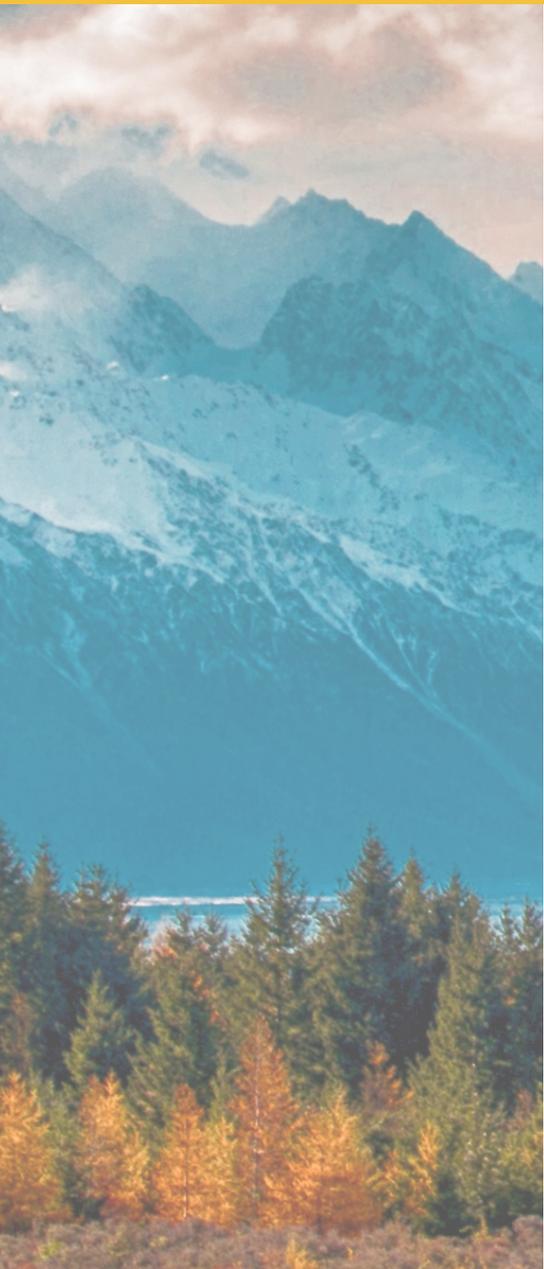




Cultural Heritage Resource (CHR) , Traditional Information & Traditional Practices

Course Workbook



FIRST NATIONS
LAND MANAGEMENT
RESOURCE CENTRE



T M Training, Mentorship &
P D Professional Development

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Cultural Heritage Resources and Traditional Information and Traditional Practices

Course link: https://labrc.com/public/courselet/Cultural-Heritage-Resources-Traditional-Information-and-Traditional-Practices/presentation_html5.html

Welcome

This courselet will focus on First Nation (FN) Traditional Information and Traditional practices (TI&TP) and the important role it plays in defining FN's Cultural Heritage Resources (CHR).

The main topics that will be discussed include:

- An introduction and discussion of TI&TP
- Traditional Consultation
- Difference between Traditional Knowledge (TK) and Western Science Approach
- Traditional Use and Traditional Ecological
- Knowledge (TEK) Studies
- Benefits of Preserving CHRs

By the end of this courselet, a Lands Governance Director (LGD) should have gained a basic understanding of the importance of a FN's TI&TP in supporting, preserving, protecting, and defining FN CHRs. The material provided in this courselet is current to the date of the courselet.

Big Picture

FNs have always passed down their collective TI&TP from generation to generation to ensure its survival and that each generation preserves and disperses it.

TI&TP and languages are especially at risk of loss when knowledge is not shared among members. That is why it is important for a FN to identify its TI&TP and incorporate them in the FN's definition of CHRs, so they can be preserved and shared.

With colonization and forced foreign laws and rules many FNs TI&TP had to go underground or were lost. The colonizers tried to force their western knowledge and beliefs on FNs.

Overview

FNs have the ability to create legislation, plans and policy that can assist in protecting or preserving on-reserve CHR.

Traditional information and the areas where traditional practices are conducted may usually be identified and incorporated into management planning.

Actual traditional practices themselves are not so easily protected and if they are incorporated into legislation or policy there may be difficulties in jurisdiction, monitoring and enforcement.

Other management techniques such as voluntary self-regulation require other processes to implement, although a LGD or Lands Department may be instrumental in informing such processes.

For example, access to an on-reserve hunting area may easily be limited under a Land Code(LC) or *Indian Act* bylaw, but regulating the traditional practice of hunting itself is more complex because other

considerations such as federal and provincial legislation and exclusion of migratory birds and endangered species under the Framework Agreement on First Nation Land Management must be taken into account.

Introduction to Traditional Information and Traditional Practices

FN's TI&TP is intrinsically related to the spirituality, culture, land and language of a FN. Each FN has to use their TI&TPs to identify their own CHR through the unique experiences that the FN has on the land and with each other.

It is very important that a FN's TI&P be identified so that a FN can develop its definition of CHRs.

Picture: Cedar branches used for ceremonial purposes

Picture source: [First Nations Pedagogy](#)



Oral History

TI&TPs have been passed down through protocols, customary laws, social conventions, ceremonies, Indigenous languages contain many concepts, meanings and words not easily translated to English.

Legends and stories are an oral history that was passed on from generation to generation that contains sacred spiritual practices that tell of the spiritual world and understanding of creation.

Many of the traditional practices of FN peoples form a part of their oral tradition. The sharing of traditional practices is oral-based and generally taught through hands on experience.

Picture: Elder Eugene Louie, Tla'amin FN in BC

Picture source: [Simon Fraser University \(SFU\)](#)



Protection

The protection of TI&TP is of the utmost importance to FNs since the onset of colonization. Each FN has its own unique TI&TPs that will need to be preserved and protected due to its misuse, and misappropriation by others.

It is very important that a FN's TI&TP be identified so that a FN can develop its definition of CHRs and develop laws and policies to preserve and protect their CHRs from misappropriation.

FNs have protected and preserved their cultural identity through the sharing of tradition based practices for many thousands of years. Traditional practices or customs are one way in which cultures are preserved and maintained.

Picture: Authentic Cowichan Sweater

Picture source: [CTV News](#)



What is Traditional Information

Introduction

Traditional information is comprised of a number of types of information.

The three (3) types of traditional information that will be discussed here are:

1. TK
2. TEK
3. Traditional land use

Picture: Tsartlip FN Sacred Ceremony, Vancouver Island, BC

Picture Credit: Turtle Island News



Traditional Knowledge

TK is information that is passed down from generation to generation and is considered to be a collective entity, similar to the traditional territory.

Some of the general types of information that comprises TK are the beliefs, practices, arts, and spirituality of a FN. A FN may have its own definition of TK that is largely reliant on how the information is collected and how it is going to be shared or used.



Picture Source: [First Peoples of Canada](#)

Traditional Ecological Knowledge

TEK is a type of traditional information that is all about the relationships of living things with one another and with their environment.

TEK is rooted deeply in the observations made when an individual is conducting traditional activities on the traditional lands.

Along with traditional land use information, TEK is an integral component to land use planning, environmental management and as a factor in land management decision activities.



Traditional Land Use

Traditional Land Use is simply the traditional activities that FN members conduct on the FN's traditional lands or traditional territories to access CHR, for example, a member's access to cultural resources, such as harvesting sage for ceremonial practices at cultural sites located on the FN traditional lands.

Picture: Kashechewan Elders identifying birch bark for making a traditional moose call

Picture source: [Ontario](#)



How is Traditional Information Shared?

Information

The traditional lands, environment, culture, practices and language of the FN all contribute to the shaping of traditional information that is passed through families and community members.

TK Holders

The people who share and hold traditional information are commonly referred to as TK holders.

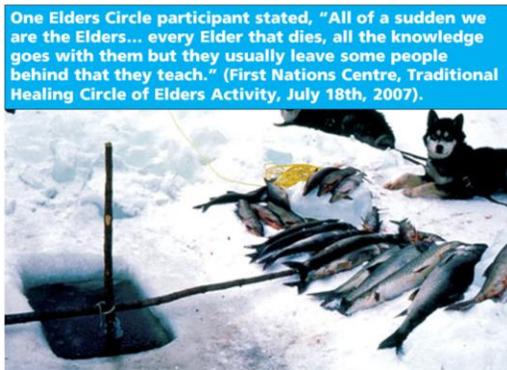
TK holders may include:

- Elders of the community
- Particular families or family members who have been entrusted with the responsibility of carrying, sharing and/or practicing TK
- Individuals from surrounding FN communities

Picture Quote: [National Aboriginal Health](#)

Picture: Traditional Ice Fishing

Picture source: AANDC



Oral Based Knowledge

The most common way for the transfer of traditional information is orally.

Oral based knowledge transfer includes such methods as:

- Storytelling,
- Ceremonies,
- Medicinal Practices,
- Dancing,
- Singing,
- Arts and crafts
- Any combination of these



Importance of FN Language & Oral Knowledge

Due to the oral nature of knowledge transfer, language is critical to how traditional practices are described and interpreted.

A particular practice or piece of information may hold a special uniqueness or extra meaning that is best expressed or shared in the context of the FN's own language, otherwise details or other specificities may be lost in the translation from the mother tongue language to English.

Transfer of TK

The transfer of TK can be relatively slow, or selective due to the method and context in which it is transferred.

Some knowledge may only be shared at particular times of the year or during a certain season when FN community members come together to share physical resources which in turn involves experiencing or actively transferring intellectual knowledge-based resources.

Picture: Soapberry



Picture source: Skeetchestn

TK Holders and FN Laws, Plans or Policy Development

TK contains all of the information regarding a FN's CHR.

Therefore, it is extremely important for a FN to work with its TK holders in any planning, policy or law development so that all of the Community's needs may be accurately reflected.

TK is very important to FNs as it is where the community's identity comes from and is considered to be an integral part of the survival of the community's culture.

Traditional Consultation

Introduction

The concept of consultation may seem like a new and emerging responsibility in Canadian Constitutional law, but in Indigenous legal traditions it is a fundamental structure supporting Indigenous societies.

Picture Source: [APTN](#)



Traditional Consultation

As part of Indigenous legal traditions, Indigenous people have developed ways to ensure that the lands, waters, and CHRs, which have sustained past and present generations, are passed on to future generations. These include ceremonies, songs and dances and stories that explain and reaffirm deep and abiding relationships with the lands, animals, waters, ancestral and spiritual worlds.¹

Indigenous nations incorporate the views and knowledge of individuals into collective decisions that ensure that lands, waters, resources and eco-systems are sustained for future generations² including cultural heritage sites.

Traditional consultation also ensured conservation, protection and preserving the integrity of lands, waters, resources, ecosystems³ and cultural heritage sites. It also enables cultural heritage sites in traditional territories to be identified, recorded and included in all LC laws, traditional use/TEK studies, and consultation policies.

Consultation Policies

Consultation policies have become a necessity and FN Governments must formalize their consultation requirements against proposed activities on traditional lands including those lands that have cultural heritage sites. The legal of duty of consultation can be used to protect CHRs.

Consultation with Indigenous Communities

Consultation in Indigenous legal conventions ensures that the individual voices, observations are added to the collective body of knowledge for the preservation and protection of all natural and CHRs and rights. Consultation within Indigenous communities can include:

- Ceremonies such as Potlatches requiring members of communities and nations and neighbouring nations, to bear witness to the rights, privileges, and accuracy of interpretation and implementation of Indigenous peoples laws;
- Council fires and public forums that identify and resolve disputes, and provide a forum for the sharing and transmission of the values, beliefs, and laws of Indigenous people;
- Advice of elders, or community members with specific knowledge of territories including cultural heritage sites or resources that allows Indigenous peoples to collectively ensure their protection;
- Diverse people with knowledge or responsibilities for specific areas or resources working with others within Indigenous nations and communities to ensure that territories are capable of sustaining all life, now and of being passed to future generations

Difference Between TK and Western Science Approach

Introduction

Onondaga wisdom keeper Oren Lyons points out that the primary difference between the way Western trained scientists and American Indians look at nature is illustrated by the fact that the dominant threads of Western thinking look at nature and see resources, while American Indians in our indigenous worldviews look at nature and see relatives and, consequently, relationships.

The Tsleil-Waututh FN in British Columbia (an operational FN) identifies their sacred trust to be for their Children of tomorrow, which in the Tsleil Waututh language reads `- steʔaxwəl ʔə ʔ wə weyələs.`

The Tsleil-Waututh agree their traditional view aligns with the indigenous cultural world-view of how things get done, always with an eye toward the seven generations yet unborn.

Incorporating/ integrating TK into a western science approach has been shown to be problematic. In the document "[Problems with Integrating TEK into contemporary resource management](#)" outlines such problems.

Picture: Tsleil-Waututh First Nation, BC



Picture Source: [Tsleil-Waututh Sacred Trust](#)

Aboriginal Concept of Environment

In Canada, aboriginal peoples see themselves as part of the environment, not removed from it. They view themselves as stewards of the land which they hold a spiritual connection and sacred trust. The aboriginal approach to stewardship is done holistically, by respecting and recognizing the part every animate and inanimate thing plays in supporting the integrity of the whole ecosystem.

It is remarkable that worldwide indigenous people can have almost identical views on the sacredness of the land. The issue of lands, dispossession, and spiritual connection is found throughout the UN document which is an expression of the rights of indigenous people worldwide. It has been endorsed by all member nations of the United Nations except Australia. See article 25 in relation to the comment of sacredness [here](#).

Stewardship of aboriginal sacred lands is not about the power and control over the land, but about a responsibility to take care of the land for the future generations. Stewardship has always been one of sustainability as noted in the Great Law of the Iroquois Confederacy: "*In our every deliberation we must consider the impact of our decisions on the next seven generations*".

Under the Framework Agreement, FNs can apply their concepts to managing the environment on reserves.



Western Concept of Environment

Western society concepts of land tend to focus on individual or private ownership, resource exploitation and control. This concept often creates tension between natural law and [man-made law](#) and is further complicated by a capitalistic based economic system. This system favors continuous growth and profit through exploitation of human and natural resources with little regard to long term consequences.

The consequences are often irreversible damage to the lands and environment as well as damage to cultures and indigenous peoples through forced displacement and destruction of sacred sites, traditional food sources and habitats (i.e., intentional annihilation of the buffalo).

Big business and corporations are the true aggressors when it comes to globalization and resource extraction the world over. There is also no question that capitalism is the underlying current. [Survival International](#) helps tribal peoples defend their lives, protect their lands and determine their own futures. For example watch this [video](#) for more information.

Regarding the western concept of land the roots of the western concept of land "Sand into Gold" can be found [here](#).

The [Traditional Knowledge Toolkit](#) has a section on the comparison between western and FN's way of life.

Tools to Help Identify & Interpret CHR

Introduction

Prior to any management or preservation activities being conducted, there needs to be a process to identify the CHRs and to locate them on the land base.

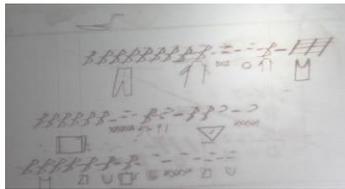
These prior research-based studies will assist in informing the management plan development and the creation of legislation and policy processes. There are a number of tools available that use TI&TP in the identification of CHR and their features and values.

Some of these tools include:

- Archaeological Assessment Process (AAP)
- Traditional Use Studies
- TEK Studies

Picture: Dokis Chief's Trading Ledger Tells a Dokis Story

Picture Source: [Anishinabek News](#)



Archaeological Assessment Process

AAPs are generally conducted in response to a proposed development activity. An AAP will consider any environmental effect a development activity may have on FN's CHRs.

Resources:

[Tasout Subdivision and Development and Servicing Law](#) page 53 for an example of an AAP.

[Ontario Archaeology Assessment](#)

[BC Archaeological Impact Assessment](#)

Picture: A Port Joli Shell Midden

Picture Source: [Coastal Archaeology Wordpress](#)

Traditional Use Studies

Traditional use studies, which can be thought of as the "geography of oral tradition or mapping of cultural and resource geography" or as a way of depicting some of the relationships of Aboriginal peoples to their lands (Tobias, 2000). This also includes a primary overview of traditional land uses.

Traditional Ecological Knowledge

[TEK](#) studies which are studies of the body of knowledge and beliefs that are handed down through generations about the relationship of living beings with one another and their environment.

Resource: The Aboriginal Mapping Network

Archaeological Assessment Process

Introduction

The two principal components of an AAP are:

1. Assessment
2. Impact management

The assessment and impact management stages occur one after the other and are dependent upon the specific levels of project planning.

Assessment

The first component of the AAP is the assessment. The assessment is the initial overview inventory and evaluation of known archaeological resources including archaeological sites and artifacts and of the potential presence of previously unidentified archaeological resources based upon some common geographical and geomorphologic indicators. The assessment of potential impacts during the initial stages of project planning is another component.

Impact Management

The second component of the AAP is impact management which follows directly from assessment and is primarily concerned with managing unavoidable adverse impacts as well as unanticipated impacts.

Archaeological Assessment Process Reports

Archaeological Assessment Process Reports

There are two (2) studies or reports which are generally generated in AAPs as follows:

1. [Archaeological overview assessment](#) (AOA) which is a study that is conducted to identify the potential areas within a specific project area that would most likely contain archaeological sites or artifacts
2. Archaeological impact assessment which studies are initiated in response to development proposals that will potentially disturb or alter the landscape, thereby endangering archaeological sites

Examples

The Gitxaala Nation in BC identified gaps in research and mitigation in Naikun's Environmental Assessment of the proposed Naikun Wind Development, which includes the Archaeology and Archaeology Report.

The NaiKun projects mainland cable transmission line transects a significant portion of Gitxaala territory and an absence of a Gitxaala Use Study presents a major gap in information. There have been serious concerns raised by Elders of Gitxaala Nation regarding potential impacts of the presence of the mainland

transmission cable. These concerns will be presented within the Gitxaala Use Study and will help to refine further comments.

This [document](#) provides Gitxaala's preliminary comments on the EA of the proposed NaiKun Wind Development and the archaeology report.

Archaeological Expertise

Introduction

When doing an archaeological study, and as part of a FN's due diligence to protect a FN from liability a FN should either hire an in house expert in CHR or seek external assistance of professionals such as archaeologists.

Archaeologist

An archaeologist is a person who studies past human cultures through the exploration of land and waterways to uncover artifacts and other signs of past inhabitation and use.

They investigate archaeological sites in order to answer specific research questions or to conserve them because they are at risk of being impacted by human or natural forces.

For information on archaeologist consultants see:

- [BC Association of Professional Archaeologists](#) which lists archaeologists in BC
- Ontario government's [Engaging Aboriginal Communities in Archaeology](#) which is a draft technical bulletin for consultant archaeologists in Ontario.

Example

The Tla'amin-Simon Fraser University Archaeology and Heritage [Stewardship Program](#) is a great example of a successful, collaborative partnership between a FN and a post-secondary institution. The Tla'amin or Sliammon FN has joined with the SFU Archaeology Department in the identification and interpretation of CHR located at a site selected by the community members.

"The Tla'amin-Simon Fraser University Archaeology and Stewardship Program is a community-based, participant-driven exploration of what archaeology can do. We are learning how archaeological sites, perspectives, practices, and data can be employed in land and place histories, in revitalizing ecosystems and stewardship traditions, and in intercultural reconciliation. We are seeking to create conditions that promote Indigenous control over heritage and destiny".

This program has been in operation since 2007 and was authorized and supported to continue through 2013. The Program goals are:

1. To sustain collaborations between Tla'amin FN, the SFU Department of Archaeology, and other partners;
2. To explore and enhance knowledge about Tla'amin lands and heritage through heritage site and object identification, documentation, and investigation;
3. To train Tla'amin youth and SFU students in archaeology and heritage stewardship;

4. To increase awareness and knowledge about Tla'amin history both within the Tla'amin community and in regional, academic and resource management communities
5. To facilitate exchanges of information and experience among Tla'amin Elders, youth, and SFU;
6. To advance to Tla'amin goals of self-governance, self-determination, and self-representation.

A six-part series of videos have been created to share the general details of the field school project. (The videos are also available on YouTube.)

Part 1: [Introduction](#)

Part 2: [Background](#)

Part 3: [Collaboration](#)

Part 4: [Herring: An Important Fish](#)

Part 5: [Logging and Archaeology](#)

Part 6: [Between the Tides](#)

Traditional Use and TEK Studies:

Introduction

Traditional use and TEK studies are very important tools for FNs when identifying and defining their CHR.

FNs have had to deal with the challenge of different western world views when non-FNs attempt to use TK in research and management decision making. It is up to the FN to ensure their experts are incorporating their protocols and traditional laws when researching, using or interpreting TK.

History

Traditional use research originally came about in the mid-1970s during the Berger inquiry into the proposed McKenzie Valley pipeline. They have since been applied in:

- Forestry planning processes
- Treaty negotiations
- Consultation and accommodation processes
- As a method for proving Aboriginal rights and title in court cases such as *Delgarnuukw v. British Columbia* and the more recent *Tsilhaot'in Nation v. British Columbia* where traditional use studies were utilized to depict the impacts of colonization on them aboriginal people (Tobias, 2000).

Studies Used in Agreements

This is still the case today, where traditional use studies and TEK studies are key components in the review of proposed land based projects, the negotiation of [Reconciliation Agreements](#) and Accommodation Agreements also known as Impact and Benefit Agreements between FNs and government or industry and in court to prove aboriginal rights and title.

For example the Musqueam Indian Band and Minister of Aboriginal Affairs and Reconciliation (British Columbia) have [a Reconciliation Settlement and Benefits Agreement](#). Picture: Musqueam Dancers



Traditional Use Study

A traditional use study can be defined as a community-based research project that's designed to identify community member's historical traditional uses and occupancies in a specified area (Tobias, 2000).

The study areas generally include the traditional territory and reserve lands but may be more specific in response to a particular proposed development project.

CHR information is collected in the form of TK so in other words a traditional use study is an area-specific report identifying traditional knowledge of FN traditional or reserve lands. It may best be recorded through interview and discussion with the knowledge holder.



Picture: Excavation at Tla'amin FN located in BC

Picture Source: [Tla'amin and SEU](#)

Information Included in the Traditional Use Study

Information

The information that is collected and recorded during a traditional use study or TEK study includes any traditional information regarding land use and occupancy that can be mapped by a FN.

For an example see the [Traditional Land Use and Occupancy Study of Cahcakiwsakahikan FN](#).

Picture: Child sized Yucca sandal from a dry cave in Texas



Map

The map may be as simple as a traced paper map or as complex as a geographical information system (GIS). This information may include (Tobias, 2000):

- Cultural sites (places where animals & plants are harvested, processed or used for food, clothing, medicines, tools, shelter, fuel and other purposes)
- Cultural resources, including rocks, minerals, and soils that are collected from making tools, conducting ceremonies, and other purposes.
- Ecological knowledge of habitats and sites critical to the survival of important animal populations; for instance, caribou migration corridors, islands where moose calve, waterfowl breeding grounds and staging areas, and spawning beds.
- Place names and habitation sites such as settlements, villages, trading posts, cabins, camps and burial grounds
- Spiritual or sacred sites such as where ceremonies take place, rock paintings exist, transformation sites, areas inhabited by non- human, para-human or supernatural beings, and birth and death sites
- Travel and trade routes
- Legends and other accounts about specific places

See: Tsawout FN Traditional Land Use and Occupancy Base Map as an example

Traditional Use Study and Land Use Plans

Introduction

Traditional use studies involving the collection and interpretation of traditional information are often done in parallel to the AAPs and the environmental impact assessments. This type of information gathering is increasingly being utilized in project development proposals, in the assessment of proposed activities and land use plans (LOP).

More often than not, as one piece of traditional information is identified a "web" of other issues will arise. This situation highlights the need to prioritize activities based upon factors such as the overall goals, objectives, and the available resources like money and capacity among other things.

Picture: Traditional Fish Trap

Picture Source: [Tla'amin and SFU](#)



Land Use Planning

Both traditional use and TEK can be utilized in land use planning and other related activities. There are a number of ways that this type of knowledge is used.

For example, traditional information can be used to provide some historical context to the land base. It may be used in the preservation and protection of CHR.

Having sites designated under the LUP is a good way of ensuring that CHR are recognized and will be considered in the review of proposed developments. Another example of ways in which this TK is used is in helping you identify your traditional territories and aid you in creating your traditional map.



Lheidli T'enneh Land Use Plan

The [Lheidli T'enneh LUP](#) has designated traditional use areas and cultural heritage sites in it.

Lheidli T'enneh has developed designation maps for these sites and in each maps legend identifies the various types of land uses that were identified by the membership.

Traditional use areas are for the areas where community members are accessing traditional resources of the land and cultural heritage sites that are used to protect the graveyard and historic church.



Other Examples

Here are a couple more examples of LUPs that have designated traditional use areas and cultural heritage sites on them.:

The [Tla'amin FN Land Use Plan](#) (which was enacted under their [LC](#)) through the [Tla'amin Land Use and Development Law](#), includes:

- Guidelines to protect environmentally and culturally sensitive areas (Appendix D)
- Development cultural constraints (e.g. known archaeological sites, cultural sites, etc.)
- Permitted use zones (e.g. for traditional and cultural uses and activities)

The Sema:th LUP has identified cultural sites (such as Sumas Mountain) that are culturally significant to the Sto:lo people in forming part of their cultural identify and attachment to the land. The [Stö:lö Heritage Policy Manual](#) notes that resource and land use must be planned in order to reduce conflict with Sto:lo heritage interests (St6:lö Nation, 2003)

Benefits of Preserving CHR

Introduction

There exists a definite need to preserve traditional information as it is where a majority of information regarding CHR is found. By preserving CHR, a community is preserving their traditional information.

The Benefits of preserving CHR is the tangible and visual conservation of cultural identify and values for its continued survival for future generations.

Picture: Herring Salmon Bones

Picture Source: [Tla'amin & SFU](#)



Traditional Information "Kept Alive"

Preservation of CHR can help to ensure that traditional information is "kept alive", to be shared between community members and future generations, thus maintaining their cultural identity.

Traditional information increases the FN's ability to protect, preserve and maintain control of FN's cultural heritage.



Building Relationships

As well, there is often broad community interest in FN's history and culture. Preservation and presentation of such information from a FN's perspective is of immense value to understanding the common history of Canada and for analyzing contemporary issues and challenges. The Union of British Columbia Municipalities "[Community to Community Forum](#)" process is an excellent example of a structured process for building respectful relationships beginning with exchange of such historical information and perspectives.

Picture: Community Outreach

Picture Source: [Tla'amin & SFU](#)



Law and Policy Development

Another benefit to preserving CHR is its ability to be used by a community in their law and policy development.

The areas in which traditional information may be used are limitless and include many different areas such as:

- Land governance
- Natural resource management
- Health
- Culture, heritage and archaeology
- Environmental management
- Environmental Assessment
- Economic Development

Preserving the traditional information about CHR ensures that there is an ongoing baseline for incorporation into such laws, policy and planning initiatives.

For example in [Tsawout LC](#) in Section 6.2 (k), Council may make laws in relations to First Nation Land including setting aside, protection and regulation of heritage sites, cultural sites, traditional sites, spiritual sites and wildlife refuges.

The Tsawout's Subdivision, Development and Servicing Law's Schedule C "General Requirements for Heritage Assessments on First Nation Land" policy's purpose is to maintain the integrity of STÅUTW history and heritage through the respectful treatment, protection, preservation, and management of STÅUTW heritage objects and sites on First Nation Land.

Click [here](#) for a copy of Tsawout's Subdivision, Development and Servicing Law.

Planning

With respect to planning, the type of information that is collected through traditional use studies and TEK studies are important in the respect that they can form part of a baseline set of background information that is incorporated into various plans such as:

- Comprehensive Community Plan
- Land Use Plan
- Natural Resource Management Plan
- Any other identified planning initiatives.

The results of a traditional use study or TEK report can assist in the identification of the various areas that either requires full protection or other access considerations.

The [Union of British Columbia Indian Chiefs](#) (UBCIC) developed a [Heritage Planning Toolkit](#) to assist FNS in developing their own cultural heritage management policies.

Other Benefits

There are a number of other benefits and uses identified in the book by Terry Tobias (2000) "[Chief Kerry's Moose: A Guidebook to Land Use and Occupancy Mapping, Research Design.](#)"

Some of the uses and benefits include:

- Documenting and storing Elder's oral history before more knowledge is lost,
- Determining shared use areas and reconciling boundary conflicts between neighbouring aboriginal communities,
- Providing evidence for court cases involving aboriginal rights and title,
- Settling treaty and claims under land claims processes,
- Identifying lands for land selection and entitlement,
- Supporting compensation claims,
- Negotiating co-management agreements,
- Negotiating protective measures and benefits from industrial development,
- Determining probable impacts of development,
- Supporting administrative programs such as land use permitting,
- Developing education curricula, and
- Providing baseline data for long-term community planning and lands/water management

How can Cultural Heritage Resources be Preserved?

CHRs need to be preserved or protected on a number of levels from within the FN itself to the regional, federal and provincial level.

Preservation and protection really begins at the community level itself as loss Of CHRs has the greatest impact on the community members first and foremost.

A community can begin by conducting its own research by learning from the TK holders. Once the traditional information has been received and recorded the best method for preserving and protecting it is to put it into practice, to share, to live by it and to respect it.



Picture: Traditional drying of salmon
Picture Source:

Preservation of TI & TP CHR Approaches

Introduction

Preservation of TI&TP in CHR approaches is very important in the overall preservation of CHRs include. These CHR approaches are:

- Planning
- Legislation and policy-making
- Negotiation

Picture: Water logged basket, Fraser Valley BC

Picture Source: [Tla'amin & SFU](#)



PLANNING

Planning involves:

- Conducting background research
- Identifying priorities, goals and objectives
- Identifying the various options for management and administrative practices for CHRs on the FN's lands.

Traditional protocols that need to be incorporated into the management and administrative plans also need to be identified as part of the planning process.

The identification of a legislative framework for CHR that includes the incorporation of traditional information is also a result of planning activities.

LEGISLATION/POLICY

FNs that are signatories to the Framework Agreement and have ratified their LC possess the ability to make laws under their LC.

A law that specifies the preservation of CHR that are located on-reserve could be enacted accordingly.

The development of a CHR law could be created in such a way that the FN's traditional laws and customs are reflected. This is a way in which traditional practices are preserved and maintained in the community.

NEGOTIATION

For the protection of CHR that are located off-reserve in the FN's traditional territory, the process is a bit more complicated. Only specific CHR are identified for management and protection under the laws and policies of other jurisdictions, such as the province.

A CHR feature that is recognized by a FN as requiring preservation or protection may not be recognized by another jurisdiction as being entitled to the same course of action under their legislation. For example, sacred sites such as caves or transformation sites which are extremely integral to a FN's cultural identity are not recognized as requiring protection under current legislation.

These gaps in legislation highlight the need for negotiation. There may be the negotiation of an agreement between the FN and the other jurisdiction as a possible course of action for the recognition, preservation and/or protection of the identified feature.

A LGD should recognize that they might not necessarily be directly involved in the negotiation of any agreement, but should understand the overall process as more often than not LGDs are called upon to provide their expertise and make recommendations on various issues.

EXAMPLES

Example 1: Tsawout Comprehensive Community Plan

The adoption of the [Tsawout LC](#) in 2007 marked a new start for self-governance for the Tsawout FN located on Vancouver Island in BC. The LC reflects Tsawout's own laws, priorities, and enables Tsawout to manage its own lands.

Tsawout knew managing future land use decisions requires a plan that outlines the type of change acceptable to the community. The plan should be based on Tsawout's:

- Core values
- Vision for the future
- Transparency through a set of policies to guide decision making.

This type of plan is referred to as a Comprehensive Community Plan (CCP).

Tsawout FN has included culture as a component of their Comprehensive Community Plan.

Example 2: McLeod Lake Indian Band Forest Practices Code Act

As another example, McLeod Lake Indian Band Forest Practices Code Act includes the following requirement:

- "8. Archaeological Impact Assessment May Be Required

The Forestry officer will carry out an archaeological impact assessment, and make the assessment available to Council, if the Council determines that an archaeological impact assessment is necessary to adequately manage and conserve archaeological sites in the area, prior to approval of a site plan or stand management prescription;"

This example is specific to McLeod Lake and in that situation they have a Forestry Office who conducts these assessments. This may not be the situation in other Nations.

Summary

Introduction

FNs' cultural identity has been preserved through the sharing of traditional information over thousands of years. The three types of traditional information that was discussed in this lesson were:

1. TK
2. TEK
3. Traditional land use.

TK holders are community members who share and hold traditional information. Traditional information is transferred through a number of different methods such as storytelling, ceremonies, medicinal practices, dancing, singing and arts and crafts.



Collection and Identification of Traditional Information

The collection and identification of traditional information can occur through a number of studies such as:

- Archaeological assessments
- Traditional use studies
- TEK studies

Picture: Top down arch taking sample

Picture source: [Tia'amin & SFU](#)

Location of CHR

CHR may also be located off-reserve in the FN's treaty area or traditional territory. In most cases, archaeological assessments that occur off reserve are conducted under provincial legislation and must follow those applicable regulations and policies and are performed by a qualified archaeologist.

Preservation of CHR

There are two main components to the overall preservation of CHR. They are managing the use of these resources or outright protection of specific ones.

CHRs may be impacted by land-based development activities such as resource extraction, by natural occurrences, such as fire, floods and by non-land based events such as cultural change. CHR may be managed, preserved or protected through planning, legislation and policy-making and/or negotiation.

The FNs in British Columbia [website](#) has many resources related to traditional knowledge.



Picture: Beach Galiano Island

Picture Source: Vancouver Sun

Sources

Environmental-Aboriginal Guardianship through Law and Education (EAGLE), Nation to Nation, The Law of Consultation and Accommodation, Semiahmoo Reserve,

Surrey B.C. Chapter 1 at 1-2.



ACRONYM LIST

AFN	-	Assembly of First Nations
BC	-	British Columbia
CHR	-	Cultural Heritage Resource
FN	-	First Nation
FNLC	-	First Nation Leadership Council
<i>FNLMA</i>	-	<i>First Nations Land Management Act</i>
<i>FRAMEWORK AGREEMENT</i>	-	<i>Framework Agreement on First Nation Land Management</i>
GIS	-	Geographical Information System
IPR	-	Intellectual Property Rights
LAB	-	Lands Advisory Board
LC	-	Land Code
LGD	-	Land Governance Director
TK	-	Traditional Knowledge
UBCIC	-	Union of British Columbia Indian Chiefs



GLOSSARY OF TERMS

ANCESTRAL REMAINS

Ancestral Remains refers to the discovery of previously unidentified, buried human remains that are of ancestry to a FN.

ARCHAEOLOGICAL SITE

An **archaeological site** may be defined as any property that contains an artifact or any other physical evidence of past human use or activity that is of a cultural heritage value or interest. For example village and settlement sites, camps and burial grounds/sites

ARTIFACT

An artifact is any object, material or substance that is made, modified, used deposited or affected by human action and is of cultural heritage value or interest. For example tools, pottery, art or clothing.

ENVIRONMENTAL ASSESSMENT

According to the International Association of Impact Assessments, an EA is

“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.”

An EA examines effects of proposed projects on soil, air quality, water quality and supply, fisheries, wildlife, traffic, noise, community health, economic development, archaeology and a variety of other social, economic and environmental topics. A well-designed EA assesses the “cumulative effects” of a proposed project combined with other past and proposed future human activities. Ways of avoiding or reducing impacts are identified in an EA.

An EA is a planning tool, a means of reviewing the effects of proposed development, a process of community engagement and an instrument for complying with regulatory requirements. After considering federal and provincial environmental assessment processes, an operational First Nation can design an efficient EA regime that is beneficial to the environment and to the quality of development occurring on reserves.

ENVIRONMENTAL PROTECTION



Environmental protection is defined as the efforts made to identify, remediate and prevent contamination of soil, water and air, and to reduce attendant risks to environmental and human health and safety. The adverse effects of exposure to contaminants may result from direct or indirect contamination of soils, water, and air from hazardous materials and uncontrolled exposure to those contaminants.

FIRST NATION LAND

"First Nation land", in respect of a First Nation, means all or part of a reserve that the First Nation describes in its land code.

FIRST NATIONS LAND MANAGEMENT ACT

Is an Act providing for the ratification and bringing into effect of the Framework Agreement on First Nation Land Management. The Act was required under the *Framework Agreement* for two purposes: to ratify the *Framework Agreement*, and to implement those clauses of the *Framework Agreement* that affect third parties or other federal laws, or that are considered important enough to be repeated in the legislation. The *First Nations Land Management Act* is intended to be consistent with the *Framework Agreement* and to apply to the First Nations that are signatories to the *Framework Agreement*. The Act was enacted and given royal assent on June 7, 1999.

FRAMEWORK AGREEMENT ON FIRST NATION LAND MANAGEMENT

The *Framework Agreement on First Nation Land Management* is a government-to-government agreement. The Framework Agreement is an initiative for First Nations to opt out of the land management sections of the *Indian Act* and take over responsibility for the management and control of their reserve lands and resources. The Framework Agreement sets out the principal components of this new land management process.

The *Framework Agreement* provides First Nations with the option to manage their reserve lands under their own Land Codes. Until a First Nation community develops and approves a Land Code to take control of its reserve lands and resources, federal administration of their reserve lands continues under the Indian Act. The Framework Agreement is not a treaty and does not affect treaty rights or other constitutional rights of the First Nations.

IMPACT AND BENEFIT AGREEMENT

Benefit Sharing Agreement is a general term to describe a written agreement that is the outcome of a consultation process about a proposed resource extraction, project or development that has the potential to impact the Aboriginal rights or interests of one or more Aboriginal groups in Canada. (Source: [Woodward and Company](#)). Another common term for this is Impact and Benefit Agreement, Accommodation Agreement etc. For more information on Accommodation click here: [First Nation Governance](#)



INDIAN ACT

The *Indian Act* is Canadian federal legislation, first passed in 1876, and amended several times since. It sets out certain federal government obligations and regulates the management of Indian reserve lands, Indian moneys and other resources. Among its many provisions, the *Indian Act* currently requires the Minister of Indian Affairs and Northern Development to manage certain moneys belonging to First Nations and Indian lands and to approve or disallow First Nations by-laws.

INDIVIDUAL AGREEMENT

An Individual Agreement between each community and Canada will be negotiated to deal with such matters as: the reserve lands to be managed by the First Nation, the specifics of the transfer of the administration of land from Canada to the First Nation, e.g. the interests in land held by Canada that are to be transferred to the First Nation, the transfer of revenues and an interim environmental assessment process, and the funding to be provided by Canada to the First Nation for land management.

INTELLECTUAL PROPERTY

Intellectual property (IP) is a term referring to creations of the intellect, such as artistic works, inventions, literary, designs and symbols, names and images, for which a monopoly is assigned to designated owners by law.

LAND CODE

A Land Code will be the basic land law of the First Nation and will replace the land management provisions of the Indian Act. The Land Code will be drafted by the First Nation and will make provision for the following matters: identifying the reserve lands to be managed by the First Nation (called “First Nation land”), the general rules and procedures for the use and occupation of these lands by First Nation members and others, financial accountability for revenues from the lands (except oil and gas revenues, which continue under federal law), the making and publishing of First Nation land laws, the conflict of interest rules, a community process to develop rules and procedures applicable to land on the breakdown of a marriage, a dispute resolution process, procedures by which the First Nation can grant interests in land or acquire lands for community purposes, the delegation of land management responsibilities, and the procedure for amending the Land Code.

LANDS ADVISORY BOARD



Under Sections 38, 39, and 40 of the *Framework Agreement*, the First Nations have established a First Nation Land Advisory Board (LAB) to provide:

- Developmental First Nations political, technical, legal, advisory and financial support
- Operational First Nations assistance in implementing the *Framework Agreement* and their own land management regimes.

The LAB is composed of Chiefs regionally elected from the Operational First Nations.

Some of the LAB's functions include:

- Establishing a resource centre
- Providing strategic direction to the Resource Centre
- Proposing to the Minister such amendments to the *Framework Agreement* and the federal legislation, as it considers necessary or advisable in consultation with First Nations
- Negotiating a funding method with the Minister, and performing such other functions or services for a First Nation as are agreed to between the LAB and the First Nation.

The LAB established a resource centre to carry out many of its technical functions and this body is the Lands Advisory Board Resource Centre (LABRC).

OPERATIONAL

When referring to the *Framework Agreement* "operational" means a First Nation which has ratified its Land Code and the Land Code is in **force**.

OSSUARY

An [ossuary](#) is a chest, box, building, well, or site made to serve as the final resting place of human skeletal remains. They are frequently used where burial space is scarce. A body is first buried in a temporary grave, then after some years the skeletal remains are removed and placed in an ossuary.

RESERVE

The *Constitution Act of 1867 Section 91 (24)* - "Indians and lands reserved for Indians":

- Creates a distinction between Indian reserve lands and other lands in Canada
- Provides that Indians and reserve lands are a federal responsibility
- Gives the federal government exclusive jurisdiction over reserve lands
- Provides that only Parliament can legislate with regard to the use of reserve lands



The basic legal framework underlying reserves is:

- The underlying legal title to reserves belongs to the federal Crown
- How the reserve was created (e.g. before or after Confederation in 1867)
- Pursuant to section 2 of the *Indian Act*, reserves are set aside by the Crown in Right of Canada for the use and benefit of a First Nation

The *Framework Agreement* (see Section 4) clarifies that reserve lands under a Land Code will continue to be reserves within the meaning of the *Indian Act* and that any reserve, title to which is vested in Canada, and managed by a First Nation under a Land Code, will continue to be vested in Canada for the use and benefit of the respective First Nation for which it was set apart.

SACRED SITES

Sacred Sites are the products of cultural and spiritual beliefs and place of practice.

TRADITIONAL PRACTICES

Where First Nation peoples hand down their customs, spiritual beliefs, information, knowledge etc., from generation to generation, since time immemorial, especially orally and by practice.

TRADITIONAL USE STUDIES

A **traditional use study** can be defined as a community-based research project that's designed to identify community member's historical traditional uses and occupancies in a specified area (Tobias, 2000). The study areas generally include the traditional territory and reserve lands but may be more specific in response to a particular proposed development project. Cultural Heritage Resource information is collected in the form of traditional knowledge so in other words a traditional use study is an area-specific report identifying traditional knowledge of FN traditional or reserve lands. It may best be recorded through interview and discussion with the knowledge holder.

LAND CODE SUMMARY

There are 9 Sections in this Land Code:

Part 1: Preliminary Matters

This introduces the Land Code to the reader and defines how the document should be read. There is a description of the terms that will be used in the document, an explanation of where the authority to govern comes from, what the purpose of the Land Code is and what lands the Land Code applies to (the reserve land description).

Part 2: First Nations Legislation

This section outlines what law making power the First Nation will have out of the Land Code and the procedure for how new land laws will be created and implemented (including where they will be published and when they take effect) under the Land Code.

Part 3: Community Consultation and Approvals

This section defines how and what the process is for implementing various elements of the Land Code. For example, approving a land use plan or enacting land laws requires community approval under the conditions defined in this section. Furthermore, this section touches on the procedures for a “meeting of members”, and the ratification process and approval thresholds are for passing laws or other matters such as: i.e. development of a heritage site, amendment to the Land Code, or any other matter.

Part 4: Protection of Land

This section outlines some of the key protections the Land Code offers- and the special conditions by which the First Nation could expropriate land (only by community approval through ratification vote) and the conditions for calculating compensation, but also the rights that may not be expropriated. This section also defines the necessity for a law on heritage sites, and ensures no development or amendment can be made to the land use plan to get rid of a heritage site created under this law. Finally this section states that an agreement is necessary for the First Nation to exchange land with another party (i.e. First Nation, Province, and Federal Government) and there are conditions to be met for lands to be received (such as the need for an appointed negotiator, freedom of receiving additional compensation or land in trust, and federal commitment to add any lands to the existing reserve base).

Part 5: Accountability

This section really has to do with how the Land Code is administered by First Nation including the rules for a “conflict of interest” and the duty to report and abstain from participation in land matters where there is a conflict. Also in the context of conflict of interest this section defines the non-application of these rules for common interests, dealing with disputes and penalties.

This section also applies to how financial management, audit and financial reporting will be conducted – establishing separate lands bank accounts, signing officers, bonding, signing authorities, and the adoption of the fiscal year for operations and reporting. This section also goes into detail about the specific rules for a year to year lands budget and financial policy. The

final part of this section is about financial records and the member's right to access information on year to year financial statements, audit report, the annual report on lands, and the penalties for interference or obstructing the inspection of these records by another member- and the coordination and roles responsible for creating and making these documents public (i.e. auditor and council).

Part 6: Land Administration

This section starts off by establishing the Lands Committee - it defines the composition, eligibility requirements, selection method, term of office and dealing with vacancies. This section also defines how revenue monies from lands will be handled (from fees, leases etc.), how the registration of land interests (leases, permits, licences) will be conducted and how it is captured through First Nations Land Registry System (FNLRS) and a duplicate register if directed.

Part 7: Interests in Land

This section relates more to the operation of the First Nation's lands administration and how it will address existing interests (e.g. CPs) and new land related interests (e.g. CPs or allocations). This section defines that there will need to be written documents, standards created, and that consent will be necessary to process any granting or disposing of assignments of land. This section defines the rights of CP holders and the procedure for cancelling a CP, the transfer and use of a CP, and the situation when a CP holder ceases to be a member. This section also defines the limits on mortgages and seizures, transfers upon death, and the principles for spousal property law (to be made into a Matrimonial Real Property law)

Part 8: Dispute Resolution

This section is created to address how possible disputes that could arise by any benefactor (e.g. First Nation member) of the Land Code and how the process for addressing disputes will be conducted. For example, an adjudicator would be established to resolve disputes in relation to lands unless members could come to some resolve by way of an informal resolution of disputes. The section sets out the powers for the adjudicator, adjudication procedures and decisions and the member's ability to appeal these decisions and expectations around costs.

Part 9: Other Matters

This section defines four (or more) items to address common issues such as:

1. Liability- the need for director and officers insurance for Lands Committee members,
2. Offences and enforcement- what are offences and what is the penalty,
3. Amendments to Land Code- specifically the process for amending this Land Code,
4. Commencement- defines when the actual start date will be.

FRAMEWORK AGREEMENT ON FIRST NATION LAND MANAGEMENT

EXECUTIVE SUMMARY

INTRODUCTION

The *Framework Agreement on First Nation Land Management* was signed by the Minister of Indian Affairs and Northern Development and 13 First Nations on February 12, 1996. One other First Nation was added as of December 1997. The Agreement was ratified by Canada through the *First Nations Land Management Act*, assented to June 17, 1999

The Agreement is an initiative by these 14 First Nations to take over the governance and management control of their lands and resources. This First Nation designed and driven *Framework Agreement* with Canada has expanded from the original 14 First Nation signatories to 84 First Nation Signatories in 2013. The *Framework Agreement* applies only to those First Nations who choose to ratify it.

The *Framework Agreement* is not a treaty and does not affect existing treaty or other constitutional rights of the First Nations.

The *Framework Agreement* provides the option to govern and manage reserve lands outside the *Indian Act*. The option to regain control of reserve land through a land code can only be undertaken with the consent of the community. A land code replaces approximately 30 sections of the *Indian Act*.

TAKING CONTROL OF LAND GOVERNANCE

A First Nation signatory to the *Framework Agreement* develops its land governance system by creating its own Land Code, drafting a community ratification process and entering into an individual Agreement with Canada. The specific steps are set out in the *Framework Agreement*:

The Land Code: Drafted and approved by the community, will be the basic land law of the First Nation and will replace the land management provisions of the Indian Act. The Minister of Indian Affairs and Northern Development will no longer be involved in the management and decision making of a First Nation's reserve lands. The Land Code does not have to be approved by the Minister or AANDC.

The Land Code is drafted by each First Nation and provides for the following matters:

- Identifies the reserve lands to be governed by the First Nation under its Land Code,
- Sets out the general rules and procedures for the use and occupation of these lands by First Nation members and others,
- Provides financial accountability for revenues from the lands (except oil and gas revenues, which continue under the Indian Oil and Gas Act),
- Provides the procedures for making and publishing First Nation land laws,
- Provides conflict of interest rules,
- Provides a community process to develop rules and procedures applicable to land on the breakdown of a marriage,
- Identifies a dispute resolution process,
- Sets out procedures by which the First Nation can grant interests in land or acquire lands for community purposes,
- Allows the delegation of certain land management responsibilities,
- Sets out the procedure for amending the Land Code,
- Deals with any other matter respecting the governance of First Nation reserve land and resources.

Individual Transfer Agreement: An Individual Agreement between each community and the Minister will be negotiated to deal with such matters as:

- The reserve lands to be managed by the First Nation,
- The specifics of the transfer of the administration of land from Canada to the First Nation,
- The transitional and operational funding to be provided by Canada to the First Nation for land governance.

Community Ratification Process: In order for the First Nation to assume control over its lands, the Land Code and the Individual Agreement must be ratified by the voting age members of the First Nation. All members of the First Nation who are at least 18 years of age, whether living off-reserve or on-reserve, have the right to vote on the Land Code and the Individual Agreement. The procedure for the community ratification process is developed by the community in accordance with the *Framework Agreement*.

Federal Legislation: Canada agreed to ratify the *Framework Agreement* by enacting federal legislation that is consistent with the *Framework Agreement*. The *First Nations Land Management Act* was enacted and given royal assent on June 17, 1999.

Verification: An independent person selected jointly by the First Nation and Canada, called a Verifier, confirms that the community ratification process and Land Code are consistent with the *Framework Agreement*. The Verifier monitors the community ratification process to ensure that the rules are followed.

Recognition of Land Governance Authority: If the community ratifies their own Land Code and the Individual Agreement, control over First Nation lands and resources are no longer be subject to the *Indian Act*, but recognized to be under the governance authority of the First Nation.

TITLE TO FIRST NATIONS

Reserve lands under the *Indian Act* are held by Her Majesty and are set apart for the use and benefit of a First Nation. This will not change under the *Framework Agreement*. These lands remain a federal responsibility under section 91(24) of the *Constitution Act, 1867*. In addition, the First Nation's land will be protected against future surrender for sale.

LEGAL STATUS AND POWERS OF FIRST NATIONS

The *Framework Agreement* provides First Nations with all the legal status and powers needed to govern and manage their lands and resources. While First Nations will not be able to sell their land, they will be able to lease or develop their lands and resources, subject to any limits imposed by their own community Land Code.

Law-Making Powers: A First Nation governing its lands under a Land Code will have the power to make laws in respect of the development, conservation, protection, management, use and possession of First Nation land. The Land Code does not authorize laws relating to the taxation of real or personal property. Such laws must be made separately pursuant to section 83 of the *Indian Act*. The First Nation's Council can also continue to make by-laws under section 81 of the *Indian Act*.

Land Management: The *Framework Agreement* provides the First Nation with all the powers of an owner in relation to its First Nation Land, except for control over title or the power to sell it. The First Nation's Council can manage land and resources, as well as revenues from the land and resources, in accordance with its Land Code.

Third Party Interests: Interests in First Nation land held by third parties, or by Canada, will continue in effect according to their terms and conditions under a Land Code. No new interests or licences may be acquired or granted except in accordance with the Land Code.

First Nation Expropriation: The First Nation will have the option to acquire lands for community purposes upon payment of fair compensation to those whose interests are affected.

Accountability: A Land Code will make provision for a First Nation to report to its members and to be accountable for the governance of their lands, resources and revenues.

Marriage Breakdown: A First Nation will be able make rules on the rights of spouses to interests in First Nation land if their marriage breaks down. The community must, within 12 months of passage of its Land Code, develop and enact rules and procedures on this topic. The new rules and procedures will ensure the equality of women and men.

Registration of Interests: All documents pertaining to land interests of a reserve will be recorded in the First Nation Land Registry System (FNLRS).

The FNLRS is:

- Electronic
- Provides for Instant Registration
- Priority based
- Paperless
- Backed by Regulation (Unlike the *Indian Act* registry system)

The FNLRS system and regulations are landmark achievements. These regulations made it possible for reserve to have greater land certainty, mortgageability, title insurance and drastically reduced or eliminated land transaction costs

PROTECTION OF FIRST NATION LAND

The preserving of the quantity and quality of existing First Nations lands is a fundamental principle of the *Framework Agreement*. Some aspects of this principle are summarized below:

Taxation and Seizure under Legal Process: The current exemption of reserve lands, and personal property situated on-reserve, will continue under the relevant provisions of the *Indian Act*.

Environmental Protection: A First Nation with a land code in effect will be required to develop an environmental protection regime. A First Nation will have the power to make environmental assessment and protection laws and will harmonize these laws with federal and respective provincial environmental laws.

Voluntary Exchange of Lands: A First Nation may decide that it is advantageous to exchange some of its First Nation lands for other lands. Provision can be made in its Land Code for a procedure to negotiate and approve such exchanges. An exchange of land cannot occur without the consent of the First Nation community.

No Provincial Expropriation: Under the *Framework Agreement* there can be no expropriation of First Nation land by a provincial or municipal government or agency.

Restricted Federal Expropriation: Canada's power to expropriate First Nation land is greatly restricted. That power can only be exercised with Cabinet approval and only when the expropriation is justified and necessary for a federal public purpose that serves

the national interest. Compensation must include provision for equivalent lands so that the land base of the First Nation is not diminished.

Enforcement: The First Nation will have full power to enforce its land and environmental laws and may enter into further agreements with other jurisdictions to assist in such enforcement. A First Nation can appoint its own Justice of the Peace or special prosecutor to try offences created under a Land Code or a First Nation law. First Nation laws may make provision for search and seizure, fines, imprisonment, restitution, community service or alternate means for achieving compliance with its laws.

CONTINUING FEDERAL RESPONSIBILITY

Canada will remain liable for and will indemnify a First Nation for losses suffered as a result of any act or omission by Canada, or its agents, that occurred before the Land Code comes into effect. After that date, the First Nation is responsible for its own acts or omissions in managing its lands.

DISPUTE RESOLUTION

The First Nation will establish its own processes for dealing with disputes in relations to its lands and resources. These can include mediation, neutral evaluation and arbitration. In the case of a disagreement between the First Nations and Canada on the meaning or implementation of the *Framework Agreement*, there are provisions in the *Framework Agreement* to resolve the dispute outside the courts.

LANDS ADVISORY BOARD AND RESOURCE CENTRE

The First Nations party to the *Framework Agreement* established a Lands Advisory Board and Resource Centre to assist them in implementing their own land governance regimes, including developing model land codes, laws, documents, agreements and management systems.

FIRST NATIONS INVOLVED

The following is a list of the 40 First Nations who signed the *Framework Agreement* and who have enacted Land Codes pursuant to the *Framework Agreement*.

BC

1. Beecher Bay
2. Kitselas
3. Leq' a: mel
4. Lheidli T'enneh
5. Matsqui
6. Musqueam
7. Seabird Island
8. Shx'wha:y Village
9. Skawahlook
10. Sliammon
11. Snaw Naw As (Nanoose)
12. Songhees
13. Squiala
14. Sumas
15. Tsawout
16. Tsawwassen^(a)

MB

1. Chemawawin
2. Opaskwayak
3. Swan Lake

17. Tsekani (McLeod Lake)
18. Ts'kw'aylaxw (Pavilion)
19. T'sou-ke
20. Tsleil-Waututh
21. Tzeachten
22. Westbank^(b)
23. We Wai Kai (Cape Mudge)
24. We Wai Kum (Campbell River)

SK

1. Kahkewistahaw
2. Kinistin
3. Muskeg Lake
4. Muskoday
5. Whitecap Dakota
6. Flying Dust

ON

1. Anishinaabeg of Naongashiing
2. Georgina Island
3. Henvey Inlet
4. Mississauga
5. Nipissing
6. Scugog Island
7. Whitefish Lake

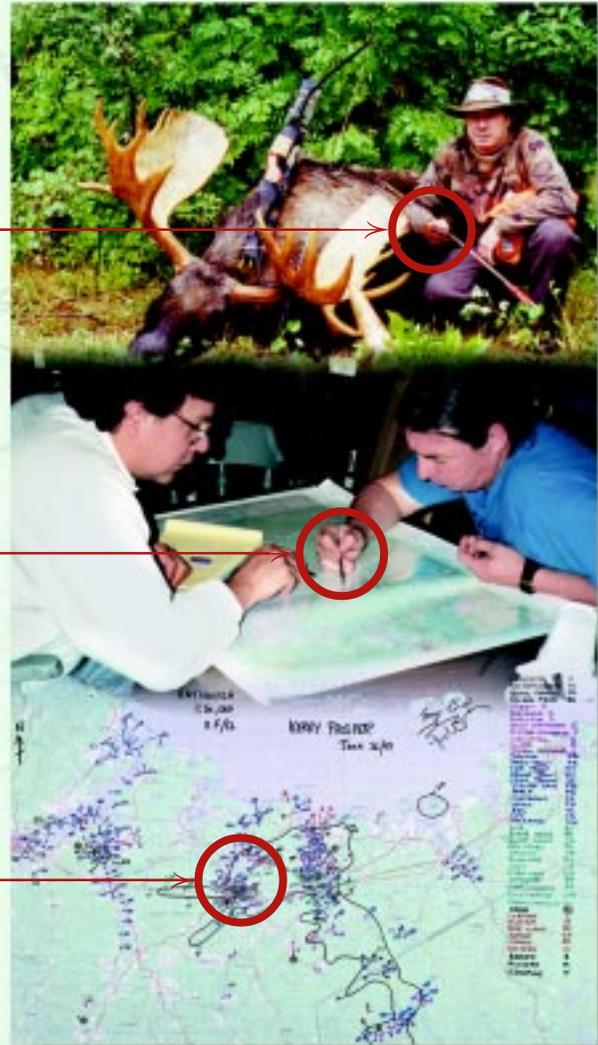
(a) Now implementing treaty

(b) Now implementing full self-government

CHIEF KERRY'S MOOSE

a guidebook

to land use and
occupancy mapping,
research design
and data collection



by Terry N. Tobias

A JOINT PUBLICATION OF THE UNION OF BC INDIAN CHIEFS AND ECOTRUST CANADA

THE FRONT COVER

The top photograph on the front cover shows Kerry Prosper, who was Chief of the Afton First Nation at the time, with a bull moose he killed in 1995 to feed his family. This particular hunt was believed to be the first time in generations that a Mi'kmaq hunter killed a moose using a recurved bow. For this reason, this hunt held some symbolic importance for the nation. The middle photo shows James Michael, Director of the Treaty and Aboriginal Rights Research Centre of Nova Scotia, conducting a land use and occupancy mapping session with Kerry in 1997. The bottom photo depicts one of Kerry's map biography overlays that resulted from the interview. One of the hundreds of sites mapped is the location in the French Lakes area of Cape Breton where Kerry knocked down that moose.



CHIEF KERRY'S MOOSE

a guidebook to land use
and occupancy mapping,
research design and
data collection

*Part one in a series of publications intended for First Nation
researchers and decision makers, illustrating best practices
in land use and occupancy research and mapping.*

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The views expressed in this publication are those of the author, and are not necessarily shared by the Union of BC Indian Chiefs or Ecotrust Canada.

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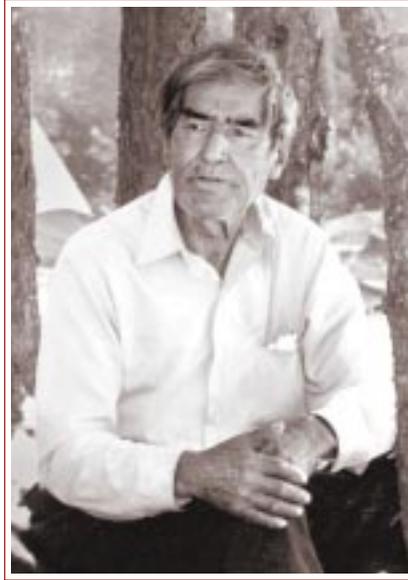
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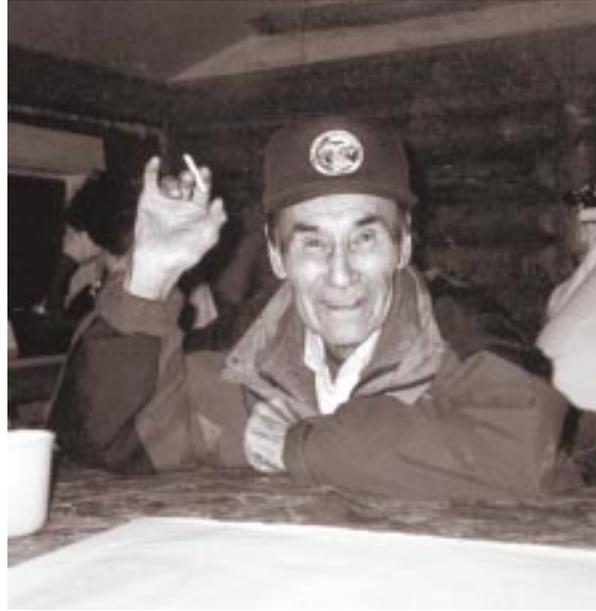
BAZILE DECOURSAY

1928-1993

*To Elder Bazile Decoursay, and all the elders
whose knowledge and wisdom continue to
enrich and revitalize the younger generations
of both First Nation and non-native peoples.*

AND

*To Dr. Peter Usher and Dr. Martin Weinstein,
generous colleagues and mentors, and leaders among
those who pioneered the Canadian land use and occupancy
research methodologies that are now being adapted
by indigenous cultures around the globe.*



CONTENTS

Introduction	xi
1 Land Use and Occupancy Mapping: A Definition and A Warning	1
2 The Tasks of a Mapping Project	4
3 Map Biographies and Composites	12
4 Doing Quality Research	19
5 Designing the Project: Why, Who, When, Where and What	33
6 Principles of Research Design and Implementation	38
7 Measuring Quality	49
8 Creating a Culture of Research	56
Summary	58
Glossary	62

Foreword

Information – access to it, or access denied – has long been at the root of how communities have expressed who they are, to themselves and outsiders. The oral traditions of First Nations have been – for hundreds of years – cherished and deeply respected ways of communicating complex information about culture, politics, the environment, and what we now call economics. After European contact, these oral communications were given less and less weight, and First Nations were put at a profound disadvantage in negotiating about their lands and resources. Just a few years ago, I remember talking to a provincial cabinet minister about forestry operations that were going to have a serious negative impact on Algonquin lands and the Algonquins’ ability to sustain themselves. The minister said, “Prove it to me!” Clearly, words were not sufficient. That was a seminal moment in my life, and in my work.

