-secondary educational services. Most Musqueam students attend public schools managed by the Vancouver School Board (VSB), while a smaller number attend local private schools. Musqueam students that reside on reserve attend two main elementary schools: Southlands Elementary, which is part of the Vancouver Public School System; and, Immaculate Conception (a Catholic school). The majority of Musqueam high school students that reside on reserve attend Point Grey Secondary High School, but many attend other secondary schools in the greater Vancouver area (Musqueam First Nation Representative 2014).

The growing number of Members on the wait list for post-secondary education funding is a concern for Musqueam. Currently, not all high school graduates and adults from Musqueam who make requests for funding for tuition, textbooks, and living allowances can be accommodated (Musqueam First Nation 2013); (Musqueam First Nation Representative 2014).

The Musqueam Education Department, Employment and Training Department, Health Department, and Social Development Department work in collaboration to support Members in achieving their goals. The Employment and Training Department, which focuses on apprenticeship or trades certificates or diplomas, addresses:

- Skills training;
- Capacity building; and
- Local labour market partnerships (Musqueam First Nation Representative 2014).

Musqueam strives to effectively and efficiently manage training to employment programming through a job coach who screens applicants, manages files from beginning to end, and provides income management support. The job coach works to match the applicant's aptitude and interest with industry openings. Musqueam youth are being supported in meeting their goals, aspirations, and interests in multiple industries including: trades, hospitality/tourism, retail, and health careers. Training development for youth includes:



18-B EXISTING SOCIAL AND ECONOMIC CONDITIONS OF MUSQUEAM FIRST NATION COMMUNITY

- Musqueam partnerships;
- Community based programs to improve accessibility/ success;
- Essential skills (life skills, literacy and numeracy) developed in partnership with local colleges (i.e., Vancouver Community College, Kwantlen, Native Education College);
- Communication and leadership programs; and
- Job coaching/shadowing (Musqueam First Nation Representative 2014).

The Aboriginal Training for Employment Program (ATEP) was a pilot project in July 2008 with the goal of providing employment opportunities for at least 20 unemployed or underemployed Members. There were 15 participants in the CORE Tourism Program and 12 in the Trades training program. Of the 27 participants, 18 are now employed or have returned to receive further training (Musqueam First Nation 2013).

In keeping with Musqueam's approach to support the whole person (i.e., culturally, emotionally, physiologically and spiritually) when meeting training and education needs, recently steps have been taken to further revitalize Musqueam canoe families. In July 2013, the Social Development Department, following discussions with Community Members, made arrangements to submit a proposal for an Insight grant through the Social Science Humanities and Research Council of Canada, to start a Musqueam canoe project in partnership with the University of British Columbia. In April 2014, Musqueam received partial funding for a 3-year MUSQUEAM canoe project. The community will begin constructing a carving shed on IR 2 in June 2014 with the intention of carving a 15 person, sea-going canoe from a raw log. A Musqueam crew will be recruited and trained and they will travel on a journey together. This project has been identified as an opportunity to share and celebrate the Musqueam's language, history, and traditions. As part of the process, a project Advisory Council will be set up (Musqueam First Nation Representative 2014).

As noted in the report entitled, *Musqueam First Nation: A Comprehensive Sustainable Community Development Plan (We Are of One Heart and Mind)* (2011), Musqueam is aware of the barriers to employment faced by Members and is supporting these Members to get the jobs they want. Musqueam notes their current efforts to support Members have helped to reduce social assistance amongst employable Members from over 30% in 1998 to 12% in 2011. Musqueam recognizes more can be done, given their non-Aboriginal neighbours in Metro Vancouver have a less than 1% social assistance rate (amongst employable people aged 24 to 60). Musqueam Members desire more effective employment support for (re)entry into the labour force and culturally appropriate skill development and training programs (Musqueam First Nation 2011a).

3.3.2 Capacity Development Partnerships

A number of Musqueam departments, including the Social Development Department, Employment and Training Department, Education Department, and Health Department work in partnership to offer education and training opportunities and resources and offer support and programs to address the various barriers to employment Musqueam Community Members face (Musqueam First Nation Representative 2014).



Musqueam is a member of the Coastal Corridor Consortium, established by the Musqueam, other Aboriginal communities, and Vancouver Community College, Capilano College, and the Native Education College. The Consortium dedicates resources to improving, developing and delivering developmental programs and services that prepare adult learners for post-secondary studies. Initiatives include courses and programs in trades, vocational and career training; and, technical and academic studies leading to certificates, diplomas, associate degrees, and applied degrees (Musqueam First Nation Representative 2014).

Musqueam recently entered into a partnership with British Columbia Institute of Technology (BCIT) to provide a Carpentry program to Members. For this partnership, the old gym at Musqueam was refitted as a workshop and served as a classroom. Community Members attended classes on Indian Reserve No. 2 (IR 2). Aboriginal students from other First Nations who had applied to BCIT were also able to attend (Musqueam First Nation Representative 2014).

3.3.3 Training Needs

A Musqueam departmental representative explained that the impact of the reconciliation agreements¹ have significantly affected Members' training needs. With the certainty of Musqueam's referral to employment there has been a shift from the service industry to heavy construction (Musqueam First Nation Representative 2014). For example, over 30 Band Members received full-time employment related to the Gateway Agreement (2010) (i.e., as part of the 2010 Winter Olympic Games, Musqueam negotiated short-term partnerships with both businesses and government). Most Members were employed with Peter Kiewit and Sons, and Fraser Transport Group (FTG) (Musqueam First Nation 2013); (Musqueam First Nation 2011a). However, Musqueam departmental representatives acknowledge it is necessary to develop more administration and office skills amongst their Members. Employment agreements under new business partnerships are anticipated to assist with expanding opportunities. Economic development in the Community (e.g., Milltown Marina) is expected to further generate opportunities in administrative and retail employment and other office work. Musqueam identified the need to structure their partnerships and contracts so that they can take advantage of such opportunities (Musqueam First Nation Representative 2014).

At this time, 40% of Musqueam Employment and Training Department's clients, for all employment services are women. In addition, many of Musqueam Elders (60 years and older) are finding retirement difficult and they would like to re-enter the workforce. However, the Employment and Training Department has not applied for funding for programs for that age group due to a shortage of resources (i.e., personnel). Even though the Department has four staff, and Musqueam is a very small Community, departmental representative indicated it is still difficult to address the many needs of Community Members (Musqueam First Nation Representative 2014).

