



# Gitxaala Use Study

Prepared for Port Edward Area LNG Projects, including:

- Prince Rupert LNG
- Pacific Northwest LNG
- Prince Rupert Gas Transmission Project
- Westcoast Connector Gas Transmission Project

July, 2014



PREPARED BY:  
CALLIOU GROUP  
CALGARY, AB



ON BEHALF OF:  
GITXAAŁA NATION  
KITKATLA, BC

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For further information, please contact:

**Gitxaala Nation**

PO Box 149

Kitkatla, BC V0V 1C0

250-848-2214

[gitxaalanation.com](http://gitxaalanation.com)

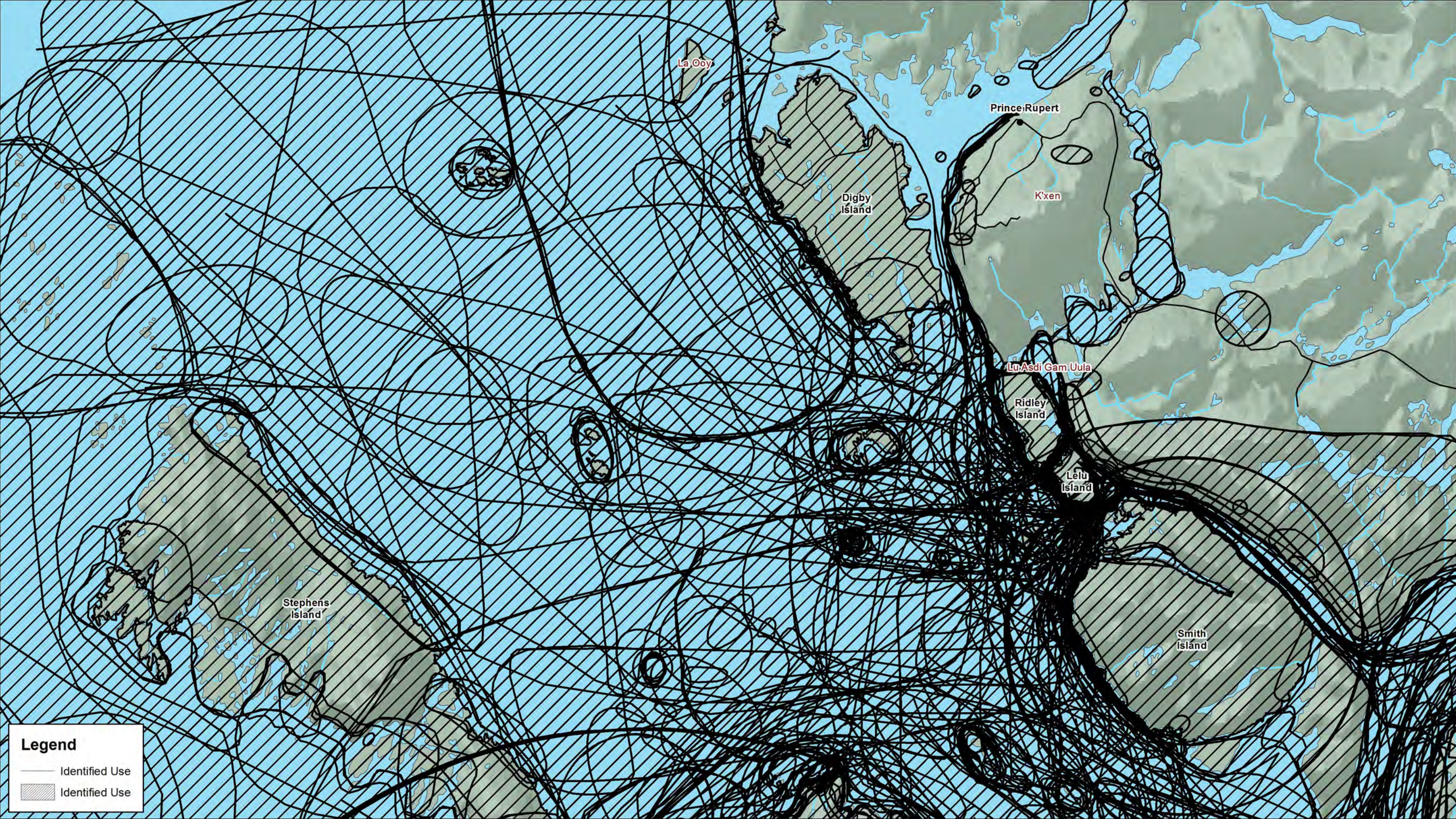
## Executive Summary

The following Report, *Gitxaata Use Study* for the proposed Port Edward Area LNG Projects including Prince Rupert LNG; Pacific Northwest LNG; Prince Rupert Gas Transmission Project; Westcoast Connector Gas Transmission Project (the Projects) is intended to identify Gitxaata Nation marine, intertidal and land use information in the vicinity of the Projects. This area, known as the Study Area, includes the marine pipelines routes, shipping lanes, terminals and associated terminal infrastructure such as jetties. This Study Area represents a portion of the Gitxaata Nation's traditional territory. For the purposes of this Report, the Study Team conducted interviews with 30 Gitxaata members in the fall of 2013 and the spring of 2014. The Study Team also reviewed, and where appropriate, included traditional use data from the Gitxaata Use Study for the Enbridge Northern Gateway Project.

During the interviews conducted for this Report, Gitxaata Nation members reported extensive past and current use within the Study Area (See Figure X-1 for a composite map of all use by all Study Participants in the Study Area. Gitxaata Nation Participants also reported dependency on the resources harvested from within this area for food, economic and cultural purposes (see also the Port Edward Area LNG Projects Gitxaata Valued Components Reports (Calliou Group 2014) and the Gitxaata Port Edward Area LNG Projects Socio-Economic Report (Calliou Group 2014)). In particular, the system of governance of the Gitxaata Nation as described by Study Participants is a complex system of resource use and management directly tied to specific areas within their territory. Further, the Nation's cultural identity is directly tied to their ability to access their territories and important places and continue a marine harvesting way of life.

Of particular concern to the Study Participants are the potential effects related to access and marine navigation through the Project Study Area both during construction of the pipelines and operation of the terminals. Participants also emphasized concerns with regards to the marine environment around Flora Bank, noting that it is an area that supports juvenile salmon (as well as other species) and is an area where spawning fish (including salmon, herring and eulachon/oolichan) travel through en route to the Skeena River and Nass River. Participants are concerned that the Projects could negatively impact Gitxaata Nation in the areas of governance, harvesting, economy (which may include trade, barter or commercial), cultural identity, sacred places and therefore cultural transference and continuity. Nation members are also concerned about increased wake; increased noise; increased air pollution; increased waste; visual disruption, introduction of invasive species; bilge, ballast and sewage discharge; emergency preparedness and accidents, and; cumulative effects from the Projects and other related or similar projects.

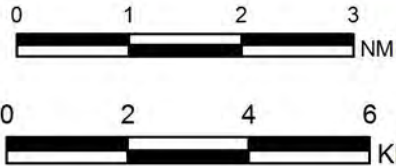






**Gitxaala Nation Use Study**

**Composite Use**

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Prepared For:	 GITXAALA ENVIROMENTAL MONITORING	Prepared By:	 Calliou Group
Date:	6/17/2014	Figure Number:	X-1
Map Information:	Base Data: NTDB Topographic Mapsheets (Department of Natural Resources); Digital Elevation Model (GeoBase); Use Data and Place Names (Gitxaala Nation)		



## **Study Team**

### **REPORT AUTHORS:**

Germaine Conacher  
Shauna McGarvey

### **INTERVIEWS:**

Germaine Conacher  
Shauna McGarvey  
Friederike Rischmann  
Adena Vanderjagt

### **GIS MAPPING:**

Adena Vanderjagt  
Thomas Campbell  
Carrie Conacher

### **PHOTOS:**

Shauna McGarvey  
Colin Nelson  
Friederike Rischmann

### **TRANSCRIPTION:**

Friederike Rischmann  
Ryland Brennan

### **SENIOR REVIEW:**

Tracy Campbell  
Germaine Conacher

### **GITXAALA ENVIRONMENTAL MONITORING RESEARCH ADVISORS:**

Caroline Butler  
Bruce Watkinson  
James Witzke  
Charles Menzies (University of British Columbia)

### **INTERPRETER:**

Ernie Bolton

### **COORDINATORS/INTERVIEW OBSERVERS:**

Ernie Bolton  
Greg McKay



### **Port Edward Area LNG Projects Interview Participants**

Allen Robinson  
Bruce Watkinson  
Douglas (Doug) Brown (Lutgutsamtii)<sup>1</sup>  
Harvey Aster  
Willard Robinson  
John Vickers  
Mel Tolme  
Ray Nelson (Niis Txay Naa)  
Larry Bolton  
Theodore Nelson  
Verne Jackson  
Vince David  
Ted Gamble (Geetn)  
Ernie Bolton (G away)  
Clarence Innis (Txa gyet)  
Colin Nelson  
Greg McKay (Laxs 'Neeext)  
Samuel (Sam) Lewis  
Ronnie Shaw  
Reverend Sam Lewis (La Ooy)  
Cyril Aster  
Eugene Gordon  
Warren Aster  
Reg Gladstone  
Clyde Moody  
Elliot Moody  
Gilbert Hill  
Keith Lewis  
Matthew (Matt) Hill (Txa La Laatkwa)  
Edward Gladstone (Niis Kul Uutk)

### **PORT EDWARD AREA LNG PROJECTS FIELD PARTICIPANTS**

Clarence Innis  
Bruce Watkinson  
Greg McKay  
Eddie McKay (Laawx)  
Ray Nelson  
Ernie Bolton  
Cyril Aster  
Matthew Hill  
Doug Brown  
Larry Bolton  
Rita Robinson (N'tsi'its) (–Ka'yeeyt)  
Ronnie Shaw

### **GITXAALA VALUED COMPONENT WORKSHOP PARTICIPANTS**

Clarence Innis  
Matthew Hill  
Margaret Hill ('Wii Hana'a)

---

<sup>1</sup> Where available we have included Participant's hereditary names.



Ernie Bolton  
Greg McKay  
Colin Nelson  
Cyril Aster  
Eddie McKay  
Ray Nelson  
Warren Aster  
Ted Gamble  
Warren Nelson (Aama gyedm 'Neext)  
Keith Lewis  
Craig Bolton  
Merle Bolton ('Wii Xa'a)  
Ronnie Shaw  
Douglas (Doug) Brown  
Rita Robinson  
Thelma Hill (Gaas)

#### **ENBRIDGE NORTHERN GATEWAY GITXAALA USE STUDY PARTICIPANTS**

Cyril Aster  
Ernie Bolton  
Larry Bolton (Inta 'Wii Waalp)  
Allan Brown (Gilasgamax)  
Don Brown (Wudi Naaxs)  
Doug Brown  
Edwina Brown (Wii Txaaw)  
Marjorie Brown (Ksi gwisgwaask)  
Vince Davis (A'gyannst)  
Joey Douglas  
Ted Gamble  
Ben Hill (Dzogm Giis Haaytk)  
Gilbert Hill  
Matthew Hill  
Thelma Hill  
Clarence Innis  
Keith Innes  
Linda Innes  
Tim Innes (Guuldm gaawdi gaax)  
Willy Innes (Niis Du'et)  
Keith Lewis  
Rennie Lewis  
Godfrey Mason  
Eddie McKay  
Greg McKay  
Elmer Moody (Lii 'taam lax dii)  
Jeannette Moody (Wil Uks Yaa Gyemk)  
Queenie Moody (N'tsi'its Łgutga Gyibaaw)  
Ray Nelson  
Annette Olney  
Shirley Ryan  
Ronnie Shaw  
Joe Fred Spencer (Wii Gyedm Ksi Gwaantk)  
Bill Stewart  
Teresa Stewart



## Abbreviations and Acronyms

<b>AK</b>	Aboriginal Knowledge
<b>ATK</b>	Aboriginal Traditional Knowledge
<b>BC EAO</b>	British Columbia Environmental Assessment Office
<b>BCEAA</b>	British Columbia Environmental Assessment Act
<b>CEAA</b>	Canadian Environmental Assessment Act
<b>EA</b>	Environmental Assessment
<b>GEM</b>	Gitxaata Environmental Monitoring
<b>GIS</b>	Geographical Information Systems
<b>GUS</b>	Gitxaata Use Study
<b>LSA</b>	Local Study Area
<b>NEB</b>	National Energy Board
<b>RSA</b>	Regional Study Area
<b>TEK</b>	Traditional Ecological/Environmental Knowledge
<b>TLUS; TLU; TU</b>	Traditional Land Use Study; Traditional Land Use; Traditional Use
<b>VCR</b>	Valued Component Report



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# 1.0 Introduction

There is a natural convergence between the environmental assessment process embedded within the regulatory review framework and the Crown's duty to consult and accommodate Aboriginal peoples (Bankes 2009; Lambrecht 2013). The Crown's duty to consult is triggered when the Crown, as represented by the Government of Canada and/or a provincial government, "has knowledge, real or constructive, of the potential existence of the Aboriginal right or title and contemplates *conduct* that might adversely affect" that right (Haida Nation v British Columbia 2004, 35). The conduct of the Crown includes decisions to approve the construction and operation of natural resource development projects, such as a proposed natural gas liquefaction facility and associated marine terminal. The Crown's duty to accommodate is triggered when there is a strong possibility that Crown conduct may "require taking steps to avoid irreparable harm or to minimize the effects of infringement" (Haida Nation v British Columbia 2004: 47).

The process used by the Crown in Canada to gather information to predict and measure both positive and negative effects resulting from proposed natural resource development projects requiring Crown approval is broadly known as the regulatory review system. The regulatory review system occurs on a spectrum where the largest projects with the highest probability for change to the environment undergo a predictive process known as the environmental assessment process. Although there is no 'one' definition of environmental assessment, the International Association for

Impact Assessment defines it as:

The process of identifying, predicting, evaluating and mitigating the biophysical, social and other relevant effects of development proposals prior to major decisions being taken and commitments made (IAIA and IEA 1999).

The conduct of environmental assessment processes are underpinned by the notion that a rational scientific method provides the basis for their execution and that “in order to be credible, the [EA] process must be based on scientific objectives, modeling and experimentation, quantified impact predictions and hypothesis-testing”(Noble 2010: 4).

In Canada, the requirement for the conduct of an environmental assessment is codified within legislation (both federal and provincial) across the country. However, most legislation outlining requirements for environmental assessments do not outline specific Aboriginal consultation requirements; Aboriginal consultation requirements are outlined in separate guideline or policy documents that are constantly being informed by decisions of Canada’s courts. As a result, legislation setting out the Crown’s expectations on the requirements of the environmental assessment process, including scope, procedures and methods, are not explicit with respect to the identification of adverse effects to Aboriginal rights and title.

Despite this lack of explicit guidance of how proponents are to identify negative effects to matters of importance to Aboriginal peoples, the Crown primarily uses the results of the environmental assessment process to predict and manage adverse effects to Aboriginal rights and title; that is, the Crown does not, on its own, undertake a systematic identification of effects resulting from a project on Aboriginal rights and title parallel to the ongoing project assessment undertaken by the proponent. Therefore, it is critical that the information collected and presented to the Crown by the proponent in their application accurately and credibly identifies the size, scope and nature of the effect to Aboriginal rights and title to ensure meaningful Aboriginal consultation and accommodation.

## 1.1 Traditional Land Use Studies (TLUS)

There is much confusion of what Traditional Land Use Studies are and conversely, are not.

Traditional Land Use Studies (TLUS) (sometimes called “Land Use and Occupancy Study”, “Traditional Knowledge Study”, “Traditional Use Study” or “Aboriginal Traditional Knowledge Study”) **should** provide baseline data on the exercise of Aboriginal and treaty rights, including a description of the continuity of practice of those rights in a project-specific study area of an Aboriginal group’s traditional territory. Project-specific TLUS should focus on the question, *“what Aboriginal and treaty rights were, are and going to be practiced in the area that may be potentially impacted by this project?”*

Information should be collected in relation to a variety of biophysical (natural) and socioeconomic (human) components from an Aboriginal group about past, present and future exercise of Aboriginal and treaty rights in the area impacted by a project. This information should be documented spatially (maps) and in narrative formats. Optimally, TLUS should also include a description of the conditions necessary for continued practice of those rights. This baseline information can then be integrated into the environmental assessment process by the proponent and their consultants at numerous junctures of the assessment, and used to assist in the identification of potential adverse effects to the use of land, water and resources as well as effects to the socio-economic environment for the exercise of Aboriginal and treaty rights for each Aboriginal group



potentially affected by the project.

Care is required when using the term 'traditional'. Static notions of the term "traditional use" can imply that activities are part of a bygone past, and are frozen in time. On the contrary, Aboriginal and treaty rights are contemporary activities that are part of vibrant cultures. Calliou Group strives to use the term "traditional" to describe a *continuity of practice* of activities by Aboriginal peoples that are central to their culture.

TLUS can also document issues and concerns from an Aboriginal group about the intended use of the project area for the purposes of exercising treaty or Aboriginal rights. While project-specific TLUS can be the mechanism to tell an Aboriginal group's 'story,' they are not proxies for the identification of changes to Aboriginal rights. Issues and concerns expressed within the context of an Aboriginal consultation process are not substitutes for the identification of effects. A project-specific TLUS, by design, does not attempt to identify on its own (either qualitatively or quantitatively) project effects on the TLUS data collected. A TLUS is a baseline information collection exercise only. A traditional land use study **is not** a stand-alone environmental assessment, which is defined as a prediction of changes resulting from a proposed decision.

The conduct of a TLUS must adhere to basic scientific research principles, for obvious reasons, as "science is a necessary ally when trying to convince others that information is credible" (Tobias 2009). Others have cautioned against the practice of not using defensible methodologies in the documentation of traditional use information; Peter Usher notes "there is a risk that any knowledge, taken out of context in which it was generated can be misinterpreted or even deliberately misused" (2000).

For many years, anthropological or qualitative social science research involving Aboriginal peoples was conducted without their consent or active participation (Castellano 2004). This practice is changing; social scientists now acknowledge that "documentation and communication of TEK, regardless of who does it, requires the support, cooperation and involvement of the community involved" (Usher 2000).

As TLU studies are the collection of baseline information from an Aboriginal group, the conduct of the TLUS should occur **after** the selection of biophysical and socio-economic valued components. Information informing each valued component should be collected during the conduct of the TLUS. This baseline information should then be assessed by the proponent using standard environmental assessment methodology. The resulting identification of changes to the baseline of each selected valued component will inform how a project will negatively or positively affect the exercise of rights for that group.

For the purposes of this report, we will refer to the following TLU study as the Gitxaata Use Study (GUS). We take the term "Use" to be inclusive of all rights and related activities, practices, and interests.

### **1.1.1 Traditional Environmental Knowledge and Traditional Land Use**

While there are two types of information collected in the context of a project-specific Traditional Land Use Study, neither should be viewed as separate or discrete from one another. The first type is called Traditional Environmental (or Ecological) Knowledge (TEK) (also known as Indigenous Knowledge (IK) or Indigenous Science (IS)). TEK is understood as the cumulative body of qualitative knowledge, beliefs and practices, handed down and through generations, primarily by oral transmission, describing the relationship of living beings (including humans) with one another and with their environment (Berkes 1998). It is a complete knowledge system with its own concepts

of “epistemology, philosophy, scientific and logical validity” (Daes 1994: para 8). Further, TEK is associated with Aboriginal societies with significant historical continuity in resource use practices.

TEK information is essential to understanding the nature of the Aboriginal rights, and as such, it is necessary to ensure that TEK information is gathered within the context of a TLUS.

Qualitative TEK information provides the context for the exercise of rights by Aboriginal peoples, and helps to demonstrate the meaning behind practices integral to culture developed over time. TEK explains ‘how and why’ land, water and resource use occurs the way it does, and continues to exist because Aboriginal groups continue to practice and access the places to which their knowledge is connected and learned.

While extremely valuable, it can be difficult to visually represent and use this type of qualitative information. Short of reading and analyzing full narrative accounts found in TLUS interviews, it is challenging to represent TEK in a way that is readily understandable or useable in environmental assessments. Therefore, it is important to describe TEK in terms that are understood in the context of environmental assessments: related to and described as valued components.

The second type of collected information is called Traditional Land Use (TLU) information. TLU information is the ‘where and when’ of Aboriginal and treaty rights and has the potential to be more easily represented spatially on a map to create a visual depiction or ‘picture’ of the exercise of rights. In *Chief Kerry’s Moose*, Terry Tobias follows Peter Usher when defining Traditional Land Use:

*Use refers to activities involving the harvest of traditional resources; things like hunting, trapping, fishing, gathering of medicinal plants and berry picking and travelling to engage in these activities. For any given community or nation, use occurs over a specific geographic area. (Tobias 2000)*

TLU information also includes harvesting sites, habitation sites, and cultural and spiritual areas, storied places, and place names. Despite lending itself more readily to spatial depiction than TEK, TLU information has an inherent element of ‘movement’ to it (such as animals, people, or activities like harvesting) that also makes it difficult to accurately capture and fully represent on a static, two-dimensional map. There are exceptions of course. Some aspects of TEK can be easily mapped, such as wildlife migration routes, calving areas, or spawning areas (Tobias 2009). However, the use of TEK information from a qualitative interview loses context as soon as it is placed statically on a map. The map should be read in conjunction with the interview in order to better appreciate the context and connection between both types of data. Indeed, TEK can be understood as the explanation while the TLU data can be understood as the basis of the map or picture. Both are required in order to provide the context within which the use information can be accurately framed, understood and evaluated within an EA process. It is the responsibility of the author of a TLUS to do so.

Still, it is important to note, that quite often, the exercise of two-dimensional mapping can oversimplify Aboriginal and treaty rights and obliterate any context that created the land and water use patterns over time (Roth 2006). In other words, “unlike qualitative studies (which probe deeply and capture subtleties of meaning using the recorded word) map surveys cannot capture the richness of meaning. They can only scratch the surface” (Tobias 2009).



### 1.1.2 Limitations of Traditional Land Use Studies

There are several important limitations of TLU Studies that must be highlighted.

First, it is tempting to view a project-specific TLUS as the totality of information about the exercise of Aboriginal and treaty rights in a particular area by an Aboriginal group. This is not the case. A project-specific TLUS has the same limitations as any baseline study conducted for a single project.

A large volume of baseline data could be collected to characterize the biophysical and human environments, and a long list of techniques for collecting that data could be employed...however, EA scoping should establish clear boundaries for spatial and temporal assessment according to the important components of the environmental baseline (Noble 2010).

In other words, the amount of baseline information collected for a single assessment is shaped by certain parameters. The parameters used to scope the conduct of a project-specific TLUS include number of interview participants, financial resources used and time allotted for execution of the study. A TLUS should be used to describe baseline trends.

It is also impossible to fully represent the extent of knowledge or areas of use learned over a lifetime during a standard two-hour interview format. By definition, a representative map of traditional use will identify 'used' and 'unused' areas which may not accurately reflect the totality of a lifetime of cultural knowledge and practices. This mapping exercise therefore cannot adequately or correctly capture all use over time. This limitation is especially evident when draft reports are presented at a community meeting for verification. Often, both study participants and community representatives lament that the report does not capture or represent the totality of the community's knowledge and use.

Secondly, spatial representation is by definition an interpretation of information. Locating and identifying specific-use sites on two-dimensional, large scale topographic maps is challenging. Some study participants, with deep knowledge of their territory and experience on the land and water, may have limited experience reading maps. For others low "map literacy" is a reflection of the fact that mapping a multi-dimensionally experienced world in two-dimensions does not always translate cross-culturally. As a result, mapped information captured during desktop TLUS may have an inherent element of inaccuracy. This is not particular to Aboriginal Traditional Land Use Studies: all mapping processes carry with them inherent elements of inaccuracy and imprecision. Field visits to seek and verify specific information is ideal. However, TLUS are rarely provided the time or financial resources for robust field visits to locate and precisely identify TLU information captured during interviews. It is therefore extremely unlikely that all sites identified during desktop interviews will be field verified.

Thirdly, any information collected from qualitative interviews will only reflect what was asked of the interview participant in the course of the interview. While somewhat self-explanatory, the results are controlled by the interviewer.



*Port Edward Harbour*

## **1.2 Port Edward Area LNG Projects**

There are currently four major projects being proposed in the Port Edward Area, two LNG terminals and two pipelines connecting to the terminals. These projects are as follows:

- Prince Rupert LNG
- Pacific Northwest LNG
- Prince Rupert Gas Transmission Project
- Westcoast Connector Gas Transmission Project

Because of the close proximity of these projects, similar regulatory timelines and overlapping study areas within the Gitxaata traditional territory, Gitxaata Nation chose to use an integrated approach for the Gitxaata Use Study. In other words, interviews and field trips were conducted to collect Use information within the defined Port Edward study area (see Section 2.2) and a single report was created for use by all four project proponents. All four projects were required by the applicable regulatory authorities through either their Application Information Requirements (AIR) or EIS Guidelines to collect information on Aboriginal Interests. This Report satisfies, in part, those requirements for Gitxaata Nation<sup>2</sup>.

### **1.2.1 Prince Rupert LNG Proposed Liquefied Natural Gas Facility**

The Prince Rupert LNG Proposed Liquefied Natural Gas Facility (PRLNG) is a proposed natural gas liquefaction plant, associated port, and infrastructure facilities to export liquefied natural gas (LNG) to international markets. The Proponent, PRLNG, is a wholly owned subsidiary of BG International Limited who conducts business in Canada as BG Canada (PRLNG Application Information Requirements 2014).

The proposed PRLNG site is located on Ridley Island and will be approximately 125

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<sup>2</sup> In addition to this Report, Gitxaata has also prepared the following reports for submission to the Regulators and Proponents: *Calliou Group. Port Edward Area LNG Projects Gitxaata Nation Socio-Economic Report*. July 2014 and *Calliou Group. Port Edward Area LNG Projects Gitxaata Nation Valued Components Report*. July 2014



hectares. The land required for the project is designated as Federal Crown Land, is being administered by the Prince Rupert Port Authority, and has been designated for industrial use (PRLNG Application Information Requirements 2014). Overall, the project will have a LNG storage capacity of 540,000 cubic metres and PRLNG is proposing facility development and production capacity in two phases.

Phase one for the associated marine terminal will include one trestle (jetty) and one ship berth. Eventually, the trestle will be extended and a second berth will be added. For the first phase of development, PRLNG anticipates 189 vessel calls per year or an average of 3-4 per week. In the second phase an additional 95 vessels calls will be added for a total of 5-6 carriers using the facility per week (PRLNG Application Information Requirements 2014).

### **1.2.2 Pacific Northwest LNG Project**

The Pacific Northwest LNG Project (PacNW LNG) is a proposed natural gas facility that will convert natural gas to liquefied natural gas and export this product to Pacific Rim markets in Asia (Pacific Northwest LNG Project Description 2013). The project is broadly referred to as the Pacific NorthWest LNG Limited Partnership, is majority owned by PETROLIAM NASIONAL BERHAD (PETRONAS) and has minority stakeholders of Japan Petroleum Exploration Company (JAPEX) and PetroleumBRUNEI. However, the Pacific NorthWest LNG Limited Partnership as a whole will be responsible for the construction, operation and ownership of the Project (Environmental Impact Statement and Environmental Assessment Certification Application 2014).

The proposed PacNW LNG site is located on Lelu Island on lands and waters under the Prince Rupert Port Authority and is within the District of Port Edward. The Project will include:

- A natural gas reception system
- Gas pretreatment
- Three 6 MTPA natural gas liquefaction trains
- Three full containment 180,000 LNG storage tanks
- A marine terminal with trestle
- A bunkering facility
- A materials off-loading facility (MOF)
- An access road
- A bridge
- Pipeline and utility connections (Pacific Northwest LNG Project Description 2013)

The overall project development area encompasses approximately 261 hectares with 160 of these hectares being on Lelu Island and the other 100 hectares being marine infrastructure. These Project components will be constructed in two phases and would begin following receipt of all necessary regulatory approvals.

### **1.2.3 Prince Rupert Gas Transmission Project**

The Prince Rupert Gas Transmission Project (PRGT) is “a sweet natural gas pipeline that will extend from a point near Hudson’s Hope, British Columbia (BC), to the proposed Pacific NorthWest LNG export facility...” on Lelu Island (Application Information Requirements 2014). The proponent is TransCanada Corporation which will design,

build, own and operate the pipeline.

PRGT consists of a 900 kilometer pipeline with a diameter of up to 1,219 millimeters, a metering facility at the receipt and delivery points and three compressor stations. The Project will also allow for a potential six additional compressor stations for future expansion (Application Information Requirements 2014).

In addition to the pipeline itself, the Project will require some temporary infrastructure during construction such as access roads, bridges, stockpile sites, and borrow sites, contractor yards and temporary construction camps (Application Information Requirements 2014).

#### **1.2.4 Westcoast Connector Gas Transmission Project**

The Westcoast Connector Gas Transmission Project (WCGT) is a natural gas transmission system for the transportation of sweet gas from northeast British Columbia to Ridley Island on the northwest coast (Environmental Assessment Certificate Application 2014). The proponent is Westcoast Connector Gas Transmission Ltd. which is a British Columbia company that was formed with the purpose of pursuing the project on behalf of Spectra Energy and BG International Limited who conducts business in Canada as BG Canada (Environmental Assessment Certificate Application 2014).

Depending on final route selection, the route will either be approximately 854 kilometres or 862 kilometres in length. There will be up to five compressor stations along the selected route, each requiring approximately 35 hectares of land as well as three metering stations, block valves and roads for construction and operation of the project (Environmental Assessment Certificate Application 2014). The main features of the route are the potential terrestrial pipelines (mostly buried, up to two) with diameters up to 1,219 millimeters and the submerged pipelines on the seabed with diameters of 1,067 millimeters (common corridor, up to two). The pipelines will typically have a 55 meter right-of-way with an additional 15 meters of temporary workspace (Environmental Assessment Certificate Application 2014).

WCGT will also require a level of temporary infrastructure during construction that includes facility construction areas, temporary camps for the workforce, pipe and equipment laydown areas, borrow sites, temporary access roads and barge landing areas (Environmental Assessment Certificate Application 2014).

The overall system will be designed for operation of 50 years (Environmental Assessment Certificate Application 2014).

### **1.3 Valued Components**

An environmental assessment process necessitates the compartmentalization of the human and biophysical environments into manageable units appropriate for scientific study; often referred to as valued components or VCs (Noble 2010: 89.)

The methodology for the selection of VCs varies across Canada. Their identification and selection is dependent upon regulatory requirements, as well as influenced by professional judgment on behalf of the scientific practitioner conducting the assessment.

A fundamental principle for the conduct of an environment assessment process is that

not all aspects of the biophysical and human environments can or should be examined in the context of a single application. It is important to ensure all potentially affected components of the environment (including human and biophysical components) are considered for inclusion; however, only those components with the highest probability for change through interaction with the project at hand should be ultimately included (Noble 2010).

An environmental assessment process is the primary (and often only) vehicle for gathering information about matters of importance to Aboriginal peoples and their Aboriginal and treaty rights, and the prediction of changes resulting from a proposed project to those rights. Therefore, ensuring that the selection of valued components will enable the confident identification of predicted changes to Aboriginal and treaty rights is critical.

For each of the four Port Edward Area LNG Projects the BC EAO defines valued components as: "specific attributes of the environment, economy, social, heritage and health pillars that may be affected by the proposed Project". To provide the ability of each proponent to conduct a fulsome assessment that identifies effects on Gitxaala Nation, Gitxaala undertook the exercise of developing VCs specific to Gitxaala. The results of this work can be found in the following reports:

- Calliou Group. Port Edward Area LNG Projects Gitxaala Valued Components Report (Prince Rupert LNG), July 2014
- Calliou Group. Port Edward Area LNG Projects Gitxaala Valued Components Report (Prince Rupert Gas Transmission Project), July 2014
- Calliou Group. Port Edward Area LNG Projects Gitxaala Valued Components Report (Westcoast Connector Gas Transmission), July 2014
- Calliou Group. Port Edward Area LNG Projects Gitxaala Valued Components Report (Pacific Northwest LNG), July 2014





2.0

# Methodology for Gitxaala Use Study

## 2.1 Study Purpose

The expressed purpose of this Report was to document the exercise of Gitxaala Aboriginal rights and associated resource use information, as represented by Gitxaala Study Participants in their traditional territory, within the Study Area (as defined in Section 2.2, below). As previously stated, this Report is intended for use only in the environmental assessment and regulatory process for the following projects:

- Prince Rupert LNG
- Pacific Northwest LNG
- Prince Rupert Gas Transmission Project
- Westcoast Connector Gas Transmission Project

Gitxaala is one of the Aboriginal groups identified in Schedule C of the Section 11 Orders for each of the above referenced projects.

## 2.2 Study Area

Normally, the spatial parameter or Study Area for the conduct of a project-specific Traditional Land Use study is the area within an Aboriginal group's traditional territory that can potentially be affected (either by direct or cumulative effect) by the project under review. The spatial parameters for a TLU Study Area are therefore set by the biophysical or socio-economic discipline with the largest area for study of potential impact. For this study, large sections of both pipelines' marine routes as well as both LNG facilities, associated infrastructure and LNG tanker shipping routes are located within the northern portion of Gitxaata traditional territory.