It became clear to me that sure, we had anecdotal testimony, but that was not good enough. How can you demonstrate that the activities of outsiders are affecting your survival? It is so difficult to prove to the non-native establishment that you’ve got rights. You have to be able to show the impact to a people who are not themselves land based. So you need to draw them a picture. That’s what land use and occupancy mapping is all about.

This has become even more important following the 1997 landmark Supreme Court of Canada ruling in *Delgamuukw*. Although the court found that oral testimony does have weight in law, the court also underlined the

need to demonstrate physical occupation of territory in order to prove Aboriginal title. The only way you can prove physical occupation is by telling the court, “I was here, I have a house here, I have a trapline here, hunt small game over here ...” All these are markers of occupancy, and the only way to prove occupancy is by having a map that sets out the evidence in terms the people across the negotiating table, or a judge, will understand and accept.

For many First Nations though, the question is, “How to get started in the right direction so that our maps end up really serving our community and nation?” This is where Terry Tobias’ guidebook on use and occupancy mapping will be an extremely useful and timely tool. It is aimed at the community level – for researchers, lawyers and planners working in Aboriginal and treaty rights research and natural resource management.

I have been working in this field for about 18 years as a lawyer, advising First Nations in the preparation of evidence both for court and negotiation purposes. In all these years, my experience has been that there is not enough attention paid to methodology and detail. As the competition for scarce natural resources increases it can be expected that research standards will be more closely scrutinized by governments, courts and third party interests as our nations seek to establish Aboriginal title to lands and resources. Therefore, it is important for First Nations and their advisors to know how to do this research and how to do it well.

Terry Tobias’ work provides sound guidance in this regard by an individual who is accomplished, credible and experienced in this field. I’d like to add that credit is due to the Union of B.C. Indian Chiefs and Ecotrust Canada for helping bring this important project to fruition, and getting this guidebook to communities where it is desperately needed.

So take heart. The research is worth the effort. Years ago the minister made his challenge, “Prove it!” And in those days, no logging company ever asked the Algonquins where they could cut. Now they don’t cut without asking the permission of the Algonquins.



David C. Nahwegahbow, LL.B.

David is an Anishinabe lawyer from Whitefish River First Nation near Manitoulin Island, Ontario. He practises Aboriginal law and has an office in Ottawa. David is also President of the Indigenous Bar Association in Canada.

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In 1982 George Smith and the Northern Village of Pinehouse invited me to live in their community and help design research that would demonstrate the importance of traditional resources to their way of life. In preparation, I wrote Martin Weinstein and asked his advice. He sent me a copy of Dr. Hugh Brody's beautifully written book, *Maps and Dreams*, which was then just hot off the press. That book documented the Union of BC Indian Chiefs groundbreaking and successful attempt to employ land use and occupancy mapping to help stop the construction of a pipeline. In some ways then, things are coming full circle with *Chief Kerry's Moose*, another UBCIC initiative. I would like to acknowledge the president of the UBCIC, Chief Stewart Phillip, and Leigh Ogston and all the other personnel whose ongoing endeavours are providing quality guidance, reference materials and conferences for First Nation researchers at the community, regional, national, and international levels. I would like to thank once again George Smith and all the people who welcomed me into their community almost two decades ago, and who were so good to me during my Pinehouse years.

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Introduction

A boriginal peoples in Canada have been mapping aspects of their cultures for more than a generation. Indians, Inuit, Métis, non-status Indians and others have called their maps by different names at various times and places: land use and occupancy; land occupancy and use; traditional use; traditional land use and occupancy; current use; cultural sensitive areas; and so on. I use “land use and occupancy mapping” in a generic sense to include all the above. The term refers to the collection of interview data about traditional use of resources and occupancy of lands by First Nation persons, and the presentation of those data in map form. Think of it as the geography of oral tradition, or as the mapping of cultural and resource geography.

Most aboriginal communities in Canada – even some of the urban ones – have done this type of mapping. Some have completed whole series of map projects, each presenting a different theme. Others are now updating maps they first compiled years ago. People are busier than ever in their efforts to map various dimensions of use and occupancy. There is a good chance your community has recently done such a project, is doing one now, or is planning one. Possession and control of cultural data translates into considerable political power, at both the negotiating table and in court.

Think of it as
the geography
of oral tradition.

Governments probably will not drop extinguishment and surrender from their agendas.



Many land use and occupancy studies document the locations of natural features that are considered especially sacred or spiritual. Jayne Konisenta, Petr Cizek and Peter Marcellais, Chief of the Nahanni Butte Dene Band, pose on the frozen Nahanni River, Northwest Territories. In the background is Nahanni Butte, the feature from which the band takes its name. Community members identified the mountain as a sacred site during their mapping project.

Good quality mapping can be used in support of many different projects, some of which are listed below.

- ◆ Documenting elders' oral history before more knowledge is lost.
- ◆ Determining shared use areas and reconciling boundary conflicts between neighbouring aboriginal communities.
- ◆ Providing evidence for court cases involving aboriginal rights and title.
- ◆ Settling treaty and claims under federal land claims processes.
- ◆ Supporting compensation claims.
- ◆ Negotiating co-management agreements.
- ◆ Negotiating protective measures and benefits from industrial development.
- ◆ Determining probable impacts of development.
- ◆ Supporting injunctions to stop unwanted development.
- ◆ Providing baseline data for long-term community planning and resource management.
- ◆ Supporting administrative programs such as land use permitting.
- ◆ Developing education curricula.

Any group with aspirations to meaningful self-government and recognition of rights will engage in this kind of research. Governments probably will not drop extinguishment and surrender of aboriginal title from their agendas, although they may use different words for them. The need to do cultural research will remain as important as ever. Your grandparents' and parents' knowledge about their cultural pursuits and use of resources is central to getting recognition of rights in today's political climate. Similarly, the ability to document your own and your childrens' land and water-based activities may be critical for proving title and rights in the decades to come.

Even in a friendly political climate, an aboriginal government must acquire, update, and control access to an inventory of its people's cultural resources. Self-government requires the capacity to manage resources. Baseline inventories of cultural sites are needed and periodically need to be refined, verified and updated. Culture is not static or fixed in stone – patterns of occupancy and use change over time. There will always be a need to do good research, whether this involves collecting an initial baseline inventory or doing subsequent monitoring for change.

Many First Nation groups and communities have expressed concerns about a lack of clear direction for generating maps that will serve them well. This guide offers some ideas and recommendations that will result in

the construction of good maps. It is based on almost two decades of experience designing land use and occupancy mapping projects, and working with indigenous peoples at the community level to collect the data they need. The recommendations are grounded in hard experience of what has and has not worked for these kinds of projects.

This book is for leaders, administrators, and program personnel at the community or First Nation government level, as well as their consultants and external research people, and community researchers who have had experience with similar kinds of studies. The information and ideas contained here should be of use to anyone who has the responsibilities of designing mapping projects and providing guidance to community interviewers.

What follows is a consideration of the key factors that lead to success for aboriginal mapping. I do not offer a simple formula, or off-the-shelf methodology, that can be applied across the board. This is impossible. There are so many different reasons that research is done, a huge range of cultural and linguistic diversity among Canada's indigenous communities, and enormous contrasts in various nations' relationships to resources. The lifestyles of an urban community, and its dependence on traditional harvesting, are very different from a northern village's.

The discussion starts with what land use and occupancy mapping is about and cautions you to consider an important distinction between use and occupancy. I then outline the tasks involved. The concepts of map biography and map composite are introduced with the help of samples from a particular project. The guide then emphasizes the importance of quality data, and goes on to stress that although people tend to underestimate the challenge of obtaining good data, it is straightforward once you know how to conduct what is called social science. The importance of avoiding the museum approach to mapping is highlighted, followed by a look at how to lay the groundwork for good research. Obtaining and training good personnel, taking control of research design, and respecting your workers' limitations are discussed. Special attention is paid to response burden, the factor that most commonly undermines research. The five defining characteristics of any project (the why, who, when, where, and what) are discussed, along with the principles guiding research design and implementation, the measures of quality, and the culture of research. The guide ends with a summary of recommendations. There is a glossary at the back to help the reader with terms that may be unfamiliar.

The recommendations are grounded in hard experience of what has and has not worked for these kinds of projects.



In addition to natural features, sometimes human-made structures are considered to have a special spiritual significance and are mapped as sacred sites. Many Inuit consider their Inuksuit sacred and locate them on maps during land use and occupancy projects. This Inukshuk is near Pangnirtung on Baffin Island, Nunavut.



Land Use and Occupancy Mapping: A Definition and a Warning

Despite the tremendous diversity among First Nations they all share one thing – the harvesting of fish, wildlife, and plant materials has been the historical basis of economic life. Many aboriginal communities remain dependent on wild mammals, birds, fish, other creatures, and undomesticated plants to feed and shelter themselves. In the pursuit of the resources that continue to be the foundation of their cultures, people leave traces over the landscape, evidence that they have been there. Many of their activities leave no visible evidence, however. Instead, they etch themselves in the minds of those who travel their homeland in search of physical and spiritual sustenance.

First Nation peoples carry maps of their homelands in their heads. For most people, these mental images are embroidered with intricate detail and knowledge, based on the community's oral history and the individual's direct relationship to the traditional territory and its resources. Land use and occupancy mapping is about documenting those aspects of the individual's experience that can be shown on a map. It is about telling the story of a person's life on the land. Over time individual experience becomes part of the collective oral tradition, a story of much grander proportions. In this respect, use and occupancy mapping is a means to help record a nation's oral history.

Mapping is not just about obtaining a set of maps. There are other benefits that arise from the process of obtaining them. When properly done, use and occupancy interviews increase the participants' awareness of their



Elder Peter Hunter and Stan McDonald of the Wolf Lake First Nation take a break during Peter's map biography session in Temiscaming, Quebec. Land use and occupancy projects provide a great opportunity for individuals of different generations to share their experience, information and knowledge.

Land use and occupancy mapping is about telling the story of a person's life on the land.



Elders Felix Tale of the Pehdzeh Ki First Nation and Leo Norwegian of the Liidlii Kue First Nation share stories at the Horn Plateau, Northwest Territories, during a workshop to design a protected area for the plateau. Use and occupancy maps often get used in ways that bring together elders from different villages, which helps keep the bonds between communities strong.

connection to territory. People are usually surprised to see how much they have used their land. They often have a new-found sense that their activities as individuals are part of a larger picture involving the whole community. Mapping always gives rise to a heightened awareness of aboriginal rights that have been denied, and an increased willingness to be involved in strategies to right long-standing injustices. There are opportunities for individuals of different generations to share their experience, information and knowledge.

Elders from different villages are often brought together, renewing bonds between communities and strengthening the First Nation. Overall, land use and occupancy mapping helps to invigorate a people's pride in its cultural heritage. In addition, the administrative and technical capacity acquired through successful mapping projects increases the nation's abilities to administer and manage its territory.

Listed below are some of the types of land use and occupancy information that have been mapped by aboriginal groups.

- ◆ Places where animals are harvested for food, clothing, medicines, tools, and other purposes.
- ◆ Places where plant materials are harvested for food, clothing, medicines, tools, shelter and fuel.
- ◆ Places where rocks, minerals, and soils are collected for making tools, conducting ceremonies, and other purposes.
- ◆ Ecological knowledge of habitats and sites critical to the survival of important animal populations; for instance, caribou migration corridors, islands where moose calve, waterfowl breeding grounds and staging areas, and spawning beds.
- ◆ Habitation sites, such as settlements, trading posts, cabins, camps, and burial grounds.
- ◆ Spiritual or sacred places such as ceremony sites, rock paintings, areas inhabited by non-human or supernatural beings, and birth and death sites.
- ◆ Legends and other accounts about specific places.
- ◆ Travel and trade routes.
- ◆ Aboriginal place names.

Dr. Peter Usher, one of the pioneers of land use and occupancy methodology, has made an important distinction between "use" and "occupancy." He regards some of the above kinds of information as evidence of one or the other, but not both. Peter has looked closely at this distinction while examining First Nations' maps, and his work indicates that it is critical to pay attention to the difference between use and occupancy when using maps in certain political processes.

The following distinction draws directly from Peter's work:

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.

Occupancy refers to the area which, as Peter puts it, a "particular group regards as its own by virtue of continuing use, habitation, naming, knowledge, and control."

These two geographic areas are usually different in extent. Use mapping documents the locations where activities like hunting, fishing and travelling occur. Occupancy mapping, by contrast, records the following types of information: stories and legends about places; ecological knowledge of places; indigenous place names; habitation sites like cabins and burial grounds.

The geographic extent of use tends to be larger than the extent of occupancy, and in Peter Usher's words, "limits of occupancy are likely to be much more stable over time than the limits of use; the mapping of occupancy, in contrast to use, would normally reveal both much less overlap and a more obvious boundary between aboriginal territories" (Figure 1).

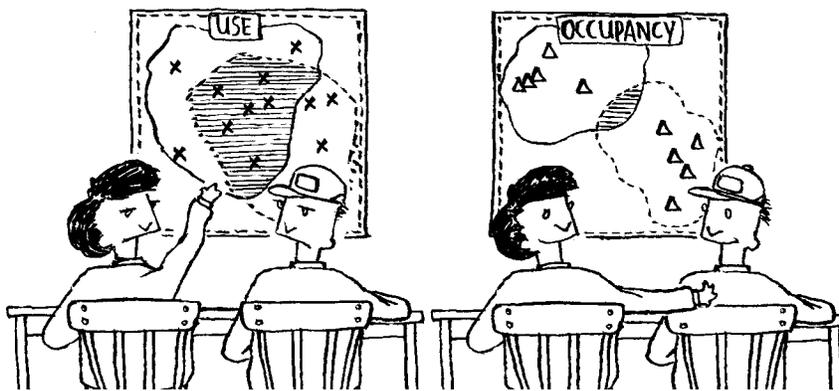


FIGURE 1 Use Versus Occupancy

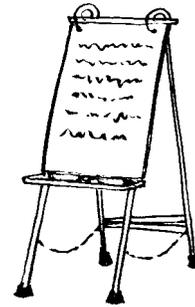
For many neighbouring nations, territorial limits based on the mapping of use – the harvesting of traditional resources – probably generates a lot of artificial overlap. A problem is that infrequent and far flung trips to obtain animals and plants, often with the permission of the adjacent nation, get included. The mapping of occupancy – locations about which people have knowledge of ecology, legends and indigenous place names, and where they have built habitations and buried their dead – is likely respectful of the nations' true territorial limits while generating less overlap. Negotiations based primarily on occupancy would, it seems, be more constructive in reconciling First Nations' interests.

The really important point that Peter makes is that the overlap problem in current claims processes is probably the result of mapping use instead of occupancy. Claims based on mapped occupancy would almost certainly generate less boundary conflict between nations, while still respecting nations' own understandings of their territorial limits. Land claims processes get seriously bogged down because of the overlap issue. This may serve non-native government agendas, but it frustrates the aspirations of aboriginal peoples. If you are going to use data to identify territorial boundaries for purposes of land claims, think about whether it is in your best interest that the negotiations be based primarily on occupancy data.

the three key factors that must be in place for use and occupancy mapping to succeed. (Its importance is discussed in *Laying the Groundwork for Good Research* in Chapter 4.)

TASK 2 Hiring and Training Personnel

The second key factor for success is the team of people who do the interviewing. These individuals must have dedication to the project and the skills needed to collect data from community members. (Discussion of *Research Personnel and Training* appears in Chapter 4.)



TASK 3 Development of Research Design and Testing of Interview Guide

Data collectors will be using an interview guide when they ask community people for their use and occupancy information. The interview guide points to the third factor that must be in place for the mapping to succeed. It guides the asking of questions, and is the most concrete expression of research design. (This entire book is about research design, but the following sections are most to the point: Chapter 4: *Avoiding Response Burden*; Chapter 5: *Designing the Project*; Chapter 6: *Principles of Research Design and Implementation*; and Chapter 7: *Measuring Quality*.)



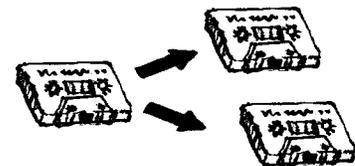
TASK 4 Interviewing Participants and Collecting Map Biographies

Use and occupancy data are collected using a standard method known as the map biography. This is a face to face interview during which the participant indicates on a map the places he or she has harvested resources or gone to for spiritual purposes. In some cases the participant also marks places that he or she has never used or even visited, but has knowledge about. (See Chapter 3: *Map Biographies and Composites*.)



TASK 5 Replication and Storage of Raw Data

After data are collected, it is a good idea to make copies of the maps and tapes that contain them. Most nations now recognize the importance of having back-up copies of all raw data, because many communities have lost irreplaceable data through fire, vandalism, water damage, or simply by losing track of materials when community administrations change or move from one building to another. Videocassettes, audiocassettes, and research notes can be easily copied, and maps or overlays can be reproduced using a variety of processes including photography and blueprinting. Copies and originals should be stored in separate and secure locations. One nation carefully copied all its raw data, then stored the copies alongside the originals. An arsonist torched the building, destroying years' worth of data, much of it from elders who had passed on.





Many communities have lost irreplaceable data through fire, vandalism, water damage, or simply by losing track of materials.

TASK 6 Translation of Indigenous Language Interview Tapes

Sometimes it is necessary to have all the interviews done in the indigenous language. For instance, some use and occupancy mapping involves getting information that is best expressed using the first tongue, things like ecological knowledge and aboriginal place names. Other kinds of data can be as easily obtained using English or French.

Is it necessary to interview all participants about where they harvested resources or travelled or camped on their territory, in the indigenous language? Although ideally this would be preferable, the question raises two important issues.

- ◆ Many communities now have only a handful of people who understand the old people's vocabulary and their way of using language well enough to make a good translation of their language.
- ◆ Translation work is very time consuming, which means it is also expensive.

These two factors can create a situation where the audiocassette data are temporarily, even permanently, unavailable. Also, because of the intensity of translation work and the possibility of burnout, the best research design might involve using your skilled translators only when they are really needed.

Obviously, any elder who does not speak English or French, or who has a strong preference to be interviewed only in their first language, should have her or his wish respected.

TASK 7 Transcription of Audiocassettes

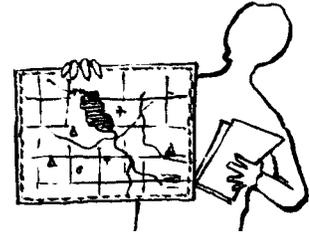
Interview tapes contain raw data that need to be converted into written or typed form, called transcripts, so that they can be turned into a useable research product like a report. Whenever possible transcripts should be input into a computer because a word processor allows users of the data to search for information electronically.

Sometimes it is necessary to make verbatim transcriptions, in which every word heard on the tape is recorded in the transcript. This is very time consuming and expensive, requiring about nine hours of labour for each recorded hour. It should be undertaken only when really necessary so that more of the project's budget can be used for other tasks. It may be necessary to make verbatim transcripts in preparation for court, but is it necessary to do so when producing a report for presentation at a co-management table? A lot of material can be transcribed using a non-verbatim approach, requiring perhaps three hours of labour for each cassette hour.



TASK 8 Review of Transcripts and Map Biography Data

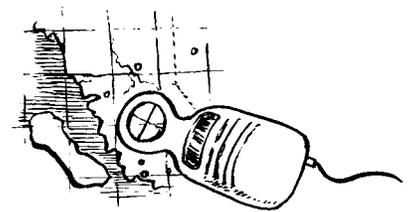
In this task the reviewer carefully reads each participant's transcript while checking the data that were marked on that person's overlays or maps during the interview. There might be a checklist of two or three dozen items that have to be kept in mind while looking at each overlay. This review has three main purposes. One is that the material in the transcript is checked for consistency with the material marked on the overlays. Any contradictions, omissions, or other problems are noted for clarification by the participant. A simple example would be a burial site on the map that is not mentioned in the transcript. Two, the reviewer also makes sure everything marked on each overlay follows the rules the interviewers were supposed to use during data collection (Task 4). Are the titles and labels correct, map symbols readable, and polygons completed? This process makes the digitizers' job (Task 9) much easier and shorter. The third main reason for doing the review is that all the transcript data are coded, in the margin of the transcript copy, in preparation for database entry (Task 11) and report writing (Task 13).



TASK 9 Digitizing Data on Map Biographies and Producing Digital Composites

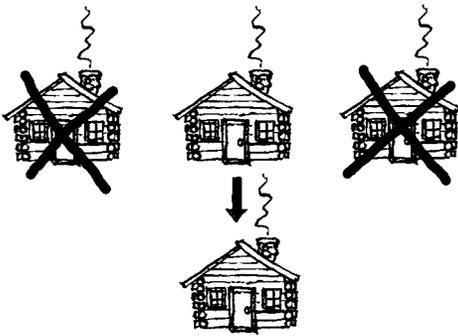
Digitizing is the process of converting data that have been marked on overlays or paper maps into electronic form. Data are stored in a computer running geographical information systems (GIS) software, which is a mapping software program. All the data appearing on all participants' overlays get digitized. Once they are in electronic form, they are checked against the original hard-copy maps or overlays, to make sure the digitizers did not accidentally omit data or locate some inaccurately. The digitized information can then be stored and combined in different ways. Various combinations are produced as digital composites and can be displayed on the computer screen (Task 10). They can also be printed as composite maps on paper (Task 12), again showing any combination of data. Flexibility alone makes developing GIS capacity a good investment when possible. Producing map sets by hand will meet certain limited objectives, but the disadvantage is that all that work goes into producing a set of maps that can only be used for one or two purposes. GIS costs are high, technicians need a lot of training and experience, and digitizing is time-consuming, but once the data are digitized your nation can always add new data, or go back and print out new maps that show different combinations of old data.

Flexibility alone makes developing GIS capacity a good investment when possible.



TASK 10 Elimination of Redundant Data

Use and occupancy mapping typically involves interviewing many individuals separately and then combining all their data on one set of maps to represent the community's ties to its territory. This process produces many duplications of mapped features. The same important sacred area or berry site or cabin might be mapped by many dozens of participants. Some individuals will consider the extent of the site to be different than others and some will locate it more accurately than others. When you combine all the data you often end up with a cluster of many markings that represent a single feature. If the maps are to be used as an inventory for management and operational planning, it is important to eliminate as much of the duplicated data as possible.



Data are never removed from the individual's map file inside the computer, but rather from the community's composite file. This is done using the GIS while looking at the data on the computer screen, and while referring to the transcript information. Decisions about which data to delete are based on several factors: the known reliability of the participants, their ability to see and read maps, their level of effort during the interview, and so on. A lot of judgment is used in this process, and it is best if the person cleaning up the data is familiar with the participants. By the end of this task you will have a set of community maps (Task 12) that shows only a single datum for each feature. This set is preliminary but it forms a sound basis for community verification (Task 12).

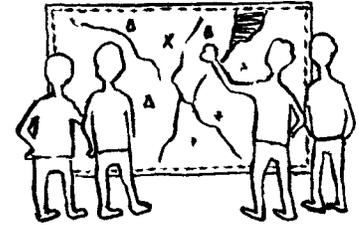
TASK 11 Entry of Descriptive Data into a Database

The information in each participant's transcript (Task 8) that describes the mapped features is entered into a database, on a feature by feature basis. For example, when Henry Patomogan indicated his father Martin's first cabin site, he reported that he first went there when he was about eight years old, and that he was there with Martin and Martin's brother Sam, both of whom were trapping at the time. Henry also reported that he had returned to the site many times to go fishing and also for hunting moose and snaring rabbits. The last time he used the cabin was the summer three years ago when it burned down. All these data are entered into the computer. When everybody's data are entered, the database can easily combine all the information about Martin Patomogan's first cabin site, which then represents a community history of that site. The database is very useful for report writing (Task 13), because it brings together everything recorded about any mapped feature you ask it about.

	LOCATION	INDICATORS PRESENT	USES
1	MIMISITTE	NO	AMERICAN
2	WIPRITTE	YES	TRAPPING
3	NANISITTE	N/A	1..
4	EMSPITTE	YES	1..
5	WIPALITTE		

TASK 12 Verification of Community Maps

It is always a good idea to print off a set of large paper maps that display the community's use and occupancy data, and to have groups of community members examine them closely. These meetings are useful for verifying the overall quality and completeness of the mapped data. A record of all comments should be kept. Corrections to existing information often emerge, as well as additional data, resulting in an improved set of revised community maps.



There is another reason to budget for these meetings when designing your research plan. When people see their community's use and occupancy information shown on maps for the first time, they are almost always surprised and delighted. When use and occupancy research is done well, the maps are always impressive. These occasions are usually the first time that people really understand what the research project is about. They are often the first time that people see clearly how their personal stories are part of a community system, part of a much larger story. There is often a great sense of satisfaction and empowerment in this experience. Verification meetings are an important part of the research plan. They are much more than a simple exercise in getting a stamp of approval from the community.

TASK 13 Report Writing

A description of how the use and occupancy mapping data were collected is necessary if you expect people to take your maps seriously. This is called methodology, and should be as detailed as possible without breaking confidentiality. Sometimes a report may also summarize the material found in the transcripts. The exact nature of your reports can vary a lot, depending on the objectives of your project.

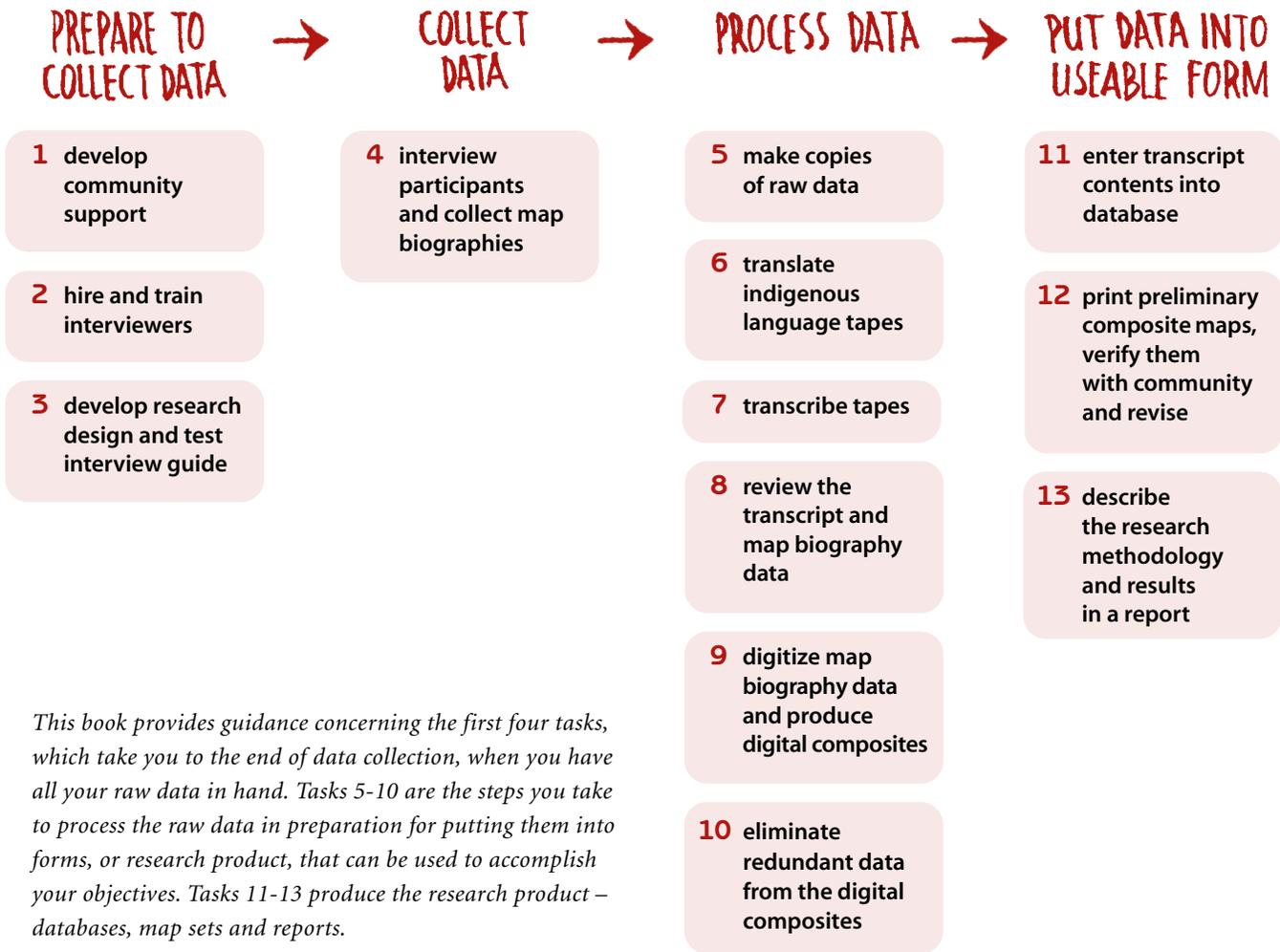


In addition to the 13 tasks shown in Figure 2 (on the following page), there is a lot of administrative work involved in a land use and occupancy project, including the development of work plans and budgets and obtaining funds. Interviewing participants is only one of a number of tasks, most of which can take weeks or months to complete. Sometimes use and occupancy mapping is started before administrators know how much budget is required for later tasks. Avoid the mistake of assuming that data collection is the sole major expense. Budget realistically for all the tasks.

It is important that people doing the major tasks shown in Figure 2 are consulting with each other on an ongoing basis. As much as possible, consultation should begin prior to the start of their tasks. For instance, you

When people see their community's maps for the first time, they are almost always surprised and delighted.

FIGURE 2 Major Tasks of Land Use and Occupancy Mapping Projects



This book provides guidance concerning the first four tasks, which take you to the end of data collection, when you have all your raw data in hand. Tasks 5-10 are the steps you take to process the raw data in preparation for putting them into forms, or research product, that can be used to accomplish your objectives. Tasks 11-13 produce the research product – databases, map sets and reports.

should think about GIS use when designing data collection procedures. You can make the GIS activities much easier by building in small details to data collection. Digitizers often have preferred ways for interviewers to label overlays, mark data, and indicate the grid locations on the map biographies.

**Budget realistically
for all the tasks.**

The way in which interviewers, translators, transcribers, transcript reviewers, digitizers, data entry clerks, and report writers do their jobs greatly helps, or hinders, those who work with the material later on. For example, the manner in which an interviewer marks data on the overlays can make an enormous difference to digitizers, speeding up their work tremendously if the marking of symbols is done carefully. Each person involved in any of the major mapping tasks should have a solid understanding of the

other tasks, and each should have easy access to the others' methodologies. Digitizers, for instance, should have copies of the data collection methodology for quick reference. The more understanding that project personnel have about each others' methods and responsibilities, the more smoothly the project will progress.

Just as each mapping project task should be done with reference to all other tasks, each use and occupancy project itself should be done with all other past community research projects in mind. For example, you should choose a database that is compatible with databases used in earlier projects. Paying attention to database compatibility saves huge headaches and unnecessary expense later on.



Michel Thusky of the Algonquins of Barriere Lake stands beside the stone foundation of a nineteenth-century trading post that had remained lost to historians until the day this photograph was taken. Old habitation sites like this post hold special significance to First Nations, and are usually mapped during land use and occupancy studies.

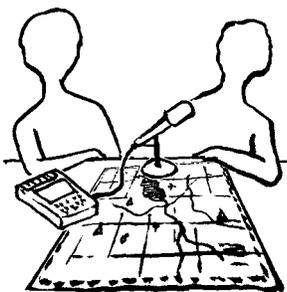


Map Biographies and Composites

Land use and occupancy projects typically collect data using what are called map biographies. These are face to face interviews with individuals who are asked questions about their use of the community's territory. Throughout the session the locations of the use and occupancy sites are indicated on a paper base map, or onto a clear overlay taped over the map. Usually the interviewer asks for information about the participants' experience of the land base or seascape over their entire lifetime. That is why it is referred to as a biography, although it might more correctly be thought of as an autobiography.

Most researchers focus on obtaining data pertaining only to the participant's direct personal activities and experiences. Others have found it useful also to ask for information about knowledge of sites obtained from parents and elders. If the interviewer covered enough topics and the participant had perfect memory and was willing to sit at the mapping table long enough, the resulting biography would represent everything that could be marked on a map. This of course never happens. What does emerge from the map biography is a useful but simple and incomplete representation of the participant's life story on the land and waters of the territory.

Some practitioners restrict their use of the map biography method to questions about harvesting activities like hunting, fishing, trapping, and gathering, and travelling to engage in those activities. Others extend the

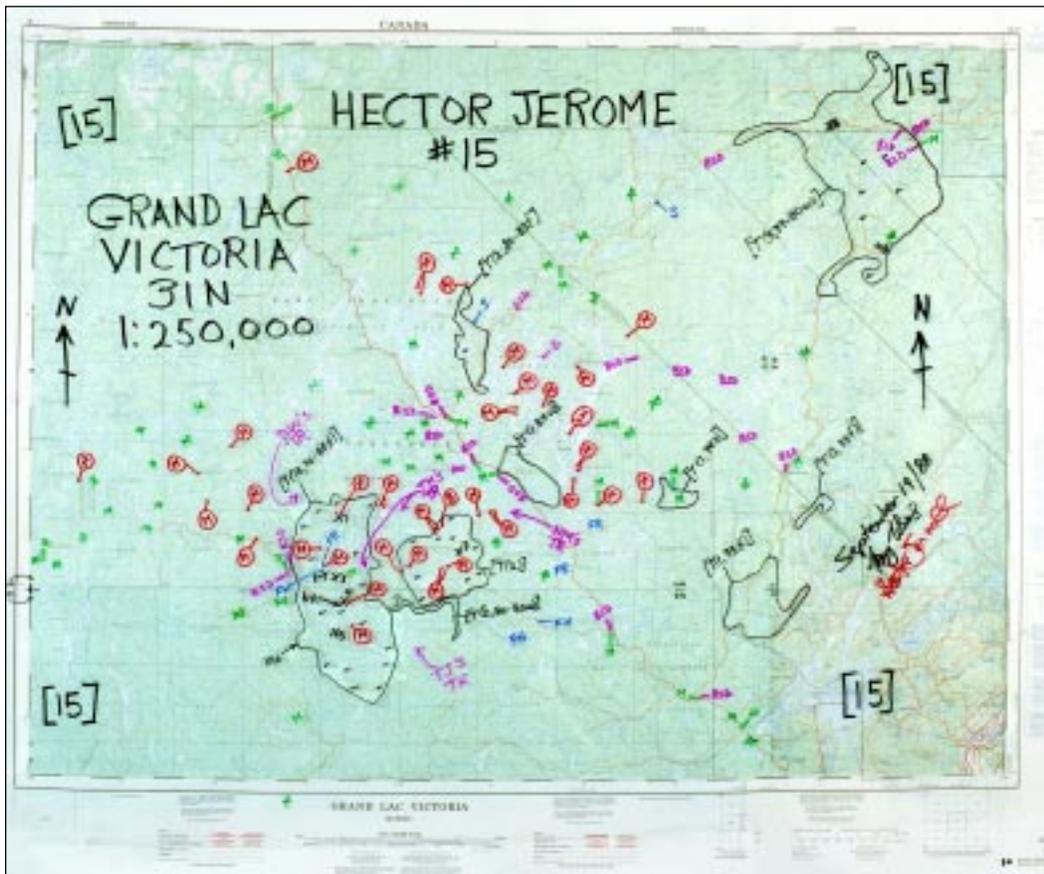


map biography method to cover questions about the participant’s experience and knowledge of ecology and critical wildlife habitat, traditional habitation sites, spiritual and sacred areas, legends and stories associated with sites, and aboriginal place names.

In the photograph to the right, Hector Jerome is getting ready to do his map biography. He is a member of the Algonquins of Barriere Lake, near Rapid Lake, Quebec. The community did a number of different use and occupancy mapping projects. It needed the information for a co-management agreement aimed at ensuring that the Algonquins would always be able to pursue traditional activities on their territory. Map 1 shows the data that were marked on Hector’s map biography during one of his interview sessions.



Hector Jerome prepares to do his map biography interview with the help of Scot Nickels and Sue Roark-Calnek.



MAP 1

This is one of Hector Jerome’s map biography overlays. The transparent overlay is taped to a mosaic of four National Topographic System paper base maps.

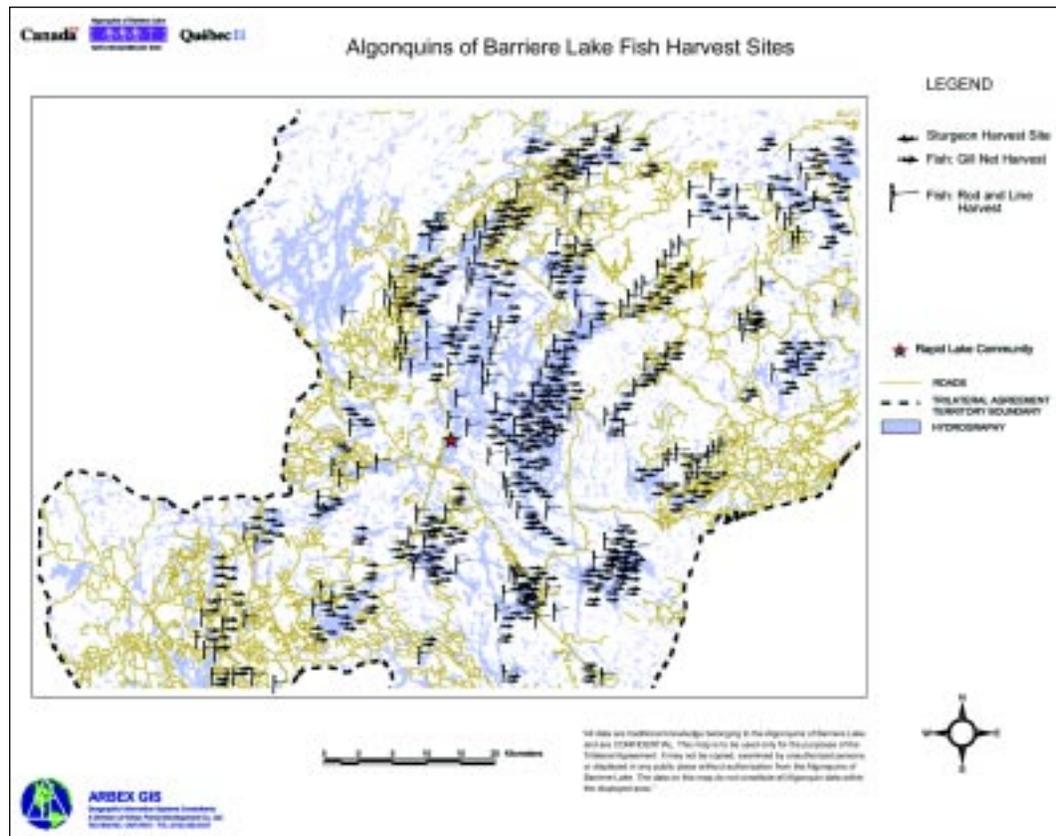
During that particular session, Hector was asked to indicate places where he had killed big game animals, small game, where he had caught fish, where he had done his trapping, gathered plant materials like berries, and the locations of cabins and camp sites he had used. In subsequent mapping sessions he recorded Algonquin place names and some of his main travel routes.

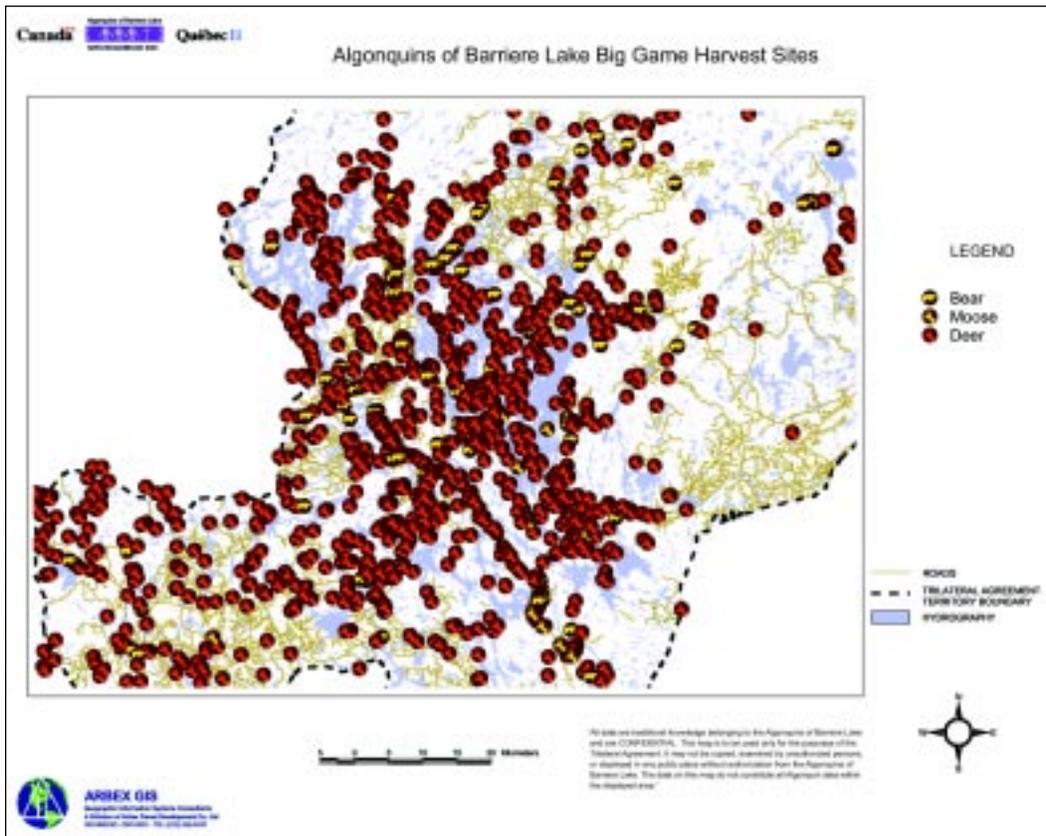
After some dozens or hundreds of map biographies are completed, the information from them is used to make a series of composite maps. These break out subsets of information provided in map biographies and combine them for all community members or for groups (teenagers, for example) in the community. The Algonquins of Barriere Lake project has produced the following seven map composites, which are preliminary and in draft form.

- ◆ Fish harvest sites
- ◆ Big game harvest sites
- ◆ Trapping areas
- ◆ Plant harvest sites, special wildlife sites, sacred areas
- ◆ Main travel routes
- ◆ Habitation sites
- ◆ Algonquin place names

MAP 2

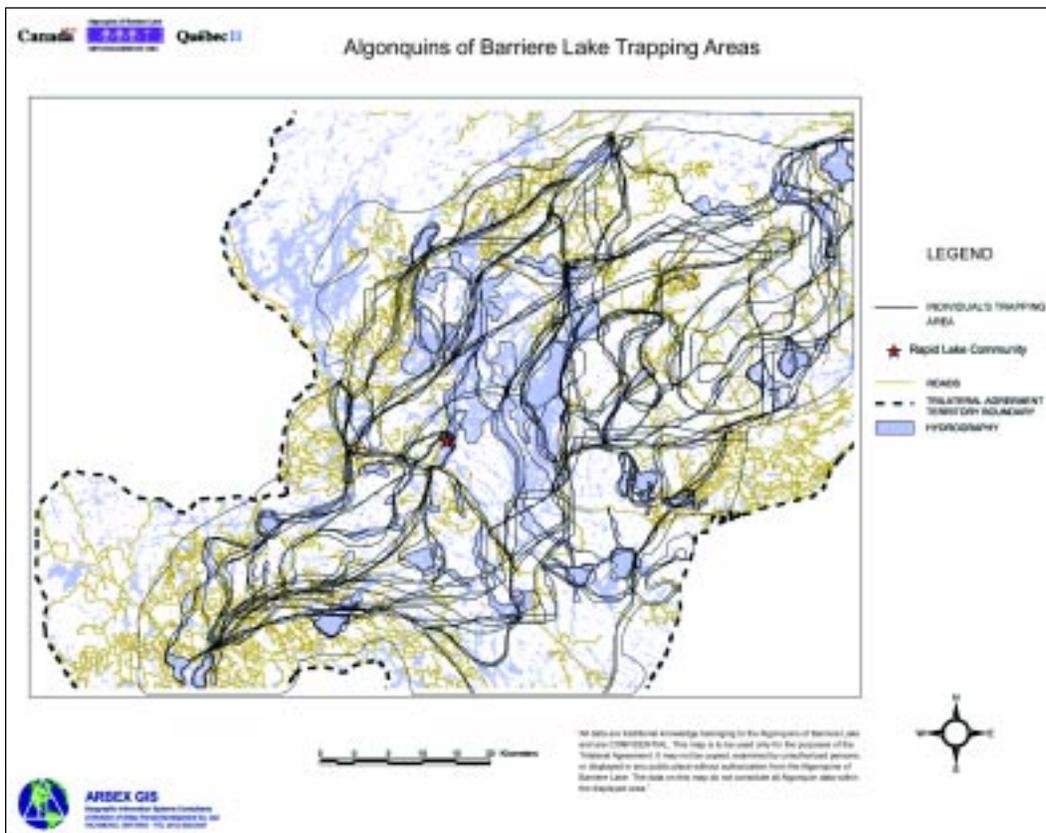
This composite shows some of the community's fish harvest sites. It displays a different symbol for each of sturgeon, fish caught in gill nets, and fish obtained by angling.





MAP 3

Some of the community's big game harvest sites are shown on this map. A different symbol is used for each of black bear, moose, and white-tailed deer.

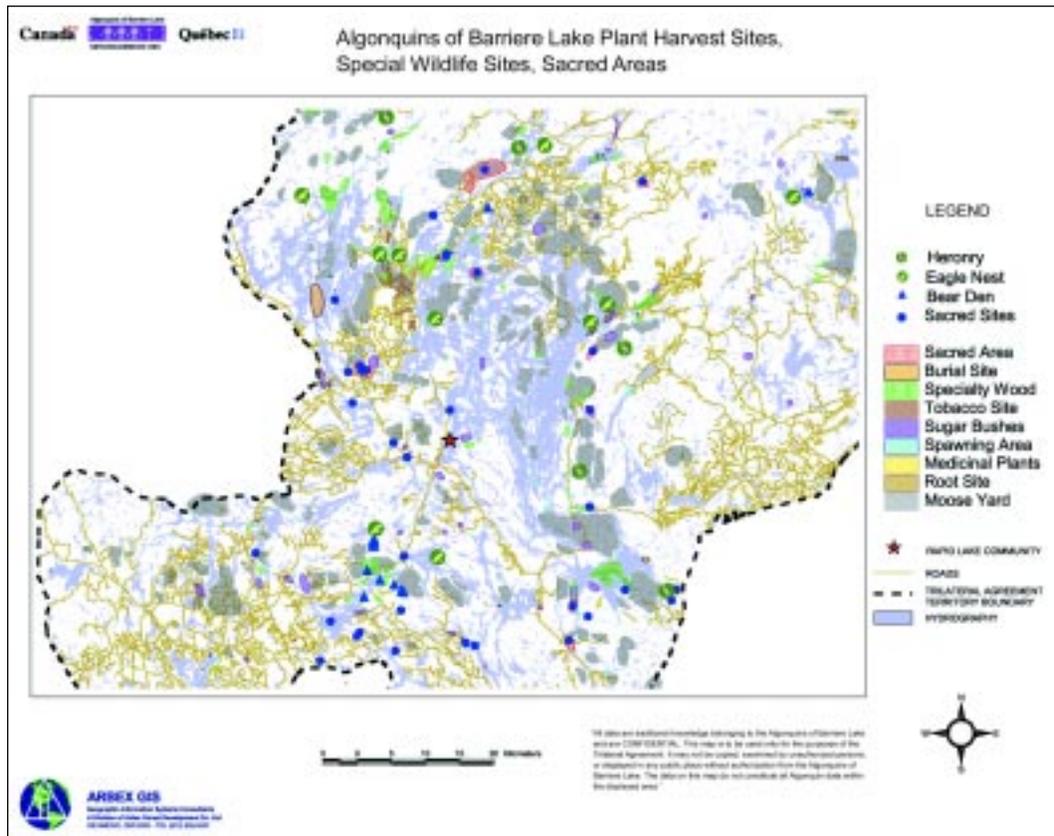


MAP 4

Each participant who had done any trapping indicated the areas trapped over their lifetime, and each of those areas is indicated on this composite as a polygon. The Algonquins call this their spaghetti map.

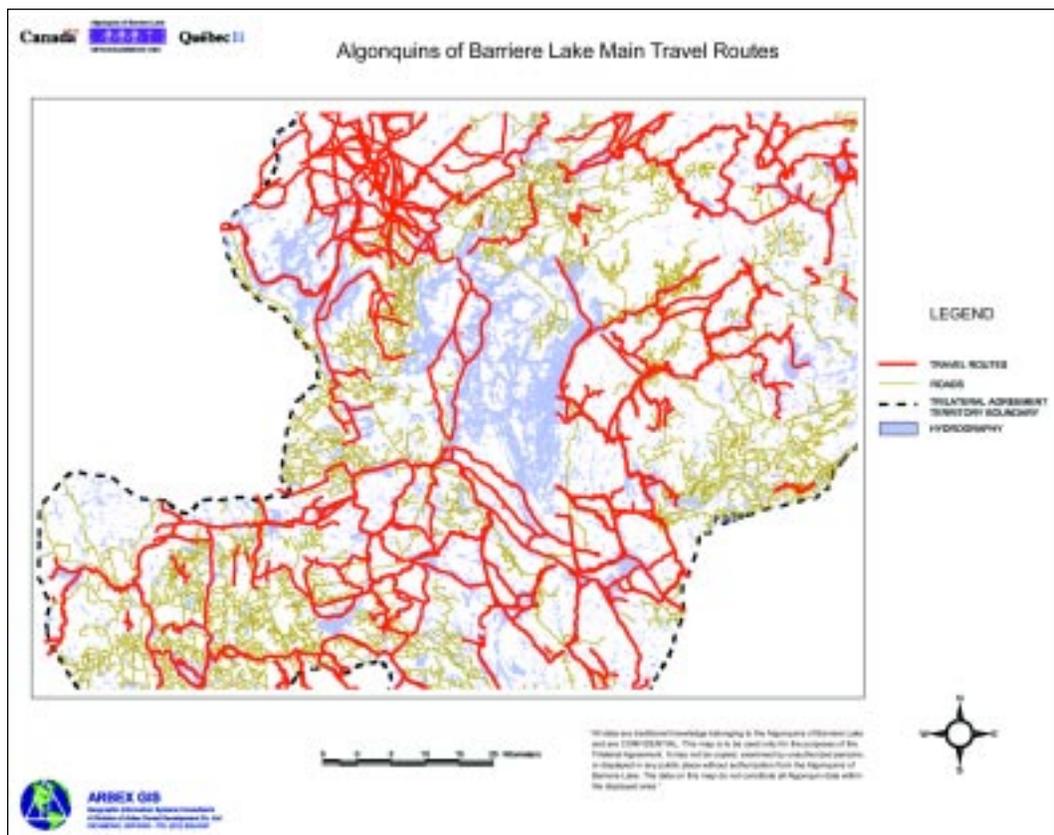
MAP 5

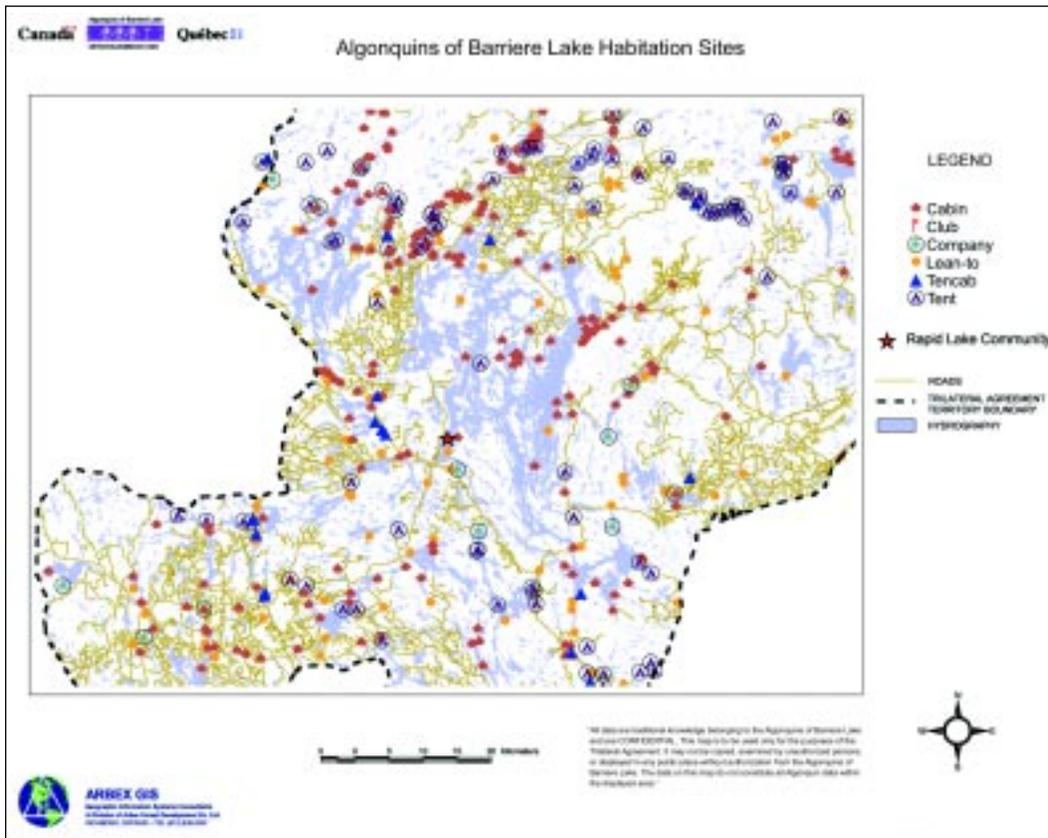
This composite shows some of the plant material harvest sites, special wildlife sites, and sacred areas. It displays a different symbol for each of the following: specialty wood, tobacco, sugar bush, medicine plant, root collecting, heronry, eagle nest, bear den, spawning site, winter moose use, sacred area, and burial site.



MAP 6

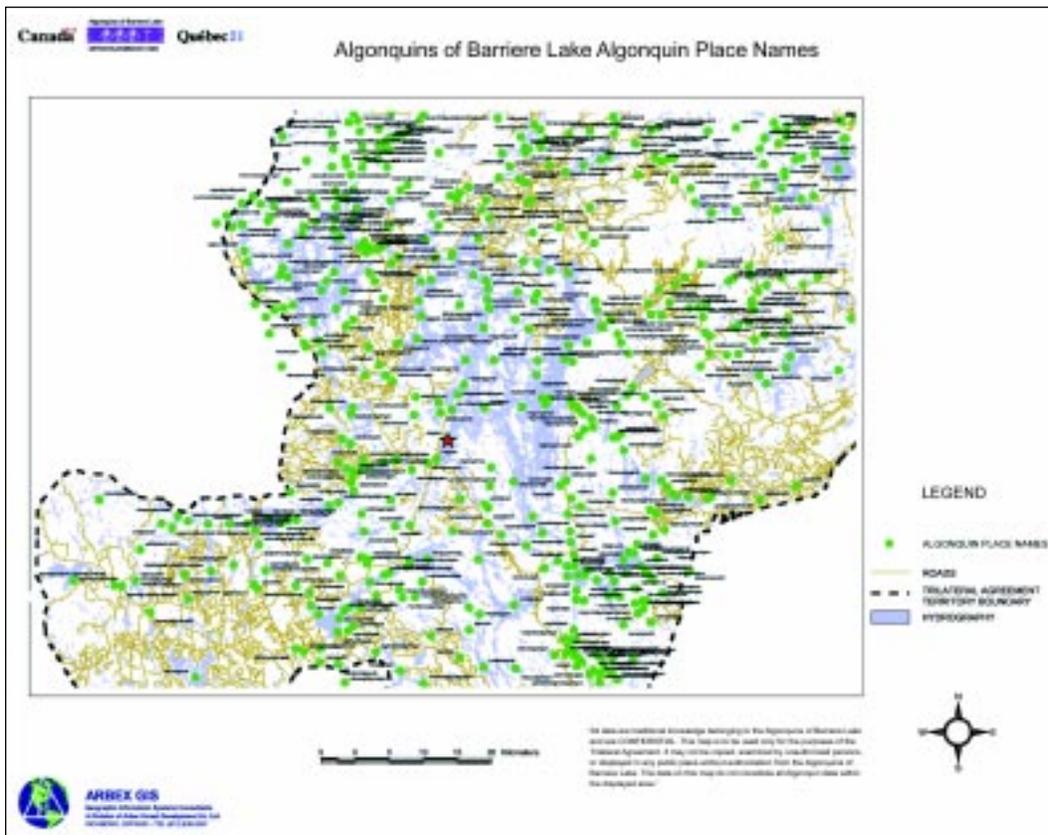
Some of the community's main travel routes are shown on this map.





MAP 7

This composite depicts some of the Algonquins' habitation sites. A different symbol is used for each of the following types of structures: trapper cabin, tourist camp, company building, lean-to, tent-cabin, and tent.



MAP 8

Approximately 900 Algonquin place names are displayed on this composite.

The categories for each composite change depending on what part of the country the mapping is being done for, which First Nation is doing it, and the intended uses of the maps. The Barriere Lake big game composite (Map 3) has three different symbols, one for each of moose, deer and black bear. In contrast, the Nahanni Butte Dene Band's big game composite might show symbols for each of moose, bighorn sheep, mountain goat, caribou, deer, black bear, and grizzly bear.

While the map biography is used for collecting an individual's use and occupancy information, the map composite is used for displaying or presenting the entire community's data. The biography is a data collection tool while the composites are what are used for presentation, education, negotiation, litigation, and so on.



Doing Quality Research

The history of Indian policy and the often adversarial nature of negotiations with government, industry, and sometimes with neighbouring aboriginal groups, suggests that the quality of mapped land use and occupancy data will remain a key factor in successful negotiations and litigation. Data quality may become even more important as populations grow, and as increasing numbers of corporations, agencies, and indigenous peoples lay claim to diminishing resources. This section of the guide addresses the issue of doing good research.

Most existing policies, guidelines and handbooks instructing indigenous organizations how to map their cultural resources are flawed, and often contain the seeds of failure. Sometimes the authors of such material work within institutions whose goals are not entirely compatible with those of indigenous communities. Or sometimes the people who write the material are not skilled at doing the very thing they are instructing others to do. In some provincial and territorial jurisdictions for instance, archaeologists and foresters are given the responsibility of producing the how-to material. They cannot be expected to put together guidelines for doing successful social science research in First Nation communities.

There are different standards of quality that your research can meet. Project designers often give insufficient thought to the issue of quality, and their final maps end up being of limited use. In some instances, data quality is so poor that maps end up not being used at all for fear that if others

Most existing policies, guidelines and handbooks contain the seeds of failure.



First Nations are always interested in mapping their current habitation sites, like this trapper's cabin made of logs, near Rapid Lake, Quebec, or the sod house shown below, in Mittimatalik (Pond Inlet) on Baffin Island, Nunavut.



There is an urgency
to document oral
history and traditional
knowledge for the
benefit of future
generations.

got hold of them the information would be used against aboriginal interests. Sometimes having no data is better than having poor data, because poor data can be used against you. The standard depends on the intended use. For instance, the level of quality needed to use data internally for curriculum development is different than that needed to succeed in a court action. If you aim your sights high, then your maps are likely to withstand any level of critical examination.

There are four good reasons to set your sights high.

- ◆ Mapped cultural inventories can be useful in many different contexts, even unforeseeable ones. It makes sense to collect the data in a manner that allows your community to use the maps in any situation.
- ◆ Land use and occupancy information warrants respect, even a level of reverence. It deserves to be documented in a manner that minimizes the probability that it will be dismissed or disregarded.
- ◆ Many aboriginal communities are losing the elders who possess knowledge that the majority of their children and grandchildren do not. There is an urgency to document oral history and traditional knowledge for the benefit of future generations.
- ◆ Doing good quality land use and occupancy research is no more expensive than doing poor work, especially when you consider the long-term consequences.

Some communities that did cultural mapping a decade ago, when there was no immediate threat to their resource bases, are doing the research over again. They realize that the original work was not done carefully enough to counter the unwanted industrial development that is now taking place on their territories. When you think of the long-term benefits that can result from negotiations about who gets access to your territories, and the potential role of data in those negotiations, it makes sense to adopt a single, consistent approach to research. Simply, if you are going to do it, do it well.

Doing research well is not the same as making the results look professional. Quality has to do with the manner in which data are collected while appearances have to do with the manner in which data are presented. The GIS technicians, using their computers, can make almost any data set look impressive, but they cannot improve the quality of the data.

Some aboriginal administrations have made the mistake of letting technology lead or define their research agendas. A large number of communities now possess GIS hardware and software but not the capacity to operate it well. They have fine-looking maps that are great to hang in the local

band office or school. Unfortunately, many of these same maps would not get taken seriously in negotiations with provincial, territorial, federal, or other indigenous governments.

Looks do not win points at the negotiating table, substance does. Remember, “garbage in, garbage out.” If the input is poor quality data, the output will be poor quality maps (Figure 3).



FIGURE 3 Garbage in, garbage out

The importance of having quality map data can hardly be overstated. If you take shortcuts and are sloppy with the design and implementation of your land use and occupancy data collection, do not count on getting to your desired destination.

Appreciating the Challenges of Oral History as Social Science

If you make the decision that you want to map the contents of oral tradition, and that you want to do it well, what is involved? Some things are obvious and others are not. A common problem is that an administration will assume its role is over once funding is obtained. This is a recipe for failure because the leaders are making the same mistake that the funding agencies often make. They underestimate what a potentially tough job the community’s own data collectors have in front of them.

It is natural to underestimate the difficulties of land use and occupancy mapping. “We have been passing knowledge from generation to generation for thousands of years,” your thinking might go. “What can be difficult about mapping aspects of that oral tradition?” The answer emerges when you consider the kinds of political processes in which your data can be used, and the basic assumptions on which those processes are built. Negotiation, mediation, and litigation are all based on an examination of the merits of concrete documentary evidence, part of the tradition of Western science.