¹ The Province of British Columbia has been "building a new relationship with First Nations based on respect, recognition, and reconciliation" (Government of British Columbia 2008). The Province of British Columbia completed several agreements with First Nations in BC, that "create the opportunity for comprehensive and lasting reconciliation" (Government of British Columbia 2014a). Further concerning reconciliation, Chief Justice Beverly McLachlin, speaking to an audience of law students in Toronto, Ontario in March 2014, stated, "Canada, I believe, is a project on reconciliation. Our successes have always been in recognizing the differences and accommodating them and in working together with respect" (Brean, Joseph 2014).



Furthermore, at an individual level, Community Members have responded positively to the introduction of the Psychological Vocational Educational Assessment. Currently the Employment and Training Department does not have the required resources for the Assessment and the Department's clients (i.e., Members) see it as a positive contributing factor to employment through the agreements (corporate or reconciliation) (Musqueam First Nation Representative 2014).

3.3.4 Barriers to Training and Education

Barriers to training and education identified by Musqueam departmental representatives are similar to the barriers to labour force participation (discussed earlier) and include the following:

- Residential schooling: a number of Musqueam departmental representatives referred to lasting, intergenerational, adverse effects of residential schools amongst some Members. However, Musqueam departmental representatives believe Musqueam will one day “get to a generation that was not so impacted by residential schools and will be able to carry on with their education and do well.” It was further noted that “once some of the barriers are eliminated, Musqueam students will be able to go through their elementary and high school years feeling fully supported and able to carry on with their studies and plans to go to post-secondary” schooling (Musqueam First Nation Representative 2014).
- Educational requirement including literacy: some Members struggling to meet the minimum educational pre-requisites required for some training initiatives, including basic high school completion (Musqueam First Nation Representative 2014).
- Adequate funding: due to low base incomes, and many members requiring financial assistance, Musqueam has a long list of Members waiting to attend post-secondary institutions. Musqueam's education funding policy focuses on supporting current high school graduates (i.e., Members who graduate in June receive support to attend post-secondary institutions in the autumn). Musqueam's second priority is to financially support Members who are already part way through their post-secondary programs. Once the two aforementioned groups have graduated then Musqueam is able to attend to the needs of students on the wait list (Musqueam First Nation Representative 2014).
- Connection to Community: some Members prefer to remain in the community for personal, familial and cultural reasons and may be reluctant to go off reserve to receive training certification. A Musqueam representative suggested if the Port through the Project were to offer training opportunities, it would be helpful to bring these opportunities to the Community or support a transition, from training at the Community to on the job training at the Port for example (Musqueam First Nation Representative 2014).



4.0 ECONOMIC DEVELOPMENT

4.1 Musqueam Capital Corporation

The Musqueam Indian Band (MIB) Chief and Council established the Musqueam Capital Corporation (MCC) in 2008 as a business company with the responsibility to manage the Band's business activities. MCC is accountable to the Chief and Council. The MCC is mandated to oversee revenue generating assets as per Chief and Council directive, owned by the Musqueam and generate annual revenue stream from profits realized through business operations, capital appreciation and leases and/or property management revenues (Musqueam First Nation Representative 2014). In executing its property development and asset management responsibilities, MCC takes guidance from three key documents: *Musqueam First Nation: A Comprehensive Sustainable Community Development Plan*; *Musqueam Economic Development: Strategic Plan*; and *Musqueam Land Use Plan (IR#2, IR#3, IR#4)*. MCC reports to the Musqueam Band Council through a nine-member Board of Directors, including the Chief who is appointed by the Board as Chair of the Board, two Councillors, two Community Members, a finance expert, a real estate development expert, a business management expert, a government enterprise expert.

The Chief Executive Officer (CEO) of MCC reports to the Board. The MCC's priorities include managing the assets that Musqueam gained back in 2008 as part of the Reconciliation, Settlement and Benefits Agreement with the Province of British Columbia (the "Province"). The 2008 Agreement, which came into effect on April 14, 2008, included a cash payment and transfers of the following lands:

- University Golf Course lands (59 hectares);
- Bridge Point lands (7 hectares);
- Block K – a 13.8 hectare parcel adjacent to IR 2; and
- Block F – an 8.5 hectare parcel located beyond the western end of the University Golf Course (BC Ministry of Aboriginal Relations and Reconciliation 2013); (Musqueam First Nation Representative 2014) (Musqueam Indian Band 2011).

MCC, in collaboration with MIB administrative departments, also assists with development of business interests, working to provide support to Musqueam businesses, entrepreneurial opportunities and long-term employment for Members. Recent large projects including Gateway, the Evergreen Line, and the Canada Line have been undertaken in Musqueam traditional territory. These large projects provide Community Members with employment, experience, and apprenticeship opportunities primarily in construction. The MCC would like to continue to develop a program to support Community Members in securing careers as opposed to jobs and to have opportunities to own their own small businesses (Musqueam First Nation Representative 2014).

Goals for the MCC, collaboratively with Musqueam Employment and Training, are to advance training opportunities for employment, and develop a preferred procurement policy for, and enhanced support to Musqueam community owned small businesses (Musqueam First Nation Representative 2014).



4.2 Economic Development Projects

The Milltown Marina, a 50/50 Joint Venture between Musqueam and Bastion Development Corporation, is a key development initiative by the Musqueam community, situated six nautical miles from where the mouth of the North Arm of the Fraser River meets the Strait of Georgia. The marina is in close proximity to a sacred Musqueam site. The marina complex includes the following:

- 229 water slips for boats up to 80 feet (slip shortages have been an issue for more than a decade and Milltown had 120 moorage applications in before the docks had even gone in the water);
- Drystack moorage facility for 200 boats up to 28 feet;
- Repair facility;
- Marine store;
- Convenience store;
- Full service restaurant;
- Yacht sales;
- Storage facilities; and
- A new location for the Royal Canadian Marine Search and Rescue Station 10 (Milltown Marina and Boatyard 2014a; Milltown Marina and Boatyard 2014b; Musqueam Indian Band and Bastion Development Corporation 2010; Scott 2014).

Recently, YVR Airport Authority has approached Musqueam to determine the community's business supplier capacity to support the construction of a designer outlet mall (Musqueam First Nation Representative 2014).

Block F – an 8.5 hectare parcel located beyond the western end of the University Golf Courses – is among the assets managed by MCC and gained by Musqueam as part of the Reconciliation, Settlement and Benefits Agreement with the Province. Musqueam has submitted a re-zoning application to the Province for Block F. The MCC will market the property to potential developers as a long term prepaid 99-year leasehold. Plans for Block F include the construction of townhouses, condominiums, a small retail component, and a 3 acre (1.2 ha) park (Government of British Columbia: University Endowment Lands 2014).