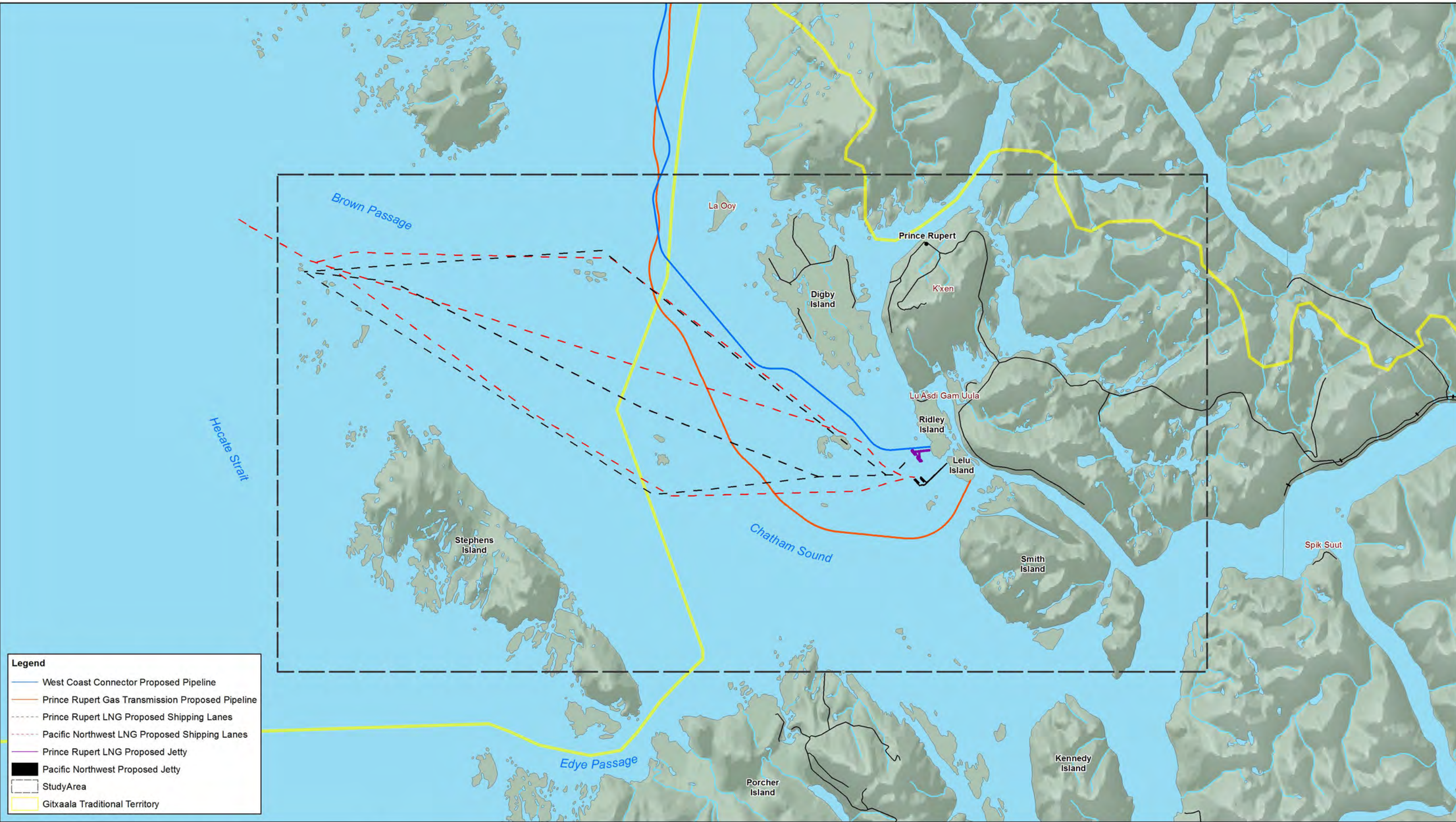
Therefore, the Study Area for this integrated Report includes: the WCGT and PRGT pipelines where they enter Gitxaata territory, the LNG tanker shipping routes and the LNG facilities on Ridley and Lelu Island.

The boundaries of the Study Area were:

- North of Digby Island, Prince Rupert and Brown Passage
- South to Porcher Island, including De Horsey Island
- East to the mouth of the Skeena River
- West including Stephens Island and Triple Island

The Study Area can be seen in Figure 2-0.





Gitxaala Nation Use Study



Study Area

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Prepared For:	 GITXAALA ENVIRONMENTAL MONITORING	Prepared By:	 Calliou Group
Date:	6/17/2014	Figure Number:	2-0
Map Information:	Base Data: NTDB Topographic Mapsheets (Department of Natural Resources); Digital Elevation Model (GeoBase); Proposed Shipping Lanes, Jetties, and Pipelines (Petronas, BG Group, TransCanada Corporation, Spectra Energy); Use Data and Place Names (Gitxaala Nation)		



## 2.3 TLUS Study Methodology

A review of the available literature on TLUS yields several methodologies for use and occupancy studies. These guidelines can best be described as applying to TLUS studies that are comprehensive in scope, rather than project-specific. Currently, there exist very few peer-reviewed methodologies for the incorporation, design and execution of project-specific TLUS studies into a regulatory review process. In a report to the Canadian Environmental Assessment Agency, Larcombe (2000) suggests attempts to incorporate TLUS studies into EA reports have not been successful to date, and Aboriginal views remain poorly integrated into EAs.

Practitioners, therefore, must combine the best practices of existing studies in the absence of project-specific guidelines. The execution of the TLUS adapts the methodologies and best practices outlined in several documents for the conduct of comprehensive TLUS, including:

- *Chief Kerry's Moose: A Guidebook to Land Use and Occupancy Mapping.* Terry Tobias. Joint Publication, Union of BC Indian Chiefs and Eco Trust, 2000.
- *Living Proof: The Essential Data-Collection Guide for Indigenous Use-and-Occupancy Map Survey.* Terry Tobias, Union of BC Indian Chiefs and Eco Trust, 2010
- *A Guide to Conducting a Traditional Knowledge and Land Use Study.* Terry Garvin, Northern Forestry Centre Staff. Northern Forestry Centre, 2001.
- *Best Practices Handbook for Traditional Use Studies.* Ministry of Aboriginal Affairs and Northern Development, Government of Alberta, 2003.
- *Living Proof: The Essential Data-Collection Guide for Indigenous Use and Occupancy Map Surveys.* Terry Tobias. EcoTrust Canada, Union of British Columbia Indian Chiefs, 2009.

The Study Team also used their collective experience in the conduct of both project-specific and comprehensive TLUS over the past 20 years to inform the methodology for this Report. For the purposes of this Report, because much of Gitxaata's exercise of Aboriginal rights occurs on the water and not the land, we will occur on the water and not the land, we will refer to the TLUS as a Gitxaata Use Study (GUS).

### 2.3.1 Review of Existing Information

As part of the analysis, the Study Team reviewed data originally collected during the 2011 Gitxaata Use Study for the Enbridge Northern Gateway Project as well as the 2014 Gitxaata Use Study for the LNG Canada Project. Sites and interview data that fell within the RSA area for LNG Canada's project were incorporated into the maps and component discussion in section 4.0 Selected Use, Aboriginal Rights and Knowledge. The interview methodology and map digitization process used during Northern Gateway and LNG Canada were the same as the methodology used in the present study (see below for details). The Study also relied on Statutory Declarations of Gitxaata members *In the matter of the Gitxaata Nation and Canada and the Prince Rupert Port Authority* (2012, 2013).

The Study Team also reviewed various published and unpublished material for relevant historical and cultural information to assist in the development and execution of this Report. A full listing of references can be found in section 7.0 of this Report.

### 2.3.2 Interview Protocol

A semi-structured interview was deemed by the Study Team as the most appropriate method of eliciting Participant information. Semi-structured interviews use an interview guide and a clear plan for prompting responses without constraining the interview too narrowly. At the same time this technique gives the interviewer control over the direction of the proceedings while obtaining an appropriate level of detail from the Participant, who is also free to raise points, emphasize key concerns, and add information as they see fit (Benard 2006). Semi-structured interviewing is used when there is limited opportunity to conduct follow-up or clarification interviews. The interview protocol or categories for this Report were designed by Calliou Group. The interview categories outline themes for the conduct of interviews.

A copy of the interview protocol is attached as Appendix 1.

The categories for interviews included:

- Areas where the Participants have exercised, or currently exercise their Aboriginal rights including (but not limited to) harvesting of marine resources, fishing, hunting, and gathering (time and emphasis was placed on marine resources);
- Specific-use or fixed cultural sites, including (but not limited to) locations of house or clan territories, marine travel routes, birth places, sacred places, named places, teaching areas, fishing camps, graves, etc.;
- Types of animals (marine and land based) and plants harvested, the season and conditions of harvest; and
- Project related concerns, specifically issues related to from increased tanker traffic throughout the traditional territory.

The recall interval (the period of time for which participants' provided data) for the Report was set at a 'lifetime', which is defined as "anytime within the respondent's life" or "within living memory" (Tobias 2009). Any land activity recorded for this recall interval was marked in the study as "current". Occasionally, Study Participants recalled activities of former generations. This data was also recorded and marked as "past".

### 2.3.3 Selection of Participants

Study Participants were selected by Gitxaala Nation Research Coordinators based on several criteria, including:

- Gitxaala Nation membership;
- Knowledge and use of the Study Area; and
- Availability during the study time frame.

Gitxaala Nation Research Coordinators and Study Team endeavoured to select interview Participants who actively use the study area for the exercise of their Aboriginal rights.



*Study Participants on field visit*

#### **2.3.4 Conduct of Interviews**

Interviews to collect Gitxa̱a̱ta use Information in the Study Area have been ongoing since the fall of 2013. While conducting interviews for the LNG Canada Gitxa̱a̱ta Use Study, the Study Team took the opportunity to collect use information and project concerns about the Port Edward Study Area. Additional interviews to conduct more use information in the Study Area continued in the spring of 2014.

Thirty Gitxa̱a̱ta Nation members were interviewed by the Study Team. Participants were interviewed either in Lach Klan or at the Gitxa̱a̱ta Environmental Monitoring Office in Prince Rupert. Interviewing occurred on the following dates:

- September 12, 2013
- October 1 – 4, 2013
- October 23 – 25, 2013
- November 21, 2013
- April 7 – 10, 2014
- May 6, 2014

A maximum of two (2) Participants were interviewed at the same time. The majority of interviews ranged from approximately one (1) hour to two (2) hours in length. Occasionally, GEM staff Greg McKay or Ernie Bolton acted as observers and interpreters. All of the interviews were conducted primarily in English. To ensure data integrity and accuracy of information, each interview was voice recorded and then transcribed using standard transcribing protocols. Hand written mapping notes were also taken by the Study Team during the interviews.



### 2.3.5 Field Visits

For this Report, an initial field visit was conducted on October 2, 2013 to specifically look at the PR LNG Project. Three Study Participants and the Study Team participated in a site tour lead by BG Group, and their environmental consultants AECOM, to look at the proposed terminal location on Ridley Island as well as view the area and proposed jetty location by boat.

Field visits to specifically look at the Study Area were conducted on May 7 and 8, 2014 to familiarize Participants with the projects, travel through the Study Area, collect and confirm Gitxaata use information, and gather specific issues and concerns related to the projects. The Study Team, GEM research advisors, and twelve (12) Participants traveled by boat through the Study Area on two separate trips.



*Study Participant on field visit*

The route was as follows: from the north end of Digby Island following the WCGT pipeline route through Chatham Sound to Ridley Island where the line terminates, around the south end of Ridley Island where the PR LNG terminal is planned, out to the end point of the PR LNG jetty, into Porpoise Harbor, over to Lelu Island to view the PacNW facility location, and returned following the PRGT marine pipeline route from Lelu Island along the south end of Flora bank, outside of Kinahan Islands and through Chatham Sound to the north end of Digby Island. See Figure 5-1 for route map.

Study Participants were asked questions similar to the questions they were asked in the interview sessions. Please see Section 5.1 for details. Data from the field visit is presented in Section 5 - Field Observations and Section 6, - Project Issues and Concerns.

During these field visits, Gitxaata Nation members specifically shared their knowledge in regards to:

- Specific project concerns
- Marine harvesting

- Commercial fishing
- Fish and fish habitat (including migration and spawning areas)
- Travel routes
- Wildlife and wildlife habitat
- Plants and plant habitat (incl. medicinal plants)
- Traditional Land use
- Sacred sites
- Teaching areas



*Study Team and Study Participants on field visit*

The Study Team took field notes of the observations shared by the Participants. Photos were taken to capture observations and document any features of interest to Study Participants. The Study Team also took GPS points of interest and recorded the route.

### **2.3.6 Workshops**

For a related Report, three (3) workshops were undertaken to provide a baseline understanding of Gitxaala Valued Components: governance, sacred places, cultural identity and title harvesting. Please see Port Edward Area LNG Projects Gitxaala Valued Components Report (VCR) (2014) for details.

Study Participants were asked questions relating to Governance, Cultural Identity, Harvesting, and Sacred Places. For a description of these workshops, including workshop questions, please see Section 2.8 of the Gitxaala VCR. For a review of the results, associated maps and a consideration of related project concerns please see section 3.0 Governance, section 4.0 Cultural Identity, section 5.0 Sacred Places, and section 6.0 Harvesting in the Gitxaala VCR (2014).

### **2.3.7 Informed Consent**

Study Participants and field Participants were asked to sign consent forms which explained the purpose of the study and requested permission to use the knowledge shared during the interviews and field visits in this Report. The consent form also outlined that the information shared during the interview is considered the property of Gitxaata Nation. The consent form used is attached as Appendix 2. Permission was also requested from Participants to allow for voice recordings, and, where permission was obtained, recordings were taken.

### 2.3.8 Maps

A combination of composite mark-up maps and Canadian Hydrographic Service Nautical Charts were used by the Study Team during interviews. Three mark-up maps were created in advance of study execution and included a 1:410,000 map displaying the traditional territory and two focused maps with scales of 1:107,181 and 1:74,969. The Canadian Hydrographic Service Nautical Charts used during interviews focused on the Port Edward LNG Projects Study Area and included charts that ranged from a scale of 1:77,800 to 1:20,000.



*Interview maps at the Gitxaata Nation band office*

During the survey, information that could be represented spatially was captured on these maps. Study Team members physically controlled documentation of mapped information, primarily for consistency. Mapped information was confirmed with study Participants during the interview, as each site or area was recorded. Fixed sites and areas are given a feature number at the time they are recorded, which corresponds to the notes taken throughout the Report.

The Study Team's experience is that the use of polygons is best suited to represent an Aboriginal harvester's life experiences related to the exercise of Aboriginal rights. Polygons, although not exact, afford the Study Participants a way to represent a lifetime of experience in a single, two hour interview format. Polygons also allow for the representation of movement over large territories used for harvesting. The use areas identified on the maps contained within this Report should be considered approximate as field verification was not completed as part of this Report.

The Study Team also utilized polylines as part of the study, where applicable, to document trails and travel routes.



### 2.3.9 Map Digitization

Map digitization for this Report was conducted using ArcGIS 10, ArcMap Version 10.1 (developed by ESRI, 2013) Geographic Information System (GIS) software. In order to ensure consistency, two digital shapefiles that were previously created for Gitxaala Use Studies were used. All map digitization was entered into these files. The files created included:

- A polyline file to document linear features (travel routes and migration routes etc.);
- A polygon file to document use areas; and
- A point file to document Sm'algyax place names

The polygon and polyline files contained an associated attribute table which was used to document information specific to each mapped site. The fields contained in each file were:

- Feature ID (generated by GIS software);
- Shape (generated by GIS software);
- ID (an arbitrary number assigned in order of site digitization);
- Date (the interview date and project name);
- Site Number (the site number assigned on the original mark-up map);
- Lead (Study Team);
- Use Type (past, current or future use type);
- Species;
- Season;
- Info (a brief site description including location description);
- Participant;
- Activity (Type of Site); and
- Label (a specific mapping label);

The point files contained an associated attribute table which was used to document information specific to each mapped site. The fields contained in each file were:

- Feature ID (generated by GIS software);
- Shape (generated by GIS software);
- ID (an arbitrary number assigned in order of site digitization);
- Date (the interview date and project name);
- Site Number (the site number assigned on the original mark-up map);
- Lead (Study Team);
- Place Name;
- Info (a brief site description including location description);
- Participant;
- Label (a specific mapping label);

The records made using the mark-up map during the interview and mapping notes were entered into the GIS database. The notes were transcribed in a sequential manner,

and were supplemented by voice recording, where necessary. Also, notes included the numbers assigned to sites on the map next to the applicable site description. The mark-up map was labeled and correlated to the interview notes.

Areas and linear features were digitized into the above mentioned shapefiles using the Editor tools in ArcGIS and the digital versions of the maps used in the interviews. If an area or feature was further described in the interview notes, this was also incorporated into the maps. For example, if a shape was around an island and the Participant indicated they hunted deer on that island, the polygon was adjusted to conform to the description. Additionally, if a Participant indicated an activity at a location not correctly represented on the mark-up maps, the boundaries were corrected to the actual location via the description in the text.

Once digitization of the mark-up maps was completed, the information was represented using the symbology available within ArcGIS 10, ArcMap Version 10.1 and was labeled using the Label field from the attribute table.

### **2.3.10 Map Creation**

Following digitization of mapped data, the Study Team developed composite figures for this Report. Only use areas located within the Study Area (as defined in Section 2.2) were displayed on maps. In addition to data collected for this Report, the composite figures also included use data collected as part of the Gitxaata Use Study for the Enbridge Northern Gateway Pipeline Project (2011) that was located within this project's Study Area.

### **2.3.11 Community Verification Process**

A draft Report was reviewed by GEM staff prior to the submission of the final Report to Gitxaata Nation. This was done to ensure the information contained within the Report was accurate and respected any confidentiality concerns.

A GEM Research Coordinator provided map biographies to each of the Study Participants and asked them to verify the information presented prior to submission of the final Report. Study Participants were also given copies of quotations that were used from their interview transcripts in the draft Report and asked to confirm the details of the quotation and the accuracy of the transcription.

A final review of the study results was conducted by GEM staff, academic experts, and Gitxaata hereditary and political leadership on June 25, 2014. Their comments, and observations on the content, were included in this Report where appropriate.

## **2.4 Limitations of this Report**

In addition to the broad limitations described for the use of TLUS generally in Section 1.3.7, several specific limitations apply to this Report.

Field visits for verification of desktop interview information were not conducted for all identified sites due to time and budget constraints. The May 2014 field visit was conducted to elicit project concerns for the Study Area. While it confirmed the existence of many of the sites and stories identified during the desktop interviews, it was not sufficient to identify and confirm the numerous places Gitxaata Study Participants identified as part of the interview process.

Although thirty knowledgeable Gitxaata Nation harvesters and knowledge holders were

identified and interviewed for this Project, in addition to the relevant data from the Enbridge Northern Gateway Use Study Participants, the information contained is not a complete record of the past, current and future resource use (including exercise of Aboriginal rights) by Gitxaala Nation members.

A limited interview format necessary for a project-specific study (e.g. two hour interview) does not adequately capture a Participant's full lifetime of knowledge. In order to accomplish this, a much larger study would be required. Such a study would include more comprehensive interviews, in terms of the number of interviewees, the topics addressed, and the geographic area covered in the interview process.

Further, it should also be noted that not all individuals feel they can share all aspects of Gitxaala life. Some Gitxaala members declined interviews altogether while some project Participants deferred the sharing of stories or information because they did not feel it was appropriate for cultural reasons for them to share. Clarence Innis (Txa gyet)<sup>3</sup> is Acting Chief Councilor for Gitxaala Nation. He is Gispuwada and Sm'gigyet. He noted however that there is a developing recognition among Nation members that sharing traditional land use and Aboriginal rights information is critical to Gitxaala's success, indeed he notes that compared to 10 years ago, Gitxaala members: *"understand if you don't say anything, at the end of the day when it's all over Gitxaala will not exist 'cause you've kept all your history and your stories and you've taken it with you in your grave and there will be nothing for your young generation. Yeah. Anyway, we've come a long ways. There's still a lot of people out there that know a lot that haven't really come forward"* (Calliou Group 2014a).

While, none of the Gitxaala Nation members required interpretation services for the current study, it should be noted that the English language cannot fully and completely capture the expression of Aboriginal Participants in their own language. Words or expressions may not readily transfer to an understanding in the English language as the Participant intended. Sm'algyax translations and spellings were reviewed by Douglas Brown (Lutgusamtii) although any errors in transcription remain the author's own.

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<sup>3</sup> Hereditary names will be provided in Chapters 2 and 3. Hereditary names were obtained either in person or from the personal Statutory Declaration in the Matter of Gitxaala Nation and Canada and the Prince Rupert Port Authority made by the Participant.





## 3.0 Gitxaala Nation

### 3.1 Introduction

This section commences with a general description of the Gitxaala Nation including a summary of information available regarding the traditional territory, history, governance structure, and resource use of the Nation. While there is a broad anthropological and ethnographic literature available on Gitxaala, where possible and when appropriate we have emphasized Gitxaala perspectives. This section includes data collected during interviews for this study, and, where appropriate, data collected during interviews for previous Gitxaala Use Studies as well as for the Prince Rupert Port Authority affidavits.

### 3.2 The Nation

The Gitxaala Nation, formerly known as Kitkatla, is located on British Columbia's North West Coast in the village of Lach Klan (referred to as Kitkatla or the "the Village") on Dolphin Island. The registered population of the Gitxaala Nation as of May 2014 is 1,910 with 419 living on reserve (AANDC 2014).

In the past, anthropologists and linguists have grouped Gitxaala as part of the broader Coast Tsimshain cultural-linguistic group (Halpin and Seguin 1990); however,

according to Gitxa̱a̱la oral history and Nation members it is more appropriate to Gitxa̱a̱la tradition to describe the Nation as Gitxa̱a̱la (Menzies and Butler 2008). The language of Gitxa̱a̱la people is Sm'alg̱ax.

Gitxa̱a̱la Nation is not a signatory to a historic treaty and, as of Report finalization, is currently not in the modern-day British Columbia comprehensive treaty process. Gitxa̱a̱la Nation asserts Aboriginal rights and title throughout their territorial lands and waters which stretches from Prince Rupert Harbour, south to Aristazabal Island including Banks Island, McCauley Island, Pitt Island the western side of Campania Island, portions of the mainland adjacent to Grenville Channel and the surrounding waterways (Gitxa̱a̱la Nation).

There are twenty-one (21) contemporary Gitxa̱a̱la Indian Reserves (IR) at various locales throughout Gitxa̱a̱la territory (see Figure 1-1). In some cases, the Canadian Government used sites where Gitxa̱a̱la villages or fishing camps were located to establish the reserves (C. Menzies, Pers. Comm.). The contemporary village of Lach Klan is on the reserve Dolphin Island 1. The other reserves are Citeyats 9, Clowel 13, Grassy Islet 2, Keecha 11, Keswar 16, Keyarka 17, Kitlawao 10, Kitsemenlagan 19, Klapthon 5, Klapthon 5A, Kooryet 12, Kul 18, Kumowdah 3, Pa-aat 6, Sand Island 4, Sheganny 14, Toowartz 8, Tsimlairen 15, and Tsimtack 7 (INAC 2010). Services in Lach Klan are very limited; the closest centre where full-service grocery stores and other amenities are located is Prince Rupert which is only accessible by ferry, sea plane or personal boat.

## 3.3 Governance

### 3.3.1 Clans, Houses and Territories

The political structure of the Gitxa̱a̱la Nation is a location-based, hereditary system. Elmer Moody explained that Gitxa̱a̱la has a matrilineal tribal system (Calliou Group 2011). Descent is reckoned through maternal line. This means that territories, names, titles, ceremonies, resource use knowledge, are generally (although not exclusively) traced through the mother, her brother, and their maternal ancestors and members are encouraged to marry exogamously, or outside of their clan (Halpern and Seguin 1990). Although the Nation collectively refers to itself as 'Gitxa̱a̱la,' within that there is also a clan and house system. Each of these structures of authority, namely, the clans and houses, have autonomy and separate decision making power (Calliou Group 2011). Clarence Innis described Gitxa̱a̱la traditional governance as having: *"four tribes: the killer whale [Gisbutwada], the eagle [Lax̱g̱iik], the wolf [Lax̱g̱ibuu] and the raven [Ganhada] clan."* He elaborated further, adding:

*Basically, out of those clans there are several houses; approximately 23 houses which all have Sm'g̱ig̱yet in there: Chiefs. They're all situated throughout our territory- all those houses I talk about, those tribes all have territory that they look after. They have autonomy how they look after and how they govern themselves with one set of laws, ayaawx, that governs us, how we interact and how each tribe can't really speak for another tribe's use of their territory, their names, crests. There is protocol and process how we follow all of that. It's a common understanding amongst all our people about ayaawx.*

As Clarence notes, each clan is further divided into autonomous houses. These houses are lead, depending on their rank or status, by either a "house chief" or Sm'ooygit if the house was of high status, or a "councilor" if the house was ranked low. In the past, the highest ranking house's leader was understood to be the ranking Gitxa̱a̱la chief and the other house leaders were ranked in descending order below him, irrespective of

the clan (C. Menzies, personal communication). A hereditary chief is referred to as a Sm'ooygít and chiefs as Sm'gígyet (Elmer Moody) (Calliou Group 2011). Doug Brown explained that prior to the establishment of the village of Lach Klan, Gitxaata people utilized different portions of their longstanding territories on a seasonal basis. They travelled from key resource area to key resource area depending on the time of year and the availability of marine and land species (Calliou Group 2011). Matt Hill stated that Gitxaata people lived and travelled throughout a traditional territory, including the lands and surrounding waters that extend from Aristazabal Island/Moore Islands in the south to the Nass River in the North

Elmer Moody further explained: *"Gitxaata weren't necessarily travelling from one end [of the territory] to the other; it was specific to the clans and tribes that were gathering resources in those areas."* Within the larger Gitxaata territory not only are there territorial divisions, where land and resources belonged to certain clans, these are further sub-divided into smaller house group areas. And as Elmer Moody further notes, within *"each of these areas, each of the clans has responsibility and access to the resources"* (Calliou Group 2011).

Clarence Innis confirmed:

*Ayaawx is really what governs us and what guides us through our culture. It's not only how we look after our territory, it's how we interact with nature itself. How we look after it, how we respect it, how we make sure that we only take what we need. We make sure that it's going to be sustainable for generations to come. All of that is in ayaawx, it's all in there. There are laws in ayaawx that even tells us when to harvest, and how to harvest.*

The different territories and houses may also have differing levels of wealth/status associated with them. For example, there may be sockeye creeks in one chief's territory but within a neighbouring chief's territory the creeks may be more lucrative. The more lucrative (or resource rich) territories are associated with houses that have had a demonstrated wealth/higher status throughout history (Calliou Group 2014a).

Under the Indian Act, Gitxaata has a custom electoral system enabling Gitxaata to recognize the traditional hereditary structure of Gitxaata governance. Gitxaata has seven elected councilors; three positions are elected at large (Chief Councilor, Deputy Councilor and Youth Councilor) and the remaining four positions are elected within the clans; therefore there is a representative on council from each of the four clans. In addition to the contemporary elected leadership, Gitxaata also convenes a hereditary table, comprised of Sm'gígyet and Sigydm hana'a (Matriarchs) to provide direction to the Nation (Calliou Group 2014a).

### **3.3.2 Transfer of Names and Territories**

Gugwílx'ya'ansk can be translated as the Gitxaata process of inheritance or the *"process, structure, tradition of passing names and territory to future generations"* (Butler 2010). Matriarchs, or Sigydm hana'a, hold the knowledge associated with names, the authority of transference, and advise on worthy successors, but it is the responsibility of the matrilineal uncle to provide the teachings: *"In our culture we follow our mother's side"* (Elmer Moody). Elmer Moody reported that in the past, at age 10 or 11, nephews were sent to live with their uncle because the uncle would have a different territory than their fathers. Eventually, the nephew assumes the responsibility of the land, the clan and the house. In order to receive this responsibility he would have to understand the codes, rules, the territory, resources, system of governance and the stories. Ted Gamble (Geetn) said that when he passes away, his nephew will inherit his

name (Calliou Group 2011).

Clarence Innis further described how names are transferred from the house leader to his maternal nephew:

*That's all in ayaawx, household. It's the laws that...The only persons that are really eligible to take any kind of names are the nephews of the house leaders. It's really up to house leader to choose out of his nephews. It doesn't necessarily mean the oldest. It means usually he chooses to see who has that leadership and qualities and he starts to mentor that person how to look after, start to pass on ayaawx. What he can't and he can do, what he can and he can't say, everything. When he mentors him, when he has chosen someone - and that usually happens towards the end of his life, he lets the nation know who's next in line.*

Elmer Moody explained that if all these protocols have been met, on the death of the matrilineal uncle the clan meets and discusses the nephew's capability with the Sigydm hana'a; if he is deemed capable he has two years to prepare and assume responsibility and if he is not prepared the Sigydm hana'a identifies another in line. Much like a monarchy there is not just one person in line for succession. This practice ensures the protection and longevity of the territory. Elmer Moody explained that the ability to assume a position is tied to birthright, or Sayt Kuulm haat which means "we come from the same umbilical cord" (Calliou Group 2011).

Further explaining how a name is only transferred once the house leader is passed on, Clarence, with confirmation from Ernie Bolton (Gawaay) noted:

*Yes. Once the house leader has passed on, there is a process and a protocol that needs to be followed by that person in order to start to take those steps to take that name. First of all, I think upon the death of a house leader it's up to that person, really, to bury that person, his uncle. Once he has followed that protocol he announces a year later that he'll be moving the headstone and probably that's when he'll take the name ... And along with that name comes a blanket that really signifies his authority and jurisdiction over that house and the territory, the names, the crest, everything that retains the house. And all this is validated and witnessed by the nation. That's why there's gifts given and it's not just because there's a significance to that, it's to show 'thank you very much for coming and witnessing and what we've just did and if it's correct let us know'.*

The tradition of passing names determines the control and access to the clan and house areas and territories, including resources. Names are associated with specific territories. For example, Elmer Moody explained that the names his family has are specific to their clan (Laxgibuu), just as the names Gisbutwada have are specific to Gisbutwada, Ganhada to Ganhada and Laxsgiik to Laxsgiik.

Gitxaata governance is founded on the connection between the requirement of the passing of a name and the territory tied to that name. If this did not occur together, Elmer Moody believes it would lead to serious disputes within the Nation that would have to be resolved with a recitation of the stories and history associated with the disputed territory. This story telling and history are referred to as Adaawx and Maalsk. Adaawx is storytelling; these stories identify morals and beliefs, values and ethics. Maalsk is "our history", and Elmer Moody explained that "It's my telling, so, for somebody to be able to stand up and take a name they'd have to be able to recite their history to those territories". Elmer further noted that if a territory came under dispute "we would say to tell the history, no one else can tell it, that is Maalsk. No one



*else can tell it.*" Part of this telling would include a recitation of genealogies and family connections as well (Calliou Group 2011).

The ability to assume a name or status has a number of protocols. First and foremost, your mother and father must have a high rank or status and the Sigydm hana'a give an indication to the clan who they see as a candidate for leadership. This indication and the relationship between the uncle and nephew help determine the selection (Elmer Moody). Clarence Innis further explained:

You see who is starting to develop as a leader. Who would be able to speak. You start to groom someone. I was going through that all my life not knowing. The teachings and the values put in here. My uncle started to work with me - getting me involved in everything that he was doing. He just starting putting a name onto me...each name has a ranking - you build yourself up into it. When he passed on, there was really no one else.

If the nephew is deemed capable, then the father's side must also acknowledge the selection for validation. Elmer Moody noted that the clan would be *"in trouble"* if the other clans or house chiefs expressed disapproval with the selection of the candidate. Elmer further explained that if the father's side does not validate the succession then the candidate is not considered a full chief. Also, even if the father's side validates the selection and the other clans disapprove, then it could result in a loss of social status and a loss in prestige of a ranked name (Calliou Group 2011).

### 3.3.3 Feasting and Status

Feasting and the presentation of resources is an important component of both Gitxaata governance and cultural transference. There are a many different kinds of feasts for a variety of purposes. For a listing of the kinds of feasts please see the Port Edward Area LNG Projects Gitxaata Valued Component Report (July 2014), Section 3.2.3: Feasting.

An important feast is one for transferring names and their associated territories. The passing of names occurs publically at community feasts; especially names associated with status. Elmer Moody explained that in addition to passing the name, the purpose of feasting is also validation; it allows the other chiefs to express agreement or disagreement.

Matt Hill described several of the many different kinds of feasts:

*There is a feast for the burial. The Burial Feast. There is a feast for taking the name and that is the erecting a headstone. That is when they take the name. When they do the burial... it is an indicator of who is in succession. And they announce it then. And when they announce it that means that individual has to buy the headstone and erect it and hold his own feast and take the name.*

Adding, *"Then there is a feast, a Cleansing Feast. There are several different Cleansing Feasts. And there is a feast for taking the name off. If you tarnish the name"* Matt notes that in the hereditary system only the sister of the chief can *"disrobe the chief"*. He adds that there are also feasts for reinstating the chief if he meets the requirements. A *"Redeeming Feast"*, notes Thelma Hill (Gaas)<sup>4</sup>, is held whenever a person with a big name (high status) accepts that they have done something wrong. A Redeeming Feast is held by the person who requires redeeming while a Cleansing Feast is hosted by the

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4 Thelma Hill shared this information during the Round II VC Workshops. It was not captured in the Gitxaata Valued Components Report. Thelma was also interviewed for the Gitxaata Use Study for Enbridge Northern Gateway.

tribe (Calliou Group 2014a).

Matt also noted that there are feasts for:

*Taking a chieftain name. And distribution of wealth. Today they use money. And that is called Yaawk and there is a feast they call Oýax. That is to strengthen the name. Or elevate yourself further. And retaining the name. So there is whatever incident that happens—if I fell, I was conducting a funeral and it wasn't my fault but I fell. People from different tribes helped me. So I had to put up a feast and acknowledge them.*

He elaborates:

*Whether it is my fault or not it had to be done so that is what I did. So the chief is always, he has got to be ready at all times for any kind of feast. Doesn't matter what happens, he has got to be ready. That person that I talked about, Johnson Gordon, always says, Di gweeá. The literal translation is you make yourself poor chief to be a chief. It means that you have to spend everything.*

Gilbert Hill agreed that feasting is very important to Gitxaata and explained that when there is a death, a feast is held to honour that individual. If that person had a name, then one year after the death there is another feast to pass the name. This practice of passing a name could not occur without a feast and each feast uses all of the traditional foods.

As the chief of his house, Clarence Innis is responsible for organizing feasts for his clan. For example, Clarence held a feast to move a headstone for his late aunt in May, 2010. He explained:

*...that is one of the responsibilities in my position – is making sure that the duties putting closure to a person's life and putting a headstone on. That's done in front of the whole community, the Nation, people come to witness things that are done. And they are there to witness the things that happen and if they are done right. Also if there are names taken – anything to do with governance. It's all done in a feasting house, and it's to be witnessed. Any change or inheritance to happen– it's done in front of the communities. (Calliou Group 2011).*

Along with the transfer of a blanket and the moving of the headstone, the maternal nephew is responsible for holding a feast in order to confirm the name transfer. Although he noted that this has changed in recent times, Clarence Innis further described the importance of traditional food at the feast: "Back then, it was very important. And it is usually that was in this kind of weather, summer months we were always thinking ahead into the winter, preparing for that feast, gathering the foods that needs to be fed to the people. And a lot of the times the food is given out to the people. Today they give blankets and stuff like that, dry goods."

Merle Bolton ('Wii Xa'a) noted that the whole community comes together to put on the "smorgasbord" that is associated with feasting. Margaret Hill<sup>5</sup> observed that when Kitkatla is "hit with a death" the whole community helps put on a feast, particularly when the family cannot afford a feast.

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<sup>5</sup> Merle Bolton and Margaret Hill shared this information during the Round II VC Workshops. This data was not captured in the Gitxaata VCR. Margaret was also interviewed for the Gitxaata Use Study for Northern Gateway.