Land use and occupancy mapping employs the rules of social science, which studies society and social relationships. The practice of it is social



Some of the structures that people stay in while at habitation sites are less permanent than log cabins or sod houses. Canvas tents are used at this bush camp near Pinehouse, Saskatchewan. Regardless of the permanency of the structure, all sites where people stay out on the land while hunting, fishing, trapping, gathering and travelling are significant, and usually appear on First Nations’ maps.

Looks do not win points
at the negotiating table,
substance does.



Land use and occupancy mapping studies sometimes document places where wild foods are prepared for consumption and storage. These places are usually but not always located at habitation sites. Elder Helen Natomagan of Pinehouse hangs strips of moose meat on a rack, beneath which a fire will be made to provide smoke for curing the meat.

in nature because one person is asking another for information, and it is science because the questions are being asked in a systematic manner, according to Western scientific rules of gathering and verifying knowledge.

People are complex animals and all kinds of psychological and social considerations are involved when you ask someone else for information. This is especially true when the kinds of questions you ask are personal, as in the case of use and occupancy mapping. The challenge is magnified because the research crosses cultures, with the indigenous community adopting rules of research developed by the larger society. One culture has been fundamentally oral in nature for a very long time, while the other has depended on the written record for the transmission of information.

Oral traditions must now be respected and taken much more seriously than before, thanks to Gitksan and Wet'suwet'en elders, and the Supreme Court of Canada's 1997 *Delgamuukw* ruling. *Delgamuukw* says that evidence based on oral traditions must receive the same weight as other common law forms of evidence, such as archival documents and expert opinion. The court's finding is a victory for all aboriginal governments, but it does not mean that such testimony will receive immediate respect. As new rules of admissibility and weighting emerge in the courts, they are likely to be consistent with the principles of the existing scientific model.

The role of social science will not be diminished, either in courts or outside of them, for years to come. However, once your leadership commits itself to doing good research, and is aware of the limitations of any mapping project, it has made a significant step towards levelling the playing field. Western science, and all its strengths, can be a powerful tool in the hands of First Nation governments.

Avoiding the Museum Approach to Mapping

The first thing that has to be in place is your leadership's commitment to producing a set of good quality maps. This commitment usually goes hand in hand with a plan that is larger than the particular mapping project. There needs to be a more general strategy. For what political processes or framework agreements do you anticipate using the maps? How do you design the work to be effective in those contexts, while keeping your next move in mind? How do you minimize the ability of others to use your own research against your interests?

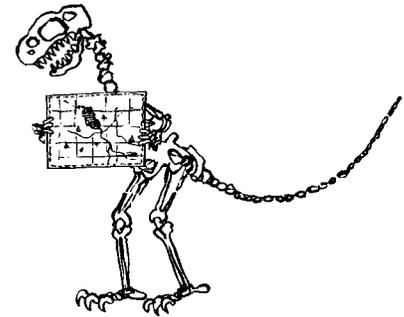
It is risky to view a use and occupancy project in isolation from a larger research strategy. No matter how thorough data collection is, the typical budget cannot produce maps that represent all your community's cultural geography. Even if you had funds to do four major mapping projects –

harvesting sites, travel routes and habitation, spiritual sites, and place names – and you documented all the mappable information that all your elders and harvesters had, the final product would not represent the totality of your culture and oral tradition. The final set of maps would still have gaps, with many cultural features isolated from the others in a sea of blank space. That blank space, however, can be critical to the survival of the culture. For instance, the final maps might display the places a community harvests salmon while the spawning streams on the community's territory remain unmapped, or blank.

The danger of showing cultural features as disconnected islands, or fragments, on a map is that corporations and agencies carry on with business as usual on the portions for which no data are mapped. Governments may take the position that aboriginal title and rights are site specific, and do not apply on the rest of the territory. They tend to regard the mapped bits as museum pieces which are isolated remnants of heritage, instead of parts of living cultural systems. The sad fact is that you can save all the island remnants and, in the end, save little. The development that occurs in all that blank space, much of which is productive habitat for the animals and plants necessary to sustain your culture, can lead to a situation where your mapped features eventually do become museum curiosities that do little more than commemorate dead tradition. Perhaps the salmon harvest sites get some protection in planning processes, but the watersheds that feed the streams continue to get clear-cut, resulting in the destruction of the spawning beds. Saving some of the pieces, some of the sites, is not the same as keeping the system healthy.

There is risk involved in mapping specific sites, but it is necessary if you are to end up with credible maps that serve your community well. The issue is not so much whether to map detailed and specific sites when appropriate, but rather how to control the release of data, how much data to release, to whom, when, and at what level of detail – both in terms of geographical space and historical significance. Collecting data that are best represented as small areas or points and mapping them as large polygons defeats many of the purposes for which First Nation groups do the mapping in the first place.

Regardless of whether specific sites are mapped as points or large polygons, in many parts of Canada it would be impossible to show that entire traditional territories are saturated with use. That is why it is important to link each piece of use and occupancy mapping research to your previous efforts, and to have your next project build on the strengths of what you are doing currently. Ideally you will end up with something called



Saving some of the pieces, some of the sites, is not the same as keeping the system healthy.



Habitation sites are particularly important to map, not only because they are concrete evidence of occupancy, but also because once you document them, it is much easier to then map your community's travel routes. This is because when people are travelling, they are usually going from one cabin or camp to another, or making day trips out from the sites to harvest resources. The habitation sites are like the dots on a child's connect-the-numbers line drawing.

Indigenous peoples do not have the luxury of doing land use and occupancy research for the fun of it. Communities want their work to meet concrete practical needs.

comprehensive research. To date this has been a rare thing, mostly because indigenous leaders have not seen a need for it. Or if they have, they have not been presented with any examples of how to accomplish it.

Comprehensive research requires an overall plan that links a number of key components together. Taken as a whole, it proves that the museum approach is not valid. Many nations have used something called a harvest survey to obtain quantitative measures of the amount of food their territories provide. Many have researched and mapped the ways that industry, government, and third party interests have restricted their use of their territories. Comprehensive research also describes the complex system of use that is the foundation of all the mapped use and occupancy data. That system of use cannot be portrayed in map form, but it can be put into words. Traditional ecological knowledge, social customs, organizational structures, and social institutions are part of the system, and when the maps are considered in light of these, there are no blank spaces. Everything can be shown to be interconnected. What appear as blank spaces on the map can be shown to have meaning and significance to the culture.

A number of communities are successfully pursuing comprehensive research. They and others are rightly concerned about the damage that can be done to their resources and territories in the time it takes to do research. However, numerous groups have discovered that even incomplete (but good quality) research has been effective in stopping or lessening the impacts of unwanted development. Indigenous governments are including the negotiation of interim measures in their long-term strategies. These are temporary mechanisms that give all cultural resources, whether mapped or not, some level of protection until such time as a satisfactory management plan is in place. Such a plan is one that gives due consideration to the nation's entire system of cultural resources, including the unmapped "empty" areas.

Whether or not interim measures are in place, all maps should display prominent qualifiers that state their limitations, and put potential users on notice that the data are not to be abused. Such qualifiers might indicate that the map is a work in progress and incomplete, and that the data displayed in no way lessen anybody's obligation to consult with the community. Restrictions concerning ownership, viewing, replication, and distribution of the map should also appear.

Indigenous peoples do not have the luxury of doing land use and occupancy research for the fun of it. This is applied research, not academic inquiry. Communities want their work to meet concrete practical needs. Because those needs often involve long-term change, it is necessary to

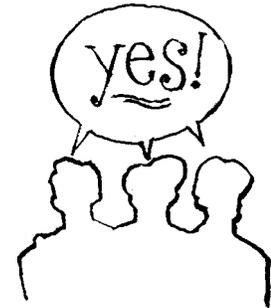
have a research plan that is in step with a long-term political agenda. Your mapping has to be designed with your big picture in mind. If it is not, somebody has already designed it for you, as part of their agenda, which almost always involves the museum approach.

Laying the Groundwork for Good Research

The most important factor that makes or breaks community research is whether members are willing to participate. An administration can have a big picture well thought out, and truly want a project to succeed, but still fail because it does not secure community support. It is the administration's responsibility to do whatever is necessary to inform people about the project, address concerns about things like confidentiality, and develop a consensus that the project is in the best interests of all families. Ideally, this is done before the first map session takes place.

Here are two real-life examples that represent the range of community preparedness for mapping. The two communities, one in Quebec and one in Ontario, are very close in population size and have territories that are similar in extent. Data collection involved the same number of interviewers, asked for the same kinds of information, used similar interview guides, required the same amount of participants' time, and recorded data at the same scale of base map. In both cases, close to 90 participants did map biographies. Data collection took three weeks in Community A. It took three years in Community B. The band administration and elders of Community A spent many months publicly discussing the research, and a strong consensus about the need for it was solidly in place before the first interview. The chief and council of Community B endorsed the research from the outset, but the elders were split on the issue and many adults had no understanding about it when data collection started. Obtaining a set of map biographies required a dozen trips to the village at considerable expense, and the research agenda itself became a divisive issue.

If community consensus is not in place when interviewing commences, workers will struggle for the entire data collection phase. They will find themselves spending far too much time explaining the project to people, and listening to individuals' concerns about the research itself, the funding agency, or even gripes about their own politicians. It is not the interviewer's job to do damage control when sensitive issues are raised during data collection. Every local government has its critics who will use a request to participate as an invitation to criticize. For many data collectors, getting individuals to sit down with them has been quite frustrating in itself, and the experience of having prearranged map sessions turn into no-shows



The most important factor that makes or breaks community research is whether members are willing to participate.



Contemporary travel routes are often mapped, regardless of time of year used and method of travel. A Pinehouse resident on a snowmobile cautiously inspects an ice fissure on Sandfly Lake in northern Saskatchewan (above). Two members of the Algonquins of Barriere Lake paddle along the Ottawa River, near its headwaters in mid-northern Quebec (below).



is all too familiar. It is neither fair to the interviewers nor productive for the research to start without widespread popular support.

In addition to building consensus for the endeavour, the aboriginal government must provide hands-on political and material support to its data collectors for the entire period of interviewing. Administration personnel are usually stretched thin because of limited resources. Often, everybody ends up being asked to take on more than they can handle. Unfortunately, the success of the research can be jeopardized if the interviewers get asked to take on too many responsibilities. Ideally, the community's leaders will be able to designate a staff member who has the skills and time to help take care of the problems that workers will face from time to time. More technical problems are best handled by the research director.

Research Personnel and Training

Leaders sometimes make the mistake of always hiring local research directors regardless of the candidates' previous experience or training. If you are counting on high-quality data to use in contexts where the allocation of natural resources is at stake, then this can be a recipe for disappointment. Indigenous politicians must be clear about whether their primary goal is to reap the short-term rewards of hiring local research directors (things like local political support and income for the community) or to seize the opportunity to produce maps that can help win long-term benefits.

This is not always an either-or situation. There are some very skilled aboriginal researchers, but many communities cannot yet count these among their members. It will be some time before the majority of indigenous groups have their own capacity to design successful cultural research of this kind. Indigenous governments can create a temporary solution during the transition period by negotiating funding for pre-project training of potential community research directors, or at least, on-the-job training experience.

Most communities will, for the time being, remain dependent on the services of skilled outsiders to help them design and direct land use and occupancy research. Unlike the 1970s, when isolated groups first started doing this kind of mapping, almost all communities have now had experience with outside consultants and researchers. Most are aware of the importance of keeping consultants accountable, and of maintaining control of cultural data. Still, administrations sometimes make poor judgments about the abilities of consultants to help them do good mapping.

Often it is assumed that if a candidate for research director is a university graduate, she or he will meet your needs. University experience is a

valuable asset, but it does not in itself point to successful research. The candidate's academic background is likely to be in a field such as forestry or archaeology which accepts the world view of society at large. If his or her assumptions about the connection between your people's culture and well-being are at odds with your own people's way of looking at the world, then there is a problem. The risk is that the research will be undertaken largely in keeping with outside values despite the person's best intentions. The research would then likely end up serving outside interests. The ideal qualification for research director is a demonstrated track record of having worked with First Nation people on cultural research projects, of having earned their trust, and having produced useful product.

In addition to the research director, the selection of community people to do data collection is critical. These individuals have to be motivated by the belief that the project will make a difference to their people. They need to be self-starters and firmly committed to staying on for the duration of the data collection phase. This is especially important, because in most communities the team of interviewers is made up of only two or three persons, and the loss of even one makes a difference in the amount of map sessions that get completed. Most projects do not have the budget or flexibility to allow for the training of a replacement.

The level of commitment and motivation is as important as any other qualification. The tone in this regard will often be set by the community's leadership. If the project is perceived to be a make-work program, the likelihood increases that workers will be hired who regard the position as just a job. There are numerous other considerations in selecting workers. They should have the following qualities.

- ◆ Good interpersonal skills.
- ◆ The respect of community members, especially elders.
- ◆ A heartfelt interest in their culture.
- ◆ A familiarity with their traditional culture, systems of harvesting, and traditional territory.
- ◆ A lifestyle that allows them to show up on the job consistently free of any influence of drugs or alcohol.
- ◆ The ability to read and understand maps.
- ◆ The ability to speak and write in their indigenous language.
- ◆ The ability to use a flexible interview guide by being able to think on their feet and probe with follow-up questions.
- ◆ A willingness to pay close attention to detail.
- ◆ The ability to read and write well, and to keep good research records.



Sometimes the mapping of travel and trade routes focuses on documenting the most ancient of a First Nation's heritage routes. Genevieve, Bazile, Lucie and Antoine Decoursay pause for a rest, while paddling on Barriere Lake. The lake is known to have been used by the Decoursay ancestors for many hundreds of years.

The good news
is that this is not
rocket science.



Carrie Paquette, Fred Askoty, Chief Stewart Cameron, Sam Acko, Stan Napolean, and Lana Garbitt practise techniques they have been acquiring during a land use and occupancy research skills training in Fort St. John, British Columbia. The workshop brought together community researchers from the Doig River, Sauleau, and Prophet River First Nations.

If you are not in the
driver's seat, then
somebody else is.

You will not often find people who meet every one of these criteria. It is important to select your team so that individual strengths complement each other. For instance, successful interview teams sometimes have only one member who speaks the indigenous language and has an intimate knowledge of the territory, and another member who writes well enough to keep good records and take responsibility for the detail required by social science.

Most government-funded research projects encourage workers to start data collection without sufficient training. Agencies either set low standards, or do not provide the means by which higher ones can be achieved. It is up to the community to insist on high standards, to define those for itself, and to collect data in a manner that meets them. You can do good use and occupancy mapping only if you know the rules of good data collection, and for this reason training is a prerequisite for success in most communities. The good news is that this is not rocket science. The principles, methodologies, and confidence needed can be acquired by people with nonprofessional backgrounds in a matter of days.

Taking Control of Research Design and Data

In addition to building up community-wide support for the research, and the careful hiring and training of staff, your administration must take control of its design. The design is a combined blueprint and work plan. It lays out how the data are to be collected and then worked into a final set of maps.

Research design does not happen by itself. If you have not created it, then you need to ask yourself who has. If you are not in the driver's seat, then somebody else is, and that somebody is usually the funding agency or industry. Often what you want your map data to accomplish is at odds with what the funding body wants to accomplish. For instance, your community might want cultural sites mapped so that it can protect them, while the funding agency might want the sites mapped so it can honour some administrative or legal obligation, and then proceed with business as usual on your territory, with no regard for protection.

No single research design can meet the needs of conflicting or contradictory agendas. You can, however, put together a blueprint that serves aboriginal interests well, while meeting funding requirements. You can also minimize the risk of government misusing the information you might be obliged to deliver. This is an especially sensitive issue because there have been numerous instances where cultural information has been collected by consultants or academics, then used for personal gain, and sometimes never returned even after repeated requests by the community.

Maintaining control of your map data is essential. It can be done, even in the face of funding requirements to provide some of the data to outsiders. A number of projects have been successful in meeting obligations to supply information, by providing data that are presented in a way that safeguards sensitive sites from violation. For instance, there might be a category of sites that is especially vulnerable to vandalism, such as ancestral burial grounds. The map could show each site as an area covering ten square kilometres, making them impossible to find on the ground without the community's assistance.

Information-sharing agreements can be negotiated to include a variety of mechanisms that allow the indigenous group to retain sole possession of the kinds of data most likely to be abused. Under some arrangements, the community releases data on a case-by-case basis as the need arises, and only after careful evaluation by a committee of elders and other leaders. Under other arrangements, the government receives only maps showing cultural sites, while the aboriginal group retains control of the database, which contains the detailed information about the history and significance of each site.

Taking control of your mapping project involves more than the obvious things such as negotiating a strong information-sharing agreement and keeping consultants accountable. It also means giving careful thought to the technical design of the research. Funding arrangements often include prepackaged research designs, in the form of policy guidelines or "how-to" manuals, and these usually have big problems. Fortunately, funding guidelines always leave a lot of room to manoeuvre. But if you do not take advantage of this flexibility and design the research yourself, somebody else is already in the driver's seat by default.

Avoiding Response Burden

Taking control of your research involves avoiding the unintended invitations to fail that are hidden in the instructional material provided by government and industry. The most common invitation is simply that the community is asked to take on an overly-ambitious project, one for which the expectations set by the research design are too high. This appears innocent enough, which makes it difficult to recognize as a potential problem. Attempting to accomplish too much is probably the number one reason for research shortcomings, and why map projects fail to produce the results that are wanted by aboriginal administrations.

When you design research you have to be realistic about what can be done within a set budget and time frame. Your expectations have to take into account the skill levels of project personnel and the level of cooperation you can expect from potential participants.

Prepackaged research designs, in the form of policy guidelines or "how-to" manuals usually have big problems.

Suppose you want to design a project to map the content of oral tradition. You could collect some of the following kinds of information: harvesting sites; ecology and critical animal habitat; site-specific features of special cultural significance; travel and trade routes; and place names. All of these kinds of information, or themes, are mappable. However, it is impossible to collect the data needed to map them all in a single project, which is exactly what some guidelines encourage communities to do. A really good job can be done only when the focus is on one or two of the themes. It is necessary to be selective in what you are going to ask people because if you are not, you end up with an interview guide that is complex and long, which means you run the risk of major response burden.

Response burden occurs when the participant experiences the interview as too much of an effort. People have a range of experiences at map sessions. Some will find them enjoyable and even fun; others will find them positive, but somewhat inconvenient. Still others will experience their interview as frustrating. The interview must be structured in such a way that the majority of participants will be satisfied afterwards, especially the elders. Those are the people who likely know the most about many kinds of cultural features. They also tend to experience the most fatigue and frustration when response burden is high. Elders also tend to be listened to by community members at large, and their opinions about the interview have considerable impact on final participation rates. What you want is for the mapping to generate project support by having participants go back into the community and tell others what a worthwhile endeavour it is. You do not want people leaving the session annoyed.



Two things happen when response burden is high.

- ◆ The interview gets a reputation for being tough. When this happens the data collectors spend much more of their time trying to get people to participate, and the final number of completed sessions is low.
- ◆ People who do agree to do a map are more likely not to provide good quality data for each of the questions.

Both of these outcomes translate into a weak set of community composites.

One way to look at response burden is as an issue of respect. You want your workers to respect the basic limitations we all have as human beings. The participant does not have an unlimited amount of energy, time, or willingness to concentrate on the task at hand. On average, it seems that most people are comfortable staying focused up to about one and a half hours at a sitting, although this varies from one culture to another, and it certainly varies from one individual to another.

Respecting the Limitations of Community Workers

Encouraging First Nation people to design research that results in excessive response burden is only one way in which instructional material invites failure. Another is to set up wildly unrealistic expectations of your workers. Consider this scenario. The community gets the funding to do a mapping project. The administrator has a budget to hire four workers and a research director for 15 months. The government supplies guidelines which lay out the project's phases and how each is to be conducted, as well as what the community is expected to provide at the end of each phase. It sounds good so far, but the problem is the job description of the workers.

A typical mapping project involves a number of big tasks, as shown in Figure 2 (page 10). Some research guidelines also require the project, as part of the same 15-month package, to do other tasks like archival work, ground-truthing of sites, and the manual completion of a data form for each mapped feature. What ends up happening on some projects is that community people are asked to do a whole range of tasks, any one of which by itself is a substantial undertaking. Most individuals selected as workers for these kinds of projects do not have professional experience or a lot of training in related fields. You put your research at serious risk if you ask your interviewers to wear too many hats. All of us have limits on how much knowledge or how many skills we can learn and apply in a given amount of time. It is unreasonable to ask an inexperienced person to become skilled enough to do, for instance, archival research, social science data collection, transcription, administration (filling out data forms), and digitization of data all in the same period.

This would be fine if both the community and funding agency had set out with the intention of providing workers with a smorgasbord opportunity to taste a whole series of research skills over a period of a few months, but that is never the case. Funds are provided to produce concrete product, which is the primary objective. Capacity-building is secondary. The administration typically does this kind of research because it needs data for specific purposes, often urgently. Workers who are asked to learn, master, and apply a variety of skills in a short time frame, and produce something of quality, might come to feel they are in a pressure-cooker. Under these circumstances, anybody would have difficulty delivering.

One of the saddest consequences of research guidelines that invite people to take on too much too quickly, is that the project ends up leaving the workers overwhelmed, even demoralized. For instance, in one community, in less than a year, the project staff, all of whom were from the community, were asked to undertake intensive training in archival research, map data collection, and transcription, as well as workshops in GIS. The project ended in disarray, without funds and without quality product. The band hired

You put your research at serious risk if you ask your interviewers to wear too many hats.



Logs are an important construction material for many First Nation communities. Land use and occupancy mapping projects often document the locations where trees are harvested for this purpose, as well as the actual building (habitation) sites.

Every research project is an opportunity to build the skills and confidence that are one of the cornerstones of self-government.

one of the luckless workers to stay on to manually create the composites that were originally intended to be produced using GIS software.

What are the probable results of a situation like this? Aboriginal leaders, negotiators, educators, lawyers, and resource managers do not end up with the quality data needed to serve their people. The community acquires a reputation for failure and finds itself out of luck the next time it applies for funding to do cultural research. Community members become cynical about research because their efforts did not translate into concrete benefits. The workers are left doubting their ability to acquire and apply research skills, and perhaps thinking the project's outcome was their fault.

These are serious consequences, especially if your people's vision is to govern itself and develop the capacity to do its own research, planning, and resource management. Every research project is an opportunity to build the skills and confidence that are one of the cornerstones of self-government. This can only happen if the expectations put on your researchers are realistic. Make sure their job descriptions are reasonable and focussed enough to ensure success.

Aboriginal people embarking on land use and occupancy projects need to get themselves in the driver's seat of research design. Being cautious with the how-to instructional material that often comes with funding dollars, and creative in modifying it to suit your needs, is part of the process. There is always room to manoeuvre. You can mold the research design so that it respects both the limitations of your participants and those of your workers, minimizing response burden and creating a process in which your workers succeed.



Designing the Project: Why, Who, When, Where and What

There are hundreds of decisions that relate to the design of a land use and occupancy mapping project. Most have to do with nit-picking details. What symbol should I use for the map category of moose? Should 15-year-old males be asked to do map sessions? How do I assign personal identity numbers to participants? How do I indicate the date on audiocassette labels? Should a site be mapped based on a childhood recollection or parental account of it? How do I correct a mistake made when marking data? Do I ask a question about snowshoe hare? Should I map the place a person killed caribou the time he was visiting a relative on another group's territory?

So, where to start?

Fortunately, there are a small number of key decisions that have to be made that help clarify everything else that follows. These have to do with the project's five big defining characteristics, or parameters. They look simple at first glance. They are the why, who, when, where, and what of the research. Many map projects do not think these through carefully enough, leading to problems and unnecessary damage control efforts later on. More than that, not giving due consideration to the defining characteristics can seriously sabotage the quality of your maps. The Big Five are at the heart of research design.

- 1 Why
- 2 Who
- 3 When
- 4 Where
- 5 What



Peter Paul of the Afton First Nation in Nova Scotia strips a piece of birch bark for making a quill basket. Many kinds of trees provide materials for many purposes. Wood from the white birch for instance, is used for firewood, and the bark has been widely used by some indigenous cultures for making things like canoes, eating utensils, baskets, art and tools. The locations of the harvest sites are often mapped.

The process of defining the five research characteristics may take a considerable amount of time, if done well. Ideally, the brainstorming involves the input of the community's political leadership, administration, project staff, active harvesters, and elders.

1 Why

Why are you doing this project?

All five questions are important, but the most critical one is why. Why are you doing this project? What do you want to accomplish with it? What are your objectives? Are you going to use the land use and occupancy maps for curriculum development, co-management negotiations, impact mitigation, negotiation or litigation of rights and title, compensation, or some other purpose? The list could go on for a long time. For instance, you could design an oral history mapping project that focuses entirely on salmon management, or on the rehabilitation of medicine sites, or on traditional travel routes with an eye to developing ecotourism on your territory.

Be careful. The temptation is to list many purposes and then to design a process to achieve them all. This cannot be done, at least not done well. What you end up with is a mishmash of poor quality data that will not meet the requirements of many of your listed purposes, and that will not do the job well for any of them. It is fine to have multiple objectives in mind as long as you have clearly identified one as being primary. That single objective then becomes the focus of the entire project, the reference point around which all other design considerations revolve, including the other four parameters.

2 Who

Who are you going to interview?

Depending on the primary objective and how much time and budget are available, you have to make decisions about how many and which people you are going to interview. In other words, you have to define your study population.

It is often useful to start by breaking down the band or membership list into smaller lists of males and females, by 10-year age groups; for example, men from 30 to 39 years of age, women between 30 and 39, men from 40 to 49, and so on. Rank each of the smaller lists, so that the most experienced and knowledgeable persons in each group are identified, and indicate which elders are at risk because of health reasons. Mark which people are no longer living in the community, and where they currently reside.

Perhaps knowledgeable individuals who are not on the membership list but who are married into the community should be added to the lists. Maybe there are official members who have not set foot on the territory for many years, and should be taken off the lists. Each community is unique, but these are the kinds of considerations that lead to a set of criteria, or rules, that determine the study population. The point is to think it through and have the population defined before starting data collection.

It is impossible to know exactly how many interviews are needed, but it is important to have some idea about the minimum number of sessions required to meet your main objective. Although a large sample is always desirable, it is not always necessary. For instance, under the federal land claims process an aboriginal group would want a line depicting their outer territorial extent of occupancy. This can often be acquired by interviewing a couple of dozen of the older and most wide-ranging resource users. The claimants' survey can be successful with participation of a quarter of their adult population, or even less. However, if the primary objective was to obtain baseline data for purposes of resource management, a much larger sample size would likely be needed. Interviewing a relatively small group of elders who travelled widely over the territory a few decades ago might not yield data useful for making decisions about where younger people harvest resources today.

3 When

When is the period of time for which you want to collect data?

This depends, as do all the parameters, on the purpose of the research. Generally, there are two relevant time frames. One is called recent or “current” use and occupancy. The accepted definition for this is “within living memory” – any time within the person’s life. Some researchers regard this as the period from the person’s teenage years until the date of interview. Others prefer to include childhood recollections as well. A set of current use maps represents the sum of the direct personal experiences of all participants. It can display some information for up to 75 or 80 years prior to the time of survey, but most of the information is more recent because most participants are younger.

The second time frame pertains to historical use and occupancy research, which involves a greater time depth. It results in data that extend farther back than those obtained strictly from within living memory sources. Historical use research uses a combination of oral history and written sources, and documents a community’s occupancy of a territory going back hundreds of years.



Like many elders, Aloysius Benoit of the Miawpukek First Nation, a long-time trapper and sailing schooner captain, possesses an encyclopaedic knowledge of his community’s traditional territory, which includes the area around Conne River, Newfoundland. During his map biography session Aloysius provided firsthand accounts of sites that he had visited more than 60 years prior to the date of his interview. Whenever a “within living memory” use and occupancy study is undertaken, elders are the lynchpin sources of data.



Peter Paul gathers sweetgrass, which is used for purification rituals. Some plant materials are especially important for ceremonial purposes, and First Nations usually document the harvest locations during their use and occupancy mapping studies.

Historical use and occupancy studies use sources that go deeper than the direct life experiences of current generations to help determine the limits of the traditional territory, often for land claims purposes. Current research is usually undertaken to determine the extent and limits of a community's use of territory within recent years. This is important for claims research and, when data are obtained for the whole territory and not just the outer edges of it, current use and occupancy mapping is especially useful for resource management.

In some situations both the historical and within living memory time frames might be inappropriate. Take, for example, a community doing research to assess the impacts of industrial development. It would likely have a different definition for its "when" parameter than the ones used in either historical or current use and occupancy studies. Because of budget constraints, the impact assessment research might focus only on the families most likely to feel the greatest impacts of development. Those would be the families that had been active in the zone of impact in the years immediately preceding the research. It is conceivable that few elders would be interviewed for such a study.

4 Where

Where is your study area?

When you ask somebody to do a map interview, what extent of the earth's surface are you interested in? What is the study area? If the main objective is to obtain data to be used as evidence for proving aboriginal title, the area of relevance would cover the territory defined as traditional by elders, and for which obtainable use and occupancy data could be anticipated.

If the study relates to an Inuit community in Nunavut, the negotiators and lawyers are not interested in the fact that a member once killed ducks with a Delaware acquaintance in the marshes of Walpole Island, near the Canada-United States border. But what if that person harvested ducks with relatives on a neighbouring Inuit community's territory; are those sites to be mapped? What about sites much farther afield, on one of the more distant village's territory? These kinds of questions need to be considered and answered prior to the first interview. Sometimes information that emerges from data collection warrants a rethinking of how the study area was initially defined, and occasionally this results in a slight modification. This also sometimes happens with the who, when, and what (but never with the why) parameters.

5 What

What questions are you going to ask participants?

Any of the five parameters can be difficult to define. Almost always the one that is most time-consuming has to do with what. What kinds of data do you want for your maps? There is a huge range of different kinds of mappable oral history data, or themes, that can be relevant to meeting your primary objective: harvesting areas, habitation sites, travel and trade routes, place names, and so on. It is important to choose a small number of themes, usually no more than two. There are two advantages to being so selective.

- ◆ You can do a thorough job so that the research product is complete enough that subsequent projects can build on it from a position of strength.
- ◆ You can avoid excessive response burden.

If you decide on harvesting sites as a theme, it is necessary to think about who the consumers of the harvests are. Do you want mapped data that represent where people obtained resources that were used to feed themselves and their community, or that were used for sale on commercial markets, or for trade with distant kin, or that ended up in tourists' freezers? Do you want to map a site where a resource is harvested and a portion feeds your community and a portion is sold on international markets? These kinds of considerations need to be resolved carefully. Questions must be framed in a way that allows participants to know exactly what the interviewer is after.

The interview guide, which is the actual list of questions to be asked, is the concrete end product of all the decisions made concerning the "what" parameter. Even a quick look at it can say a lot about a project's chances of success because its length and complexity are related to the way people will likely experience the mapping sessions. The interview guide is where the overly-ambitious project gets into major trouble by generating too much response burden. It is also where the more carefully designed project succeeds. The effective interview guide is carefully constructed and then tested on a few individuals to see if its wording is clear, and to make sure the interviews are not going to be too long and difficult. Some changes might be necessary, after which the guide is finally administered to participants.

The effective interview guide is carefully constructed and then tested on a few individuals.





Principles of Research Design and Implementation

- 1 Respect
- 2 Confidentiality
- 3 Informed Consent
- 4 Focus
- 5 Flexibility
- 6 Consistency
- 7 Organization
- 8 Caution
- 9 Self-Reporting
- 10 Integrity
- 11 Data Diamond
- 12 Fun

Research has two basic aspects: design and implementation. You design it, then do it. You construct the blueprint, then you collect data according to that blueprint.

There are a number of principles that are very helpful when designing and implementing your work. Projects often take on a life of their own, going off in this direction today, then pulling you off in a different one tomorrow. Principles are guidelines that keep you on track, and guarantee that your project stays manageable. Some are more important than others; some may apply more to certain kinds of data collection. The principles discussed below have made a big difference for a number of successful land use and occupancy projects.

1 Respect

Respect participants in a heartfelt manner, at all times.

Respect is at the top of the list. I have already referred to the need for honouring the limitations of participants and workers. Most individuals can sense whether someone respects them, or is faking it. They can also sense whether the community researcher genuinely honours the experience that is being shared during an interview, even if that experience comes from a belief system different from the interviewer's. Some of the questions asked during an interview are private and intimate. Elders are often asked to talk

about things for which many aboriginal people have been judged and ridiculed. The legacy of the residential schools, *The Indian Act*, and other government policies have left their mark, making some participants reluctant to share what they know about cultural sites, especially related to spirituality. Many communities have had experiences with outside researchers, consultants, and even with some of their own people, that have not helped the situation.

Every person associated with the project must be willing to respect participants in a heartfelt manner, at all times. Few things pertaining to research can make the rounds in a small community faster than an incident involving disrespect, especially if an elder is involved. In the context of the interviewer-participant relationship, disrespect is like breaking a trust.

2 Confidentiality

Adopt official mechanisms that define what confidentiality looks like, in concrete terms, and follow through with honouring them.

Confidentiality is closely related to respect. It, too, is fundamentally about trust. Even a single breach of it can undermine a mapping project. Individuals can have all kinds of reasons for not wanting others to have access to their personal information. Most are concerned that government might get it and use it against them in some way. Some are even afraid about individuals from their own community seeing it. In every research project confidentiality is an issue, and most projects underestimate the amount of concern that emerges once data collection starts. It is smart planning to anticipate people's concerns and think of things you can do to address them. You should do this long before the first map interview.

For most of us, it is not sufficient to hear, "Don't worry, your data will be kept confidential." People generally want to know how the data or information will be kept confidential. What does confidentiality actually look like, in concrete terms that can be easily visualized and understood? By way of illustration, here are four mechanisms that some projects have adopted.

- ◆ No person may look at a participant's map biography or listen to the session tapes without the participant's written permission. The only exceptions are people hired to work on the project.
- ◆ Researchers hired to conduct the map interviews or analyze the data are bound by legal contract to honour strict rules of confidentiality.

Neskonalith Indian Band
 Box 608 CHASE, B.C. V0E 1M0
 Telephone 679-3295 Fax 679-5306

BCR No. 97-98-690, Y5
 Date of Approval: November 20, 1997
 Regional Office: Vancouver
 Province of: British Columbia
 Quorum of: 4 (four)

WHEREAS: Neskonalith Indian Band Chief and Council is doing a Traditional Use Study, the purpose of which is to map Secwepemc use of natural and cultural resources within a person's lifetime; and

WHEREAS: Neskonalith Indian Band Chief and Council will be using the study to promote joint natural resources management, until the Douglas Reserve and comprehensive Aboriginal title questions are settled with other governments; and

WHEREAS: Neskonalith Indian Band Chief and Council strongly encourages the full support of our community members and wish to address any concerns members may have regarding confidentiality and the release of information;

THEREFORE BE IT RESOLVED: that the following provisions regarding confidentiality of Traditional Use Study information be adopted:

- 1) No person may look at a participant's individual map overlay(s) or listen to a participant's individual map session cassette tape(s) without that person's written permission. The only exception to this pertains to people hired by the Band Council to work on the TUS Project.
- 2) All persons hired by the Neskonalith Indian Band Chief and Council to conduct the map interviews or to put the collected information in a form it can be used, are bound by legal contract to honour strict rules of confidentiality.
- 3) The final set of maps will not have any person's name on it.
- 4) The report that goes with the maps will have peoples' names in it, but access to it will be strictly controlled by the Neskonalith Indian Band Chief and Council. It will be used only for advancing Secwepemc title, rights, jurisdiction and interests of the Neskonalith Indian Band.

Chief Arthur Manuel
 Councillor - Bonnie Andrew
 Councillor - Richard Manuel

Councillor - Frank Denaoui
 Councillor - Roger Sauis

- ◆ The final composite maps used for negotiations do not display participants' names.
- ◆ The report that accompanies the maps does have people's names in it, but access to it is strictly controlled by the aboriginal administration, and it will be used only for advancing the title, rights, jurisdiction and interests of the group.

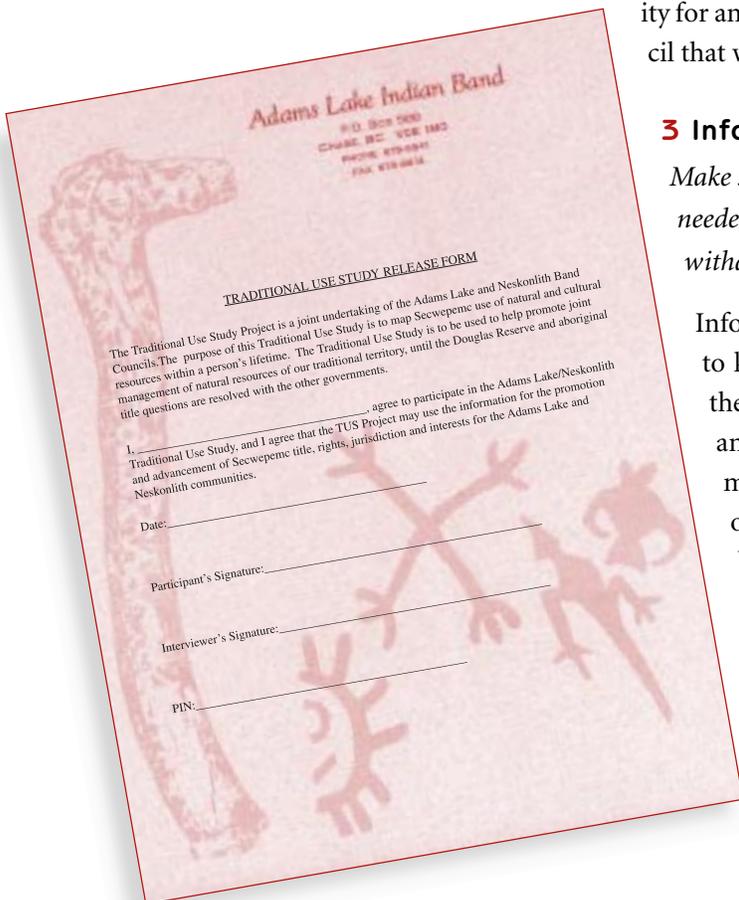
Adopt whatever works for your community. The important thing is to be able to follow through on what you tell people. Since confidentiality is in the hands of your administration, its safekeeping is basically an issue of political will. That is why it is a good idea to obtain a firm commitment from your local politicians, in writing. A resolution outlining the mechanisms designed to guard confidentiality, with the leaders' signatures on it, is something tangible your workers can show to participants. People like seeing that statement of support, and they like having somebody they can hold accountable. It is appropriate that these be the political leaders, since the interviewers are requesting the data on their behalf.

Sometimes land use and occupancy data end up in court. Most individuals do not like the idea that their information might be examined by lawyers, or that they might have to take the witness stand. People have the right to know that it is possible their leaders will someday ask them to appear in court on behalf of their nation. This is a remote possibility for any given person, and ultimately it is the nation's own council that will select your witnesses.

3 Informed Consent

Make sure that potential participants have the information needed for them to offer informed consent, and that they can withdraw from the process at any time.

Informed consent is also related to respect. People have a right to know about the nature of the project, its objectives, why the data are needed, what the anticipated uses of them are, and so on. This principle is not only about the rights of community members. The success of the project may depend on it. Widespread participation and quality data will not be forthcoming unless individuals have come to their own understandings about the need for their cooperation. Such understanding can only be based on information. People must also have the right to consent, without pressure or coercion. Similarly, successful research recognizes a participant's right to withdraw his or her consent, and to cease participation at any time.



Each individual who agrees to participate in a land use and occupancy project should sign (or make their mark) on a release or consent form. The typical form briefly states the purpose of the research and intended uses of the data. The participant's name and date are printed on the form, and both the interviewer and interviewee sign it. By signing, the person formally agrees to participate and allows the aboriginal administration to use the information for the stated purposes. Most forms assign a participant's identity number for purposes of record keeping, and some also specify any additional constraints on data use that are expressed by the participant.

4 Focus

Maintain a workable focus by being realistic about the number of themes you attempt to map in a single project, and by being selective in constructing the interview guide so the average session is not too long.

Focus, a fourth principle of good research, was touched on in the section on response burden. It is important to be careful about the number of different themes you try to map in a single project, and it is critical that you are selective in constructing the interview guide so that the average session is not too long. Remember that focussing on the primary objective of the project keeps everything else on track. Letting go of focus is like forgetting your research purpose. If you lose focus, you may end up with a project that is out of control.

5 Flexibility

Be flexible in the administration of the interview guide while also maintaining sufficient focus, "sufficient" being that which ensures the primary objective is finally met.

Flexibility allows staff to deal with situations as they arise. Like all human endeavour, research is organic in nature. It tends to take on a life of its own. People have their own preferences about when and where they want to do their interviews. They have their own ideas about where the research should head and how it might be modified. The research team learns in the doing. There will be changes in methodology, usually minor ones, as data collection proceeds. The trick is to be flexible while at the same time maintaining sufficient focus, "sufficient" being that which ensures the primary objective is finally met.

Finding this balance is not always easy. Picture this: the data collector has an interview guide to work with, which has been designed with a clear objective and focus in mind. Now she is sitting down with an elder who has his own ideas about what kinds of cultural information the



Elder Evelyn Windsor shows Benny Stewart and another student how to dig for a traditional Heiltsuk medicine plant, near Bella Bella, British Columbia. Use and occupancy mapping invigorates a people's pride in its cultural heritage, and encourages young people to get back to their roots.



Photo © Shirr Hall, Box 854, Westside, B.C.

Deana Hunt of the Heiltsuk First Nation picks seaweed. Food plants remain important resources for aboriginal communities, and land use and occupancy mapping typically documents many of the harvest sites.

community needs to put on maps. He may also think that this much younger person ought to just put the tape recorder on, respectfully keep her mouth closed, and listen. Situations like this are not uncommon. After all, the social scientific model of inquiry has been parachuted in on top of the traditional indigenous way of passing knowledge from one person to another. So, how to respect the elder and still find a workable balance between focus and flexibility? When elders are well informed about why questions are being asked in a strange or seemingly intrusive manner, they are almost always willing to meet you more than half way.

6 Consistency

Have all interviewers follow the same methodology in a highly consistent manner.

Consistency means doing things the same way each time. It applies to each of the hundreds of little conventions that are determined by the research design. A convention is simply an agreed-on way of doing something. There might be several dozen conventions that govern, for instance, how data and symbols are to be indicated. Some examples are listed.

- ◆ What colour and thickness of pen to use when labelling an overlay.
- ◆ What colour and thickness of pen to use when marking symbols on an overlay.
- ◆ How to deal with a feature that has more than one symbol designation.
- ◆ How to indicate that a particular datum is only an approximate location.
- ◆ How to deal with a mistake made while marking a feature.

These and other conventions instruct the worker how to deal with any conceivable situation pertaining to the marking of data onto paper maps or plastic overlays.

Marking data is only one of a number of areas of research design. The following are some of the others, each one of which is made up of its own bunch of conventions: assignment of participant numbers; selection of map scale; interview procedure; interview guide; selection of symbols; labelling audiocassettes; keeping records; taking care of data. The hundreds of conventions involved, taken as a whole, make up the research methodology. The methodology informs the worker how to deal with any conceivable situation relating to any aspect of data collection.

It is important for all data collectors to follow the same methodology, and for each one of them to follow it consistently. One reason is that the dollar costs of not doing so can be very high. Data collection is only the

fourth in a sequence of tasks (Figure 2, page 10), each one of which can be a major undertaking in terms of labour and expense. Keeping each component within budget largely depends on how consistent the technicians involved in the preceding steps have been in their work. A data collector with a casual attitude or inclination to be sloppy can create enormous amounts of unnecessary work for the transcribers, digitizers, and others.

More importantly, consistency is one of the foundations of social science because it is closely tied to something called reliability, which is a cornerstone of the scientific method and a basic measure of data quality. In fact, consistency is an essential aspect of all the basic indicators of quality, which are discussed below. This is why a willingness to pay attention to detail is an important consideration in the screening and hiring of data collectors.

7 Organization

Stay organized so that you can set up for interviews quickly, track raw data easily, and have the project notebook material you need to write a quality methodology report.

Organization requires people to take detail seriously. First-time researchers are usually surprised at how quickly raw data, overlays and cassette tapes accumulate, and how much research equipment and materials they have to handle on a daily basis. Imagine a research office, typically quite small, with a number of large map tables, many hundreds of overlays with data on them, four or five hundred base maps, hundreds of tapes with data, and all the recording equipment and supplies needed by a team of three or four workers. Good organization allows you to stay on top of it all.

It is almost impossible to stay organized if there is not a secure, well-lit interviewing room that has space for a number of mapping tables and whatever is needed for elders to feel comfortable during interviews. Conducting the map sessions in one centralized, well-equipped room is more productive than trying to interview participants in their homes. In addition to a good working space, obtaining custom-built storage boxes for your overlays and cassettes helps with organization.

When a worker can consistently get his hands on whatever he needs so he can set up his interviews quickly, you have good organization. When a worker can track any piece of raw research product, and lay her hands on it quickly, you have good organization. When all your data collectors' project notebooks are updated in a manner consistent with project methodology, on a daily basis, the project is likely in great shape.



Aloysius Benoit, Gloria Benoit, and Phil Jeddore pose with some of the 2,200 map biography overlays and 260 audiocassettes that contain the Miawpukek First Nation's land use and occupancy data. The custom-built plywood boxes make it easier to keep the raw data organized and help protect them from wear and tear when in transit or storage.



A Mi'kmaq person digs for clams during low tide, at Summerside, Nova Scotia. Many coastal communities rely heavily on resources from the sea, including a remarkable variety of tidal and bottom-dwelling creatures like shellfish, sea urchins, sea cucumbers and crabs. Harvest sites are often mapped.

8 Caution

If you are going to err in the recording of data, err on the side of caution.

Caution is generally a wise policy when it comes to the design of oral history mapping and collection of data. If you are going to err, do so on the side of caution. For instance, if a participant says, “I think I killed a caribou there,” the interviewer should ask for clarification before marking the site. If the hunter’s response still indicates uncertainty, the worker might say “OK, we’ve got that information on tape, and we’re not going to mark the site on the map.” The datum is not lost because it is captured on audiocassette and appears in the transcript record.

This principle of erring on the side of caution lets you, if needed, make the argument that your maps are conservative, that they understate the community’s dependency on cultural resources. This can be useful in some negotiating processes and in court. You do not want someone to be able to make a case that the maps are exaggerations. When undertaken properly, this kind of research always produces impressive results.

9 Self-Reporting

Design your current use and occupancy research to obtain as much self-reported data as possible, and in a way that lets you sort out which data were reported secondhand.

Self-reported data refer to the notion that, generally speaking, when you are doing current use and occupancy research, you want as much of your information as possible to be reported by individuals who have had direct experiences of the mapped features they indicate. It is better to have Jim Thusky report his own big game kill sites than to have his brother indicate them on Jim’s behalf. It is preferable to have Gloria Lariviere, who was snaring rabbits at the old Point Portage settlement in 1929, relate her own experience of those times, instead of having the relative or friend who was with her tell you about them.

The principle emphasizes two things. First, it is best to have individuals tell their own stories. Second, if you ever need to, you should be able to revisit a data set and sort out which data were self-reported, and which were reported by individuals secondhand. This is not to say that secondhand or hearsay information is not important. On the contrary, it is very valuable and forms a foundation of the community’s living oral tradition, which the court in *Delgamuukw* said must be given great weight.

10 Integrity

Tape record the interviews and design other aspects of data collection and record-keeping in a way that lets you track the source of any particular datum.

Integrity of data refers to traceability. If your data have good integrity, you can trace back any of the thousands of individual features appearing on a final set of maps to its source. The ability to do this is important for a variety of purposes. If the maps are being used administratively for land use permitting for instance, the users want the data to be easily sourced to the people who have knowledge about the sites in question. If maps are being used in court to support aboriginal title, claimants need the data to be linked to source transcripts. Entire land use and occupancy data sets have been dismissed by judges because integrity was not demonstrable.

A demonstration of integrity might look like this. Imagine you are looking at the composite for big game kill sites, on which there might be 1,000 points. You should be able to select any point and identify which individual's map overlay the original point can be found on, the date of the interview, and the name of the interviewer. You should also be able to locate the transcript page on which the respondent refers to his big game kills in the area under consideration, and the place on the audiocassette where you can hear his voice talking about it.

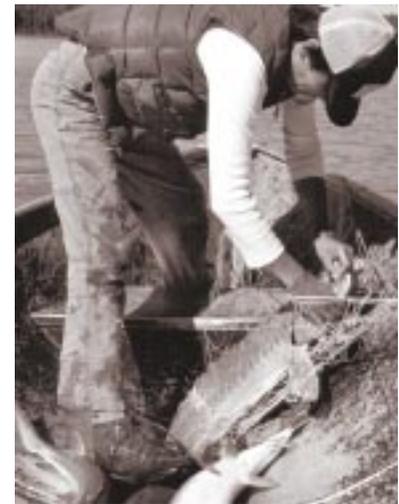
Excellent data integrity requires that each mapping session be recorded on audiocassette. Occasionally a community researcher is concerned that certain individuals will not participate if there is a tape recorder involved. Having conducted many hundreds of map interviews, I have never found an individual who, having initially objected to being recorded, persisted to the point of not participating. When given enough information about the project and opportunity to ask questions about things like confidentiality, and time to think it over, people always agree to have their sessions taped. If somebody refuses to do a map biography the issue is almost certainly not about recording. The researcher's job is to discover what the real problem is and address it.

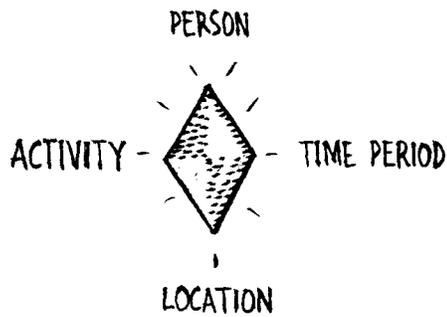
In addition to good data integrity, having all map sessions taped is a necessity for any project that is serious about obtaining detailed information about the mapped features. It is impossible to make a good written record of all relevant data during a map session, especially if the interviewer has her sights on data diamonds.

Entire land use and occupancy data sets have been dismissed by judges because integrity was not demonstrable.



Fish harvest sites are usually mapped, regardless of the method of capture employed, as long as the species are used for local consumption. Chief Vernon Morris of the Muskrat Dam First Nation retrieves a pickerel from the Severn River, Ontario using rod and reel (above), while a fellow band member removes sturgeon from a net (below).





11 Data Diamond

Train your interviewers to think in terms of data diamonds, which will give your maps historical depth and provide concrete evidence of longtime use and occupancy.

Data diamond is an idea or mental picture that is useful to keep in mind both when designing research and while interviewing people. It reminds data collectors of the kinds of information that the land use and occupancy project is after. Once interviewers get into the habit of thinking in terms of collecting diamonds, they are much more likely to be thorough in their questioning and therefore successful in obtaining the most useful data possible. The diamond shape, with its four points, refers to the linking of four kinds of information: a person's name (the who), an activity (what), a location (where), and some indication of time period (when).

Each time a feature is marked onto an overlay, whether it is a point to indicate a moose kill site or a polygon for a burial ground or a line to represent a travel route, the participant has automatically provided one diamond. For example, 22-year old Jim Thusky does his map biography in December 1999, and the interviewer asks him if he has ever killed moose anywhere on the map sheet they have in front of them. Jim says "yes" and indicates two kill sites, one of which is on a tiny island called Yost, and the other at the north end of Soreback Portage. The instant Jim indicates those sites he has provided two diamonds: "Jim Thusky – moose – Yost – 1990s" and "Jim Thusky – moose – north end Soreback Portage – 1990s." If Jim states that he was with his father Abe when Jim shot the animal on Yost, he has automatically provided a third diamond: "Abe Thusky – moose – Yost – 1990s." The only thing the interviewer marks at each of the two kill sites, is the symbol for moose, which represents one of the diamond's points. He does not draw a little diamond on the overlay at Yost, and he does not write the words "Jim Thusky" or "Yost" or "1990s" on the overlay because they are all givens. (He also does not add "Abe Thusky" to the overlay because that information is captured on audiocassette.)

Land use and occupancy map projects are about collecting these diamonds. A single project will produce thousands of them, whether the interviewers are aware of it or not. Data collectors who do not think in terms of diamonds will still obtain them. The advantage of being conscious about diamonds is that by actively seeking them out, many hundreds or thousands more are obtained, without interviewing additional participants. In addition, the descriptive information that can be linked to each feature on the final set of composites has much more detail and historical depth. It is these kinds of descriptive data which are the most powerful evidence that your group has been active on your territory.



Like all other animal resources, fish harvest sites are mapped regardless of the season the resources are obtained. Alvin, Raymond and Larry Iron pose with the northern pike, whitefish and sucker they have just removed from a gillnet on Pinehouse Lake.

For instance, the interviewer asks 75-year old Gloria Lariviere if there are any old settlement sites she has ever stayed at, and she indicates one at Point Portage. This one diamond (“Gloria Lariviere – settlement – Point Portage – sometime from 1924 to 1999”) is useful, but there is an opportunity here to obtain much more information about the Point Portage settlement. The interviewer who is on the lookout for diamonds would ask a series of probing follow-up questions, and she would do so using the image of the diamond as a guide, collecting as many of the four points of each diamond as possible. Perhaps what Gloria remembers is that when she was five years old she and her older brother Ron spent a winter at the settlement in her father Barney Michel’s cabin with his brother Frank, and the two men trapped there from early October until spring breakup. Gloria also provides the names of four other men who were living at and trapping from the Point Portage settlement that winter, and adds that her father was really proud of her and Ron because they both snared rabbits, just out behind the cabin, all by themselves. Diamonds galore! There are 16 of them here: eight named individuals (persons) each stayed at the old settlement (activity) at Point Portage (location) in 1929 (time period); six men did trapping based out of the settlement in 1929; and two children each snared rabbits there the same year. Three of these diamonds are represented in Figure 4.

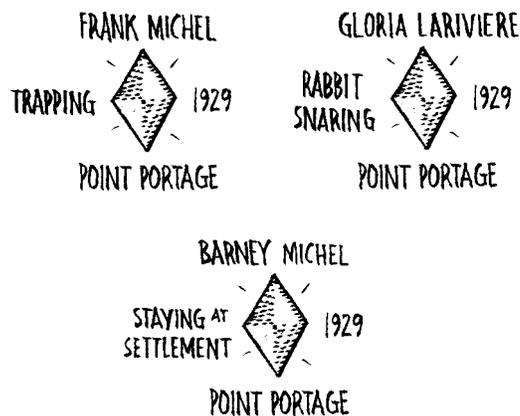


FIGURE 4

Three of Gloria’s Diamonds

When Gloria Lariviere was five years old her father took her to the old Point Portage settlement. During her map biography interview she provided 16 diamonds for that trip, three of which are represented here.

It is especially important to collect diamonds when interviewing elders because they are capable of providing evidence of use and occupancy farther back in time. Gloria has already placed eight people at Point Portage 70 years ago, but maybe her father had also told her that Frank and he used to base themselves out of the settlement long before Gloria’s time, that they had been born there, and that they had grown up there at the same time Jacob Jerome’s grandchildren did. The genealogical records show that Barney was born in 1894 and Frank in 1886, thus firmly placing the family at Point Portage well before the turn of the twentieth century, about six generations ago.



Consultant Petr Cizek makes a futile gesture of rolling up his sleeves, as he gets smoked at table soccer by a gleeful Chief Peter Marsellais during a break in Nahanni Butte's land use and occupancy project. The work often involves long hours and repetitive tasks, and it is important to find ways to have fun with your co-workers.

There are many of these kinds of data contained in the oral traditions of most aboriginal communities. Research should be designed so that as many as possible of the elders' diamonds are recorded because these bear testimony to the longtime historical use and significance of each mapped site. They give your composites the added dimension of historical depth, and convert the notion that "we've used our territory for a long time" into something concrete. With diamonds, the argument becomes alive with the names and stories of real flesh and blood ancestors. This kind of detailed information is invaluable for education purposes, and not easily ignored by agencies or courts.

12 Fun

Have fun, and find ways to celebrate the process.

Fun, as a research principle, is to remind us that research is part of a bigger picture called life, and that there should be plenty of moments of enjoyment and laughter. As challenging as it can be at times, the job of collecting land use and occupancy data should not feel heavy or plodding. Many dimensions of indigenous oral histories are inherently beautiful. Many elders and young harvesters bring an enthusiasm and quiet excitement to the map table, and an optimism that their contribution to the big picture can make a difference for their people. Research projects can be designed to allow for spaces of celebration and lightness. The research is not only about the final product. This principle of having fun helps project staff remember that the process itself has immeasurable benefits.



The 12 research principles discussed above have proven effective in producing numerous successful use and occupancy map sets. The principles are similar to the project's five big defining characteristics in one respect. Like those five parameters, if the principles are given due regard in the design and implementation of data collection, all the hundreds of methodological details tend to fall into place. The principles are the guidelines. When it comes to land use and occupancy mapping, they are the basis of good social science.



Measuring Quality

In addition to the parameters and principles of research, you should pay close attention to the indicators of data quality. These are characteristics of data that can be evaluated and measured. They are the things to which potential users would give consideration when deciding whether your maps are useful. Critics would look at them closely when trying to demonstrate that your maps are not up to scratch.

Instead of discussing these five measures of quality in this part of the guide, I could have talked about some of them in the previous section as research principles. Likewise, you could legitimately regard some of the principles – like integrity, self-reported data, and data diamonds – as indicators of quality because their presence and relative amounts can be observed and measured. There are many connections among all these concepts and it is difficult (and unnecessary) to pigeonhole them.

1 Reliability

Could somebody else do your study over again, using your methodology, and come up with the same maps?

Reliability is a cornerstone of social science because it has to do with reproducibility. Can the research results be duplicated? If a fire destroyed all the map biographies and all the composites, could the project be done a second time, and produce the same results? To have good reliability

- 1 Reliability
- 2 Validity
- 3 Accuracy
- 4 Representativeness
- 5 Consensus

you need to have two things. First, there has to be a carefully designed methodology, administered in a consistent manner from one interview to the next. Second, there has to be a thorough written account of that methodology. That account consists of definitions of the parameters and detailed descriptions of the conventions adopted. Theoretically, a different set of data collectors should be able to re-interview the same people and end up with a similar set of maps. In other words, reliability has to do with predictability of outcome.

The methodology is the project's set of instructions. It is important not only to help prove that your data are reliable, but also to demonstrate they are valid. Reliability, validity, and accuracy are words used interchangeably by most people, but social science uses each of them in different ways. There are complex interrelationships among the three concepts, but these overlaps need not concern us.

2 Validity

Do your maps say what you claim they say?

Validity refers to the meaning of your maps. Do they mean what they are supposed to? Do they say what you claim they say?

This might sound confusing, so here is an example. Imagine you are looking at one of a community's finished composite maps, the one depicting big game kill sites. The title reads: "Jackfish Indian Band Kill Sites of Big Game Animals Used for Community Consumption." The Jackfish people are known to eat a lot of moose meat, but you are still surprised to see 2,000 moose sites on their map. It is also known that their men do a lot of guiding for American trophy hunters.

You decide to check the methodology report, and discover that the interview guide's moose question does not instruct participants to mark only those kill sites for which animals were used to feed community members. You then listen to segments from a small number of tapes to hear how interviewers handled the moose question. Not surprisingly, they did not specify what the interview guide had not instructed them to. How many of the 2,000 moose sites provided meat for village residents, and how many are sites where Jackfish guiding parties met with success but the meat ended up filling tourists' freezers? This particular kill site (the one on tiny Yost Island), does it really belong on this composite, given the title of the map? If a question like this cannot be easily answered, the data have poor validity. The meaning and significance of the map is open to too much interpretation.

Maybe the picture gets even worse. When you listened to the sample of tapes you found that the interviewers used different key words when asking the moose question. One would ask for places where moose were “shot,” while another asked for sites where they were “hunted.” A third data collector tended to use the word “get,” while the fourth asked participants where they had “looked for” moose. Sometimes the same interviewer would switch back and forth in his choice of key words, even during the same mapping session. The list of key words can be expanded: shot, hunted, gotten, looked for, killed, shot and killed, retrieved, harvested, and so on. Each of these has different or ambiguous meanings. Now validity is in serious question. For instance, moose that were shot but not retrieved do not belong on the Jackfish big game map as it is titled. Nor do moose that were looked for but never seen, shot, and retrieved. Just what does the composite mean?

To avoid this ambiguity the interviewer must be clear about the nature of the data that are being sought. A well-constructed interview guide that uses carefully selected definitions and key words, and data collectors who consistently convey those definitions to participants and use those key words, will ensure good validity.

3 Accuracy

Are the features on your maps located with enough precision to meet your project’s objectives?

Accuracy has to do with the precision with which mapped sites are indicated. How precise is the location on the map where Jim Thusky saw the remains of old Jason Monabu’s cabin? Does the spot marked on the map truly represent the location of that cabin on the earth’s surface? Assume that Jim got it exactly right when he showed the interviewer where to make the point. If the base map used for data collection is 1:250,000 scale, the ink dot representing the datum point can easily cover a quarter kilometre on the ground. If the base map used is 1:50,000, the ink point covers about 50 metres, and the datum is thus more accurate. Accuracy is also related to things like the participant’s ability to read or interpret maps, his ability to see well, and his willingness to be careful when indicating sites.

If you wanted to verify accuracy, you could compare where Jim indicated Jason’s cabin to where other participants independently located it. This is called triangulation, and it offers a basis to make the best possible judgment about where the likely location of the feature is, without additional expenditure of research budget. You could also do what is called



Two members of the Lutsëlkè Band look for caribou on the tundra east of Yellowknife, Northwest Territories. Some land use and occupancy studies map the areas over which hunters scan the landscape for animals. When using binoculars, as in the photograph above, people can see great distances, which raises questions about exactly what is being documented when you map where hunters have “looked for” big game. This is an issue of validity, and it points to the importance of selecting the key words for your interview guide very carefully, and also of using them consistently when interviewing.