In March 2014, Musqueam, Squamish, and Tsleil-Waututh Nations entered into a historic Protocol Agreement which outlines the practical mechanisms for equally sharing economic benefits resulting from crown land sales occurring within shared territories. The Agreement also establishes a foundation that will enable the First Nations to work together as business partners in the acquisition and development of key assets in the Vancouver area as part of a long-term strategy to protect and re-access traditional lands. Thus far, Musqueam and the Tsleil-Waututh First Nation have purchased Lands in Burnaby. In addition, the Musqueam, Tsleil-Waututh and Squamish First Nations have a contract in place to purchase a warehouse site on East Broadway in Vancouver. Both properties may eventually be redeveloped (Government of British Columbia 2014b); Musqueam First Nation Representative 2014; Rennie & Associates 2014).



Most recently, Musqueam, Squamish, and Tsleil-Waututh Nations reached an agreement as part of a joint venture with the Canada Lands Company (CLC), a federal Crown corporation, giving them joint ownership of three properties. The terms of the agreement provide that the three First Nations and CLC are joint venture partners that will work to assess and possibly develop the properties. The three parcels are all former federal government lands and total 31.5 hectares (Baker, Paula 2014, Seyd, Jane 2014).

In addition to IR 2, Musqueam has also been allotted two additional reserves (i.e., IR 3 and IR 4) by Canada. Musqueam's IR 3, is located on Sea Island in Richmond across from IR 2 along the Fraser River on McDonald Slough. There are no buildings on IR 3 (Musqueam First Nation Representative 2014; Musqueam First Nation 2010).

Musqueam also has a 57.2-hectare (141.34-acre) reserve (IR 4) located in the District of Delta, in close proximity to the proposed Project. The First Nation controls the land, which is surrounded by Agricultural Land Reserve (ALR). Musqueam had highest and best use studies commissioned twice, in 2011 and 2013 for IR 4. Due to the location and zoning of IR 4, both studies pointed to the development of IR 4 for port related activities (Musqueam First Nation Representative 2014; Musqueam First Nation 2010). Currently, there are no specific plans regarding the development of IR 4. However, Musqueam is aware industrial property in the lower mainland is scarce and that the proposed Port project may initiate discussions concerning the development of IR 4 (Musqueam First Nation Representative 2014).

4.3 Business Profile

Currently, Musqueam does not have Member-owned or Musqueam-owned construction companies. However, Musqueam recently created a number of mutually beneficial partnerships and are currently under negotiations to build internal capacity. As a result of the partnerships two Band members have started five-year electrician apprenticeships which are being endorsed by Houle Electric (Musqueam First Nation Representative 2014).

A number of Members are gaining experience in carpentry, construction and as electricians. The MCC is supporting Members to complete this training and work towards ensuring that members have career opportunities and perhaps the possibility of owning their own businesses. The goal is to create a business entity fully owned by Musqueam Members or the Musqueam First Nation (Musqueam First Nation Representative 2014).

Musqueam member owned enterprises in the Community (non-construction related) include:

- Sparkes Services, which undertakes interior and exterior painting and home maintenance;
- CNN Services and Musqueam First Nation collaboration, which provide terrestrial and riparian ecosystem enhancements and restoration services, including native species planting programs and erosion control and invasive species management;
- Salishan Catering, which provide services in potlatch platter; full service event planning; finding facility and site locations; and Coast Salish cultural theme, welcomes and blessing. The business also provides training to local Community Members; and



- Numerous carvers, artists, weavers and performers that are involved in the commercial production of many forms of artwork (Musqueam First Nation Representative 2014).

MCC wants to support small businesses and has started to do so. This is also a focus of the Board of Directors of the MCC, as well as the MIB E&T department (Musqueam First Nation Representative 2014).

4.4 Agreements and Contracts with Port Metro Vancouver

As part of the Milltown Marina development, Musqueam entered into a limited liability partnership with Bastion Development and 50 year lease from PMV. Musqueam has bid and worked on a number of smaller port projects such as the Glenrose tidal restoration, work at Boundary Bay, and with PMV Corporation directly (Musqueam First Nation Representative 2014).

4.5 Barriers to Procurement

It was noted by a Musqueam departmental representative that lack of business capacity is a barrier to Musqueam businesses when trying to acquire contracts to participate in either the construction or operation phases of the proposed Project. Musqueam does not have the business entities at this time to bid on large construction-related projects for example. An approach proposed by the Musqueam departmental representative would be for Musqueam to demonstrate to a prospective business partner that bidding on port related project together would be beneficial to both parties (Musqueam First Nation Representative 2014).

The Musqueam departmental representative further noted that Port Metro Vancouver launched an Aboriginal Business Directory in January 2014 with the objective of establishing a listing of Aboriginal entrepreneurs or businesses that seek to do business with the Port and link them to potential Port business opportunities. This directory is perceived as being a helpful tool to assist the Musqueam Community to narrow down their focus on business development and procurement opportunities (e.g., road building). Such information also helps Musqueam when they approach potential business partners (Musqueam First Nation Representative 2014).



5.0 MARINE RESOURCE USE

5.1 Overview of Musqueam First Nation Fishery

The Musqueam's 2011 Comprehensive Sustainable Community Development Plan states:

“We have always depended on the resources in our traditional territory. Above all, we are a fishing people. We have fished the Fraser River and Salish Sea for salmon, oolichan, and other fish and harvested shellfish from time immemorial. Our rhythms, stories and culture are closely aligned with the river. Through partnership and dialogue we work to restore habitat and protect our resources throughout the traditional territory and on our own reserve” (Musqueam First Nation 2011a:85).

As explained by a Musqueam departmental representative, “fish and seafood has always been a staple of Musqueam’s culture, of Musqueam’s diet, of Musqueam’s way of life” (Musqueam First Nation Representative 2014). Further, the importance of “salmon and other maritime food resources in the Musqueam economy has been confirmed by archival documents, the research of archaeologists and anthropologists, and the recorded oral history of the Musqueam” (Musqueam Comprehensive Land Claim: Preliminary Report on Musqueam Land Use and Occupancy 1984). A Musqueam departmental representative explained that Musqueam traded fish for other resources with their neighbours on Vancouver Island and up the Coast. He also stated that, today fish is “just as important to Musqueam.” For example, Musqueam Members try to fill their freezers with fish during salmon harvesting season. When Musqueam holds ceremonial events in their Community they use fish to feed their Members and their visitors. It was further emphasized by the Musqueam departmental representative that, “Musqueam has always been a fishing community. It is not a coincidence that Musqueam [i.e., IR 2] is located right at the mouth of the Fraser River, it’s who we are. It’s who we have always been.” The Musqueam departmental representative stressed that “any type of impact on Musqueam fishery is a negative impact on the Musqueam Community and its way of life” (Musqueam First Nation Representative 2014).