Matt Hill described the kinds of foods that are commonly served at a feast:

*Everything. Gourmet foods. Seaweeds, chopped and fried. Clams, cockles, devilfish or octopus, calamari it's called or squid, shrimps and prawns, crabs, all kinds of fish, smoked fish, dried fish and fresh salmon if there is somebody fortunate enough to get a salmon that time of the year. And winter time is usually spring salmon. And cooked every which way. Deer meat, seal meat, cooked every which way, half dried, smoked and fresh. And cooked in various ways. Oolichan, herring, herring eggs...*

Gilbert Hill is a cook for Gitxaata feasts. As a member of the Blackfish (Gisbutwada) Clan, Gilbert cooks for Blackfish feasts. He explained that each clan has their own cooks, but if they do not have someone available he will get called to cook for another clan. If he prepares a feast for another clan, that clan will present him with gifts of blankets and money; however, there are no gifts if you are cooking for your own clan. Gilbert Hill also explained that feasting is dependent on available resources and noted that if the resources were not available to hold a feast, the feast would not occur. *"No use going to the feast because the food's not there."*

Gitxaata Participants explained that their traditional system of governance, authority and jurisdiction over their territories depends on a healthy environment. The system of passing names and the territories attached to those named requires the ability to use, access, and control the wealth within the territories. Elmer Moody explained that the above described system of governance and resource management is still intact today and noted that it requires a direct connection back to the land in order to function. Specifically he stated that the governance is directly *"reliant on a tie back to the land."* In other words, if the tie to the resource is gone, there will be no functioning system of Gitxaata governance (Calliou Group 2011).

Clarence Innis confirmed this connection between, territory, feasting and status, when he remarked that it is *"what is in their territory"* that determines the rank or status of the Sm'gigyet and the house: *"I think in years past, the more they gave in their feast, determined their rank and their status because there was so much wealth given out to the people when they came to witness. It's what they had in their territory. And some of these territories are very rich."* The loss of territories or loss of access to resources within territories can result in the loss of wealth and therefore loss of status for the house and Sm'gigyet. Clarence Innis said this is why Gitxaata have not signed treaty. *"These names would mean nothing if you have no land or no territory. All those goes with the name when you feast and take that name and authority. If you put a blanket on a person with no wealth or names, territory, he is the chief of really nothing."* (Calliou Group 2014a).

### 3.4 Gitxaata Places

There are Gitxaata house territories and named places throughout the Gitxaata territory from Prince Rupert Harbour to the south end of Aristazabal Island. These names are known to Gitxaata and are part of Gitxaata's oral history. Doug Brown described how in the past, Gitxaata people would travel throughout their territories, spending time with smaller groups in the summer and coming together in the winter. Matthew Hill (Txa La Laatkwa) said that there are shared stories with neighbouring Nations on the boundary markers between territories (Calliou Group 2011).

Some of the names and territories within the Port Edward Area LNG Projects Study Area are described below and can be seen on Figure 3-1.

### 3.4.1 K'xen (Kaien Island)

Kaien Island, where Prince Rupert is currently located, is known to Gitxaata as K'xen. The anglicized name, Kaien, is derived from the Sm'algyax word K'xen. Kenneth Richard Spencer, aka Dick Spencer, (Affidavit 2013) explained that Gitxaata have been living at and using K'xen for centuries. Jeannette Moody (Wil Uks Yaa Gemk) explained how she always knew the area as K'xen: *"I remember growing up and the Gitxaata elders at the time always said they were going to K'xen. They would not use the words 'Prince Rupert' or 'town'. It is only recently that we know the area as 'Rupert' instead of K'xen"* (Affidavit 2012).

Matthew Hill (Affidavit 2013) reported: *"The word k'xen literally describes the place where there is a really narrow area with rocks, where the tide rises or falls, and there is foam. The name of the area where K'xen originates is Butze rapids. The tidal waters pour in and out of there, and especially when there is a big tide there is a lot of foam. It has long been known by our people to be a treacherous area of water. Because of this and because of the Gitxaata presence in the area, our people call the island Lach K'xen or K'xen for short"*.

Matthew Hill (Affidavit 2013) further described how K'xen was a trading place before European contact. He explained it was a convenient distance for many groups to travel, including: the Haida, the Nisga'a, the Gitksan, etc. Gitxaata would trade their harvested species, including abalone, seaweed and herring eggs for oolichans, oolichan grease, moose meat and soap berries.

In addition to Kaien Island itself, Gitxaata has many specific locales throughout the island that are of importance. Casey Point, on Kaien Island, is near the Super Port and the BC/Alaska Ferry docks, the Gitxaata name for Casey Point is Wil-yagatoo, which means "a slide" (Dick Spencer, Affidavit 2013). Dick Spencer explained that this area is named Wil-yagatoo because, before Prince Rupert was a city, all the Gitxaata tribes would get together in this location to defend against enemies: they would collect sand, rocks and timber and place them at the top of the mountain to create a slide. The remains of these slides helped to create Casey Point. Near Casey Point is a creek called Frog Creek or Ksba Ganaaw, this is where Gitxaata people lived and had a graveyard: this area belonged to the Gispuwada from the Git Na Gun Aks house (Dick Spencer, Affidavit 2013). Matthew Hill (Affidavit 2013) reported that his grandfather (Nathan Shaw/Wii Namoolk) also told him stories about how Gitxaata people lived at Casey Point.

Doug Brown (Affidavit 2012) recalled a boat trip he took with Gitxaata elder Nathan Shaw who was born in the late 1800s. Doug explained *"I remember a boat trip with Nathan Shaw when I was around 14 or 15 years old; I remember the boat trip very clearly. As soon as the boat entered into the pass between where Digby Island starts and where the southern point of K'xen (Kaien Island) starts, Nathan Shaw would start pointing out all the ancient Gitxaata landmarks to me. Nathan Shaw knew the names of every point, bluff, beach and rock, from the top of the ridges to the water, including Gitxaata names all over Digby Island as well."*

### 3.4.2 Lu Asdi Gam Uula (Porpoise Harbour)

Lu Asdi Gam Uula is the Gitxaata name for Porpoise Harbour and it means "the place where a lot of seal dwell" (Dick Spencer, Affidavit 2013). Dick Spencer (Affidavit 2013) further explained that:

*Watson Island and the surrounding area belonged to the Gitxaata Gispuwada walp (house of David Douglas) from the Git Na Gun Aks. The area around*



*the old Inverness Cannery, near Port Edward, to K'xen at Galloway Rapids, including Watson Island and Ridley Island, is traditional territory that has always been important to Gitxaata. The village at Lu Asdi Gam Uula (Porpoise Harbour Area), where the Douglas family lived, was part of this Gitxaata Gispuwada Git Na Gun Aks territory.*

Dick Spencer (Affidavit 2013) also elaborated on who currently holds the name and is the hereditary chief whose territory includes Lu Asdi Gam Uula (Porpoise Harbour):

*The present sm-ooygit Txa Gyet of the Gitxaata Gispuwada from the Git Na Gun Aks is Clarence Innis. Through gugwilx'ya'ansk Clarence Innis inherited his name Txa Gyet from David Moody. David Moody inherited that name from Joseph Shaw, and Joseph Shaw inherited the name from his grandfather on his dad's side, Job Spencer (also my biological paternal grandfather).*

Clarence Innis (Affidavit 2012) explained how he inherited his name:

*Approximately one year after my uncle David Moody passed away, I put on a feast and received his name, Txa gyet. All of the other tribes were invited and witnessed the event. The sm'gyigyets (chiefs) of the other clans put the name on me. They verified that everything was done correctly, such as making sure our ayaawx (law) was followed and that I was entitled to the name.*



*Porpoise Harbour*

Edward Gladstone (Affidavit 2012) reported that “Gitxaata used to live in Porpoise Harbour, south of Port Edward. My grandmother told me about the people that lived in Porpoise Harbour. They lived there before her time. It was a place where the Gitxaata would come together, all the clans. It was just at the mouth of Porpoise Harbour.”

Jeannette Moody (Affidavit 2012) was married to David Moody who had the name Txa Gyet before he passed away and the name was inherited by the current sm'ooygit Clarence Innis. Jeannette Moody reported: “I know an adawx (oral history) that originates from Porpoise Harbour related to Gitxaata possessing gold. This adawx was told to me by my great grandmother Fannie Spencer and my grandmother Alice Shaw.”

### 3.4.3 Coast Island and Ridley Island

Edward Gladstone (Affidavit 2012) reported that *“There is an adawx (oral history) about Coast Island, off Ridley Island. My mother and grandmother taught me that some Gitxaala used to stop and camp there. These Gitxaala were going to Metlakatla Pass. It was a resting place. They camped on the inside of Coast Island, on the side closer to Ridley Island.”*

Allan Brown (Affidavit 2012) also confirmed that Ridley Island, as well as Porpoise Harbour, belongs to the house Git Na Gun Aks and that *“this information has been told through our history, handed down from generation to generation.”*



*Ridley Island*

### 3.4.4 Digby Island

Allan Brown (Affidavit 2012) reported that Digby Island is also part of Gitxaala territory: *“My father and grandfather Nathan Shaw told me that Digby Island belongs to Gitxaala. Nathan Shaw and Mason Brown told me adawx (oral history) about a man who fell from heaven and turned into a rock; he has a face and arms like a man, but he is a rock.”*



*Existing development on Ridley Island*

### 3.4.5 Lach/La Ooy (Tugwell Island)

Doug Brown (Affidavit 2012) reported that Tugwell Island or La Ooy is a Gitxaata name that is currently held by Rev. Sam Lewis. Rev. Sam Lewis (Affidavit 2012) explained:

*Tugwell Island belongs to the walp (house) of La Ooy, and as leader of that walp, it is my territory. Tugwell Island is referred to as 'to 'tsip La Ooy. There is a pile of rock on Tugwell Island that are considered the "rocks of La Ooy", or totsm (pile of rocks). When you see a pile of rocks on land, it is a sign that the territory belongs to someone. According to our ayaawx (law), no person can go on to Tugwell Island without the permission of the sm-ooygit (chief) that holds that name, which is me.*

Dick Spencer (Affidavit 2012) also reported knowing the story of Tugwell Island: *"I know adawx (oral history) about Tugwell Island, which is called Lach Ooy in our language. It was told to me by my grandmother Man Txapsxn and other Gitxaata elders I have learned from such as Mason Brown. The adawx involves Niss Not a Gitxaata chief."* Rita Robinson (Affidavit 2012) was taught the song about La Ooy from her mother and grandmother and explained: *"I have to ask permission from whomever the song belongs to before I sing the song. Since this song belongs to La Ooy (Sam Lewis) of the Ganhada (Raven), I need to get La Ooy's permission in order to sing the song."*

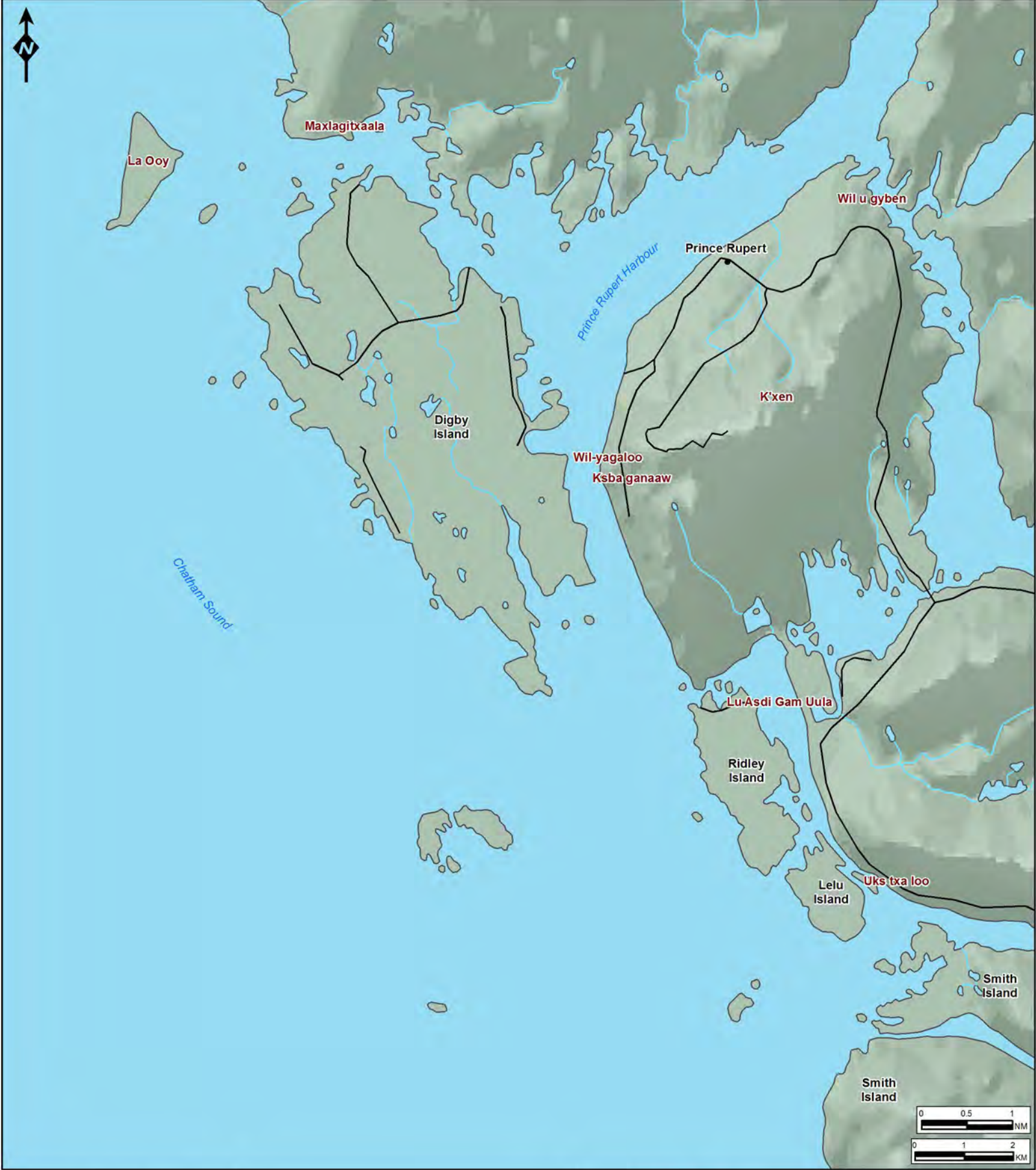
### 3.4.6 Lax kas 'waan (Kennedy Island)



The Gitxaata name for Kennedy Island is Lax kas 'waan, which means 'the place of no teeth'. This location was camp, or a place of residence, where Gitxaata people lived while moving to and from the Nass River for oolichan fishing (Richard Spencer in Menzies 2008). In addition to being a place where people camped and lived, Matthew Hill (in Menzies 2008) also described Lax kas 'waan as a lookout because it was close to the Prince Rupert Harbour Area.

### 3.4.7 Uks txa too

Uks txa too is the Gitxaata name for the location that became Inverness Cannery. It was originally a Gitxaata fishing camp. Larry Bolton (in Menzies 2008) explained *"That's where our Gitxaata people lived. And there's a story about that place."*





<b>Gitxaala Nation Use Study</b>		Prepared For:  GITXAALA ENVIRONMENTAL MONITORING	Prepared By:  Calliou Group
<b>Place Names</b>	THIS MAP SHOULD NOT BE CONSIDERED A SUBSTITUTE FOR CONSULTATION. USE NOTATIONS ARE NOT EXACT LOCATIONS OF USE SITES. THIS MAP IS THE EXCLUSIVE PROPERTY OF THE GITXAALA NATION. ANY REPRODUCTION OR DISTRIBUTION WITHOUT WRITTEN APPROVAL IS STRICTLY PROHIBITED.	Date: 7/2/2014	Figure Number: 3-1
		Map Information: Base Data: NTDB Topographic Mapsheets (Department of Natural Resources); Digital Elevation Model (GeoBase); Use Data and Place Names (Gitxaala Nation)	



### 3.5 Gitxaata Resource Management Principles

Gitxaata have laws that inform how and when they harvest the resources in their territory. These laws, or ayaawx, are passed down through generations and provide the basis for how Gitxaata sustain and manage resources (Butler 2010).

Matthew Hill explained that their traditional system of laws have been in place for “thousands of years” and have ensured the continuity of their way of life. *“Our traditional laws were structured when they were made to preserve and sustain any resource. So you can only harvest so much and you can’t abuse in any way shape or form any type of resource... our laws were structured to ensure that these resources survived and were given to us thousands of years ago.”* He said, *“When I started the story it’s to tell you about the laws and how many thousands of years our laws are in place and how valid they are even today. And they’ll be just as valid thousands of years down the road if we continue to uphold them and if we protect the environment the way it should be protected and preserved and enhanced because the laws are structured to do all that.”*

Clarence Innis explained, *“There is a connection to everything including human life. We’re not disconnected from anything. That’s why our people held everything, our whole environment, with respect and honour. They gave thanks for the abundance it gives you. In return, you look after it”.* Furthermore, *“The value is in the resource and the land around it...The wealth that’s there, to help sustain your community and the people. Without it, there’s nothing left. That’s how I see it.”*

Gitxaata harvesters have many examples of the principles that regulate harvesting. For example, for shellfish species that are gathered such as clams, cockles, abalone, mussels, etc. the harvesters explained that Gitxaata only pick these animals when the tide is down (Menzies 2010); further they only harvest to the edge of the tide, thus ensuring that there are more in the following year. Several Study Participants shared a story regarding abalone harvesting. This species was traditionally harvested according to Gitxaata principles, Nation members shared their harvesting locales and in the following years commercial divers began frequenting abalone harvesting areas and overfished them to the point where they are now listed as a Species at Risk (Gilbert Hill, Jeannette Moody, and Ernie Bolton). Gilbert Hill described how the divers would strip the kelp of the rock and decimate the abalone population. This story was shared as an example of harvesting done contrary to Gitxaata ayaawx. Ernie Bolton reported that Gitxaata is still fighting for its right to harvest abalone because they only pick them as far as low tide. In other words, they do not collect abalone, or other shellfish, by diving - this is done as a way of managing the resources (Calliou Group 2011, 2014a).

Another example given by many Study Participants regarding Gitxaata resource management principles is that traditional foods are harvested seasonally; that is, there is a specific season in which different items are fished, gathered, and hunted. More detailed information on seasonal harvesting can be found in Sections: 6.2 Culturally Critical Species and 6.3 Harvesting Calendar and Associated Ayaawx. Study Participants reported on the appropriate times to harvest specific resources. Herring-roe-on-kelp is generally harvested in the early spring in March to April (Cyril Aster). Ernie Bolton explained that there are different types of seaweed that are picked when they are certain lengths and at specific times during the season. Seaweed gathering begins in May. Ernie further explained that the primary season for halibut fishing is in the mid to late spring, after the herring eggs season is over. Salmon are fished in the summer. Godfrey Mason noted that the correct time to harvest clam and cockles are in “months that end with R” or from September to December.

Gilbert Hill told a story about telling commercial fishers that they were harvesting sea urchins not in accordance with Gitxaala laws: they harvested the urchins in June which is the wrong season. Gilbert indicated that this is evident by the 'milk' on the water which means the urchins are *"getting their little ones"*. The commercial fishers explained that they have machines that remove the milk and Gilbert told the fishers that was not what he was trying to tell them; what he meant was there are certain times of the year to eat certain things in order to protect the breeding stock during the spawning process (Calliou Group 2011).

Ben Hill (Dzogm Giis Haaythks), Marjorie Brown (Ksi gwisgwaask) and Don Brown (Wudi Naaxs) also reported that in the past Gitxaala people practiced selective fishing; this was done using fish traps so harvesters could ensure they were catching a specific size/type of fish. The selectivity and sustainability of Gitxaala traditional fishing methods have been documented elsewhere (see Menzies and Butler 2007).

## 3.6 Gitxaala Economy

Gitxaala people have relied and continue to rely on the ocean for much of their food and income. Pre and post contact, Gitxaala have harvested the resources in their territory to sustain themselves, their families and community (Allan Brown). Gitxaala have participated in the commercial fishing industry since its establishment in the early 1800s (Menzies and Butler 2007, 2008)<sup>6</sup>.

For these Projects, Gitxaala has also prepared a more detailed overview of the Gitxaala economy in Calliou Group, Port Edward Area LNG Projects Socio-Economic Study, July 2014. This Report includes information on:

- Gitxaala Demographics
- Housing
- Community Infrastructure
- Gitxaala Economy, including income and wage economy, education and training and non-traditional land use
- Gitxaala harvesting and food security
- Commercial fishing
- Marine travel routes

### 3.6.1 Sharing of Resources

Many Study Participants reported the regular practice of sharing traditional foods amongst family and community members (Clarence Innis, Gilbert Hill, Cyril Aster, and Thelma Hill). Eugene Gordon simply noted that *"We share [with] whoever needs it"*. Clarence Innis noted that community sharing practices are strong today and harvesters will give food away to community members when they catch something. Study Participants with family living away from Lach Klan will often send them traditional foods. For example, Gilbert Hill noted that he not only shared with *"anybody that wants food that can't go out"* like his neighbor, Bertha Tolme, for whom he supplies cockles, he also supplies his family members who live in Edmonton and Vancouver with traditional foods.

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<sup>6</sup> A detailed account of Gitxaala participation in the Resource Economy, including fishing, can be found in "The Indigenous Foundation of the Resource Economy of BC's North Coast" by Charles R. Menzies and Caroline F. Butler in *Labour/Le Travail*, 61 (Spring 2008), 131-149.

Cyril Aster supplies traditional food to at least ten families. He explained that if he hunts a deer he will often take enough meat for his supper and will give the rest away. He said he never stops harvesting because he never saves enough for himself and always gives it away.

Clarence Innis echoed the idea of community sharing; he said that although he has the responsibility to look after the people of his house and clan, he will also assist the entire community. Clarence further explained that he often feeds his family in Prince Rupert with fish he catches around the Skeena River and Inverness Passage.

### 3.6.2 Trade

Elmer Moody explained one aspect of the Gitxaala Nation economy is based on the ability to trade with other nations. He explained that in the past, chiefs built their wealth around trade items and the ability to restrict others from accessing those trade items within their territories. Ernie Bolton said that when his family lived in the cannery camps, they would also trade with other communities for traditional items such as oolichan grease.

A trade network with neighbouring nations still exists for many Gitxaala people; numerous Study Participants reported that they often trade for food items, particularly oolichan or oolichan grease, which they cannot obtain in Gitxaala territory (Godfrey Mason, Keith Innes, Larry Bolton, and Cyril Aster). Larry Bolton (*Inta 'Wii Waalp*) explained that people from “the Nass” favour Kitkatla seaweed and will often trade for it. Cyril Aster trades with the Nisga’a for oolichan grease or oolichan (either fresh or dried). Herring eggs are a favourite item to use in trade but he explained that he will also trade seaweed, clams, cockles and halibut. Reg Gladstone also shared that he would regularly trade herring eggs for oolichan and moose meat with the people of the Nass and Skeena Rivers. Matt Hill shared that he traded for bear meat because bear meat has different taste and texture depending on where it is hunted that is sometimes preferable. Gilbert Hill reported that he brings a box of food for trade, often halibut, clams and cockles in exchange for soapberries or oolichan grease. He noted that grease is getting more expensive and can sometimes only be traded for seaweed which is becoming more difficult to collect. Godfrey Mason reported that he also trades seafood for moose meat with “*friends up the line*”, a reference to the Nass (Calliou Group 2014a).

## 3.7 Gitxaala Rights

Matt Hill explained how he views Gitxaala title to the land; he said he prefers the term “*land holders*”. Elmer Moody further explained that a hereditary chief has much authority and discretion in *his* territory, but his territory is held for a collective group, or the members of his house.

Allan Brown stated that before contact, Gitxaala people lived in their territory and fishing is their right, not a privilege: “*We were there first, before they made that law*” and he stated that the fishing laws are one of the many Government actions imposed on Gitxaala.

Study Participants also expressed their concern about the diminishment of Gitxaala rights over time. For example, Allan Brown reported that Gitxaala has a long history of being poorly treated by non-Aboriginal people. He told a story about the totem poles in the village. He said that almost every house had a totem pole but the “*so-called minister of Gods, white man’s God*” said it was a sin and ordered them taken down. The chiefs cut them down and now his grandfather’s totem pole is in a New York museum. He

stated that the traditional territory has been Gitxaata's since before contact and has been passed down from generation to generation; *"that land is our heart, our heart and soul."*

Clarence Innis is also concerned about Gitxaata rights and their traditional territory:

*Last things my uncle said to me is 'whenever you speak about our territory, you have to let the government know that it's really not for sale. It's for our people to use. And it's for us to make sure that it's intact.' But as we move forward it's getting more and more difficult. Because government is deciding how to use our territory without really coming to consult with us properly. That's where we are; we have a lot of challenges. My people have been here for thousands of years and we're going to be here for as long as this land is here.*

Joey Douglas related a story concerning the Queen of the North accident, and his views about Gitxaata ownership of the territory:

*One thing when we sat down with the incident command and when they brought on BC Environment and then Environment Canada came onboard, we had to let them (Environment Canada) know just how much of our territory we do have and they were amazed when they see exactly how huge our territory's waters are. While we were there, you know, they kept referring to us as 'stakeholders'. That we have a 'vested interest' in this area, or we have a vested interest that area...We can't let them refer to us as 'stakeholders' as though we have vested interest. This is our territorial waters. We are inhabitants of our territory...We didn't want to be recognized here or in any documents that they refer to later on as stakeholders, or a Nation with vested interests. So that's how they have to refer to us later on, as the Gitxaata Nation. As inhabitants and owners of our territorial waters. Our territory is huge.*

### **3.7.1 Resource Use and Culture**

During the interviews for this Study and previous Gitxaata Use Studies, Participants emphasized the importance of their connection to their territory for the transmission and retention of their culture. For more details on this please see section 6.0 Project Issues and Concerns. This is also further elaborated on in section 4.0: Cultural Identity of the Port Edward Area LNG Projects Gitxaata Valued Components Report.

Many Study Participants emphasized the importance that harvested foods have on their identity, and overall health and well being. Doug Brown explained: *"I want to die eating that. It's my natural food, it's what makes me who I am. I'm a person from the sea. I was born on a little island surrounded by the ocean so, you know...we didn't grow potatoes or raise cattle, you know. We just – 99% of our food came at low tide. If I couldn't get that then... what's the use. I have to have my food from the ocean."*

Theodore Nelson echoed these sentiments and indicated that harvested foods are equally important to the youth: *"But when you get back home and eat your traditional foods and you feel well again... And it's a big part of – right down to the kids' life."*

Clarence Innis said he speaks Sm'algyax to his grandchildren to pass along his knowledge of the Gitxaata territory and way of life. For Clarence, the sites and use areas are a link to previous generations, and his education in the Gitxaata ways. Like his grandfather, Clarence uses stories to illustrate Gitxaata values and knowledge. He explained how he teaches the next generation:

*Even our young people are not hearing enough of it. We are an oral Nation, oral community – a lot of that is done around a supper table – the passing of*



*our culture. And actually going out and doing it is passing down our culture....  
Going by someone's land and letting your young ones know who this belongs  
to what house they belongs to, is how you pass on culture. You actually go  
and live it. (Calliou Group 2011).*

Cyril Aster is another Nation member who is actively teaching community youth the traditional way of life. He indicated that he always tries to take out one or two youth on his boat and teach them about sharing and giving the food away when they come back. Currently, one of Cyril's students (his nephew) is teaching the youth on his own. Cyril learned his skills from his mother's brothers – his uncles – and was taken with them whenever there was room in the boat.

Many Study Participants, including Ernie Bolton and Cyril Aster, talked about participating in the annual *Gathering Strength* youth cultural canoe camp. During the canoe journey, participants camp and share stories and knowledge. Cyril Aster explained that it is a way to connect with their youth and community.



## 4.0 Selected Use, Aboriginal Rights, and Knowledge

The following section details sites identified during the interview process where Gitxaata Study Participants exercise their Aboriginal rights. Although it documents areas where participants go currently or have gone in the past, Bruce Watkinson explained that the ability to continue to explore new areas is important and he doesn't want to be limited to just going where he has gone before. He emphasized the importance of being able to access the territory.

### 4.1 Sacred Places and Cultural Areas

Study Participants explained that throughout their territory there are many places that are associated with experiences, stories and events that link them to their territory. Some Study Participants shared some of these stories and experiences during the study; however, others indicated that they had knowledge of a story or place, but did not feel comfortable providing more detailed information.

The category Sacred Places and Cultural Areas includes sites for storied places, *spanaxnox* and *adaawx*, named places and hereditary territories<sup>7</sup>, burials and other

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<sup>7</sup> The hereditary territories listed here are only a few of the Gitxaata house territories. It should also be noted that house territories always include the water in addition to land.

teaching areas shared by Study Participants during the interviews can be found on Figure 4-1. Because of the sensitive nature of most of these sites, the site listing and figure will identify them generically as Sacred Places. This is not a comprehensive documentation of Gitxaata sacred places or cultural areas.

Gitxaata tell stories to share information in relation to a variety of things, including: experiences on the land and water, history of the Nation, education, resource management principles, sacred and cultural knowledge, values, and ethics, and Gitxaata identity. These stories include Adaawx, Maalsk, as well as other contemporary stories about the land.

Adaawx stories are ways of relaying knowledge and guidance for Gitxaata. Adaawx includes stories that serve to teach the listener the morals, beliefs, values, and ethics necessary to survive and relate to all other humans, animals, plants, and the land. Adaawx provide information required to survive on the land (Elmer Moody, Calliou Group 2011), relate to humans, animals, plants and other elements of the non-human world, and guide behaviour. Ray Nelson explained: *"It's quite something our ayaawx, adaawx, and gugwilx'ya'ansk. You really think of it. How these people back then, hundreds of years ago, how they built the foundations of this and it all comes from our land."* (Calliou Group 2011)

Maalsk are proprietary stories relating to the history of houses and individuals, telling of the acquisition of territories, names, crests, or songs (Elmer Moody, Calliou Group 2011). Finally, the Gitxaata also share contemporary stories regarding interactions between community members, non-Aboriginal people, places, species, and other elements of the non-human world. Many of the contemporary stories that Gitxaata tell are in relation to the land, ocean, and animals. They often include observations about animal behaviour, and/or interactions with humans. Gilbert Hill told a story about his interaction with a wolf that he encountered swimming in the water while he was out on a trip with his wife and children. He approached the wolf and stopped the boat in front of him. The wolf swam in one spot and looked at him; Gilbert told the wolf in his language that he was not here to hurt the wolf and was not going to shoot him. Gilbert told the wolf that he and his family would be in the area for three days to gather clams and cockles and asked the wolf that no harm come to his wife and children. Gilbert explained that once he was finished speaking to the wolf, it turned and swam back to shore and they had no encounters with it for the duration of their trip (Calliou Group 2011).

Another category of Sacred Places discussed by Participants include spanaxnox and naxnox. Spanaxnox are associated with places and supernatural events or supernatural beings whereas naxnox is everything. Spanaxnox can refer to both a location and what exists there. Everything has a spirit from the ants to the seaweed to the salmon. To have naxnox is to connect to something else (Calliou Group 2011). Most of the stories that Study Participants shared about spanaxnox and naxnox sites came with warnings of the cultural prohibitions that surround such places and stories. Many Participants were cautious in sharing their stories and some declined to discuss spanaxnox and naxnox sites all together.

Place names for sites were identified throughout the Study Area by Study Participants and in the Prince Rupert Port Authority Statutory Declarations. The passing of names and the territories associated with them is known as Gugwilx'ya'ansk. Study Participants also provided, where possible and where they felt comfortable, information on the hereditary territory for another Nation member.

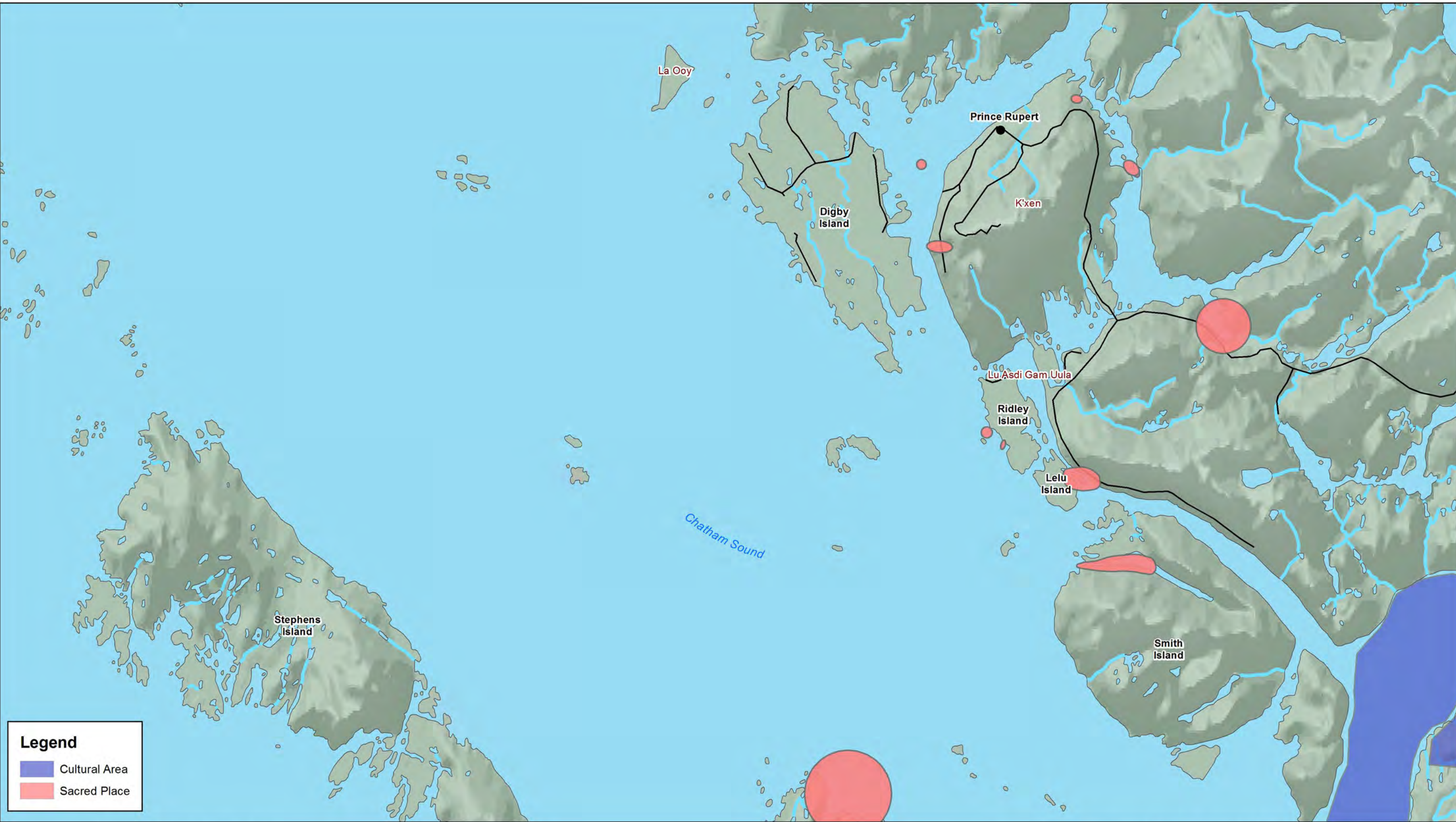
At least two hereditary territories were identified in the Study Area, but not mapped. These are the house territories of Txa Gyet (Porpoise Harbour, Watson Island, Lelu

Island and Ridley Island) and La Ooy (Tugwell Island). More detailed information on the following territories and names can be found in Section 3.4 Gitxaata Places:

Other scared places and cultural areas are listed below and can be found on Figure 4-1.