Dale Smith and Henry Smith of Pinehouse hold up the snowshoe hare they have just retrieved from snares. Many kinds of small game are important sources of protein for First Nation communities, and harvest sites are often recorded during mapping projects.

ground-truthing, and take the base map and a global positioning system (GPS), and go with Jim to the actual site.

Maybe you discover that Jim has not been precise and the mapped point is a kilometre away from the actual location. This would not necessarily be a problem, depending on what kind of feature is involved and whether the exact location is required to meet the objective of the mapping project. For instance, if the data are intended for curricula development, the lack of precision would not likely be troublesome. However, if the data are needed for operational planning, which involves operations like logging and depends on detailed data at a scale of 1:20,000, there is a problem. A caterpillar operator building a haul road, and using a map displaying data that are in error by as much as a kilometre, can do damage as he decides where to construct the road. If the feature is indeed an ancestor's cabin site or a burial ground, and the purpose of the mapping is to preserve it, then that amount of error is unacceptable because it can result in the site being destroyed. The same degree of accuracy, however, would not be problematic for a big game kill site, since the accuracy of the individual point is not the issue, but rather the pattern shown by the collection of points.

Accuracy is related to scale of mapping, which is determined by the main objective for doing the research in the first place. Even if the community wants data for operational planning, in most cases it is nonsensical to think that an inventory of cultural sites can be mapped at 1:20,000 scale. Many communities' territories easily cover 40x1:50,000 map sheets, which is the equivalent of 250x1:20,000 sheets. The sheer awkwardness of working with a set of 250 maps for data collection purposes, and its effect on response burden, are reasons to abandon the notion. In addition, there is so much detail and often so few recognizable reference points on a 1:20,000 sheet that the participants sometimes have difficulty locating themselves. It is important to be realistic about the strengths and limitations of the various map scales for data collection purposes. The community should decide which scale best suits its needs.

Often the best scale is 1:50,000 because the resultant map composites are detailed enough to use as a reference tool for many planning and management purposes, while still providing the information needed for claims processes. You can refer to the composites whenever the need arises to obtain more complete data for any area or feature, or to improve the accuracy of existing data. A mapped inventory of cultural sites, collected at 1:50,000 scale, can be effective for operational planning when used in consultation with elders during on-site visits and in conjunction with GPS corrections. An advantage of collecting your data at 1:50,000 (and not at the operational planning scale of 1:20,000) is that it encourages government

and industry to consult with your community. Outsiders are more likely to acknowledge that real live First Nation people are an ongoing and necessary complement to the imperfect and always incomplete set of reference maps.

Having a process in which the mapped data are ground-truthed a few at a time, on an ongoing basis, is advantageous for another reason. Ground-truthing large numbers of sites is very expensive and can cripple research budgets if you are not careful. The community should carefully define its priorities, and use as much as possible of the available funds to interview key elders before deaths result in more permanent loss of traditional knowledge. Sometimes immediate ground-truthing of a site is warranted because the participant may, in extreme cases, be the only person alive who knows about the site, and there is uncertainty as to its location. It is important for your community, and not the funding agency, to define how much verification of accuracy is needed, and when.

4 Representativeness

Are the mapped data that participants provided characteristic of the community the participants belong to?

Representativeness refers to whether the data speak for the population the maps claim to represent. To what extent are the data provided by the participants characteristic of the population the participants belong to? A number of things have to be looked at when answering this question. How were individuals selected when compiling the list of people to be interviewed? What were the criteria for defining that study population? Are those criteria consistent with the primary objective of the project? How many members of the study population were interviewed, and what percentage does that number represent? Did participants provide complete, high quality data?

If the participant selection criteria are valid in terms of the project's objective, then two simple statistics, the number of participants and the coverage rate, provide a good sense of representativeness. For instance, if 160 individuals complete map biographies, then participation is 160. If the study population is 200 persons, then the coverage rate is 160 over 200, or 80 per cent, which suggests good representativeness. Coverage of 10 per cent would suggest it is poor.

Whether the objective of the use and occupancy study warrants widespread participation of all adults or a sizeable subset of adults, the idea is generally the same: 70 or 80 per cent coverage suggests good representativeness. However, if the study is dependent on a small number



The harvest locations of big game species, both terrestrial and marine, are usually recorded during land use and occupancy mapping studies. In the photograph above a young Algonquin girl takes a close look at a moose that has just been shot on a beach near Rapid Lake, Quebec. Below, Inuit men haul ashore a bearded seal near Kangiqtugaapik (Clyde River) on Baffin Island, Nunavut.



of participants, sometimes called key informants, then it is important to have complete coverage of that group because the absence of even one informant's data can result in weak representativeness.

To give a simplified example, pretend the Blue Heron Band designed a mapping project to document the extent of its small game harvesting. Its final composite shows 575 places where band members have snared snowshoe hare, and you want to know whether the map represents the pattern and extent of band members' rabbit kill sites. To determine this you would look at the methodology report's description of how persons were selected to be interviewed. First, you would determine what the population group is. If hare is a basic food and all adults are known to be active snarers, the study population might consist of all adults, men and women, in which case the study is like a survey. If, on the other hand, there are only a few women who specialize in rabbit snaring, and are known to harvest huge amounts for distribution to other band members, the study population might consist of only this handful of key informants.

In either case, you would then look at the report's account of coverage rate. If it were only 10 per cent you would suspect that representativeness is poor. This is because if more study population members were to be interviewed, and their hare data added to the composite, changes in pattern would emerge. Some of the gaps would fill in and some of the edges of data distribution would expand outward. However, in the the survey of all adults, if coverage was 75 per cent, chances are that you could keep doing interviews, adding data, and not see resultant changes in overall pattern. At that point you have good representativeness. On the other hand, if the study population was only a small number of women, you might need 90 or 100 per cent coverage before the interviewing of an additional person would have no major effect on the distribution of mapped sites.

5 Consensus

Do the users of your maps agree that they are useful for the intended purposes?

Consensus is not really an inherent characteristic of data. But you can measure it, and it does reflect the degree to which your maps are reliable, valid, accurate, and representative. Suppose you table your maps, maybe at a co-management meeting where a number of different agencies and user groups are negotiating. If those people take a close look at the maps and at the companion methodology report and find them to be good quality, the composites themselves are likely to achieve consensus.

Excellent research is supposed to provoke controversy in some fields of inquiry, but not in this one. Land use and occupancy mapping has been around in Canada for a long time. The basic methodology is well developed and research product has been used in many different contexts, including co-management negotiations and courts. If your maps do not achieve consensus regarding their usefulness, it is probably because they are of questionable quality.



Creating a Culture of Research

The most obvious result of giving insufficient thought to the measures of quality, principles, and parameters described in this book is that the research product is likely to fall short of the project's immediate objectives. There is a bigger picture to consider though. A community's experience, positive or negative, of its own land use and occupancy initiatives contributes to its culture of research. This is the group's collective understanding of research and its benefits, and people's willingness to contribute to an ongoing research program.

How receptive are community members to the announcement of yet another study or survey? Does it make people grumpy and elicit comments like "We've been studied to death," or "It'll never change anything," or "They've already asked me those kinds of questions before?" Do people respond with a sense of optimism and enthusiasm? Is there resistance to the idea, or openness?

It is critical to ask these kinds of questions while designing any particular piece of research because the answers are suggestive of the response burden likely to be encountered, and the participation that can be expected. It is also important that your government does what it can to encourage a culture of research that is favourable to future initiatives. The long-term research needs must be kept in mind, with the goal being that community members, when called upon, will be willing to support their government's call for information and knowledge.

The collective attitude towards a particular project is largely determined by people's experiences of previous research endeavours. There are things that can be done so that the overall experience of any particular land use and occupancy study will enhance the community's culture of research. Here is a short list.

- ◆ Honour the principle of informed consent – make sure that people have lots of information about the study prior to data collection, so that there is a groundswell of understanding out in the community, not just among the administration.
- ◆ Design the research carefully, and make sure that the project does not generate excessive response burden.
- ◆ Support your interviewers in every way you can, and recognize the difficulty of their task and the pivotal role they play.
- ◆ Follow through on any promises made to participants, such as a commitment to provide a personal copy of the session audiocassette, or a promise to notify them personally as to when and where the composites will be displayed.
- ◆ Hold a series of well-planned community verification meetings, and do everything you can to ensure they are well attended.
- ◆ Acknowledge the completion of the project with a celebration, and publicly thank all participants and the research team.
- ◆ Make sure that the final research products are accessible to all community members, and that everybody knows they exist.
- ◆ Keep people informed about the processes in which the research findings are being used, and the outcomes.



The author and Cyril Carpenter of the Heiltsuk Nation take a break during Cyril's map biography session. Creating a strong culture of research in your community is largely a matter of being thoughtful about the needs of participants. Every interview provides an opportunity to appreciate and respect another human being, and when approached in this manner, the work is very gratifying. When this is the case, community members are more likely to support their government's subsequent research projects.

- 5 Find ways to maintain control of your map data to a level that meets your community's needs, and negotiate an information-sharing agreement that includes them.
- 6 Read the funding agency's instructional "how-to" materials with an eye to discovering all possible flexibility that can be used to your advantage. Avoid the invitations to fail that are often hidden in such guidelines, especially the invitation to design an overly-ambitious project that generates too much response burden.
- 7 Have the interviewers, transcribers, digitizers and other people doing each of the major mapping project tasks consult with each other on an ongoing basis and encourage their consultations to start as early as possible.
- 8 Budget realistically for all the mapping project tasks needed to obtain a quality research product. Avoid the mistaken assumption that data collection is the sole major expense.
- 9 Carefully define the project's basic parameters before you start data collection. It is all right to have multiple objectives as long as you have clearly identified one as primary. The study population, period covered by the mapping, study area, and interview guide are all defined with reference to that primary objective. Construct your interview guide carefully, keeping response burden in mind.
- 10 Refer to the principles of research design and data collection at every step of your mapping project.
 - ◆ Respect participants in a heartfelt manner, at all times.
 - ◆ Adopt official mechanisms that define what confidentiality looks like, in concrete terms, and follow through with honouring them.
 - ◆ Make sure that potential participants have the information needed for them to offer informed consent, and that they can withdraw from the process at any time.
 - ◆ Maintain a workable focus by being realistic about the number of themes you attempt to map in a single project, and by being selective in constructing the interview guide so the average session is not too long.
 - ◆ Be flexible in the administration of the interview guide while also maintaining sufficient focus, "sufficient" being that which ensures the primary objective is finally met.
 - ◆ Have all interviewers follow the same methodology in a highly consistent manner.
 - ◆ Stay organized so that you can set up for interviews quickly, track raw data easily, and have the project notebook material you need to write a quality methodology report.



Elder Martin Smith of Pinehouse is shown skinning a mink on his trapline in northern Saskatchewan. For many aboriginal communities the mapping of the areas their members have trapped is important because trapping has been a key economic activity for many decades, and numerous other harvesting activities have been done in association with trapping. Fur-bearers continue to be an important source of both dollar income and edible meat for many First Nation families.

- ◆ If you are going to err in the recording of data, err on the side of caution.
 - ◆ Design your current use and occupancy research to obtain as much self-reported data as possible, and in a way that lets you sort out which data were reported secondhand.
 - ◆ Tape record the interviews and design other aspects of data collection and record-keeping in a way to ensure good integrity of data, which allows you to track the source of any particular datum.
 - ◆ Train your interviewers to think in terms of data diamonds, which will give your maps historical depth, and provide concrete evidence of longtime use and occupancy.
 - ◆ Have fun, and find ways to celebrate the process.
- 11** Keep the measures of data quality in mind at every step of your project.
- ◆ Ensure good reliability by carefully designing the methodology, administering it in a consistent manner, and providing a thorough written account.
 - ◆ Ensure good validity by having interviewers be clear about the nature of the data that are being sought, by having a well-constructed interview guide that uses carefully selected definitions and key words, and by having data collectors who convey those definitions to participants and consistently use those key words.
 - ◆ Define what level of accuracy and which data collection scale best suit your needs, and also how much verification of accuracy is needed, and when. Be realistic about the strengths and limitations of the various map scales for data collection purposes.
 - ◆ Ensure good representativeness by making the criteria that determine who is a member of the study population consistent with the primary objective of the mapping project, and by achieving a high coverage rate.
 - ◆ Help achieve your objectives by having composites that are of demonstrably high quality. Make them a positive factor in reconciliation processes, by generating understanding and consensus. Composites that are reliable, valid, accurate, and representative are not likely to be controversial.
- 12** Do whatever is necessary to inform your people about the project, address concerns about issues like confidentiality, and develop a consensus that the project is in the best interests of all families. Have this consensus in place before data collection starts.
- 13** Find a research director who has a track record of having worked with aboriginal communities on cultural research projects, having earned their trust, and having produced useful product.

- 14 Select your team of interviewers with attention to their commitment, interpersonal skills, community respect, sobriety, map reading, use of the indigenous language, ability to interview in a probing manner, familiarity with culture and harvesting systems, willingness to pay close attention to detail, and reading and writing skills.
- 15 Obtain the training your interviewers will need to do a good job at data collection.
- 16 Be prepared to provide your community interviewers with all the political, material, and moral support they need. Designate a staff member who has the skills and time to help with the problems that interviewers will face from time to time.
- 17 Make it as easy as possible for your interviewers to remain focused on data collection, the single most important task for the success of the research and the task they have been trained to do. Respect their limitations and do not invite failure by having them take on responsibilities unrelated to data collection.
- 18 Ensure that the project strengthens the community's culture of research by creating a groundswell of understanding about the study, designing it carefully and avoiding excessive response burden, actively supporting the interviewers, following through on promises to participants, holding well-planned verification meetings, celebrating project completion and thanking participants, making the research products accessible, and keeping people informed about how the research findings are used.



In summary, implementing effective land use and occupancy research does not have to be the complicated and hit-and-miss process that has sometimes been the experience of First Nation communities. You can have a winner every time. The above recommendations will get you headed in the right direction, and if you do your best to be uncompromising on data quality, you will have maps that your elders and other members will be proud of.

And you will have maps that will help your government in its dealings with outside agencies and industry. This is a certainty. When competent leaders, negotiators and litigators have quality research in hand, the power balance at the negotiating table or court shifts in your favour. The take-home message of this guidebook is very simple. Settle only for good quality land use and occupancy maps. Your nation and your grandchildren deserve nothing less.

Implementing effective land use and occupancy research does not have to be a complicated and hit-and-miss process ... you can have a winner every time.



Kids being kids, in Pinehouse, on the Churchill River in northern Saskatchewan. Doing a good job with your use and occupancy research is ultimately related to notions about the well-being of your children and their descendants. Whatever we do in life, and how we do it, is linked to the kind of world and the nature of the rights we want our children to inherit.

Glossary

- Accuracy:** A measure of the quality of *raw data* or *research product*. An accuracy measure indicates how precisely the location of a mapped *feature* is known.
- Archival research:** Research involving the types of records held at archives. An archive is a place where unique, original and unpublished materials (diaries, journals, photographs, maps, files, film and sound footage) are kept.
- Baseline information** or **baseline inventory:** A set of *use* and *occupancy data* used for comparison with other sets of *data*, and against which change over time can be measured.
- Co-management:** A negotiated arrangement where government or industry agree to jointly manage the resources of the territory with the First Nation.
- Community consensus** or **consensus:** A broad agreement among community members.
- Composite map** or **composite:** A map that combines and displays all *data* for a particular group of *interview guide* categories, from the *map biographies* of a specific group of participants. For example, the big game kill sites for all community members, or the plant gathering sites for women over 40 years of age.
- Comprehensive research:** A research strategy that links a number of key research projects together to produce data which prove that mapped land *use* and *occupancy* information represents living cultural systems, and that the *museum approach* to First Nations' cultural research is not valid.
- Consistency:** The doing of a given task the same way each time it is done.
- Convention:** An agreed-on way of doing each of the hundreds of little tasks that, together with the *parameters*, make up the research *methodology*.
- Coverage rate:** A statistic determined by dividing the number of participants (*participation*) by the number of people in the *study population*.
- Culture of research:** The community's collective experience and understanding of the benefits and risks of *use* and *occupancy* research, which largely determines community members' willingness to contribute to the kind of long-term research program necessary for self-government.
- Current use and occupancy research:** A kind of mapping study that documents each participant's *use* and *occupancy* of the territory any time within the participant's life, or *within living memory*. These kinds of studies record the direct life experiences of current generations, and generally go no farther back than 80 years.
- Data:** See *datum*.
- Database:** A collection of *data* organized according to a structure that describes the characteristics of the data and the relationships among them. A *GIS* database for instance, includes data about the location and characteristics of *features*.
- Dataset:** A collection of data that is organized around a common theme, like land *use* and *occupancy* for instance.
- Datum:** A single fact collected during an *interview*. The plural of datum is *data*.
- Diamond** or **data diamond:** The mental image to remind interviewers of the importance of obtaining four kinds of information (person, activity, location, time period) for each *feature* mapped during a *map biography interview*.
- Digital** or **digital data:** *Data* that are directly readable by a computer.
- Digitizing:** The process of converting *data* marked on a *map biography* into a *digital* form using a computer and *GIS* software. A map is digitized by taping it to a special electronic table, pointing at each feature marked on it with an attached "puck" (a device with a set of crosshairs), and pressing a button.
- Feature:** A *point* or *line* or *polygon* on a map that represents something in the real world like a moose harvest site or travel route or burial ground.

- Geographical information systems (GIS):** Computer software that deals with mapped information. GIS allow the map *data* to be captured, stored, checked, combined, manipulated, analyzed, displayed on screen, and printed out.
- Global Positioning System (GPS):** A satellite based navigational system that allows points on the earth's surface to be located with a high degree of *accuracy*.
- Ground-truthing:** Verification of the location and *accuracy* of sites mapped during *interviews* by going to the sites with the aid of maps and interview participants, and ideally also with a *global positioning system*.
- Harvest survey:** A key component of *comprehensive research* that provides quantitative measures of the amount of food that a community obtains from its territory over a defined period of time.
- Historical use and occupancy research:** A kind of study that uses a combination of oral history and written sources to document a community's *use* and *occupancy* of the territory. These kinds of studies record information that goes much farther back than the direct life experiences of current generations, usually hundreds of years.
- Informed consent:** The *principle of research design* and data collection that acknowledges that people have the right to know about the nature of the project, why the *data* are needed, and what the anticipated uses of them are, and that people have the right to agree to participate and to subsequently withdraw their participation.
- Integrity of data or data integrity:** The *principle* of research design and data collection that allows you to trace any *datum* found in the *research product* back to its original source among the *raw data*.
- Interim measure:** A negotiated temporary mechanism that gives all *use* and *occupancy* resources, both mapped and unmapped, some level of protection until such time as a management plan giving due consideration to the nation's entire system of cultural resources is in place.
- Interview:** A face to face social interaction that results in a transfer of *data* from a survey participant to the interviewer.
- Interview guide:** The list of questions that an interviewer uses to guide her or his questioning of the participant during an *interview*.
- Key informant:** A participant who verbally provides information to an interviewer during a research project which has a *study population* made up of a small number of only the most knowledgeable individuals.
- Lines:** Geographic *features* that have length but no area (e.g. political boundaries), or *polygon* features that are too narrow for their boundaries to be seen on a map of a given *scale*. See *points*, *polygons*.
- Map biography:** The map or set of maps resulting from a face to face interview during which the individual participant indicates the places he or she has used resources *within living memory*, and in some cases, places that have never been used or visited personally, but about which the participant has knowledge.
- Methodology:** The detailed account of how the *use* and *occupancy data* were collected, which includes a definition of each of the research *parameters* and a detailed description of the hundreds of research *conventions*.
- Museum approach:** Industry and government's typical interpretation of mapped First Nation cultural *features*, which is that they represent isolated remnants of a dead or dying tradition, instead of representing parts of living cultural systems.
- Occupancy:** Refers to the area which, as Dr. Peter Usher puts it, a "particular group regards as its own by virtue of continuing use, habitation, naming, knowledge, and control." The mapping of occupancy records stories and legends about places, ecological knowledge of places, indigenous place names, and habitation sites like cabins and burial grounds.
- Operational planning:** Land use planning that involves the use of large-scale maps, usually 1:20,000 *scale* which shows a lot of detail, to guide on-the-ground operations like logging and the construction of roads.
- Parameters:** The five basic big defining characteristics of the *research design* which have to do with why the research is undertaken, who is to be interviewed (*study population*), what time period data are to be collected for (*within living memory*), what geographic area data are to be collected for (*study area*), and what questions the participants are to be asked (*interview guide*).
- Participation:** The number of individuals from the *study population* that complete *map biography* interviews.
- Points:** Geographic *features* that have no area or length (e.g. mountain peaks), or features that are too small for their boundaries to be seen on a map of a given *scale*. See *lines*, *polygons*.

Polygons: Geographic *features* that cover a land or water area and are large enough to be seen on a map of a given *scale*. Polygons are defined by a *line* or lines that surround an area. See *points, lines*.

Population: See *Study population*.

Principle or research principle: A guideline that helps keep your research design and data collection on track and ensures that you end up with good quality *research product*.

Raw data: The many thousands of individual facts that are obtained during *interviews*, and that are recorded on study participants' *map biography* overlays or maps, and in their interview audio or videocassettes.

Reliability: The quality measure of the *raw data* or *research product* that addresses the question as to whether the same results could be reproduced if somebody else took the same *methodology* and repeated the mapping interviews following that methodology.

Representativeness: The quality measure of *research product* that addresses the question as to whether the map *data* truly represent the *study population* that the maps claim to represent, or in other words, whether the data provided by the participants are characteristic of the population to which the participants belong.

Research design: The strategic plan for a research project that sets out the outline and key features of data collection methodology and analysis, including a detailed consideration of the research *parameters*.

Research product: The concrete end result (such as *composite maps*, reports, and *databases*) of the research in which the *raw data* are organized, summarized and presented in a way that is useful.

Response burden: The study participant's experience of the interview as burdensome.

Scale: To show a portion of the earth's surface on a map, the area must be reduced. Map scale indicates the extent of this reduction. It is expressed as a ratio of distance on the map to distance on the ground. For instance, on a map with a scale of 1:50,000, one hand length on the map represents 50,000 hand lengths on the ground.

Social science: The study of society and social relationships.

Study area: The geographic area for which *use* and *occupancy* data are to be collected.

Study population: The individuals who are eligible to be interviewed.

Themes: The broad categories that are mapped during *use* and *occupancy* research, e.g. harvesting sites, critical animal habitat, site-specific features of special cultural significance, travel routes, and place names.

Transcription: The activity performed by people called transcribers which converts the content of the *interview* audio or videocassette into a transcript, which is a written or typed record of the *raw data* captured on tape.

Translation: The activity performed by people called translators which converts the content of interviews conducted in the indigenous language into French or English.

Triangulation: The process of obtaining a sense of the *accuracy* of a mapped *feature* by comparing where different participants indicated it on their individual *map biographies*.

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 kinds of activities. The mapping of use records the locations where these activities occur.

Validity: The quality measure of the *raw data* or *research product* that addresses the question as to whether the data and information mean or signify what you claim they mean or signify.

Verbatim transcript: The typed record of an interview tape's raw data which captures, in exactly the same words, everything the participant and interviewer are heard to say.

Within living memory: The generally accepted time frame for most *use* and *occupancy* studies, which covers any time within the participant's life.

Word processor: Computer software that allows the creation, editing, formatting, and printing of text documents.



The take-home message of this guidebook is very simple. Settle only for good quality land use and occupancy maps. Your nation and your grandchildren deserve nothing less.

This book is for leaders, administrators, and program personnel at the community or First Nation government level, as well as their consultants and external research people, and community researchers who have had experience with similar kinds of studies.

The information and ideas contained here should be especially useful to anyone who has the responsibilities of designing mapping projects and providing guidance to community interviewers.



“We adopted the approach that is outlined in this guidebook, and built an inventory of quality information about our historical uses of Tseil-Waututh territory. The resulting maps and documentation are benefiting our negotiations for co-management of traditional lands, and helping us build the relationships and understanding required for the protection of our Aboriginal title and rights. Our land use maps are thus aiding in the survival and growing strength of our nation, and will benefit future generations.”

Chief Leonard George

Leonard is Chief of the Tseil-Waututh First Nation.

“A key aspect to documenting and substantiating our connection to our traditional territories is proper land use mapping. As an Aboriginal leader, I know that we need accurate and professionally developed maps to use in consultations, negotiations and possibly litigation, in order to protect our Aboriginal title and rights. I therefore encourage anyone interested in carrying out a cultural mapping project within an Aboriginal nation or community, to read this book. Whether we like it or not, the provincial and federal governments have more plans for our traditional territories and if we want to have a say, we need to establish the facts about our land use. Our own maps will be central to those discussions.”

Chief Arthur Manuel

Arthur is Chief of the Neskonlith Indian Band, Chairman of the Shuswap Nation Tribal Council, Spokesperson for the Interior Alliance of Aboriginal Nations, and Co-Chair of the Assembly of First Nations Delgamuukw Implementation Strategic Committee.

“The Supreme Court of Canada, in *Delgamuukw*, said Aboriginal title must be established by evidence of physical and legal occupancy, or tenure. The principal way of establishing physical occupancy is to plot the First Nation’s land use activities on a map. Therefore, it is important for nations and their advisors to know how to do this research and how to do it well. Terry Tobias’ work provides sound guidance in this regard by an individual who is accomplished, credible and experienced in this field.”

David Nahwegahbow, LL.B.

David is a Anishinabe lawyer practising Aboriginal law in Ottawa, and he is also President of the Indigenous Bar Association in Canada.



Union of BC Indian Chiefs



ECOTRUST CANADA





Lheidli T'enneh

**Reserve Land Use Plan
2005**

Acknowledgments

The *Lheidli T'enneh Land Use Plan* is the result of a combination of efforts that should be acknowledged. First of all, the Elders of Lheidli T'enneh have provided a great deal of education and patience, enabling staff to learn about the land through both stories and studies, combining oral history with recall of survey issues and feasibility studies. Their guidance with respect to land and culture is the basis of this Plan.

The community of Lheidli T'enneh has also been very involved, providing recommendations for issues that need to be included in the *Lheidli T'enneh Land Use Plan* as well as feedback on community mapping, mail-outs, and general information sharing. This feedback helped us make each session better than the last. Added to this feedback, the community input sessions with the Youth Treaty Council opened our eyes to the unlimited possibilities for the future development of Lheidli T'enneh reserve lands and helped us remember that planning is the legacy for the future generations.

Lheidli T'enneh staff have also been very supportive and in some cases integral to the completion of the *Lheidli T'enneh Land Use Plan*. For their efforts the Treaty Office, (Ron Seymour, Vanessa West, Mike Bozoki, Marvin George & Teresa Dolman) Chris Thomas and most especially Gord Haines should be recognized and thanked. The Director of Treaty Policy and Research, Rick Krehbiel has provided a great deal of input to educate staff and ensure that this Plan is accurate in references to internal and external land management laws. Regina Toth, the Band's Land Manager has been a key player in bringing the Band to the forefront of the First Nations Land Management process. Lheidli T'enneh is one of the original 14 signatory Bands to sign the Framework Agreement and many of the operational Bands across Canada look to Lheidli T'enneh as a model for community consultation, planning and management because of her efforts.

Finally, the Lands Authority and its subcommittee the Land Use Planning Committee (LUPC) has provided a great deal of direction for the *Lheidli T'enneh Land Use Plan* content, framework and outcomes. Their direction and participation has made the *Lheidli T'enneh Land Use Plan* a successful participatory planning exercise. Ideally, participatory planning projects rely on the community to oversee the process and provide direction and education to the planner, but all too often the end result is a document that may or may not incorporate the voice of the community. Their knowledge and assistance throughout the process, especially in communication and facilitation with the community is invaluable and we are truly appreciative of their efforts. The current Land Use Planning Committee is comprised of the Lands Authority members Violet Bozoki, Kenora Stewart, Melody Buzas, Lyle Pius, Lenora White, and community representatives Ron Seymour, Frank Frederick Sr., Counselor David Baker and Shirley Gustason.

Doocha,

Mussi

Table of Contents

ACKNOWLEDGMENTS	1
EXECUTIVE SUMMARY	5
BACKGROUND	5
LEGAL BASIS OF THE PLAN	5
COMMUNITY MAPPING	5
COMMUNITY AND YOUTH LAND USE PRIORITIES	5
LAND USE DESIGNATIONS.....	6
IR#1A TS'UNK'UT	6
IR# 2 KHAST'AN LHUGHEL.....	7
IR#3 LHEZBAONICHEK	7
IR# 4 DZULHYAZCHUN TSALAKOH.....	7
PLAN IMPLEMENTATION.....	8
SECTION 1 - INTRODUCTION TO THE PLAN	9
Table 1 – Lheidli T'enneh Reserve Lands.....	9
OUTLINE OF THE PLAN.....	9
FIRST NATIONS PLANNING	10
SECTION 2 – COMMUNITY INTRODUCTION	11
PEOPLE AND THE LAND	11
RECENT HISTORY OF LHEIDLII T'ENNEH LAND BASE.....	12
Fort George Indian Reserve #1 (Lheidli).....	12
Fort George Cemetery IR #1A (Ts'unk'ut)	12
Fort George (Shelley) IR #2 (Khast'an Lhughel).....	13
Clesbaoneecheck IR #3 (Lhezbaonichek)	13
Salaquo IR #4 (Dzulhyazchun Tsalakoh).....	13
COMMUNITY DEMOGRAPHICS	13
Ratio of On-Reserve Members to Off-Reserve Members.....	14
Chart 1 - Ratio of On-Reserve to Off-Reserve Members.....	14
Age Demographics	15
Chart 2 On-Reserve Population Demographics.....	15
Chart 3 Off-Reserve Population Demographics.....	15
POPULATION PROJECTIONS	16
Historical Population Data.....	16
Table 2 - Lheidli T'enneh 20-Year Historical Population Data	16
Future Population Projections.....	16
Table 3 - Lheidli T'enneh 20 Year Future Population Projections (at 5.9%)	17
FACTORS TO AFFECT POPULATION OUTCOMES.....	17
Bill C-31	17
Treaty Ratification	18
SECTION 3 – HISTORY OF LAND MANAGEMENT	19
TRADITIONAL LAND MANAGEMENT.....	19
THE INDIAN ACT AND LAND MANAGEMENT	19
Reserve Land Tenure Under the Indian Act	19
FIRST NATIONS LAND MANAGEMENT ACT (FNLMA)	20
LHEIDLII T'ENNEH BAND LAND CODE	21
LANDS AUTHORITY	21
SECTION 4 – LAND USE PLANNING PROCESS	22
PARTICIPATORY PLANNING.....	22
LAND USE PLANNING COMMITTEE	22

Community Mapping	22
Figure 1 – Youth Mapping Session	23
Table 4 – Summary of Community Mapping Sessions & Information Meetings	24
PRESENTATION OF RESULTS	24
SUMMARY OF COMMUNITY-IDENTIFIED DEVELOPMENT PRIORITIES	25
SECTION 5 – RESERVE LAND USE STRATEGIES	27
LAND USE DESIGNATIONS	27
<i>Traditional Use Area</i>	27
<i>Cultural Heritage Site</i>	27
<i>Community Development Area</i>	27
<i>Community Development Expansion Area</i>	27
<i>Natural Resource Development Area</i>	28
<i>Environmentally Sensitive Area</i>	28
INDIVIDUAL RESERVE PLANS	28
IR# 1A TS'UNK'UT (FORT GEORGE CEMETERY).....	30
BACKGROUND	30
DEVELOPMENT OPPORTUNITIES AND CONSTRAINTS	30
COMMUNITY AND YOUTH LAND USE PRIORITIES	31
PLANNING VISION FOR TS'UNK'UT	31
LAND USE DESIGNATIONS	31
CULTURAL HERITAGE SITE OBJECTIVE	31
CULTURAL HERITAGE SITE PERMITTED LAND USES	31
PLANNING STRATEGIES (What to do and When)	31
Short Term Priorities	31
Medium Term Priorities	32
Long Term Priorities	32
IR# 2 KHAŠT'AN LHUGHĒL (NORTH AND SOUTH SHELLEY)	33
BACKGROUND	33
HISTORY OF LAND USE PLANNING	33
EXISTING INFRASTRUCTURE	34
Water Supply and Distribution System	34
Fire Protection	35
Wastewater Disposal	36
Roads	36
DEVELOPMENT OPPORTUNITIES AND CONSTRAINTS	37
Flood and Erosion Hazard	38
Environmental Assessment	38
Economic Development	38
COMMUNITY AND YOUTH LAND USE PRIORITIES	39
PLANNING VISION FOR KHAŠT'AN LHUGHĒL	40
LAND USE DESIGNATIONS	40
COMMUNITY DEVELOPMENT AREA OBJECTIVE	40
COMMUNITY DEVELOPMENT AREA PERMITTED USES	40
COMMUNITY DEVELOPMENT EXPANSION AREA OBJECTIVE	40
COMMUNITY DEVELOPMENT EXPANSION AREA PERMITTED USES	41
TRADITIONAL USE AREA OBJECTIVE	41
TRADITIONAL USE AREA PERMITTED USES	41
NATURAL RESOURCE DEVELOPMENT AREA OBJECTIVE	41
NATURAL RESOURCE DEVELOPMENT AREA PERMITTED USES	41
ENVIRONMENTALLY SENSITIVE AREA OBJECTIVE	41
ENVIRONMENTALLY SENSITIVE AREA PERMITTED USES	41
CULTURAL HERITAGE SITE OBJECTIVE	42
CULTURAL HERITAGE SITE PERMITTED USES	42
PLANNING STRATEGIES (What to do and When)	42
Short Term Priorities	42

Medium Term Priorities	43
Long Term Priorities.....	44
IR#3 LHEZBAONICHEK (CLESBAONEECHECK).....	45
BACKGROUND	45
DEVELOPMENT OPPORTUNITES AND CONSTRAINTS	45
Environmental Assessment	46
COMMUNITY AND YOUTH LAND USE PRIORITES	46
PLANNING VISION FOR LHEZBAONICHEK	47
LAND USE DESIGNATIONS.....	47
NATURAL RESOURCE DEVELOPMENT AREA OBJECTIVE.....	47
NATURAL RESOURCE DEVELOPMENT AREA PERMITTED USES	47
TRADITIONAL USE AREA OBJECTIVE	48
TRADITIONAL USE AREA PERMITTED USES	48
ENVIRONMENTALLY SENSITIVE AREA OBJECTIVE.....	48
ENVIRONMENTALLY SENSITIVE AREA PERMITTED USES	48
COMMUNITY DEVELOPMENT EXPANSION AREA OBJECTIVE.....	48
COMMUNITY DEVELOPMENT EXPANSION AREA PERMITTED USES	48
PLANNING STRATEGIES (What to do and When)	49
Short Term Priorities	49
Medium Term Priorities.....	49
Long Term Priorities.....	49
IR# 4 DZULHYAZCHUN TSALAKOH (SALAUQUO)	50
BACKGROUND	50
DEVELOPMENT OPPORTUNITIES AND CONSTRAINTS	50
Environmental Assessment	50
COMMUNITY AND YOUTH LAND USE PRIORITIES	51
PLANNING VISION FOR DZULHYAZCHUN TSALAKOH	51
LAND USE DESIGNATIONS.....	51
TRADITIONAL USE AREA OBJECTIVE	52
TRADITIONAL USE AREA PERMITTED USES	52
NATURAL RESOURCE DEVELOPMENT AREA OBJECTIVE.....	52
NATURAL RESOURCE DEVELOPMENT AREA PERMITTED USES	52
ENVIRONMENTALLY SENSITIVE AREA OBJECTIVE.....	52
ENVIRONMENTALLY SENSITIVE AREA PERMITTED USES	52
PLANNING STRATEGIES (What to do and When)	52
Short Term Priorities	52
Medium Term Priorities.....	53
Long Term Priorities.....	53
SECTION 6 - IMPLEMENTATION	54
LAND USE PLAN APPROVAL AND AMENDMENT	54
DISPUTE RESOLUTION.....	54
ZONING LAW	54
ENVIRONMENTAL SITE ASSESSMENTS	55
LOCAL GOVERNMENT RELATIONSHIPS.....	55
CAPITAL PLAN AND PROJECT PRIORITIES.....	55
Housing.....	55
PROGRAMS	57
IMPLEMENTATION STRATEGIES	57

Executive Summary

The Lheidli T'enneh Land Use Plan (LUP) provides future land use and development direction for the existing Lheidli T'enneh reserves. These reserves include Ts'un'ut (Fort George Cemetery), Khast'an Lhughel (Shelley), Lhezbaonichek (Clesbaoneecheck) and Dzulhyazchun Tsalakoh (Salaquo) totaling 685.6 hectares (ha) or 1,695 acres (ac).

BACKGROUND

This Land Use Plan has been prepared as a joint project between the Lands Authority and the Lheidli T'enneh Treaty Office. To assist in the preparation of the Plan, the Lands Authority formed a Land Use Planning Committee (LUPC) consisting of the 5 elected Lands Authority members as well as 4 additional community members. The LUPC has provided direction to staff with respect to traditional and cultural knowledge, community mapping sessions, issues identification, plan content, draft plan review and has served as a valuable resource throughout this project.

The Elders' Committee has contributed Carrier names and provided important cultural/heritage background information to ensure this Plan includes traditional use considerations when future land use decisions are made.

LEGAL BASIS OF THE PLAN

The Lheidli T'enneh LUP has been prepared under the provisions of the Lheidli T'enneh Band Land Code. The Land Code provides the legal authority for the Band to plan, develop, conserve and manage their lands.

The final Plan must be approved by a vote open to all adult Lheidli T'enneh Band Members to become Lheidli T'enneh Law.

COMMUNITY MAPPING

In order to obtain as much community input as possible 11 community mapping sessions and 3 information meetings were held with various Band committees and Community members between August 2004 and January 2005. These community mapping sessions provided Members with the opportunity to "see and touch" Lheidli reserve maps, share their thoughts on land use choices and indicate what land uses and developments they want for these lands in future. As part of this process Members also identified traditional use areas that may require further investigation/identification and protection to avoid future land use conflicts.

COMMUNITY AND YOUTH LAND USE PRIORITIES

To summarize Members' input obtained at the community mapping sessions two maps were prepared for each reserve. These maps "paint a picture" of overall community and youth land use priorities. The Community Land Use Priorities included community input on one map. Youth

input was summarized on a separate map in order to recognize youth land use priorities separately.

These maps generally indicate Members wish to retain traditional uses as an important part of the reserves while providing for additional housing, recreation opportunities, community facilities and services for existing and future residents.

LAND USE DESIGNATIONS

The Community and Youth Land Use Priorities Maps are the basis for the Land Use Designations for each reserve.

These Land Use Designations consist of the following:

- Traditional Use Area**
- Cultural Heritage Site**
- Community Development Area**
- Community Development Expansion Area**
- Natural Resource Development Area**
- Environmentally Sensitive Area**

Section 5 presents the Land Use Designations used throughout this plan and indicates what land uses and developments are permitted within each Land Use Designation. For example, housing is permitted in the Community Development Area but not in an Environmentally Sensitive Area.

The Land Use Designations are shown for each reserve on attached Map #14 through Map #17. These maps indicate what land uses can be developed in various areas on each reserve and provide the overall framework for the Lands Authority and land administrators to make land use decisions when development proposals are made.

IR#1A TS'UNK'UT

This reserve consists of 0.9 ha (2.3 ac) and is located within the present boundaries of the City of Prince George's Fort George Park near the confluence of the Nechako and Fraser Rivers. The cemetery has primarily cultural/heritage value as the historical burial ground for Lheidli T'enneh Members.

Objective

Cemetery as a significant cultural heritage site for the Lheidli T'enneh First Nation.

This reserve is proposed as a Cultural Heritage Site under the Land Code for continued use as a cemetery and to celebrate Lheidli cultural, history and traditions at the confluence of the Fraser and Nechako Rivers.

For IR#1A there are no Community or Youth Land Use Priorities Maps since this entire reserve will be a cultural heritage site. See Map #14 for the land use designations for IR #1A.

IR# 2 KHAŠT'AN LHUGHEL

North and South Khašt'an Lhughel (Shelley) consist of 533 ha (1,318 ac) located **approximately 22 km** upstream from the confluence of the Fraser and Nechako Rivers. This reserve contains the primary community settlement area for Band Members with 36 homes.

Objective

Khašt'an Lhughel (Shelley) as a sustainable community with a variety of employment and housing opportunities together with education, social and recreation programs.

This reserve is the primary Community Development Area and Community Development Expansion Area for Lheidli T'enneh. This reserve is proposed to provide existing and future Members with expanded housing opportunities and community facilities. See Map #15 for the land use designations for Khašt'an Lhughel (Shelley).

IR#3 LHEZBAONICHEK

Lhezbaonichek (Clesbaoneecheck) is 124 ha (306 ac) and located on the Nechako River approximately 20 kilometres upstream from the confluence of the Nechako and Fraser Rivers.

Objective

Traditional Use with Community Development Expansion Area along North Nechako Road.

This reserve may have potential as an alternate location for residential and related development in future dependent upon resolution of off site road upgrades and extension of power to this area. See Map #16 for the land use designations for Lhezbaonichek (Clesbaoneecheck).

IR# 4 DZULHYAZCHUN TSALAKOH

Dzulhyazchun Tsalakoh (Salaquo) is 37 ha (91 ac) and located at the confluence of the Chilako and Nechako Rivers approximately 14 km upstream from Lhezbaonichek (Clesbaoneecheck).

Objective

Traditional Use with small-scale water based tourist facility adjacent to Nechako River.

Due to significant development constraints (lack of legal/physical access, CNR main line, topography), this reserve is proposed for primarily traditional uses. This reserve does not have any future development potential with the exception of small-scale tourist facilities to support water-based tourism along the Nechako River. See Map #17 for the land use designations for Dzulhyazchun Tsalakoh (Salaquo).

PLAN IMPLEMENTATION

This Plan will become Law based upon:

- Lands Authority recommendation to the Band Council under Section 24 of the Land Code;
- Members' approval by vote under Section 12 and 14 of the Land Code;
- Band Council enactment to bring the Plan into law.

This Plan will guide the Lands Authority and Council with respect to:

- Land use decision making on reserve lands;
- Preparation of a zoning law with detailed regulations and provisions with respect to issuance of permits and approvals for specific developments;
- Preparation of capital and operational plans with respect to development on reserve lands, and;
- Delivery of programs and services within existing and new community facilities on reserve lands.

Section 1 - Introduction To The Plan

The *Lheidli T'enneh Land Use Plan* is a community-driven project that combines the land use and development priorities of the Membership with best planning practices in order to create an overall land use plan that guides the management of Lheidli T'enneh's land base. Essentially, the Land Use Plan (LUP) may be thought of as a tool that provides the community and administration with the information of what development can occur where.

Since the Band is in the final stage of Treaty negotiations and the probability of incorporating new settlement lands into the land base in the near future is very real, the *Lheidli T'enneh Land Use Plan* has been split into two phases. The first phase deals with the existing Lheidli T'enneh reserve parcels and the second phase with Treaty Settlement Lands.

This document is the first phase of the *Lheidli T'enneh Land Use Plan* focusing on Lheidli T'enneh's four existing reserve lands.¹ These four reserves and their approximate land area are presented below in Table 1 (see also Map #1 for the location of each reserve and proximity to the City of Prince George).

Table 1 – Lheidli T'enneh Reserve Lands

Reserve Number	Reserve Name	Area in Hectares (ha)
IR #1A	Ts'unk'ut - Fort George Cemetery IR #1A	1.0 ha
IR #2	Khast'an Lhughel - North and South Shelley IR #2	524.5 ha
IR #3	Lhezbaonichek – Clesbaoneecheck IR #3	123.0 ha
IR #4	Dzulhyazchun Tsalakoh – Salaquo IR #4	37.1 ha
	Total Area	685.6 ha

OUTLINE OF THE PLAN

Although the main goal of the *Lheidli T'enneh Land Use Plan* is to provide a land use and development plan, it was decided by community and staff that the secondary focus of the LUP is accessibility. In other words the *Lheidli T'enneh Land Use Plan* should be understandable to each person that reads it. The way in which we approached this is through education, by providing the reader with a brief understanding of the cultural, historical and legislative developments that have impacted the land use and land management practices of Lheidli T'enneh.

Owing to the educational aspect of the Plan, Sections 2 through 4 provide a detailed background to the processes that lead to the completion of the *Lheidli T'enneh Band Land Use Plan*. Specifically, Section 2 provides an overall introduction to the community through a discussion of culture, recent history of the land base and community demographics. Section 3 presents the history of land management on reserve as well as the legislative mandates under which this Plan operates. These include the First Nations Land Management Act, the Lheidli T'enneh Band Land Code and its law-making abilities regarding land use and land

¹ Up until February 2005 Fort George IR #1A did not have Indian Reserve status owing to a mistake made by INAC offices in the early 1900's. This oversight has been recently rectified through an Order In Council and the designation of this land as an Indian reserve is being filed with the First Nations Land Register System.

management. Section 4 discusses the planning processes, including Band Member input and presents the results from the community mapping sessions for both community and youth development priorities.

With respect to land use planning, Section 5 is broken down into four separate “mini” plans for each of the reserves (also known as sector plans). Each of these “mini” plans deals with the land use and development issues specific to each of Lheidli T'enneh's reserves. This includes planning strategies and a series of short, medium and long-term priorities for the future development of these lands.

Finally, Section 6 follows up the planning recommendations and strategies identified throughout the *Lheidli T'enneh Land Use Plan* by providing implementation strategies for the short, medium and long-term priorities identified. These implementation strategies provide a checklist for the Lands Authority and Land Management staff of the initiatives to be undertaken to implement the Plan under the Land Code and to meet the Band's demand for infrastructure, housing, community facilities, recreation, health and safety, development review, cultural heritage, wildlife, habitat and watershed management and economic development.

FIRST NATIONS PLANNING

It is important to recognize that the *Lheidli T'enneh Land Use Plan* is an example of a First Nations planning exercise. We say this for two reasons, the first being that the Plan legislatively fulfills the requirements of Lheidli T'enneh Band Land Code for community approval and adoption.² Secondly because the planning area for the *Lheidli T'enneh Land Use Plan* is much more than the physical characteristics, it is the history and culture of the people. Like all First Nations, the Lheidli T'enneh people and culture are linked to the **land**. This is important to recognize because it bears on the existing land base, the ways in which the land is used now and the ways in which the land will be used in the future.

As part of the cultural significance of the land, the *Lheidli T'enneh Land Use Plan* has incorporated Carrier place names as a means to reclaim the original names and meaning of these places and as an educational tool to expose youth, Band Members and the non-Aboriginal community to the language and the history of the land. Although the Indian Lands Registry System (ILRS) names for the reserves differ, for the purposes of this Plan the Lheidli T'enneh names will be used with the ILRS names provided in brackets.

² The Lheidli T'enneh Band Land Code was enacted under the Framework Agreement on First Nation Land Management and its implementation legislation; the *First Nations Land Management Act*. What is important to note is that the Framework Agreement is a First Nations' initiative (see Section 3 for a more detailed discussion).

Section 2 – Community Introduction

Typically municipal plans provide an introduction of the planning area for which they were created. Usually these introductions are about the physical characteristics of the city or village such as location, land base, population, and relevant zoning or bylaws. They might also include a description of the planning objectives as defined by the planner or planners that created the plan. All of these elements are also a part of the *Lheidli T'enneh Land Use Plan*. However, in addition to these quantitative details, it is important to understand that the community shares a common culture and history and these have impacted the outcome of the Plan.

The purpose of Section 2 is to introduce the community of Lheidli T'enneh, first by understanding that Lheidli T'enneh culture has directed the plan and will continue to direct land and resource management. Second by examining the recent history of the reserve land base, and finally, by providing an overview of the Lheidli T'enneh population and factors that affect it.

PEOPLE AND THE LAND

We are the *Lheidli T'enneh*. Our name translates as “people from where the rivers flow together.” According to our history, a large group of our people were led by Traditional Chiefs and Medicine People to the confluence of these two rivers. These rivers are known as the Nechako and the Fraser.

We traveled throughout our territory, a territory that was once separated into *keyohs*. Each *keyoh* was the responsibility of a clan. We hunted and gathered throughout our Traditional Territory. We traded with neighboring communities. There were no permanent settlements like we think of them today. Instead, there were seasonal villages and camps along the lakes and rivers throughout our territory. Lheidli, the site of present-day Prince George was one of these villages. It is clear to us that our ancestors occupied and used all of what we know as our Traditional Territory.

This is still true today.

This excerpt of Lheidli T'enneh land and occupancy was taken from the *Lheidli T'enneh Traditional Use Study* completed on June 19, 2000. These few paragraphs demonstrate that since time immemorial the Lheidli T'enneh people have been connected to the land employing a complex system of land and resource management that is entrenched in the culture of the Lheidli T'enneh people.

Traditionally, Lheidli T'enneh economy consisted of hunting, fishing, gathering and seasonal trade regulated and managed through a *bah'lhats* (potlatch) form of governance. Even the name *Lheidli T'enneh* (*Lheidli* refers to the actual location where the rivers meet and *T'enneh* refers to people from that place or territory) is drawn from the land, signifying the importance of the relationship between the people and the land.

RECENT HISTORY OF LHEIDLI T'ENNEH LAND BASE

Between the years of 1892 and 1900 the Department of Indian Affairs established a total of four numbered reserves for Lheidli T'enneh (formerly the Fort George Indian Band). The total area of the reserve land base in 1910 consisted of 1237.4 hectares (ha). Today, the reserve land base consists of 685.6 ha. Like many other First Nations the influx of settlers, the upset in the traditional economy, the Indian Act and epidemics pressed the Band to sell off land, specifically, IR #1 and a section of IR #4. The following sections provide a brief outline of the recent history of the Lheidli T'enneh reserve lands with particular attention to the sites of Lheidli (Fort George IR #1) and Dzulhyazchun Tsalakoh (Salaquo IR #4).

Fort George Indian Reserve #1 (Lheidli)

In 1892 the Fort George Indian Reserve #1 was established at the confluence of the Nechako and Fraser Rivers, the current site of the City of Prince George's downtown core. As the main residential site, IR #1 had an area of 1366 acres. By 1900, the Lheidli T'enneh (then the Fort George Indian Band) had three other reserves (IR #2, IR #3 and IR #4) and a population of approximately 144 Band Members. Fort George IR #1 remained the main residential site for the Lheidli T'enneh Nation until their removal in 1913 to IR #2 (Khast'an Lhughel).

In 1907 the Grand Trunk Pacific Railway Company (GTPR) announced its intentions to create a route across BC. With this announcement came the influx of real estate speculators, promoters, and settler activity to the Fort George Indian Reserve #1. By 1910 land promoters had created two separate town sites bordering the reserve, each marketed as terminal sites not only for the GTPR but also for about six or so "paper railways".

For the years between May 1908 and November 1911, IR #1 was the subject of a vicious land dispute between the Lheidli T'enneh Band, the GTPR, the Natural Resources Security Company (NRS), and provincial and federal government officials. Originally the GTPR wanted to use the northern portion of the reserve and the fee simple land to the west of it for the development of a train station and residential town site. However when the owners of the western lots wanted high prices for their lots the GTPR made plans to expropriate the reserve under the Railway Act. This idea never went ahead because the GTPR lawyers argued it would be difficult to prove that the entire area of the 1366 acre reserve was required for railway purposes.

Since the GTPR could not expropriate the land they tried to purchase the reserve from the Lheidli T'enneh Band. These negotiations took three and a half years, involved several court proceedings and in the end the GTPR bought IR #1 for \$125,000 and gave the Lheidli T'enneh Band seven months to leave the reserve. This transaction, including surrender of the reserve land, would not have been possible without the active participation of the Department of Indian Affairs and the Catholic Church. The surrender is now subject to a Specific Claim in the Federal Court of Canada and the Indian Claims Commission against the federal government.

Fort George Cemetery IR #1A (Ts'unuk'ut)

After the "sale" of Fort George IR #1 to the Grand Trunk Pacific Railway in 1913, it was agreed that the cemetery consisting of 0.913 ha (2.3 ac) out of the original reserve would be returned to the Band as a reserve. The GTPR transferred the cemetery land to the (then) Department of Indian Affairs (DIA), but DIA failed to transfer this lot to BC in 1938 when the province transferred all Indian Reserves to Canada under *Order in Council 1036*.

This oversight was not identified until the Lheidli T'enneh Band Land Code was being finalized in 2000. An Order in Council was approved in early 2005 has now finalized this reserve designation and therefore the cemetery is formally designated as Indian Reserve. Upon final treaty settlement Canada will transfer title to the reserve to Lheidli T'enneh ownership.

Fort George (Shelley) IR #2 (Khas't'an Lhughel)

Fort George (Shelley) IR #2 was one of the original numbered reserves set out by the Department of Indian Affairs. After Fort George IR #1 was transferred to the GTPR, IR #2 became the primary settlement area for the Lheidli T'enneh Membership.

Clesbaoneecheck IR #3 (Lhezbaonichek)

Also one of the original numbered reserves, Clesbaoneecheck remains much the same as it was upon transfer to the Band. A further discussion of Clesbaoneecheck is found in Section 5.

Salaquo IR #4 (Dzulhyazchun Tsalakoh)

In the early 1920's many communities were picking up the pieces from the fallout of the Spanish flu epidemic of 1918-1919.³ Margaret Gagnon, a Lheidli Elder tells stories of the epidemic as the time when the Lheidli T'enneh started burying their dead rather than cremation because they couldn't keep up to the numbers of people dying.

In an effort to raise money for the community the Band passed a Band Council Resolution (BCR) in 1922 to surrender part of Salaquo IR #4 (42 acres) to the Government of Canada to be sold and the proceeds to be held for the Band. Later that year Canada sold the land to Mr. John McArthur from Winnipeg for \$856 and issued him a Letters Patent. To raise title to the property Mr. McArthur should have registered his Letters Patent with the BC Land Title Office, but this did not happen. As a result Mr. McArthur's title to the land did not appear in the BC Lands Titles Office or on the First Nations Land Registry.

At present, the land is deemed "no man's land" since Mr. McArthur did not raise title. Unfortunately the 42 acre surrender and the events around the sale of this land were not recognized at the community level until March of 2005. This leaves the Band with a number of outstanding questions about the proceeds from the sale, the entitlement of the land to Mr. McArthur's heirs and whether or not the Band wishes to obtain these lands as part of the final treaty settlement. These questions are currently under investigation.

COMMUNITY DEMOGRAPHICS

Demographics are used to study patterns in populations. In land use planning, demographics such as age are frequently used to determine future infrastructure and service needs. For example if a community has more than 50% of its population under the age of 14 it is likely that that many of the services such as education, recreation, health and transportation will be geared

³ It is estimated that over 20 million people died worldwide, of those approximately 50,000 people were Canadians. Many historians believe that these numbers are even higher since many developing countries and remote communities did not register their death tolls.

towards supporting youth. The same could be said for an aging population whereby there might be more assisted living developments, healthcare and transportation services.

For the purposes of the *Lheidli T'enneh Land Use Plan* demographics are discussed in terms of populations. Like most First Nations, Lheidli T'enneh regards its Band Membership as two populations, the on-reserve population and the off-reserve population. The historical reason for this split is largely because of the Indian Act and Indian and Northern Affairs Canada (INAC) policies.⁴

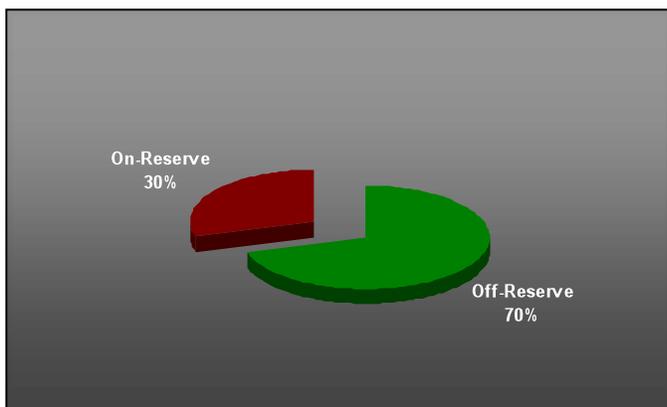
For example, at this time INAC only provides funding for physical infrastructure (including housing) and social programs and services for the on-reserve population. If an off reserve Band Member would like to move back to the reserve to access affordable housing and community health services the reality of this situation is that they will wait years for housing, simply because the funding received from INAC is never enough to keep up with the demand. Added to this situation, the division of the Membership established through policy is often embraced at the community level, such that Band Members living off reserve are often viewed as disconnected with the reserve community.

To date, Lheidli T'enneh has attempted to alleviate the separation between the Members living on and off reserve through intensive treaty-focused community consultation that encourages all Members to participate.⁵ This consultation also includes youth specific activities and provides the necessary supports to ensure participation (such as transportation). Added to this, the Land Code requires community approvals for the creation of land laws, all major planning exercises and major land transactions.

Ratio of On-Reserve Members to Off-Reserve Members

The following chart demonstrates that of the 309 registered Band Members (December 2004), 211 or 68% of Lheidli T'enneh Band Members live off reserve. The remaining 32% or 98 people live on reserve, either at IR #2 or IR #3.

Chart 1 - Ratio of On-Reserve to Off-Reserve Members



⁴ To understand some of the assimilative policies enforced by the Department of Indian Affairs please see *A Narrow Vision, Duncan Campbell Scott and the Administration of Indian Affairs in Canada* (Titley: 1986).

⁵ For the post treaty climate Lheidli T'enneh is also researching models in order to set up LTN locals in the urban centers with the highest percentages of Band Members).

The on-reserve population of any First Nation is directly correlated to the availability of housing, community services, health and safety and overall standard of living (see Waldram *et al*: 2000). Since 76% of the Lheidli T'enneh housing was built after 1991, it is likely that a historical lack of housing contributed to the high percentage of Members living off-reserve. Other factors impacting the off-reserve population include legislative changes, such as Bill C-31 and the close proximity of the reserve lands to the urban centre of Prince George, where housing and services are more readily accessible.

Age Demographics

The age demographics for the Lheidli T'enneh on and off-reserve populations are demonstrated in Charts 2 and 3. For both populations there is a large percentage of Band Members under the age of 25 (40% for the on-reserve population and 34% for the off-reserve population). This demonstrates a younger population, which will create specific pressures for housing for new family formations, recreation and education. In planning for this demographic Lheidli T'enneh should focus on youth services for recreation and education and the development of affordable housing, such as attached housing units (apartments, condominiums and townhomes).

The remaining population over the age of 25 (60% for the on-reserve population and 66% for the off-reserve population) will create specific pressures for housing and health services. In planning for this demographic Lheidli T'enneh might consider developing specialized housing, including assisted living and other health services to accommodate elder Band Members.

Chart 2 On-Reserve Population Demographics

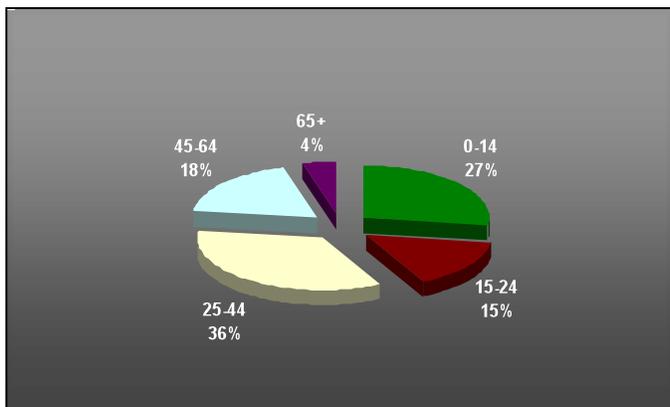
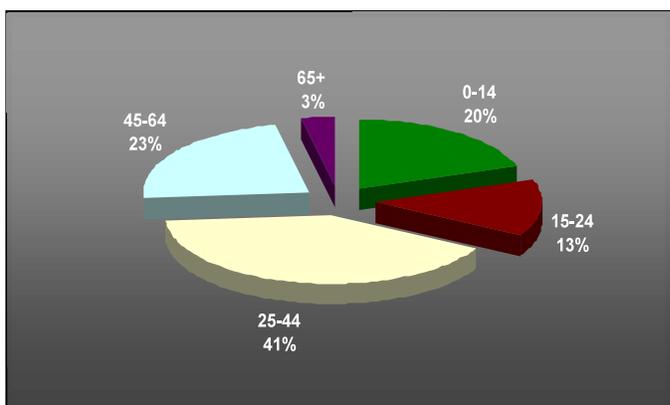


Chart 3 Off-Reserve Population Demographics



POPULATION PROJECTIONS

As previously stated for Land Use Planning process population trends and projections are a key factor in determining the future infrastructure, capital and housing demands that will be placed on the community. By determining the population growth of both the on and off-reserve community, Lheidli T'enneh will be able to plan for and provide the physical and social resources and services necessary to develop the community.

Historical Population Data

Since population demographics do not remain the same, community planners analyze the historical population data and trends in order to make projections about what the future community demographics might look like and plan for services 20 years from now. For the purposes of the Lheidli T'enneh Land Use Plan 20 years of historical data was used in order to derive geometric growth rates. The 20-year historical data is as follows:

Table 2 - Lheidli T'enneh 20-Year Historical Population Data

Year	On-Reserve	Off-Reserve	Total Membership
1984	67	25	92
1985	83	25	108
1986	85	35	120
*1987	85	35	120
1988	85	83	168
*1989	85	83	168
1990	39	139	178
1991	38	145	183
1992	39	166	205
1993	41	174	215
1994	53	170	223
1995	52	174	226
1996	51	191	242
1997	91	168	259
1998	91	173	264
1999	112	155	267
2000	109	179	288
2001	109	191	300
2002	108	193	301
2003	97	205	302
2004	98	211	309
Growth Rate	1.8	10.7	5.9

* No data exists

Future Population Projections

A number of population projections have been prepared for the Band in the past. The 1990 *Physical Development Plan for Lheit-Le-We-Tens* prepared by the Carrier Sekani Tribal Council (CSTC) projected a total Band population of 275 by the year 2010 with an on-reserve population

of 170. Based on actual 2005 Band population, the 1990 projections have underestimated the Band's total membership by 2010.