5.2 Comprehensive Fisheries Agreement

In addition to the traditional protocols that govern Musqueam marine resource use, Musqueam also follows the protocols set out in the Comprehensive Fisheries Agreement it has entered into with Canada as represented by the Minister of Fisheries and Oceans (DFO). In response to the Sparrow decision (Lexum 1990), the Department of Fisheries and Oceans Canada (DFO) launched the Aboriginal Fisheries Strategy (AFS) in 1992. Approximately a decade later, and following a series of discussions between DFO and Aboriginal groups, the AFS evolved and currently DFO enters into Comprehensive Fisheries Agreements with First Nations (Department of Fisheries and Oceans, Canada 2012a);(Department of Fisheries and Oceans, Canada 2012b).

Musqueam’s Comprehensive Agreement contains provisions for both a FSC fishery and an Economic Opportunity (EO) fishery (Department of Fisheries and Oceans, Canada 2012a);(Department of Fisheries and Oceans, Canada 2012b); (Department of Fisheries and Oceans 2013a)(Department of Fisheries and Oceans 2013b). The terms of the August 21, 2013 Agreement include provisions for issuing of Communal Licences to the Musqueam for the Food, Social and Ceremonial (FSC) Fishery as well as provisions for the Economic Opportunity (EO) fishery. The Agreement, in Schedule A, Section 1.2 further provides that “DFO agrees to manage the various fisheries based on the principle of the FSC Fishery having highest priority of access after



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conservation, with the goal of providing the Organization [i.e., Musqueam] with a reasonable opportunity to catch the quantities of Salmon set out in this Schedule (Department of Fisheries and Oceans 2013b).

Section 2 of the Agreement addresses the species and quantity of fish that Musqueam is allowed to harvest for the FSC fishery:

- a) Sockeye Salmon;
- b) Chum Salmon;
- c) Pink Salmon;
- d) Chinook Salmon; and
- e) Incidental harvest of Hatchery Marked Coho Salmon caught under the Communal Licence for:
 - i) Sockeye Salmon; or
 - ii) Chum Salmon.

Section 2.2 of the Agreement states that Steelhead Salmon and Sturgeon must not be retained (Department of Fisheries and Oceans 2013b).

Section 3.1 (a) of the Agreement sets out the area where the Musqueam FSC Fishery may be undertaken, identifying “portions of DFO management sub-areas 29”(Department of Fisheries and Oceans 2013b).

Section 5.2 of the Agreement also contains a provision for an Economic Opportunity Salmon fishery, defined as “Fishing under a Communal Licence that authorizes sale of Fish” (Department of Fisheries and Oceans 2013b).

As explained by a Musqueam departmental representative, FSC and Economic Opportunity is the same fishery with Economic Opportunity licences allowing for the legal sale of the fish. Musqueam is able to transfer, in years of abundance, their FSC allocation to a portion of the Total Allowable Catch (TAC) in Canada of salmon. For example, in 2014 (projected to be a year of abundance for Sockeye Salmon) Musqueam will likely be able to transfer some of their fish to EO. Last year there was no abundance so they did not transfer any salmon from FSC to Economic Opportunity. Therefore, the only fishing Musqueam undertook last year was for food (Musqueam First Nation Representative 2014). Musqueam’s position is that, Musqueam’s FSC fishery is a priority over all other fisheries, second only to conservation. A second fishery priority is their Economic Opportunity fishery. The third fishery priority is commercial fishing that takes place in Musqueam’s territory (Musqueam First Nation Representative 2014).

FSC and Economic Opportunity licences are both communal licences (i.e., Musqueam Communal Fishing Licence). They are held by the Community and not issued by the DFO to individuals. Community Members who participate in any fishery licenced through the Musqueam Fisheries Department (all salmon species, crab, prawn, etc.) are required to have a “Musqueam Communal Fishing Licence” otherwise known as a “Designation Card.” The commercial fishery is an individually owned licence as issued by DFO and is not a part of the AFS (Musqueam First Nation Representative 2014).



5.3 Commercial Fishery

The Canadian Department of Fisheries and Oceans implemented the Pacific Integrated Commercial Fisheries Initiative (PICFI) in 2007 to support First Nation participation in sustainable commercial fisheries (Department of Fisheries and Oceans 2011). In light of this opportunity, Musqueam formed a joint venture partnership with Sliammon and Tsleil-Waututh First Nations to create the Salish Seas Limited Partnership (Salish Seas LP) to manage the commercial fishery. Part of the Salish Seas LP business plan is to ensure that each licence is leased out to a Community member in one of the three First Nations. Another part of the business plan is to ensure deckhands are also Community Members from the three First Nations (Musqueam First Nation Representative 2014).

Salish Seas LP is provided with commercial access to various species including:

- One crab licence in Management Area I;
- Two prawn licences that are fished throughout the British Columbia Coast;
- Access to a certain percentage of halibut quota (approximately 20,000 pounds) annually;
- Approximately 24,500 pounds of the black cod quota; and
- 12 herring gillnet licences within the inside of Vancouver Island area (Musqueam First Nation Representative 2014).

A commercial fisherman that leases a license of the licenses held by Salish Seas LP can harvest anywhere within the designated management area of that licence. The commercial crab licence held by Salish Seas is in Crab Management Area I and allows for harvesting along the coast. Harvest primarily occurs in Bowen Island and Burrard Inlet as well as near the Roberts Bank terminals. Herring fishing is dependent on availability. When available, some fishers fish in the Salish Strait area between the Island and the Mainland. Halibut fishing primarily takes place near the northern tip of Vancouver Island, while prawn fishing primarily occurs north of Bowen Island (Musqueam First Nation Representative 2014).

5.4 Recent Research on Marine Harvesting in the South Fraser Delta

The continued importance of marine resources to the Musqueam has most recently been documented in a report prepared for Musqueam by Jason Woolman entitled *Contemporary Musqueam Use of the South Fraser Delta* (Woolman, Jason 2014). This report records Musqueam's contemporary resource use, use areas, and cultural use of the southwestern portion of their territory encompassing the Project and adjacent areas. Concerning fisheries, the "study area" in this report encompasses portions of the Department of Fisheries and Oceans (DFO) management area 29, Commercial Salmon Seine Area B, Commercial Salmon Gill Net Area E, and Commercial Salmon Troll Area H, and Commercial Crab areas H, I, J (Woolman, Jason 2014).

Woolman, informed by preliminary interviews with several Musqueam Community Members, who have knowledge and expertise in areas of hunting, fisheries, plant harvesting and Musqueam cultural use of the study area, maintains that "all resources within the study area have the potential to be used as trade items as



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previously practiced with other First Nation” (Woolman, Jason 2014). Morgan Guerin, Musqueam Aboriginal Fisheries Officer, notes that, “...currently salmon is traded to other nations as has happened “forever” but that currently restricted species have the potential for trade when conservation concerns are addressed. There is also interest in applying for commercial sales licenses of other species, such as crab.” (Woolman, Jason 2014).