- Sacred Place on the Northern point of Porcher Island (Willy Innes)
- Sacred Place Kloiya (Reverend Sam Lewis, Edward Gladstone)
- Sacred Place on the West coast of Ridley Island, adjacent to Coast Island (Ray Nelson, Matt Hill)
- Sacred Place at the Butze Rapids (Ray Nelson, Matt Hill)
- Sacred Place in the Prince Rupert Harbour (Ray Nelson)
- Sacred Place around Stapledon Island and the East coast of Lelu Island (Matt Hill)
- Sacred Place at Casey Point, on the West coast of Kaien Island (Matt Hill)
- Sacred Place in Sourdough Bay (Matt Hill)
- Sacred Place in Tsum Tsudai Inlet (Matt Hill)
- Cultural Area by Veitch Point (Matt Hill)
- Cultural Area through the Telegraph Passage and the Inverness Passage (Greg McKay)





<b>Gitxaala Nation Use Study</b>
<b>Sacred Places</b>

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Prepared For:	 GITXAALA ENVIROMENTAL MONITORING	Prepared By:	 Calliou Group
Date:	6/17/2014	Figure Number:	4-1
Map Information:	Base Data: NTDB Topographic Mapsheets (Department of Natural Resources); Digital Elevation Model (GeoBase); Use Data and Place Names (Gitxaala Nation)		



## 4.2 Galdo ada gal tsap (Sites and Settlements)

During interviews for the Report, Participants identified Village and Settlement Sites, camps and cabins as well as canneries. Doug Brown, Matthew Hill and Ray Nelson explained how the canneries were a place where Gitxaʼa people would come together every year.

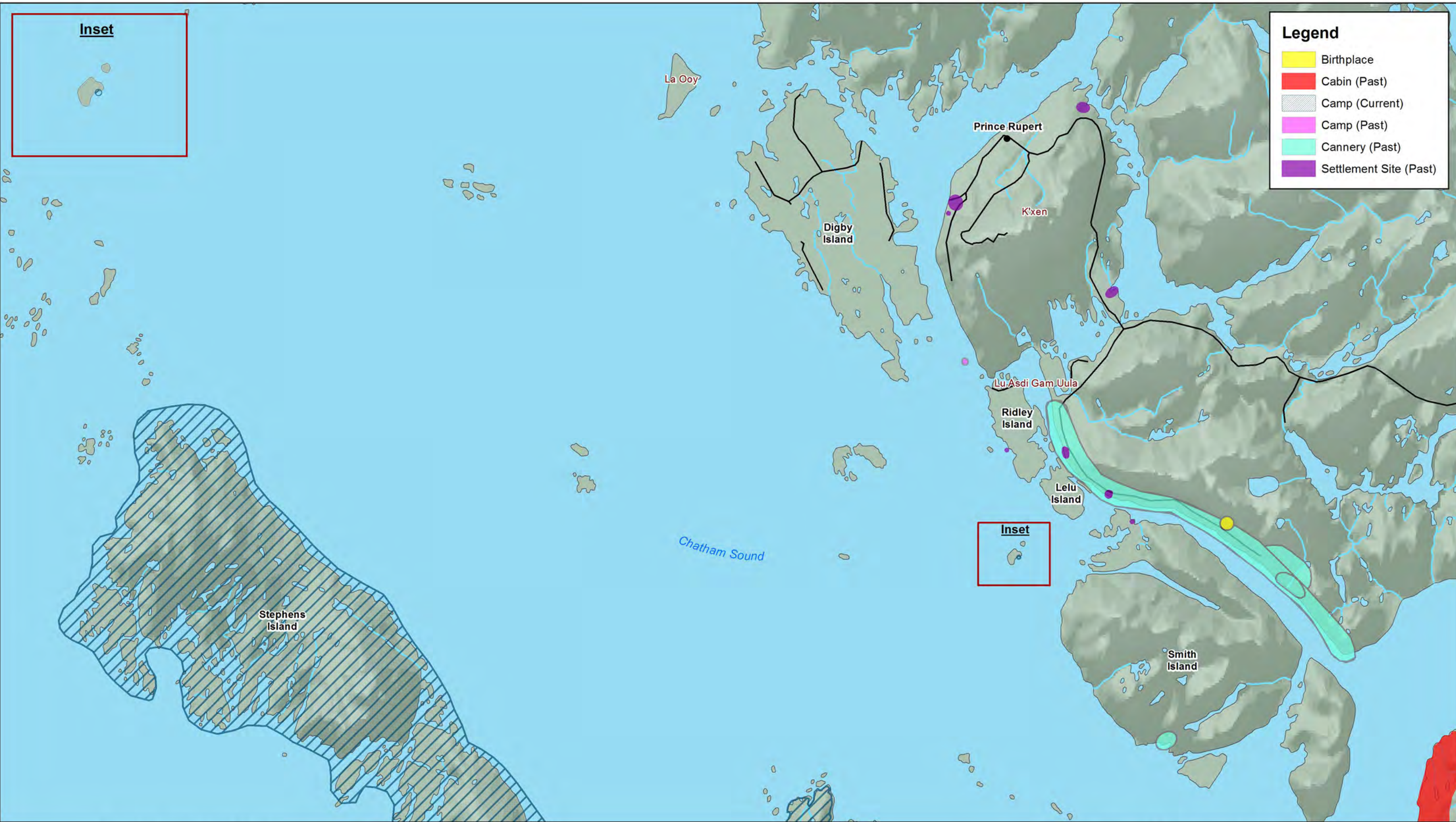
This is not a comprehensive list of historic sites and settlements and it does not include archaeological sites. Historic sites such as cabins, camps and settlement sites identified during the interviews that are within the Study Area are listed in Figure 4-2 below:

- Village Site on the South end of Prince Rupert (Workshop Participants)
- Village Site near Miller Bay on Kaien Island (Workshop Participants, Ray Nelson)
- Village Site on Ridley Island (Workshop Participants)
- Village Site on the West side of the Tsimpsean Peninsula (Workshop Participants, Ray Nelson)
- Village Site on the Southwest side of the Tsimpsean Peninsula (Workshop Participants, Ray Nelson)
- Village Site on the North side of Smith Island (Workshop Participants)
- Settlement Site at Pilsbury Point, South of Prince Rupert (Matt Hill)
- Settlement Site in Sourdough Bay (Matt Hill)
- Birthplace in the Sunnyside Cannery (Ted Gamble)
- Cabins near the processing facilities, across Telegraph Passage (Clarence Innis)
- Camps around Stephens Island (Ronnie Shaw)
- Camping spots between Hunt Point and the Creak Islands (Cyril Aster, Ted Gamble)
- Camping on Kitson Island (Cyril Aster, Ted Gamble)
- Camp Site on Barrett Rock (Matt Hill)
- Cannery, the Sunnyside Cannery (Ernie Bolton)
- Cannery, across from Smith Island (Clarence Innis, Doug Brown)
- Cannery, the Cassiar Cannery in the Inverness Passage (Greg McKay)
- Cannery on Hazel Point, of Smith Island (Doug Brown)



*Lach Klan (Kitkatla)*





Gitxaala Nation Use Study



Sites and Settlements

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Prepared For:	 GITXAALA ENVIROMENTAL MONITORING	Prepared By:	 Calliou Group
Date:	6/17/2014	Figure Number:	4-2
Map Information:	Base Data: NTDB Topographic Mapsheets (Department of Natural Resources); Digital Elevation Model (GeoBase); Use Data and Place Names (Gitxaala Nation)		



### 4.3 Migration, Spawning, and Breeding Areas

Nearly all Study Participants emphasized the importance of the migration areas for salmon, oolichan, herring and halibut throughout the study area, particularly the salmon spawn in the Skeena River. Ernie Bolton explained that the peak sockeye run in the Skeena River is at the end of July followed by pinks, chums and coho. It was also reported that whales and seals will often travel through the area following the fish migration.



*Salmon creek on Ridley Island*

Migration and spawning routes identified during the Study Area can be found on Figure 4-3 and listed below:

- Fish Migration: The fish move through all the passes before heading up the Skeena River (Clarence Innis)
- Fish Migration: Through Brown Passage into Chatham Sound. (Reverend Sam Lewis, Edward Gladstone)
- Salmon Migration: Through the Edye Passage, towards the Skeena River (Ernie Bolton, Cyril Aster, Ted Gamble)
- Salmon Migration: From West of the Kinahan Islands to Flora Bank (Ray Nelson)
- Salmon Migration: From the Principe Channel, West of Porcher Island, through the Edye Passage, and into Chatham Sound (Greg McKay)
- Salmon Migration: From the Principe Channel, through Ogden Channel, and into Chatham Sound (Greg McKay)
- Salmon Migration: From Chatham Sound to the Skeena River, through the Inverness Passage (Greg McKay, Larry Bolton, Vince Davis, Cyril Aster, Ted Gamble)
- Salmon Migration: Along the West coast of Digby Island (Bruce Watkinson, Larry Bolton)
- Salmon Migration: From Kennedy Island, up the Skeena River (Vince Davis)
- Salmon Migration: From the South end of Stephens Island to the Skeena River (Keith Lewis)
- Salmon Migration: From the North end of Stephens Island to the Skeena River (Keith Lewis)



- Salmon Migration: From the Lawyer Islands to the Skeena River (Cyril Aster, Ted Gamble)
- Salmon Migration: From the Northwest corner of Chatham Sound towards Smith Island (Theodore Nelson)
- Salmon Migration: From Chatham Sound to the Skeena River (Doug Brown)
- Salmon Migration: From Ogden Channel to the Skeena River (Doug Brown)
- Chum Salmon Migration: From Chatham Sound to the Skeena River, through the Inverness Passage (Ray Nelson, John Vickers)
- Chum Salmon Migration: From Grenville Channel to the Skeena River (Ray Nelson)
- Chum Salmon Migration: From Ogden Channel to the Skeena River (Ray Nelson)
- Coho Salmon Migration: From Chatham Sound to the Skeena River, through the Inverness Passage (Ray Nelson, John Vickers)
- Coho Salmon Migration: From Grenville Channel to the Skeena River (Ray Nelson)
- Coho Salmon Migration: From Ogden Channel to the Skeena River (Ray Nelson)
- Pink Salmon Migration: From Chatham Sound to the Skeena River, through the Inverness Passage (Ray Nelson, John Vickers)
- Pink Salmon Migration: From Grenville Channel to the Skeena River (Ray Nelson)
- Pink Salmon Migration: From Ogden Channel to the Skeena River (Ray Nelson)
- Pink Salmon Migration: From Kennedy Island to the Skeena River (Vince Davis)
- Sockeye Salmon Migration: From North of Stephens Island to West of Smith Island (Reg Gladstone)
- Sockeye Salmon Migration: From the Edye Passage to West of Smith Island (Reg Gladstone, Keith Lewis)
- Sockeye Salmon Migration: From Ogden Channel to the Skeena River (Reg Gladstone, Ray Nelson)
- Sockeye Salmon Migration: From Chatham Sound to the Skeena River, through the Inverness Passage (Ray Nelson, John Vickers, Bruce Watkinson)
- Sockeye Salmon Migration: From Grenville Channel to the Skeena River (Ray Nelson)
- Sockeye Salmon Migration: Through the Telegraph Passage to the Skeena River (Bruce Watkinson, Vince Davis)
- Spring Salmon Migration: From Chatham Sound to the Skeena River, through the Inverness Passage (Ray Nelson, John Vickers)
- Spring Salmon Migration: From Grenville Channel to the Skeena River (Ray Nelson)
- Spring Salmon Migration: From Ogden Channel to the Skeena River (Ray Nelson)
- Steelhead Trout Migration: From Chatham Sound to the Skeena River, through the Inverness Passage (Ray Nelson, John Vickers)
- Steelhead Trout Migration: From Grenville Channel to the Skeena River (Ray Nelson)
- Steelhead Trout Migration: From Ogden Channel to the Skeena River (Ray Nelson)

- Oolichan Migration: From Chatham Sound to the Skeena River, through the Inverness Passage (Ray Nelson)
- Oolichan Migration: From Grenville Channel to the Skeena River (Ray Nelson)
- Oolichan Migration: From Ogden Channel to the Skeena River (Ray Nelson, John Vickers)
- Oolichan Migration: From Kennedy Island to the Skeena River (Vince Davis)
- Whale Migration: From the Principe Channel, up through the Edye Passage (Keith Lewis)

#### **4.3.1 Herring (tsigah) and Herring Roe on Kelp (xs'waanx)**

Study Participants identified natural herring spawn areas, and areas for herring and commercial herring roe on kelp, where they harvest herring roe for both personal and community consumption.

Harvesters collect kelp (see Plate 4-3) from one area and set it up in another location by weighting it with rocks. Here, the herring will spawn with the roe attaching itself to kelp. Gitxaata harvesters will then collect the roe-on-kelp. Cyril Aster reports Gitxaata harvesters usually get ready for the roe-on-kelp season in March. Godfrey Mason noted that herring will spawn on rocks as well; this is called gi-axs (Calliou Group 2011, 2014a).



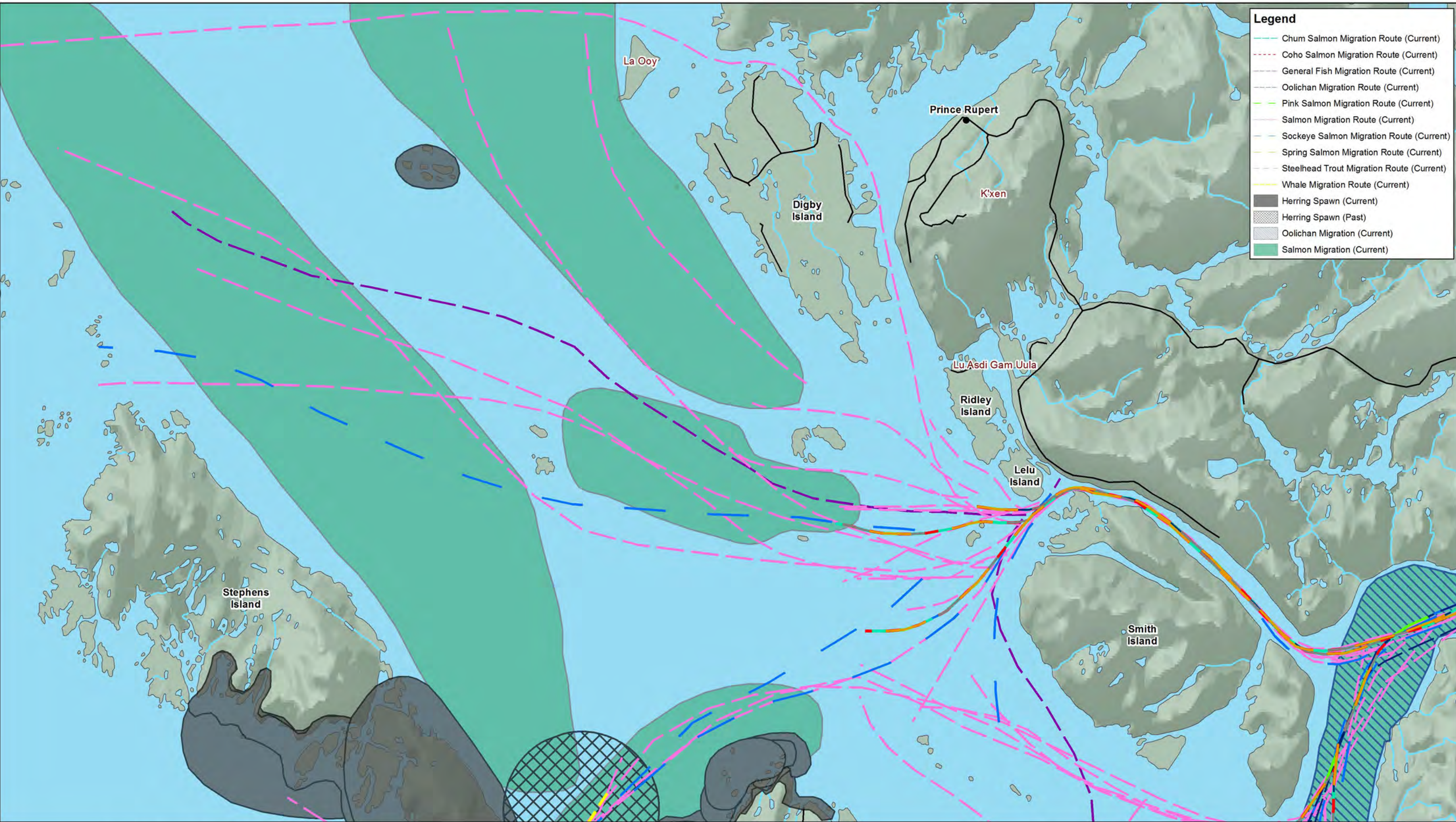
*Herring Roe on Kelp*

Reg Gladstone reported that while they often harvest roe-on-kelp in open water, Gitxaata harvesters have also identified wind-protected areas for roe-on-kelp gathering during bad weather. He noted that it is occasionally possible to identify herring spawns from the air: the water becomes white with herring eggs. Reg also shared that Gitxaata harvesters often trade herring eggs with the Nass and Skeena River people for moose meat and other items.

Locations reported by Study Participants for herring and herring roe are found on Figure 4-3 and are listed below.

- Edye Passage (Ronnie Shaw)
- Island Point of Porcher Island (Colin Nelson, Ray Nelson, Vince Davis)
- Hunt Point, on Porcher Island (Keith Lewis, Cyril Aster, Ted Gamble, Verne Jackson, Ray Nelson, Bruce Watkinson)
- The Southwest coast of Stephens Island (Reverend Sam Lewis, Edward Gladstone, Keith Lewis)
- The Lucy Islands (Greg McKay)
- Prescott Island and Arthur Island (Mel Tolme)
- From Porpoise Harbour up to Seal Cove (Reverend Sam Lewis, Edward Gladstone)
- Off the West coast of Digby Island (Reverend Sam Lewis, Edward Gladstone)
- Through Chatham Sound and the Hecate Strait (Reverend Sam Lewis, Edward Gladstone)
- Along the South West coast of Stephens Island (Reverend Sam Lewis, Edward Gladstone, Keith Lewis)
- Along the North end of Porcher Island (Keith Lewis)
- Morse Basin (Eugene Gordon)
- Wainwright Basin (Matt Hill)
- The Genn Island (Matt Hill)







## 4.4 Non-Consumptive Animals

Study Participants regularly identified the habitat or reported seeing a number of land animals and marine species that they do not presently consume. While some animals, for example, whales and porpoises, are not hunted and consumed currently they may have been hunted for consumptive purposes in the past (C. Menzies personal communication). Other animals such as the raven, blackfish, eagle and wolf are associated with Gitxaata clans and some Study Participants report hunting proscriptions on these species (Doug Brown, Calliou Group 2011). However, while these animals are considered “well respected” and not consumed, Study Participants reported that wolves in particular are regularly hunted to manage and control population numbers (Calliou Group 2014a).

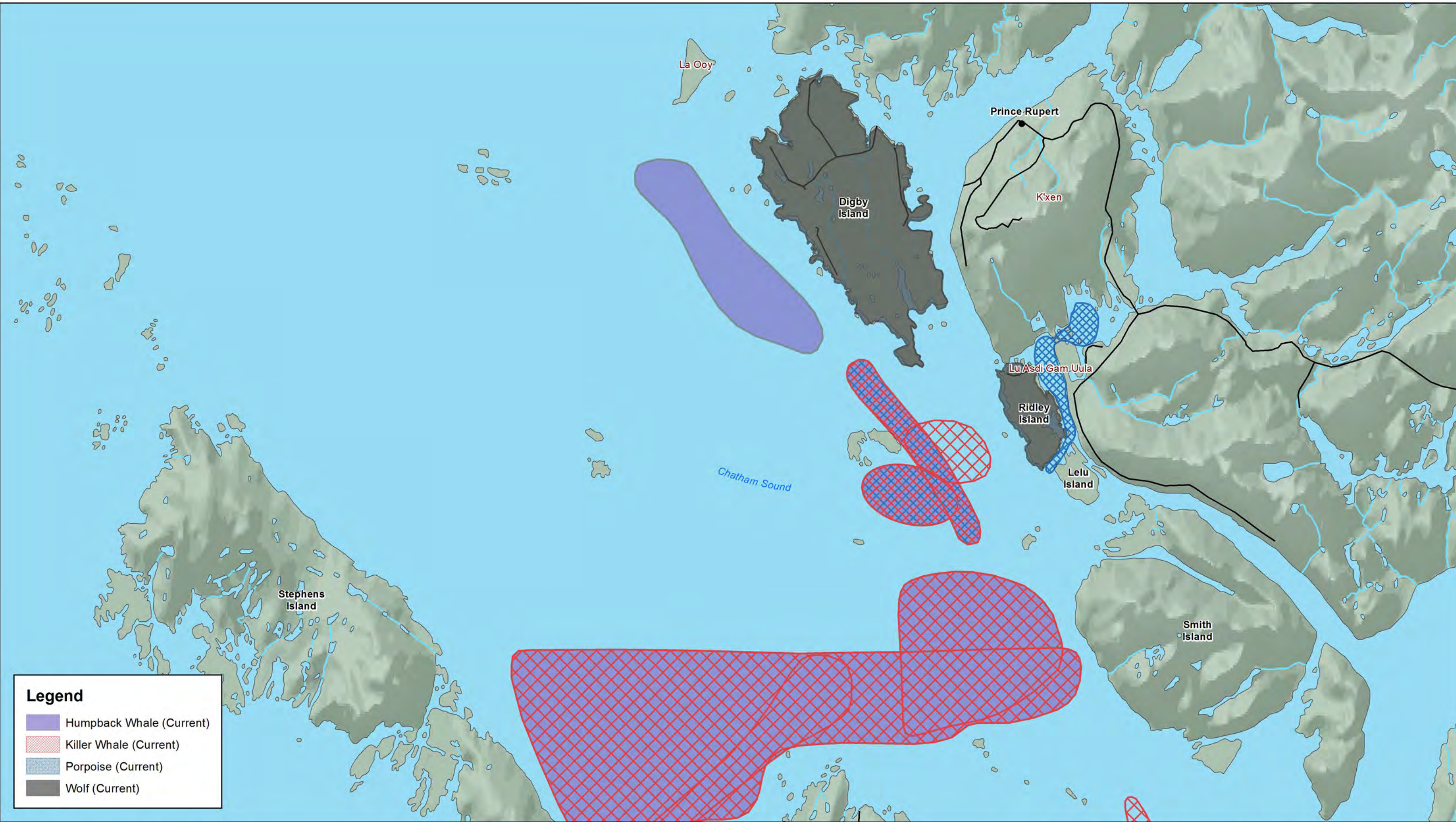


*Wolf swimming*

Locations of non-consumptive animals were identified during the interviews are on Figure 4-4 and listed below:

- Wolves: Ridley Island (Vince Davis)
- Wolves: Digby Island (Vince Davis)
- Humpback Whales: Between the Kinahan Islands and Kitson Island (Clyde Moody, Elliot Moody, Matt Hill)
- Humpback Whales: Chatham Sound (John Vickers)
- Humpback Whales: Edye Passage and the Southern part of Chatham Sound (Bruce Watkinson, Vince Davis)
- Humpback Whales: Along the West coast of Digby Island (Bruce Watkinson)
- Humpback Whales: South of Digby Island, off Flora Bank (Vince Davis)
- Killer Whales: Between the Kinahan Islands and Kitson Island (Matt Hill)
- Killer Whales: Chatham Sound (John Vickers)
- Killer Whales: The Marcus Passage (John Vickers)
- Killer Whales: The Edye Passage and Southern part of Chatham Sound (Bruce Watkinson, Vince Davis)
- Killer Whales: West of Ridley Island (Bruce Watkinson, Vince Davis)
- Porpoise: Between the Kinahan Islands and Kitson Island (Matt Hill)
- Porpoise: West of Ridley Island (Vince Davis)
- Porpoise: Porpoise Harbour and Porpoise Channel (Doug Brown)







## 4.5 Gayna dm yaakm (Travel Routes)

Study Participants identified travel routes throughout the territory that they use to access different resources and areas. These travel routes were often chosen with two considerations in mind: the type of weather and water conditions experienced (rough vs. calm seas) and the ability to stop and harvest or fish along the way.

Several frequently used marine travel routes were documented in the Study Area. Many Participants, including Ray Nelson, Eddie McKay, Clarence Innis, Greg McKay, Bruce Watkinson, Cyril Aster and others reported travelling by small vessel near the shores of Lelu and Ridley Island when going between either Prince Rupert or Port Edward and Lach Klan. Study Participants explained that this route is the preferred route when the weather is rough. Further details on the frequency and importance of this travel route can also be found in Section 4.7: Travel Routes and Access to Traditional Territories in the Port Edward Area LNG Projects Gitxaʼla Socio-Economic Report, July 2014.



*Killer Whale*

Not all travel routes were documented for this study. Identified routes and anchorage sites are shown on Figure 4-5:

- Dolphin Island up to the East side of Smith Island (Allen Robinson, Colin Nelson)
- Porpoise Harbour out to Chatham Sound (Bruce Watkinson)
- Porpoise Harbour and through the Inverness Passage (Bruce Watkinson, Clyde Moody, Elliot Moody, Larry Bolton)
- Porpoise Harbour up towards Prince Rupert Harbour (Bruce Watkinson, Larry Bolton)
- From Prince Rupert Harbour to Inverness Passage (Clyde Moody, Elliot Moody)
- To Port Edward and Prince Rupert (Colin Nelson, Reg Gladstone, Ronnie Shaw)
- Around Ridley Island (Cyril Aster, Ted Gamble, Workshop Participants)
- The Inverness Passage (Cyril Aster, Ted Gamble, Theodore Nelson, Ray

Nelson, Workshop Participants)

- Around Lelu Island, down to Hanmer Island (Cyril Aster, Ted Gamble)
- To Malacca Passage (Cyril Aster, Ted Gamble)
- Prince Rupert to Kitkatla (Doug Brown, Eugene Gordon, Gilbert Hill, Keith Lewis, Larry Bolton, Mel Tolme, Reverend Sam Lewis, Edward Gladstone, Ted Gamble, Theodore Nelson)
- Prince Rupert to Kitkatla, through the Telegraph Passage (Keith Lewis)
- From Prince Rupert through Edye Passage (Gilbert Hill)
- Around Porcher Island (Greg McKay, Ronnie Shaw)
- Safer Route from Smith Island to either side of Ridley Island (Matt Hill)
- The Skeena River, around the West side of Porcher and Banks Island (Ray Nelson)
- Along Smith Island to Prince Rupert (Ray Nelson)
- Prince Rupert Harbour into Chatham Sound (Ray Nelson, Reg Gladstone, Workshop Participants)
- East of Lelu Island (Reverend Sam Lewis, Edward Gladstone)
- Up the Skeena River (Ronnie Shaw)
- Smith Island to Prince Rupert Harbour (Warren Aster)
- Along the West coast of Digby Island (Workshop Participants)
- Good weather route from Kitkatla to Prince Rupert (Greg McKay, Mel Tolme)
- Bad weather route from Kitkatla to Prince Rupert (Greg McKay, Vince Davis)
- Bad Weather route from Kitkatla to Porpoise Harbour (Mel Tolme)
- Bad Weather route through the Inverness Passage to the Skeena River (Ray Nelson)
- Bad Weather route from Porpoise Harbour to Prince Rupert Harbour (Vince Davis)
- Bad Weather route along Ridley Island (Workshop Participants)
- Bad Weather route through Porpoise Channel (Workshop Participants)
- Anchorage: Between Smith Island and De Horsey Island (Greg McKay)
- Anchorage: Greentop Islet (Keith Lewis)
- Anchorage: The Kinahan Islands (Workshop Participants)
- Anchorage: By the Tsum Tsadai Inlet (Workshop Participants)
- Anchorage: Off Soar Point (Workshop Participants)
- Anchorage: Off Hicks Point on Smith Island (Workshop Participants)



#### 4.5.1 Laxha adaaks (Currents, Tides and Weather)

Study Participants shared their knowledge and experience of tides, currents and weather conditions throughout their traditional territory. In particular, they noted how winds, waves and tides affected their ability to travel and fish throughout the territory.

Ronnie Shaw called a southeastern wave a Haywaask, a northwestern wave a Gūülka and north-eastern wave a Gisiyaask. Ronnie Shaw also noted that big ground swell waves are called Binbanm goo. If the big wave comes from the south-east “*you better turn back*” because the waves will get bigger. According to Ronnie, if the big wave comes from the northwest, the day will improve (Calliou Group 2014a).

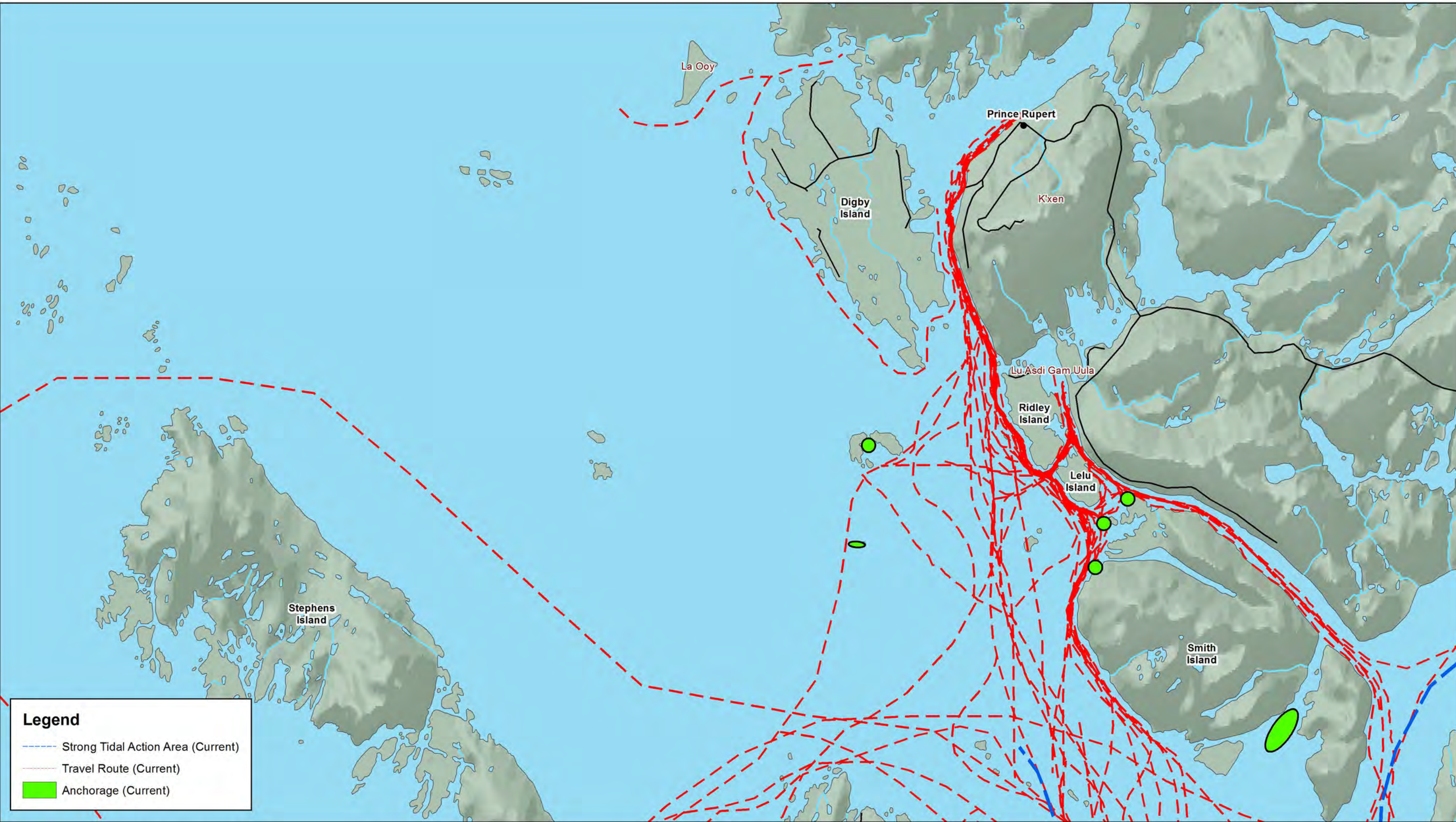
Areas where Study Participants identified currents, tides, waves or weather patterns in the Study Area are shown on Figure 4-5:

- Strong Tidal Action: From the Skeena River to the Hecate Strait, through Ogden Channel (Rennie Lewis)
- Strong Tidal Action: Moves from Smith Island South through Arthur Passage, and the Ogden Channel (Larry Bolton)



Boat in Kitkatla Harbour





**Gitxaala Nation Use Study**

**Travel Routes and Strong Tidal Action**

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## 4.6 Fishing

Fishing has always been a central component of the Gitxaala Nation. Study Participants identified numerous areas throughout the Study Area where they fish for a variety of species both for food and commercial purposes. Elmer Moody noted that within Gitxaata territories there are areas where certain fish species exist that cannot be found in other areas. Reg Gladstone noted that all the Gitxaata drag seine spots *"belong to somebody"*. And Ernie Bolton explained that Gitxaata did not just fish indiscriminately. His father, for example, knew where to fish depending on the tide. He would instruct Ernie where to fish and how long to fish at a certain spot depending on the tide (Calliou Group 2011).

Study Participants reported that the Study Area is an important commercial fishing area. Greg McKay recalled that when the regulations allowed for 24-hour fishing, the Chatham Sound, Inverness Passage, and Skeena River area *"looked like a little city."* Doug Brown further explained: *"gillnetters get fish at night, as long as they have a little lamp on the end of your net, yeah. And you have a lamp on your light, on your pole, on your boat and there was literally thousands of them. It looked like a city out there."*

Ray Nelson described the same area as *"our bread and butter"*.

### **Fishing – general**

Study Participants identified some general fishing areas where numerous fish can be found. These areas are listed below and are shown on Figure 4-6. Additionally Study Participants identified areas related to historic fishing sites including fish traps.