The 1998 *Lheidli T'enneh First Nation Physical Development Plan* prepared by C₄ Engineering Ltd. revised the 1990 population projections using 3 growth rates of 2.5%, 5% and 7% for the years 1998 to 2018. Using these 3 growth rates, future Lheidli T'enneh Membership was projected to increase to 434 (2.5%), 703 (5%) and 1025 (7%) by 2018. Using the same growth rates the on-reserve population was expected to increase to 291(2.5%), 387 (5%) and 537(7%).

Based upon review of the historical population data, previous population projections and further analysis, this Plan proposes using the geometric growth rate for the total Membership of 5.9% for both the on and off-reserve populations as indicated in the Table below.

Table 3 - Lheidli T'enneh 20 Year Future Population Projections (at 5.9%)

Year	On-Reserve	Off-Reserve	Total Membership
2005	104	223	327
2006	110	237	347
2007	116	251	367
2008	123	265	389
2009	131	281	412
2010	138	298	436
2011	146	315	462
2012	155	334	489
2013	164	353	518
2014	174	374	548
2015	184	396	581
2016	195	420	615
2017	206	445	651
2018	219	471	689
2019	232	499	730
2020	245	528	773
2021	260	559	819
2022	275	592	867
2023	291	627	918
2024	308	664	972
2025	327	703	1030

FACTORS TO AFFECT POPULATION OUTCOMES

Between 1984 and 2004 the population of the Lheidli T'enneh Membership tripled. Aside from usual birth and death rates, there are a few factors contributing to the historical population increases as well as future population increases. These factors include:

Bill C-31

For most First Nations in Canada there have been two landmark years for large population increases, 1986 and 1996. In 1985 the Government of Canada passed Bill C-31 allowing those women and their dependants who had lost their Indian Status through enfranchisement to be

reinstated.⁶ Owing to Bill C-31, in 1986 many First Nations saw dramatic increases in their populations (this particularly impacted the off-reserve population since mostly enfranchised Members and their children were living off reserve). Similarly, in 1999, INAC processed a large backlog of Bill C-31 applications resulting in another rapid increase of First Nations' populations.⁷

Treaty Ratification

As mentioned, Lheidli T'enneh is in the final stages of treaty negotiations. Should the treaty be ratified and finalized there will be a greater land base (including lands within the City of Prince George), more resources for community services and infrastructure as well as management over who is eligible to be a Member of the Lheidli T'enneh Nation. Currently in order to be a Band Member, a person must also be a registered Indian. With treaty, a program for eligibility and enrollment will be implemented such that people with a family connection to Lheidli T'enneh may have the opportunity to become Band Members without being registered Indians. It is possible that Lheidli T'enneh will see a marked increase in the total Membership population due to the Eligibility and Enrollment program.

Also with treaty ratification is greater opportunity for the Membership to live on Lheidli T'enneh lands. Under the provisions of the Land Code, Lheidli T'enneh is currently examining models for reserve tenure such as leases, to prepare for both the increase in land base and the interest of the Membership wanting to live on or develop Lheidli T'enneh lands.

⁶ For a brief discussion of enfranchisement see http://www.ainc-inac.gc.ca/pr/pub/matr/his_e.html

⁷ For more information regarding the processing of Bill C-31 files see the *INAC Population Projections for Canada and Regions 1998-2008* (2000).

Section 3 – History of Land Management

The following section provides a brief history of Lheidli T'enneh land management practices. This is done for two reasons, the first is to provide information for those people with little or no knowledge of traditional land management or reserve land management under the Indian Act. Second, it outlines the First Nations Land Management Act and the processes that Lheidli T'enneh underwent to take over the management of their land base.

TRADITIONAL LAND MANAGEMENT

As mentioned in Section 2, prior to contact Lheidli T'enneh had a very complex system of governance, the *bah'lhats*, which included the traditional ownership and management of land. Through the *bah'lhats* a family or clan would orally trace the boundaries of their *keyoh* and the people in attendance would bear witness to this, confirming the clan's "ownership" of their land. The *keyoh* provided all the resources necessary for survival and was managed by the family to ensure its preservation.

Today, although the *bah'lhats* are no longer practiced, and the *keyoh* system has diminished Lheidli T'enneh acknowledges the "ownership" of traditional land through both the collective understanding of the traditional territory and through recognition of occupancy, such as in a house prior to the establishment of the reserves, or use, such as hunting areas.

THE INDIAN ACT AND LAND MANAGEMENT

First passed in 1876 this Canadian federal legislation sets out certain federal government obligations and regulates the management of Indian reserve lands, Indian moneys and other resources including culture. Upon its enactment, the Indian Act replaced traditional methods of governance and land management, leaving First Nations without control of their resources. Approximately 25% of the Indian Act deals with the management of reserve lands (the specific sections are discussed further in this section). Like most First Nations in Canada, the department of Indian and Northern Affairs Canada (INAC) administered Lheidli T'enneh reserve lands until the Band took over this authority under its Land Code in December 2000.

Reserve Land Tenure Under the Indian Act

It is important to recognize that under the Indian Act **fee simple tenure does exist on reserve**. As per Section 18(1) of the *Indian Act*, reserve land is owned by the Crown and set aside for the use and benefit of the First Nation occupying it. The most common forms of individual tenure on reserve exist as leases or Certificates of Possession, which are a unique form of tenure only existing on reserves.

Basically a Certificate of Possession (CP) is a legal document that gives an individual the right to possess and occupy a certain parcel of land. CP land may be passed to other Band Members such as in an estate or sold back to the Band, but it is not equivalent to fee simple tenure. CP parcels are still reserve lands and cannot be used as an asset for securing a mortgage or loan with a financial institution. Further, the Band Council may annex CP parcels for development.

FIRST NATIONS LAND MANAGEMENT ACT (FNLMA)

On February 12, 1996 the Government of Canada (as represented by the Minister of Indian Affairs) and 13 First Nations, including Lheidli T'enneh, signed the *Framework Agreement on First Nation Land Management*.⁸ The Framework Agreement outlined the requirements for a new land management process, where First Nations could opt out of the land related provisions of the *Indian Act* and have authority over reserve lands. The legislation for the Framework Agreement was introduced in Parliament as Bill C-49, the *First Nations Land Management Act* (FNLMA) and was enacted and given royal assent on June 17, 1999. The process is now known as the First Nations Land Management Initiative, or FNLMI for those people operating outside of the Act and as FNLMA for those operating within.

Every First Nation eligible to come under the FNLMA is required to follow the guidelines set out by the Framework Agreement for the creation and adoption of a land code. Once adopted, this land code replaces the land management provisions of the *Indian Act*. Specifically the following sections of the Act do not apply:

- Reserves (ss. 18-19)
- Possession of Lands in Reserves (ss. 20, 22-28)
- Trespass on Reserve (ss. 30-31)
- Sale or Barter of Produce (ss. 32-33)
- Roads and Bridges (s. 34)
- Lands Taken for Public Purposes (s. 35)
- Surrenders and Designations (ss. 37-41)
- Distribution of Real Property (ss. 49 and 50(4))
- Management of Reserves and Surrendered and Designated Lands (ss. 53-60)
- Farms (s. 71)
- Removal of Materials from Reserves (s. 93)
- Regulations made under section 57 of the *Indian Act*; and
- Regulations under sections 42 and 73 of the *Indian Act* to the extent that they are inconsistent with the Framework Agreement or the Land Code or the laws of the First Nation.

One of the most valuable provisions of the FNLMA is that each First Nation is required to create a community approval process (s. 7 of the Framework Agreement) for the adoption of a land code (s. 5 of the Framework Agreement) as well as its individual agreement with the Minister (s. 6 of the Framework Agreement). The community approval process guarantees the distribution of information regarding the FNLMA to all Band Members and requires an approval vote from a minimum of 25% of all eligible voters, whether on or off-reserve. Basically the community approval process ensures the participation of the entire Membership, and provides an opportunity for informed, community-based decision-making.

In order to ensure that First Nations wanting to sign on to the FNLMA have the resources to do the Framework Agreement provided for the inclusion of a Lands Advisory Board (LAB) to assist individual First Nations with the development of their land code, addressing land management regulations, environmental assessment polices and reporting (ss. 38-41 of the Framework

⁸ One other First Nation was added in December 1997. Since the 14th First Nation was added before the FNLMA was enacted, the literature commonly refers to the efforts of the original 14 signatory First Nations.

Agreement).⁹ As an added support, the LAB and the Government of Canada appoints an independent verifier to ensure that community approval process for the adoption of a land code is done in accordance with the Framework Agreement.

LHEIDLI T'ENNEH BAND LAND CODE

The Lheidli T'enneh Band Land Code was ratified by a Membership vote on October 28, 2000, certified by the LAB verifier on November 15, 2000 and came into legal force and effect on December 1, 2000. Since that time, the Lheidli T'enneh Band Land Code has undergone one major amendment that was approved at a Meeting of Members (s. 12 of the Lheidli T'enneh Band Land Code) on March 7, 2003.

The Lheidli T'enneh Band Land Code represents a major shift in the management of the Lheidli T'enneh lands and resources as it provides the opportunity for Lheidli T'enneh to develop land management laws that previously would have been imposed by the Indian Act. Through the Land Code any issues regarding land use, conservation, possession, tenure and development can be reconciled through the law-making provisions (ss. 6-9) of the Lheidli T'enneh Band Land Code.

Ultimately the Lheidli T'enneh Land Code is a First Nations governmental approach to land use and land management that maintains the values of the people without deference to the Indian Act. It allows for the people of Lheidli T'enneh to make decisions about their land base and how it will be used for generations to come. The methods of land management traditionally used by the Lheidli T'enneh may have changed over time but the mechanism for consultation and community approval ensure that families are represented and decisions are made at the community level.

LANDS AUTHORITY

In order to facilitate the functions of the Land Code and advise Chief and Council on all matters pertaining to Band lands, the Land Code provides for a body of elected Band Members known as the Lands Authority (LA) (see ss. 24-26 of the Lheidli T'enneh Land Code). The Lheidli T'enneh LA works directly with Lands Advisory Board and oversees the management of Band Lands as well as the distribution of information between administration and Band Members. The Lheidli T'enneh Lands Authority is currently composed of five elected eligible Band voters that may hold office for a maximum term of four years and one Chairperson that is appointed by Council (see section 25 of the Lheidli T'enneh Band Land Code).

The Lheidli T'enneh Band Land Use Plan comes from the function of the Lands Authority for the development of land management resources. In this case, a land use plan that maintains the guidelines of the Lheidli T'enneh Band Land Code and integrates community values for development.

⁹ Section 38 of the Framework Agreement provides that the composition of the Lands Advisory Board must have at least 3 members from First Nations that have ratified their land code.

Section 4 – Land Use Planning Process

PARTICIPATORY PLANNING

The Lheidli T'enneh Band Land Use Plan is based on the methods of participatory planning. The philosophy behind participatory planning is based on the premise that the *community knows best*. In other words, planning and development is directed through the input of the Lheidli T'enneh Band Members. This approach to planning land use and development breaks the cycle of top-down decision making processes that are so much a part of the historical relationship between government and First Nations. In addition community input creates a sense of community ownership over the planning outcomes, which is exactly the goal (as per the FNLMA and the Framework Agreement that guides it).

For this document, the input of the Band Membership has created a series of land use planning statements that have been summarized to form the *Lheidli T'enneh Land Use Plan*. However, it is important to recognize that the Lheidli T'enneh Land Use Plan is a living document and that the planning statements created through community participation are flexible and may change over time. Therefore it is crucial that this document be revisited every 5 years and be evaluated by the community to see if it still matches the priorities of the Membership.

LAND USE PLANNING COMMITTEE

In order to ensure that the Lheidli T'enneh Band Land Use Plan is a community driven document from start to finish, a Land Use Planning Committee (LUPC) comprised of nine Band Members was appointed to oversee the process. The composition of the Land Use Planning Committee includes the five elected members of the Lands Authority (Violet Bozoki, Kenora Stewart, Melody Buzas, Lyle Pius, and Lenora White) with the addition of four other Band Members, (Frank Frederick Sr., Ron Seymour, Counselor David Baker and Shirley Gustason) who represent the Community Treaty Council.

Throughout the formation of the Lheidli T'enneh Band Land Use Plan, the LUPC provided direction on input processes, content, areas of concern, traditional knowledge of the land and assisted in the facilitation of community mapping sessions.

Community Mapping

Community input for the Lheidli T'enneh Band Land Use Plan was largely obtained through community mapping sessions. Community mapping is a tool for participatory planning that provides each participant with an opportunity to express **what** developments they would like to see and **where** they would like to put them.

For the Lheidli T'enneh Band Land Use Plan, a series of large maps representing each reserve were brought to community meetings so that Band Members had the opportunity to “see and touch” maps of the Lheidli T'enneh reserve lands and indicate what land uses and developments they want to see on Lheidli land. In addition to identifying development, Band Members also identified what areas are culturally significant and should be protected either for habitat management (plants and animals) or historical sites that should be protected from major resource developments such as forestry or mining. In the end Band Members transferred

knowledge about the land, teaching both the planners and each other about the past, present and future significance of each reserve and the area around it.

For the Plan, each of community mapping sessions began with three or four table-sized maps of either one or two of Lheidli T'enneh's reserves. Each map showed existing development and infrastructure as well as physical constraints to development such as the absence of road access, right of ways, slopes, floodplains and drainage courses. Working off the existing development maps, Band Members were provided with 1-hectare squares of different coloured paper with each colour representing a different land use (see Appendix 1 for a copy of the community mapping legend). Land uses included residential, community facilities, commercial, industrial, traditional use, tourism, recreation, and agriculture.

Through group discussion, Band Members placed various land use "squares" onto the maps usually by identifying specific developments and matching them back to the land use designations.¹⁰ Once each map was completed, Members presented their maps and discussed the issues they faced in determining which land uses were applied to their map.

Under the direction of the LUPC, community mapping sessions were held with both the general Band Membership and **separately with the Lheidli T'enneh youth**. This was done without any population or demographic analysis but with the understanding that the Lheidli T'enneh youth are the future of the community and that their vision for community development should be solicited and presented separately.

In order to obtain community input and ensure that Members were not excluded a total of **11** community mapping sessions and **3** information meetings were held with the various community groups and general Band Membership. The breakdown of these community sessions is presented on the following page.

Figure 1 – Youth Mapping Session



¹⁰ It is true that not everyone agrees, but upon examination of the completed community maps almost all of them followed the same patterns for land use, regardless of which date or session they were completed on. Even the few maps that did not match often displayed similar developments, just placed in a different location. For example four maps of Shelley might show a sawmill (industrial land use) in the northeast corner of the reserve and one map placed a sawmill (industrial land use) in the northwest corner of the reserve. The result is still the same, that the Membership supports industrial development on reserve.

Table 4 – Summary of Community Mapping Sessions & Information Meetings

Community Group	Date	Reserve(s) Mapped
LUPC	August 26, 2004	Khast'an Lhughel (Shelley)
LUPC	September 30, 2004	Dzulhyazchun Tsalakoh (Salaquo)
LUPC	October 8, 2004	Lhezbaonichek (Clesbaoneecheck)
LUPC	November 8, 2004	Experimental Farm
CTC	October 26, 2004	Dzulhyazchun Tsalakoh (Salaquo) Lhezbaonichek (Clesbaoneecheck)
CTC	November 9, 2004	Khast'an Lhughel (Shelley)
CTC	December 7, 2004	Experimental Farm
YTC	November 4, 2004	Dzulhyazchun Tsalakoh (Salaquo) Lhezbaonichek (Clesbaoneecheck)
YTC	December 9, 2004	Khast'an Lhughel (Shelley)
General Community Meeting	January 16, 2005	Khast'an Lhughel (Shelley) Dzulhyazchun Tsalakoh (Salaquo) Lhezbaonichek (Clesbaoneecheck)
Staff Meeting	October 26, 2004	Lhezbaonichek (Clesbaoneecheck)
General Information	November 21, 2004	AGM
General Information	December 5, 2004	Treaty Update Meeting
Carrier Place Names Committee (Elders)	January 25, 2005	All Reserves & Names

LUPC = Land Use Planning Committee
 CTC = Community Treaty Council
 YTC = Youth Treaty Council

It should be noted that at the time of the completion of Lheidli T'enneh LUP the Band was nearing the completion of a Treaty process. Owing to this, two main community groups, the Community Treaty Council (CTC) and Youth Treaty Council (YTC) were regularly scheduled and attended by Band Members.¹¹

This is important for two reasons; the first is that the makeup of the CTC provides for representation from each family as well as representation across ages and gender, and ensures participation from both the on and off-reserve population. This is the exact tenant of community input, that it is representative. Secondly, the CTC and YTC provided a readily available opportunity to coordinate and facilitate the community mapping sessions. Certainly this is a unique situation and might set the example for other First Nations wanting to undertake a community input process be it for treaty, land use planning or any other Band initiatives.

PRESENTATION OF RESULTS

In order to present the results from the mapping sessions and general community input, the Land Use Planning Committee recommended that the information obtained from the mapping sessions be combined into two maps for each reserve. The first map is a presentation of the overall community identified land use priorities (see Maps #8, #10 and #12). The second set of

¹¹ The Lheidli T'enneh Community Treaty Council has a routine weekly meeting with attendance ranging from forty to sixty Band Members. The Youth Treaty Council has weekly or bi-weekly meetings with over 20 youth in attendance.

maps presents the outcomes from the youth community mapping sessions (see Maps #9, #11 and #13).

Once all the community mapping sessions were completed, each of the reserve maps were digitized and the most frequent land uses and their location presented the final map. For example, all of the community maps identified *Tourism* and *Traditional Use* as land uses for Dzulhyazchun Tsalakoh (Salaquo). In order to present the boundaries of separate land uses, each community map for Dzulhyazchun Tsalakoh (Salaquo) was digitized, visually examined and then the most frequent boundaries presented.

As mentioned previously, given the nature of Ts'unk'ut (Fort George Cemetery) as a cemetery, no mapping sessions were completed for this reserve. However, once the Band undertakes negotiations with the City of Prince George for the maintenance of the cemetery a similar exercise might be completed to determine a collective vision for the aesthetic of the cemetery.

SUMMARY OF COMMUNITY-IDENTIFIED DEVELOPMENT PRIORITIES

From the community mapping sessions Lheidli T'enneh Band Members identified a large number of specific developments that they would like to see occur on reserve. Some of which included the preservation or upgrading of culturally significant sites and traditional use areas. The most frequently identified development for the reserves included:

- New Housing
- Camps
- Berry Picking
- Wild Rice
- Store
- Restaurant
- Education Centre
- Hospital/Health/Day Care Centre

Many of these developments were repeatedly identified throughout the community mapping sessions, indicating a collective vision for the values/principles to guide the development of each of the reserves. These value statements are as follows:

- Develop agricultural opportunities for Band and export purposes (wild rice, organic farming).
- Recognize sites for their historical cultural and spiritual importance (church, cemetery).
- Retain areas for traditional economic activities and use elders to educate youth (fishing, medicine plants).
- Develop new outdoor recreation activities for Members (formalizing existing trails and developing new trails and associated facilities).
- Develop new outdoor land and water based uses to attract, educate and cater to tourists and provide employment/income (river tours, bed/breakfast).
- Provide new commercial and industrial opportunities (gas station, general store).

- Develop community facility/facilities to provide programs and services (healing centre, health care, day care and Elders centre).
- Construct a variety of additional housing types (affordable Band housing (such as triplexes, Elder assisted living, single-family detached Band housing and high-end residential) and ensure that the Membership participates in the aesthetic and construction of housing.
- Develop or improve on and off site access to reserve lands.

Section 5 – Reserve Land Use Strategies

This section contains specific strategies for land use for each of the four Lheidli T'enneh reserves listed below.

- Ts'unuk'ut (IR #1A Fort George Cemetery)
- Khast'an Lhughel (IR #2 North and South Shelley)
- Lhezbaonichek (IR #3 Clesbaoneecheck)
- Dzulhyazchun Tsalakoh (IR # 4 Salaquo)

This Plan takes into account community input, physical development plans, demographics, environmental characteristics, traditional use and engineering and environmental studies that have previously been completed on each of the reserves. The Plan should be used when making all land use and financial decisions related to reserve development. Also it should be noted that the *Lheidli T'enneh Land Use Plan* must be evaluated on a regular basis with a comprehensive review undertaken at least every 5 years.

LAND USE DESIGNATIONS

Land use designations have been proposed for each reserve. The designations group similar and compatible land uses together under a number of comprehensive land use categories. The Land Use Designation Maps, numbered 14 through 17 indicate the location of land uses that are permitted within each of the reserves. Continuation of existing land uses, community and youth land use priorities and professional planning principles have been considered in developing these designations. The land use designations and their permitted uses are as follows:

Traditional Use Area

This land use designation refers to an area where traditional uses including hunting, berry picking or other culturally significant activities historically occurred or currently take place. Generally, Traditional Use Areas are for the use and benefit of Lheidli T'enneh Band Members. These areas should be protected from incompatible land uses for the future in accordance with the future Zoning Law.

Cultural Heritage Site

This land use designation refers to a specific site such as a cache pit, culturally modified trees, cemetery, church or site where culturally significant activities occurred or currently take place. These sites should be identified, geo-referenced and protected and preserved for the future in accordance with the Land Code.

Community Development Area

This land use designation refers to existing residential and commercial uses at Khast'an Lhughel (Shelley) as well as the Band office, as well as community facilities and industrial uses serviced with or have the potential to be serviced with communal water and sewer systems in accordance with the future Zoning Law.

Community Development Expansion Area

This land use designation refers to areas designated for possible future expansion of the existing community development area at Khast'an Lhughel (Shelley) and potentially

Lhezbaonichek (Clesbaoneecheck). Prior to the development of these lands Lheidli T'enneh will adopt a zoning bylaw to ensure that new development conforms to the Plan and infrastructure requirements, and is compatible with adjacent uses.

Natural Resource Development Area

This land use designation refers to the development of Lheidli T'enneh's natural resources including forestry, fisheries, gravel, agriculture and even traditional plants such as berries for tourism.

Environmentally Sensitive Area

This land use designation refers to those lands within the 1:200 year floodplains, areas with slopes greater than 20%, wetlands, lands that require erosion control or shoreline protection and lands that may be flooded or uncovered due to changes in the bed and shore of the Fraser and Nechako Rivers. These areas should generally remain in their natural state. However, should proposals to develop these areas be submitted, the completion of specific environmental studies and the adoption of environmental mitigation measures processes for the protection and management of these areas will be required in accordance with the Land Code.

INDIVIDUAL RESERVE PLANS

Under this section, each of the reserves has an individual plan that addresses a number of planning issues. Depending on the location, existing development and future development potential some or all of the planning issues presented below are discussed in detail.

Background of the creation, major land transactions and physical characteristics for each reserve is provided.

Community and Youth Land Use Priorities are identified for each reserve. Most of the land use priorities come from the community and youth mapping sessions but also were taken from comments provided throughout the community input phases of this Plan. It is important to establish the community land use priorities within each individual plan so that future land uses remain consistent with community values.

Development Opportunities and Constraints are identified for each reserve. The reserves are geographically separated but all are located adjacent to the Fraser or Nechako River. They have a number of similarities and differences in terms of traditional uses, topography, floodplain, access, and future land use potential. It is important that development opportunities and constraints be considered when planning future land use and undertaking specific development projects such as housing or tourism uses.

Planning Visions are proposed for each reserve based upon the Band's overall Vision Statement. These reserve level Planning Visions "paint a picture" of what the future land use of these reserves is intended to be. This "picture" is based upon participatory planning using the community mapping results (as discussed in Section 4) and general community and youth land use priorities. Lheidli T'enneh youth played a significant part in defining these visions, and brought a unique and modern perspective to the issue.

Objectives provide specific direction on how the Planning Vision for each reserve should be implemented within each Land Use Designation.

Permitted Uses indicate the primary uses that shall be permitted within individual Land Use Designation and secondary uses that may be permitted by the Lands Authority.

Planning Strategies identify what measures need to be undertaken to implement the Planning Visions and Objectives for each reserve in accordance with the Land Use Designations and permitted uses. For example, these strategies identify what needs to be done to ensure housing is built in the appropriate location or protect traditional use areas from incompatible development such as industrial uses.

The Planning Strategies are prioritized into short, medium and long-term priorities to indicate what specific tasks need to be done and when they need to be done to implement the plan.

- Short term strategies need to be undertaken within 1 to 3 years.
- Medium term strategies should be undertaken between 4 and 10 years.
- Long term strategies may be undertaken after 10 years.

It should be noted that these time periods may be flexible and are dependent on staff and capital resources available.

It is important to remember that the reserves are not islands unto themselves. In implementing these strategies it is crucial to develop and maintain good relationships with neighbouring private landowners, BC Crown lands and Local Governments. It is especially important for Lheidli T'enneh, City of Prince George and Regional District of Fraser Fort George to work towards harmonization of land use plans where such plans impact mutual interests and jurisdictions. Cooperative administrative and political relationships will mutually benefit all three parties. It is also critical for local governments and Lheidli T'enneh to work together to determine the most cost effective manner to provide municipal services (road maintenance, fire protection) for the reserves and adjacent private landowners. In some cases, it may be more appropriate for Lheidli T'enneh to enter into municipal service agreements to "purchase" services from adjacent local governments. In future, it may also be appropriate for local governments to negotiate agreements and "purchase" services from Lheidli T'enneh.

IR# 1A TS'UNK'UT (FORT GEORGE CEMETERY)

BACKGROUND

The original Fort George IR #1 was established in 1892 at the confluence of the Fraser and Nechako River. At that time IR#1 consisted of 553 ha (1366 ac). This area included what is now the present-day downtown core of the City of Prince George.

When this reserve was “sold” to the Grand Trunk Pacific Railway (GTPR) in 1913, it was agreed that the cemetery consisting of 0.913 ha (2.3 ac) out of the original reserve would be returned to the Band as a reserve. The GTPR transferred the cemetery land (Block Z Plan B 3575 (LTO) Plan BC, 644 CLSR to the (then) Department of Indian Affairs (DIA), but DIA failed to transfer this lot to BC in 1938 when the province transferred all Indian Reserves to Canada under *Order in Council 1036*. This oversight was not identified until the Lheidli T'enneh Band Land Code was being finalized in 2000. An Order in Council was approved in early 2005 has now finalized this reserve designation and therefore the cemetery is formally designated as Indian Reserve. Upon final treaty settlement Canada will transfer title to the reserve to Lheidli T'enneh ownership.

Ts'unk'ut (Fort George Cemetery) is physically located within the present boundaries of the City of Prince George's Fort George Park near to the Exploration Place museum. The burial ground is located within the northern portion of Ts'unk'ut (Fort George Cemetery) and has approximately 27 existing marked and unmarked graves. Ts'unk'ut (Fort George Cemetery) is an active cemetery with burials occurring as recently as 2002 (four) and there is the potential to accommodate additional graves within the existing cemetery plan.

Primarily the cemetery has cultural and heritage value as the original burial ground for Lheidli people who lived at the confluence of the Nechako and Fraser Rivers. Due to the cemetery's physical location within Fort George Park, Ts'unk'ut (Fort George Cemetery) has the potential to increase its profile within the City of Prince George and Region.

DEVELOPMENT OPPORTUNITIES AND CONSTRAINTS

Ts'unk'ut (Fort George Cemetery) provides a unique opportunity within Fort George Park to celebrate Lheidli T'enneh culture in two ways. First, there is an opportunity to enhance this reserve with additional educational and culture exhibits sensitive to its primary purpose as a burial ground. Second, there is an opportunity to partner with Exploration Place and Fort George Park to expand the existing museum utilizing adjacent lands such as Hudson Bay Slough. This partnership may take the form of a major cultural attraction and visitor destination in this area while respecting the integrity of the existing burial grounds.

The only major constraint that Ts'unk'ut (Fort George Cemetery) has is its internal location within Fort George Park where the existing reserve is surrounded by a major city park and trail. The existing cemetery is located among a number of passive recreational activities that also use Becott Way from 20th Avenue.

COMMUNITY AND YOUTH LAND USE PRIORITIES

There were no community mapping sessions held specifically for Ts'unk'ut (Fort George Cemetery). The Lands Authority has been in ongoing discussions with the City of Prince George to resolve three issues related to Ts'unk'ut (Fort George Cemetery). The first is to strike a service agreement for the maintenance of the cemetery. The second is to accurately identify the location and names of deceased buried in individual unmarked plots. Finally, the Lands Authority along with Lheidli T'enneh Elders are in discussions with the City to have a 100m area around the boundaries of the cemetery be excavated in an archaeological dig (or appropriate methodology) for remains that may have been disturbed throughout the numerous City developments at the current site since the dissolution of IR #1.

PLANNING VISION FOR TS'UNK'UT

Ts'unk'ut (Fort George Cemetery) will be celebrated as a significant cultural/heritage site for the Lheidli T'enneh Nation.

LAND USE DESIGNATIONS

Cultural Heritage Site

CULTURAL HERITAGE SITE OBJECTIVE

Recognize Ts'unk'ut (Fort George Cemetery) as a cultural heritage site based upon to its cultural, spiritual and historic value and its continued use as a burial ground.

CULTURAL HERITAGE SITE PERMITTED LAND USES

Primary uses shall include burials and appropriate exhibits celebrating Lheidli T'enneh culture and history.

No secondary uses may be permitted on this reserve.

PLANNING STRATEGIES (What to do and When)

Short Term Priorities

- Designate Ts'unk'ut (Fort George Cemetery) as Cultural Heritage site under the Lheidli T'enneh Land Code.
- Finalize a municipal service agreement with the City of Prince George to ensure Lheidli T'enneh participation in decisions related to landscaping and cemetery improvements/upgrades with an emphasis on a high aesthetic standard of grounds maintenance.

- Initiate Lheidli T'enneh joint comprehensive study with Regional District of Fraser Fort George and City of Prince George to determine the feasibility of developing a major Aboriginal cultural destination with attractions (such as a salmon feast) to highlight the importance of First Nations in the region and attract tourists/visitors to Fort George Park.

Medium Term Priorities

- Encourage burial ground as an active cemetery for Lheidli T'enneh Members and explore potential for designation of portion of City of Prince George cemetery expansion for future Lheidli T'enneh use.
- Ensure formal Lheidli T'enneh representation on City committees involved in future management, operation and site planning in Fort George Park and Exploration Place where adjacent activities may impact Ts'un'k'ut (Fort George Cemetery).
- Initiate discussions with Exploration Place to store and display artifacts to be transferred to Lheidli T'enneh as part of Final Treaty Settlement.
- Initiate negotiations with City of Prince George to form a partnership in the development of additional cultural/heritage exhibits at Exploration Place.

Long Term Priorities

- Develop appropriate information package to educate Members, the broader Prince George Community and tourists on the traditions, culture and history of Ts'un'k'ut (Fort George Cemetery).

IR# 2 KHAST'AN LHUGHEL (NORTH AND SOUTH SHELLEY)

BACKGROUND

This reserve was established in 1892 and was generally settled and developed following the “sale” of IR#1 after 1913. Khast'an Lhughel (Shelley) consists of 533 ha (1,318 ac) and is divided by the Fraser River creating North and South sides of the reserve. This reserve is approximately 22 kilometres upstream from the confluence of the Fraser and Nechako Rivers. The north side of the reserve was cleared progressively in the 1920s and 1930s, and then clear cut in 1966 and 1967 to expand agricultural production. Prior to that, sections of both sides of the reserve were cleared for housing and industrial activity such as the British Columbia Railway (BCR) Line.

North Khast'an Lhughel (Shelley) is 482 ha (1,192 ac) in size and is generally level with large areas of swampy land in proximity to Rancheree Lake and a number of intermittent watercourses draining to the south into the Fraser River. Access to the north side of the reserve is via Landooz Road to the west. Significant slopes occur primarily in the northwest portion of the reserve and along a bench dividing the existing fields and the water tower from the floodplain area west of the existing houses (see Map #2).

On the north side of the reserve, there are 20 houses, a cemetery, church, education center and a play area with the remainder of lands dedicated to agriculture. Also on the north side BC Hydro's 500 KV power line runs north and south through the reserve utilizing 21 ha (53 acres) of land paralleling the eastern boundary of the reserve. There is also a major gas transmission pipeline right of way (3.0 ha) on the western portion of the reserve in proximity to the BCR rail right of way (3.6 ha). The Lheidli T'enneh Final Treaty Agreement will potentially add significant lands (Salmon B and D, Shelley A blocks) adjacent to the existing reserve.

South Khast'an Lhughel (Shelley) is 51 ha (127 acres) in size with 16 houses, Band and Treaty office. Access to this reserve is via Whenun Road from Shelley Road to the west. A number of single family detached homes and an old mill site are located adjacent to the reserve in the village of Shelley located within the Regional District of Fraser Fort George. The Canadian National (CN) mainline traverses the reserve.¹² A significant hill is located to the south of the tracks. Existing housing and Band office are located north of the tracks together with a low lying area adjacent to the Fraser River. The Final Treaty Settlement may result in the addition of Lheidli T'enneh traditional territory (Beaver A, B, C blocks) abutting the south and east boundaries of the reserve.

HISTORY OF LAND USE PLANNING

A number of plans have been completed for Khast'an Lhughel (Shelley) and Lhezbaonichek (Clesbaoneecheck) in recent years. The *Lheit'Le We-Tens 1990 Physical Development Plan* (PDP) discussed population trends, housing demand, current infrastructure and land use in detail. The 1990 PDP proposed future residential development for North Khast'an Lhughel (Shelley) and Lhezbaonichek (Clesbaoneecheck) with a community hall/office building, fire hall, sports fields, and primary school at North Khast'an Lhughel (Shelley). A cow/calf operation, a

¹² The former Grand Trunk Pacific (now Canadian National Railway) line was originally established in 1914-15.

pre-fab modular housing plant, and welding shop were proposed for the existing hay fields and along Landooz Road at the western entrance to the reserve.

The 1998 *Lheidli T'enneh First Nation Physical Development Plan Update* revised the 1990 Plan. This Plan confirmed North Khas't'an Lhughel (Shelley) as the focus for new residential development with the other reserves remaining substantially in an undeveloped state. Future land uses identified for Khas't'an Lhughel (Shelley) included agricultural, natural, residential, commercial/industrial, recreational, community centre (fire hall, offices and research centre) and elementary school.

Community development plan options were proposed for low and high density residential lot subdivisions. The low density option was recommended because of larger lots, lower costs and retention of existing lifestyle. Total housing demand for the next 20 years was predicted to be 136 units including wait lists, new houses and replacements at a capital cost of \$7 million for new lots, infrastructure, community centre and elementary school.

EXISTING INFRASTRUCTURE

Water Supply and Distribution System

South Khas't'an Lhughel (Shelley) obtains its drinking water from groundwater via an existing well adjacent to the Fraser River. The water is pumped to the reservoir south of the CN right of way. From the reservoir water is distributed to individual homes by gravity via 150 mm diameter PVC mains, which include fire hydrants.

North Khas't'an Lhughel (Shelley) similarly obtains its drinking water from groundwater via an existing well and pumphouse adjacent to the Fraser River at the east end of Landooz Road. Water is pumped to the reservoir on the west side of the settlement and distributed to individual homes through 150 mm diameter PVC mains with fire hydrants.

Based upon CH2MHill's October 2003 Asset Condition Reporting System (ACRS) review there is no staff member responsible for operations and maintenance. The North water system appears to be well maintained with equipment tested and serviced regularly by a local Prince George firm. There does not appear to be a similar operation and maintenance arrangement for the South water system with the result that a number of deficiencies need to be addressed.

In August 2000 new standby wells were drilled next to the 2 existing production wells currently providing water to North and South Khas't'an Lhughel (Shelley). Hemmera Envirochem's *Hydrogeological Investigation North Shelley Community and South Shelley Community* reports (February 2002) compares the quantity and quality of water for both existing and new wells. Results of the chemical data for both North and South new standby wells and existing production wells indicate concentrations of calcium carbonate and manganese above the recommended Health Canada guidelines. The existing South reserve production well also exhibited concentrations of iron that exceed drinking water guidelines. However, these guidelines for hardness, manganese and iron are aesthetic objectives and not related strictly to health considerations.

A review of the pumping test data from the North standby well and existing production well suggest that the new standby well is capable of a much higher yield than the existing well. Therefore, should future development of a proposed subdivision necessitate increased drinking

water requirements, the new standby well could be used as the main drinking water source for the North community, while the existing production well could be used as a back-up if required.

The report indicates the existing South production well contained elevated iron concentrations that may indicate deterioration of the well piping, screening and casing. Given these conditions, it was recommended that the new well be completed as the main water supply for the South reserve and the existing well be replaced.

The Band currently has 2 capital projects funded by INAC to deal with the maintenance and replacement of various components of the water supply and distribution systems.

SProject 5295 Domestic Water Supply Improvements for North and South Khast'an Lhughel (Shelley) is scheduled for completion in 2006. This project will identify the remaining life span of both systems' supply and distribution components and identify repairs needed to ensure safe drinking water.

Project 4482 North Shelley Subdivision is also scheduled for completion in 2006. This project will examine options for developing additional serviced lots north of the existing housing including the development of a communal wastewater disposal system.

Fire Protection

In 1996, 2000/2001 and 2003 the First Nations Emergency Services Society (FNESS), assessed community fire hazards and options for fire protection and fire suppression. A number of grass and brush fires resulted in damages to offices and homes in 2003. Lheidli T'enneh's funding proposal to INAC to provide fire protection for Khast'an Lhughel (Shelley) in 2004 outlined a number of options as follows:

- Service agreement with Regional District to provide limited fire protection for the south reserve by the Shell-Glen Volunteer Fire Department. This option is not realistic given the distance between the south reserve and the Shell-Glen Fire hall.
- Service agreement with City of Prince George to provided limited fire protection to the north reserve. The City advises that its nearest fire hall is too far away to be able to provide coverage.
- Residential sprinkler systems for each home or facility. This option has limited protection since properly equipped fire departments are still required to deal with other fires (such as grass and brush fires) that occur outside the structures. Such systems require regular maintenance to ensure their effectiveness.
- Installation of hose cabinets to provide fire protection until an adequately equipped fire department can be organized for the reserve. This option has some merit but is not recognized by insurance companies as adequate protection against fire.

Capital Project 5203 Fire Protection for Khast'an Lhughel (Shelley) has been completed by staff and Creekside Fire Protection in December 2004. The purpose of this project was to design fire hose cabinets for the storage of fire protection equipment for both the north and south reserves. The report recommends that both north and south water systems should be upgraded with pumps to increase existing water pressures and fire flow capacities for fire hoses to work properly. It also recommends that fire hydrants should be constructed in the vicinity of the barns

and storage facility to improve coverage in this area. Finally, a fully equipped and trained volunteer fire department needs to be established to supplement the initial protection provided by the fire hose cabinets. These steps are considered interim measures until a capital plan for a fire hall can be submitted to INAC.

Over and above the fire protection for the reserves, Lheidli T'enneh has entered into a partnership arrangement to undertake a Regional Emergency Response and Recovery Plan with the Regional District of Fraser Fort George. This Plan will identify potential risks that threaten the reserve and develop strategies to deal with these events. Risks identified to date at Khast'an Lhughel (Shelley) include the security of the CN/BCR rail lines, forest and brush fires, flooding and potential gas pipeline ruptures. One key issue that needs to be addressed in this Plan will be access from both south and north reserves in the case of an emergency. There is currently only one road access to each reserve. Previous studies have indicated there is a need to construct emergency road access and relocate Landooz Road to minimize the impact of potential flood events.

Wastewater Disposal

Individual septic fields are utilized to provide wastewater disposal for all homes and buildings in North and South Khast'an Lhughel (Shelley). Hemmera Envirochem's 2002 report indicates that the existing North septic fields are not impacting the deeper aquifer where the existing production and standby wells are located. This report recommends continued operation of individual septic fields including the future installation of individual septic fields in the vicinity of the proposed subdivision. Similarly, the existing South reserve septic fields are not impacting the shallow groundwater in the vicinity of the existing production and standby wells. The report recommended continued use of septic fields as a domestic wastewater disposal method in this area as well.

However, Health Canada's position since 2000 has been that they will not approve any more septic systems in Khast'an Lhughel (Shelley) due to the 1:200 year floodplain, soil types and septic field infiltration during spring runoff. Projects 4477 and 5205 funded by INAC will conduct an assessment of existing septic systems and determine the necessity and extent of the repairs or replacements required to upgrade these systems, if required. This project will also examine the feasibility of constructing a communal wastewater disposal field or lagoon to replace existing individual septic fields. Hemmera's report indicates that more detailed soil testing is required in the vicinity of the potential community wastewater disposal field east of the existing reservoir.

A determination on the future use of individual or community wastewater disposal options is a key issue to be addressed in any future subdivision in North Khast'an Lhughel (Shelley).

Roads

North Reserve Roads are gravel surfaced with open ditches. Landooz Road is the main access road to the north side of Khast'an Lhughel (Shelley) and approximately 2500 m length. This road is partially located with the 1:200 floodplain. Relocation of a portion of Landooz Road was completed in recent years to avoid the potential of an accident where the main Duke Energy gas transmission line crosses the road. Khast'an Road runs off Landooz Road and serves a number of houses. There is also an access road to the water reservoir for operations and maintenance. Lheidli T'enneh information provided to INAC in 2000 indicated these roads require upgrading and improvements to current standards to improve the road base and surface treatment as well as ditches.

South Khast'an Lhughel (Shelley) reserve roads are gravel surfaced with open ditches. The road surface is approximately 6 to 7.5 m. wide. The main access road is Whenun Road connecting to Shelley Road at the south end and terminating in a dead end at the north end of the community. Whenun Road is approximately 950 m in length within an 18 m. right of way on the reserve. Two short cul de sacs, T'ughus Rd and Sewh Rd have been developed off Whenun Road.

The South Shelley Road Access Feasibility Study completed by C4 Engineering in 2001 identified 2 options for Whenun Road. The first option proposed to construct a new road from Loopol Road in the south Shelley community on the west side of the reserve boundary to connect with Whenun Road on the reserve. This option would result in Whenun Road and the uncontrolled crossing over the CN tracks being closed to traffic. This option would require the purchase of land from Canfor to accommodate this road realignment.

The second option proposed would retain the existing road alignment and upgrade the existing CNR railway crossing by raising the road on both sides of the tracks. This road project would reduce the existing approach grades and improve sightlines for vehicles crossing the tracks. A crossing protection signal is also proposed under this option.

The study ultimately recommended option 1, the Whenun Road relocation, due to life cycle costs and safety considerations even though purchase of right of way and other land tenure issues are involved.

Capital project 4990 Khast'an Lhughel (Shelley) Road Improvements is underway to identify improvements required for approximately 3.2 km of roads and drainage on the reserve. The specific scope of the work for this project includes an assessment of existing road and drainage conditions as well as detailed design for road reconstruction and drainage improvements.

A new emergency road access is recommended above the 1:200 year floodplain on the north reserve. This new access will provide residents safe access to the BCR rail tracks that are located above the floodplain. In order to resolve the potential for flooding within certain sections of Landooz Road off the reserve to the west, further discussions need to occur with the Regional District of Fraser Fort George as part of the joint emergency planning process presently underway.

DEVELOPMENT OPPORTUNITIES AND CONSTRAINTS

Khast'an Lhughel (Shelley) is a position to capitalize on a number of development opportunities due to the following strategic considerations:

- Adjacent CN/BCR rail tracks on both south and north reserves;
- Proximity to existing Canfor sawmill and pulp and paper operations;
- Adjacent to old mill site west of south reserve;
- Water frontage on Fraser River;
- Very productive agricultural land;
- Existing domestic water supply sources with potential for expansion;
- Proximity to the City of Prince George.

The major development constraints associated with this reserve include:

- Physical separation of the north and south reserve by the Fraser River;
- Significant land areas that are wetlands and susceptible to flooding;
- Significant slopes in the northwest part of the reserve and south of CN mainline;
- Potential upstream erosion hazard from the Fraser River (see discussion below).

Flood and Erosion Hazard

North and South Khas't'an Lhughel (Shelley) have significant lands adjacent to the Fraser River within the 1:200 year floodplain (see Map #2). Fraser River bank erosion over the years has been extensive especially during strong spring runoffs. Flooding and bank erosion have the potential to threaten existing infrastructure (roads, wells, septic fields), create safety hazard for residents and inundate roads that are too low and susceptible to flooding.

Flood and Erosion Damage Mitigation Plan Stage 1 report completed by UMA Engineering Ltd in January 2000 documents the flood and erosion hazard risks for Khas't'an Lhughel (Shelley). In addition, a number of capital projects have been initiated or completed in recent years to mitigate the impact of flooding and erosion hazard noted in this report.

In 1997 the North Shelley Erosion Protection Project Phase 1 (CPMS 2753) was completed to reduce the safety risk of steep banks caused by Fraser River slope erosion. Phase 1 resulted in the regrading of approximately 400 m of riverbank to a slope of 1.8:1 and the installation of a rip rap apron along the regraded section between the existing houses on Landooz Road and the Fraser River. Phase 2 of the Riverbank Erosion Protection Project has been partially funded by INAC. This project may result in the construction of an additional 450 m of rip rap bank protection directly downstream from Phase 1 if this project is fully funded.

Fort George Indian Reserve Flood Protection by Hay and Company Consultants Inc. 2001 notes a potential larger flood hazard at the north boundary of the reserve where future erosion of the banks of the Fraser River could result in the river partially diverting through an old channel and creating a significant flood hazard for North Khas't'an Lhughel (Shelley). The report recommends that a flood protection berm should be constructed near the north boundary of the reserve. With the recent relocation of the BCR right of way due to bank erosion in the area, the future impact of this risk on the reserve and mitigation measures need to be investigated further.

Environmental Assessment

Morrow Environment Consultants *Phase 1 Environmental Site Assessment* (ESA) completed in 2000 identified a number of issues of potential environmental concern at Khas't'an Lhughel (Shelley).

These issues include minor spills of diesel fuel, individual garbage pits, use of oil on roads for dust control, equipment leakage from logging operations, abandoned vehicles and potential soil contamination associated with the CN, BC Rail and Duke Energy right of ways.

Economic Development

The Economic Development Strategy Report for Lheidli T'enneh Band 1993 identifies a number of potential business ventures have been undertaken or identified for further investigation, some of which include:

- Log home building
- Hemp and flax farming
- Hemp processing
- Organic farming and market gardening
- Shingle and cant mill adjacent to the South reserve
- Dairy farming
- Cow/calf operation
- Slaughterhouse
- Specialty and wild game farming
- Ethno-tourism
- Education with Aboriginal content and focus
- Housing repairs and maintenance
- Information technology for other First Nations
- Waste recycling

Some of these uses may be developed on this reserve on existing agricultural lands in the area west of Landooz Road.

COMMUNITY AND YOUTH LAND USE PRIORITIES

The community mapping sessions identified a wide range of future development priorities for Khast'an Lhughel (Shelley) including:

- Future housing for Band Members
- Employment generation (repair shop, fabricating)
- Protection of church/graveyard corridor
- Increased agricultural production
- Outdoor recreation (hockey, ball fields, soccer, golf)
- Recreation/Community Centre (health, education)
- Retention of existing traditional use areas for berry picking, medicine plants and hunting

The land use priorities are depicted on the Khast'an Lhughel (Shelley) Community and Youth Land Use Priority Maps #8 and #9 (see also Section 4). The maps completed throughout the community mapping sessions indicate a broad range of land uses with an emphasis on the provision of more housing and additional commercial and industrial uses. Certainly, there is a priority on developing a more self sufficient community with a variety of employment opportunities, community facilities, social services and recreational opportunities to serve existing and future residents and visitors.

Both community and youth priorities highlight both urban type land uses to meet the increasingly diverse needs of the reserve, as well as prioritizing retention of a rural lifestyle and access to traditional use areas.

PLANNING VISION FOR KHAST'AN LHUGHEL

This reserve is the principal settlement area for the Lheidli T'enneh Membership. Based upon the Lheidli T'enneh Vision Statement, community mapping and community and youth land use priorities, the following Vision is proposed for this reserve.

Khast'an Lhughel (Shelley) will be a sustainable community providing a variety of employment and housing opportunities, education, social and recreation programs to ensure a high quality of life for its residents.

To implement this Planning Vision, the reserve has been divided into a number of land use designations. These designations have individual objectives, list of permitted uses and strategies to guide land use decisions.

LAND USE DESIGNATIONS

Community Development Area
Community Development Expansion Area
Cultural Heritage Site
Traditional Use Area
Natural Resource Development Area
Environmentally Sensitive Area
Cultural Heritage Site

COMMUNITY DEVELOPMENT AREA OBJECTIVE

To encourage the repair and replacement of existing houses and new homes on existing lots together with the development of compatible land uses to serve the residents.

COMMUNITY DEVELOPMENT AREA PERMITTED USES

Primary uses shall be houses, duplexes and triplexes, with accessory uses including home occupations limited to use within the dwelling units, offices, commercial uses within Band office, playground, churches and similar uses.

Secondary uses may include community facilities (such as a community centre or fire hall), commercial retail uses, offices and home occupations with outdoor storage where there is little or no impact on adjacent residential uses.

COMMUNITY DEVELOPMENT EXPANSION AREA OBJECTIVE

To provide for long term residential expansion in the area adjacent to existing community development north of the cemetery.

To provide for small scale commercial, industrial and other employment opportunities in the west Landooz Road area.

COMMUNITY DEVELOPMENT EXPANSION AREA PERMITTED USES

Primary uses shall include residential expansion and agriculture (field crops) north of the cemetery.

Secondary uses may include temporary uses without permanent structures or buildings north of the cemetery, and commercial/industrial uses in the west Landooz Road area based upon a future sector plan for this area.

TRADITIONAL USE AREA OBJECTIVE

To protect traditional use areas for future use by the Lheidli T'enneh Membership.

TRADITIONAL USE AREA PERMITTED USES

Primary uses shall include hunting, berry picking, medicine plants, hunting, outdoor recreation.

Secondary uses may include low intensity agriculture (wild rice).

NATURAL RESOURCE DEVELOPMENT AREA OBJECTIVE

To retain existing forested areas for future harvesting and explore potential for alternative field crop uses in existing field areas.

NATURAL RESOURCE DEVELOPMENT AREA PERMITTED USES

Primary uses shall include hunting, forestry, silviculture, outdoor recreation, traditional uses for tourism.

Secondary uses may include accessory uses to primary uses (such as processing plants or greenhouses).

ENVIRONMENTALLY SENSITIVE AREA OBJECTIVE

To minimize large scale development within the 1:200 year floodplain, wetlands and on significant slopes greater than 20%.

ENVIRONMENTALLY SENSITIVE AREA PERMITTED USES

Primary uses shall include traditional uses, agriculture, forestry, outdoor recreational uses.

Secondary use may include building and structures associated with Primary Uses in accordance with future Zoning Law requirements.

CULTURAL HERITAGE SITE OBJECTIVE

To celebrate the existing cemetery and church grounds as a cultural heritage site based upon its spiritual, cultural and historic value.

CULTURAL HERITAGE SITE PERMITTED USES

Primary uses shall be a cemetery and church.

Secondary uses may include buildings and structures associated with the primary uses in accordance with future Zoning Law requirements.

PLANNING STRATEGIES (What to do and When)

Short Term Priorities

- Establish a Housing Task Force to complete a Housing policy including maintenance of wait lists, rental rates, repair, replacement of existing homes and new home construction as well as investigate future equity/tenure options and verify interest of community members in living on reserve.
- Focus housing efforts on repair, upgrading and replacement of homes on existing lots.
- Undertake training and education programs to ensure community members are able to participate fully in all aspect of Lheidli T'enneh administration and operation/maintenance responsibilities and other employment initiatives on and off reserve.
- Complete a subdivision design for North Khast'an Lhughel (Shelley) to meet demands for 50 to 60 lots over next 20 years and finalize recommend sewage disposal option with community member input.
- Undertake outline plan and design to extend existing water and sewer system on for North Khast'an Lhughel (Shelley) to the west of the Community Development Area to provide for potential commercial/industrial development and training opportunities (forestry, log building).
- Develop a program to fund Church restoration and consider lands between church and cemetery for special landscaping treatment.
- Allocate funds to complete the physical design and program development for community/education centre expansion.
- Review organic market gardening, hemp processing and shingle mill operations and revise plans to determine future direction for these business opportunities.
- Upgrade for North Khast'an Lhughel (Shelley) standby well in conjunction with development of new lots and use existing well as back up.

- Contract operation and maintenance responsibility for South Khast'an Lhughel (Shelley) water system and introduce training program for staff resources to assume this function for both water systems.
- Upgrade South Khast'an Lhughel (Shelley) reserve standby well to production well and use existing well as back up.
- Complete domestic water systems study and allocate capital funds to complete water supply/distribution improvements and meet fire protection requirements (pumps and additional fire hydrants).
- Review three options for north side sewage disposal and decide on preferred option for community sewage disposal field, lagoons or individual septic fields.
- Complete road improvements projects initiated in 2000 and access/allocate capital funds for recommended road construction and drainage improvements.
- Review road maintenance agreement with City of Prince George in conjunction with road construction and drainage improvements to determine whether agreement should be revised, renewed, or maintenance undertaken internally by Lheidli T'enneh for North Khast'an Lhughel (Shelley).
- Initiate land purchase for Whenun Road relocation.
- Install hose cabinets and begin the process of establishing volunteer fire departments for North and South Khast'an Lhugel (Shelley).
- Implement Regional Emergency Response and Recovery Plan recommendations and allocate funds to mitigate flood, fire and other risks (emergency road access, road relocations, rip rap bank protection).
- Build local government relationships with regular meetings, referrals, committee participation and joint projects (emergency planning, snow removal, regional growth strategy).
- Negotiate municipal servicing agreements with local governments as required (road maintenance) and review existing arrangements for garbage and street lighting.

Medium Term Priorities

- Identify future requirements for shallow utilities (power, gas telephone, cable, fibre optics) and work with private companies to extend and upgrade existing services and provide for logical extension to new north subdivision in future.
- Explore options to identify Community Land for designation under Land Code after Final Treaty Settlement.
- Complete additional river bank erosion and rip rap projects based on Riverbank Erosion Protection Phase 2.

- Develop signage program for reserve including entrance signs to the reserve and community facilities.
- Review the need for hunting restrictions within the Community Development Expansion Area.
- Initiate agreement with Canfor for continued use of Northwood Bridge.
- Investigate need for North reserve boundary flood protection berm and other mitigation measures.
- Relocate Whenun Road north of CNR tracks in accordance with C₄ 2002 feasibility study.
- Revise Plan to include treaty settlement land base expansion when Final Treaty Settlement ratified.
- Initiate trails and park plan to provide for playground improvement expansion, new parks, trail development (outdoor hiking, snowmobiling, skiing) as well as tree planting and landscaping program for community.
- Identify appropriate fire hall location and undertake design with potential for this facility to be within or adjacent to community centre.
- Undertake feasibility study on upgrading or replacing existing Band office or potential inclusion in future community centre with one stop customer service for all programs and services. This study should also identify the advantages and disadvantages of a new administration office or satellite office off reserve.

Long Term Priorities

- Investigate feasibility of pedestrian bridge over Fraser River to improve access and as part of regional cycling trail network
- Construct community centre offering full range of social, health, educational and recreation programs and services with potential inclusion of administration office.

IR#3 LHEZBAONICHEK (CLESBAONEECHECK)

BACKGROUND

Lhezbaonichek (Clesbaoneecheck) was surveyed and established in 1894. The reserve is 123 ha (304 ac) in size and located on the left bank of Nechako River within the Regional District of Fraser Fort George, upstream from the confluence of the Nechako and Fraser Rivers on the west boundary of the City of Prince George.

The reserve is mostly forested sloping from northwest to southeast and is bisected by North Nechako Road. This road continues to the Reid Lake area and is constructed to a gravel standard. North Nechako Road was formerly a private log haul road originally “permitted” through the reserve by Prince George Pulp and Paper. The responsibility for North Nechako Road beyond the City boundary is not certain. The road is not public in the legal sense because it is not owned and maintained by a government. The Regional District and BC Transportation do not wish to assume responsibility for this road due to concerns voiced by the Department of Fisheries and Oceans with respect to periodic road erosion (escarpment slumping) into the Nechako River. Resolution of this slumping problem to meet DFO requirements was estimated to cost just under \$1 million in 1985. BC Forestry Services has also stated that they are not interested in assuming responsibility of this road for the same reasons.

Lhezbaonichek (Clesbaoneecheck) is the former site of the Lheidli T’enneh Pow Wow Grounds and includes an existing stage area. Two residential dwellings and a drilled well are presently located on this reserve. The reserve also includes four low lying islands in the Nechako River. These islands tend to be susceptible to flooding dependent upon seasonal fluctuations in Nechako River water levels.

UMA Engineering Ltd. *Flood and Erosion Damage Mitigation Plan* assessment concluded that the two existing houses are approximately 2.5 m. above flood levels. The houses appear to be safe in a 1:200 year flood although flooding at the eastern boundary of the reserve with likely occur since this area is an old floodplain. As a result, flooding of North Nechako Road may require the existing residents to leave the reserve by the main gravel road to the west. Minor erosion is threatening the river frontage access road to one of the houses. This erosion will require the relocation of the road slightly to the north.

DEVELOPMENT OPPORTUNITES AND CONSTRAINTS

The development opportunities associated with this reserve result from its location on the banks of the Nechako River. First, this allows the use of the river to cater to water users. Second, there is a potential for future residential development on-reserve, whether this be Band housing or high end residential lots similar to the Bayshore Estates to the east. However, there are two key constraints that need to be addressed prior to consideration of any significant development within the Community Development Expansion Area.

The first major constraint is access. North Nechako Road is currently a forest service road that needs to be upgraded east of the reserve to resolve the periodic slope failure of the bank and attendant road closures. Lheidli T’enneh needs to initiate a meeting of all involved to identify options and preferred solutions to upgrade this private logging road and stabilize the

escarpment prior to public road designation with future maintenance by the City of Prince George, Regional District of Fraser Fort George or potentially Lheidli T'enneh.

The second major constraint is that presently there is no BC Hydro power service to this reserve. Lheidli T'enneh should explore alternatives to extend power to Lhezbaonichek (Clesbaoneecheck) with BC Hydro and identify capital funding sources in conjunction with consideration of future residential development in the Community Development Expansion Area.

Environmental Assessment

Morrow Environmental Consultants Phase 1 ESA (2000) identified a number of areas of generally low to moderate environmental concern.

Two areas of the reserve where unauthorized dumping occurred in the past have been cleaned up but require further investigation. Random dumping appears to have continued in recent years in various areas of the reserve. Similar to Khast'an Lhughel (Shelley) the use of oil for dust control and equipment leakage from previous logging operations have been noted.

A detailed list of potential concerns identified in the Phase 1 ESA and their relative degree of environmental risk are summarized in Appendix 2.

COMMUNITY AND YOUTH LAND USE PRIORITIES

The community mapping sessions identified a wide range of future land use priorities for Lhezbaonichek (Clesbaoneecheck) including:

- Campsites/cabins
- Future housing (retirement assisted living, Band housing, high end housing)
- Berry picking, wild rice, herbs, medicine
- Services such as store, boat launch, restaurant, gas station
- Multi use trails and recreation facilities
- Tourism businesses (guiding outfitters, bed and breakfast
- Stage renovation (concerts, Pow Wow)

The upgrade of North Nechako Road and extension of power from BC Hydro were identified as two key issues that need to be resolved prior to any development occurring on this reserve. These land use priorities are depicted on the Community and Youth Land Use Priority Maps.

The Community Land Use Priorities Map (see Map #10) for Lhezbaonichek (Clesbaoneecheck) identifies the need to retain much of the reserve area for traditional uses (such as berry picking and fishing) and low impact tourism (guiding outfitters, boat launch and outdoor recreation uses, trails). All these uses have minimal environmental impact.

The eastern portion of the reserve abutting North Nechako Road contains two existing houses and the Pow Wow grounds. It is identified for future residential uses (high end residential, Band housing, retirement assisted living).

The Youth Community Land Use Priorities Map (see Map #11) identifies a broad range of land use priorities for this reserve including extensive commercial, community facilities, and

extensive residential land uses for most of Lhezbaonichek (Clesbaoneecheck). Youth land use priorities emphasize the development of a full range of housing, commercial, recreation and tourism uses generally associated with a self contained urban community and place much less importance on traditional and outdoor recreation uses.

The Community and Youth Land Use Priorities Maps identify housing and commercial uses in the easterly portion of this area abutting North Nechako Road. Both maps identify the islands for some traditional uses and recreation as well as uses related to the Nechako River such a fish camp and tourism related uses (restaurants, lodges, boat launch, campgrounds). Neither map supports future industrial development in the area.

The major difference between Community and Youth Land Use Priority Maps is the degree to which the youth priorities focus on developing a wider range of commercial uses (bank, hotel, Tim Horton's), larger community facilities (schools and hospitals) and housing dispersed throughout Lhezbaonichek (Clesbaoneecheck). The Community priorities identify a much narrower band of development along North Nechako Road with larger areas of land being retained in traditional use in the southwest and northern portion of the reserves with lower impact tourism and recreation uses in the bench areas above this road.

PLANNING VISION FOR LHEZBAONICHEK

Based upon input received from Community Members and staff assessment of off site constraints, the following Vision statement is proposed for Lhezbaonichek (Clesbaoneecheck).

Lhezbaonichek (Clesbaoneecheck) will retain Natural Resource Development and Traditional Use values and Environmentally Sensitive Areas with future provision for a Community Development Expansion Area.

LAND USE DESIGNATIONS

Based upon this Vision the following designations are proposed:

Natural Resource Development Area
Traditional Use
Community Development Expansion Area
Environmentally Sensitive Area

NATURAL RESOURCE DEVELOPMENT AREA OBJECTIVE

To retain the northwest area of Lhezbaonichek (Clesbaoneecheck) (designated as Natural Resource Development Area) area for future forestry operations and recreational opportunities (see Map #5).

NATURAL RESOURCE DEVELOPMENT AREA PERMITTED USES

Primary uses shall include forestry, hunting, potential trails, outdoor recreation uses (hiking trails).

Secondary uses may include outdoor recreation facilities.

TRADITIONAL USE AREA OBJECTIVE

To retain this area for traditional berry picking and other similar uses.

TRADITIONAL USE AREA PERMITTED USES

Primary uses shall be hunting, berry picking, medicine plants, etc.

There are secondary uses permitted in this area.

ENVIRONMENTALLY SENSITIVE AREA OBJECTIVE

Minimize development within swampy areas adjacent to McPhee Creek, Duck Lake, and areas with slopes over 20%.