The following information concerning harvesting by Musqueam Members of various fish and seafood species was informed by Musqueam Community knowledge holders and harvesters (Woolman, Jason 2014).

- “Shrimp are harvested by trap and trawl, and prawn by trap in the waters from the U.S. border up to Steveston within the study area”.
- Salmon are critical for food, ceremonial, social and economic uses and all five species of species of salmon, including: “st^haqwəy (spring) sθəqəy (sockeye) kwəxwəθ (coho), kal’əxw (chum) and hu:ń (pink), as well as qiwχ (steelhead) are harvested within the study area.” Salmon are most sought intensely outside of Steveston, Canoe Pass, the Lower Reaches and Roberts Bank. Coho harvesting is restricted due to conservation concerns and regulations.
- Currently, all bivalve harvesting throughout the study area has been closed by DFO. Musqueam interviewees recall gathering clams and cockles in the area around Tsawwassen.
- The harvesting of crabs by traps occurs in Boundary Bay and the waters from the United States border up through Steveston within the study area, “including the area between the Tsawwassen Ferry docks and the Roberts Bank Terminal.” Members follow the crab migrations with an awareness of where to harvest and which areas to avoid during breeding.
- Eulachon, which have declined in population, are harvested on the South Arm of the Fraser River.
- Herring are harvested in the Canoe Pass region and the north side of the South Arm of the Fraser River.
- Sturgeon was traditionally an important food source. Sturgeon can be found in the South Arm of the Fraser River and off its mouth.
- Starry Flounder, caught as a bycatch while targeting salmon, are harvested in the South Arm of the Fraser River, outside of Canoe Pass and from Steveston through Roberts Bank within the study area.
- Octopuses, which are sought after by Members as a traditional and contemporary food source, are harvested in the study area as a by-catch.
- Urchin and sea cucumber, once used as food and medicine, cannot be harvested in the study area due to “pollution concerns and changes to the foreshore through industry”.
- Ratfish were once harvested for medicinal purposes and the skin of dogfish was traditionally used as sandpaper (Woolman, Jason 2014).

Woolman notes that “the study area was highly utilized by Musqueam and was home to multiple named sites. Access to this area and its resources by other first nations was governed by traditional protocols which are still maintained and enforced today” (Woolman, Jason 2014).



5.5 Access, Productivity, and Quality of Marine Habitat and Resources

Concerning access to the fishery, the Musqueam departmental representative explained that “all the navigational paths of incoming shipping vessels [i.e., Deltaport, proposed RBT2, and BC Ferries] are of concern to Musqueam” (Musqueam First Nation Representative 2014). The representative stressed that at this time, the responsibility is on Musqueam fishers to take steps to avoid the navigational channels of the vessels. It is necessary for the fishers to mark their prawn and crab gear with floating devices. Harvesters do not set traps in the navigational channels because ships run over the traps or get caught on the ship and the ships then drag the traps away or break the buoys off. When this occurs, the fishers are not able to find their traps. The Musqueam departmental representative noted that the proposed Project, which Musqueam understands will be build outwards into the water, “is taking away from areas that Musqueam can actually access, further increasing impacts upon navigational channels” (Musqueam First Nation Representative 2014).

In regard to the fishery productivity, the Musqueam departmental representative indicated Musqueam Members believe habitat loss in and around the Roberts Bank terminal and to the north and south are potential factors in the decline of marine resources. It is their position that the current terminal adversely affects the habitat for all aquatic species (i.e., the habitat that the aquatic resources depend upon). Oxygen levels, pH levels and other biophysical aspects are seen as aspects affected in that area because there is no water flowing through, and the arm of the current terminal affects tidal flows, creating a dead zone, with little, to no, flow going by. The tides are hampered by the structures in place. The Musqueam departmental representative noted that, “if an extension to the arm is to be added (i.e., RBT2), there will be further impacts on that area. There is also the matter of the ferry going back and forth as well as other industrial impacts on the habitat in the Project area” (Musqueam First Nation Representative 2014).

The quality of marine resources is also of concern to Musqueam. A Musqueam departmental representative referred to anecdotal reports from Musqueam crab harvesters regarding the quality of crab being harvested. He noted that Musqueam fishers, when bringing up crab traps, have discovered crabs that are “black as well as mutated crabs. Musqueam fish harvesters have also found mutated salmon, with cancerous cells and lumps within the body of the salmon” (Musqueam First Nation Representative 2014).

The Musqueam departmental representative continued, noting that species Members traditionally harvested are no longer accessible or acceptable for consumption. He explained “Musqueam members can no longer go to our beaches and dig up clams, oysters, or mussels – all shellfish. Even if the shellfish were there no one would eat them given how contaminated the Fraser River foreshore has become” (Musqueam First Nation Representative 2014). It was further explained by the Musqueam departmental representative that “being unable to harvest on their beaches, means Musqueam Members have to trade with relatives on Vancouver Island or go to the extent of buying seafood for Musqueam Elders. The compromised quality of the fish and seafood has had a major impact on Community Members’ diet. There has been a nutritional imbalance. There has been a negative impact on the Community” (Musqueam First Nation Representative 2014).



6.0 GOVERNMENT FINANCE

Musqueam's 2012 annual report indicates that 51% of Musqueam total revenues are self-generated revenue through rents and leases, the Taxation Fund, Musqueam businesses, and other sources. The money derived from self-generated revenue can be used according to approval of the First Nation's annual budget, including provision of municipal services to IR 2 residents (Musqueam First Nation 2013).

The remaining 49% of total revenue is received from various government agencies including AANDC, Health and Welfare Canada, Ministry of Transportation, Department of Fisheries and Oceans, Canada Mortgage and Housing Corporation. Government funding is restrictive, in that it must be spent in a specified way and is repayable if not disbursed as specified in the contribution agreements² (Musqueam First Nation 2013).

The 2012 Musqueam Annual Report indicates community services accounted for 60% of the Musqueam's expenses. Expenditures, which supplement government sponsored programs, focussed on the Community Centre, Soccer Field and Cultural Centre as well as funding Wellness, Language and Culture, and Employment and Training and accounted for the remaining 40% of expenditures (Musqueam First Nation 2013).

² Contribution agreements outline forms and parameters of assistance, monetary and/or non-monetary from the federal government to Aboriginal groups (Aboriginal Affairs and Northern Development Canada 2013b).