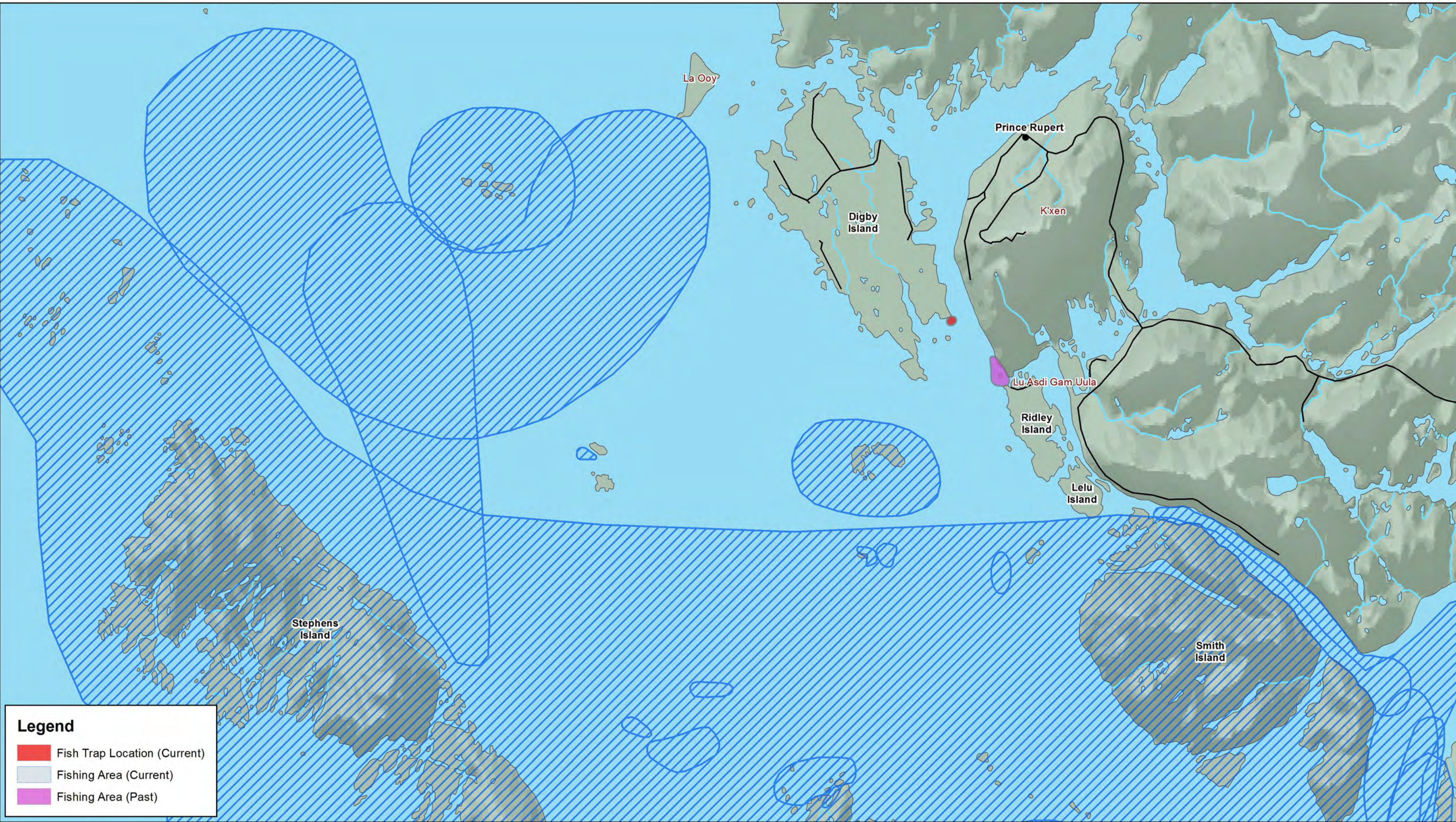
### **Fishing areas – general**

- Agnew Bank, Flora Bank, and Horsey Bank (Matt Hill)
- East of the Gull Rocks (Bruce Watkinson)
- South of the Gull Rocks (Bruce Watkinson)
- Around Greentop Islet (Bruce Watkinson)
- Between the Rachael Islands (Bruce Watkinson)
- Around Kennedy Island and the Lawyer Islands (Doug Brown)
- Around the Kinahan Islands (Harvey Aster, Willard Robinson)
- Around the Lucy Islands (Harvey Aster, Willard Robinson)
- At the mouth of the Skeena River (Keith Lewis, Ronnie Shaw)
- Telegraph Passage (Larry Bolton)
- Arthur Passage (Larry Bolton)
- Between Holland Rock and Kitson Island (Reverend Sam Lewis, Edward Gladstone)
- East of Smith Island (Reverend Sam Lewis, Edward Gladstone)
- Along the East coast of Stephens Island (Ronnie Shaw)
- Off Hunt Point (Verne Jackson)
- The Southern mouth of Prince Rupert Harbour (Matt Hill)

### **Fish traps**

- Off Frederick Point (Matt Hill)





<b>Gitxaala Nation Use Study</b>
<b>General Fishing</b>

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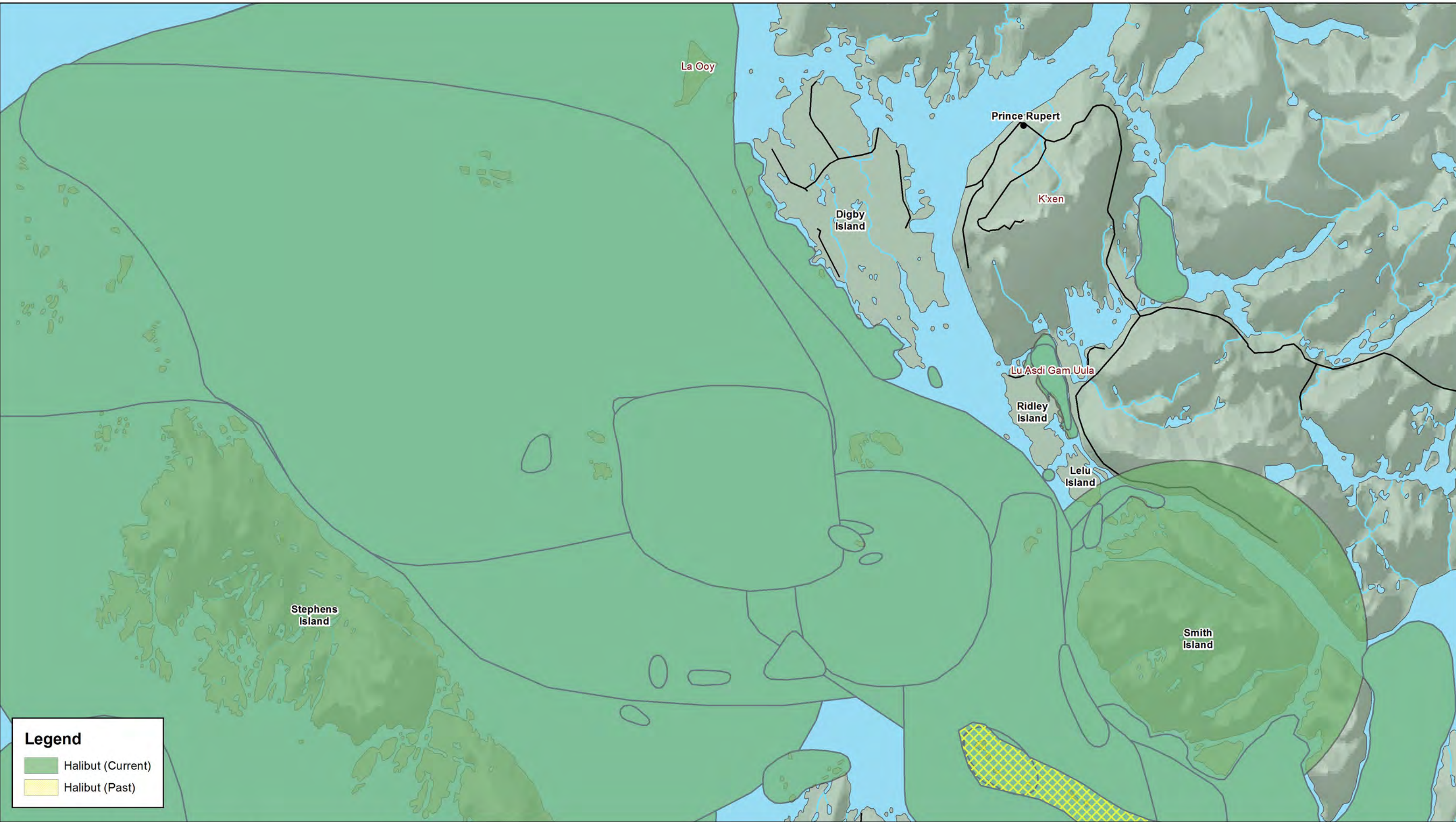
### ***Halibut [Txaw]***



Many Participants, such as Bruce Watkinson and Ray Nelson, reported that they set halibut gear or jig for halibut in the Study Area. Gilbert Hill noted that halibut can be found in deep places at any time of the year.

Locations where Study Participants reported halibut are listed below and found in Figure 4-6-1.

- Between the Kinahan Islands and Greentop Islet (Bruce Watkinson)
- South of Greentop Islet (Bruce Watkinson)
- North of the Rachael Islands (Bruce Watkinson)
- West of the Rachael Islands (Bruce Watkinson, Harvey Aster, Willard Robinson)
- South of the Rachael Islands (Keith Lewis, Larry Bolton)
- Off Hunt Point (Bruce Watkinson, Mel Tolme)
- East and South of the Gull Rocks (Bruce Watkinson)
- Around the Gull Rocks (Theodore Nelson)
- North of Porcher Island (Colin Nelson)
- The Inverness Passage and South of Lelu Island (Cyril Aster, Ted Gamble, Verne Jackson)
- Chatham Sound (Cyril Aster, Ted Gamble, Greg McKay)
- The mouth of the Porpoise Channel (Cyril Aster, Ted Gamble)
- Malacca Passage (Cyril Aster, Ted Gamble)
- Brown Passage (Greg McKay)
- Porpoise Harbour (Harvey Aster, Keith Lewis, Willard Robinson)
- West of Smith Island (Matt Hill)
- Agnew Bank (Matt Hill)
- Morse Basin (Matt Hill)
- Marcus Passage (Matt Hill)
- Holland Rock and Greentop Islet (Matt Hill)
- Around Seal Rocks, Warrior Rocks, and Grenville Rock (Matt Hill)
- Greentop Islet (Mel Tolme)
- The Lawyer Islands (Mel Tolme, Ernie Bolton, Larry Bolton)
- Off the West coast of Digby Island (Reverend Sam Lewis, Edward Gladstone)
- Edye Passage (Ronnie Shaw)
- The mouth of the Skeena River (Ronnie Shaw)
- North of Hooper Point (Sam Lewis)
- Around Smith Island (Vince Davis)
- Off Lima Point (Vince Davis)
- Around Kennedy Island (Ernie Bolton)





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<b>Txaw (Halibut)</b>		Date: 6/17/2014	Figure Number: 4-6-1
		Map Information: Base Data: NTDB Topographic Mapsheets (Department of Natural Resources); Digital Elevation Model (GeoBase); Use Data and Place Names (Gitxaala Nation)	



### ***Salmon [Hoon]***

A variety of species of salmon are fished by Gitxaata throughout the Study Area. Study Participants regularly reported fishing salmon throughout the territory without always identifying the species. This section includes both commercial salmon fishing, and Gitxaata fisheries for food, and other forms of community use such as feasting, barter and bait.

Study Participants reported preparing salmon in many ways including smoking, salting, and jarring in order to preserve it. Eugene Gordon identified numerous creeks that he used to catch salmon for canning and smoking as well as for commercial halibut bait.

### ***Salmon - general***

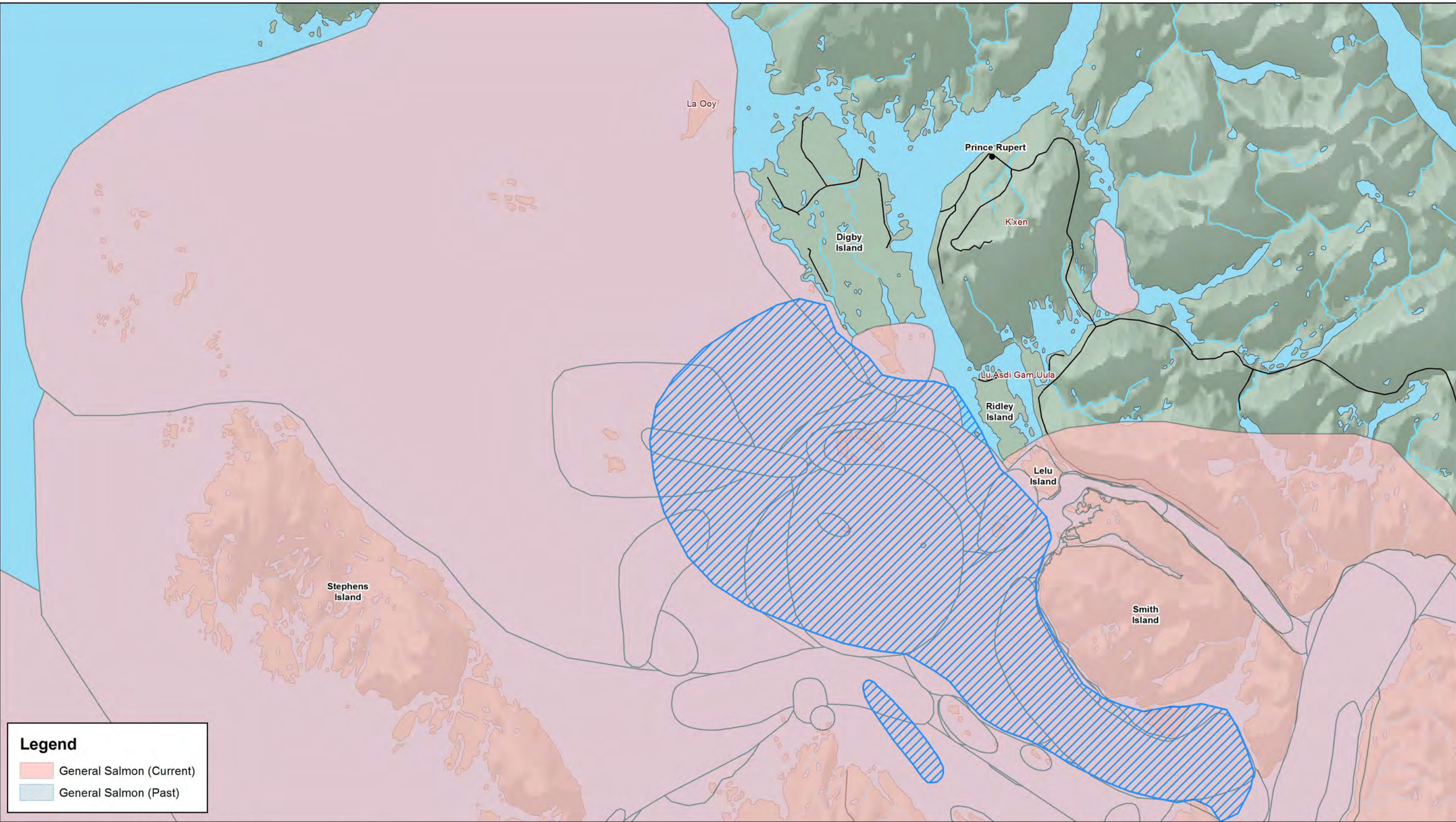
General (non-species specific) salmon locations identified by Study Participants are listed below and displayed on Figure 4-6-2. This section also includes areas that are known to be good salmon habitat.

- Around the West of the Kinahan Islands (Bruce Watkinson)
- Inlet on Smith Island (Ben Hill)
- South of the Rachael Islands (Bruce Watkinson)
- Horsey Bank (Bruce Watkinson, Harvey Aster, Ray Nelson, Willard Robinson)
- The Inverness Passage and around Smith Island (Clyde Moody, Elliot Moody, Greg McKay)
- North of the Kinahan Islands till Digby Island (Clyde Moody, Elliot Moody, Ray Nelson)
- Off the North coast of Porcher Island (Colin Nelson, Cyril Aster, Ted Gamble, Ernie Bolton, Keith Innes, Verne Jackson)
- Chatham Sound (Cyril Aster, Ted Gamble)
- Around the Gull Rocks (Cyril Aster, Ted Gamble, Verne Jackson)
- The Malacca Passage and Southern part of Chatham Sound (Cyril Aster, Ted Gamble, John Vickers)
- Telegraph Passage (Cyril Aster, Ted Gamble)
- Flora Bank, off Lelu Island (Doug Brown, Ray Nelson)
- From Smith Island to the Mouth of the Skeena River (Eddie McKay)
- Off Lima Point (Greg McKay)
- West of Ridley Island (Greg McKay)
- Telegraph Passage (Greg McKay, Harvey Aster)
- South of the Kinahan Islands (Greg McKay)
- Between Lelu Island and Smith Island (Harvey Aster, Ray Nelson, Willard Robinson)
- The Marcus Passage (Harvey Aster, John Vickers, Larry Bolton, Ray Nelson, Willard Robinson)
- The Inverness Passage (Harvey Aster, Ray Nelson, Willard Robinson)
- Off Hunt Point (Harvey Aster, John Vickers, Willard Robinson)
- Around the Genn Islands (Keith Lewis, Theodore Nelson)
- Around the Lawyer Islands (Larry Bolton, Theodore Nelson)
- The Principe Channel and North of Porcher Island (Matt Hill)
- Morse Basin (Matt Hill)
- Around Greentop Islet (Mel Tolme)
- Around Holland Rock (Mel Tolme)
- The Skeena River (Ray Nelson)



- West of Smith Island to Greentop Islet (Ray Nelson)
- Off the West coast of Digby Island (Reverend Sam Lewis, Edward Gladstone)
- Chatham Sound and the Hecate Strait (Reverend Sam Lewis, Edward Gladstone)
- Off the West coast of Smith Island (Reverend Sam Lewis, Edward Gladstone)
- Around Porcher Island (Ted Gamble)
- Around the Kinahan Islands, Greentop Islet, and Holland Rock (Verne Jackson)
- Around the Rachael Islands (Verne Jackson)
- The Telegraph Passage up to the Skeena River (Willard Robinson)
- Around Smith Island (Ted Gamble)





<b>Gitxaala Nation Use Study</b>
<b>Hoon (Salmon)</b>

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## ***Sockeye and Spring Salmon***

Sockeye and spring salmon locations are on Figure 4-6-3 and listed below:

### ***Sockeye [misoo]***

- Off the West coast of Smith Island (Allen Robinson, Colin Nelson, Cyril Aster, Ted Gamble, Eugene Gordon, Reg Gladstone, Sam Lewis, Theodore Nelson)
- Inverness Passage (Eugene Gordon)
- All around Chatham Sound (Eugene Gordon)
- Near Smith Island (Gilbert Hill)
- Edye Passage (Godfrey Mason, Sam Lewis, Keith Innes)
- Telegraph Passage and Inverness Passage (Greg McKay)
- Brown Passage and Chatham Sound (Greg McKay)
- Marcus Passage (John Vickers)
- By Havelock Rock (Keith Lewis)
- The Inverness Passage (Keith Lewis)
- Creeks on Smith Island (Keith Lewis)
- Robertson Banks, East of De Horsey Island (Keith Lewis)
- South of the Rachael Islands (Larry Bolton)
- Up the Skeena River (Matt Hill, Ronnie Shaw)
- Around the Lawyer Islands (Mel Tolme, Sam Lewis)
- Off Hunt Point (Mel Tolme)
- Along the East side of the Telegraph Passage (Mel Tolme)
- Off the West coast of the Kinahan Islands (Ray Nelson)
- Between Lelu Island and Smith Island (Reg Gladstone, Ronnie Shaw)
- Off the coast of Lelu Island (Reg Gladstone)
- The Horsey Bank and Inverness Passage (Reg Gladstone)
- Porpoise Channel and Porpoise Harbour (Reg Gladstone)
- Around Stapledon Island (Reg Gladstone)
- Around Kitson Island, Flora Bank, Horsey Bank, and Agnew Banks (Reg Gladstone)
- North from Digby Island through Chatham Sound (Ronnie Shaw)
- By Holland Rock (Sam Lewis)
- Around the Rachael Islands (Sam Lewis)
- The North end of the Telegraph Passage (Sam Lewis)
- Off the West coast of Digby Island (Sam Lewis)
- Around the Kinahan Islands (Theodore Nelson)
- Around Smith Island (Vince Davis)
- Flora Bank (Vince Davis)
- Near the Inverness Passage (Warren Aster)
- North of the Lawyer Islands (Greg McKay)
- Along the North coast of Porcher Island (Mel Tolme)
- Off Brooks Rock (Ray Nelson)
- Butler Cove (Ray Nelson)

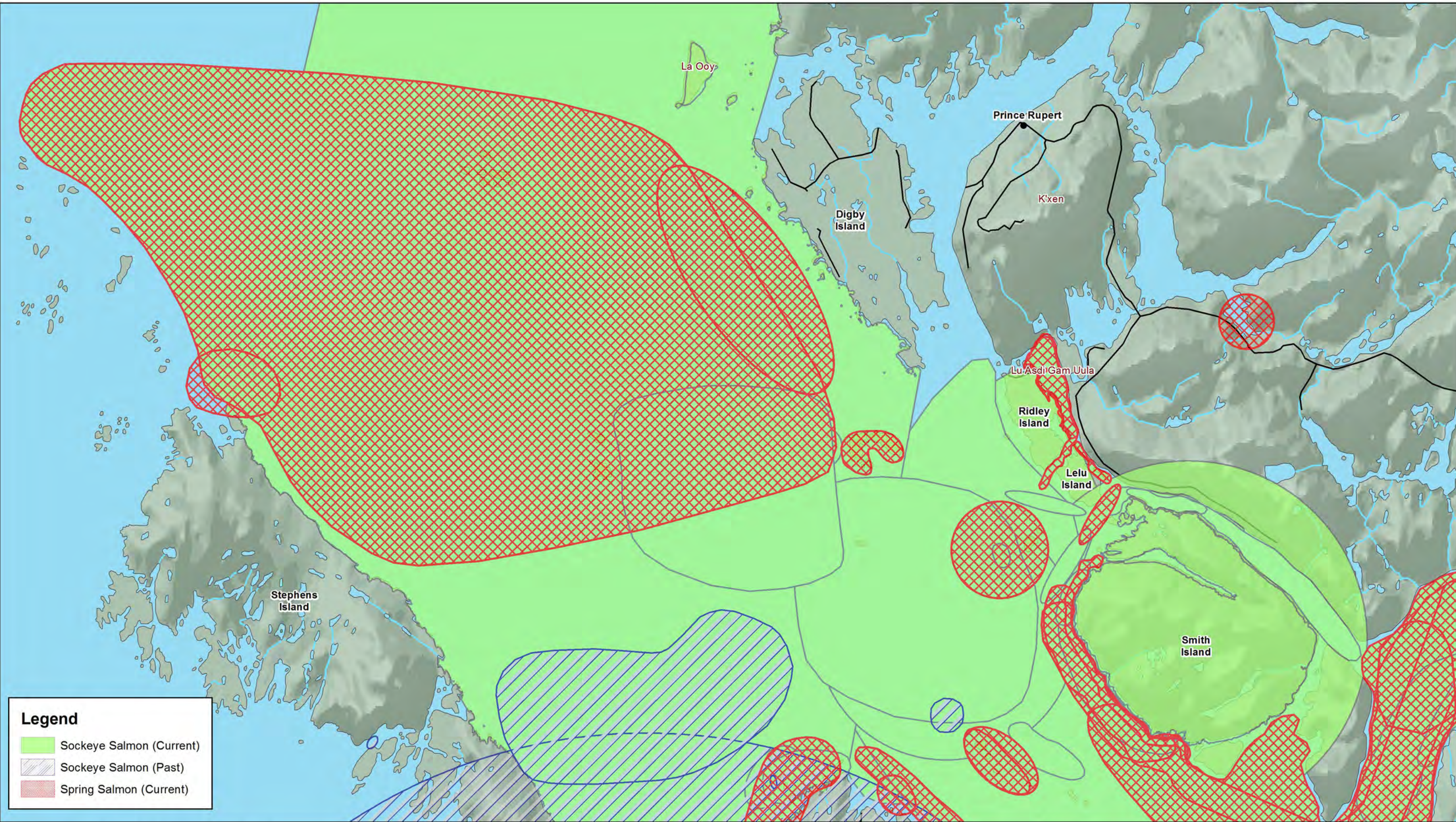
### ***Spring ['yee]***

- Off Hunt Point and Mason Point of Porcher Island (Bruce Watkinson)
- Along the West coast of Smith Island (Colin Nelson, Reg Gladstone)
- Telegraph Passage and Inverness Passage (Greg McKay)
- Brown Passage and Chatham Sound (Greg McKay)



- Off Avery Island (Harvey Aster, Willard Robinson)
- Port Edward (Keith Lewis)
- Throughout the Skeena River (Matt Hill)
- Around the Lawyer Islands (Mel Tolme, Theodore Nelson)
- Between Lelu Island and Smith Island (Reg Gladstone)
- Porpoise Channel and Porpoise Harbour (Reg Gladstone)
- Around Stapledon Island (Reg Gladstone)
- Around Kitson Island, Agnew Banks, Flora Bank, and Horsey Bank (Reg Gladstone)
- Around De Horsey Island and Smith Island (Reverend Sam Lewis, Edward Gladstone)
- Kloiya Bay (Reverend Sam Lewis, Edward Gladstone)
- The mouth of the Skeena River (Ronnie Shaw)
- Off the West coast of Digby Island (Sam Lewis)
- By Humpback Bay (Theodore Nelson)
- Off Hunt Point (Theodore Nelson)
- Around the Kinahan Islands (Theodore Nelson)







**Gitxaala Nation Use Study**

**Misoo ada 'Yee**  
**(Sockeye and Spring Salmon)**

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### ***Chum and Pink Salmon***

Chum and pink salmon locations can be found on Figure 4-6-4 and are listed below:

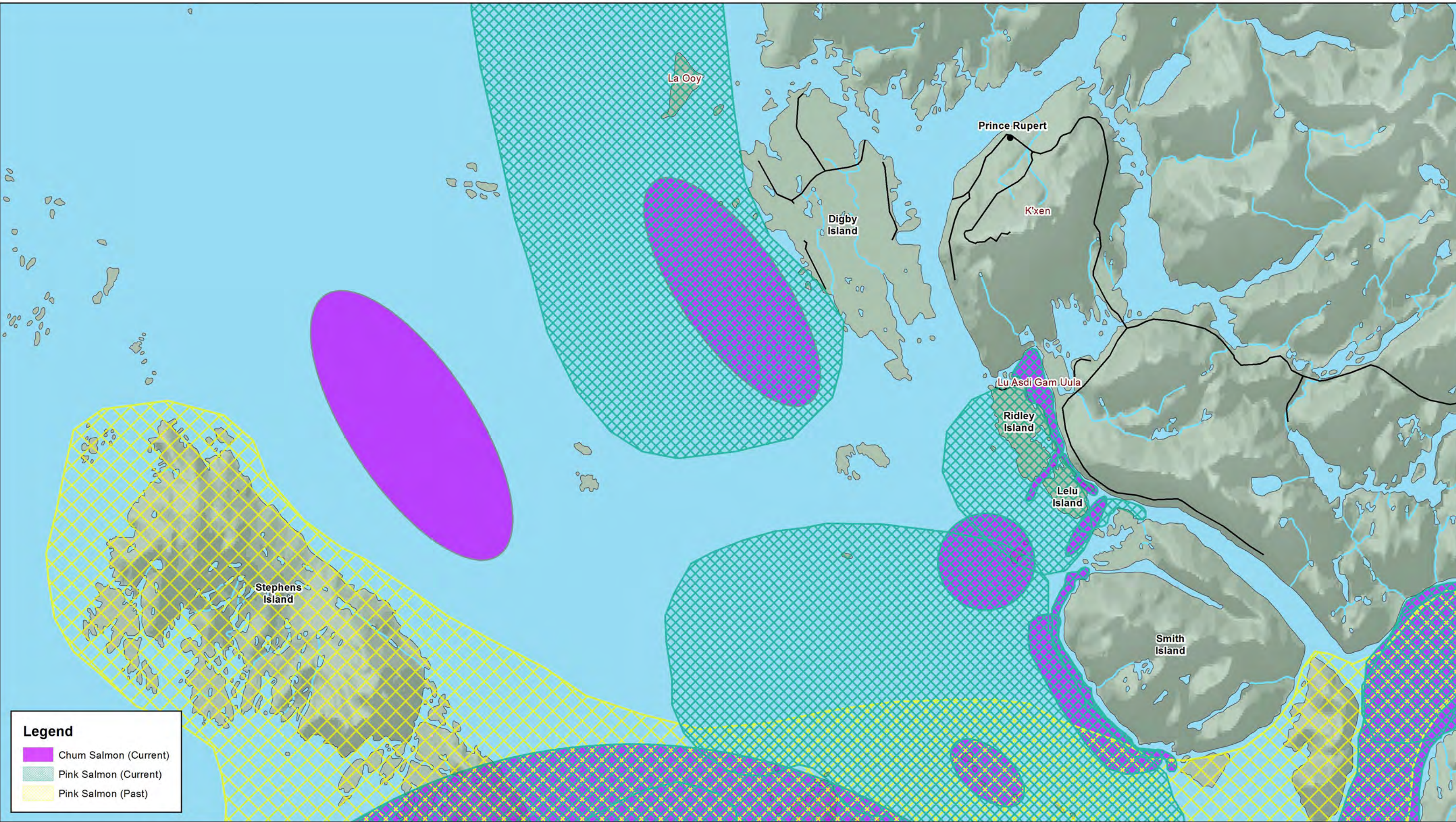
#### ***Chum [gayniis]***

- Along the West coast of Smith Island (Colin Nelson, Reg Gladstone)
- Telegraph Passage and the Inverness Passage (Greg McKay)
- Edye Passage (Keith Innes)
- Around the Lawyer Islands (Mel Tolme)
- Between Lelu Island and Smith Island (Reg Gladstone)
- Porpoise Channel and Porpoise Harbour (Reg Gladstone)
- Around Stapledon Island (Reg Gladstone)
- Around Kitson Island, Agnew Banks, Flora Bank, and Horsey Bank (Reg Gladstone)
- West of the Rachael Islands (Sam Lewis)
- Off the West coast of Digby Island (Sam Lewis)

#### ***Pinks [stm'hoon]***

- Along the West coast of Smith Island (Colin Nelson, Reg Gladstone)
- Inverness Passage (Eugene Gordon)
- Edye Passage (Godfrey Mason, Keith Innes)
- Telegraph Passage and Inverness Passage (Greg McKay)
- Up the Skeena River (Matt Hill)
- Around the Lawyer Islands (Mel Tolme)
- Between Lelu Island and Smith Island (Reg Gladstone, Ronnie Shaw)
- Porpoise Channel and Porpoise Harbour (Reg Gladstone)
- Around Stapledon Island (Reg Gladstone)
- Around Kitson Island, Agnew Banks, Flora Bank, and Horsey Bank (Reg Gladstone)
- West of Digby Island, in Chatham Sound (Ronnie Shaw)
- All around Porcher Island, McCauley Island, and Smith Island (Ernie Bolton)







**Gitxaala Nation Use Study**

**Gayniis ada Stm'hoon**  
**(Chum and Pink Salmon)**

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### ***Coho and Steelhead***

Coho salmon and steelhead trout locations can be found on Figure 4-6-5 and are listed below:

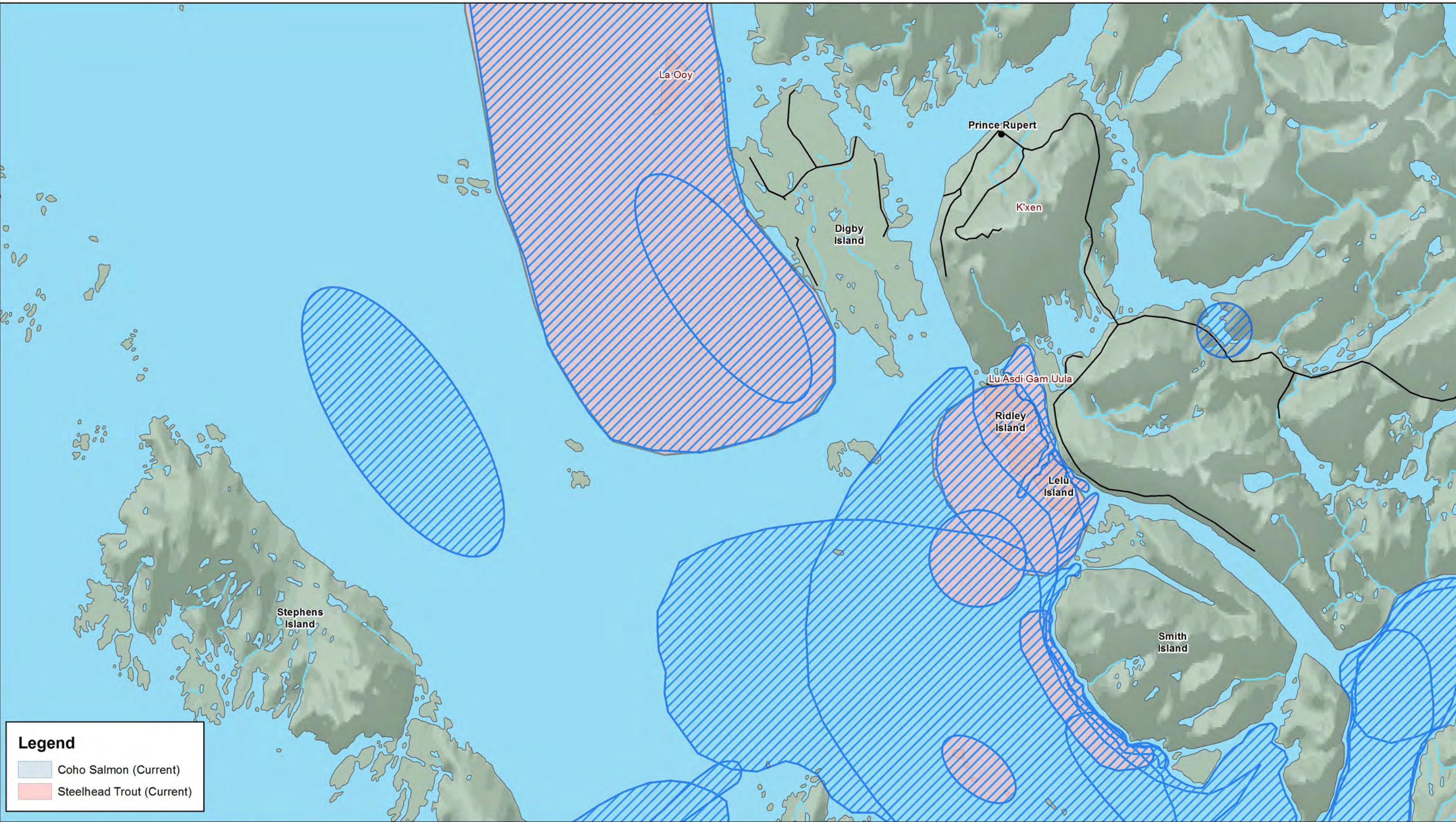
#### ***Coho [üüx]***

- By Hunt Inlet (Bruce Watkinson)
- Along the West coast of Smith Island (Colin Nelson, Reg Gladstone)
- West of Smith Island, Lelu Island, and Ridley Island (Gilbert Hill)
- Edye Passage (Godfrey Mason)
- Telegraph Passage and Inverness Passage (Greg McKay)
- Up the Skeena River (Matt Hill)
- Around the Lawyer Islands (Mel Tolme)
- Between Lelu Island and Smith Island (Reg Gladstone, Ronnie Shaw)
- Porpoise Channel and Porpoise Harbour (Reg Gladstone)
- Around Stapledon Island (Reg Gladstone)
- Around Kitson Island, Agnew Banks, Flora Bank, and Horsey Bank (Reg Gladstone)
- Near Kloiya Bay (Reverend Sam Lewis, Edward Gladstone)
- West of Digby Island, in Chatham Sound (Ronnie Shaw)
- At the mouth of the Skeena River (Ronnie Shaw)
- West of the Rachael Islands (Sam Lewis)
- Off the West coast of Digby Island (Sam Lewis)

#### ***Steelhead [meliit]***

- Around the Lawyer Islands (Mel Tolme)
- Between Lelu Island and Smith Island (Reg Gladstone, Ronnie Shaw)
- Off the West coast of Smith Island (Reg Gladstone)
- Porpoise Channel and Porpoise Harbour (Reg Gladstone)
- Around Stapledon Island (Reg Gladstone)
- Around Kitson Island, Agnew Banks, Flora Bank, and Horsey Bank (Reg Gladstone)
- West of Digby Island, in Chatham Sound (Ronnie Shaw)





**Gitxaala Nation Use Study**

**Meliit ada üüx**  
(Steelhead Trout and Coho Salmon)

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### ***Crab [K'algoos], Prawns, Shrimp***

Study Participants identified crab locations for both commercial and food fisheries. Reverend Sam Lewis described how Gitxaata used to harvest crab before crab pots became popular. They would wait until a zero tide and walk along the beach to pick them and they would bake the crabs on the beach. Greg McKay described how he and his nephews used to bait a hook and lower it to the bottom of the ocean floor. After a length of time, they would begin slowly pulling the line out of the water: usually they would catch at least two crabs.