ENVIRONMENTALLY SENSITIVE AREA PERMITTED USES

Primary uses shall include traditional uses.

Secondary uses may include Traditional Uses and uses consistent with the Natural Resource Development uses subject to completion of an environmental impact assessment statement to ensure minimal impact within this area.

COMMUNITY DEVELOPMENT EXPANSION AREA OBJECTIVE

To provide for long term potential residential development adjacent to North Nechako Road dependent on adequate supplies of groundwater and soil suitability for septic fields as well as off-site road and power improvements.

COMMUNITY DEVELOPMENT EXPANSION AREA PERMITTED USES

Primary uses shall include individual housing sites and traditional uses.

Secondary uses may include Member or market housing, community facilities, tourist uses (boat launch, campsite) and commercial uses to support residential, community facilities, tourist and outdoor recreational uses.

PLANNING STRATEGIES (What to do and When)

Short Term Priorities

- Initiate stakeholders meeting with City of Prince George, Regional District of Fraser Fort George, Ministry of Transportation, BC Forest Services and Canfor to upgrade North Nechako Road east of the reserve and undertake remedial measures necessary to minimize future road closures due to slope failure.
- Revisit BC Hydro power options for the reserve and explore additional options to provide power to this area if and when the Community Development Expansion Area is developed.
- Complete site investigations of mounds and depressions to determine their suitability for designation as a Cultural Heritage Site and identify appropriate setbacks from other uses.
- Undertake erosion control measures as identified in *UMA Flood and Erosion Damage Mitigation Plan* as required to stabilize the banks adjacent to the Nechako River.

Medium Term Priorities

- Complete water quality and quantity testing for the existing well and additional ground water testing to determine the potential for domestic water supply in this area prior to any consideration of future residential development in Community Development Expansion Area.
- Undertake soils investigation within the Community Development Expansion Area to determine the suitability of this area for individual or communal sewage disposal facilities.
- Determine the feasibility of developing youth and Elder cultural camp (cabins, multi purpose building) for education and cultural purposes with potential revenue generation from rental to other groups.
- Determine feasibility of upgrading existing stage and development of cultural and concert program.
- Identify boat launch location and extent of support services required (gas, bed and breakfast, parking, rest area) to accommodate existing water users and tourists.
- Initiate and pilot ethno tourism cultural corridor water based opportunities celebrating the history and culture of Lheidli T'enneh reserves and other points of interest on the Nechako River targeted to provide a unique visitor experience.

Long Term Priorities

- Determine the feasibility of developing water frontage lots for community members or market housing in conjunction with North Nechako Road improvements and costs to extend power to the Community Development Expansion Area.

IR# 4 DZULHYAZCHUN TSALAKOH (SALAQUO)

BACKGROUND

Dzulhyazchun Tsalakoh (Salaquo) is approximately 37 ha (91 ac) in size and located on the right bank upstream from Lhezbaonichek (Clesbaoneecheck) at the confluence of the Chilako (Mud) River and Nechako River within the Regional District of Fraser Fort George. There is no legal, physical or private road access to this reserve. Pedestrian access to Dzulhyazchun Tsalakoh (Salaquo) is obtained from lands to the south where permission is required to traverse adjacent lands prior to walking over the CNR railway bridge to the reserve.

The reserve is generally forested with significant pine beetle kill (see Map #7). The Canadian National Railway main line between Prince George and Prince Rupert bisects the reserve. This mainline is elevated with fill through the west part of the reserve to achieve an acceptable grade for the bridge crossing on the west bank of the Chilako. The mainline returns to grade toward the east reserve boundary. The reserve is generally level to rolling north of the CNR mainline with a gravel bar area at the confluence of the Chilako and Nechako Rivers. Significant slopes occur in the southeast area of the reserve.

Field site visits have identified a number of culturally modified trees and caches in proximity to the original seasonal village site.

DEVELOPMENT OPPORTUNITIES AND CONSTRAINTS

Development opportunities for this reserve are water based and rely on the potential of rafting, kayaking and canoeing on the Chilako and Nechako Rivers. Recognition of the historic seasonal village site and potential trail to link this site with the Cranbrook Hill Greenway are two other potential opportunities for this reserve.

Three major constraints provide significant barriers to future development of Dzulhyazchun Tsalakoh (Salaquo). First, there is no legal or physical access to Dzulhyazchun Tsalakoh (Salaquo) or any potential to obtain access without acquiring easements or purchasing adjacent properties. Second, the location and elevation of the CNR mainline through the reserve effectively divides the reserve into two separate areas, diminishing, if not totally eliminating, the potential for any significant development at the confluence of the Chilako and Nechako Rivers. Third, the slopes in the southeast area of the reserve may present a significant construction and maintenance cost should a road be constructed to provide vehicular access to this reserve via Crown lands to the east.

Environmental Assessment

Morrow Environmental Consultants Phase 1 ESA (2000) identified a number of minor environmental concerns within the existing CN railway right of way. They also noted an empty steel drum in the southwest corner of the reserve that does not appear to represent a potential environmental concern.

A detailed list of concerns and their relative degree of environmental risk are included in Appendix 2, Potential Concerns Identified as a Result of Phase 1 ESA.

COMMUNITY AND YOUTH LAND USE PRIORITIES

The community mapping sessions identified a number of future land use priorities for Dzulhyazchun Tsalakoh (Salaquo) including:

- Tourism and support services (river tours, lodge, gas)
- Camps (youth fish camp, cultural, survival)
- Community and recreation facilities (trails, boat launch)
- Traditional use (berries)
- Agriculture (wild rice)
- Fishing (fish hatchery)
- Forestry (mature furniture grade pine)

The Dzulhyazchun Tsalakoh (Salaquo) Community Land Use Priorities Map (see Map #12) has summarized these uses into a number of categories for the purpose of depicting these priorities. This map identifies a number of traditional use areas associated with the seasonal village that was located at the confluence of the two rivers in the past. These uses include caches and culturally modified trees. In addition a number of smaller areas for residential, recreation and tourism priorities were highlighted in various areas of the reserve.

The Youth Land Use Priorities Map (see Map #13) indicates a large number of dispersed land use priorities throughout the reserve. This map places less emphasis on traditional uses, recreation and tourism uses, with higher priority placed on residential, commercial development and community facilities.

Both Community and Youth Land Use Priorities Maps identify the confluence of the Nechako and Chilako Rivers for traditional and tourism uses. While the youth priorities focus on a much higher level of urban type development, dependent on off site road and infrastructure improvements, the community map indicates a much higher priority for traditional and tourism uses.

PLANNING VISION FOR DZULHYAZCHUN TSALAKOH

Based upon the input received from the Lheidli T'enneh Membership and staff assessment of off site development constraints, the following Vision statement is proposed for Dzulhyazchun Tsalakoh (Salaquo).

Enhancement of Traditional Use focus with water based tourism priority linked to the Nechako River.

LAND USE DESIGNATIONS

Based upon this Vision the following designations for Dzulhyazchun Tsalakoh (Salaquo) are proposed:

- Traditional Use Area**
- Natural Resource Development Area**
- Environmentally Sensitive Area**

TRADITIONAL USE AREA OBJECTIVE

To retain Dzulhyazchun Tsalakoh (Salaquo) in its primarily natural state with recognition of the original seasonal village site, culturally modified trees and caches.

TRADITIONAL USE AREA PERMITTED USES

Primary uses shall include traditional uses and protection of original seasonal village sites, culturally modified trees and caches.

Secondary uses may include Natural Resource Development Area uses, shelter, recreational trails and water based tourism uses with appropriate setbacks from any future cultural heritage sites.

NATURAL RESOURCE DEVELOPMENT AREA OBJECTIVE

To log pine beetle diseased trees in accordance with pine beetle management plan.

NATURAL RESOURCE DEVELOPMENT AREA PERMITTED USES

Primary uses shall use include forestry and outdoor recreation.

Secondary uses may include Traditional Uses.

ENVIRONMENTALLY SENSITIVE AREA OBJECTIVE

To retain low lying areas and significant slopes in their natural state.

ENVIRONMENTALLY SENSITIVE AREA PERMITTED USES

Primary uses shall include traditional uses.

Secondary uses may include recreational trails, forestry.

PLANNING STRATEGIES (What to do and When)

Short Term Priorities

- Negotiate access easements, right of refusal or purchase of the lands to the west of the reserve to ensure legal access from Ollinger Road to this reserve.
- Determine whether use of existing CNR bridge for pedestrian access requires any CN approval to minimize Lheidli T'enneh liability.

- Complete GPS inventory reserve for caches and culturally modified trees and designate key areas as cultural heritage sites.
- Implement a pine beetle management plan for reserve and potentially adjacent private and Crown lands to remove diseased trees as required.
- Stockpile pine logs on site to construct shelter for water users and hikers in future.
- Lobby BC Provincial Government, Regional District of Fraser Fort George and City of Prince George to include a future trail link from the existing Cranbrook Hill Greenway to this reserve.

Medium Term Priorities

- Undertake design of trail and rest area for hikers and water users with input from stakeholders.
- Contact Canadian National Railway, BC Provincial Government and affected land owners to obtain comments and/or acquire the necessary approvals for improvements required to develop the trail across the tracks and on Crown land.
- Undertake brushing and tree clearing for the trail with appropriate directional and historical signage as part of integration with Cranbrook Hill Greenway.
- Involve water users and other tourism stakeholders in determining feasibility for any overnight rest areas as part of a Nechako River cultural corridor.
- Initiate and pilot ethno tourism cultural corridor water based opportunities celebrating the history and culture of Lheidli T'enneh reserves and other points of interest on the Nechako River targeted to provide a unique visitor experience.

Long Term Priorities

- Develop a shelter for water-based users and as a trail terminus for potential hikers from Cranbrook Hill Greenway.
- If access is obtained or purchased for lands west of Chilako River, determine the feasibility and capital costs to construct pedestrian bridge if more intensive water or trail based uses require improved public or community member access over CN bridge in future.

Section 6 - Implementation

This section provides an overview of the strategies required to implement the *Lheidli T'enneh Land Use Plan*. The intention is to provide an easily accessible guide that summarizes the both the next steps for Plan implementation under the Land Code, as well as the development priorities for each reserve. A chart has been provided that reviews all of the short, medium and long-term priorities presented in Section 5. In addition, specific considerations have been made with respect to capital projects and housing projections.

LAND USE PLAN APPROVAL AND AMENDMENT

In order for the Land Use Plan to become law, the following processes must be followed, as required by the Land Code:

- Recommendation by the Lands Authority to the Lheidli T'enneh Membership under Section 24 of the Land Code;
- Approval by Lheidli T'enneh Membership at a meeting held to consider the Plan under Section 12 of the Land Code;
- Band Council Resolution to approve the Plan under Section 7 of the Land Code.
- Amendments to this plan are also required to follow the processes set out above for the initial approval of the plan.

DISPUTE RESOLUTION

After approval of the *Lheidli T'enneh Land Use Plan*, any dispute that arises with respect to Plan interpretation or decisions made by the Lands Authority may be referred to a Dispute Resolution Panel. Dispute resolution will follow the guidelines as set out in the Land Code. The Lands Authority shall appoint the members of the Dispute Resolution Panel. The Panel shall provide appropriate notice to affected parties, consider any submissions and make decisions in a timely manner. In order to ensure fair and consistent judgments of the panel, it is recommended that a Band Council Resolution be implemented that adds detail to the processes for hearing disputes set out in the Land Code.

ZONING LAW

Upon approval of this Plan, the Lands Authority, in consultation with Band Members, shall undertake the preparation of a Zoning Law for the lands contained in this Plan and develop processes and procedures for development review and the issuance of approvals for specific developments. This Zoning Law shall follow the same approval process as a Land Use Plan.

ENVIRONMENTAL SITE ASSESSMENTS

Phase 2 and 3 Environmental Site Assessments for the specific sites identified in Phase 1 should be undertaken in 2005 and 2006. This will ensure remediation of any environmental problems is carried out prior to transfer of titles for the reserves from Canada to Lheidli T'enneh.

LOCAL GOVERNMENT RELATIONSHIPS

Building and maintaining good relationships with other governments is an important goal included in this Land Use Plan. The following list reiterates the recommended projects and negotiations which will involve the local governments of the City of Prince George and the Regional District of Fraser Fort George:

- Finalize a Municipal Service Agreement with the City of Prince George, guaranteeing the Band's participation over decision making for Ts'un'ut (Fort George Cemetery), as well as ensuring Band representation on any committees whose decisions affect the cemetery.
- Increase the visibility of Lheidli T'enneh at Exploration Place and Fort George Park through the installation of additional cultural and heritage exhibits, and development of an educational package for the public.
- Review the Road Maintenance Agreement with the City of Prince George for North Khast'an Lhughel (Shelley).
- Initiate a meeting of all involved and affected to upgrade North Nechako Road east of Lhezbaonichek (Clesbaoneecheck).
- Lobby Provincial Government and local governments to include a future trail link from existing Cranbrook Hill Greenway to Dzulhyazchun Tsalakoh (Salaquo).

CAPITAL PLAN AND PROJECT PRIORITIES

Based upon recommendations and actions outlined in this Land Use Plan and the forthcoming Comprehensive Community Development Plan, Council shall prepare a Capital Plan to guide future annual budgets and capital project priorities including applications to obtain capital funding from the Federal Government of Canada, the Provincial Government of BC, and other funding sources.

Housing

Currently Khast'an Lhughel (Shelley) is the primary residential community for Lheidli T'enneh. However with the possibility of a treaty settlement, Lheidli T'enneh may acquire developable lands within city limits to provide land for future housing. As such, the discussion on housing is provided in this Section to ensure that **housing needs are considered in the context of future land and development opportunities** and should be passed through the Membership for approval of location.

As mentioned in Section 2, as of December 2004, Lheidli T'enneh had 309 registered Band Members. Of those 211 or 68% of the Membership live off reserve. The remaining 32% or 98 people live on reserve (95 at Khast'an Lhughel (Shelley) and 3 at Lhezbaonichek (Clesbaoneecheck)). Currently there are a total of 37 housing units located at both North and South Khast'an Lhughel (Shelley). Of these, the Band owns 35 homes, one home is privately owned and the other is condemned. This results in an average household size of 2.6 persons. In addition, there are two housing units at Lhezbaonichek (Clesbaoneecheck).

Between 1984 and 2004 total Band Membership more than tripled due to Bill C-31 and natural population increase (see Section 2 for 20-year historical population data). This population boom has resulted in an eightfold increase of Band Members living off reserve over the last 20 years (25 to 211). During the same time period, the number of Members living on reserve increased by only a third from 66 to 98 Members.

As discussed in Section 2, a number of future population projections have been prepared for the Band in the past. These various reports derive housing needs based on future population projections.

The 1990 *Physical Development Plan for Lheit-Le-We-Tens* prepared by the Carrier Sekani Tribal Council (CSTC) projected a total Band population of 275 by the year 2010 with 170 living in Khast'an Lhughel (Shelley). This projection was expected to generate a housing demand of 81 units by 2010 including some replacement of existing homes and construction of new homes to accommodate on and off reserve population increase. Based on actual 2005 Band population, the 1990 projections have underestimated the Band's total membership by 2010. On the other hand, these projections have overestimated the number of residents expected to be living at Khast'an Lhughel (Shelley) in the next 5 years unless there is sufficient demand and capital funds available to accommodate significant housing on this reserve.

The *Lheidli T'enneh First Nation Physical Development Plan* (1998) revised the population projections using 3 growth rates from 1998 to 2018 of 2.5%, 5% and 7%. These rates exclude the impact of Bill C-31 Membership re-instatements (see Section 2). The 1998 Physical Development Plan population and housing projections for the reserve in 2005 indicated that there would be 207 and 231 residents on the reserve with 69 and 77 houses required to accommodate this demand. This projection is more than double the actual number of residents and houses living at Khast'an Lhughel (Shelley) in 2004.

As demonstrated in Section 2, by the year 2020 it is projected the Band will have total population of approximately 500 members with approximately 300 living on reserve and 200 living off reserve. These projections result in the need for **approximately 50 to 60 new houses** to meet on reserve housing demand plus the replacement and/or repair of the existing 36 homes resulting in a total of 90 to 100 houses by 2020.

A significant variable with respect to future on reserve population and housing demand is the number off-reserve Band Members who may wish to move to Khast'an Lhughel (Shelley) upon final treaty settlement and in subsequent years. The 1995 Community Assessment indicates that over 70% of off-reserve Members who responded to this survey would prefer to live on reserve if there were better housing, community services and job opportunities. It is important to update Membership interest in moving to the reserve as part of projecting housing demand and to consider the development of newly acquired treaty settlement lands

PROGRAMS

Based upon recommendations and actions outlined in this Plan and the subsequent Comprehensive Community Development Plan, Council shall implement service delivery programs (housing, education, health care, economic development) using this Plan as a guide in making decisions.

IMPLEMENTATION STRATEGIES

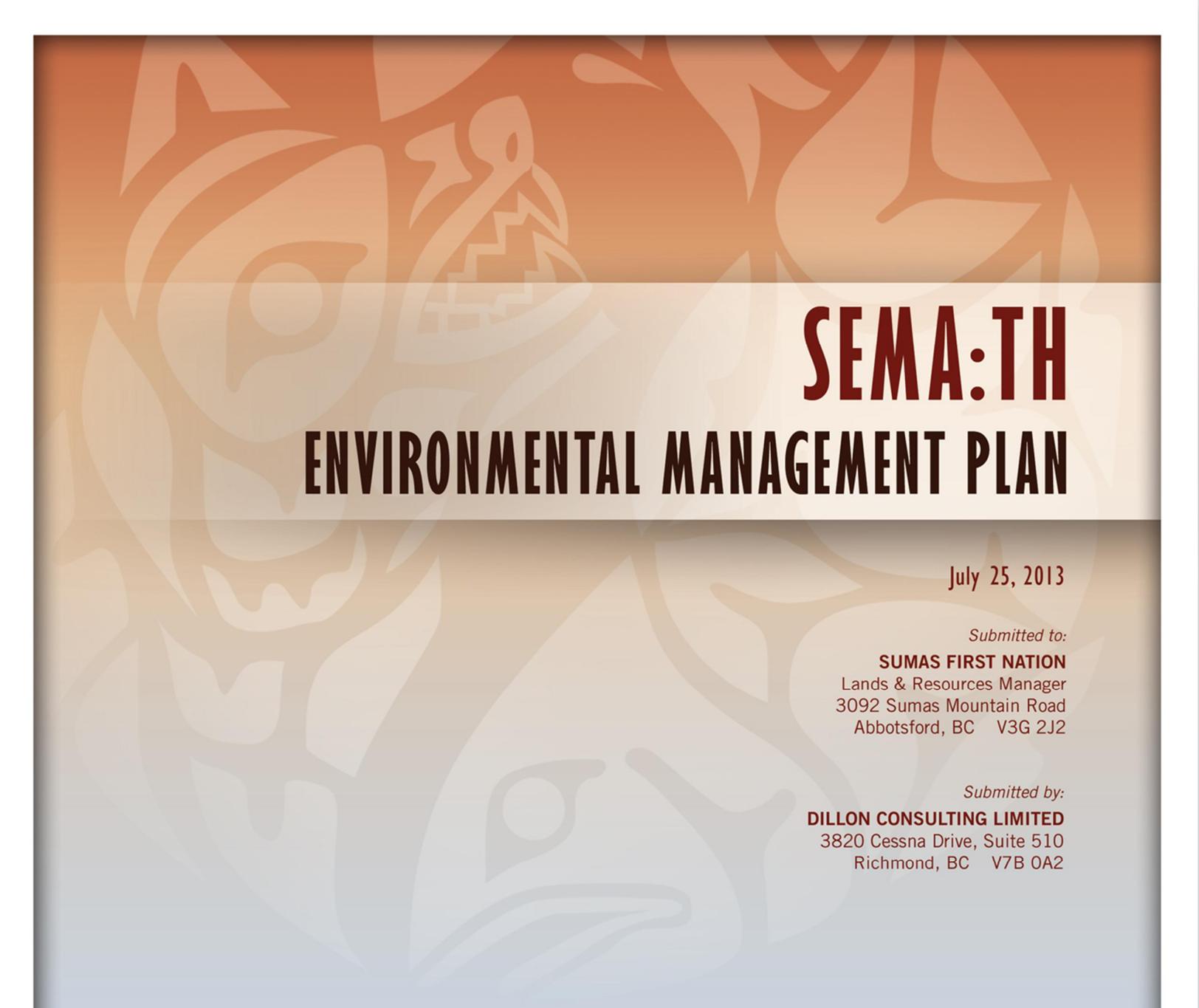
The chart attached on the next page summarizes the short, medium and long-term priorities for all reserves as identified throughout the Plan. It can easily be presented a stand-alone document for reference with respect to other Lheidli T'enneh programs. These priorities should be used to guide Lheidli T'enneh's annual budget and long-term capital spending for the development of each of the reserves.

RESERVE	SHORT TERM PRIORITIES	MEDIUM TERM PRIORITIES	LONG TERM PRIORITIES
TS'UNK'UT (Fort George Cemetery)	Designate Ts'unk'ut as Cultural Heritage Site.	Encourage burial ground as active cemetery for Lheidli T'enneh Members.	Develop educational package detailing traditions and culture of Lheidli T'enneh, and history of Ts'unk'ut.
	Finalize a municipal service agreement with the City of Prince George ensuring Band's participation in decisions over cemetery.	Ensure Band representation on committees involved in decision making which may impact Ts'unk'ut.	
	Initiate comprehensive study to determine the feasibility of developing a major Aboriginal cultural destination.	Initiate negotiations with City of Prince George to develop additional cultural/heritage exhibits at Exploration Place.	
KHAST'AN LHUGHEL (Shelley)	Establish a Housing Task Force and complete a Housing policy.	Identify future requirements for shallow utilities and work with private companies to extend and upgrade existing services.	Investigate feasibility of pedestrian bridge over Fraser River.
	Focus housing efforts on repair, upgrading and replacement of homes on existing lots	Explore options to identify Community Land for designation under Land Code after Final Treaty Settlement.	Construct community centre offering full range of social, health, educational and recreation programs.
	Undertake training and education programs for administration, operation and maintenance, and other employment initiatives.	Complete additional river bank erosion and rip rap projects based on Riverbank Erosion Protection Phase 2.	
	Complete North Subdivision design to meet demands for 50 to 60 lots over next 20 years.	Develop signage program for reserve	
	Outline plan and design to extend existing water and sewer system on north reserve to the west Community Development Area.	Review the need for hunting restrictions within the Community Development Expansion Area.	

RESERVE	SHORT TERM PRIORITIES	MEDIUM TERM PRIORITIES	LONG TERM PRIORITIES
KHAST'AN LHUGHEL (Shelley)	Develop a program to fund Church restoration.	Initiate agreement with Canfor for continued use of Northwood Bridge.	
	Complete the design and program development for community/education centre expansion.	Investigate need for North reserve boundary flood protection berm and other mitigation measures.	
	Review organic market gardening, hemp processing and shingle mill operations.	Relocate Whenun Road north of CNR tracks in accordance with 2002 report.	
	Upgrade North standby well and use existing well as back up.	Revise Plan to include treaty settlement land base expansion when Final Treaty Settlement ratified.	
	Contract operation and maintenance responsibility for South water system/train staff to assume this responsibility for both water systems.	Initiate trails and park plan to provide for recreation facilities and tree planting and landscaping program for community.	
	Upgrade South reserve standby well and use existing well as back up.	Identify appropriate fire hall location and undertake design.	
	Complete domestic water systems study and complete water supply/distribution improvements to meet fire protection requirements.	Undertake feasibility study on upgrading or replacing existing Band office.	
	Review and decide on options for north side sewage disposal.		
	Complete Road Improvements project.		
	Review road maintenance agreement with City of Prince George.		
	Initiate land purchase for Whenun Road relocation.		
	Install hose cabinets and establish volunteer fire departments.		
	Implement Regional Emergency Response and Recovery Plan recommendations to mitigate flood, fire and other risks.		

RESERVE	SHORT TERM PRIORITIES	MEDIUM TERM PRIORITIES	LONG TERM PRIORITIES
KHAST'AN LHUGHEL (Shelley)	Build local government relationships.		
	Negotiate municipal servicing agreements with local governments as required.		
Lhezbaonichek (Clesbaoneecheck)	Initiate stakeholders meeting to upgrade and maintain North Nechako Road east of the reserve.	Complete water quality and quantity testing for the existing well and additional ground water testing.	Determine the feasibility of developing water frontage lots for community members or market housing.
	Investigate BC Hydro power options for the reserve, explore additional options to provide power to this area.	Undertake soils investigation within the Community Development Expansion Area.	
	Complete site investigations to determine location of Cultural Heritage Sites.	Determine the feasibility of developing youth and seniors cultural camp.	
	Undertake erosion control measures to stabilize the banks adjacent to the Nechako River.	Determine feasibility of upgrading existing stage and development of cultural and concert program	
		Identify boat launch location and extent of support services required.	
		Initiate and pilot ethno tourism cultural corridor water based opportunities.	
Dzulhyazchun Tsalakoh (Salaquo)	Secure legal access from Ollinger Road to Reserve.	Undertake design of trail and rest area for hikers and water users.	Develop a shelter for water-based users and as a trail terminus for potential hikers from Cranbrook Hill Greenway.
	Determine whether use of existing CNR bridge for pedestrian access requires any CN approval.	Contact stakeholders to acquire the necessary approvals to develop the trail across the tracks and on Crown land.	Determine the feasibility and capital costs to construct pedestrian bridge
	Complete GPS inventory reserve for caches and culturally modified trees and	Undertake brushing and tree clearing for the trail as part of integration with	

	designate key areas as cultural heritage sites.	Cranbrook Hill Greenway.	
RESERVE	SHORT TERM PRIORITIES	MEDIUM TERM PRIORITIES	LONG TERM PRIORITIES
Dzulhyazchun Tsalakoh (Salaquo)	Implement pine beetle management plan to remove diseased trees as required.	Determine feasibility for overnight rest areas as part of a Nechako River cultural corridor.	
	Stockpile pine logs on site to construct shelter for water users and hikers in future.	Initiate ethno tourism cultural corridor water based opportunities.	
	Lobby governments to include a future trail link from the existing Cranbrook Hill Greenway to this reserve.		



SEMA:TH

ENVIRONMENTAL MANAGEMENT PLAN

July 25, 2013

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SEMA:TH

ENVIRONMENTAL MANAGEMENT PLAN

Table of Contents

GLOSSARY	III
1.0 INTRODUCTION.....	1
1.1 Framework.....	1
1.2 Scope.....	1
1.3 Purpose.....	2
2.0 ADMINISTRATION	3
2.1 Document Control.....	3
2.2 Annual EMP Review.....	3
2.3 Annual EMP Chief and Council Review.....	4
2.4 Semi-Annual Reviews.....	5
2.5 Amendments.....	5
2.6 Roles and Responsibilities.....	5
3.0 METHODOLOGY	8
3.1 Literature Review.....	8
3.2 Community Engagement.....	11
4.0 ENVIRONMENTAL MANAGEMENT PRIORITIES.....	14
4.1 Air Quality.....	14
4.2 Groundwater Protection	15
4.3 Habitat Protection.....	16
4.4 Fuel Handling and Storage.....	17
4.5 Soil and Fill Management.....	17
4.6 Solid Waste Handling and Disposal	18
4.7 Land Development.....	18
4.8 Surface Water Management	19
4.9 Cultural Resources Protection.....	20
4.10 Environmental Emergency Response.....	20

SEMA:TH

ENVIRONMENTAL MANAGEMENT PLAN

5.0	IMPLEMENTATION.....	22
5.1	<i>General Considerations.....</i>	22
5.2	<i>Obligations for Implementation.....</i>	22
5.3	<i>Reviewing and Updating the EMP.....</i>	22
5.4	<i>Building the Sema:th Lands and Resources Department.....</i>	22
5.5	<i>Schedule.....</i>	23
5.6	<i>Training and Education.....</i>	23

APPENDICES

- Appendix A: Environmental Operating Procedures
- Appendix B: Implementation Schedule



GLOSSARY

Above-ground storage tank (AST)	An above-ground storage tank (AST) is any chemical or fuel (gas, diesel, or heating oil) storage tank located above ground. ASTs are commonly used to supply fuel to heat homes, store vehicle fuel or power generators.
Ammonia	Ammonia is a colourless pollutant with a pungent odour that also acts as a precursor to the photochemical reactions that produce secondary fine particulate matter. Ammonia itself is also associated with negative effects on human health and the environment. Major sources of ammonia include livestock waste and fertilizer production.
Ancestral Human Remains	Ancestral Human Remains: the skeletal or otherwise physical remains of a deceased person or persons in all likelihood of Stó:lō ancestry.
Aquifer	A geological formation of permeable rock, gravel, or sand containing or conducting groundwater.
Artifacts	Artifacts: objects that can be readily removed from the site of which they are a part; moveable objects (e.g., chipped stone flakes, knives, spears and arrowheads; tin cans; glass bottles and jars; basketry; personal gear; groundstone hand-mauls; bone pins; antler wedges; glass beads; looms; instruments; etc.).
Base flow	Portion of (stream) flow that comes from groundwater or other delayed sources.
BC Building Code 2012	Provides strong guidance for the construction of buildings; including extensions, substantial alterations, and upgrading of buildings to remove an unacceptable hazard and is a requirement under Aboriginal Affairs and Northern Development Canada (AANDC) Terms of Reference. The BC Building Code applies to the core concepts of the National Building Code, along with elements specific to BC's unique development needs.
BC Fire Code 2012	Provides First Nations with a standard for acceptable level of fire safety within the community. It is not required by law that Nations follow the guidelines within the BC Fire Code; however, the Code provides standards which should be strongly considered.
BC Ministry of Environment Develop with Care 2012	Environmental Guidelines for Urban and Rural Land Development in British Columbia documents: Best Management Practices for Amphibians and Reptiles in Urban and Rural Developments in British Columbia (2004); Guidelines for Raptor Conservation during Urban and Rural Land Development in British Columbia; Develop with Care: Species Factsheets – includes information related to land development and mitigation protocols for rare and endangered species; and South Coast Region Information Package – includes information on regional features, regionally significant species, and invasive alien species.
BC Plumbing Code 2012	A useful tool for the installation or designing of plumbing systems. It also applies to the extension, alteration, renewal and repair of existing plumbing systems. While the Code is not mandatory for Nations to adopt, it could be a useful tool and guide for plumbing practices unique to BC's development needs.

*Terminology as found in the Stó:lō Heritage Policy Manual.



British Columbia Emergency Response Management System (BCERMS)	<p><i>The Emergency Program Act</i> requires that all Provincial ministries and agencies utilize the BCERMS. First Nations, who have not ratified treaties with the Federal and Provincial government are governed by federal statute, are not legally required to follow the BCERMS model but are strongly encouraged to incorporate this model into their emergency plans. The majority of municipalities and First Nations utilize BCERMS to ensure consistent emergency principles and coordinated response efforts. To facilitate the same level of services to First Nation communities PEP, Aboriginal Affairs and Northern Development Canada (AANDC), and First Nations Emergency Services (FNESS) utilize the BCERMS model to standardize delivery of emergency management and response efforts.</p>
British Columbia Extended Producer Responsibility (EPR) Programs	<p>BC's policies and programs are designed to have producers of designated products take responsibility of the full life-cycle management of their items, including costs, collection, recycling and final disposal. EPR programs shift responsibility to the producer and away from local waste authorities. It also provides incentives for producers to incorporate environmental considerations and waste reduction measures into the design of their products. EPR materials should be managed responsibly. A list of current EPR products available on the Recycling Council of British Columbia (RCBC) website: http://rcbc.bc.ca/education/product-stewardship/programs#Top</p>
<i>British Columbia Heritage Conservation Act</i>	<p>British Columbia's archaeological sites are protected under the <i>Heritage Conservation Act</i> (HCA). This Act is the latest in a number of pieces of legislation focused on the protection of archaeological sites.</p>
<i>Canadian Environmental Protection Act</i>	<p>The <i>Canadian Environmental Protection Act</i> is administered by Environment Canada. Part 4 deals with pollution prevention; Part 5 deals with controlling toxic substances; and Part 8 deals with environmental matters related to emergencies.</p>
Canadian Environmental Quality Guidelines	<p>The federal government works with the provinces and territories to ensure Canadians receive clean, safe, and secure drinking water. Municipalities receive their powers from the provinces and have ability to pass by-laws that can have an impact on water resources.</p>
City of Abbotsford's Soil Removal and Deposit Bylaw No. 1228, 2003	<p>The bylaw that regulates the movement of soil within the City limits.</p>
Criteria Air Contaminants	<p>While many different contaminants may be emitted to air, there is a set of contaminants considered the "Criteria Air Contaminants" that are of particular interest in analyzing air quality. These contaminants are: Oxides of nitrogen (NOX); Sulphur dioxide (SO₂); Carbon monoxide (CO); Volatile Organic Compounds (VOCs); and Particulate Matter (PM).</p>
Critical habitat	<p>Habitat that is necessary for the survival or recovery of a listed wildlife species.</p>
Demolition and Land Clearing (DLC) waste (also referred to as Construction and Demolition (C&D) waste)	<p>Demolition and Land Clearing (DLC) waste includes: building / demolition materials; bricks; concrete; gypsum / drywall; and wood.</p>



Deposit	Means the act of moving soil and other material and placing it upon a parcel or contiguous parcels of land on which such soil and other material did not exist or stand.
DFO Freshwater Intake End-of-Pipe Fish Screen Guideline (1995)	Contains a set of guidelines to assist proponents in the design and installation of fish screens where freshwater is extracted from fish-bearing waters.
Endangered species	A wildlife species that is facing imminent extirpation or extinction.
<i>Environmental Management Act</i>	The <i>Environmental Management Act</i> replaces the old <i>Waste Management Act</i> and the <i>Environment Management Act</i> and brings provisions from both of those acts into one statute. The Act seeks to protect human health and the quality of water, land and air in British Columbia. The Act also enables the use of administrative penalties, informational orders and economic instruments to assist in achieving compliance.
<i>Emergency Program Act</i>	The <i>Emergency Program Act</i> requires that all Provincial ministries and agencies utilize the British Columbia Emergency Response Management System (BCERMS).
Emergency Program Management Regulation	The Emergency Program Management Regulation identifies the emergency management responsibilities of the Provincial Emergency Program (PEP) and other ministries.
Extended Producer Responsibility (EPR) Materials	Extended Producer Responsibility (EPR) Materials include: expired smoke alarms; cell phones; antifreeze, lubricating oil, oil filters and oil containers; rechargeable batteries and cell phones; electronic products and small appliances; light bulbs; medications; paint, flammable liquids, domestic pesticide and gasoline; thermostats; and tires.
Extirpated species	A wildlife species that no longer exists in the wild in Canada, but exists elsewhere in the world.
Features	Features: objects that form a permanent part of the site of which they are a part; objects that cannot physically be removed from the site of which they are a part - at least not without significant effort or without destroying the object (e.g., sqémél depressions; shell heaps; cache pits; earthworks; culturally modified trees; house frames / foundations; rock walls; pit-fall traps; trails; roasting pits; hearths; stone quarries; burial mounds / pits; monuments; roads / trails; etc.).
Fill	Refers to soil that has been removed from one area and deposited in another area, typically as a means to fill depressions and holes to make an area suitable for development.
Fine Particulate Matter	In addition to being one of the criteria air contaminants, it must be understood that fine particulate matter (PM2.5) can be both directly emitted from a source (primary) or created through a series of photochemical reactions in the atmosphere (secondary).
<i>Fire Services Act</i>	The <i>Fire Services Act</i> is administered by the B.C. Office of the Fire Commissioner, which is part of the Ministry of Public Safety and Solicitor General. Section 25 of the Act outlines emergency powers of the B.C. Fire Commissioner.
<i>First Nations Lands Management Act</i>	Provides First Nations the authority to create laws to control Nation lands, resources and the environment. This is a federal law and allows First Nations to create their own approach for making land allotments to individual Nation members, matrimonial real property interest or rights and "in cases of breakdown of marriage, respecting the use,



	occupation and possession of First Nation land and the division of interests in First Nation land".
<i>Fisheries Act, 1985</i>	The <i>Fisheries Act, 1985</i> makes it illegal to harm fish habitats or fishing grounds. Environment Canada is responsible for the administration and enforcement of the <i>Fisheries Act</i> as it pertains to spills and environmental emergencies.
Fisheries and Oceans Canada (DFO) Land Development Guidelines for the Protection of Aquatic Habitat (1993)	Contains guidelines to protect fish populations and their habitat from the damaging effects of land development activities. These guidelines apply primarily to salmon, trout and char, but are applicable to all fish species.
Fraser Valley Regional District Integrated Solid Waste Management Plan (Draft, April 18, 2011)	Contains information on waste policies and goals and how waste materials will be managed in the region.
Fraser Valley Regional District Soil Deposit and Removal Bylaw No. 0061, 1996	Sections 723 and 799 of the Local Government Act, R.S.B.C. 1996, c. 323, authorize the Regional Board of the Fraser Valley Regional District to regulate the removal and deposit of soil in the Regional District.
Garbage or 'residual waste'	Garbage or 'residual waste' means materials that cannot be recycled, composted or diverted through other programs, such as: diapers; sanitary products; Styrofoam; cigarette butts; and lint.
Ground-level Ozone (ozone)	Ground-level Ozone (ozone) is an air contaminant associated with many negative health and environmental effects. Ozone is not emitted directly, but is the product of a series of photochemical reactions occurring in the atmosphere involving two precursor pollutants, NOX and VOCs.
Groundwater	Water that is found below ground in the soil or in pores and crevices in rock.
Guidelines for Canadian Drinking Water Quality	Set out the basic parameters all water systems should strive for in order to deliver the cleanest, safest, and most reliable drinking water to consumers. These guidelines apply to water destined for human consumption and are developed for select physical, chemical, microbiological, and radiological parameters. The most important guidelines deal with microbiological quality and help ensure the risk of exposure to disease-causing organisms in drinking water is minimized.
Habitat	(a) In respect of aquatic species: spawning grounds and nursery, rearing, food supply, migration and any other area on which aquatic species depend directly or indirectly in order to carry out their life processes, or areas where aquatic formerly occurred and have the potential to be reintroduced. (b) In respect of other wildlife species: the area or type of site where an individual or wildlife species naturally occurs or depends on directly or indirectly in order to carry out its life processes or formerly occurred and has the potential to be reintroduced.
Heating oil	A type of fuel generally used to power a furnace for a home or other building.
Household Hazardous Waste (HHW)	Household Hazardous Waste (HHW) includes: batteries; electronic waste; fluorescent tubes and compact fluorescent lights; household paints; pesticides and flammable liquids,



	medications; and waste oil, filters and containers.
Hydraulic oil	Oil used in the hydraulic systems of equipment such as excavators or backhoes.
ICI (Industrial, Commercial and Institutional) sector	Waste materials are often classified by source. Waste generated through industrial, commercial and institutional activities is referred to as “ICI sector” waste.
Iron and manganese	Iron and manganese are metallic elements present in many types of rock. Iron has the symbol “Fe” and manganese has the given symbol “Mn.” Both are commonly found in water and are essential elements required in small amounts by all living organisms. Concentrations of iron and manganese in groundwater are often higher than those measured in surface waters.
Land Use Plan	A Land Use Plan is the principle land use planning document for a community. Its purpose is to produce a desirable and workable future land use system. The Land Use Plan is a general document that provides a set of overarching policies and maps which establish goals and provide guidance for the physical development of the community. Within the context of the Sema:th Land Use Plan, policies will have regard to relevant social, economic, and environmental matters.
Migratory bird	A migratory bird referred to in the Convention of the MBCA (1994), and includes the sperm, eggs, embryos, tissue cultures and parts of the bird.
Multi-barrier approach	An integrated system of procedures, processes and tools that collectively prevent or reduce the contamination of drinking water from source to tap in order to reduce risks to public health.
Municipal policies and bylaws	Can contain information on material bans; i.e., materials which are prohibited or banned from disposal at municipal landfills. Because waste generated on the reserve is collected and transported off-site for disposal, banned materials cannot be included in the garbage. Inclusion of these banned materials in the waste stream can result in fines and charges, which would be levied on the collection contractor and likely passed on to Sema:th Nation.
Municipal solid waste	Commonly known as trash or garbage generally refers to waste consisting of everyday items that are discarded by the public. It does not include industrial waste, agricultural waste, medical waste, radioactive waste or sewage sludge.
Nest	The nest of a migratory bird and includes parts of the nest that holds eggs or offspring.
Nitrate	Nitrate is a chemical compound of one part nitrogen and three parts oxygen that is designated the symbol “NO3.” It is the most common form of nitrogen found in water.
Organic or ‘compostable’ waste	Organic or ‘compostable’ waste includes: ‘green waste’ – yard trimmings, grass, clippings, branches, etc.; food waste scraps; tissue paper; and food-soiled paper packaging.
Peak flow	The maximum instantaneous discharge of a stream at a specific location. Corresponds to the highest stage of a flood.
Point and non-point sources of contamination	Contaminants can originate from a “point source” or “non-point source” – meaning they can come from a single source (or point) or, that they don’t have one specific source and come instead from the cumulative effect of any number of factors or activities.



Provincial Emergency Coordination Centre	The Provincial Emergency Coordination Centre (PECC) coordinates provincial resources and prioritizes and establishes provincial objectives in response to requirements at other levels. This level also serves as the coordination and communications link with the federal disaster support system. The Provincial Central Coordination level is activated when the key Ministry(ies) or the Director of the PEP considers it necessary to coordinate and direct overall provincial response to an emergency or disaster.
Provincial Standards and Best Practices for Instream Works (1994)	Assists in the planning and implementation stages for a proposed development by providing a series of performance guidelines and regulatory compliance standards.
Recyclables or 'blue box / bag' materials	These materials include: paper and envelopes; newspapers, magazines, flyers; cardboard; boxboard (e.g., cereal boxes); milk cartons and juice boxes; and containers such as plastic, metal and glass.
Regional Timing Windows of Least Risk	The BC MOE and DFO have developed a set of regional timing windows for activities that have the potential to impact fish and wildlife populations and their habitats. To reduce the risk of impacts, instream works and vegetation clearing are ideally limited to non-critical periods of the year, unless stringent, species-specific mitigation measures are initiated.
Removal	Means the act of removing soil from the parcel or contiguous parcels of land on which it exists and shall include the removal of soil which has been placed into a stockpile or other storage on any land.
Residential sector	Waste materials are often classified by source. Waste generated by single family and multi-family residential households is referred to as "residential sector" waste.
Soil	Soil is defined as: clay, silt, sand, gravel, cobbles, boulders, or peat.
Species at risk	An extirpated, endangered, or threatened species or a species of special concern.
Species of special concern	A wildlife species that may become threatened or an endangered species because of a combination of biological characteristics and identified threats.
Stó:lō Heritage	Stó:lō Heritage: all aspects of Stó:lō culture and lifeways - both tangible and intangible - of the past, present and future, including but not limited to: language, physical / spiritual landscapes; place names; ceremonial sites; burials and burial sites; spirited places; songs; dances; art; craft; design; religious / spiritual / ceremonial practices; places and materials; subsistence and material gathering practices and sites; oral histories including all sqwelqwel and sxwōxwiyám; traditional / historical knowledge; family names; archaeological sites, features and objects; historic sites, documents and objects. Stó:lō Heritage can be classified by 'type', such as Sxwōxwiyám, Xá:Xa, Ceremonial Regalia, etc., as presented in Section 4.0. Also referred to as 'Stó:lō Heritage Resources' in relation to resource management.
Stó:lō Heritage Policy, 2003	Stó:lō Heritage Policy, 2003 – As described in the Policy, the Stó:lō maintain ownership of and jurisdiction over all Stó:lō heritage sites and objects. On behalf of the broader Halkomelem-speaking community, Stó:lō Nation maintains jurisdiction over Stó:lō heritage sites and objects not otherwise linked directly to a family or individual. Stó:lō Nation



	recognizes and accepts the shared heritage interests of other traditionally Halkomelem speaking communities and organizations not directly associated with the Nation. Stó:lō Nation endeavours to establish heritage related Protocol Agreements, as needed, with such Halkomelem communities and organizations. Stó:lō Nation may also develop heritage related Protocol Agreements with non-Aboriginal governments and resource management agencies.
Stó:lō Intellectual Property	Stó:lō Intellectual Property: knowledge, the nature of use of which has been transmitted from generation to generation, which is regarded as Stó:lō and as belonging to Stó:lō individuals, families, communities or the Nation as a whole. Stó:lō Intellectual Property, though rooted in the past, is contemporary knowledge that changes with time. Stó:lō Intellectual Property includes: place names; oral history; family names; songs; dances; designs/ images / arts; language; knowledge.
Surface water	Surface water refers to water flowing across or accumulating on the ground surface as a result of precipitation processes and most often due to the influence of rainfall and snowmelt. As water inundates and accumulates on the surface, it begins to flow towards creeks, streams, lakes, ditches, or installed storm sewer systems or reservoirs. Regionally, surface water originates in mountainous areas and then flows through creeks, streams, and as overland flow to larger creeks and streams in lowland areas.
Threatened species	A wildlife species that is likely to become an endangered species if nothing is done to reverse the factors leading to its extirpation or extinction.
Total, Faecal and E. coli bacteria	Coliform bacteria are described and grouped, based on their common origin or characteristics, as either Total or Faecal Coliform. The Total group includes Faecal Coliform bacteria such as Escherichia coli (E .coli), as well as other types of Coliform bacteria that are naturally found in the soil. Faecal Coliform bacteria exist in the intestines of warm blooded animals and humans, and are found in bodily waste, animal droppings, and naturally in soil.
Underground storage tank (UST)	An underground storage tank (UST) is a storage tank located underground to contain chemicals, fuel, or septic materials.
Waste stream	Waste can also be classified by stream or material. Typical terminology used by the municipal waste stream is provided in Appendix I.
Watershed	The area of land where all of the water that is under it or drains off of it goes into the same place (US EPA).
Watershed management	Conservation Authorities define watershed management as “managing water resources within specific watersheds by knowing how much water is in the system, where it comes from, who is using it, how it is being contaminated and where it ends up. Watershed management takes into consideration all the outside activities that can influence the quality and quantity of our surface and groundwater.”
Well or borehole	Groundwater is accessed through wells or boreholes which are dug or drilled into aquifers.



Zero Waste Challenge

The term “zero waste” is a concept that promotes a future where landfills are no longer needed. The term is intended to encourage people to think more holistically about their waste and to view it as a resource instead of garbage destined for burial. Zero Waste is a mindset meant to propel change in the existing solid waste management system and to promote the adoption of more aggressive waste reduction policies aimed towards stopping waste before it is created and maximizing reuse and recycling programs.



1.0 INTRODUCTION

S'ólh Téméxw te ikw'élò. Xólhmet te mekw'stám it kwelát – “This is our land. We have to look after everything that belongs to us”. In our Stó:lō culture, a link exists between the past, present, and future. In our Halq'emeylem language we have the word tomiyeqw – the relationship expressed in this word connects people seven generations past with those seven generations in the future. The connection between the past and the future rests with those of us living today. It is in this spirit that we, the Sema:th People today, undertook the development of our Environmental Management Plan (EMP).

We created the Sema:th EMP to ensure a healthy environment, protection of resources, appropriate development, and a celebration of our living culture. Our ancestors lived in harmony with the land and had sophisticated methods of environmental management. We wish to honour them through this EMP, by acknowledging our role as the current caretakers of the land. In doing so, we recognize the important role we play in ensuring a healthy and prosperous future for the generations still to come.

1.1 Framework

In December 2010, the *Sema:th Land Code* was accepted. The *Sema:th Land Code* is an important and exciting step in Sema:th autonomy. The Land Code was drafted pursuant to the Framework Agreement on First Nation Land Management and the *First Nation Land Management Act (FNLMA)*. Since November 2011, the Land Code has been operational, making Sema:th responsible for our acts or omissions in managing our lands. Under Land Code, Sema:th First Nation Council has the power to make laws in respect of the development, conservation, protection, management and administration of Sema:th Lands (Sema:th Laws). This Environmental Management Plan (EMP) will assist Sema:th Nation in managing our Lands in an environmentally and culturally sustainable manner.

1.2 Scope

The EMP is developed as an operational manual to be used by Sema:th to manage activities and related environmental features that have the potential to impact the environment and health of people on Sema:th Lands. As illustrated in Figure 1, Sema:th Lands are located on the south side of the Fraser Valley, east of the City of Abbotsford. Sema:th Lands refer to the land comprised of Sumas Indian Reserve #6 and is approximately 628 acres (~254 ha).



The authority of the EMP lies only within Sema:th Lands. However, Sema:th wishes to work collaboratively and respectfully with local municipal, regional, provincial, and federal bodies to ensure that the environment is protected for everyone.

1.3 Purpose

Through the implementation of a series of Environmental Operating Procedures (EOPs), the EMP aims to:

- Prevent and/or minimize environmental impacts (to the fullest extent possible) on Sema:th Lands;
- Provide a proactive rather than re-active environmental management regime;
- Incorporate environmental considerations into the decision making process;
- Improve environmental protection and performance that goes beyond compliance with applicable laws, regulations, Best Management Practices, and standards;
- Protect Sema:th Lands and the environment for future generations;
- Incorporate Sema:th Traditional Knowledge into current environmental management practices;
- Improve operational structure and efficiency with regard to environment management;
- Facilitate continual environmental management improvement;
- Bring together the information, documentation and research that has been conducted on Sema:th Lands to ensure that sound environmental stewardship occurs;
- Promote the principles of sustainable development on Sema:th Lands;
- Increase the overall awareness of workers and neighbouring municipalities regarding environmental issues and practices on Sema:th Lands; and
- Increase environmental awareness and pride among Sema:th people.



2.0 Administration

The EMP is a living document that must evolve in response to changing environmental, operational and legislative conditions. The following section outlines administrative tasks associated with the EMP.

2.1 Document Control

Document control is a means of keeping track of documents, procedures, and processes. The purpose is to ensure that everyone has easy access to and uses the correct and most up-to-date versions. Environmental legislation, best management practices (BMPs), and procedures can change over time which will require amendments and updates to the EMP. Therefore it is important that documents related to the EMP are controlled to ensure that only the current versions of the documents are referred to and used.

To help ensure that the EMP and related documents remain current and that only the most up-to-date versions are used, the following document control measures will be implemented:

- Include a date and version number on all documents;
- Review all documents on a pre-determined schedule;
- Revise documents as required;
- Obtain appropriate approvals and sign-offs on all revised documents prior to issuing or re-issuing;
- Remove and destroy/recycle all outdated documents;
- Maintain an electronic master copy at the Lands & Resources Department Office; and
- Store all EMP records in hard copy and/or on an electronic data records system for 5 years.

2.2 Annual EMP Review

The Sumas Lands & Resources Manager is responsible for ensuring that the EMP and related documents are reviewed, updated, and maintained as appropriate. To meet this commitment, the Lands & Resources Manager will lead an annual review of the EMP and related documents and record the results and findings in an Annual EMP Review Report which will be presented to Chief and Council (see Annual EMP Review Meeting below).



The review will include, but will not be limited to:

- An assessment of all EOPs for adequacy, accuracy and relevance and will include any recommended amendments ;
- An examination of recent changes to applicable legislation and regulations as they relate to specific EOPS;
- An assessment of the EOP goals, objectives and targets and the degree to which they are being met;
- The success of the EMP implementation plan including recommendations for improvement; and
- The effectiveness of the document control and recommended changes.

2.3 Annual EMP Chief and Council Review

Sema:th Chief and Council and the Lands & Resources Manager will meet annually for an EMP Review Meeting. The meeting will serve to review and discuss:

- The results and findings of the EMP Review Report including:
 - Performance summary for activities covered under each EOP;
 - Update on how current and adequate the EOP Goals and Objectives are and how the commitments are being met;
 - Effectiveness and suitability of the EMP and the related EOPs in relation to changing conditions and information;
 - Changes to legislation and regulations that may impact the EMP and specific EOPs;
- The environmental incident report summary and any environmental non-conformances;
- Remediation and preventative actions;
- Any concerns resulting from interested parties;

The annual meeting will also allow the EMP review team to approve, confirm, and/or set new goals, objectives and targets as needed, as well as to review, modify and approve budgets as necessary to continue implementing the EMP.



2.4 Semi-Annual Reviews

An EMP and/or EOP review can also occur outside of the annual review in response to significant regulatory changes, new land use processes, changes in industrial operations, and/or organizational adjustments. As required, the Lands & Resources Manager will carry out semi-annual assessments on the effectiveness, performance, and achievements of each EOP and make amendments as necessary.

2.5 Amendments

Amendments to the EMP and/or EOPs will be completed as follows:

- As necessary, each amendment will be presented to Sema:th Chief and Council for review, adoption and approval for implementation; and
- The amended policy will be printed, signed, and circulated to relevant personnel (e.g., Managers) and posted.

2.6 Roles and Responsibilities

Role	Responsibilities
Chief and Council	<ul style="list-style-type: none"> ▪ Establish and define the overall organizational structure, including roles, responsibilities, and authorities to effectively implement and maintain the EMP. ▪ Provide the equipment, training, human resources, and funding necessary to implement and maintain the EMP. ▪ Participate annually in the EMP Review Meeting.
Lands & Resources Department The Lands & Resources Manager is ultimately responsible for the following tasks but is allowed to delegate procedural aspects to other department staff and/or other Sema:th departments, contractors, agencies, etc., as appropriate.	<ul style="list-style-type: none"> ▪ Maintain the Approved EMP <ul style="list-style-type: none"> ○ Conduct or assign responsibilities for EMP/EOP reviews and inspections and related documentation. ○ Maintain current EOPs within the EMP. ○ Establish and implement EMP document control procedures. ○ Ensure that legal requirements relevant to the EMP are reviewed annually. ○ Maintain a central, electronic and hard copy version of the EMP. ○ Prepare the Annual EMP Review Report. ○ Coordinate and participate in the Annual EMP Review meeting. ○ Prepare an annual budget for Chief and Council to review and approve for the implementation and maintenance of the EMP.



Role	Responsibilities
Lands & Resources Department	<ul style="list-style-type: none"> ○ Ensure that adequate training of Sema:th staff is provided related to the implementation and requirements of the EMP. ▪ Communicate the EMP <ul style="list-style-type: none"> ○ Ensure that staff and contractors are aware of the EMP and EOP requirements and objectives. ○ Communicate the EMP goals, objectives, and EOPs both internally and externally, and as appropriate. ○ Liaise with, advise, and report back to Chief and Council on the status of project activities and any environmental issues. ○ Advise Chief and Council of any non-compliance and any emerging environmental issues and assist in addressing them. ○ Liaise with regulatory agencies as required. ○ Maintain a registry of complaints. ▪ Review Compliance with the EMP <ul style="list-style-type: none"> ○ Schedule and coordinate internal EMP and EOP reviews. ○ Implement or assign corrective action as required in response to inspection or monitoring results, audit findings, Chief and Council reviews or incidence reports. ○ Monitor contractor's compliance. ○ Periodically review monitoring reports to ensure required data is being collected. ▪ Maintain EMP Related Documents (including but not limited to): <ul style="list-style-type: none"> ○ Environmental permits, approvals and government agency correspondence related to the EMP. ○ Agreements with fuel, chemical and waste contractors and suppliers for activities related to the EMP. ○ Facility site plans, records, checklists, audit reports and related documentation. ▪ Environmental Incidences <ul style="list-style-type: none"> ○ Promptly investigate all reportable environmental incidences to ensure that appropriate reporting, response and other legal requirements have been met.



Role	Responsibilities
Lands & Resources Department	<ul style="list-style-type: none">○ Able to stop work to ensure compliance with regulatory and/or EMP requirements.○ Ensure environmental incidents are reported to the appropriate/applicable agencies and Chief and Council.○ Retain the services of a qualified Environmental Professional to assess and mitigate risk associated with impacts to the environment.
Contractors	<ul style="list-style-type: none">▪ Adhere to the requirements set out in the EMP and other applicable legislation.▪ Communicate environmental responsibilities and requirements of this EMP to their staff and sub-contractors, and record that communication.▪ Ensure all members of their staff and sub-contractors are trained to prevent or mitigate environmental impacts.▪ Ensure all labour, equipment, and materials are available to execute the project activities and respond to environmental incidents.▪ Correct deficiencies and any non-compliance items raised by Sema:th First Nation.▪ Retain the services of a Qualified Environmental Professional to assess and mitigate risk associated with impacts to the environment.



3.0 Methodology

A multi-staged approach was taken for the development of the EMP to ensure the goals and objectives met the needs and requirements of Sema:th Lands and its community members. The development of the EMP included a collaborative approach to gather invaluable knowledge and input from Sema:th members, which helped guide the identification of the top environmental management priorities on Sema:th Lands.

The following initial tasks were completed to provide important background information necessary for the development of the EMP and the associated EOPs:

- Review of existing literature related to environmental features and activities associated with Sema:th Lands;
- Community engagement; and
- Compilation of existing legislative guidelines, policies, regulations, best management practices (BMPs), and applicable standards.

3.1 Literature Review

To develop an understanding of the existing baseline conditions and to assist in identifying key environmental management priorities on Sema:th Lands, a desktop overview and literature review was completed. Documents included, but were not limited to:

- Sumas First Nation Phase 1 Environmental Site Assessment, 2009;
- Sumas First Nation – I.R. No. 6 Phase 2 Environmental Site Assessment, 2012;
- Draft Sumas First Nation – I.R. No. 6 Phase 3 Environmental Site Assessment, 2013;
- Stó:lō Environmental Conservation and Land Use Policy – Draft, August, 2002;
- Stó:lō Heritage Policy Manual – May, 2003;
- Upper Stó:lō Fraser Valley Plant Gathering book;
- Fire Protection Agreement – December, 1996;
- Sumas First Nation Draft Highest and Best Use Study – December, 2012; and
- Sanitary Sewer Agreement – December, 1991.



To date, a number of site investigations have been completed or are on-going on Sema:th Lands to identify present and potential environmental management issues, particularly related to site contamination. The most significant of the studies completed to date have included Phase 1 (completed in 2009), Phase 2 (completed in 2012), and Phase 3 (in progress) environmental site assessments (ESA) and an environmental emergency response plan, completed in 2011. Specific documents are discussed further below.

3.1.1 Phase I Environmental Site Assessment

A Phase I Environmental Site Assessment (ESA) was completed by Teranis Consulting Ltd. (Teranis; Sumas First Nation Phase 1 Environmental Site Assessment, 2009) to establish the environmental conditions and identify areas of primary environmental concern on Sema:th Lands prior to the implementation of the Land Code. Teranis identified a total of forty four (44) Areas of Potential Environmental Concern (APECs) on or adjacent to Sumas land. APECs were associated with fill sites, fuel storage tanks (above and underground), vehicle maintenance areas and/or commercial/industrial operations, such as the Brick Plant, Metal Box site, former SES Soil Remediation Facility, former Rotary Kiln site, former Miners Camp and former Saw Mill.

3.1.2 Phase 2 Environmental Site Assessment

The Phase 2 ESA was completed by Teranis in 2012, to confirm the presence or absence of contaminants within the areas of potential environmental concern identified during the Phase 1 ESA (Sumas First Nation – I.R. No. 6 Phase 2 Environmental Site Assessment, 2012). Summary of the results indicated that metals and hydrocarbons were found to be elevated in soil and groundwater, and a total of 22 Areas of Environmental Concern (AECs) were retained for further investigation from the original 44 APECs. The principle areas of concern include the following:

- Landfill (stability, asbestos, contaminated soil & leachate plume);
- Widespread low level metals and PHC impacts at the Brick Plant;
- High levels of PHCs in soil & groundwater at the former Rotary Kiln, Bunker UST and former fueling facility on Lot 76;
- Metals and PHCs on Lot 55 and Metal Box Container site; and
- Fill quality west of Kilgard Road and south of the Admin Office.



Phase II recommendations included:

- Conduct a Supplemental Phase 2 ESA to verify and delineate contamination (metals, PAHs - naphthalene and phenanthrene and petroleum hydrocarbons) identified by the Phase 2 ESA;
- Advance additional groundwater monitoring wells to establish background groundwater quality;
- Confirm the presence of asbestos in soil at the landfill site and determine the source of this material;
- Assess slope stability at the former SES landfill site;
- Identify the location of groundwater abstraction wells on Sumas lands and their current status and usage;
- Conduct additional air quality monitoring to assess potential impact from local source(s), and to confirm AQ during spring, summer and fall, when impacts are typically more pronounced; and
- The former Brick Plant appears to be in a considerable state of disrepair. Building walls appear to be structurally unsound and may collapse and pose a risk to people working on the site. It is recommended that the Nation retain a suitably qualified structural engineer to assess building condition, safety issues, potential for continued long term use and anticipated maintenance and decommissioning costs.

3.1.3 Phase 3 Environmental Site Assessment

At the time of writing this document, a Phase 3 ESA is currently on-going and is being completed by Teranis. The purpose of the Phase 3 is to focus on delineating soil and groundwater impacts and completing recommendations for the areas of environmental concern, as outlined in the Phase 2 report. Based on the results of the Phase 3 ESA, further recommendations for management will likely focus on soil and groundwater impacts; quarterly monitoring of groundwater and surface water in select areas; completion of a human health and ecological risk assessment; and remediation efforts through removal of soil and/or groundwater contaminant sources.

3.1.4 Sumas First Nation Emergency Plan

The Sema:th emergency response plan was updated in September 2011 (Sumas First Nation Emergency Plan, 2011). The plan provides an overview of, but not limited to the following:

- Emergency contacts and community context;
- Emergency plan overview;
- Sema:th management organizational structure;
- Hazard, risk and vulnerability assessment;



- Evacuation procedures and response action plans; and
- Recovery roles and procedures.

3.2 Community Engagement

Community input into the EMP is a critical component of the development of the EMP. To fully engage the Sema:th community a series of activities and discussions related to environmental management were completed. Through coordination with the Lands Advisory Committee (LAC), Chief and Council, and Lands staff, community engagement initiatives have included:

- Community newsletters;
- Development and distribution of a community questionnaire;
- Community open house;
- Meetings, workshops, and presentations with the Sema:th Management Team;
- Youth visit; and
- Graffiti boards.