7.0 SERVICES AND INFRASTRUCTURE

7.1 Housing

Most Musqueam Members wish to live on their home reserve of IR 2. However, they have limited unencumbered land available for housing development on IR 2 (Musqueam First Nation 2011a); (Musqueam First Nation Representative 2014). Community Members rank housing needs as the most important Community objective, with Members wanting the following:

- Efficient use of land;
- Increase in housing choice (i.e., type and location);
- Improvement in housing quality; and
- Improvement in Band housing service to Members (Musqueam First Nation 2011a).

7.1.1 Housing Supply

At Musqueam IR 2 houses are built through one of two processes:

- *Section 95* or On-Reserve Non-Profit housing is a program that assists First Nations in the construction, purchase and rehabilitation, and administration of suitable, adequate and affordable rental housing on-reserve. The Canadian Mortgage and Housing Corporation (CMHC) provides subsidies to the constructing of a dwelling to assist with financing and operation (Canadian Mortgage and Housing Corporation 2014a). This process requires the Musqueam Housing Department to:
 - approach Chief and Council with a Band Council Resolution (BCR) for approval to build;
 - submit an application to Canadian Mortgage and Housing Corporation (CMHC) for the provision of operating subsidies; and
 - submit a ministerial loan guarantee to Aboriginal Affairs and Northern Development Canada (AANDC) to get a loan from CMHC through All Nations Trust Company to build the home (Musqueam First Nation Representative 2014).

Through the above process, AANDC provides \$20,000 (\$19,000 for construction and \$1,000 for infrastructure), with the remainder of the funding coming from the mortgage held by the Band. The Band then charges Band members rent. Members are tenants until the loan is paid (Musqueam First Nation Representative 2014).

- *Section 10* or Loan Insurance Program On-Reserve with Ministerial Loan Guarantee serves to assist Band Councils or First Nation Members living on-reserve to access financing for the construction, purchase and/or renovation of single-family dwellings or multiple residential rental properties (Canadian Mortgage and Housing Corporation 2014b).



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According to the Musqueam departmental representative, there are 81 *Section 95* homes or homes rented from the Band and 110 Member owned homes (i.e., title is in the hands of Members) on IR 2. In addition to securing financing, the lack of land available and limited available infrastructure (e.g., water, sewer) have been identified as constraints to housing supply (Musqueam First Nation Representative 2014).

Table 6 provides a profile of Musqueam dwellings over a four year period. Musqueam First Nation has a total of 239 dwellings, of which 216 are single dwellings and 23 are multifamily dwellings.

Table 6: Musqueam First Nation Dwellings

	2008	2009	2010	2011
Total Dwellings	184	199	238	239
Number of Single Family Dwellings	168	176	215	216
Number of Multi Family Dwellings	16	23	23	23
Number of Assisted Living Dwellings ^(a)	0	0	0	0

^(a) Assisted living, in this report, is defined as dwellings that accommodate seniors, adults with chronic illness, and children and adults with disabilities (mental and physical) (Aboriginal Affairs and Northern Development Canada 2013c).

Source: (Musqueam First Nation 2013).

7.1.2 Housing Demand

Long-term rentals on reserves were identified as the most pressing housing needs, followed by Elder housing (Table 7). When Members were asked their home preference, 89% of respondents indicated they would prefer to own their own home over renting (at 11%).

Table 7: Musqueam's Most Pressing Housing Needs, 2011-2012

Most Pressing Housing Needs	Percentage of Respondents
Long-Term Rentals on Reserve (Apartments, Condos, Townhouses)	43%
Multi-Family Housing	15%
Long-Term Rentals on Reserve (Houses)	3%
Elder Housing (Including Assisted Living)	28%
Housing for Young Families	8%
Home Ownership Program	5%
Buildable Lots	0%
Home Maintenance Program	0%
Social Housing	0%
Emergency Shelter	0%
Safe House for Children	0%
Month-to-Month Rental Homes	0%

Source: (Musqueam First Nation 2013).



According to the Musqueam departmental representative there are currently 290 Members on the housing wait list. More Members will be added to the list in the future (as soon as a Band member turns 18 they put their application in for a house). All types (e.g., families, low income, seniors) of housing are in demand. It was indicated that at this time, there are no houses being built unless Members have their own land and their own money to build their houses. Lack of land has been identified as a major barrier to providing sufficient housing for Members, while lack of sufficient income hinders Members from building their own homes (Musqueam First Nation 2010); (Musqueam First Nation Representative 2014).

7.1.3 Housing Conditions

Adequate housing is defined by the CMHC as housing that does not require major repairs according to residents (Canada Mortgage and Housing Corporation 2014). Based on the Musqueam First Nation’s reports, a substantial number of the 239 dwellings are in need of major repairs (compared to Corporation of Delta, and Metro Vancouver) (Musqueam First Nation 2013, Statistics Canada 2013b, c).

The Musqueam Housing Maintenance team conducts annual home inspections and undertakes maintenance and renovation work for Section 95 houses. As part of this process, Musqueam employs two maintenance people to do minor repairs on home including addressing mold issues. Mold remediation can be carried out by trained Community Members, reducing remediation cost. The Musqueam department representative indicated mold issues have decreased substantially since 2008 (Musqueam First Nation Representative 2014).

As detailed by the Musqueam departmental representative, securing funding for repairs renovation work is an involved, time consuming, and uncertain process through the following:

- Application for funding through CMHC’s Residential Rehabilitation Assistance Program (RRAP) available to bring existing housing up to minimum standards of health and safety and to modify housing to meet the needs of the disabled. Once CMHC approves the funding application, CMHC conducts an inspection prior to granting the funds;
- The Housing Department can apply for a \$10,000 grant to AANDC for a forgivable loan (i.e., if a Member remains in the house for specific period of time); and
- In cases where costs exceed funding provides by CMHC or AANDC or in instances where applications are not approved by CMHC and/AANDC, cost for repairs and renovation have to be covered by the Band (Musqueam First Nation Representative 2014).

Table 8 details housing repair problems raised by Members, and percentage of Members that rank each of the repairs as a key issue.

Table 8: Musqueam Housing Repair – 2011 - 2012

Housing Repair Issues	Percentage of Respondents
Deterioration	37%
Mold	10%
Plumbing	10%



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Housing Repair Issues	Percentage of Respondents
Electrical	6%
Structural (Roof)	6%
Insulation	4%
Foundation	6%
Not Sealed	0%
Appliances	6%
Yards (Flooding)	4%

Source: (Musqueam First Nation 2013).

The Housing Department is working to inform Members on the importance of paying their rent, advising Members that the monies derived from rent can be used for future renovations. The Housing Department is also educating Members who are tenants to look after minor repairs in order to cut costs and allow the two maintenance staff to address more major repairs (Musqueam First Nation Representative 2014).