Bruce Watkinson reported that the area around Flora Banks is very popular to set crab pots and is important crab habitat.

Locations for crab, prawns and shrimp identified during the Study are listed below and can be found in Figure 4-6-6.

#### ***Crab***

- Off the West coast of Ridley Island (Bruce Watkinson, Clyde Moody, Elliot Moody, Cyril Aster, Ted Gamble, Vince Davis)
- Off the West coast of Lelu Island (Bruce Watkinson)
- Off the West coast of Smith Island (Bruce Watkinson, Colin Nelson)
- Off the Tsimpsean Peninsula, by Prince Rupert (Bruce Watkinson)
- The Marcus Passage (Bruce Watkinson)
- Flora Bank, Horsey Bank, and Agnew Banks (Clyde Moody, Elliot Moody, Cyril Aster, Ted Gamble, Vince Davis)
- Around Kitson Island (Cyril Aster, Ted Gamble, Reverend Sam Lewis, Edward Gladstone)
- Porpoise Channel (Cyril Aster, Ted Gamble, Keith Lewis)
- The Malacca Passage and Southern part of Chatham Sound (Cyril Aster, Ted Gamble)
- Telegraph Passage (Cyril Aster, Ted Gamble)
- Flora Bank (Doug Brown, John Vickers, Keith Lewis, Ray Nelson)
- Horsey Bank (Harvey Aster, Willard Robinson)
- Between Holland Rock and Kitson Island (Keith Lewis)
- Porpoise Harbour and Porpoise Channel (Matt Hill, Reverend Sam Lewis, Edward Gladstone)
- Between the Kinahan Islands and Kitson Island (Ray Nelson)
- By Port Edward (Reverend Sam Lewis, Edward Gladstone)
- By Lelu Island and Ridley Island (Sam Lewis)
- North of Kitson Island (Reverend Sam Lewis, Edward Gladstone)
- East of Smith Island (Reverend Sam Lewis, Edward Gladstone)
- Around the Kinahan Islands, Greentop Islet, and Holland Rock (Verne Jackson)
- South of Lima Point (Verne Jackson)
- Coast Island, off the West coast of Ridley Island (Vince Davis)

#### ***Prawns***

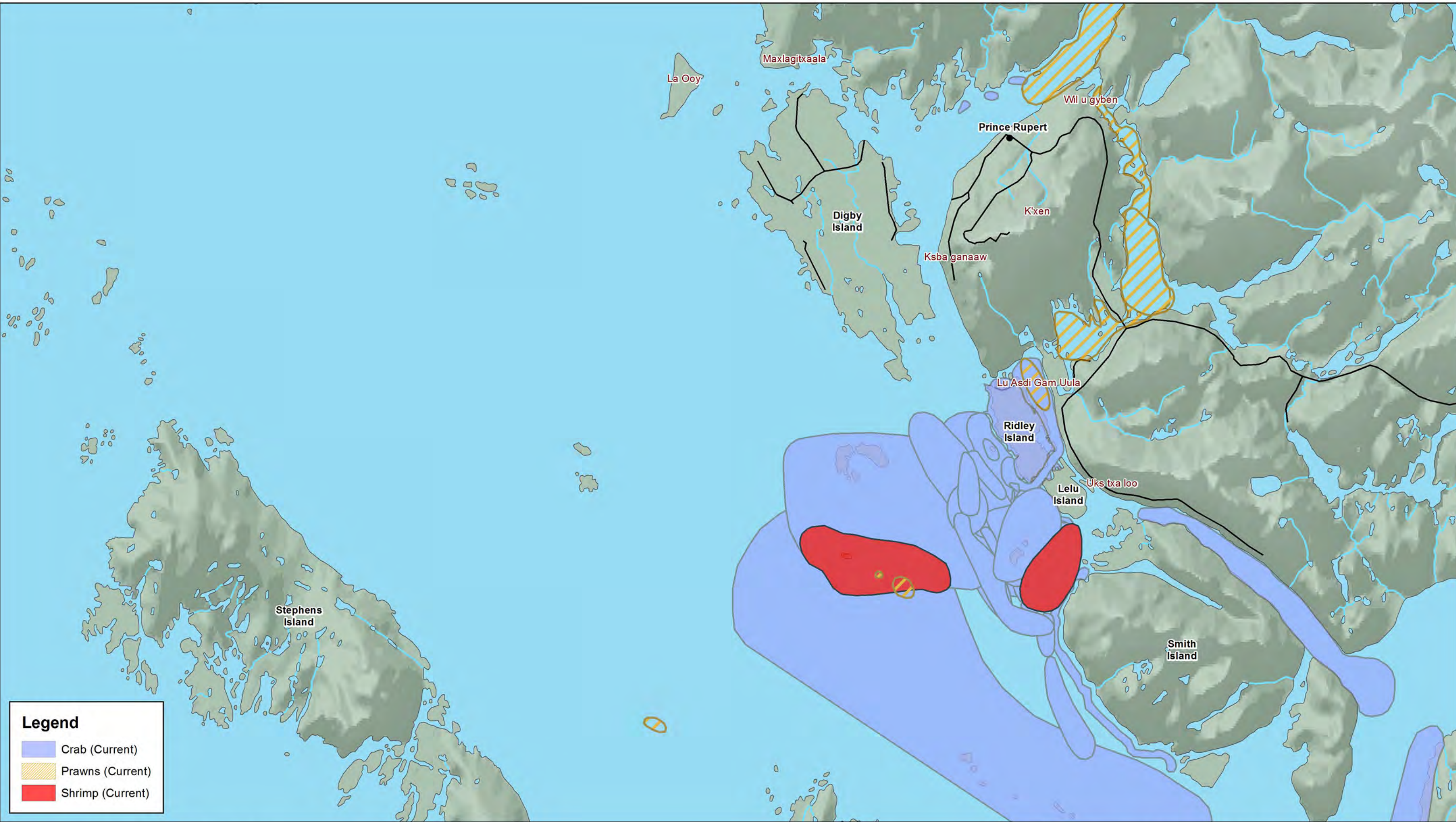
- South of Greentop Islet (Bruce Watkinson)
- South of the Gull Rocks (Bruce Watkinson)
- Morse Basin (Matt Hill)
- Porpoise Harbour (Reverend Sam Lewis, Edward Gladstone)



- From Porpoise Harbour to Seal Cove (Reverend Sam Lewis, Edward Gladstone)
- Through the Tuck Narrows, near Prince Rupert (Reverend Sam Lewis, Edward Gladstone)

***Shrimp***

- Horsey Bank (Harvey Aster, Willard Robinson)
- Around Holland Rock and Greentop Islet (Matt Hill)



**Gitxaala Nation Use Study**



**K'almoots (Crab), Prawns, and Shrimp**

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### ***Cod and Snapper***

Matt Hill has noticed changes in the cod population. He explained that cod stocks, like abalone, can take years to replenish and they grow slowly; living upwards of fifty or sixty years. Gilbert Hill explained that cod is often used as bait for halibut and forty hooks can be baited with one ling cod. Gilbert also shared that in addition to bait, people eat ling cod, and it is “*good eating*” (Calliou Group 2011).

Bruce Watkinson reported several locations where he fishes for cod or rock fish in the Study Area.

Locations for cod and snapper identified during the Study are listed below and can be found in Figure 4-6-7.

### ***Cod – general***

- East of the Gull Rocks (Bruce Watkinson)
- Morse Basin (Matt Hill)
- Alexandra Rocks, North of the Rachael Islands (Mel Tolme)
- Off Hunt Point (Mel Tolme)
- Off the West coast of Digby Island (Reverend Sam Lewis, Edward Gladstone)
- Through Chatham Sound and the Hecate Strait (Reverend Sam Lewis, Edward Gladstone)

### ***Ling Cod [wat’ukw]***

- Chatham Sound, from Stephens Island to Digby Island and South to Smith Island (Cyril Aster, Ted Gamble)
- Around Holland Rock and Greentop Islet (Matt Hill)

### ***Rock Cod [de la gayk]***

- Chatham Sound, from Stephens Island to Digby Island and South to Smith Island (Cyril Aster, Ted Gamble)

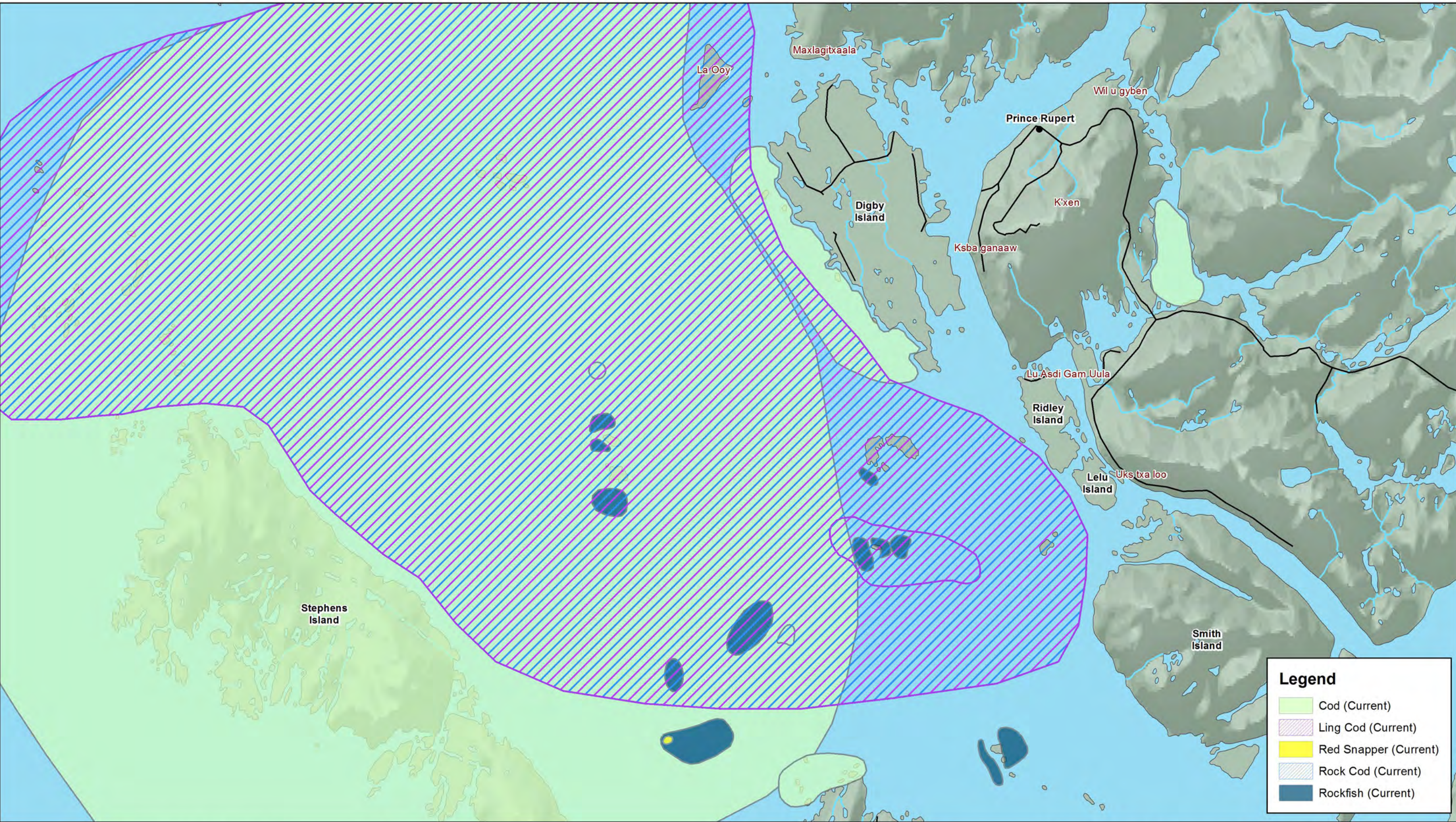
### ***Red Snapper***

- South of the Gull Rocks (Bruce Watkinson)

### ***Rock Fish***

- South of the Rachael Islands (Bruce Watkinson)
- Off the Lawyer Islands (Bruce Watkinson)
- Off Greentop Islet (Bruce Watkinson)
- East of Greentop Islet (Bruce Watkinson)
- South of the Gull Rocks (Bruce Watkinson)
- East of the Gull Rocks (Bruce Watkinson)
- Off the West Kinahan Island (Bruce Watkinson)
- Between the Rachael Islands (Bruce Watkinson)
- North of the Rachael Islands (Bruce Watkinson)
- Gull Rocks (Theodore Nelson)
- From Hanmer Island to Lelu Island (Matt Hill)





**Gitxaala Nation Use Study**

**Cod, Red Snapper, Wat'ukw (Ling Cod), De la gayk (Rock Cod), and Rockfish**

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## 4.7 Si amgyiika (Harvesting)

Many Gitxaata Study Participants identified areas in the territory that are good for all types of seafood harvesting. These general tidal harvesting areas have a variety of species that are harvested such as: chitons, sea prunes, sea cucumbers, clams, cockles, mussels, urchins and sea gull eggs. Seaweed and kelp harvesting are included in the Marine Vegetation Harvesting section below.

### General harvesting

General harvesting refers to locations that Participants identified harvesting but did not specify species.

General harvesting sites are listed in Figure 4-7-1

- Around Ridley Island (Reverend Sam Lewis, Edward Gladstone)
- Southeast corner of Smith Island (Ronnie Shaw)
- Holland Rock (Mel Tolme)

### Sea Prunes/Chitons [*'yaans*]

Gitxaata Nation members reported picking Sea Prunes or '*yaans* throughout their territory. Ernie Bolton shared that sea prunes can be picked on the rocks during low tide, noting that because they are algae eaters, they can often be found where there is kelp. Sam Lewis described how to prepare sea prunes or '*yaans*. He noted that by putting them in cold water they open up and get *"nice and soft in a couple of hours."*

Areas where Study Participants reported sea prunes/chitons are listed below and on Figure 4-7-1.

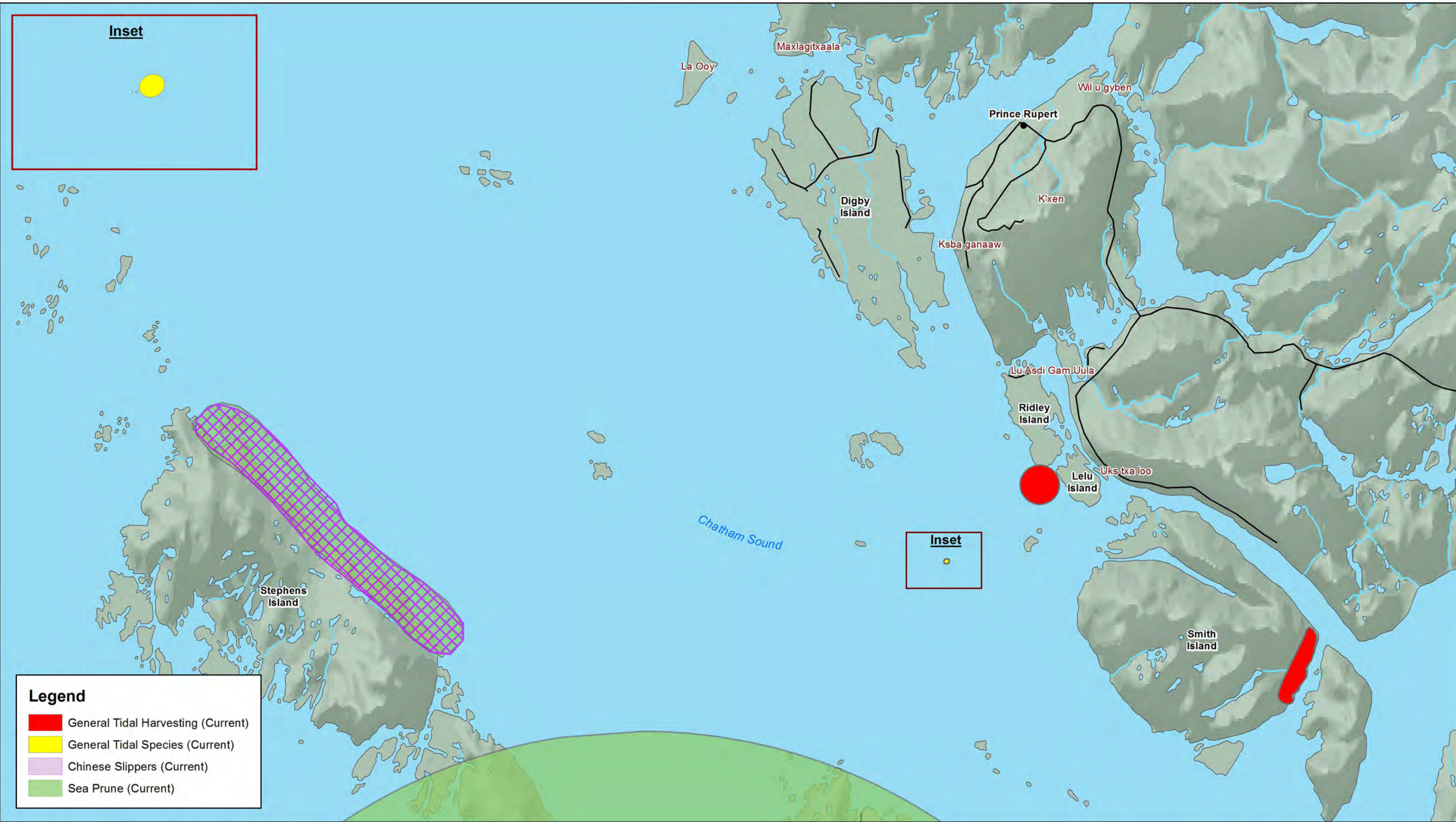
- Holland Rock (Cyril Aster, Ted Gamble)
- Around the Lawyer Islands (Cyril Aster, Ted Gamble)
- By Hunt Inlet (Cyril Aster, Ted Gamble)
- Around Coast Island, off the West coast of Ridley Island (Cyril Aster, Ted Gamble, Theodore Nelson)
- All around Porcher Island (Keith Innes)
- Around the Rachael Islands (Reverend Sam Lewis, Edward Gladstone)
- All along Stephens Island (Ronnie Shaw)
- On Ridley Island (Sam Lewis)
- Off Hunt Point (Verne Jackson)

### Chinese Slippers [*t'saak*]

Areas where Participants reported Chinese slippers are listed below and on Figure 4-7-1.

- By Hunt Inlet (Cyril Aster, Ted Gamble)
- Around the Rachael Islands (Reverend Sam Lewis, Edward Gladstone)
- All along Stephens Island (Ronnie Shaw)





**Gitxaala Nation Use Study**



**'Yaans (Sea Prune), T'saak (Chinese Slippers), and General Tidal Harvesting**

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**Inset**

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### **Abalone [Bilhāa]**

Many Study Participants shared stories regarding abalone harvesting. Nation members reported that after they shared their harvesting locations with the DFO, commercial divers began frequenting these areas and overfished them to the point where they are now listed as a Species at Risk (Jeannette Moody, Ernie Bolton) (Calliou Group 2011).

Gilbert Hill described how non-Aboriginal abalone divers strip the rock of kelp decimating the abalone populations. *"They cut the kelp off... and the year later there wasn't one abalone out there. They didn't even keep the kelp. They just cut it off and left it. And just- the abalone never came back. Even our sea prunes- everything seems to live- like we do – they live off something. And they really like the kelp."* Ernie Bolton explained that because Gitxaata only pick abalone at low tides (as opposed to diving for them) they should be permitted to harvest. He noted that Gitxaata is still fighting for this right (Calliou Group 2011).

Abalone can be found on Figure 4-7-2 and are listed below:

- Around Stephens Island (Ronnie Shaw)
- Around Greentop Islet (Larry Bolton)

### **Mussels [Gyels] and Giant Mussels [hagwyn]**

Locations for mussels and giant mussels are found on Figure 4-7-2 and listed below.

#### **Giant Mussels [hagwyn]**

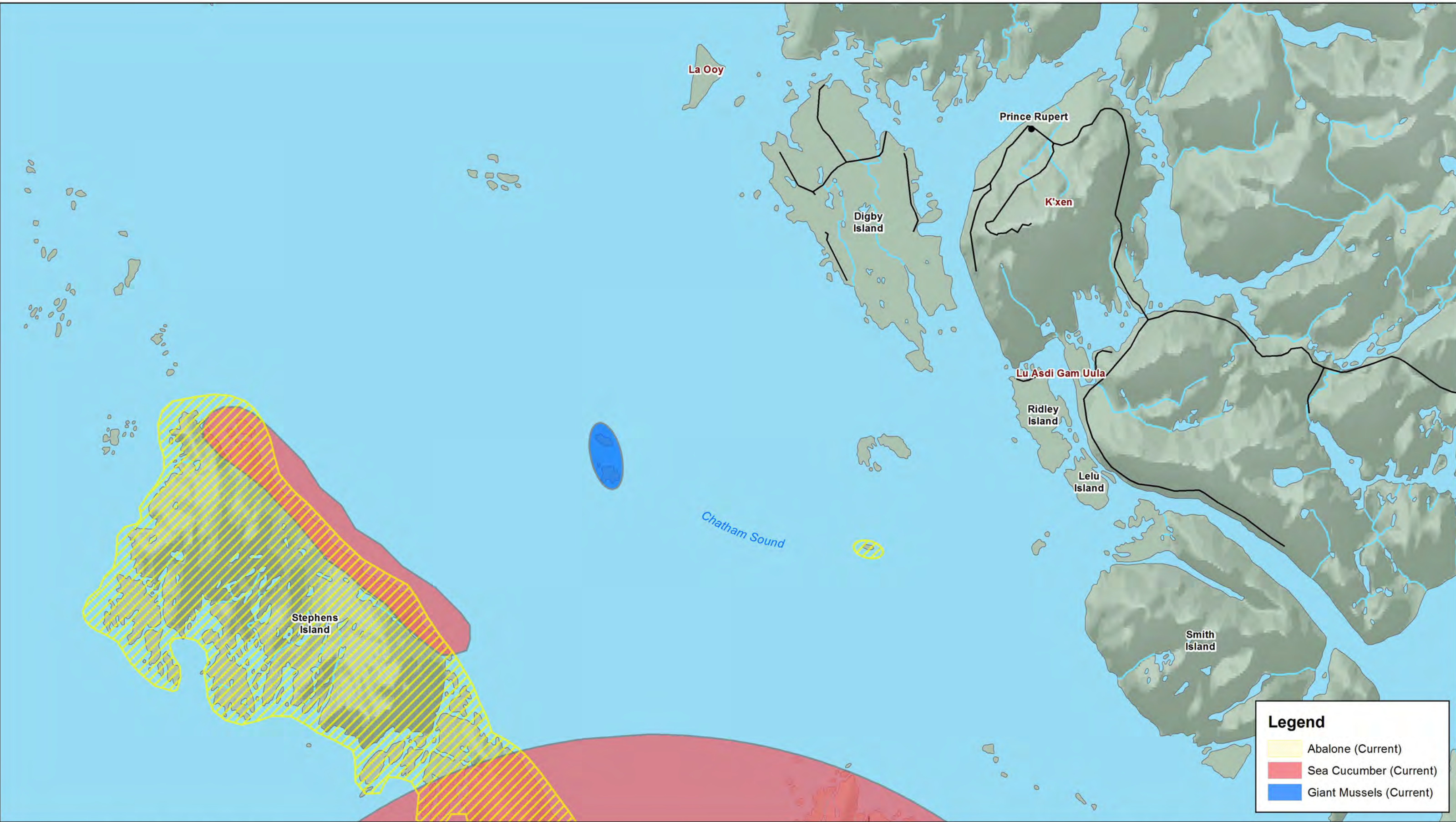
- Around the Rachael Islands (Reverend Sam Lewis, Edward Gladstone)

#### **Sea Cucumbers [Gyenti]**

Areas where Study Participants reported sea cucumbers are in Figure 4-7-2 and are listed below.

- All around Porcher Island (Keith Innes)
- All along Stephens Island (Ronnie Shaw)





**Legend**

Abalone (Current)

Sea Cucumber (Current)

Giant Mussels (Current)

Gitxaala Nation Use Study

Bilhaa, Hagwyn, ada Gyenti  
(Abalone, Giant Mussels, and Sea Cucumbers)


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Date:

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Figure Number:

4-7-2

Map Information:

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### **Clams [Ts'a'ax]**

Gilbert Hill described the conditions for harvesting clams. He reported that his father taught him *"where the tide moves all the time, that's where our food is best. The clams are healthy, they're strong and they're white."* Gilbert also noted that clams are good to pick all winter until March.

Clam locations are on Figure 4-7-3 and listed below.

- Off the coast of Kaien Island, near Barrett Rock (Cyril Aster, Ted Gamble)
- North of Porcher Island, the Smith Island Area, and part of the Grenville Channel (Ernie Bolton)
- Around Lima Point and Spire Island (Harvey Aster, Willard Robinson)
- Along the Southwest coast of Digby Island (Harvey Aster, Willard Robinson)
- Along the West coast of Stephens Island, from Butler Cove to Skiakl Point (Reverend Sam Lewis, Edward Gladstone)
- The mouth of Prince Rupert Harbour, by Ridley Island (Vince Davis)
- Off Island Point (Colin Nelson)
- On Digby Island (Greg McKay)

### **Cockles [Gaboox]**

Gilbert Hill noted that cockles, unlike clams, are only good for a short window of time so they try to pick as many as possible. They are usually best in the late fall (November). By early winter they will start to get small inside. Thelma Hill also cautioned against going out too early. She said that she reminds young people if they go in the early part of cockle season there is still sand inside the shell.

Cockles are often harvested at similar locales as, or close to, clams; many Participants identified areas where they pick *"clams and cockles"*. Cockle locations are listed below and found on Figure 4-7-3.

- Along the West coast of Stephens Island, from Butler Cove to Skiakl Point (Reverend Sam Lewis, Edward Gladstone)
- The mouth of Prince Rupert Harbour, by Ridley Island (Vince Davis)
- Off Island Point (Colin Nelson)
- On Digby Island (Greg McKay)
- Ridley Island (Sam Lewis)







### **Sea Urchins [Ts'akwe'ats]**

Gilbert Hill described the sea urchin harvest: *"Certain times of the year you get sea urchins. In June you don't touch sea urchins."* Colin Nelson also shared that they would regularly pick Green Urchins. He described how they live underground with rocks over them and it is necessary to *"dig 'em out of the ground"*.

Gilbert Hill recalled that when the sea urchins are spawning the *"tide's orange its watered orange on top and the sea urchins are spawning and the water is just real orange"*. Gilbert noted that while the urchins are spawning, Gitxaata refrain from harvesting (Calliou Group 2011).

Areas where sea urchins were reported are listed below and found on Figure 4-7-4.

- All around Porcher Island (Keith Innes)
- Around Holland Rock (Mel Tolme)

### **Sea Bird Eggs [Lgümet]**

Cyril Aster identified several locations within the Study Area where he collects gull eggs.

Ronnie Shaw explained how to tell which eggs are good to collect: he carries a bucket of water with him and puts the eggs in the water; how the eggs lay tells him if the eggs are good for eating or are nearly ready to hatch. Ronnie explained that you always have to collect the eggs once you have touched them because the birds will not take them back (Calliou Group 2011). He described how you can take about 15-20 eggs per seagull: *"Yeah, keep taking them. It's like their eggs, they're starting to get a little bit smaller, a little bit smaller and then you quit."* He notes that if there are only 3 or 4 eggs in a nest they should not be collected because they are almost ready to hatch and it is important to ensure there is always something to come back for. He explained that June until the end of July is the best time of the year to get gull eggs.

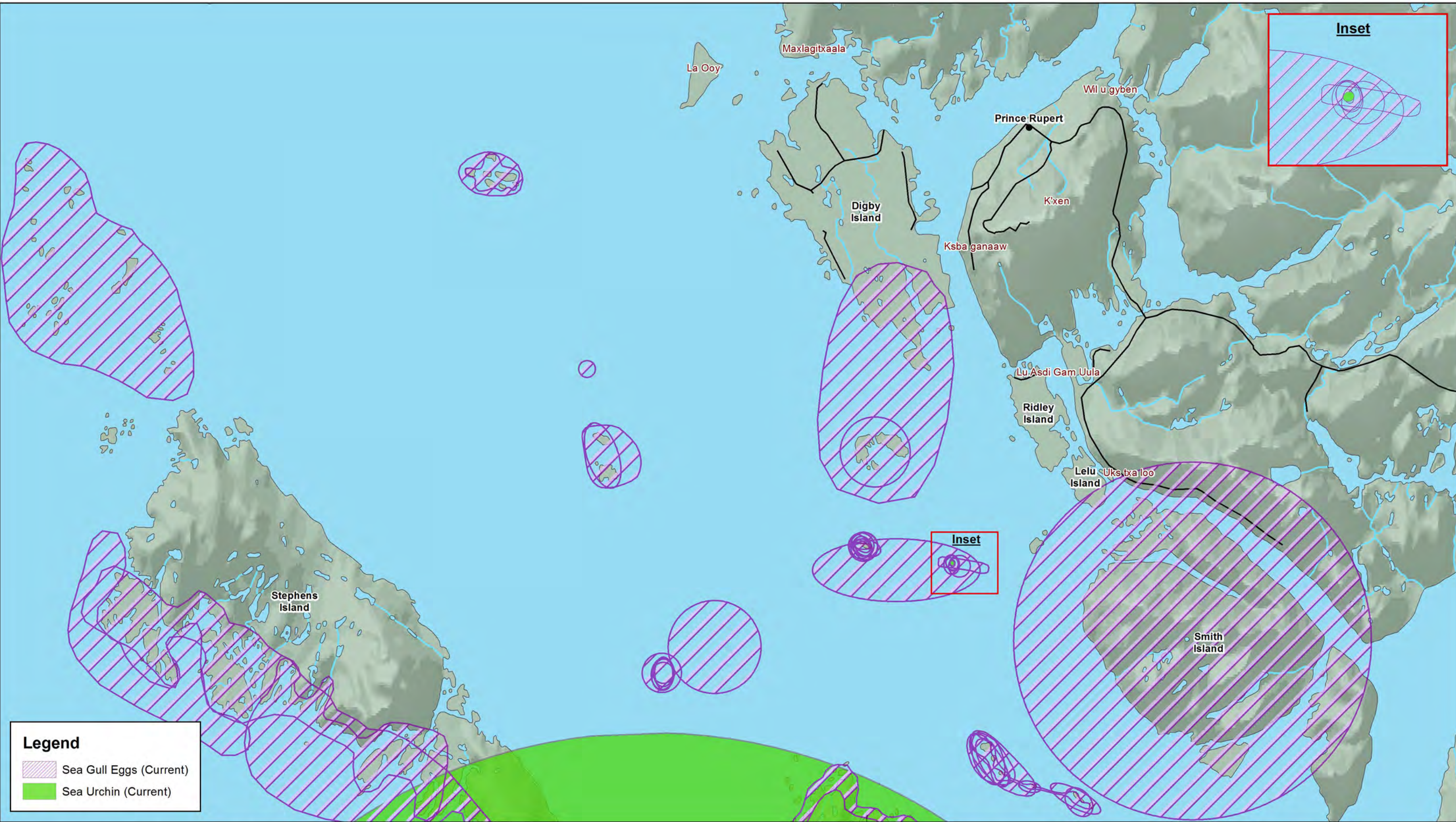
Areas where sea birds eggs were reported are listed below and found on Figure 4-7-4.

- On the Lawyer Islands (Cyril Aster, Keith Lewis, Cyril Aster, Ted Gamble, Harvey Aster, Willard Robinson, Vince Davis, Theodore Nelson)
- The South end of the Digby Island and the Kinahan Islands (Keith Innes)
- Around Smith Island (Vince Davis)
- The Gull Rocks (Cyril Aster, Ronnie Shaw, Cyril Aster, Ted Gamble, Harvey Aster, Willard Robinson, Vince Davis, Theodore Nelson)
- Along the North coast of Porcher Island (Colin Nelson)
- Greentop Islet (Sam Lewis, Keith Lewis, Cyril Aster, Ted Gamble, Ray Nelson, Matt Hill, John Vickers, Harvey Aster, Willard Robinson, Larry Bolton, Vince Davis)
- The Kinahan Islands (Sam Lewis)
- Along the West coast of Stephens Island (Reverend Sam Lewis, Edward Gladstone)
- Along the Northwest of Stephens Island (Reverend Sam Lewis, Edward Gladstone)
- Along the West coast of Stephens Island (Ronnie Shaw)
- The Tree Nob Group (Ronnie Shaw)
- Around the Holland Rock area (Ronnie Shaw, Cyril Aster, Ted Gamble, Ray Nelson, Harvey Aster, Willard Robinson, Vince Davis, Theodore Nelson,

Doug Brown)

- Genn Islands (Keith Lewis, Matt Hill)
- Bribery Island (Cyril Aster, Ted Gamble)
- South of the Rachael Islands (Ray Nelson)
- The Lucy Islands (Harvey Aster, Willard Robinson, Doug Brown)
- The Rachael Islands (Vince Davis, Mel Tolme)
- Alexandra Rocks (Mel Tolme)





**Gitxaala Nation Use Study**



**Ts'akwe'ats ada Łgümet  
(Sea Urchin and Sea Bird Eggs)**

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## 4.8 Marine Vegetation

### ***Seaweed [Ła'ask]***

Ernie Bolton explained that there are different types of seaweed that are picked when they are certain lengths and at specific times during the season. He indicated there is seaweed all around Banks Island and explained that this seaweed has the best taste and many people notice the difference (Calliou Group 2011). Ronnie Shaw reported that there is a lot of seaweed on the outside of Stephens Island and that he would often pick there.