The objectives of the community engagement and consultation process were to:

- Gain the best possible understanding of the existing conditions on Sema:th Lands;
- Gain an understanding of Sema:th members principal concerns regarding environmental issues on their lands;
- Identify the top environmental management priorities on Sema:th Lands; and
- Collaborate and develop a series of goals, objectives, and targets for each environmental management category.

Through this consultation, the top ten environmental management priorities on Sema:th Lands were identified (discussed in Section 3.3 and Section 4.0).

3.2.1 Community Newsletters

Two newsletters were developed and distributed to the community to inform Sema:th members about the EMP and the process involved in its development. The first newsletter, distributed by the LAC on February 27, 2013, outlined the purpose and objectives of the EMP and introduced the upcoming community questionnaire and open-house. The second newsletter was distributed by the LAC on April 5, 2013 and summarized the results of the questionnaire and open house.



3.2.2 Community Questionnaire and Open House

A community questionnaire was developed and distributed to Sema:th members by the LAC on March 11, 2013. Questionnaires could also be completed at the Open House, held on March 14, 2013. The community survey questionnaire consisted of 12 questions to gauge members knowledge and awareness surrounding environmental issues and management on Sema:th Lands. Members were also asked to identify the resources they value most and discuss the biggest environmental threats to Sema:th Lands. The questionnaire was open to members' ages 14 years and older. A total of 96 questionnaires were completed by Sema:th members. The results of the survey were analysed and the findings are summarized in a memorandum, along with the questionnaire, which are provided in Appendix A.

3.2.3 EMP Meetings

Throughout the development of the EMP, the following meetings were held with Lands Staff, the LAC, and Chief and Council to incorporate the best interests of Sema:th members throughout the project design, planning, and implementation:

- Project Initiation Meeting – February 21, 2013;
- Questionnaire Results Presentation and Confirmation of EOP Categories – March 25, 2013; and
- EOP Goals and Objectives Workshop – April 2, 2013.

The objectives of the meetings were to:

- Provide project updates;
- Solicit input and seek guidance on the development of the EMP;
- Identify and confirm the list of top environmental management priorities to be highlighted in the EMP through the development of the 10 EOPs ;
- Develop specific goals for each EOP and a list of objectives and targets to meet the goals – the list of goals, objectives and targets provide the framework for each EOP; and
- Provide an open forum for discussion with Sema:th members through their Leadership to gather information from the community. This invaluable information ensures the EMP captures the communities goals and priorities for environmental management on Sema:th Lands.

Taking into account the input from the community, guidance of the Leadership (Chief and Council and LAC), review of background documents, and knowledge gained through community consultation, a list of the top 10 environmental management priorities for the EMP were identified as follows (in no particular order):



- Air Quality;
- Groundwater Protection;
- Habitat Protection;
- Fuel Handling and Disposal;
- Soil and Fill Management;
- Solid Waste Handling and Disposal;
- Land Development;
- Surface Water Management;
- Cultural Resources Protection; and
- Environmental Emergency Response.

Descriptions of the 10 environmental management priorities are discussed further in Section 4. Each environmental priority has been developed into a separate EOP which are found in Appendix A. The EOPs are designed to provide guidance for Sema:th on environmental management issues.



4.0 Environmental Management Priorities

Through consultation and review of background documents, 10 environmental management priorities were identified for Sema:th Lands. The following section provides an overview of each priority and a high-level description of existing conditions that helped guide the development of the EOPs.

4.1 Air Quality

Air quality is a measure of the state of the air around us and the air that we breathe. Good air quality refers to air that is unpolluted, clear, and clean. Poor air quality refers to polluted air that has the potential to be harmful to human health or the environment. Poor air quality may be the result of emissions to the atmosphere from human activities (e.g., car emissions, industrial activities; Province of British Columbia, 2013a).

Sema:th First Nation is located in the Fraser Valley. The Fraser Valley is located in a confined airshed, which means that the area is more likely to experience a buildup of contaminants in the air (Fraser Valley Regional District, 2008). The confined airshed in the Fraser Valley is likely created by the weather, wind, and geography of the valley (Province of BC, 2013b). In particular, the topography of the area (mountains and valleys), wind direction, temperature, air pressure, and the types of pollutants all contribute to the amount of pollutants that build up in the air and in turn affect the local and regional air quality. The buildup of pollutants in the air has the potential to negatively impact human health, visibility, and the environment.

Locally, the main sources of poor air quality within the Sema:th Lands are related to industrial operations and agricultural activities. Community input identified air quality as a major concern particularly related to emissions from Royal Flex Lox Pipe Plant (off Sema:th Lands) and Big Steel Box. Air monitoring was carried out as a component of the Phase II ESA to assess the potential impacts from the asphalt batching plant or potential sources other industrial activities. The particulate material concentrations measured during the testing measured quite low and did not exceed provincial or Metro Vancouver Air Quality Objectives. The data did suggest however, that there are short-term elevated concentrations of PM10 that may be due to localized sources (e.g., vehicle emissions, road dust, industrial emissions, and local combustion sources). It should also be noted that PM10 concentrations measured on Sema:th were consistently more elevated than those recorded in Abbotsford.



Managing the air quality associated with these operations (e.g., air emissions such as dust, air pollution associated with vehicle emissions) can help to improve the air we breathe and allow for a healthier environment. While there are limitations for improving air quality in the Fraser Valley, and particularly on Sema:th Lands due to the location and surround industry, we can still control the quality of our emissions and act as stewards of the environment to promote air quality.

4.2 Groundwater Protection

Water occurring beneath the ground surface amongst spaces between rocks and soil is referred to as groundwater. The water within these spaces is typically found within 100 m of the ground surface (Environment Canada, 2011). Water underground can collect in a formation of permeable rock or loose material (e.g., sand, gravel, silt) and can be extracted for human consumption. This collection of water underground is called an aquifer and is the source of drinking water for Sema:th First Nation.

As described in the Teranis Phase I ESA (2009), the depth of groundwater on Sema:th Lands is likely to be variable depending on subsurface stratigraphy and bedrock elevation. Based on water levels within identified streams and creeks, groundwater is likely within 5 m of ground surface across much of Sema:th Lands. Local groundwater flow is inferred to generally flow south. Information presented on the Ministry of Environment web based BC Water Resources Atlas for the community drinking well indicated that groundwater is approximately 4 metres below ground surface. The Water Resources Atlas also indicates that there are 15 groundwater wells on Sema:th Lands. However, Teranis notes that provincial well inventories are typically incomplete and additional wells may be present.

Based on inferred groundwater flow direction and local creeks, land use located to the north, northeast, northwest should be considered and is located up-gradient and have the greatest potential to impact groundwater quality on Sema:th Lands. This also includes land currently occupied by Royal Flex Lox Pipe Plant.

Impacts to groundwater can occur as a result of contamination, which can cause groundwater to be unsuitable for use. Groundwater contamination is associated with hazardous materials seeping through the ground to groundwater sources or aquifers. Cleaning up contaminated groundwater can be very expensive and difficult. Contamination sources may include but are not limited to leaking gasoline storage tanks, pesticide or fertilizer, and accidental spills that can negatively impact the quality of groundwater.

Sema:th's drinking water is supplied by groundwater wells and a water treatment system is located on the north side of Lakeview Drive (Teranis, 2009). However, it is thought that some community members may



obtain their drinking water from private abstraction wells. Given the shallow elevation of the groundwater and the drinking water wells, there is concern of potential contamination and infiltration from surface level pollutants.

Sema:th currently has a groundwater sampling program in place to test and analyze domestic water use for Total Coliform, E. Coli, and Enzyme Substrate Coliform on a weekly basis. Results have been found to be in compliance with Health Canada drinking water guidelines (Sumas Lands & Resources Officer, Personal Communications, 2013). Regular sampling was also recommended in the Draft Phase III ESA (quarterly sampling) at several monitoring wells: former SES site (landfill and fill area), the brick plant waste dump, and Bunker C. There are concerns regarding elevated petroleum hydrocarbons, dissolved metals, PAHs, and other indicators of landfill leachate and ground gas parameters (e.g., methane and carbon dioxide). Recommended continuous and regular monitoring of groundwater quality is consistent with the feedback received from the community consultation process.

4.3 Habitat Protection

Habitat can be defined as the natural home or environment of a plant, animal, or other organism. All plants and wildlife depend on a healthy habitat. Aquatic habitat is the habitat within water, specifically the organisms such as plants and animals that occur in water, and can include creeks, streams, and wetlands. Terrestrial habitat includes land surfaces such as habitat within forests or a field. A variety of aquatic and terrestrial habitats occur across Sema:th Lands.

The loss of habitat is one of the main reasons that species are at risk today. A range of factors can lead to habitat loss. These factors include increased development, resource management activities, pollution and the spread of invasive plants and animals (Government of Ontario, 2013).

Habitat protection includes the use of practices and strategies to conserve and protect species and their habitats. Practices and strategies may include identifying species or communities that are sensitive within a given area, using guidance documents or best management practices when conducting activities in or near aquatic or terrestrial habitat, and obtaining appropriate permits when undertaking works in or near aquatic or terrestrial habitat. Protection of aquatic and terrestrial habitat is important for the long-term viability of our lands.

The existing surface water and creeks on Sema:th Lands provide habitat for a number of resident fish species as well as migratory Pacific salmon (both currently and historically), while the existing terrestrial habitat may be utilized by a variety of wildlife species and migratory birds. There are a number of species



afforded protection under federal legislation, including species at risk and migratory birds that have been identified on Sumas Mountain, immediately adjacent to Sema:th Lands. The community is concerned that aggressive development on the surrounding landscape will reduce the amount of available and quality of habitat remaining on their traditional territory. While habitat fragmentation limits migratory corridors for wildlife, the preservation and enhancement of the existing habitat on Sema:th Lands will ensure impacts from development are minimized.

4.4 Fuel Handling and Storage

Fuel, such as oil or diesel, is often stored in tanks in above-ground or underground storage tanks, which if not properly installed or maintained can result in fuel spills. Spills of fuel can contaminate drinking water, groundwater, and soil as well as cause odour and health problems. In addition, fuel released into the environment also has the potential to contaminate sewers, drainage ditches, and surface water.

As described in the ESAs, a significant component of impacts to soil and groundwater on Sema:th Lands are associated with poor fuel handling and storage (in addition to fill sites and industrial activities) (Teranis, 2012). The Phase II ESA noted that indications of hydrocarbon impacts (strong odours and visible product in soil) were identified in numerous locations including but not limited to the former Rotary Kiln, Brick Plant, a former service station, Sumas Works Yards, Big Steel Box, and various lots. Therefore, proper fuel handling and storage procedures including response and mitigation measures are key to preventing the unnecessary release of fuel into the environment. The results of the community questionnaire suggested a lack of education and awareness related to proper fuel handling, spill response, proper storage and disposal.

4.5 Soil and Fill Management

Soil is unconsolidated organic or mineral material located at the surface of the earth that serves as a medium for the growth of plants on land (Agriculture and Agri-Food Canada, 2011). Fill refers to soil that has been removed from one area and deposited in another area, typically as a means to fill depressions and holes to make an area suitable for development. It is important to properly manage soil and fill brought to the Nation and/or removed from the Nation to ensure deposited material is not contaminated, thereby reducing the potential for human or environmental health risks.

The ESAs noted numerous areas of soil contamination on Sema:th Lands. In particular, Sumas Environmental Services (SES) operated a soil treatment facility on Sema:th Lands which involved the biological treatment of petroleum hydrocarbon contaminated soil. Treated soil was reportedly deposited in a landfill located on Sema:th Lands, west of the SES treatment facility. The Phase II ESA concluded that



the findings suggest that soil deposited in the Landfill site was not treated sufficiently to reduce hydrocarbon concentrations below 'regulatory criteria'. In addition, the ESA highlighted several fill areas where there was elevated presence of metals and PAHs suggesting the use of untreated/contaminated fill.

The Draft Phase III ESA also provided recommendations to complete a human health and ecological risk assessment for chromium, nickel, and dissolved metals concentrations in soil in several areas on Sema:th Lands to determine if their concentrations pose a potential threat. The environmental issues surrounding soil and fill management were also identified during the community consultation process. Sema:th members felt that contaminated soils was one of the top environmental threats and identified soil and fill management as a priority on their lands.

4.6 Solid Waste Handling and Disposal

Solid waste is waste that is produced by residential, commercial, institutional, demolition, land clearing, or construction sources (Province of BC, 2013c). Waste management is the collection, transport, processing or disposal, managing and monitoring of waste materials. The term usually relates to materials produced by human activity, and the process is generally undertaken to reduce their effect on health, the environment or aesthetics (Wikipedia, 2013).

The ESAs noted and the community consultation confirmed issues surrounding several "household" type waste dumps on Sema:th Lands, which included observations of burned garbage and improperly disposed garbage along roadsides and along creek banks. The questionnaire results suggest that the majority of members feel that waste and other materials are not being disposed of properly, suggesting a lack of education and awareness in the community. The EOP will provide information related to the proper handling and disposal of waste material.

4.7 Land Development

Land development refers to the alteration of land through activities such as grading, excavation, soil removal, construction, alteration, or clearing of habitats (Queen's Printer for Ontario, 2013). This alteration or conversion of land is associated with modern communities that are constructed or reconstructed for people to live, work, worship, shop, play, and with other supporting land uses (Dewberry & Couture, 2008).

Throughout the land development process, it is important to maintain environmental and cultural values supported by the land and surrounding environment. Maintenance of environmental and cultural values during land development can be achieved through the use of environmental protection and stewardship



practices (Province of British Columbia, 2013d).

The City of Abbotsford has currently zoned Sema:th Lands as agricultural, general industrial, and rural residential land use. It should be noted that Sema:th will be developing their own Land Use Plan and Zoning By-law which will likely change these designations. General land use within Sema:th Lands include residential, parkland, agricultural, and industrial (currently brick and clay products manufacturing, vehicle servicing facility, and steel container storage restoration). Through the implementation of this EMP, we hope to facilitate and regulate responsible and sustainable development to ensure the long-term viability sustainability of Sema:th Lands.

4.8 Surface Water Management

Surface water refers to water that has accumulated on the ground surface (Thompson Rivers University, 2006). Water typically accumulates on the ground surface through precipitation such as rain, snow, or hail. As water accumulates on the surface, it begins to flow towards creeks, streams, lakes, ditches, or installed storm sewer systems or reservoirs. Regionally, surface water originates in mountainous areas and then flows through creeks, streams, and as overland flow to larger creeks and streams in lowland areas.

Surface water can be negatively impacted through contamination from human and natural sources (Thompson Rivers University, 2006). Human-caused contamination can occur through the release of hazardous materials to surface water from residential, industrial, and commercial operations. For example, water within a creek which runs through an agricultural area can be negatively impacted if pesticides and fertilizers are released into the creek. Pesticides and fertilizers may cause detrimental impacts to the aquatic life of the creek, reducing the creek's productivity, and reducing the quality of the surface water. Natural sources of surface water contamination include bacteria, viruses, or toxins within the water which are naturally occurring. If the water is consumed by wildlife, pets, or humans, they may become ill.

There are a number of watercourses that flow through or adjacent to Sema:th Lands including Sumas River, Marshall Creek, Kilgard Creek, and a number of other unnamed creeks and streams. A primary concern of the community surrounds the transportation of sediment and other pollutants into surface waters on Sema:th Lands through stormwater runoff, erosion, and other point/non-point sources. Proper management of surface water is important to the long-term viability of our aquatic and terrestrial environments.



4.9 Cultural Resources Protection

As described by Jordan-Bychkov and Domosh, culture can be defined as learned collective human behaviour. These learned traits form a way of life held in common by a group of people. Learned similarities in speech, behaviour, ideology, livelihood, technology, value system, and society bind people together.

Sema:th boasts a rich, complex, and dynamic culture full of our own distinct values, beliefs, traditions, and heritage. The future of Sema:th is important. The future of our people is based on our history, land culture, people and resources. Sema:th People wish to incorporate Traditional Knowledge into environmental management processes and protect our cultural resources so that development, activities on our land, and the use of our resources benefit the people today and ensure prosperity for future generations. We wish to continue to grow our culture, while learning from the past, to create a vibrant future.

4.10 Environmental Emergency Response

In the event of an environmental emergency, we must be prepared to respond to any event that has the potential to negatively impact human health and/or the environment. Examples of environmental emergencies include landslides, earthquakes, fires, floods, spills and the release of hazardous substances in to the natural environment. An emergency response includes a team of government, industry, communities, and local organizations to respond to an environmental emergency as soon as possible to reduce impacts (Government of Canada, 2012). Environmental emergency response is key to preventing, preparing for, and mitigating situations that have the potential to negatively affect the environment and human health (Province of British Columbia, 2013e).

Through the questionnaire and consultation process, community members expressed a consensus of concern related to the lack of formal procedure surrounding environmental emergency response. The majority of the community were either unsure or did not know what to do or who to call in the event of an environmental emergency. Additionally, the community expressed a feeling of concern related to the following potential environmental emergencies on Sema:th Lands:

- Spills (i.e., fuel and oil spills);
- Landslides caused by blasting on the mountain;
- Earthquakes;
- Fires – specifically related to explosions or industrial fires at Flex Lox; and



- Gas leaks or pipeline bursts.

Education and awareness training to the community would be required to ensure individuals are aware of specific responsibilities and procedures as they pertain to emergency response.



5.0 Implementation

The following implementation strategies will assist in putting the EMP and related EOPs into full effect.

5.1 General Considerations

The EMP and associated EOPs are a comprehensive environmental strategy that provides Best Management Practices (BMPs), guidelines, and strategies to assist Sema:th in protecting our land, environment, resources, and People. The EMP is intended to be visionary, goal-oriented, and long-term focused, based on the aspiration of both present and future community Members.

5.2 Obligations for Implementation

When Chief and Council approve the EMP, or any amendment to the EMP, the Nation and all entities or parties working on Sema:th Lands must follow the EMP and utilize the EOPs, BMPS, guidelines, and strategies to guide future land development activities in a manner that promotes environmental stewardship while minimizing negative effects. Chief and Council will have the mandate to make all community members and other parties wishing to operate on Sema:th Lands, aware of the EMP and related EOPs.

5.3 Reviewing and Updating the EMP

Provisions for reviewing and updating the EMP are found in the following sections of this report:

- Section 2.2
- Section 2.3
- Section 2.4
- Section 2.5

5.4 Building the Sema:th Lands and Resources Department

The Sema:th Lands and Resources Department is currently staffed in the following two positions – the Lands and Resources Manager and the Lands Clerk. Through the implementation of the EMP, significant responsibilities are going to be allocated to the Lands and Resources Department. Additional staffing resources will be required to ensure that the Department is fully functional and is able to manage the additional workload and responsibilities. Potential positions could include:



- Enforcement Officer;
- Environmental Technician(s); and
- Environmental Officer.

5.5 Schedule

The Implementation Schedule (Appendix B) is designed to assist Sema:th First Nation with establishing clear timelines for activities recommended in the EMP. The timeline summarizes the recommended activities of the EMP and has organized these into a series of timeframes including: foundation activities (< 1 year); short term activities (1 – 3 years); medium term activities (4 – 5 years); and long-term activities (6 years +). The table also identifies specific timeframes within specific fiscal years for the implementation of these activities.

5.6 Training and Education

As Sema:th begins to implement the EMP there are going to be employment opportunities for Sema:th Members in the areas of environmental management. To maximize these opportunities and to ensure that Sema:th Members have priority hiring opportunities on jobs related to environmental management (e.g., construction monitoring), Sema:th will build community capacity through the following:

- Identify suitable candidates to take part in environmental training programs both for short-term and long-term employment (e.g., Environmental Officer);
- Allocate specific funding to train Members; and
- Maintain a database of personnel who have completed environmental training programs related to the EMP.

The following provides a list of schools and environmental training programs relevant to the implementation of the EMP and applicable EOPs.

Vancouver Island University

- Erosion and Sediment Control (3-day);
- Environmental Field Techniques for Construction Projects (3-day);
- Environmental Monitoring for Construction Projects (3-day);
- Water Quality Sampling and Design (3-day);
- Freshwater Sampling Methods and Design (2 days each); and



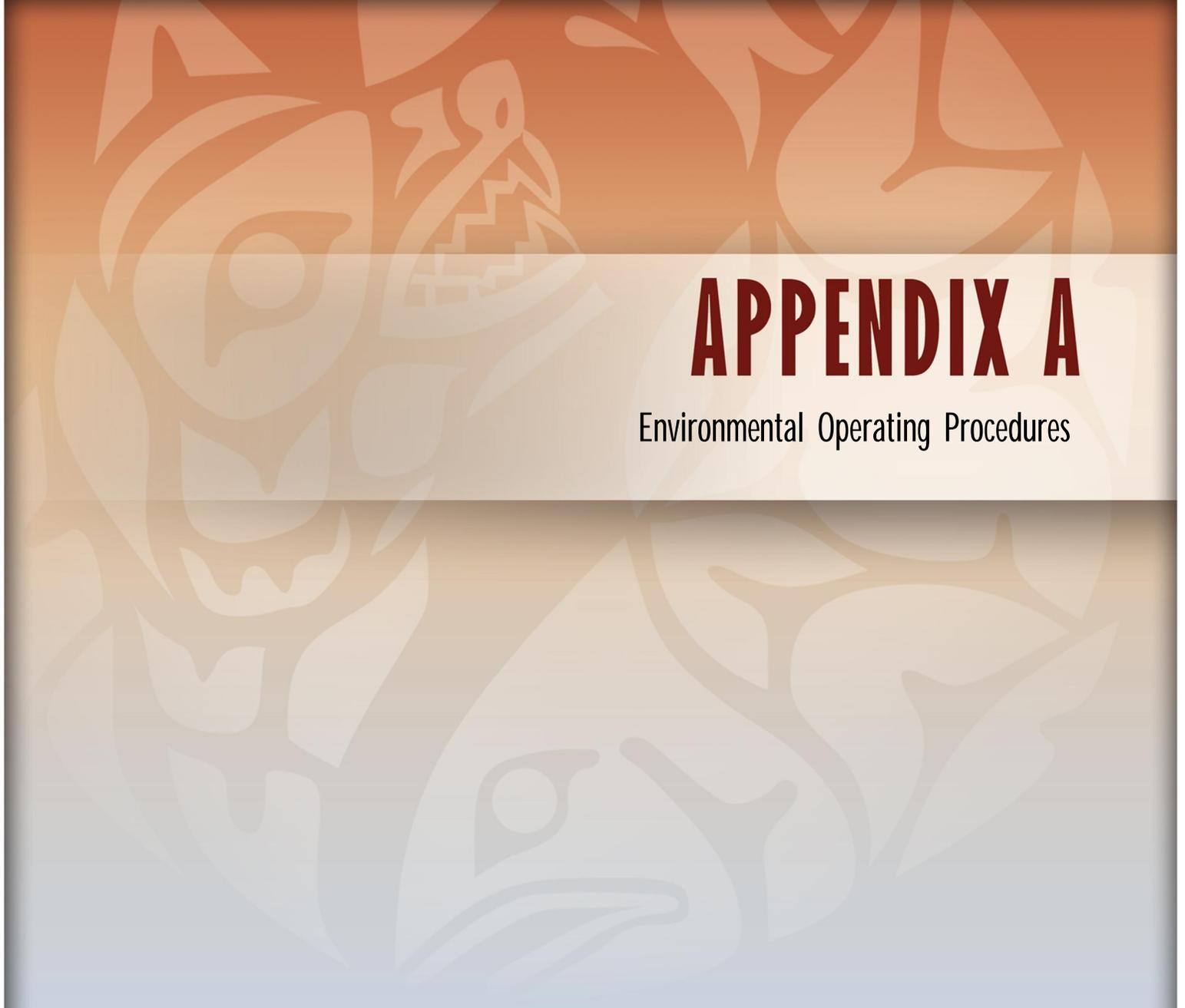
- Environmental Technician Certificate Program (25-day).

Kwantlen Polytechnic University

- Environmental Protection: Diploma of Technology (2 - 3 years)

British Columbia Institute of Technology (BCIT)

- Fish and Wildlife Recreation Diploma Program (1 year)



APPENDIX A

Environmental Operating Procedures





EOP 1

Air Quality Management

Air quality is a measure of the state of the air around us and the air that we breathe. Poor air quality refers to polluted air that has the potential to be harmful to human health or the environment. Poor air quality may be the result of emissions to the atmosphere from human activities (e.g., car emissions, industrial activities; Province of British Columbia, 2013a).

Goal:

- We recognize that air is a shared resource and essential to life, and we will do our part to promote improved air quality for everyone.

Objectives:

- Establish better relationships with Metro Vancouver and the Fraser Valley Regional District.
- Become more involved in the regional air quality decision-making process as follows:
 - Establish baseline conditions based on the work done by regional agencies to date.
 - Draw upon the existing regional air quality monitoring network to characterize/ monitor air quality moving forward.
- Create policies for household burning.
- Create and enforce a process to manage air emissions from new development.
- Educate members and generate awareness on air quality issues and management strategies for our community and neighbours.

Environmental Operating Procedure No. 1	EOP Revision: 01
Responsibility: Lands Manager, Lands Advisory Committee, Developers/Proponents, Nation Members	Revision Date: July 25, 2013



Terminology

Criteria Air Contaminants: While many different contaminants may be emitted to air, there is a set of contaminants considered the “Criteria Air Contaminants” that are of particular interest in analyzing air quality. These contaminants are:

- Oxides of nitrogen (NO_x)
- Sulphur dioxide (SO_2)
- Carbon monoxide (CO)
- Volatile Organic Compounds (VOCs)
- Particulate Matter (PM)
 - Total Particulate Matter (TPM)
 - PM with a diameter less than or equal to 10 microns (PM_{10})
 - PM with a diameter less than or equal to 2.5 microns ($\text{PM}_{2.5}$)

Ground-level Ozone (ozone): is an air contaminant associated with many negative health and environmental effects. Ozone is not emitted directly, but is the product of a series of photochemical reactions occurring in the atmosphere involving two precursor pollutants, NO_x and VOCs.

Fine Particulate Matter: In addition to being one of the criteria air contaminants, it must be understood that fine particulate matter ($\text{PM}_{2.5}$) can be both directly emitted from a source (primary) or created through a series of photochemical reactions in the atmosphere (secondary).

Ammonia: is a colourless pollutant with a pungent odour that also acts as a precursor to the photochemical reactions that produce secondary fine particulate matter. Ammonia itself is also associated with negative effects on human health and the environment. Major sources of ammonia include livestock waste and fertilizer production.



Legislation, Standards, and Policies

- *Canadian Environmental Protection Act, 1999 (CEPA 1999)*
- Indian Reserve Waste Disposal Regulations, C.R.C., c 980
- *British Columbia Environmental Management Act (Part 6 – Clean Air Provisions)*
- British Columbia Waste Discharge Regulation (B.C. Reg. 320/04)
- British Columbia Agricultural Waste Control Regulation (B.C. Reg. 131/92)
- British Columbia Open Burning Smoke Control Regulation (B.C. Reg 145/93)
- British Columbia Solid Fuel Burning Domestic Appliance Regulation (B.C. Reg 302/94)

Potential Impacts

Sema:th Nation is located in the Fraser Valley. The Fraser Valley is located in a confined airshed, which means that the area is more likely to experience a buildup of contaminants in the air (Fraser Valley Regional District, 2008). The confined airshed in the Fraser Valley is likely created by the weather, wind, and geography of the valley (Province of BC, 2013b). The airshed in the Fraser Valley is bordered by seacoast and mountains. This creates the potential for air to remain “trapped” within the Fraser Valley, creating a higher potential for pollutants to accumulate. Additionally, the Fraser Valley is subject to the movement of air emissions from the north western United States into the region. This trans-boundary pollution may contribute to air quality locally. The buildup of pollutants in the air has the potential to negatively impact human health, visibility, and the environment.

Maintaining good air quality is essential to the ongoing health of Sema:th and our Lands. Declining air quality may have potential impacts on the people (e.g., increased respiratory illness) and on the environment (e.g., damage to vegetation).

Managing air quality associated with operations on Sema:th Lands can help improve the air we breathe and allow for a healthier environment. While air quality on Sema:th Lands is dictated by regional air quality, we can work towards improving our behaviour and community and act as stewards of the environment to promote good air quality.



Best Management Practices

All development must comply with applicable Sema:th, federal, and provincial regulations, permits, authorizations, conditions, and agreements with respect to air quality management/protection.

The Fraser Valley Regional District (FVRD) has developed an Air Quality Management Plan (AQMP), originally adopted in 1998 (with draft revisions proposed). The FVRD AQMP identifies key drivers of air quality within the region as being ground-level ozone, fine particulate and precursors to both of these (e.g., ammonia, volatile organic compounds, oxides of nitrogen). The AQMP has linked the long term management of air quality within FVRD to reductions in these key drivers. As the population in the area continues to grow over time, there is the potential for an increase in pollutant emissions associated with the increased activity. Therefore, the AQMP outlines recommendations to help the FVRD with maintaining or improving air quality without limiting growth.

Strategy 1: Manage future developments

To allow for the management of air emissions associated with future development (e.g., industrial, commercial, or residential) of Sema:th Lands, all development should be subject to a review and assessment (if applicable) of air emissions. Through the air quality assessment process (see Appendix I, EOP Process: Air Quality and Managing Future Developments), identify potential impacts, assess proposed mitigation (e.g. design specifications), and determine net effects.

Strategy 2: Ongoing monitoring

The Lands & Resources Department shall review annual monitoring reports for approved developments and assess for compliance with associated mitigation measures. Sema:th will work collaboratively with the Proponent and regulators to address any air quality monitoring issues.

Strategy 3: Manage vehicle emissions through anti-idling policy

Vehicle emissions are a major contributor to air emissions within the regional air shed. One practice to manage emissions from vehicles is to develop and implement an anti-idling policy. Such a policy would engage members of the community and emphasize the importance of improving our personal daily habits. The Lands & Resources Department and/or the Lands Advisory Committee will work with the community to develop the detailed policy, and build capacity within the community with regards to the purpose and need for the policy.



Strategy 4: Participate actively in regional air quality committees

Sema:th Lands have nearby industrial activities that may affect our air quality but are out of our jurisdiction. By participating in regional committees, we will be more likely to affect change in the best interest of our air quality. Participation in these committees will also allow for Sema:th to draw upon the existing efforts of regional planning committees/agencies in defining baseline conditions and also in developing and implementing real-time air quality monitoring.

Strategy 5: Leverage relationships with other agencies

The FVRD has declared working proactively with First Nations as a goal of their Air Quality Management Plan. Sema:th will work towards establishing better relationships with the FVRD and the Greater Vancouver Regional District and Metro Vancouver. To improve these relationships, the Lands & Resources Department and the Lands Advisory Committee will consider engaging the districts in a two-way dialogue surrounding the interests and concerns of Sema:th.

Strategy 6: Prohibit illegal burning of waste on Sema:th Lands

Burning of waste is prohibited under the Indian Reserve Waste Disposal Regulations, Section 10, except under the authority of a permit authorized by the Minister of Aboriginal Affairs and Northern Development. The burning of waste, e.g., household waste, can cause the emission of pollutants that may cause negative effects to human health or the environment. Therefore, burning of waste shall not occur on Sema:th Lands.

Strategy 7: Minimize open burning

Open burning within the community should be minimized. Efforts will be made to educate the community about the significance of open burning as a source of fine particulates. Sema:th will develop a policy and permitting process to help regulate and minimize open burning.

Strategy 8: Education and awareness

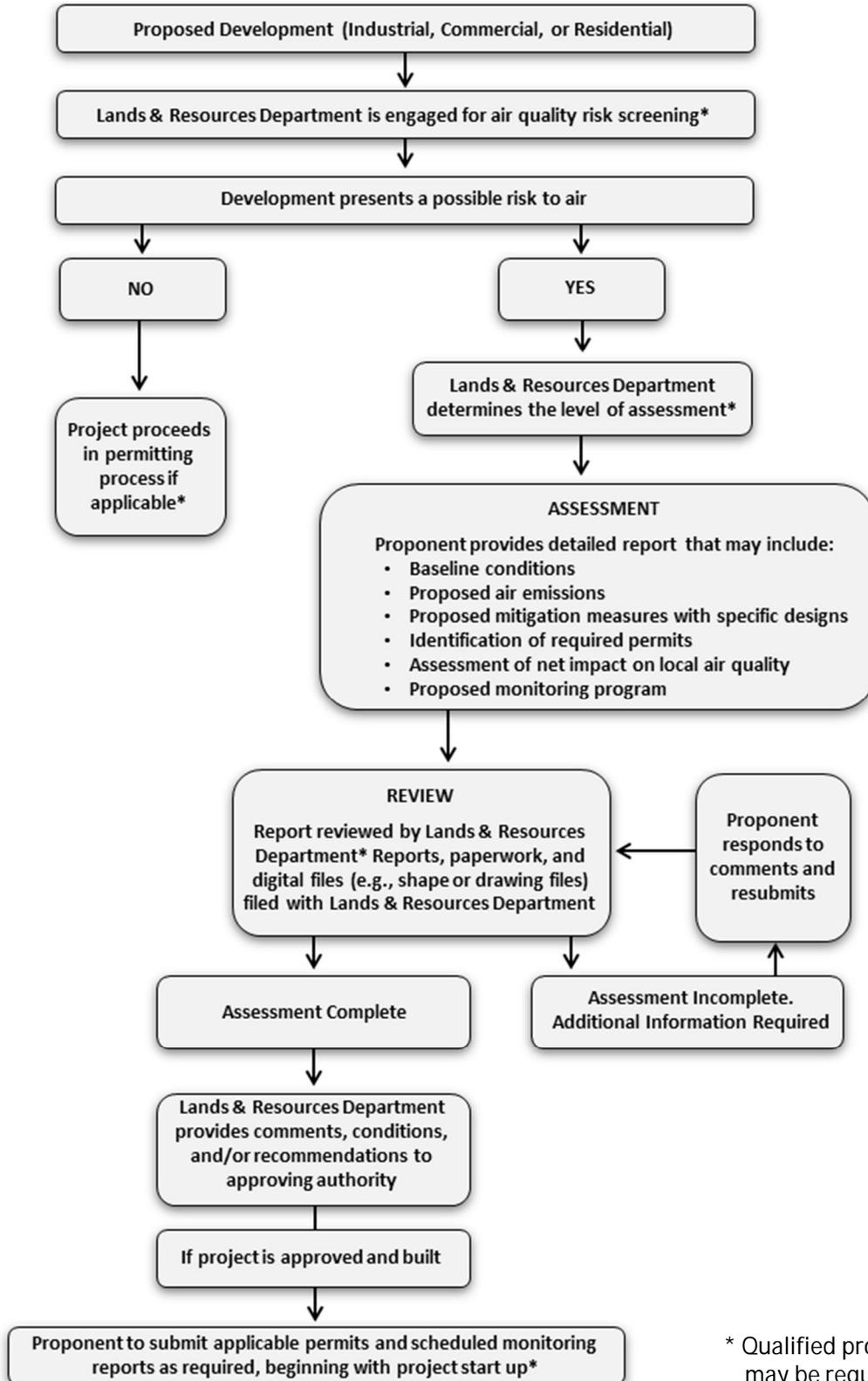
Develop community air quality awareness through education and programs including, but not limited to:

- Anti-idling campaigns;
- Car-pooling advocacy;
- Reducing household energy use; and
- Avoiding power tools (e.g., gas-powered lawn mowers) when possible.



Appendix I

EOP Process: Managing Air Quality for Proposed Development



* Qualified professional services may be required.



EOP 2

Cultural Resources

The future of our people is based on our history, land, culture, and resources. We host a rich, complex, and dynamic culture full of our own distinct values, beliefs, and traditions. We will incorporate Traditional Ecological Knowledge into environmental management processes and protect our cultural resources so that activities on our land and the use of our resources benefit Sema:th People today and ensure prosperity for future generations.

Goal:

- We will continue to grow our culture, while learning from the past, to create a vibrant future.

Objectives:

- Preserve and protect our culture.
- Act as cultural leaders and educate our youth, membership and the public on Sema:th culture and knowledge.
- Pass on our traditions, skills, and knowledge for future generations.
- Enforce the Stó:lō Heritage Policy.

Environmental Operating Procedure No. 2	EOP Revision: 01
Responsibility: Lands Manager, Lands Advisory Committee, Developers/Proponents, Band Members	Revision Date: July 25, 2013



Terminology

Stó:lō Heritage: all aspects of Stó:lō culture and lifeways - both tangible and intangible - of the past, present and future, including but not limited to: language, physical / spiritual landscapes; place names; ceremonial sites; burials and burial sites; spirited places; songs; dances; art; craft; design; religious / spiritual / ceremonial practices; places and materials; subsistence and material gathering practices and sites; oral histories including all sqwelqwel and sxwōxwiyám; traditional / historical knowledge; family names; archaeological sites, features and objects; historic sites, documents and objects. Stó:lō Heritage can be classified by 'type', such as Sxwōxwiyám, Xá:xa, Ceremonial Regalia, etc., as presented in Section 4.0. Also referred to as 'Stó:lō Heritage Resources' in relation to resource management.

Stó:lō Intellectual Property: knowledge, the nature of use of which has been transmitted from generation to generation, which is regarded as Stó:lō and as belonging to Stó:lō individuals, families, communities or the Nation as a whole. Stó:lō Intellectual Property, though rooted in the past, is contemporary knowledge that changes with time. Stó:lō Intellectual Property includes: place names; oral history; family names; songs; dances; designs/ images / arts; language; knowledge.

Features: objects that form a permanent part of the site of which they are a part; objects that cannot physically be removed from the site of which they are a part - at least not without significant effort or without destroying the object (e.g., sqémél depressions; shell heaps; cache pits; earthworks; culturally modified trees; house frames / foundations; rock walls; pit-fall traps; trails; roasting pits; hearths; stone quarries; burial mounds / pits; monuments; roads / trails; etc.).

Artifacts: objects that can be readily removed from the site of which they are a part; moveable objects (e.g., chipped stone flakes, knives, spears and arrowheads; tin cans; glass bottles and jars; basketry; personal gear; groundstone hand-mauls; bone pins; antler wedges; glass beads; looms; instruments; etc.).

Ancestral Human Remains: the skeletal or otherwise physical remains of a deceased person or persons in all likelihood of Stó:lō ancestry.

*Terminology as found in the Stó:lō Heritage Policy Manual.



Legislation, Standards, and Policies

- Stó:lō Heritage Policy, 2003 – As described in the Policy, the Stó:lō maintain ownership of and jurisdiction over all Stó:lō heritage sites and objects. On behalf of the broader Halkomelem-speaking community, Stó:lō Nation maintains jurisdiction over Stó:lō heritage sites and objects not otherwise linked directly to a family or individual. Stó:lō Nation recognizes and accepts the shared heritage interests of other traditionally Halkomelem speaking communities and organizations not directly associated with the Nation. Stó:lō Nation endeavours to establish heritage related Protocol Agreements, as needed, with such Halkomelem communities and organizations. Stó:lō Nation may also develop heritage related Protocol Agreements with non-Aboriginal governments and resource management agencies.
- *British Columbia Heritage Conservation Act* – British Columbia's archaeological sites are protected under the *Heritage Conservation Act* (HCA). This Act is the latest in a number of pieces of legislation focused on the protection of archaeological sites.
- BC Ministry of Forest Lands and Natural Resources Operations' (MFLNRO) Archaeology Branch Policy "Found Human Remains"

Best Management Practices

Development and activities must comply with applicable Sema:th, federal, and provincial regulations, permits, authorizations, conditions, and agreements with respect to cultural resources protection.

Application of the Stó:lō Heritage Policy will direct actions as lands are developed and cultivate future use. It is recognized that the purpose of the Stó:lō Heritage Policy is to:

- Protect, preserve and manage Stó:lō heritage – in all its forms – in a manner consistent with Stó:lō values, beliefs and traditions;
- Cooperate with other organizations in the protection, preservation and management of Stó:lō heritage;
- Protect and preserve Stó:lō religious freedom in all its expressions;
- Maintain the integrity of the Stó:lō spiritual world;
- Maintain healthy relations between the contemporary Stó:lō community and Stó:lō ancestors – past, present and future;
- Maintain the integrity of Stó:lō history and heritage through the respectful treatment of Stó:lō knowledge, heritage objects and sites;
- Advance knowledge and understanding of Stó:lō heritage;
- Maintain continuity in Stó:lō heritage and the practice of cultural traditions in forms both old and new; and
- Advance Stó:lō cultural revival.



Strategy 1: Identify important cultural areas through land use planning

As part of the land use planning process, identify areas for cultural protection based on Traditional Ecological Knowledge, available data (e.g., existing TK Reports), and best practices (e.g., Stó:lō Heritage Policy). As the community grows it will be important to preserve, protect and enhance these significant sites.

Strategy 2: Develop a cultural baseline overview

Work collaboratively with the Stó:lō Research and Resource Management Centre (SRRMC), to develop a cultural baseline overview of Sema:th Lands. The baseline should include but is not limited to the identification and location of:

- Culturally significant areas (e.g., fishing locations); and
- Culturally significant points (e.g., culturally-modified trees).

Information gathered through the baseline overview will allow Sema:th to inform community members and developers of potential project impacts. It will provide additional information for Council to make better land use decisions regarding future development. Where adverse impacts are identified, this information can be used to assist in developing avoidance, enhancement, or mitigation strategies. Information gathered through this study can also be used to enhance cultural sites and provide opportunities for cultural innovation on Sema:th Lands.

Strategy 3: Promote cultural resources protection and enhancement

Stó:lō Nation requires that impacts to Stó:lō heritage resources be considered, assessed, and mitigated from all development-related disturbances and impacts. Heritage Resource (HR) studies should be undertaken as either Overview Assessments (HROA) or Impact Assessments (HRIA).

All heritage related studies must be conducted by researchers with an appropriate level of experience and training, under the conditions of a Stó:lō Heritage Investigation Permit (see Section 7.0 of the Policy).

Through the land development process, mechanisms are put in place to promote, endorse, and enforce the Stó:lō Heritage Policy (see Appendix I – EOP Process Cultural Resources Protection for Proposed Development). As part of this, Sema:th will include HROAs and HRIAs as appropriate and in consideration within the Sema:th land development permitting process.

A set of management strategies (related to construction activities) have been adapted from the Stó:lō Heritage Policy and the MFLNRO's Archaeology Branch Policy regarding "Found Human Remains" and have been included as Appendix II, Emergency Impact Guidelines.



Strategy 4: Create cultural design guidelines

Growth and development, such as new buildings, can impact cultural heritage and Sema:th's sense of history and of place. To help ensure that culture is preserved and protected, Sema:th will consider creating cultural design guidelines, for developers to follow (where appropriate), that outline cultural considerations for buildings and landscaping. These could include, but are not limited to:

- Built form;
- Signage;
- Massing (i.e., size of building);
- Density;
- Height;
- Exterior treatment;
- Landscaping;
- Parking; and
- Visual impact.

Strategy 4: Leverage relationships with other agencies

While Sema:th and the Stó:lō Nation have the main responsibility for protecting our cultural resources, there are also a number of local, provincial and national organizations that can support First Nation communities in the preservation of our heritage, through grants, funding and in-kind support (i.e., labour, research, etc.). To ensure we maximize the resources available, we will continuously develop and strengthen our relationships with other agencies also responsible for the protection and enhancement of cultural values and resources. We will take an active role in bringing about a forum of co-management and leadership with regard to all cultural resources.

Strategy 5: Education and awareness

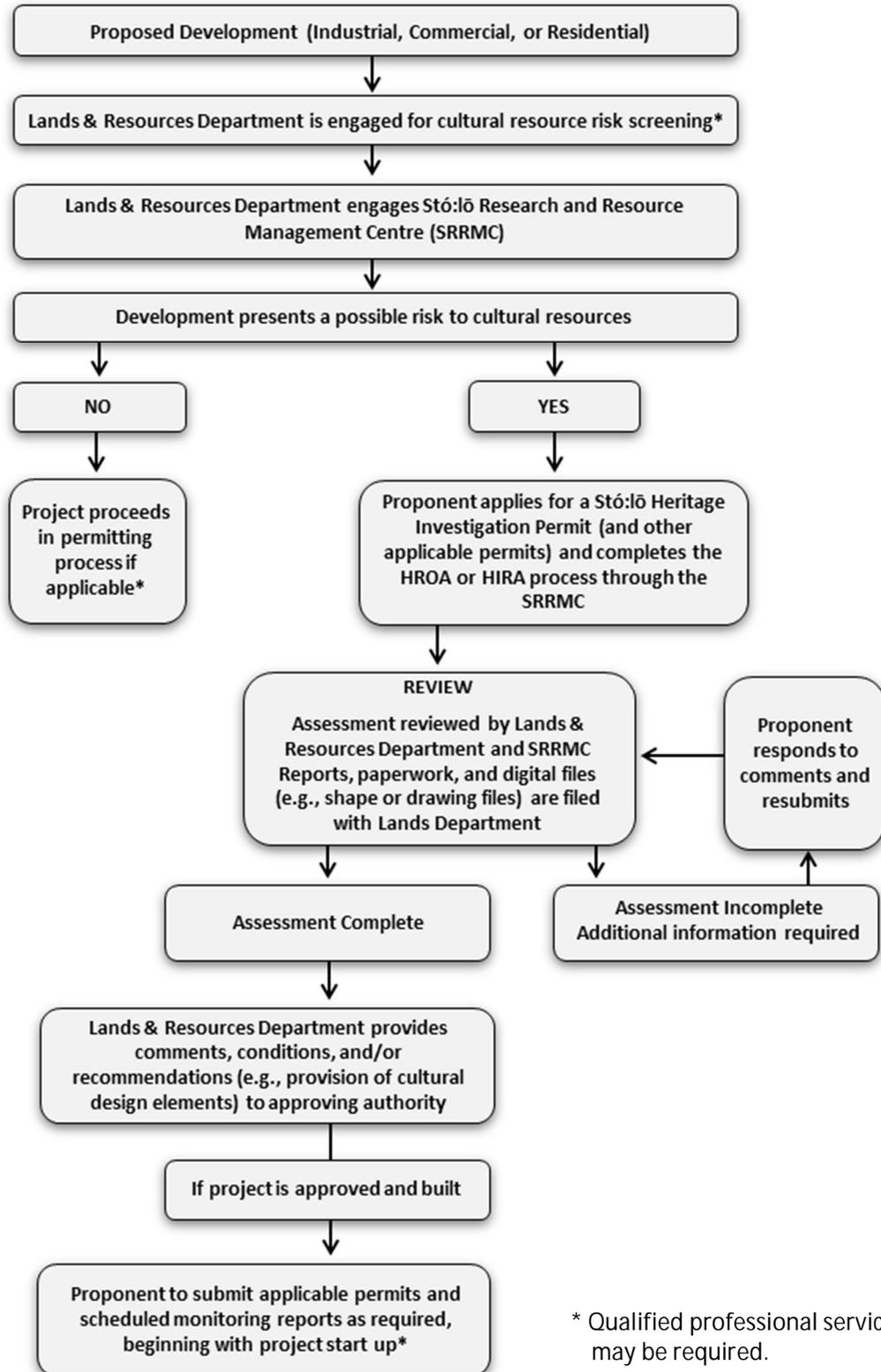
Develop cultural awareness through education and training, with an emphasis on Traditional Knowledge and Land Use. This may include but is not limited to:

- Developing and building a Sema:th Cultural Resource Centre;
- Signage of key community features (e.g., creeks, community buildings);
- Workshops for Elders to share their knowledge;
- Working with local environmental groups to include indigenous species into environmental reclamation projects;
- Promoting the preservation and enhancement of culturally significant areas;
- Consulting with Elders when developing Sema:th policies or plans; and
- Hosting cultural celebrations.



Appendix I

EOP Process: Cultural Resource Protection for Proposed Development



* Qualified professional services may be required.



Appendix II Emergency Impact Guidelines

In the event that archaeological, cultural, or heritage resources are encountered during site operations, the contractor shall immediately stop construction, notify Sema:th and comply with the policies and procedures identified in the Stó:lō Heritage Policy.

In the event that any item of particular archaeological, heritage, historical, cultural or scientific interest is found on the site, as between the contractor or the party who discovered the item(s) and Sema:th, such item(s) shall be and remain the property of Sema:th and/or the Stó:lō Nation.

Sema:th and their contractor will coordinate and work with the Stó:lō Research and Resource Management Centre (SRRMC) on behalf of the Stó:lō Nation.

Below are a set of management strategies (related to construction activities) that have been adapted from the Stó:lō Heritage Policy and the BC Ministry of Forest Lands and Natural Resources Operations' (MFLNRP) Archaeology Branch Policy regarding "Found Human Remains".

Management options will be reviewed and agreed upon between Sema:th and the SRRMC. Management options will take into account the Stó:lō Heritage Policy particularly related to:

- Section 5.3.5 – Material Culture Sites / Objects
- Section 5.3.6 – Stó:lō Ancestral Human Remains
- Section 5.3.6.1 – Incidental Discovery of Stó:lō Ancestral Human Remains
- Section 8.0 – Collection of Stó:lō Heritage Artifacts
- Section 8.1 – Incidental Finding and Collection

Cultural Sites Chance Find Management Strategy

The following emergency impact management guidelines apply to cultural, heritage and archaeological sites. Emergency management procedures for suspected human burial sites are presented separately below. The contractor shall be familiar with the Stó:lō Heritage Policy and MFLNRO's Archaeology Branch Policy regarding "Found Human Remains", recognizing that the appropriate course of action may differ depending on whether or not the remains are found in an undisputed archaeological context (i.e., with artifacts).



Initial Response by the Contractor

- Step 1: The contractor shall immediately stop construction in the immediate vicinity of the cultural or archaeological site.
- Step 2: The contractor shall contact Sema:th for further guidance. SSRMC will be contacted by Sema:th.
- Step 3: Sema:th and/or SSRMC will advise the contractor on further action.

Please refer to Table 1 in the Stó:lō Heritage Policy.

Initial Action

Depending on the nature of the situation, one of the following responses is likely:

- Based on a telephone description of the incident, it may be decided that there are no further concerns, allowing construction to continue as planned; or
- A field visit by a SRRMC archaeologist may be required. In this case, Sema:th will notify the SRRMC. It is anticipated that suitable protocols for such situations will be established in consultation with all interested parties and as per the Stó:lō Heritage Policy.

Management Options

For all management options, the SRRMC will be consulted for input into developing appropriate procedure(s) and protocols at the earliest time possible. Potential options related to land development activities could include but are not limited to:

Option 1: Avoidance through partial or complete project redesign or relocation. This ensures minimal impact to the archaeological site or heritage/cultural site and is the preferred option from a cultural resource management perspective. It can also be the least expensive option from a construction perspective.

Option 2: Salvage or emergency excavation, if necessary. This "data recovery" option is site destructive and it can delay construction. Consequently, salvage or emergency excavation is generally not a preferred option.

Option 3: Application of site protection measures, including both temporary strategies and long-term solutions. Temporary strategies could include erecting fencing or barricades to protect the archaeological or heritage site, while longer-term solutions could include capping the archaeology site with fill. Appropriate protection measures shall be identified on a site-specific basis.

Chance Find Impact Management for Human Remains

Initial Response by the Contractor

If definite or possible human remains are encountered:

- Step 1: The contractor shall immediately stop construction in the vicinity of the remains.
- Step 2: The contractor shall immediately contact Sema:th for further guidance.



Step 3: Sema:th will advise the contractor on further action.

Initial Action

- Sema:th will contact the SRRMC and the RCMP;
- Sema:th or the RCMP will contact the Office of the Coroner;
- Sema:th representatives and a professional archaeologist or physical anthropologist from the SRRMC will visit the site as soon as possible; and
- If it is determined that the remains are Stó:lō and/or Aboriginal ancestry, the Stó:lō Heritage Policy will be followed.

Management Options

The Stó:lō Heritage Policy outlines the appropriate protocol for handling Stó:lō Ancestral and/or Aboriginal human remains and shall be followed. A human remains protocol shall be established prior to recommencement of any proposed construction. Two possible strategies are presented below, but others may, or could, be considered.

Option 1: Avoidance through partial or complete project redesign or relocation. This would ensure that the remains are protected from further disturbance.

Option 2: Salvage or emergency excavation to respectfully remove the remains for reburial as per the Stó:lō Heritage Policy.

The contractor shall be aware that removal of human remains and subsequent reburial might involve certain ceremonies or procedures that could delay construction. If the contractor has any concerns about possible archaeological, historic, or burial locations, Sema:th shall be contacted for direction.



EOP 3

Environmental Emergency Response

Environmental emergency response refers to the immediate response to an emergency that has the potential to negatively impact human health and/or the environment. Examples of environmental emergencies include earthquakes, oil spills and the release of hazardous substances in to aquatic or terrestrial habitat. An emergency response includes a team of government, industry, communities, and local organizations to respond to an environmental emergency as soon as possible to reduce impacts (Government of Canada, 2012). Environmental emergency response is key to preventing, preparing for, and mitigating situations that have the potential to negatively affect the environment and human health (Province of British Columbia, 2013e).

Goal:

- To be prepared to ensure the safety of community members and our lands in the event of an environmental emergency.

Objectives:

- Ensure community members are prepared for a 3-day window in the event of an emergency.
- Develop stronger linkages with other jurisdictions and to share resources.
- Educate the community to raise awareness about environmental emergency response.

Environmental Operating Procedure No. 3	EOP Revision: 01
Responsibility: Emergency Management Committee (Chief & Council, Band Manager, Emergency Program Coordinator)	Revision Date: July 25, 2013



Legislation, Standards, and Policies

- *Emergency Program Act* – requires that all Provincial ministries and agencies utilize the British Columbia Emergency Response Management System (BCERMS).
- *Indian Act* – Sema:th has not ratified treaty with the Federal and Provincial governments. The community is located on Federal Reserve land and is currently governed by certain Federal Acts including aspects of the *Indian Act*. As such, the federal and provincial government have entered into a Memorandum of Understanding (MOU) for the Provincial Emergency Program (PEP) to provide emergency management services.
- *Environmental Management Act* – replaces the old *Waste Management Act* and the *Environment Management Act* and brings provisions from both of those acts into one statute. The Act seeks to protect human health and the quality of water, land and air in British Columbia. The Act also enables the use of administrative penalties, informational orders and economic instruments to assist in achieving compliance.
- *Fisheries Act, 1985* – makes it illegal to harm fish habitats or fishing grounds. Environment Canada is responsible for the administration and enforcement of the *Fisheries Act* as it pertains to spills and environmental emergencies.
- *Canadian Environmental Protection Act* is administered by Environment Canada. Part 4 deals with pollution prevention; Part 5 deals with controlling toxic substances; and Part 8 deals with environmental matters related to emergencies.
- *Emergency Program Management Regulation* identifies the emergency management responsibilities of the Provincial Emergency Program (PEP) and other ministries.
- *Fire Services Act* is administered by the B.C. Office of the Fire Commissioner, which is part of the Ministry of Public Safety and Solicitor General. Section 25 of the Act outlines emergency powers of the B.C. Fire Commissioner.

*Note not all applicable Acts or Regulations are identified.



Potential Impacts

An environmental emergency is an occurrence or natural disaster that affects or threatens the environment and ultimately human health. Land can be impacted by hazardous substance spills (most commonly oil and fuel spills), earthquakes, floods, or landslides. Water can be impacted from spills upstream or through ground penetration to the aquifer.

The most likely environmental emergency on Sema:th Lands includes:

- Fuel spill (oil or gas);
- Earthquake;
- Landslide;
- Flooding;
- Drinking water contamination;
- Severe weather (snowfall or wind storms); and
- Power blackouts.

Best Management Practices

All emergency environmental response procedures must comply with applicable Sema:th, federal, and provincial legislation, regulations, and agreements. The following provides additional information on provincial structures that facilitate a coordinated (provincial) approach to environmental emergency response.

Sumas First Nation Emergency Plan (2011) This plan was developed to set out the procedures, roles and responsibilities for Sema:th Nation in the event of an environmental emergency.

British Columbia Emergency Response Management System (BCERMS) The *Emergency Program Act* requires that all Provincial ministries and agencies utilize the BCERMS. First Nations, who have not ratified treaties with the Federal and Provincial government are governed by federal statute, are not legally required to follow the BCERMS model but are strongly encouraged to incorporate this model into their emergency plans. The majority of municipalities and First Nations utilize BCERMS to ensure consistent emergency principles and coordinated response efforts. To facilitate the same level of services to First Nation communities PEP, Aboriginal Affairs and Northern Development Canada (AANDC), and First Nations Emergency Services (FNESS) utilize the BCERMS model to standardize delivery of emergency management and response efforts.



Provincial Emergency Coordination Centre The Provincial Emergency Coordination Centre (PECC) coordinates provincial resources and prioritizes and establishes provincial objectives in response to requirements at other levels. This level also serves as the coordination and communications link with the federal disaster support system. The Provincial Central Coordination level is activated when the key Ministry(ies) or the Director of the PEP considers it necessary to coordinate and direct overall provincial response to an emergency or disaster.

Strategy Approach

This EOP only provides strategies for utilizing the existing Sumas First Nation Emergency Plan, 2011. If specific information on environmental emergency response is required, the reader is to refer to and use the existing Sumas First Nation Emergency Plan.

Strategy 1: Maintain the Sumas First Nation Emergency Plan (2011)

In 2011, Sema:th created an Emergency Plan that provided a framework, information, and guidance on the following:

1. Emergency Contact List
2. Community Context
3. Emergency Plan Overview
4. Emergency Management Organization
5. Emergency Response & Recovery Structure
6. HRVA, Evacuation and Community Maps
7. Response Action Plans
8. Emergency Social Services
9. Recovery and Procedures (incl. Responsibilities)

To ensure that this document is maintained with the most current and relevant information/procedures and ensures consistency with the BCERMS processes, Sema:th will establish an annual review period.

Strategy 2: Promote the roles & responsibilities established in the Sumas First Nation Emergency Plan

Competency and ability to respond to environmental emergency incidents requires a complete understanding of each person's roles and responsibilities. It is critical that key personnel responsible for the Emergency Plan are trained in their duties and are informed and aware of their responsibilities as it relates to the Plan. This will include, but is not limited to:

- Educating all personnel identified in the plan to ensure that they are effective in their role;
- Training in the use of emergency response equipment, personal protection devices, and other emergency response resources to ensure ultimate response capabilities;



- Familiarizing staff with local agencies such as fire, police, ambulance, PECC; and
- Practicing emergency drills on a regular basis.

Strategy 3: Promote education and awareness

Develop environmental emergency response awareness in the community through a variety of tactics including, but not limited to:

- Providing copies of the Sumas First Nation Emergency Plan to community members;
- Displaying copies of the Sumas First Nation Emergency Plan at key community locations (e.g., Health Centre);
- Providing plain language summaries of key aspects of the Sumas Emergency Response Plan to community members;
- Posting emergency contact list at key community locations (e.g., Health Centre);
- Conducting community workshops on environmental emergency response;
- Circulating informational pamphlets on environmental emergency response and what to do in the case of an emergency (e.g., evacuation procedures);
- Conducting environmental emergency response drills; and
- Ensuring that every household has information on what should be in an emergency kit.

Strategy 4: Work with industries operating on or near Sema:th Lands

Work cooperatively with industries operating on or near Sema:th Lands where their activities pose a potential environmental risk (e.g., fuel spill). Retain copies of their environmental emergency plans/procedures and establish techniques and formal protocols on how to collaborate in the event of an environmental emergency.

Strategy 5: Harmonize with other jurisdictions and neighbouring First Nations

The Fraser Valley Regional District's (FVRD) Community Emergency Programs (CEP) are part of the district's coordinated efforts to ensure all of its communities and rural areas are prepared for and are able to deal with emergency events. The City of Abbotsford also has an established Emergency Program.

Sema:th will look for opportunities to collaborate with the FVRD and the City of Abbotsford and neighbouring First Nations to harmonize emergency response plans and to share emergency response resources.



EOP 4

Fuel Handling & Storage

A significant component of impacts to soil and groundwater on Sema:th Lands are associated with poor fuel handling and management of fuel storage tanks (in addition to fill sites and industrial activities) (Teranis, 2012). Indication of hydrocarbon impacts (strong odours and visible product in soil) was also identified at numerous locations. Proper fuel handling and storage procedures including response and mitigation measures are key to preventing the unnecessary release of fuel into the environment from commercial and residential sources.

Goal:

- We will prevent, minimize, and mitigate environmental impacts from fuel spills or leaks on Sema:th Lands.

Objectives:

- Ensure compliance with existing legislation and regulations.
- Educate members and generate awareness of proper fuel handling and storage.
- Generate awareness of what do in the case of a spill and who to call.
- Complete regular checks on fuel tanks.
- Ensure the fill station is properly equipped for spill management.

Environmental Operating Procedure No. 4	EOP Revision: 01
Responsibility: Lands Manager, Lands Advisory Committee, Developers/Proponents, Band Members	Revision Date: July 25, 2013



Terminology

Above-ground storage tank (AST): any chemical or fuel (gas, diesel, or heating oil) storage tank located above ground. ASTs are commonly used to supply fuel to heat homes, store vehicle fuel or power generators.

Underground storage tank (UST): a storage tank located underground to contain chemicals, fuel, or septic materials.

Hydraulic oil: oil used in the hydraulic systems of equipment such as excavators or backhoes.

Heating oil: a type of fuel generally used to power a furnace for a home or other building.

Groundwater: water that is found below ground in the soil or in pores and crevices in rock.

Surface water: water that is on the surface, such as ponds, lakes, streams, rivers, creeks and oceans.

Legislation, Standards, and Policies

- *Canadian Environmental Protection Act, 1999 (CEPA 1999)*
- *National Fire Code of Canada (2010)*
- *Environment Canada Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations (2008)*
- *British Columbia Environmental Management Act*
- *British Columbia Contaminated Sites Regulation (B.C. Reg. 97/2011)*

In 2008, Environment Canada's new storage tank regulations came into force to regulate aboveground and underground storage tanks and containers under federal jurisdiction. The regulations apply to specified tanks and tank systems on federal or First Nation lands. The regulations also apply to all the piping and other equipment associated with the tanks. The regulations, entitled *Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations (2008)* apply to all tanks that meet the following criteria:

- Have a capacity of more than 230 litres;
- Are vented to the atmosphere (in other words operate at atmospheric pressure); and
- Are designed to be installed in a fixed location.