7.1.4 Housing Projections and Housing Plans

In 2008, there were 214 Members on the housing waitlist. As noted in the *Musqueam First Nation: A Comprehensive Sustainable Community Development Plan* (2011), between 2009 and 2011, Musqueam was able to complete the development of a new sub-division and construct 40 new single-family homes. In 2009, 20 Members who were on the housing waitlist were provided with housing and in 2010, 35 received housing. By 2011, the number of Members on the housing waitlist had increased to 250. Today, there are 290 on the list. Musqueam's growing population (i.e., between 2% and 3.5% annually) and its changing demographics will continue to increase the demand for housing (Musqueam First Nation 2011a); (Musqueam First Nation 2010).

Musqueam has made the following housing needs projections:

- If all their Members were to live or have a home on IR 2, Musqueam would have to build 7 or 8 houses annually just to keep up with a population growth (at 3.0%);
- Musqueam would also need to build a number of houses annually to “catch up” on their waiting list;
- Musqueam would have to build approximately 15-20 units annually over the next 22 years, or 350-375 homes to “keep up” and “catch up” on their housing needs; and
- The provision of a greater mix of housing types (e.g., multi-family homes, apartment, or “Musqueam condos”) would make better use of their limited lands, be less expensive to build and service, and would meet a greater range of Members' housing needs (Musqueam First Nation 2011a); (Musqueam First Nation 2010).



Future housing plans include:

- In the next 10 to 20 years, there is potential to develop 100 acres of buildable and available land. Currently, these land are held for the most part, by Certificates of Possession or by non-residential uses that may be redeveloped (almost ½ of the non-residential uses land is now the Musqueam Golf Course but is at flood risk);
- Increasing housing options through the provision of diverse housing types, innovative tenure option, and development opportunities;
- Increasing housing quantity by developing guidelines and building new infill and assisted living units;
- Increasing the quality of housing by completing major repairs, retrofits, and increasing member capacity in housing maintenance; and
- Exploring redevelopment, higher densities, and off-reserve housing option (Musqueam First Nation 2011a); (Musqueam First Nation Representative 2014).

7.2 Services and Infrastructure

7.2.1 Infrastructure and Service Agreements

In January 2014, Musqueam and the City of Vancouver signed a new comprehensive agreement governing the provision of services to all of Musqueam IR 2. The comprehensive agreement is structured to encompass services such as police, fire, water, sewer, animal control, and garbage pickup. The agreement also covers services the City of Vancouver will provide to future Musqueam developments, including new housing on IR 2. The agreement covers the cost of services, which Musqueam pays the City of Vancouver for. Prior to January 2014, each service was negotiated with the City of Vancouver on a case-by-case basis.

As explained by the Musqueam departmental representative, IR 2 consists of the Village (where Members live) and parcels of leased lands. Under the current agreement with City of Vancouver, Musqueam takes ownership and responsibility for the infrastructure at the Village and has started to maintain the infrastructure in the Village area. Previously the infrastructure was maintained by the City of Vancouver. Specifically, Musqueam constructed a maintenance plant and is building capacity with Community Members to undertake infrastructure related work including maintenance of the community's water, sewage, drainage, roads, grounds, and community building infrastructure. With some financial support from AANDC, Musqueam replaced a portion of the asbestos water line at the original village site. Musqueam also implemented a program to improve Community parks and open spaces and to operate and maintain the sports fields. This involves full time and seasonal training and employment for Members. On the leased lands the City continues to maintain services and infrastructure (Musqueam First Nation Representative 2014).

In regard to IR 4, currently Delta provides municipal potable water services to Musqueam for land (i.e., IR 4) located within municipal boundaries. Delta does not provide wastewater services to Musqueam IR 4 (Gyarmati 2013).



7.2.2 New Community Facilities

Musqueam recently completed a number of new facilities including:

- Two Soccer fields –one artificial and one natural. These fields provide a space for inter-Nation annual youth tournaments and a place for youth to go to after schools and in the summer months. In the past Musqueam had to apply to the Parks Board to host the tournaments. Now they can host the tournaments in the Community, bringing together various First Nations. Thus these recreation facilities serve to promote relations with other First Nations, community organizations and sports groups, and are a way to bring the Musqueam Community together (on and off reserve) in the promotion of healthier lifestyles.
- Youth Centre and Cultural Centre: these facilities are used for cultural sharings and education classes. Students from different schools come to Musqueam and the facilities serve as venues for Musqueam to share their culture with others.
- Community Centre: this facility has a gym, commercial kitchen, office space (Musqueam First Nation Representative 2014).

As noted by the Musqueam departmental representative, space is required for people to go for social, recreational and cultural activities and experiences. When Musqueam built more houses and youth returned to the community, it was necessary to consider what young people would do after school for example. The Youth Centre, gym, soccer fields offer opportunities that are important culturally, emotionally, and physically to Members and the Community. These various facilities are used by Members and rented out to generate revenue for maintenance of the facilities (Musqueam First Nation 2010); (Musqueam First Nation 2011a); (Musqueam First Nation Representative 2014).

7.2.3 Issues Related to Services and Infrastructure

Results from a community survey (as detailed in Musqueam's 2012 Annual Report) indicate the following concerns:

- Vehicle traffic in the community;
- Walking trails and pedestrian networks;
- Road and sidewalk maintenance; and
- A small number of those surveyed identified concerns with public space sanitation (including debris & waste at Beach, park, and playground) (Musqueam First Nation 2013).

Musqueam has recently worked with Metro Vancouver to address Community concerns regarding the Highbury Interceptor, which passes through IR 2 and connects to the Iona Island Wastewater Treatment Plant. The Highbury Interceptor is a large sewer that conveys the majority of Vancouver's wastewater to the Iona Island Wastewater Treatment Plant for treatment. During the meeting(s) with Metro Vancouver, Musqueam raised concerns regarding health and safety issues of the Wastewater Treatment Plant and the Interceptor. More



specifically, the stacks of the sewage plant emit odors. Musqueam is concerned because the Highbury Interceptor runs parallel to a portion of the last salmon bearing creek in Vancouver (Musqueam First Nation Representative 2014).

Metro Vancouver has announced plans to build an Air Management Facility in Musqueam Park in 2015, to extract the air and treat odour from the sewer. Metro Vancouver is working the City of Vancouver, Vancouver Park Board and Musqueam to plan this project (Metro Vancouver 2014).

As noted by the Musqueam departmental representative, Musqueam is “at the end of the line” from the City of Vancouver in regard to termination of municipal water lines. As the City is the provider of the Community’s water, it will be necessary to involve the City of Vancouver in Musqueam’s future plans for the Community, to facilitate the City’s understanding of water infrastructure and supply requirements linked to future development (Musqueam First Nation Representative 2014).