Doug Brown noted that once seaweed is dried it can last forever as long as it does not get wet. Seaweed is sprinkled in soup, boiled salmon and halibut. Ernie Bolton also shared that his mother used to trade seaweed for oolichan grease with people from the Nass River (Calliou Group 2011). Eugene Gordon also described how he would pick seaweed as a child with his father and grandmother. He describes how his grandparents would dry it on the flat rocks on the beaches of Otter Passage and then they would press it so that it could be wrapped in tarps to prevent them from getting damp. Eugene also shared that he takes his children and grandchildren out to pick seaweed.

Seaweed harvesting locations were reported by Participants at locations listed below and found on Figure 4-8

- Lelu Island (Thelma Hill)
- Along the West coast of Stephens Island (Ronnie Shaw)
- The Rachael Islands (Cyril Aster, Ted Gamble)
- Greentop Islet (Cyril Aster, Ted Gamble)
- The Lucy Islands (Cyril Aster, Ted Gamble)
- The Southwest coast of Stephens Island (Theodore Nelson)

### ***Kelp [gyoos]***

Kelp is typically picked in one location, and then transported to another locale for the herring to spawn on. Gitxaata people then harvest the herring roe. Ronnie Shaw reported picking kelp on the outside of Stephens Island. He also noted that kelp is often picked in the wintertime and used as fertilizer for gardens. And Keith Lewis reported picking kelp along the outside edge of Stephen Island. They would pick the kelp in the months of March and April and bring it back to the village in Kitkatla.

Kelp harvesting locations were reported by Participants at locations listed below and found on Figure 4-8

- Along the West coast of Stephens Island (Reverend Sam Lewis, Edward Gladstone, Ronnie Shaw)
- The Southwest coast of Stephens Island (Keith Lewis)
- Around Prescott Island (Cyril Aster, Ted Gamble)
- Prescott Passage (Vince Davis)
- The East coast of Prescott Island (Vince Davis)
- The Tree Nob Group (Vince Davis)
- Prescott Island and Arthur Island (Mel Tolme)



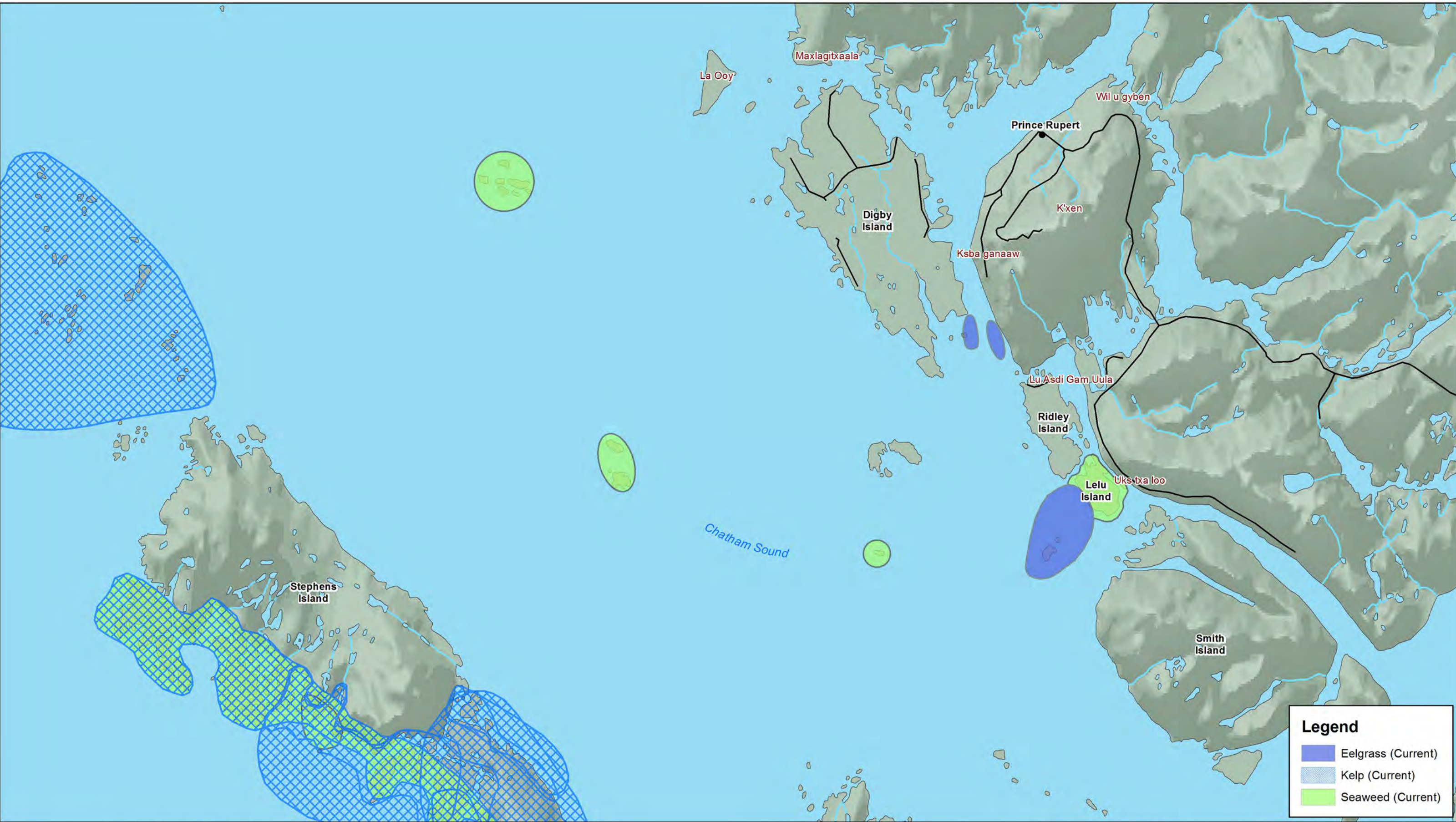
### ***Eelgrass***

Participants indicated that they do not harvest eel grass; however, many cited eel grass as an important plant for fish species especially juvenile salmon.

Eelgrass locations were reported by Participants at locations listed below and found on Figure 4-8

- Flora Bank (Doug Brown)
- Off Frederick Point (Vince Davis)
- Off Kaien Island, by Ridley Island (Vince Davis)





**Gitxaala Nation Use Study**

**Ła’ask (Seaweed), Gyoos (Kelp), and Eelgrass**

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## 4.9 'Yetsisgm gilhaawli (Land Animals) and Birds

### 4.9.1 'Yetsisgm gilhaawli (Land Animals)

Some Study Participants reported several areas for hunting and trapping land animals, though the focus of this study was marine resources. The listing of hunting and trapping areas may not be representative of the totality of Participants' use.

Ronnie Shaw recalled that his father taught him to shoot deer, seals and sea lions in the ear or neck but not in the face so the animal would not feel it. Ronnie's father also taught him to clean the blood off of his boat and rifle so the animals could not smell him coming. Ronnie said that he always comes home with something because he follows his father's teachings (Calliou Group 2011).

Some Study Participants report that hunting was an incidental activity to fishing and gathering trips. Reg Gladstone, for example noted that while fishing he would also stop on the shores to hunt.



*Bear*

#### ***Bear [amaaw]***

Study Participants reported Bear at locations listed below. These are also shown in Figure 4-9

- Ridley Island (Vince Davis)

#### ***Deer [wan]***

Study Participants reported deer at locations listed below. These are shown in Figure 4-9.

- All of Porcher Island (Cyril Aster, Greg McKay, Colin Nelson)
- Both Shores of the Grenville Channel (Cyril Aster)
- Both Sides of the Porcher Inlet (Joey Douglas)
- Billy Bay (Godfrey Mason)
- Phillips Island and Stephens Island (Ronnie Shaw)

- Around Kelp Pass (Ronnie Shaw)
- Along the Skeena River (Matt Hill)
- The beaches West of Holland Rock (Colin Nelson)
- Smith Island (Sam Lewis, Ronnie Shaw, Keith Lewis)
- South part of Ridley Island (Reverend Sam Lewis, Edward Gladstone)
- Stephens Island (Ronnie Shaw)
- Along Porpoise Channel (Cyril Aster, Ted Gamble)
- Lelu Island (Cyril Aster, Ted Gamble, Matt Hill)
- Between Hunt Point and the Creak Islands (Cyril Aster, Ted Gamble)
- Along the Telegraph Passage (Cyril Aster, Ted Gamble, Greg McKay)
- Hunt Point (Verne Jackson, Theodore Nelson)
- The Northeast corner of Porcher Island (Verne Jackson)
- The Kinahan Islands (Larry Bolton, Theodore Nelson, Doug Brown)
- Ridley Island (Vince Davis)
- On both sides of the Tsum Tsadai Inlet (Ray Nelson)



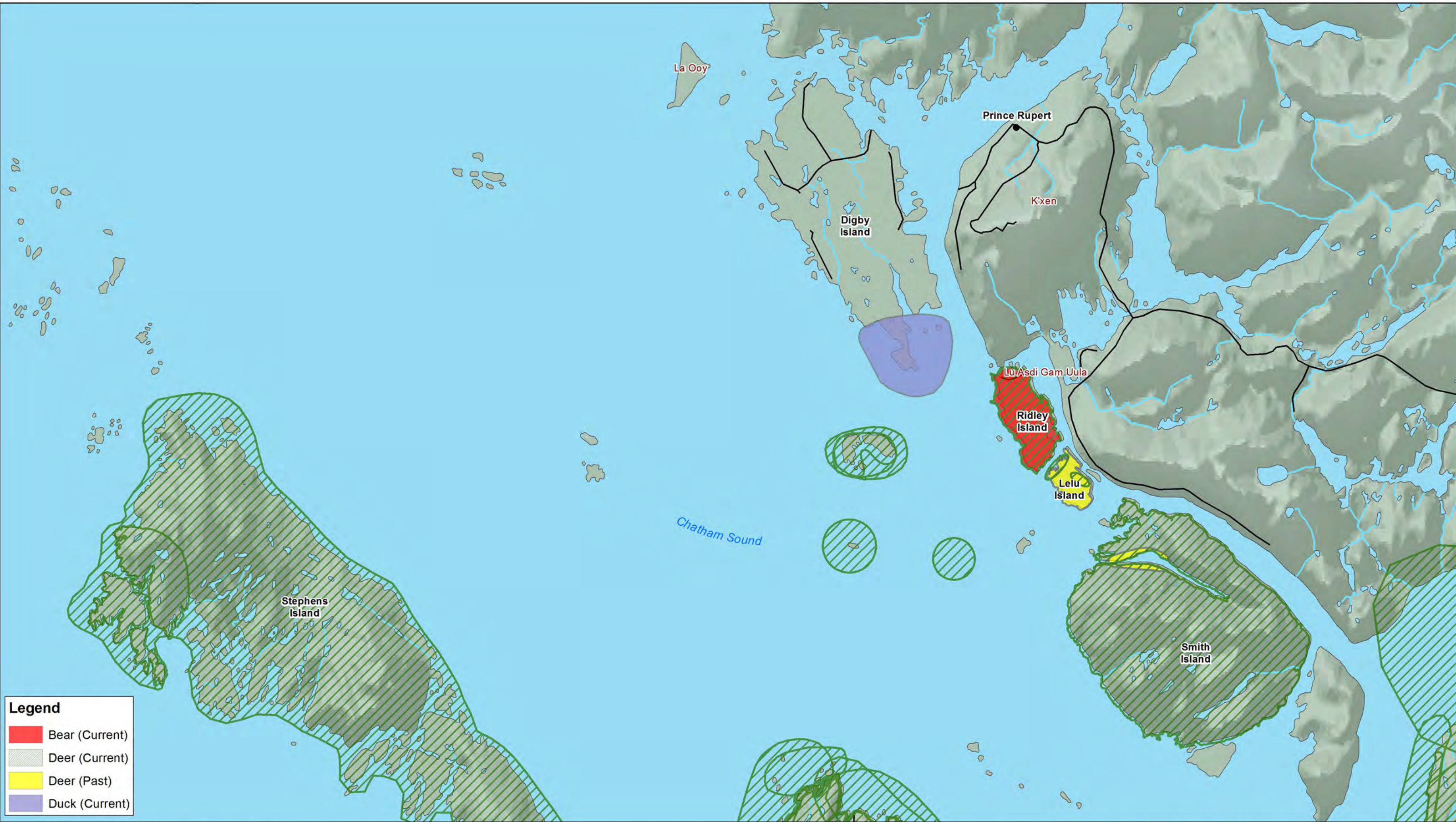
#### **4.9.2 Birds (Tsu'uts)**

##### ***Ducks – general***

Ducks were reported at the following location and can be seen in Figure 4-9.

- Off Lima Point (Greg McKay)





**Legend**

- Bear (Current)
- Deer (Current)
- Deer (Past)
- Duck (Current)

**Gitxaala Nation Use Study**

**‘Yetsisgm Gilhaawli ada Tsu’uts  
(Terrestrial Animals and Birds)**

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## 4.10 Seals and Sea Lions

### **Seals [üüla]**

Many Study Participants recalled hunting seals within the traditional territory and the Study Area. Ronnie Shaw explained that seals are difficult to hunt because they turn in the water. He said you need to shoot into the water near the front of the seal. Ronnie prepares seal meat by smoking it (Calliou Group 2011). Margaret Hill said that seal grease is the best for preparing herring eggs; she explained that not many people know how to make it correctly. Rita Robinson also observed that seal grease is very good for preparing yāans and bannock. She said that she purchases 3 gallons a year from Larry Bolton.

Seal locations are listed below and shown on Figure 4-10.

- Around Smith Island (Vince Davis, Ronnie Shaw)
- Around the Lawyer Islands (Greg McKay, Doug Brown)
- The beaches West of Holland Rock (Colin Nelson)
- A sandbar South of the Lawyer Islands (Colin Nelson)
- Base Sand in Marcus Passage (Gilbert Hill, Keith Lewis, Ray Nelson, Vince Davis, Theodore Nelson, Doug Brown)
- South part of Ridley Island (Reverend Sam Lewis, Edward Gladstone)
- Kloiya Bay (Reverend Sam Lewis, Edward Gladstone)
- Around the Kinahan Islands (Ronnie Shaw, Larry Bolton)
- Around Stephens Island (Ronnie Shaw)
- Along the West coast of Stephens Island (Ronnie Shaw)
- The Tree Nob Group (Ronnie Shaw)
- The Genn Islands (Keith Lewis, Doug Brown)
- The Gull Rocks (Cyril Aster, Ted Gamble, Larry Bolton)
- North coast of Porcher Island (Cyril Aster, Ted Gamble)
- Telegraph Passage (Cyril Aster, Ted Gamble)
- Off the West coast of Smith Island (Ray Nelson)
- Hunt Point (Theodore Nelson)
- The Lucy Islands (Doug Brown)

### ***Sea Lion [t'iibn]***

Matt Hill described sea lion as one of Gitxaata's delicacies. Ernie Bolton noted that for some areas in Gitxaata traditional territory, elders typically caution young people to take care while hunting sea lions. He advises they should not *"shoot sea lion[s] unless they know they're gonna be home on the same day"* because *"when you disturb a sea lion, when they are there, they might, they might get caught in the weather"*. Ernie warns young people that sea lions are powerful animals and that hunting them may lead to bad weather.

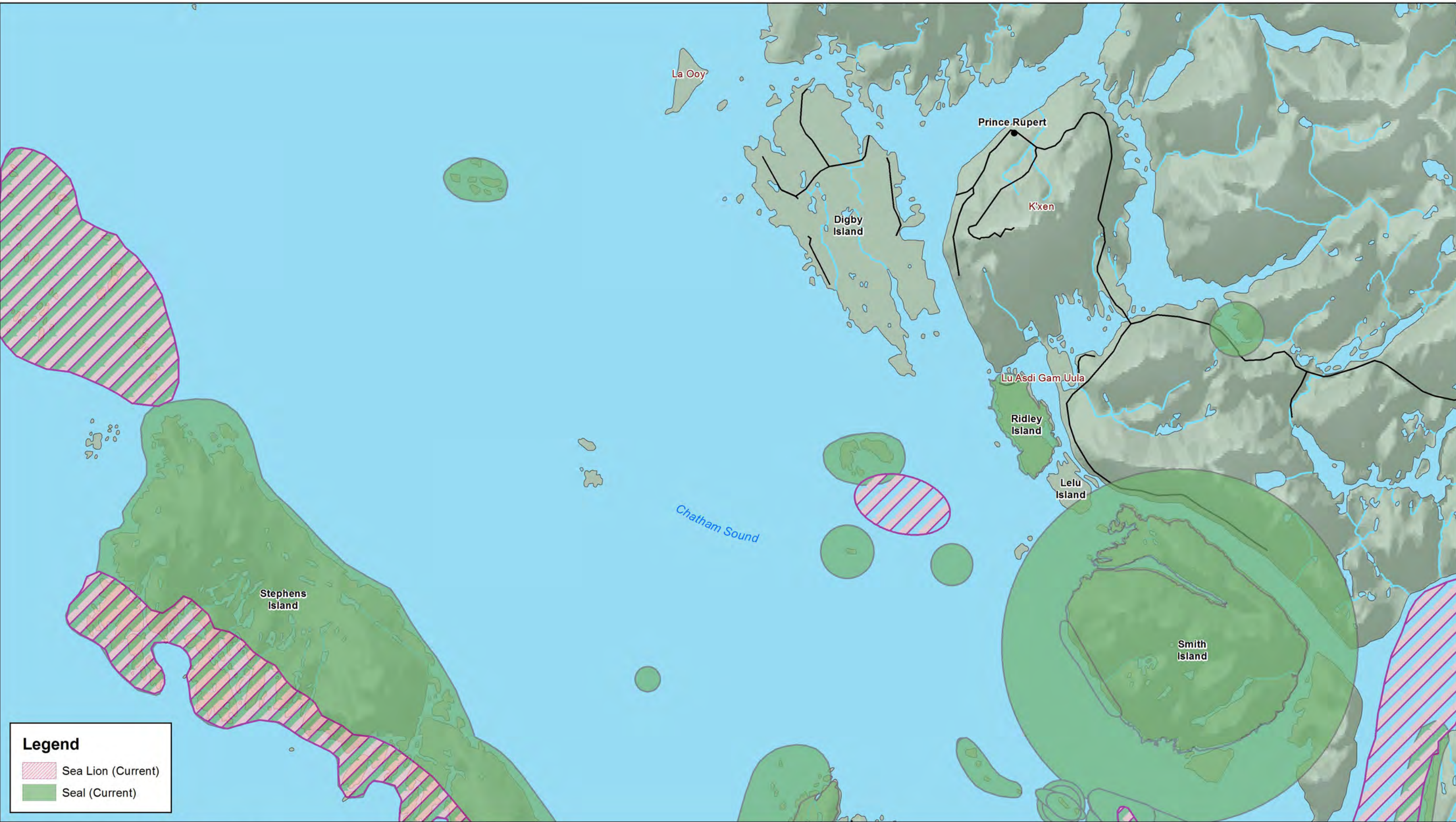


*Sea Lions*

Sea lions locations are listed below and shown on Figure 4-10.

- Along the West coast of Stephens Island (Ronnie Shaw)
- The Tree Nob Group (Ronnie Shaw)
- The Ogden Channel to the Skeena River, up the Telegraph Passage (Verne Jackson)
- Between the Kinahan Islands and Kitson Island (Matt Hill)
- The Marcus Passage (John Vickers)





**Gitxaala Nation Use Study**

**T'iibn ada üüla  
(Sea Lion and Seal)**

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## 4.11 Medicines, Plants, Trees, and Berries

Queenie Moody explained that many of the foods that Gitxaʼa collect are also consumed as much for subsistence purposes as their medicinal properties. Elmer Moody agreed and explained that seal grease and seaweed are a source of iron and Canada Geese [Haʼax] have medicinal properties (Calliou Group 2011). Jeannette Moody also indicated that oolichan grease is used as a vitamin and in the past she would take the grease three times a day (Calliou Group 2011).

In addition to marine and animal based medicines, Gitxaʼa Study Participants identified many locations for both medicinal and subsistence plants. However, as with hunting and trapping areas, due to the marine focus of this particular study, land-based gathering was not discussed to the same extent as marine harvesting. Further, it is important to note that Gitxaʼa harvesters are generally reticent about sharing stories and information regarding medicinal resources. As such the following is only a partial list of subsistence and medicinal plant gathering sites and likely underreports these important resources.

### 4.11.1 Plant Gathering-Subsistence and Medicinal

Plant, berry and tree gathering sites within the Study Area were reported by Study Participants at the following locations. (See Figure 4-11):

#### General Medicinal Plant Gathering

General medicinal plant gathering refers to locations that Participants identified harvesting but did not specify species or where medicines are considered culturally sensitive.

General medicinal plant gathering locations were reported by Participants at locations listed below. See Figure 4-11 for gathering sites.

- All over Porcher Island (Colin Nelson)

#### Devil's Club

Sam Lewis talked about gathering Devil's Club or 'wooms. He described Devil's Club as "*Indian Medicine*" and discussed how they would pick them while on deer hunting trips. Colin Nelson shared that Devil's Club is usually found along salmon creek areas.

Ronnie Shaw indicated several spots where Devil's Club could be found. He reported regularly gathering this medicine for Gitxaʼa members to treat arthritis and sore bones. When his father was alive he would chew the inner bark to help him with his arthritis and gain "*healthy strength*". Ronnie Shaw learned how to pick the medicine from his mother Agnes Shaw (nee Lewis) and his Aunt Essa. Ronnie collects Devil's Club and said that he uses the inner bark, called xsew and makes it into a tea. Ronnie noted that Devil's Club is for good luck and also gives you strength if you feel pain somewhere (Calliou Group 2011).

Gilbert Hill described how he uses Devil's Club: "*this medicine's good for-if you hear things move in our house and if you are spooked -then my kids or my wife tell me then I take this medicine when it's dry and then I burn it in my house. Walk around the whole house and smoke and they sleep real good after.*" He described how he was invited to "*do the whole school*" because it's like a "*graveyard here. There is bones buried all over.*" He also noted that he is regularly asked to smoke people's houses, but he does not just "*smoke your house with my medicine – I say a prayer while I'm doing.*"



Devil's Club harvesting locations were reported by Participants at locations listed below. See Figure 4-11 for Devil's Club sites.

- Mount Hays (Ronnie Shaw)
- Southeast corner of Smith Island (Ronnie Shaw)

### **Berries [maay]**

Berry picking is an important activity for Gitxaata; it was often described as an incidental activity to harvesting, fishing and hunting. However, some Participants shared stories of their mothers and grandmothers picking berries while their fathers and grandfathers fished and hunted.

Berry gathering areas with the Study Area were reported by Participants at the following locations (See Figure 4-11):

- Berry Area: The mouth of the Skeena River (Ronnie Shaw)
- Berry Area: The South part of Ridley Island (Reverend Sam Lewis, Edward Gladstone)
- Berry Area: Mount Hays (Ronnie Shaw)
- Blueberries: Lelu Island (Vince Davis)
- Blueberries: Along the South coast of the Tsimpsean Peninsula (Vince Davis)
- Blueberries: Ridley Island (Vince Davis)
- Huckleberries: The Southeast corner of Smith Island (Ronnie Shaw)
- Huckleberries: Between Hunt Point and the Creak Islands (Cyril Aster, Ted Gamble)
- Huckleberries: By Port Edward (Reg Gladstone)
- Huckleberries: South of Prince Rupert (Reg Gladstone)
- Huckleberries: Lelu Island (Vince Davis)
- Huckleberries: Along the South coast of the Tsimpsean Peninsula (Vince Davis)
- Huckleberries: Ridley Island (Vince Davis)
- Salmon Berries: The Southeast corner of Smith Island (Ronnie Shaw)
- Salmon Berries: Along the South coast of the Tsimpsean Peninsula (Reg Gladstone)
- Salmon Berries: By Port Edward (Reg Gladstone)
- Salmon Berries: South of Prince Rupert (Reg Gladstone)
- Salmon Berries: Lelu Island (Vince Davis)
- Salmon Berries: Ridley Island (Vince Davis)
- Stink Currant: Along Telegraph Passage (Ronnie Shaw)

### **Trees/Wood**

Ronnie Shaw learned how to use the different kinds of wood from his father: Am gan is Red Cedar, Giik is that hard spruce tree, and Wet is a Yellow Cedar. He shared that yew wood is used for smoking fish because it makes a thick smoke if you put it on top of the fire and that makes the fish taste good.

Colin Nelson pointed out that most of the medicine trees used by Gitxaata are found along the tree line from the beach. Usually they do not have to go inland to find the tree. Specifically he notes: *"It's a coastal species. You probably won't see no more than 20 metres inland from the shoreline."*

### **Bark [hett-al]**

Bark harvesting locations were reported by Participants at locations listed below. See Figure 4-11 for bark harvesting sites.

- The Kinahan Islands (Mel Tolme)

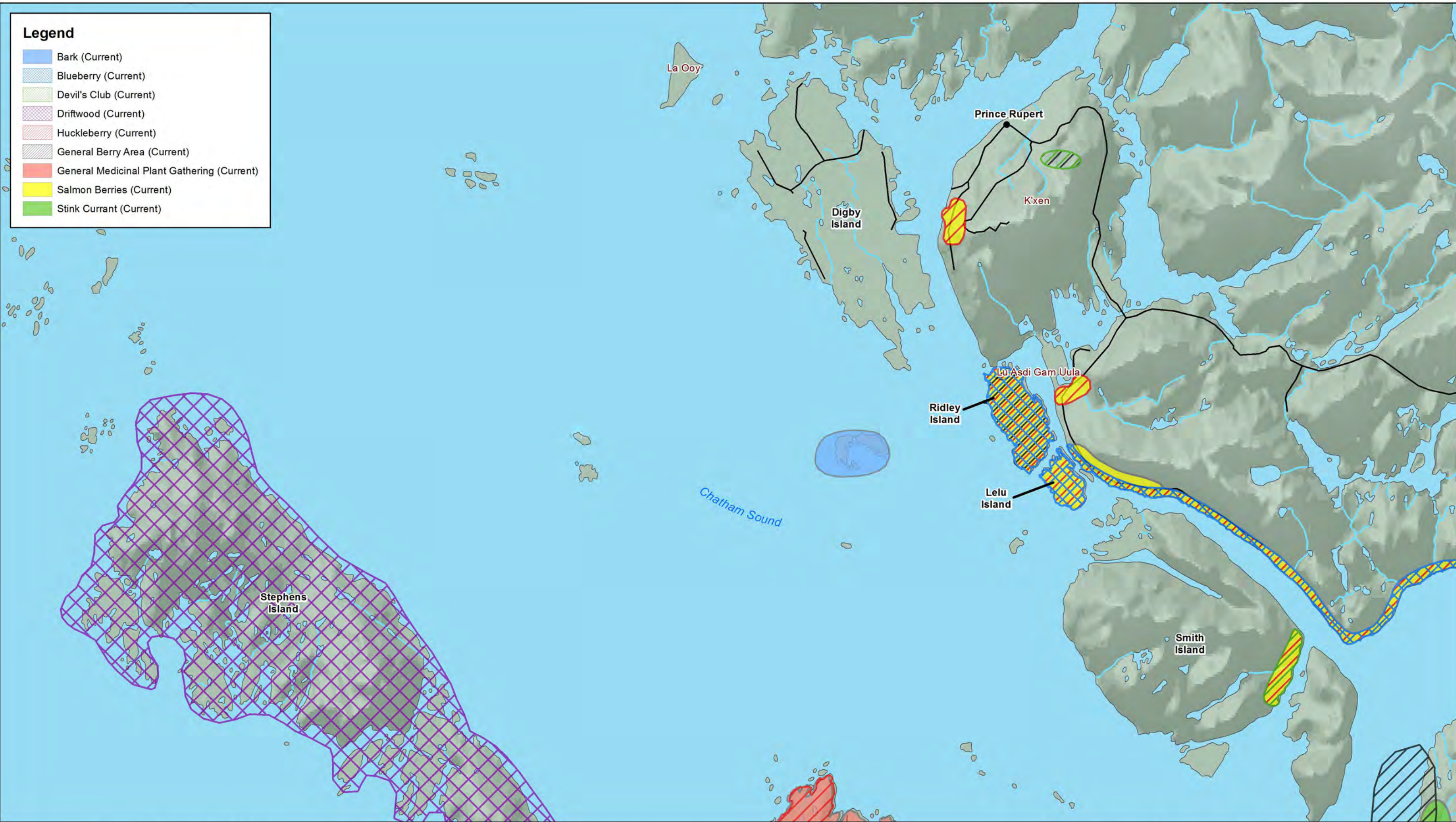
### **Driftwood**

Ronnie Shaw reported picking driftwood for his mother's cooking stove on the sandy beaches outside of Porcher and Stephens Island. He described how they would *"learn, running around sand beaches and just gathering wood back then"*. He noted how *"If you didn't get the right kind we used to have to sit there and wait longer before we eat so we gathered the right kind and we were all on the table right away"*. In particular, they would gather red and yellow cedar driftwood. As he described it: *"They were always dry -we always picked them way up, higher... close to the beach. The boats up, our boats used to be sticking out, look like ugly boats after that...Cause we had all different sizes of sticks sticking out but they're nice and dry."*

Driftwood harvesting locations were reported by Participants at locations listed below. See Figure 4-11 for driftwood harvesting sites.

- Around Stephens Island (Ronnie Shaw)





**Gitxaala Nation Use Study**



**Harvested Plants**

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Prepared For:	 GITXAALA ENVIROMENTAL MONITORING	Prepared By:	 Calliou Group
Date:	6/17/2014	Figure Number:	4-11
Map Information:	Base Data: NTDB Topographic Mapsheets (Department of Natural Resources); Digital Elevation Model (GeoBase); Use Data and Place Names (Gitxaala Nation)		





## 5.0 Field Visits

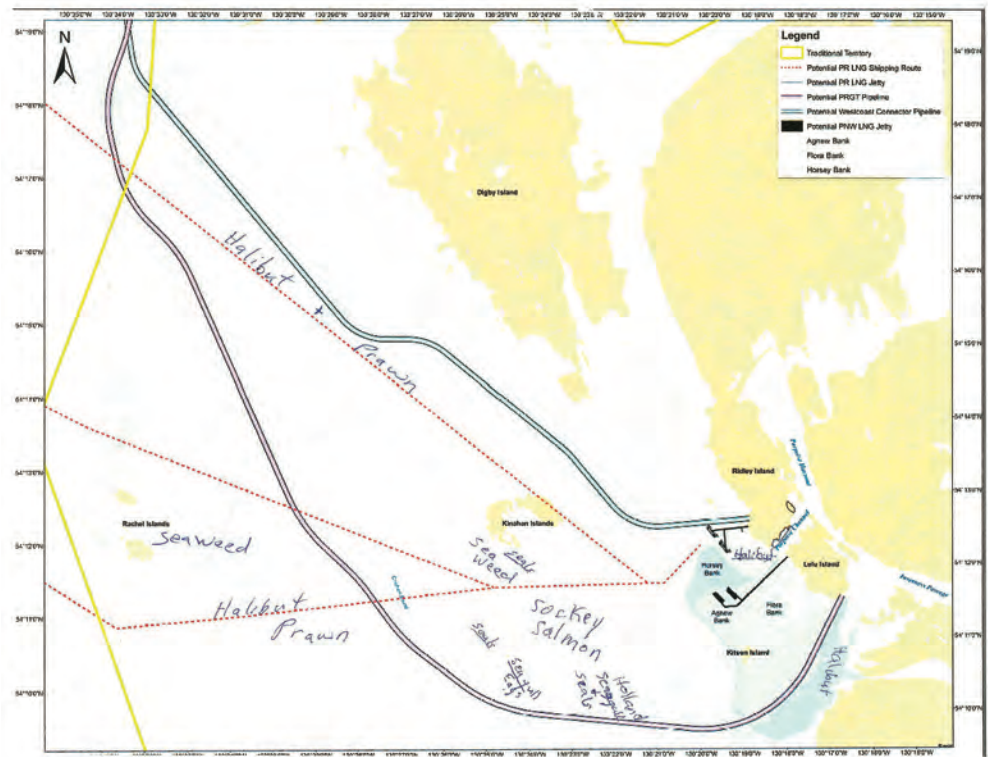
For this study, an initial field visit was conducted on October 2, 2013 to specifically look at the PR LNG Project. Three study participants and the study team participated in a site tour lead by BG Group and their environmental consultants AECOM to look at the proposed terminal location on Ridley Island as well as view the area and proposed jetty location by boat.

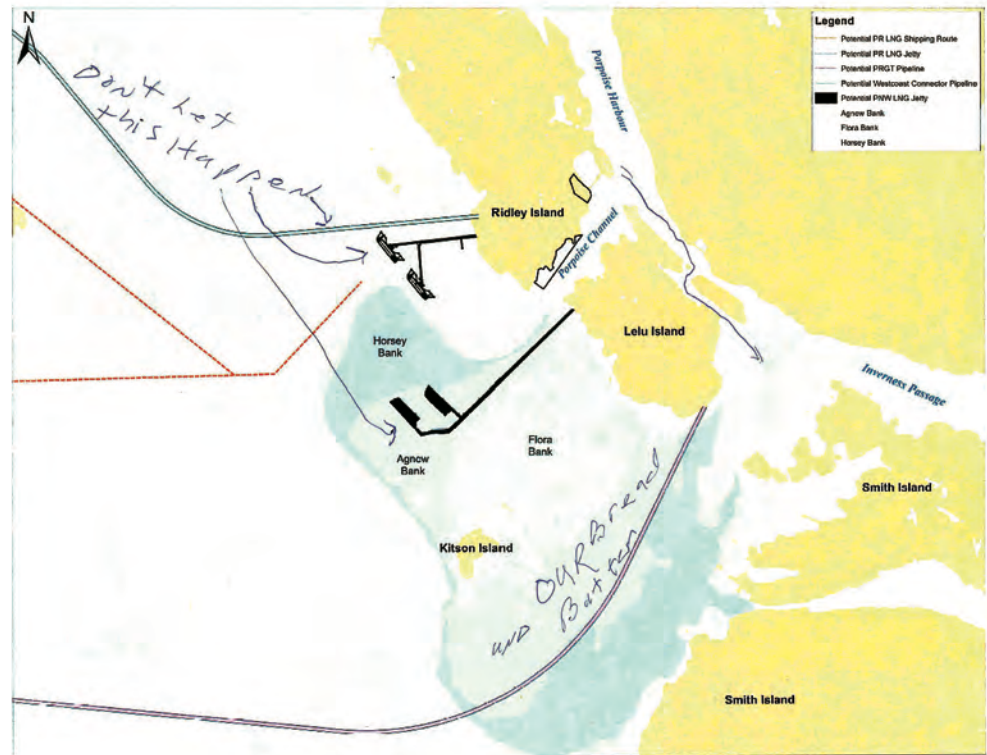
In order to specifically look at the full Study Area, two field visits were undertaken on May 7 and 8, 2014 to familiarize Participants with the Projects, travel through the Study Area, collect and confirm Gitxa̓a Use information, and gather specific issues and concerns related to the Projects. The Study Team, GEM research advisors, and twelve (12) Participants traveled by boat through the Study Area on two separate trips.

The route for the May 2014 field visit was as follows: from the north end of Digby Island following the WCGT pipeline route through Chatham Sound to Ridley Island where the line terminates, around the south end of Ridley Island where the PR LNG terminal is planned, out to the end point of the PR LNG jetty, into Porpoise Harbor, over to Lelu Island to view the PacNW facility location, and returned following the PRGT marine pipeline route from Lelu Island along the south end of Flora bank, outside of Kinahan Islands and through Chatham Sound to the north end of Digby Island. See Figure 5-1 for route map. Following Day 2 of the field visits, Participants requested a debrief to

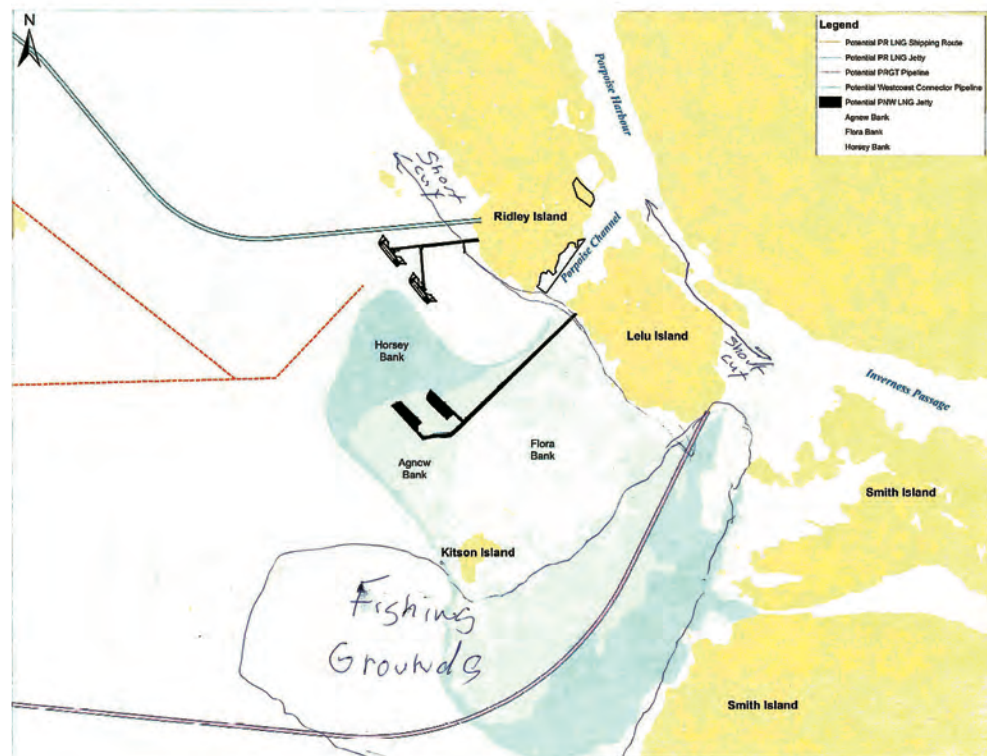


During these field visits, Gitxaana Nation members specifically shared their knowledge in regards to:





Field Participant's map notes

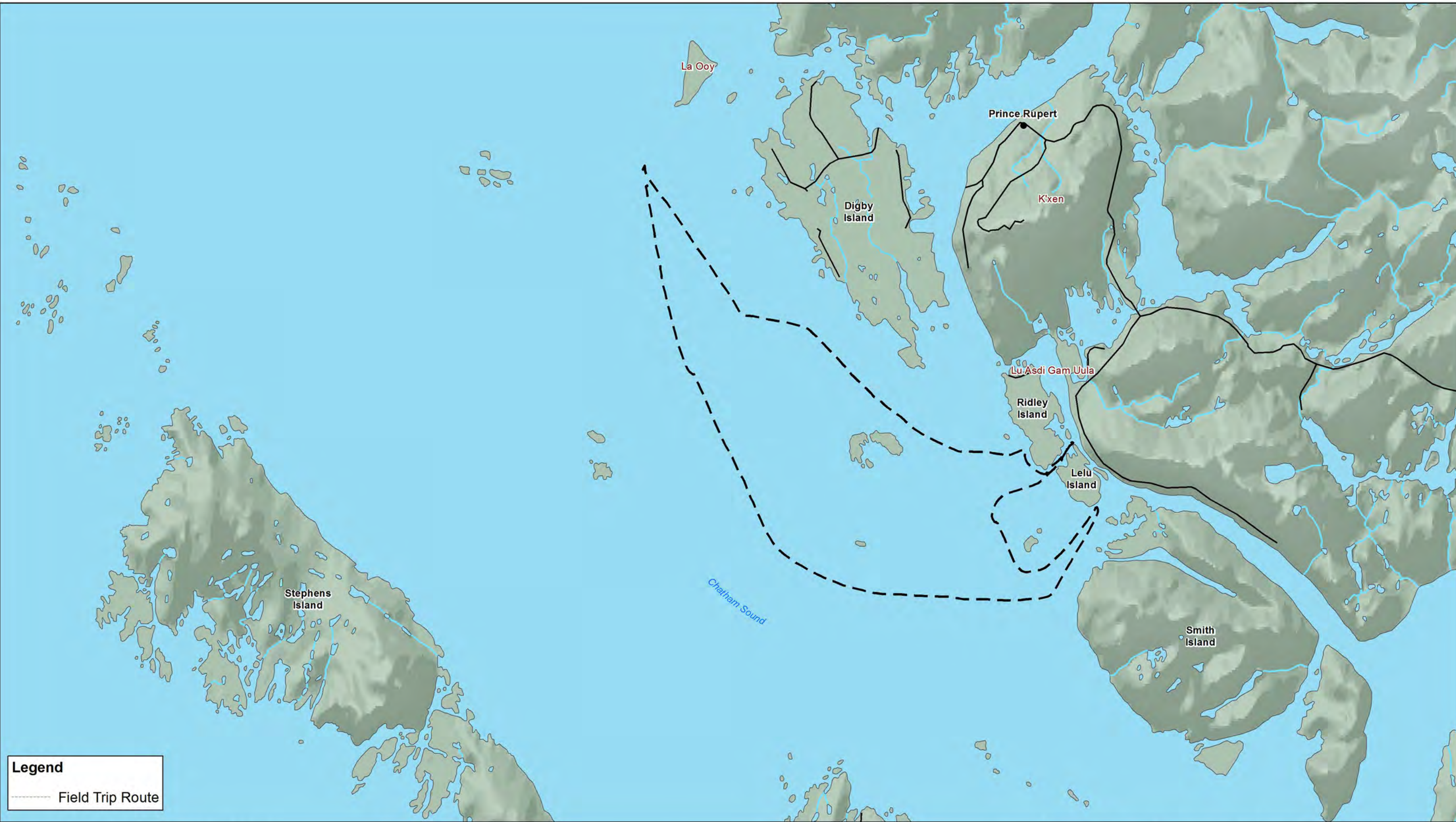


Field Participant's map notes









<b>Gitxaala Nation Use Study</b>
<b>Field Trip Route</b>

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Prepared For:	 GITXAALA ENVIROMENTAL MONITORING	Prepared By:	 Calliou Group
Date:	6/17/2014	Figure Number:	5-1
Map Information:	Base Data: NTDB Topographic Mapsheets (Department of Natural Resources); Digital Elevation Model (GeoBase); Use Data and Place Names (Gitxaala Nation)		



## 5.1 Field Visit Observations

In order to orient field visit Participants during the May 2014 field visits, each person was given two maps (at two different scales) of the study area with the proposed Projects overlaid, see Figure 5-2. Participants were encouraged to note any resource use areas, marine animal and plant habitat as well as concerns about the Project. A selection of the Participants' notes and use areas they identified can be seen in the images inset.

A common observation by many participants was that there are fishing grounds in the vicinity of the PRGT and WCGT pipelines as well as travel routes (or "short-cuts") behind Lelu Island and in front of Lelu Island and Ridley Island near the shore of both islands.

Ray Nelson and Clarence Innis explained that the Study Area was frequented for commercial fishing and reporting seining and gillnetting sites. Ray reported gillnetting all around Kitson Island and Holland Rock. Ray Nelson and Cyril Aster described the area as *"our bread and butter"*. Clarence Innis also explained that he often food fishes in the area, especially around Inverness Passage, specifically to feed his family that lives in Prince Rupert. He recalled that one year he got 500 sockeye in that location and gave it all to his family in Rupert.

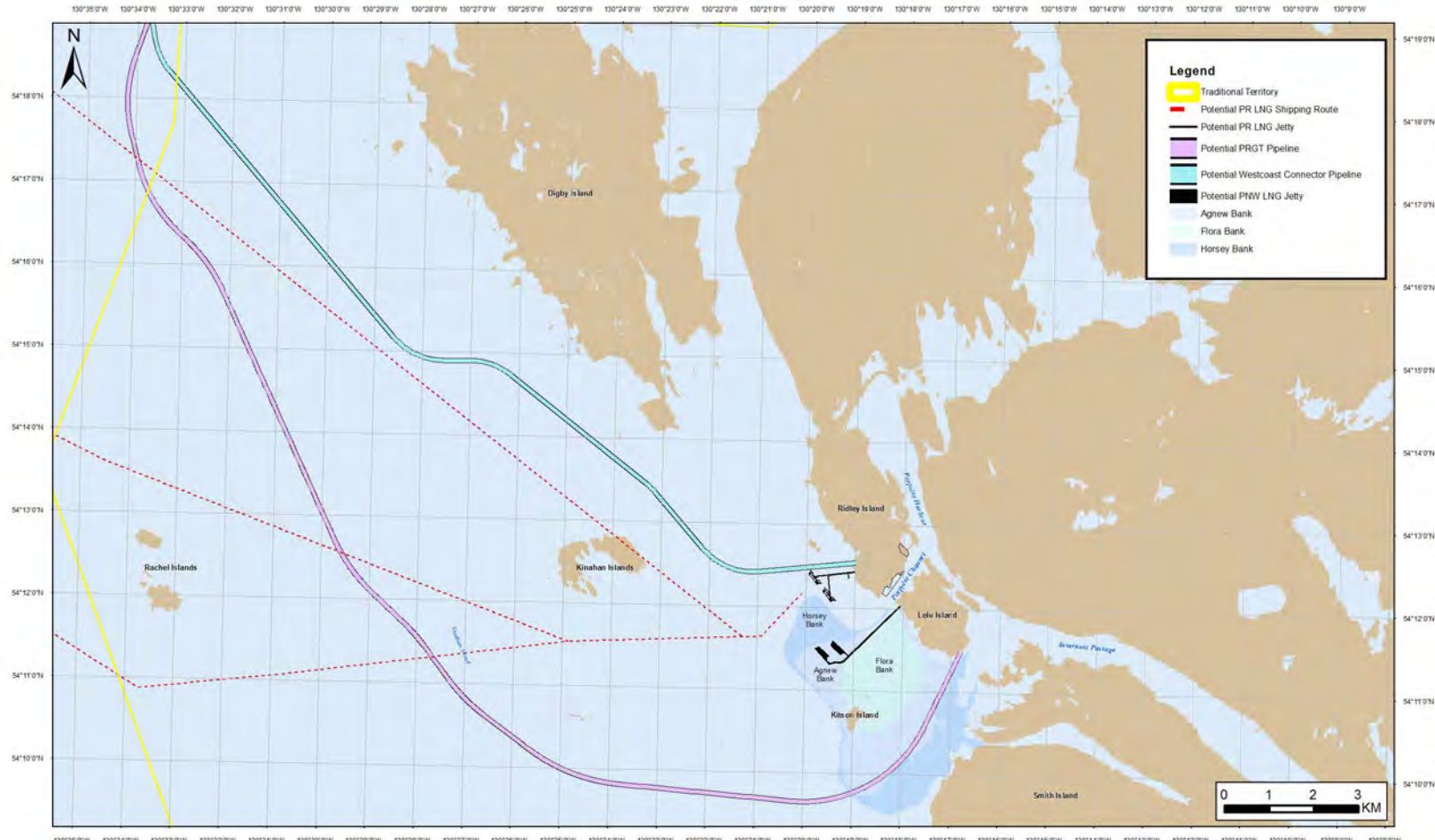
Clarence noted that all species of salmon are in Chatham Sound and further reported that there is herring, shrimp and crab throughout the area.

All of the Participants reported that the salmon run up the Skeena travel through Chatham Sound and in the vicinity of Flora Bank before spawning in the Skeena River. Ernie Bolton reported that the peak sockeye run is typically at the end of July, followed by pinks, chums and coho salmon. Clarence Innis explained that halibut follow the salmon run. Matthew Hill confirmed that all species of salmon are found in the Study Area. He also indicated that recently the sturgeon run up the Skeena River is beginning to recover.

Participants reported that Flora Bank was habitat for juvenile salmon and explained that the fish are dependent on the eel grass that grows in Flora Bank.

Bruce Watkinson said that there is a deep channel in the Study Area, near the PRGT pipeline, where oolichan travel and the humpback whales follow the oolichan.

Cyril Aster pointed out locations where he harvests gull eggs and seals at Gull Rocks and Holland Rocks. He also indicated locations for gull eggs at Genn Islands, seaweed and chitons/y'aans at Rachel Islands and seaweed at Kinahan Islands.



## Gitxaala Nation Use Study

## Field Visit Handout Maps

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Prepared For:



GITXAALA  
ENVIRONMENTAL  
MONITORING

Prepared By:



Calliou Group

Date:

6/20/2014

Figure Number:

5-2

Map Information:

Base Data: NTDB Topographic Mapsheets (Department of Natural Resources);  
Place Names (Gitxaala Nation); Proposed Shipping Lanes and Jetties (Petronas,  
BG Group); Proposed Pipelines (TransCanada Corporation, Spectra Energy)





## 6.0

# Issues and Concerns

During the interviews and field visits, Study Participants expressed concerns over the Projects. Issues and questions ranged from general concerns about the potential effects of all four projects together to specific concerns about the different projects' components. With regards to all of the proposed projects in the Port Edward area, Clarence Innis said that it is *"going to change how we use this area for sure."*

The issues and concerns discussed throughout the interviews and field visits for this Gitxaala Use Study have been subdivided below into concerns related to: the LNG terminals and associated infrastructure, tanker traffic and the pipelines.

### 6.1 LNG Terminals

#### 6.1.1 Interruption of Travel Routes and Access

Participants regularly raised concerns about frequently used travel routes around the proposed LNG terminal sites on both Ridley Island and Lelu Island (See Section 4. 5 Gayna dm yaakm - Travel Routes).

Multiple participants explained how they, and other Gitxaala members, travel between

Lach Klan and Prince Rupert or Port Edward (Greg McKay, Bruce Watkinson, Ray Nelson, Colin Nelson, Eddie McKay and Vince Davis). The Participants explained that when the weather is rough, they will use the “shortcut” and stay close to the shores of Lelu Island and/or Ridley Island. In reference to both proposed LNG terminals’ associated jetties, as well as any safety regulations that would require their boats to maintain a certain distance from either the terminal facilities or tankers in port, Participants were very concerned that this would prevent them from being able to use this safer travel route. Greg McKay further wondered how navigation around Porpoise Harbour and Prince Rupert will be impacted by the additional lights and markers from terminals, jetties and ships.

Bruce Watkinson felt that the proposed Projects will limit and complicate access to the Study Area: *“It’s going to be a nightmare coming in here”*.

In reference to accessing Porpoise Harbour and the common travel route along the shore of Lelu and Ridley Island, Mel Tolme said: *“It’s going to take away our whole route going in and out of that harbour there”* and *“I could see in the future that rough weathers going to be no-sails to our people. They’ll be stuck because of the routes being cut off like that.”* Mel Tolme also further explained the safety issues related to these navigation routes:

*You know that’s one thing that we get taught. These routes – for generations – how do we explain it to the younger generation? How they going to go the way we’re taught?...That was all safety routes that we were taught and now we’re going to be in the open for the next generation.*

Matthew Hill, and other Study Participants, had questions about the safety exclusion zone around the LNG tankers when they are berthing or at the jetties; Participants were concerned that the exclusion zone would prevent them from travelling into Porpoise Harbour.

Ernie Bolton and Ray Nelson stressed the danger of the strong current or tides in Inverness Passage and Flora Bank. They believe that this and the increased exposure to wind will make boat rides along or underneath the jetties especially risky. Bruce Watkinson further pointed out that raising only one jetty (Pacific North west LNG) will not improve their preferred travel routes.

In terms of the options for Gitxaala members if they cannot use this route, Vince Davis added:

*We’d have to tough it out through the Skeena and that’s the worst part – is going past Hanmer Island is the worst part. If they close that off – we’d have to tough it out right through – past the sand bar. That’s the worst part is crossing the Skeena. Not there – ruining the river too with gas boats.*

### **6.1.2 Tree clearing on Ridley and Lelu islands**

Ernie Bolton and Teddy Gamble voiced concern about more severe weather conditions such as increased storms as a result of removing trees on Ridley Island and Lelu Island. Ernie explained that currently the trees give shelter from strong Northwesterly and Southeasterly winds which allows for safer and more frequent boat travel.

In reference to Culturally Modified Trees on Ridley Island, on the PR LNG Project site, Cyril Aster said: *“That’s how I felt when I walked in there –even before they started talking about culturally modified trees – you know? I felt a sadness just standing in there and to know they’re all going be cut out, trees- you know? That’s history!”* Cyril



further explained the meaning of Culturally Modified Trees and how Gitxaata are taught to respect these trees and not cut them down:

*But I don't know what it means to you guys but to me, it's something our ancestors went along this coast, picked and made stuff with all that cedar and I have my own marks along down Petrel Channel and all over the place you know that's what I was telling my kids. I was showing them where we picked cedar bark, you know, that's my marks and to see these really old ones, the big huge Red Cedars you know, one time they were like that, and these people went and took bark off, years ago. And still standing like that they're huge now. And these guys are just going to go and butcher them down. That's why I was feeling sad you know, just to know that I was thinking about it.*

### **6.1.3 Historical/Archaeological Sites**

Matthew Hill indicated that there is an old village site on the mainline close to where the Pacific North West LNG Project's bridge will connect to Lelu Island. He was concerned about the location of the bridge and how close it is located in reference to the village site.

### **6.1.4 Interference with fishing or harvesting**

Several of the Gitxaata Study Participants identified concerns over the effect of the proposed LNG terminals on their fishing and harvesting practices. Clyde Moody stated, "Everybody gets their food fish there. And with that buffer zone you can't even fish in there!" Keith Lewis adds:

*So many years we've depended on our salmon, crabbing, everything you know – and that's all going to be gone, it's all going to be gone out of this area here now, crabs especially all the crabs hey? They move up there in the summer time, spring/summer, hey? You're not going to see that here anymore. That's going to affect the crabs big time."*

### **6.1.5 Dredging and Blasting**

Participants had concerns regarding the dredging and blasting associated with the project construction.

Cyril Aster and Teddy Gamble were concerned about the dredging planned for the LNG terminals' jetties. They explained that there was a pulp mill previously in Port Edward that had created a lot of pollution in the ocean. They are concerned that dredging will bring up those contaminants that have since settled into the ocean sediment.

In addition to concerns about pollution, Ray Nelson warned that high noise levels associated with blasting will impact fish and other animal's navigation and communication. He said that animals such as whales communicate over long distances. As sound travels well in water, construction noises will impact a large area of the ocean.

Theodore Nelson and Doug Brown echoed these sentiments with, respectively: "I've read up on the LNG and part of it was about the project they're actually doing all the – you know – the – well they're gonna be blasting on Lelu Island, most of it...What's that going to do to the salmon run?" and; "If that comes through then that will be the nail in the – whether there will be any salmon left I don't know." Ray Nelson was also particularly concerned with the effect of dredging on the Skeena River.

### 6.1.6 Effects to Flora Bank and the Skeena River

Several Participants expressed considerable concerns for Flora Bank and the Skeena River, especially in relation to salmon. John Vickers stated, *"The Fisheries...couple years now they haven't opened up the sockeye for the Skeena for a couple years hasn't been coming up and it's slowly coming up...Its right where they travel up, right where that jetty is. That's where they go up the Skeena."*

While Verne Jackson explained:

*The fishing days are getting very much slower. I remember when I was really young, about eight or nine years old, I used to go fishing, we used to go fishing with my late father. We used to go six days a week. Then in the '60s, early '70s, it went down to four days a week and later on three days a week and now you only what – in the Skeena – twelve hour openings?... no doubt those big ships that come in do have an effect on it. Because you used to see a lot of marine life.*

John Vickers explains his exact fears in relation to the proposed LNG terminal and possible pipeline:

*These guys, they done studies on salmon, they still can't figure out how they're able to hone back into where they were born. And if you do stuff like that, they're going to get lost... they aren't able to find their way back to where they were born, that's why I'm really afraid of it.*

Participants worried that any changes in habitat would negatively impact species, for example Ernie Bolton reported that halibut is highly reliant on muddy grounds, and Ray Nelson said that presence of eelgrass in Flora Bank is essential to the survival of juvenile salmon.

### 6.1.7 Safety

Study Participants raised safety concerns about the LNG terminals as well. Greg McKay mentioned: *"Cause that's usually the really scary part there right? Is when they're doing the transfer of the LNG stuff... 'cause the change of pressures that they have to adjust ...like to play with bombs".* While Reverend Sam Lewis noted: *"But as far as I'm concerned, with that gas coming in, it's going to be a really big trouble for the fishermen. And it's going to be a big trouble for the safety of the fishers."*

Finally, Matthew Hill had this to say: *"The whole ecosystem is...being hindered. I mean, we love to see jobs – we're not against jobs, but the safety mechanisms they introduce – I mean there's none. There's none."*

## 6.2 Increased Tanker traffic

Many of the Participants expressed concerns over increased tanker traffic through the Study Area. Concerns about increased tanker traffic included tankers interfering with the ability to travel through the area, pollution from ships as well as wake from tankers. Ronnie Shaw explained *"that's the most important thing to keep our territories clean, even the oceans too. When the big tankers come in, that's been the big worry for the longest time."*

### 6.2.1 Navigation

Greg McKay indicated that increased tanker traffic in the Study Area could interfere with Gitxaʼla boats travelling between the Village/Lach Klan and Prince Rupert or Port



Edward. He noted that this could be either from the presence of the ships themselves or from the lights at night. Bruce Watkinson identified the tanker traffic as a safety concern to smaller vessels. He stated that “*big ships sneak up on you fast*” which leaves them little time to clear the way and remove fishing gear.



*Tanker in Prince Rupert Harbour*

### **6.2.2 Wake**

Participants identified the wakes created by tanker traffic as an issue. The large wake created by passing tankers was explained by many Participants as being dangerous, particularly when travelling in smaller vessels. Participants also had concerns about the impacts of wakes on harvested foods. John Vickers explained:

*My other concern was the seaweed. The seaweed harvesting time. The seaweed is so sensitive that when it snows it'll go brown...It's so sensitive. So when you see those big things making the wakes like that...Because they, they come during harvest time for a special time of the year when it's nice and calm, those things come around...they make big waves and stir up the water.*

### **6.2.3 Operational discharge**

Study Participants expressed concern that increased tanker traffic would increase the risk of introducing an invasive species to the region. Greg McKay notes that due to the sensitivity of the entire ecosystem, an invasive species may have a larger impact than anticipated. He stated, “*A lot of that brings a threat of invasive species to different organisms. It could just change – be the first domino effect of killing the whole ecosystem.*” Matthew Hill also said he was concerned about foreign pollution coming into the area and emphasized that the effects are worse in the ocean than on land.

### **6.2.4 Noise from vessel traffic**

Study Participants also conveyed concerns about the noise from tankers, and the effect it has on marine life. John Vickers reported:

*I've seen the orcas when they come by those big ships they, there's a reason why they start jumping out of the water because they think it's – the noise coming from that...So the sounds travel in water a lot, a lot louder. Goes right to the eardrums. That's gonna really – That's what's really affecting the killer whales and all the other whales you figure why they're trying to get out you see them breaching themselves. There's a reason why they're doing that. It's just too much noise in the water.*

Keith Lewis reported that “fish are scared of big ships, you know. We see it when we stay at End Hill all day sometimes you can see the fish reactions.” He explained that Gitxaata have used sound to scare fish into their nets, so he knows that fish are sensitive to sound.

### **6.2.5 Interference with fishing equipment**

Many of the Study Participants expressed concerns over the effects of increased tanker traffic on fishing practices. Bruce Watkinson noted, “I often wonder...with some of my hotspots, will I be able to get to them or will I be able to fish comfortably with ships anchored out throughout Chatham Sound.” Participants also commonly expressed the concern that the large vessels will destroy fishing gear. Ray Nelson explained how he sets his fishing gear and indicated that if a large tanker came through the area he'd have to cut his line or have his gear run over. Participants reported that fishing gear is expensive and they would not want to risk losing their gear. Allen Robinson explained:

*Yeah I think that would be too much traffic too eh? For the commercial fishing whenever it starts... All the nets and stuff. They would all get ruined...Those would get all – they'd just get ruined...People set halibut gear out all over the place around here. It's like I said, people don't tell other people where their hot spots are so...*

John Vickers also noted:

*Oh yeah, because they won't stop and they won't even stop and take that net on the boat...they keep going. Either you cut the line or - ... I've seen some boats lose their gear, lose their net. And we've found nets that were cut.*

### **6.2.6 Interference with harvesting**

Study Participants also had concerns with tanker traffic affecting shoreline harvesting activities as well. John Vickers noted, “Any kind of disruption for it, [the seaweed] will just go brown. It's no good to eat. That's the way it is with most of the food we have. If you disrupt it in any way it's gonna go somewhere else or wouldn't.... spawn.”

### **6.2.7 Visual**

Study Participants voiced concerns about the visual impact of tanker traffic as well. Gilbert Hill stated: “I wanna be a happy man, but I can't be happy if I see big oil tanker going by my front porch every day.”

### **6.2.8 Tanker Accidents**

Study Participants were also concerned with potential tanker accidents. Ernie Bolton referenced a recent container ship accident in the Prince Rupert Harbour and stated, “So what if there's an accident in that area? ...there's already a big ship that almost ran up on the beach!...And these ships now that are going to come and pack all this liquid. Three times bigger than those ships!” Gilbert Hill voiced further concerns over a possible accident, “With all the food that we have – that's why I'm still here, that's why



*I never left the village. I love our food. This is my kitchen out there. I want something to eat I go out there and get it. But what am I going to do when a tanker ever hits a beach?"* The Gitxaata Nation has had experience with accidents in the past and the subsequent effects on their daily lives. Vince Davis related one such incident, *"We actually lost power one year because a freighter...at Smith Island. There's underground cable there and he...he actually ripped that cable right out...And we're down, almost two weeks with no power."*

## 6.3 Pipelines

Clarence Innis voiced concern about the future of food fishing along the PRGT line as it goes through one of the most lucrative areas.

### 6.3.1 Dredging required for pipelines

One of the issues identified by Study Participants related to the proposed pipelines is the dredging that would accompany it. Matthew Hill said, *"They'll be no more Sockeye – cause they're gonna dredge out that area...they're gonna open it right up and that's the major Sockeye supplier right there."*

Doug Brown added that dredging, blasting and related activity could stir up the existing contaminants resting on the river bed of Alice Arm which might then be carried downstream and be distributed in the territory.

### 6.3.2 Accidents

Several Study Participants voiced concerns regarding the risk of a pipeline rupture. An accident, especially in the water, would be *"devastating for the area"* said Matthew Hill; he continued: *"All our diet and life comes from the ocean."* One of the potential consequences of released gas, he feared, could be acid rain. Matthew Hill said that it *"blows my mind that they'd even consider putting the pipeline in the ocean"*.

Both Matthew Hill and Ronnie Shaw voiced concern about the absence of shut-off valves on the marine portions of the pipelines. Doug Brown pointed out that in regards to the length and depth of the underwater pipelines, the location of the shut-off valve does not seem adequate.

### 6.3.3 Contaminants from coating on underwater pipeline

Ernie Bolton and Ray Nelson drew attention to the potential release of chemicals from underwater pipelines. Substances, for example from pipeline coating, cement mix or occurring rust, are potential contaminants to the water and marine ecosystem.

### 6.3.4 Pipeline on ocean floor interfering with certain marine species movement

Bruce Watkinson and Matthew Hill questioned whether the pipelines on the ocean floor would hinder crab migration and disturb other components of shellfish habitat.

### 6.3.5 Interference with Fishing Gear

Ray Nelson and Cyril Aster explained that the area near Flora Bank and into Inverness Passage is quite shallow and often their fishing gear will drag along the bottom of the ocean and worried about if their gear would snag on the pipeline.

## 6.4 Other Concerns

A common concern from Study Participants was about harvested food generally, and what the Projects would mean for their ability to continue to fish and harvest food within the Study Area. Doug Brown explained the importance of Gitxaata food:

*I want to die eating that. It's my natural food, it's what makes me who I am. I'm a person from the sea. I was born on a little island surrounded by the ocean so, you know? We didn't grow potatoes or raise cattle, you know? We just – 99% of our food came at low tide. If I couldn't get that then...what's the use? I have to have my food from the ocean. There is no other question about it. That's what I crave, I think about it and just wish I had it sometimes when I didn't but yeah, yeah, no it's very important to me. I just couldn't imagine life without that.*

### 6.4.1 Increased pressure on fishing industry

Many of the Study Participants expressed concern for the increased pressure on the local fishing industry. Study Participants explained that the fishery has suffered in recent years.

John Vickers stated:

*Even the, for the herring, the wives used to work quite a bit on the herring. That's slowly going down. Everything is going down and in order for it to recover we need to get those big ships out of there. All areas where all the salmons travel, oolichans travel. That's my biggest concern is – I'd really like to see the – our fisheries recover."*

Increased pressure on the fishing industry and a decrease of fish populations is a concern. Doug Brown elaborated:

*Well, it's almost like the inevitable is going to happen. It almost seems like the beginning of a true ending to everything that we once, all in one lifetime. I've seen the peak of the industry and I've seen the total collapse. It's almost like in a blink of an eye. In less than one lifetime it's all gone. That's sad and if that comes through then that will be the nail in the – whether there will be any salmon left I don't know.*

### 6.4.2 Lack of Benefits for Gitxaata

Gitxaata Study Participants also commented on the lack of benefits from industrial activity. Study Participants often noted that while there may be increased employment in the region, it would be their Nation who had to live with the environmental effects. Keith Lewis noted:

*For LNG – it would create jobs but for who and for how long? [...] I don't know whether it's worth it to take that risk for our traditional way of living. Our traditional way of living has kept us healthy and happy. And it's changing, that is – I don't know...It's going be very depressing for many people.*

Matthew Hill said "it's lucrative in a way but...we have to live with the environment after the fact."



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## Appendix 1

<b>Fishing/Marine Gathering</b>			
<b>Fish</b> - Herring - Rockfish - Halibut - Salmon - Oolichan - Black cod	<b>Why</b> - Subsistence - Ceremonial  <b>What</b> - Species - Amounts  <b>Where</b> - Current locations - Habitats/Spawning - Routes taken  <b>How</b> - Gear types - Boat - Shore - Preparation  <b>Who</b> - Who went with you	<b>Other</b> - Clams - Cockles - Squid - Octopus - Urchin - Sea cucumber - Mussels, Giant mussel - Scallop - Chiton - Abalone - Crab - Barnacles (past harvesting) - Sea prune	<b>Why</b> - Subsistence - Ceremonial  <b>What</b> - Species - Amounts  <b>Where</b> - Current locations - Habitats - Routes taken  <b>How</b> - Boat - Shore - Preparation  <b>Who</b> - Who went with you
<b>Vegetation, Mammals &amp; Birds</b>			
<b>Vegetation</b> - Seaweed - Kelp - Eel grass (non-harvest) - Encrusting algae (non-harvest)	<b>Why</b> - Subsistence - Ceremonial  <b>What</b> - Species - Amounts  <b>Where</b> - Current locations - Habitats - Routes taken  <b>How</b>  <b>Who</b> - Who went with you	<b>Mammals &amp; Birds</b> - Seal, Fur seals  - Sea lion - Geese  - Ducks  - Gulls (eggs) - Mink - Deer - Whales - Otter - Bear	<b>Why</b> - Subsistence - Ceremonial  <b>What</b> - Species - Amounts  <b>Where</b> - Current locations - Habitats - Routes taken  <b>How</b> - Hunting method - Boat - Shore - Preparation  <b>Who</b> - Who went with you
<b>General</b>			
<b>Introductory Questions</b> - Name - Sm'algyax Name - Birthdate/location - Mother, father - Clan, house - mentioned relatives names - Anything else?	<b>Sites</b> - Burials - Camps/Moorings - Ceremonial/spiritual sites - Navigational points/Placenames - Gathering areas	<b>Potential Interruption</b> - Cultural - Social/Political - Economy - Lifestyle - Quality of life - Health	<b>Other</b> - Travel routes - Seasonal Harvesting Rounds - Spawning areas/seasons - Breeding areas/seasons - Nesting/roosting areas/seasons - Migration routes/season

## Appendix 2

### Gitxaala Nation Use Interviews: Participant Consent and Release Form

**Participant Name:** \_\_\_\_\_

**Date of Interview:** \_\_\_\_\_

**Name of Interviewer:** \_\_\_\_\_

I, \_\_\_\_\_ (participant name) agree to participate in the Gitxaala Nation's Use Study. I understand that the purpose of this project is to assist in the identification and gathering of information on Gitxaala Nation's traditional and cultural uses of the land within our Territory.

I agree that the information gained from my interview can be utilized by the Gitxaala Nation to support its efforts in researching multiple LNG Projects and related pipelines. I further understand that this information can be utilized to support Gitxaala Nation research, regulatory interventions, court actions, negotiations and legal work, projects and initiatives.

All Information collected is the sole property of Gitxaala Nation and will not be used for any purpose without Nation consent. The report created for this Project will undergo a community verification process.

Signed,

\_\_\_\_\_  
Participant

\_\_\_\_\_  
Date

\_\_\_\_\_  
Interviewer

\_\_\_\_\_  
Date