7.2.4 Health and Social Services

Musqueam Health Department’s mission is to safeguard and support the health and wellbeing of Musqueam Community Members, including mental, emotional, spiritual, psychological, and physical health. Members access medical facilities (e.g., hospitals) in the City of Vancouver. The Musqueam Health Department works with other departments and various levels of government to provide all Members access to basic health, mental health, and home and Community care programs to help Members live healthier, longer lives. The Musqueam Health Department is also part of the First Nations Health Council’s Governance Working Group, which undertakes research and improvements on First Nations health governance structures (Musqueam First Nation 2013).

The following programs are managed by the Musqueam Health Department:

- Elders program;
- Brighter Futures & Injury Prevention;
- Nutrition;
- Mental Health;
- Drug and Alcohol Counselling and Prevention;
- Drinking Water Monitoring;
- AIDS/HIV Education and Awareness;
- Mental Health (including the Employee Assistance Programs (EAP));
- Chronic Disease Management which includes Aboriginal Diabetes;
- Community Health Nursing, which includes Audiology, Dental Screenings, pre-and post-natal care;
- Kitz Cooking; and
- Girls Club (suicide prevention/capacity building).



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The Musqueam Health Department also provides assessments, referrals, and aftercare to people with addictions through their National Native Alcohol and Drug Abuse Program (NNADAP) worker (Musqueam First Nation 2013).

The adverse, generational effects of residential schools are seen to be a factor adversely affecting the health of Musqueam Members. Addiction continues to be a challenging issue. Results from a community survey (as detailed in Musqueam's 2012 Annual Report) indicate the following concerns:

- Addiction as a priority health and social issue for address;
- Diabetes in Children and Adults as a priority health and social issue for address;
- A small number of those surveyed identified domestic violence as a priority health and social issue for address; and
- Heart disease as a priority health and social issue for address (Musqueam First Nation 2013).

The Musqueam Health Department's aim is to develop a wellness approach to health, prioritizing health promotion and disease and injury prevention. The 2012 Musqueam First Nation Annual Report indicates that the following Members participated in programs aimed at preventative health, programs that promoted health, and programs that supported Members in need:

- 45 Elders participated in programs focused on luncheons, Craft programmes, Chronic Disease Programme, Kidz Cooking;
- 46 Members with Diabetes (45 self-identified and 1 gestational diabetes) participated in preventative programs;
- 14 Members participated in mental health programs; and
- 115 Members participated in preventative health programs (13 participated in the National Native Alcohol and Drug Abuse Program; 13 in Maternal Health, 43 in Chronic Disease, 27 in the Youth Centre, and 19 in the Breakfast Club) (Musqueam First Nation 2013).

With a rising on-reserve population, demands for health programs and services are increasing. Some programs are at or over-capacity given the number of staff operating them. There is an ongoing requirement for additional human and financial support (Musqueam First Nation 2013).

A Musqueam departmental representative indicated that physical disabilities can deter Musqueam Community Members from seeking urban services available in Vancouver for the physically disabled. Some Members experience a lack of "psychological assurance of inclusion" as well as reluctance to receiving services from people outside the Community (Musqueam First Nation 2014).



7.2.5 Emergency Services

As indicated in Section 7.2.1, City of Vancouver and the Musqueam First Nation have signed an Agreement to provide the First Nation with several services including police, fire and animal control. Ambulance services are provided by BC Ambulance. Musqueam in partnership with the Vancouver Police Department strive to build a stronger relationship to ensure the safety of its Community, its Members, and leaseholders. Musqueam has a Security Department, responsible for the following:

- Liaising with the Police and other Emergency Services to ensure an adequate level of respectful, impartial, and culturally sensitive service;
- Patrolling the Community (5 pm to 8 am 7 days a week);
- Community based conflict resolution;
- Responding to calls for assistance from Community Members and Leaseholders; and
- Supplying and maintaining emergency oxygen, defibrillators and first aid equipment at critical areas around the Community (Meiszner 2014; Musqueam Indian Band 2014a).



8.0 MARINE AND LAND-BASED OUTDOOR RECREATION

8.1 Non-commercial Outdoor Recreation

Recreation has been identified as a mechanism to help heal and unify the Community. During the 2011 Community Development Plan process, Community Members identified the importance of recreation for all ages to:

- Support health and well-being (e.g., playgrounds, better recreational opportunities);
- In promoting relations with other First Nations and non-Aboriginal community organizations; and
- In bringing the Community (on and off reserve) together while promoting healthier lifestyles (Musqueam First Nation 2011a; Musqueam First Nation and Ecoplan International, Inc. 2010).

8.2 Commercial Tourism

8.2.1 Commercial Land and Riverine Based Tourism

Musqueam offers the following four Educational Tours on a limited basis:

- Musqueam Historical Tour - which introduces the contemporary landscape of IR 2, the changes over time and Archaeology sites that date back 1,500 – 4,500 years BP (Before Present);
- Musqueam Ecological Tour of Musqueam Creek, Vancouver's Last Wild Salmon Stream – which focuses on how the salinity of the water in the area is important to juvenile salmon preparing for the ocean, as well as the plant life and how Musqueam Members use the plants for medicine. The tour also explains how the Musqueam have used the stream's ecosystem for spiritual, physical and mental well-being;
- Musqueam Community and Long House Tour – which focuses on how the Community has developed through time and the rich history of the land of the Musqueam People. Tour groups are informed about Musqueam's relationship with the Chinese farmers, their sacred Long House, and its historical and cultural significance; and
- Cultural Education Centre and Musqueam Gallery Tour – with the Centre holding many of Musqueam's cultural heritage treasures, public art installations created by local Musqueam carvers, weavers, and painters (Musqueam Indian Band 2014b).

Recognizing that Musqueam people have lived on the South Coast for thousands of years and that their traditional territory occupies what is now Vancouver and surrounding areas, the Vancouver Heritage Foundation (VHF) and Musqueam developed a pilot project bus tour titled, "Witness It, Remember It, Tell It". This tour takes visitors on a bus tour to explore several sites of particular importance to the Musqueam peoples and discuss traditional practices, arts, songs, legends, and on occasion personal stories. Sites visited included:

- x^wməθk^wəy^əm, the main village of the Musqueam people;
- ʔəyalməx^w, a Musqueam village site at the time of the warrior Capilano, which is present day Jericho Beach; and
- čəsnaʔəm, an ancient village and burial site of the Musqueam people (Vancouver Heritage Foundation 2014).



8.2.2 Commercial Recreation

As described in Section 4.2, Milltown Marina is situated six nautical miles from where the mouth of the North Arm of the Fraser River meets the Strait of Georgia. The location is well suited for quick and easy access to recreational boating waters.

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Handwritten signature of Linda K. Mattson in black ink.

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Anthropologist

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