According to the Environment Canada, *Storage Tank Systems for Petroleum Products and Allied Petroleum Products Regulations (2008)*, the following tank systems DO NOT fall under the regulations:

- Containers smaller than 230 litres;
- Indoor storage tanks;
- Pressurized tanks like those storing propane;
- Mobile tanks such as those on the back of pickup or other trucks;
- Outdoor, aboveground tanks that have a total combined capacity of 2500 litres or less and are connected to a heating appliance or an emergency generator; and
- Tanks regulated by the National Energy Board.

Regulated under the *National Fire Code of Canada*, the Canadian Standards Association (CSA) Standard B139, "*Installation Code for Oil-Burning Equipment*" code provides the basis of environmental control in design and operation of residential scale heating oil tanks and fuel systems.

Potential Impacts

Spills due to poor fuel storage and handling can result in harm to the environment and serious risks to human health including the risk of death or injury due to fire and explosion. Spillage of fuels, such as gasoline, diesel and heating oil, has the potential to contaminate sewers, drainage ditches, and surface water. Contaminated soils and groundwater can lead to issues with soil vapour and risks to human health and contamination of drinking water or groundwater used for livestock or crop irrigation.

Best Management Practices

Managing fuel tanks, fuel handling and fuel storage practices consistent with the Environment Canada Storage Tanks Regulations and the CSA Standard B139 provide Sema:th with a management process focussed on prevention of risks associated with existing systems.

Specification of designs to be compliant with Environment Canada Storage Tanks Regulations or CSA Standard B139 requirements in future fuel management systems will provide a mechanism by which appropriate environmental management provisions can be incorporated as a core component of the management design.

BMPs related to fuel handling and storage are included as Appendix I.



Strategy 1: Create an inventory of fuel storage tank systems

Under the Environment Canada Storage Tanks Regulations all regulated tanks should already be registered with Environment Canada. Utilize the findings of the ESAs and the Environment Canada tank registry to create an inventory that identifies and records the location and status of all fuel tank systems. At a minimum the inventory should seek to build on the existing information for regulated tanks and provide appropriate information for non-regulated tanks (e.g., residential heating oil ASTs).

The Lands & Resources Department will create and maintain the inventory and update it with information to record inspections and tank tests as required under the Regulations.

Strategy 2: Ensure existing and future fuel storage tank systems comply with federal codes

New tanks must be designed to be compliant with all federal regulations. All proposals for development or upgrade of fuel tank storage systems regulated under Environment Canada Storage Tanks Regulations must include certifications from a professional engineer, registered in BC, with direct experience of fuel storage tank design, to confirm that the systems are designed and will be operated compliant with the regulations.

Design and installation or upgrade of tank systems not regulated under the Environment Canada Storage Tanks Regulations should be completed by a certified Oil Burner Mechanic (OBM) and should be supported by certification of the OBM so that the system meets the requirements of CSA Standard B139.

Owners of all new and/or upgraded tank systems must provide supporting documentation to the Lands & Resources Department to show that they are compliant with Environment Canada Storage Tanks Regulations and CSA Standard B139. The Lands & Resources Department will update the inventory to include all new and/or upgraded tank systems.

Strategy 3: Undertake a regular inspection program

Through the fuel tank inspection process (see Appendix II, EOP Process: Fuel Tank Inspection), maintain a regular inspection program.



Strategy 4: Provide effective procedures for fuel spills and leaks

Through the spill response plan (Appendix III: General Response Plan), ensure that fuel spills and leaks are addressed in a manner that minimizes impacts to human health and safety and the environment.

Ensure that appropriate spill response kits are available at key locations in the community where fuel is stored and/or handled.

Strategy 5: Promote education and awareness

Develop fuel handling and storage awareness through education and training. This may include, but is not limited to:

- Organizing an annual small fuel container clean-up;
- Promoting awareness of where to dispose of waste fuel;
- Circulating copies of Appendix II, EOP Process: Fuel Tank Inspection and Appendix III: General Response Plan to owners of fuel tanks;
- Ensuring spill response kits are located in key areas in the community; and
- Training for Sema:th members on proper fuel handling and storage, and spill response.



Appendix I

Best Management Practices for Fuel Handling and Storage

There are a variety of BMPs related to fuel handling and storage. Below is a sample of BMPs that can be included into proper fuel handling and storage procedures.

Fuel Tank Systems and Fuel Containers

- Containers shall be filled and capped so that under normal conditions there will be no leakage;
- Containers shall be appropriate for the product being contained;
- Product/WHMIS labels are required on containers identifying contents and hazards;
- Current Material Safety Data Sheets (MSDS) must be maintained in a location available to all people involved in fuel handling, storage and disposal;
- Tanks shall be well maintained and in good condition (free of rust, dents, and leaks);
- Storage locations must be vented and have appropriate fire extinguishers that are annually inspected with proper tags;
- Operators must conduct regular inspections of fuel tanks to ensure proper requirements are met;
- Post no smoking signs at all dispensing and fuel transfer sites;
- Fuel tanks should be located away from groundwater wells or surface waters;
- Store containers at least 3 m away from any building or in a building properly designed for storage;
- Store drums and containers in an upright position;
- Dispense fuel from upright drums and containers using an approved pump;
- All small containers <230 L (50 gallons), (jerry cans, pails, canisters, and drums) that are stored at or near homes should be kept away from roadways and pedestrians and out of direct sunlight. They should be protected from potential impact;
- Do not fill containers beyond their safe filling level (~90% full);
- Use the proper dispensing pump designed for the product being handled;
- Hoses and nozzles must be maintained in good repair and do not leak;
- Operators must stay with the nozzle at all times while dispensing fuel;
- Recover spills as appropriate; and
- Contact the Provincial Emergency Program (PEP) in the event of a fuel spill (1-800-663-3456).



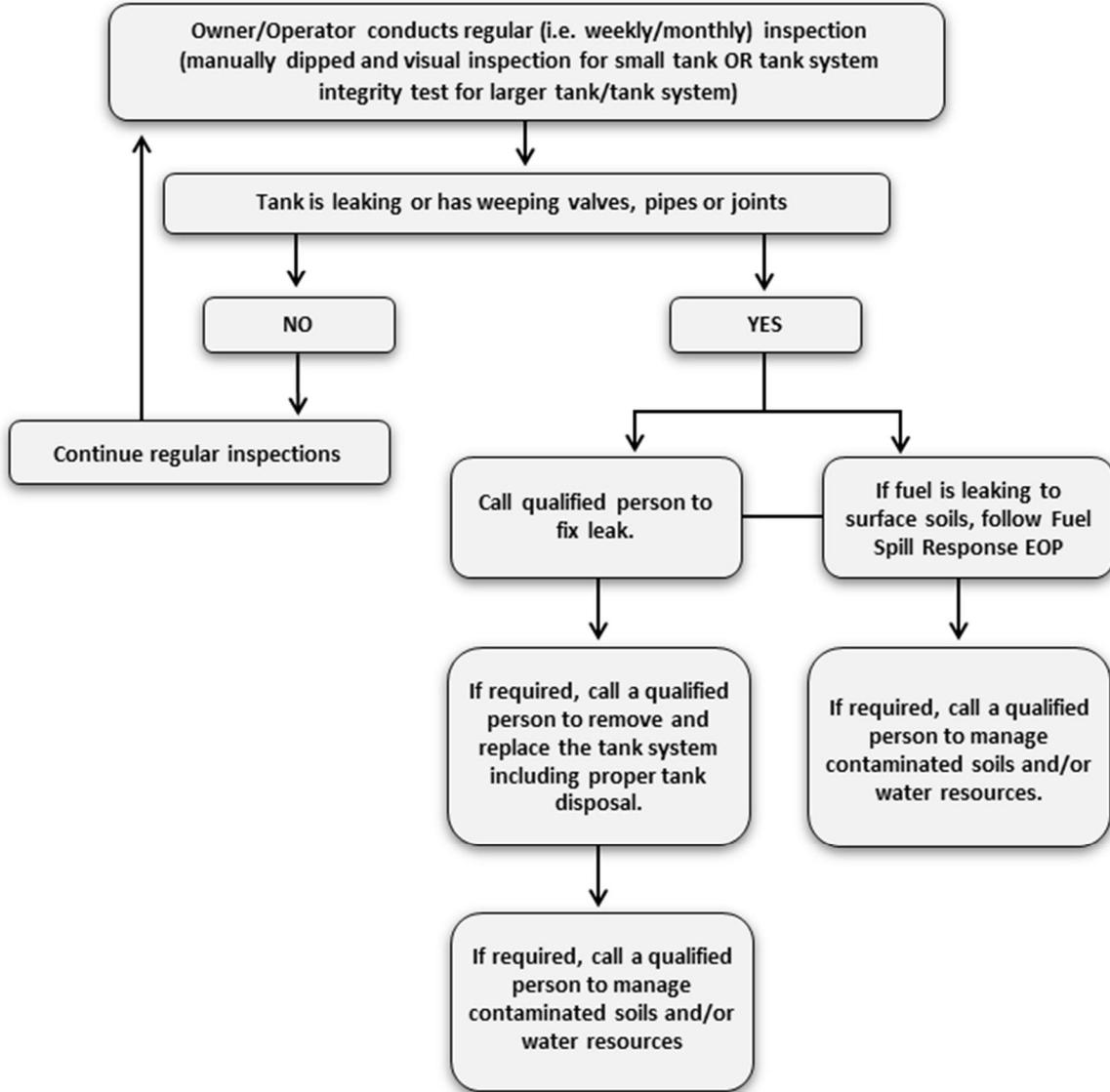
Fuel Transport

- All vehicles transporting fuel must have an appropriate spill kit and the driver must be trained and knowledgeable in its use;
- Vehicles transporting fuels must meet requirements of the *Transport of Dangerous Goods Act* and BC Ministry of Transportation;
- If a combined fuel load is greater than 2,000 L (440 gallons) a shipping document must be filled out for the cargo, the driver must have proof of "Transport of Dangerous Goods (TDG)" certified training and the load must a TDG placard appropriate for the fuels being transported; and
- All loads must be secured to prevent tipping or fuel loss. Fuel drums being transported by truck must be stacked end on end and transported by vehicles with sides or side boards.



Appendix II

EOP Process: Fuel Tank Inspection





Appendix III

General Response Plan

In the event of a fuel spill the following procedures will be implemented:

1. Ensure safety.
 2. Stop/contain the flow (when possible).
 3. Secure the area.
 4. Contain the spill.
 5. Notify/report (PEP: 1-800-663-3456).
 6. Contact the Lands & Resources Department.
 7. Clean up.
- 1) Ensure Safety
1. Ensure personal/public, electrical and environmental safety.
 2. Wear appropriate Personal Protective Equipment (PPE).
 3. Never rush in, always determine the product spilled before taking action.
 4. Warn people in the immediate vicinity.
 5. Ensure no ignition sources are present if spill is a flammable material.
- 2) Stop the Flow (If safe to do so, and when possible)
1. Act quickly to reduce the risk of environmental impacts.
 2. Close valves, shut off pumps or plug holes/leaks, set containers upright.
 3. Stop the flow of the spill at its source.
- 3) Secure the Area
1. Limit access to the spill area.
 2. Prevent unauthorized entry onto the site.
- 4) Contain the Spill
1. Block off and protect drains and culverts.
 2. Prevent spilled material from entering drainage structures (i.e., ditches, culverts, drains).
 3. Divert flow from water or other sensitive areas with non-reactive materials such as boom, gravel, sand bags, digging a trench, etc.
 4. Use spill sorbent material to contain spill.
 5. If necessary, use a constructed dam or any other method to prevent any discharge off-site.
 6. Make every effort to minimize contamination.
 7. Contain as close to the source as possible.



5) Notify / Report PEP

For spills in amounts requiring external notification, immediately report details of the spill to the Provincial Emergency Program (PEP) at 1-800-663-3456 (24-hour).

Spill reports to PEP must include:

- Name and phone of the person(s) responsible for the spill;
- Location, time and date of spill;
- Material spilled and quantity;
- Cause and effect of the spill;
- Action taken to contain the spill;
- Duration of occurrence;
- Weather conditions;
- Planned follow-up;
- Government agencies on the scene; and
- Persons or agencies advised.

6) Contact the Lands & Resources Department

Once the spill is contained, contact and report the spill details to the Lands & Resources Department and inform them of the issue at hand.

7) Clean Up

- Technical assistance is available from a QEP on clean-up procedures and residue sampling;
- All equipment and/or material used in clean-up (e.g., used sorbent, oil containment materials, etc.) must be disposed of in accordance with MFLNRO requirements;
- Accidental spills may produce hazardous wastes (e.g., material with > 3% oil) and contaminated soil. All waste disposals must comply with the *Environmental Management Act* and Regulations; and
- Contaminated soil must be treated and dealt with.



Appendix IV

Environmental Incident Reporting

Environmental Incident Report (EIR) should be prepared as soon as possible following an incident. The contractor will be responsible for completing the EIR. The target for reporting is within one (1) working day following the time of the incident.

An Environmental Incident is characterized as causing, or has the potential for causing one or more of the following:

- Adverse effect on fish, wildlife or other environmental resources;
- Adverse publicity with respect to environment; and
- Legal action with respect to violation of statutes or environmental damage.

Examples of Environmental Incidents include, but are not limited to:

- Spills of oil, fuel, PCBs, or chemicals;
- Discharge of deleterious substances into fish-bearing water;
- High or low flows that affect fish or fish habitat, wildlife or recreation; and
- Violation of environmental regulations, permits or approvals.

What Incidents are Reportable?

Any environmental incidents will be immediately reported to Sema:th and the appropriate government agencies. Please note that all spills to water must be reported immediately!

If in doubt as to whether or not to report a spill, err on the side of caution and report the spill.

How Do You Report a Spill?

Make sure you have the following information ready to report to the appropriate government agencies:

- Name and phone number of person reporting the spill;
- Name and phone number of person involved with the spill;
- Location and time of the spill;
- Type and quantity of material spilled;
- Cause and effect of spill;
- Details of action taken or proposed to contain the spill and minimize its effect; and
- Names of other persons or agencies that advised regarding the spill.



When Should a Spill Be Reported Externally?

Spills of the following substances must be report externally to PEP if the estimated amount discharged meets or exceeds the quantities list below. All spills that meet the below criteria must be reported within one (1) day of the incident. The Lands & Resources Department should always be notified immediately if a spill of any magnitude occurs on site.

Substance	Spill Quantity	Agency to Contact
Class 2.1 – flammable gas (e.g., propane)	≥10 kg or 10 min.	PEP
Class 2.2 – non-flammable gas (e.g., SF6, CO2)	≥10 kg or 10 min.	PEP
Class 3 – flammable liquids	≥100 litres	PEP
Class 8 – corrosive liquid acids and caustics (e.g., battery acid)	5 kg or litres	PEP
Class 9 – environmentally hazardous (e.g., PCBs, used ethylene glycol)	1 kg or litre	PEP
Oil and waste oil	≥100 litres	PEP
Other substances (e.g., new antifreeze, power-wash water)	200 kg or litres	PEP
Pesticides and herbicides	1 kg or litre	PEP
Any quantity of a deleterious substance released into a waterbody	All	DFO



EOP 5

Groundwater Protection

Water occurring beneath the ground surface amongst spaces between rocks and soil is referred to as groundwater. The water within these spaces is typically found within 100 m of the ground surface (Environment Canada, 2011). Although groundwater exists everywhere under the ground, some parts of the saturated zone contain more water than others. An aquifer is an underground formation of permeable rock or loose material which can produce useful quantities of water when tapped by a well and are often used as a source of drinking water.

Goals:

- We will protect our groundwater to make sure it is clean and potable for future generations.

Objectives:

- Evaluate the quality and quantity of groundwater that is available on Sema:th Lands, particularly that which is used as a source of drinking water.
- Monitor groundwater to track long-term trends in its quality and quantity and to assess the effectiveness of our groundwater management programs and to ensure a safe drinking water supply.
- Identify activities that could potentially impact groundwater, prioritizing drinking water sources.
- Identify locations where groundwater could be impacted, prioritizing drinking water sources.
- Educate the community to generate awareness about environmental stewardship and Sema:th Traditional Ecological Knowledge.

Environmental Operating Procedure No. 5	EOP Revision: 01
Responsibility: Lands Manager, Lands Advisor Committee, Developers/Proponents, Band Members	Revision Date: July 25, 2013



Terminology

Aquifer: a geological formation of permeable rock, gravel, or sand containing or conducting groundwater.

Point and non-point sources of contamination: Contaminants can originate from a “point source” or “non-point source” – meaning they can come from a single source (or point) or, that they don’t have one specific source and come instead from the cumulative effect of any number of factors or activities.

Multi-barrier approach: an integrated system of procedures, processes and tools that collectively prevent or reduce the contamination of drinking water from source to tap in order to reduce risks to public health.

Well or borehole: Groundwater is accessed through wells or boreholes which are dug or drilled into aquifers.

Watershed: A watershed is the area of land where all of the water that is under it or drains off of it goes into the same place (US EPA).

Watershed management: Conservation Authorities define watershed management as “managing water resources within specific watersheds by knowing how much water is in the system, where it comes from, who is using it, how it is being contaminated and where it ends up. Watershed management takes into consideration all the outside activities that can influence the quality and quantity of our surface and groundwater.”

Legislation, Standards, and Policies

- *Water Protection Act*
- *Environmental Protection Act*
- Environment Canada's Federal Water Policy (1987)
- Canadian Environmental Quality Guidelines – The federal government works with the provinces and territories to ensure Canadians receive clean, safe, and secure drinking water. Municipalities receive their powers from the provinces and have ability to pass bylaws that can have an impact on water resources.
- The Guidelines for Canadian Drinking Water Quality – Set out the basic parameters all water systems should strive for in order to deliver the cleanest, safest, and most reliable drinking water to consumers. These guidelines apply to water destined for human consumption and are developed for select physical, chemical, microbiological, and radiological parameters. The most important guidelines deal with microbiological quality and help ensure the risk of exposure to disease-causing organisms in drinking water is minimized.



Potential Impacts

Impacts to groundwater can occur as a result of contamination, which can cause groundwater to be unsuitable for use. Groundwater contamination is associated with hazardous materials seeping through the ground to groundwater sources or aquifers. Contamination sources may include landfills, leaking gasoline storage tank or septic tanks, pesticide or fertilizer, and accidental spills that can negatively impact the quality of groundwater. Cleaning up contaminated groundwater can be very expensive and difficult. Groundwater on Sema:th Lands is an important resource to health and livelihood and should be protected to ensure a high quality of water for the community.

Contaminants can get into groundwater via surface run-off or percolation through the soil. Soil cover cleans and filters some contaminants but needs space and time to do so. To protect well water, it is necessary to keep possible sources of contamination away from wells and surface water. Point and non-point sources of contamination include, but are not limited to:

- Garbage (EOP 9);
- Storage tanks (fuel, chemicals) (EOP 4).
- Septic systems;
- Pesticides and herbicides;
- Vehicles;
- Fertilizer (land spreading); and
- Animal faeces (grazing cows, sheep, horses, birds); and
- Chemical spills.

Best Management Practices

All development must comply with applicable Sema:th, federal, and provincial regulations, permits, authorizations, conditions, and agreements with respect to environmental protection. Given that Sema:th utilizes groundwater as a primary drinking water source, this EOP primarily addresses groundwater management as it relates to drinking water.

Even though constitutional responsibility for First Nation lands rests with the federal government, the responsibility for drinking water programs is divided between the First Nation's Council, Health Canada, Department of Aboriginal Affairs and Northern Development Canada (AANDC), Environment Canada, provincial governments, municipalities (where agreements are in place), and community members.



Various federal government departments have added responsibilities that are not mandated through regulations but are, nevertheless, important to ensuring the safety of drinking water supplies. For instance, Health Canada develops the Guidelines for Canadian Drinking Water Quality in collaboration with representatives from provincial and territorial drinking water authorities and Environment Canada. These guidelines focus on public health outcomes. The provinces and territories establish their own drinking water quality requirements using these guidelines or other more stringent ones.

Canadian Council of Ministers of the Environment's (CCME) Guidance Document From Source to Tap outlines the multi-barrier approach to safe drinking water which includes: source water protection; drinking water treatment; drinking water distribution systems; management; and monitoring.

Additional environmental standards, guidelines and BMPs that could be applied are as follows:

Groundwater is accessed through the construction of a well or borehole. If the supply is used for drinking water it is essential that:

- The well is constructed to meet relevant quality standards (e.g., BC Ground Water Protection Regulation);
- A qualified contractor must drill the well and install the well pump;
- Protection measures are put in place to protect the well integrity and water quality;
- The well and pump are regularly inspected and maintained;
- A drinking water sampling and monitoring program is established and maintained to ensure the well water is potable; and
- The well is deactivated or closed when no longer in use.

The BC Ground Water Protection Regulation – deals with aspects of well construction that significantly enhance ground water protection; recommendations include:

- Well is constructed with surface seal (to prevent contaminants from the surface or shallow sub-surface entering the well).
- Well is constructed with secure well cap to prevent direct and unintended entry into the well of any water or undesirable substances at the surface of the ground, including floodwater, ponded water, and contaminants.
- Well is constructed with well casing stick-up to help flood-proof the well.



- Well head is graded to surface water away from the wellhead.
- A Well Identification (ID) Plate is installed.
- Controlled or stopped artesian flow mechanism is installed (to prevent wasting water).
- Pump is installed using qualified installer.
- Measures are implemented to protect the well.

Strategy 1: Develop a baseline assessment

Make use of existing reports and studies (e.g., ESAs), to conduct an inventory of all properties on the Sema:th Lands to identify potential sources of groundwater contamination, including but not limited to:

- Fuel storage tanks (EOP 4);
- Waste oil containers;
- Old vehicle batteries;
- Abandoned vehicles ;
- Waste storage areas (EOP 9);
- Waste burial areas (EOP 9);
- Septic systems / tanks;
- Chemical storage areas (e.g., pesticides, fertilizers, chlorine); and
- An assessment of herbicides and pesticides used.

All potential sources of contamination will be listed and mapped, and classified based on their associated risk to groundwater quality (high, medium, and low).

Strategy 2: Manage future developments

To allow for the management of potential emissions to groundwater associated with future development (e.g., industrial, commercial, or residential) of Sema:th Lands, all development should be subject to a review and assessment (if applicable) of potential emissions and risks to groundwater. Through the groundwater assessment process (Appendix I, EOP Process: Groundwater Management for Proposed Development), identify potential impacts, assess proposed mitigation (e.g., design specifications), and determine net effects.

Strategy 3: Develop watershed management plan

Develop and implement a watershed management plan to ensure groundwater is protected. This will require working with qualified professionals¹ (engineers, geoscientists and hydro geologists) to understand site specific information on the groundwater source(s) on Sema:th Lands, and

¹ Section 70 of the *BC Water Act* defines qualified professional.



its watershed area. This plan can be supplemented and updated using Reports and Assessments submitted through the groundwater assessment process for new developments (Appendix I, EOP Process: Groundwater Management for Proposed Development).

Measures will be developed to eliminate, limit or reduce the risk associated with potential sources of contamination, as identified and ranked in Strategy I.

Strategy 4: Implement groundwater protection measures

Measures identified in Strategy 3 will be implemented to protect groundwater quality. Implementation will occur on a phased basis, commencing with those sources of contamination classified as highest risk.

Protection measures will include both the inspection and maintenance of the drinking water well and pumping system and the management of risks associated with sources of contamination.

Protection measures for the drinking water well may include:

- Implementation of a regular inspection and maintenance schedule to ensure:
 - The wellhead or the surface seal is in good condition.
 - The vermin-proof cap is in good condition.
 - The well is operated in a manner that prevents the intrusion of salt water or contaminated water into the well, or into the aquifer from which the water is withdrawn (e.g., don't over-pump). The safe well yield can be determined from a pumping test conducted as part of Strategy 5.
 - The well stick-up is protected from physical damage.
 - The well is free from any junk, garbage or other items. Note it is illegal to put any junk in an active or abandoned well, e.g., pesticides or fertilizers, carcasses, human or animal waste, refuse, or materials from construction or demolition.

Methods to limit sources of pollution may include:

- Keep potential contaminants a safe distance away from well (e.g., a minimum 30 m / 100 ft from wellhead, but should be determined by the site-specific watershed management plan developed through Strategy 3).
- Responsible management of waste materials (EOP 9).
- Maintain Spill Kits at strategic locations (identified through baseline study, Strategy 1).
- Require bunding of all tanks (fuel, chemical).



- Conduct an annual assessment of fuel tanks to determine degradation of the tank structure or pipes (EOP 4).
- Inspect and maintain septic systems. Good maintenance measures will include having septic tanks pumped every 2 to 3 years and ensure it is not failing.

Strategy 5: Develop and implement drinking water management program

A drinking water management program which includes a sampling and monitoring schedule will be developed and implemented. Procedures will be established to protect human health, investigate non-compliances and prepare remedial action plans to deal with any exceedances in drinking water quality parameters that would affect human health. As a first step, regularly a process will be developed to ensure drinking water quality monitoring results are monitored and communicated to all drinking water users. Procedures for responding to exceedances in drinking water parameters will be developed.

To ensure an ongoing safe supply of drinking water, the management program will outline measures to protect both the quantity and quality of groundwater used as a drinking water source.

A well pumping test could be conducted, using qualified contractors², to determine well performance, well yield, the zone of influence of the well and aquifer characteristics (i.e., the aquifer's ability to store and transmit water, aquifer extent, presence of boundary conditions and possible hydraulic connection to surface water).

The sampling and monitoring schedule will detail the drinking water sampling frequency, location and parameters that will be monitored. Quality parameters to be aware of include the following and further information is provided in Appendix II, Sample of Groundwater Parameters:

- Total and Faecal Coliform Bacteria;
- Nitrate;
- Arsenic;
- Sodium; and
- Iron and Manganese.

² Section 70 of the *BC Water Act* persons qualified to conduct a pumping test



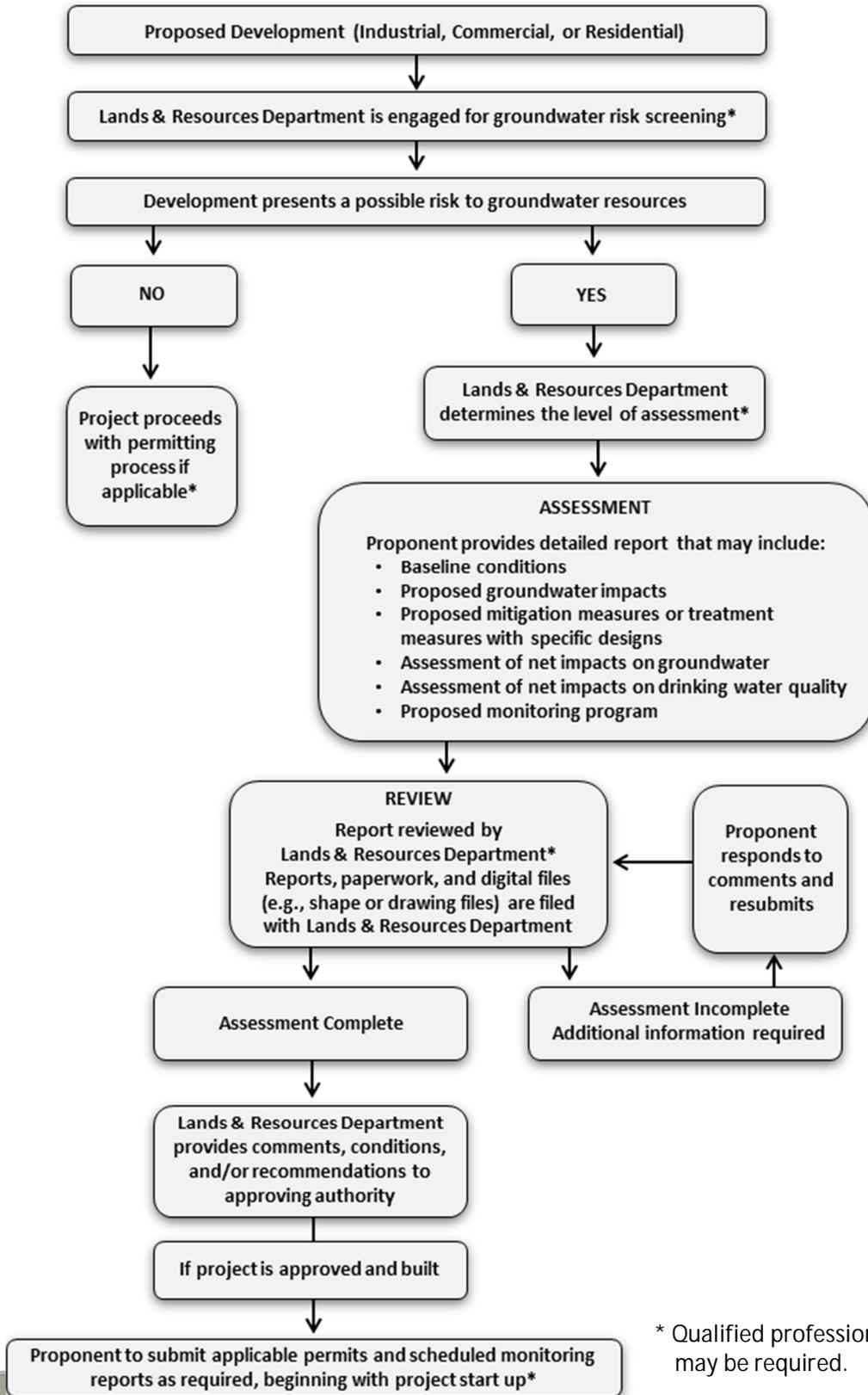
Strategy 6: Adopt policies to enforce groundwater protection measures on commercial and industrial properties

Several commercial and industrial facilities exist on Sema:th Lands. Sema:th will consider the adoption of policies, supported where necessary by Bylaws, to ensure that measures to limit groundwater pollution (as identified in Strategy 1 and developed through Strategy 3) and the ongoing sampling and monitoring of drinking water (Strategy 5) are implemented on all commercial and industrial properties.



Appendix I

EOP Process: Groundwater Management for Proposed Development



* Qualified professional services may be required.



Appendix II

Sample of Drinking Water Parameters

Parameter	Details	Potential Sources
Total, Faecal and E. coli bacteria	<p>Coliform bacteria are described and grouped, based on their common origin or characteristics, as either Total or Faecal Coliform. The Total group includes Faecal Coliform bacteria such as Escherichia coli (E .coli), as well as other types of Coliform bacteria that are naturally found in the soil. Faecal Coliform bacteria exist in the intestines of warm blooded animals and humans, and are found in bodily waste, animal droppings, and naturally in soil.</p> <p>Most of the Faecal Coliform in faecal material (feces) is comprised of E. coli, and the serotype E. coli O157:H7 is known to cause serious human illness.</p>	<ul style="list-style-type: none"> ▪ Agricultural runoff ▪ Effluent from septic systems or sewage discharges ▪ Infiltration of domestic or wild animal faecal matter
Nitrate	<p>Nitrate is a chemical compound of one part nitrogen and three parts oxygen that is designated the symbol "NO3." It is the most common form of nitrogen found in water. Other forms of nitrogen include nitrite (one part nitrogen and two parts oxygen – NO2) and ammonia (one part nitrogen and three parts hydrogen – NH3).</p> <p>Though nitrate is considered relatively non-toxic, a high nitrate concentration in drinking water is an environmental health concern because it can harm infants by reducing the ability of blood to transport oxygen. In babies, especially those under six months old, methaemoglobinaemia, commonly called "blue-baby syndrome," can result from oxygen deprivation caused by drinking water high in nitrate. Death can occur in extreme cases.</p>	<ul style="list-style-type: none"> ▪ Leaching of chemical fertilizers ▪ Leaching of animal manure ▪ Groundwater pollution from septic and sewage discharges.
Iron and Manganese	<p>Iron and manganese are metallic elements present in many types of rock. Iron has the symbol "Fe" and manganese has the given symbol "Mn." Both are commonly found in water and are essential elements required in small amounts by all living organisms.</p>	<ul style="list-style-type: none"> ▪ The most common sources of iron and manganese in groundwater are naturally occurring, for example from weathering of iron and



Parameter	Details	Potential Sources
	<p>Concentrations of iron and manganese in groundwater are often higher than those measured in surface waters.</p> <p>At concentrations found in most natural waters, and at concentrations below the aesthetic objective, iron and manganese are not considered a health risk. Water with a high concentration of iron or manganese may cause the staining of plumbing fixtures or laundry. Manganese solids may form deposits within pipes and break off as black particles that give water an unpleasant appearance and taste. Similarly, iron can collect and block pipes or fixtures and produce colour, taste and rust flakes in water. Both substances can increase the growth of unwanted bacteria that form a slimy coating in water pipes.</p>	<p>manganese bearing minerals and rocks.</p> <ul style="list-style-type: none">▪ Industrial effluent, acid-mine drainage, sewage and landfill leachate may also contribute iron and manganese to local groundwater.

Source of information (Fact Sheets – Ground Water Quality):

http://www.env.gov.bc.ca/wsd/plan_protect_sustain/groundwater/brochures_forms.html



EOP 6

Habitat Protection

The preservation and protection of habitat is of significant importance to maintain the ecological integrity of our lands, for future generations. By protecting habitat, the fish, wildlife, and plants that use this land are also protected.

Goal:

- To protect, preserve, and manage fish, wildlife, and vegetation and the habitat that sustains them in a manner consistent with our values, beliefs, and traditions.

Objectives:

- Ensure compliance with applicable legislation and regulations.
- Ensure protection of environmentally sensitive species and their habitats.
- Protect and enhance the biodiversity of indigenous flora and fauna.
- Identify and enforce appropriate riparian setbacks to ensure safe development.
- Educate the community to generate awareness about environmental stewardship and Sema:th Traditional Ecological Knowledge.

Environmental Operating Procedure No. 6	EOP Revision: 01
Responsibility: Lands Manager, Lands Advisory Committee, Developers/Proponents, Band Members	Revision Date: July 25, 2013



Terminology

Critical Habitat: habitat that is necessary for the survival or recovery of a listed wildlife species.

Endangered Species: a wildlife species that is facing imminent extirpation or extinction.

Extirpated Species: a wildlife species that no longer exists in the wild in Canada, but exists elsewhere in the world.

Habitat (a) in respect of aquatic species: spawning grounds and nursery, rearing, food supply, migration and any other area on which aquatic species depend directly or indirectly in order to carry out their life processes, or areas where aquatic formerly occurred and have the potential to be reintroduced; and **(b)** in respect of other wildlife species: the area or type of site where an individual or wildlife species naturally occurs or depends on directly or indirectly in order to carry out its life processes or formerly occurred and has the potential to be reintroduced.

Migratory Bird: a migratory bird referred to in the Convention of the MBCA (1994), and includes the sperm, eggs, embryos, tissue cultures and parts of the bird.

Nest: the nest of a migratory bird and includes parts of the nest that holds eggs or offspring.

Species at Risk: an extirpated, endangered, or threatened species or a species of special concern.

Species of Special Concern: a wildlife species that may become threatened or an endangered species because of a combination of biological characteristics and identified threats.

Threatened Species: a wildlife species that is likely to become an endangered species if nothing is done to reverse the factors leading to its extirpation or extinction.



Legislation, Standards, and Policies

- *Canadian Environmental Assessment Act*, 2012 (CEAA, 2012)
- *Fisheries Act*, R.S.C., 1985, c F-14
- *Species at Risk Act*, S.C., 2002, c. 29 (SARA, 2002)
- *Migratory Birds Convention Act*, S.C., 1994, c. 2 (MBCA, 1994)
- *British Columbia Wildlife Act*, RSBC 1996

Potential Impacts

All parts of an ecosystem, including physical, chemical, and biological components are interconnected – development and other activities can disrupt this relationship, resulting in temporary or permanent impacts to the environment. This may include impacts to:

- Fish and fish habitat (quality and quantity);
- Riparian vegetation – including alteration or removal of vegetation adjacent to streams, lakes, wetlands and other waterbodies;
- Wildlife and wildlife habitat; and
- Species at Risk – as designated under Schedule 1 of the SARA.

Best Management Practices

All development must comply with applicable Sema:th, federal, and provincial regulations, permits, authorizations, conditions, and agreements with respect to environmental protection. Additional environmental standards, guidelines and BMPs that could be applied are as follows:

Fisheries and Oceans Canada (DFO) Land Development Guidelines for the Protection of Aquatic Habitat (1993): contains guidelines to protect fish populations and their habitat from the damaging effects of land development activities. These guidelines apply primarily to salmon, trout and char, but are applicable to all fish species.

Provincial Standards and Best Practices for Instream Works (1994): assists in the planning and implementation stages for a proposed development by providing a series of performance guidelines and regulatory compliance standards.

DFO Freshwater Intake End-of-Pipe Fish Screen Guideline (1995): contains a set of guidelines to assist proponents in the design and installation of fish screens where freshwater is extracted from fish-bearing waters.

The BC Ministry of Environment Develop with Care 2012: Environmental Guidelines for Urban and Rural Land Development in British Columbia documents:



- Best Management Practices for Amphibians and Reptiles in Urban and Rural Developments in British Columbia (2004);
- Guidelines for Raptor Conservation during Urban and Rural Land Development in British Columbia;
- Develop with Care: Species Factsheets – includes information related to land development and mitigation protocols for rare and endangered species; and
- South Coast Region Information Package – includes information on regional features, regionally significant species, and invasive alien species.

Regional Timing Windows of Least Risk: The BC MOE and DFO have developed a set of regional timing windows for activities that have the potential to impact fish and wildlife populations and their habitats. To reduce the risk of impacts, instream works and vegetation clearing are ideally limited to non-critical periods of the year, unless stringent, species-specific mitigation measures are initiated. Timing windows are as follows:

- a) If works involve fish bearing streams, in-channel or bank work should be completed during the reduced-risk timing windows noted below:
 - August 1 – October 31 (rainbow trout, cutthroat trout, and steelhead)
 - July 15 – September 15 (Pacific salmon)
- b) If works involve vegetation clearing, vegetation should only be removed from an area within the clearing timing window for the protection of nesting birds to ensure that activities will not result in the disturbance of bird nests, eggs, or young. Specific timing windows are noted below:
 - August 15 – January 30 (raptors – eagles, hawks, falcons, owls)
 - August 15 – January 30 (Heron)
 - August 1 – March 31 (other birds)
- c) If works involve species at risk, there are no standard windows of least risk. For information on timing window requirements, a Qualified Environmental Professional (QEP), and/or provincial and federal regulators should be consulted prior to works being initiated.



Strategy 1: Identify important habitat areas through land use planning

As part of the land use planning process, identify areas for habitat protection based on Traditional Ecological Knowledge, available ecological data (e.g., federal species at risk), and best practices (e.g., riparian setbacks).

Strategy 2: Develop an environmental baseline overview

Work collaboratively with proponents [(through the development process] see Appendix I, EOP Process: Habitat Protection for Proposed Development] and other agencies (e.g., species at risk funding programs) to develop an ongoing environmental baseline overview of Sema:th Lands. The baseline should include, but is not limited to, the identification of:

- Existing aquatic resources, including the presence of fish and fish habitat;
- Existing terrestrial resources, including the identification of critical habitat for wildlife;
- Known occurrences and locations of species and critical habitat listed under Schedule 1 of the *Species at Risk Act*; and
- Traditional Ecological Knowledge.

The Lands & Resources Department will maintain a database of all relevant files (e.g., shape, drawing), maps, studies, and analytical results. The identification of environmental baseline conditions will assist in managing risks associated with the potential loss or impacts to habitat during various activities on Sema:th Lands, and act as an inventory for long-term monitoring.

Strategy 3: Promote habitat protection and enhancement

Through the habitat assessment process (see Appendix I, EOP Process: Habitat Protection for Proposed Development), identify potential impacts, assess proposed mitigation (e.g., habitat compensation and/or enhancement), and determine net effects.

Strategy 4: Ongoing monitoring

The Lands & Resources Department will review annual monitoring reports for approved developments and assess for compliance with associated mitigation measures (e.g., habitat compensation plans). Sema:th will work collaboratively with the Proponent to address any monitoring issues. When possible, Sema:th Environmental Monitors should be used for construction/environmental monitoring programs.



Strategy 5: Education and awareness

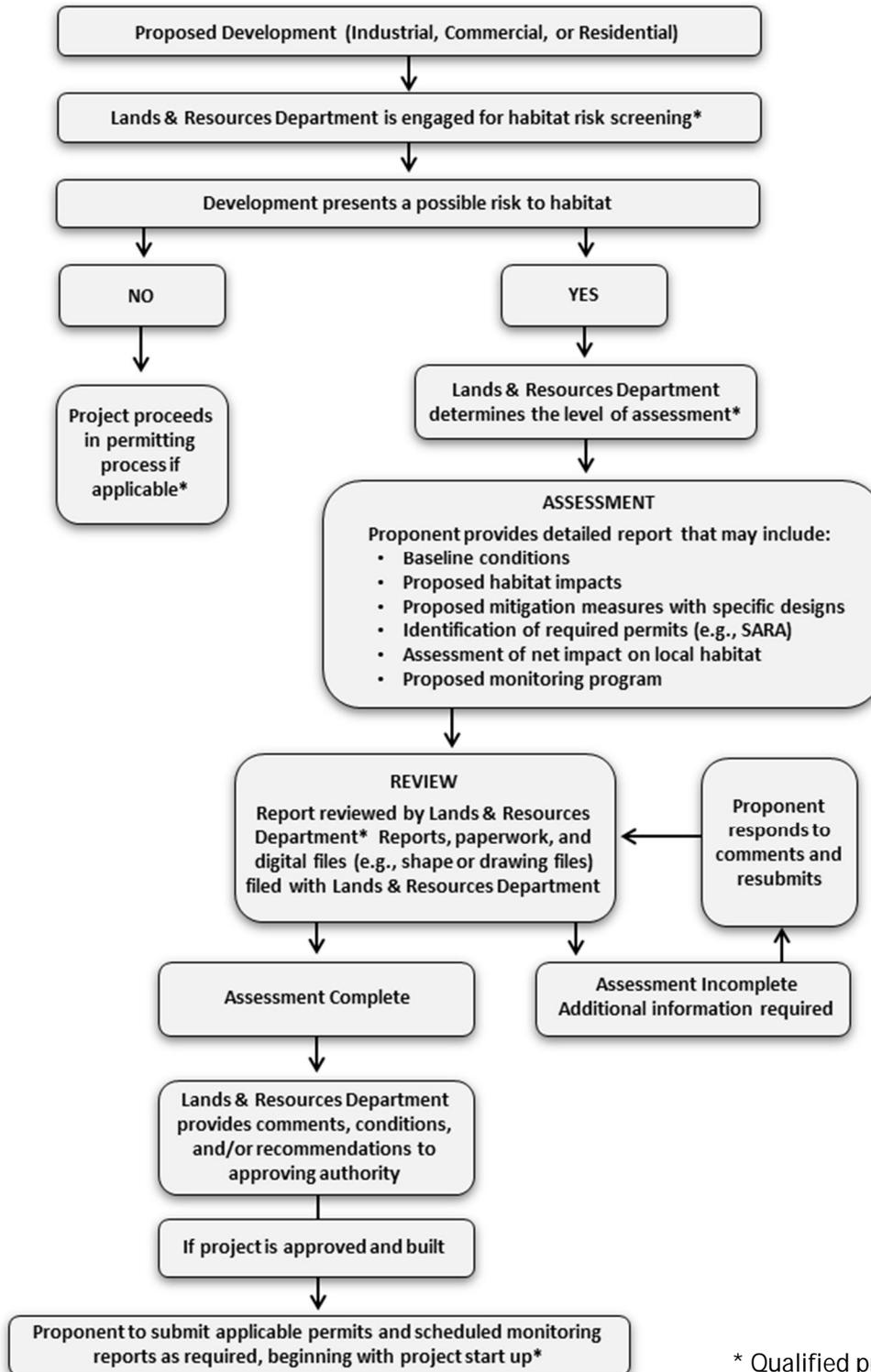
Develop habitat awareness through education and training, with emphasis on natural resources and Traditional Ecological Knowledge. This may include, but is not limited to:

- Collaborating with agencies to develop habitat enhancement programs;
- Promoting awareness of Traditional Ecological Knowledge (e.g., Elders workshops, signage, use of Stó:lō Traditional Plant Book);
- Providing community awareness on sensitive habitats or ecosystems within or adjacent to Sema:th Lands;
- Raising awareness to empower community members to identify and report environmental incidences (i.e., “Community Environmental Watch”); and
- Training for Sema:th members to work as environmental/construction monitors, field assistants, etc.



APPENDIX I

EOP PROCESS: HABITAT PROTECTION FOR PROPOSED DEVELOPMENT



* Qualified professional services may be required.



EOP 7

Land Development

Land development refers to the alteration of land through activities such as grading, excavation, soil removal, construction, alteration or clearing of habitats (Queen's Printer for Ontario, 2013). This alteration or conversion of land is associated with modern communities that are constructed or reconstructed for people to live, work, worship, shop, play, and with other supporting land uses (Dewberry & Couture, 2008)

Throughout the land development process, it is important to maintain environmental and cultural values supported by the land and surrounding environment. Maintenance of environmental and cultural values during land development can be achieved through the use of environmental protection and stewardship practices (Province of British Columbia, 2013d).

Goal:

- We will develop our lands in a way that is compatible with Sema:th laws and ways.

Objectives:

- Develop a Land Use Plan that creates a desirable and workable future land use system.
- Create land use policies and laws that have a high regard to relevant social, economic, and environmental matters.
- Ensure development procedures are in place.
- Protect the environmental and cultural heritage of Sema:th Lands and People.
- Develop a sustainable, community-controlled economy.
- Create a land use decision making process that is transparent and fair.

Environmental Operating Procedure No. 7	EOP Revision: 01
Responsibility: Lands Manager, Lands Advisory Committee, Developers/Proponents, Band Members	Revision Date: July 25, 2013



Legislation, Standards, and Policies

- *First Nations Lands Management Act* – provides First Nations the authority to create laws to control Nation lands, resources and the environment. This is a federal law and allows First Nations to create their own approach for making land allotments to individual Nation members, matrimonial real property interest or rights and “in cases of breakdown of marriage, respecting the use, occupation and possession of First Nation land and the division of interests in First Nation land”.

Best Management Practices

A strong Land Development process will help create a coordinated approach to growth and development; providing a logical process whereby Council can make decisions about the direction of Sema:th’s expansion; and providing others with an understanding of community needs.

A Land Use Plan is the principle land use planning document for a community. Its purpose is to produce a desirable and workable future land use system. The Land Use Plan is a general document that provides a set of overarching policies and maps which establish goals and provide guidance for the physical development of the community. Within the context of the Sema:th Land Use Plan, policies will have regard to relevant social, economic, and environmental matters.

The following steps outline an approach to the land use planning process:

- Identify long-term community vision;
- Recognize goals, objectives and strategies in the plan that can be measured against the vision;
- Undertake assessments to understand the environmental management and protection that is required;
- Create policies and land use designations considering the results of the community input and background review;
- Ensure compatible land use are proposed and controlled within the Land Use Plan;
- Create action plans;
- Include monitoring guidelines and strategies in order to evaluate the effectiveness of the Land Use Plan in the future; and
- Integrate the plan into the community³.

³ Ecotrust Canada, 2009



BC Building Code 2012 – provides strong guidance for the construction of buildings; including extensions, substantial alterations, and upgrading of buildings to remove an unacceptable hazard and is a requirement under Aboriginal Affairs and Northern Development Canada (AANDC) Terms of Reference. The BC Building Code applies to the core concepts of the National Building Code, along with elements specific to BC's unique development needs.

BC Fire Code 2012 – provides First Nations with a standard for acceptable level of fire safety within the community. It is not required by law that Nations follow the guidelines within the BC Fire Code; however, the Code provides standards which should be strongly considered.

BC Plumbing Code 2012 – a useful tool for the installation or designing of plumbing systems. It also applies to the extension, alteration, renewal and repair of existing plumbing systems. While the Code is not mandatory for Nations to adopt, it could be a useful tool and guide for plumbing practices unique to BC's development needs.

Strategy 1: Develop and implement the Sema:th Land Use Plan

Work with the community, legal counsel, and professional Planners to develop and implement the Sema:th Land Use Plan.

Strategy 2: Create and implement laws, policies and processes

To control land development under the Land Use Plan, a number of laws and policies will be proposed and implemented. These laws and policies will provide specific rules regarding the use of land and will pertain to the character, location, and use of buildings and structures. Sema:th will work to create and implement the following laws and policies:

- Zoning and land use laws;
- Provisions of the EMP;
- Subdivision, development, and servicing law;
- Development permits;
- Development standards and building code law;
- Environmental law considering riparian areas, floodplain, creek setbacks, and environmental management;
- Infrastructure and service agreements;
- Signage law;



- Fill law;
- Cultural development guidelines; and
- Other required development bylaws.

A flowchart to illustrate the land development process is provided in Appendix I, EOP Process: Land Development (to be drafted).

The following land development tools, processes and guidelines will also be included/considered:

- Land development process and development tools (i.e., guidelines and checklists) for developers to assist them with meeting the legal, environmental, and cultural requirements of Sema:th;
- Staff in the Sema:th Lands & Resources Department will be trained to oversee the land development and approval process; and
- Mechanisms will be in place to ensure that only certified professionals will be retained for site development and construction work.

Strategy 3: Monitoring and compliance

Monitor aspect of the land development process to assess whether the land development tools have been successful in achieving the goals and visions of Sema:th. Should certain aspects of the process prove to be unsuccessful, amendments to the laws and policies will be made to direct the future development of Sema:th Lands.

Components of the monitoring and compliance process should include:

- A scheduled review of the Land Use Plan and other laws to assess their effectiveness in implementing the vision of Sema:th; and
- Amendments to the Land Use Plan and other laws, where appropriate, to include new information, new innovations and approaches to sustainable development.



EOP 8

Soil Management

The use of contaminated soil and unregulated land filling has left a legacy of problems which can impact the health of our people and our environment. It is important to properly manage soil and fill brought to Sema:th Lands to ensure deposited material is not contaminated, thereby reducing the potential for human health or environmental risks.

Goal:

- All soil brought onto and/or used on Sema:th Lands meets environmentally acceptable standards (applicable laws and regulations), and is suitable for the current or future land use.

Objectives:

- Meet applicable standards, laws, and regulations.
- Draft, implement, and enforce a Sema:th Soil Deposit and Removal Law.
- Create a Soil Deposit and Removal Permitting Process to track the movement of soil into and out of Sema:th Lands.
- Develop harmonized soil and fill management plans with other jurisdictions.

Environmental Operating Procedure No. 8	EOP Revision: 01
Responsibility: Lands Manager, Lands Advisory Committee, Developers/Proponents, Band Members	Revision Date: July 25, 2013



Terminology

Soil is defined as:

- Clay;
- Silt;
- Sand;
- Gravel;
- Cobbles;
- Boulders; or
- Peat.

Fill: refers to soil that has been removed from one area and deposited in another area, typically as a means to fill depressions and holes to make an area suitable for development.

Deposit: means the act of moving soil and other material and placing it upon a parcel or contiguous parcels of land on which such soil and other material did not exist or stand.

Removal: means the act of removing soil from the parcel or contiguous parcels of land on which it exists and shall include the removal of soil which has been placed into a stockpile or other storage on any land.

Legislation, Standards, and Policies

- *Canadian Environmental Protection Act*
- *British Columbia Environmental Management Act* (Section 55) – The British Columbia Contaminated Sites Regulations fall within this Act.
- City of Abbotsford's Soil Removal and Deposit Bylaw No. 1228, 2003 – The City of Abbotsford's Soil Removal and Deposit Bylaw No. 1228 - 2003 regulates the movement of soil within the City limits.
- Fraser Valley Regional District Soil Deposit and Removal Bylaw No. 0061, 1996 – Sections 723 and 799 of the *Local Government Act*, R.S.B.C. 1996, c. 323, authorize the Regional Board of the Fraser Valley Regional District to regulate the removal and deposit of soil in the Regional District.



Potential Impacts

Soil can become contaminated in many ways but the most common are the result of hydrocarbon spills and through industrial and agricultural activities. It is important to ensure that contaminated soils are managed in the most environmentally safe manner with due care for human health. It is equally important to ensure that contaminated soils are not brought into a community and used in future development sites.

Best Management Practices

The movement of soil/fill on, off, and within Sema:th must comply with applicable Sema:th, federal, and provincial regulations, permits, authorizations, conditions, and agreements with respect to environmental protection. Additional BMPs, environmental standards, and guidelines that could be applied are described below.

During any excavation work, the contractor must notify Sema:th if the following is observed:

- Unusual odour that may indicate the presence of contaminants (i.e., gas or oil);
- Stained soils which are darker and may have a “wet” appearance typically indicate the presence of a spill area. Contaminated soils may also have a distinct oily feel. Typically, staining (contamination) is accompanied by an odour; and/or
- If staining, odour, buried debris, or hydrocarbon sheen is observed associated with infiltrating groundwater, the contractor will immediately stop work and advise Sema:th of the suspected contamination.

Strategy 1: Develop a soil removal and deposit law

Develop, implement, and enforce a Soil Removal and Deposit Law to effectively regulate (control and monitor) the movement of soil on and off Sema:th Lands. The law will apply to Sema:th members, contractors, businesses, and anyone depositing or removing soil on Sema:th Lands.

Strategy 2: Develop and implement a soil management permitting process

Develop and implement a soil permitting process to minimize impacts to human health and the environment, and to regulate and manage the movement of soil or fill onto and within Sema:th Lands. The permit will consider the quantity and quality of the soil and fill and the existing or potential future use of the receiving site.



Strategy 3: Utilize soil management processes

Follow Appendix I, EOP Process: Incoming Soil and Within Sema:th Lands to control the quantity and quality of soil entering or moved within Sema:th Lands. Follow Appendix II, EOP Process: Outgoing Soil to control the quantity and quality of soil leaving Sema:th Lands.

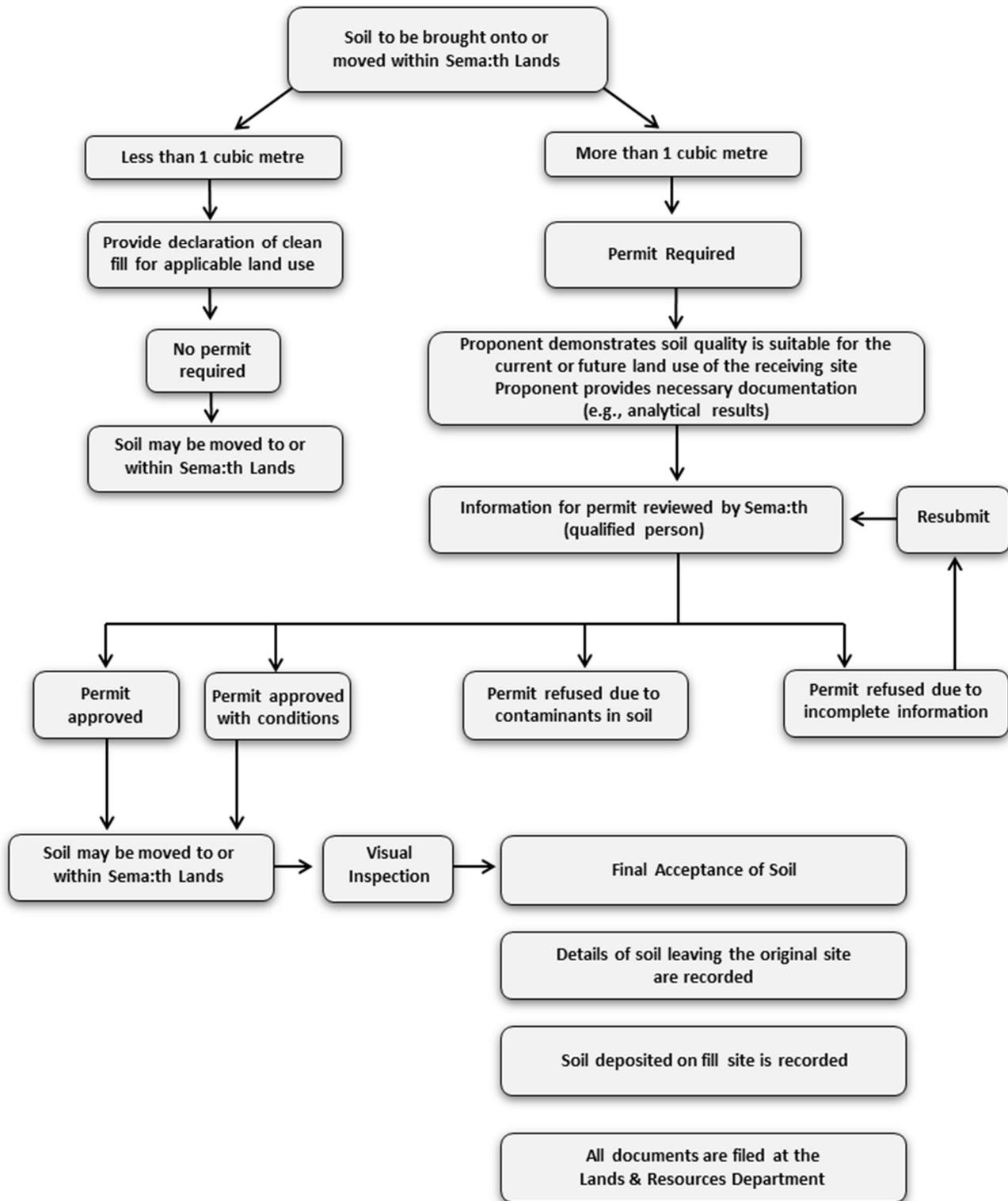
Strategy 4: Complete recommendations of the ESA

Work with the appropriate authorities to carry out the recommendations provided in the Environmental Site Assessment (ESA) with regards to contaminated soil. For example, the draft Phase III recommended that a human health and ecological risk assessment for chromium, nickel, and dissolved metals concentrations in soil in several areas on Sema:th Lands be carried out to determine if their concentrations pose a potential threat.



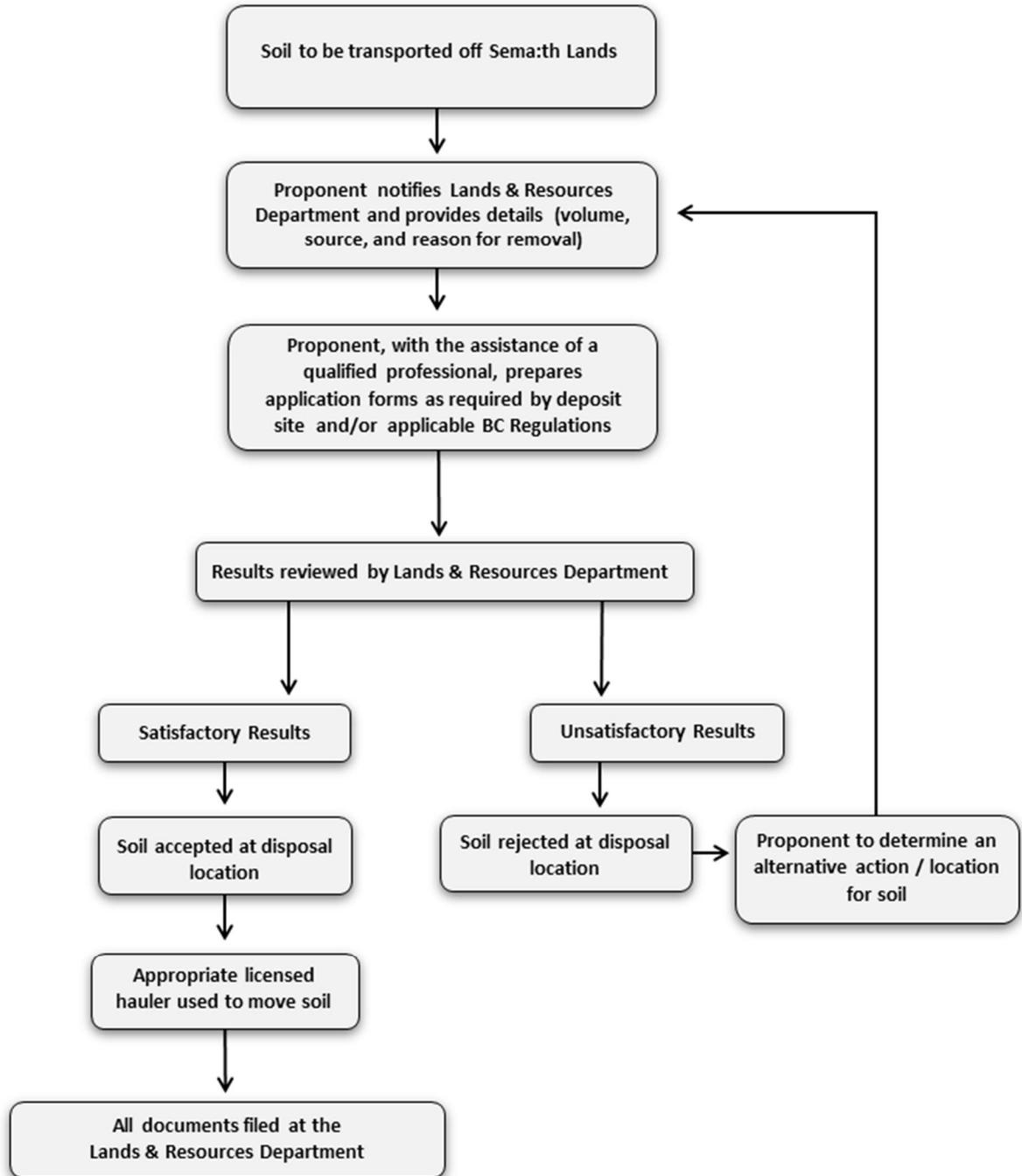
Appendix I

EOP Process: Incoming Soil and Within Sema:th Lands





Appendix II EOP Process: Outgoing Soil





EOP 9

Solid Waste Handling & Disposal

Solid waste is produced by residential, commercial, institutional, demolition, land clearing, or construction sources. (Province of BC, 2013c). Integrated Solid Waste Management (ISWM) is a comprehensive waste prevention, recycling, composting, and disposal program. An effective ISWM system considers how to prevent, recycle, and manage solid waste in ways that most effectively protect human health and the environment. ISWM involves evaluating local needs and conditions, and then selecting and combining the most appropriate waste management activities for those conditions. The major ISWM activities are waste prevention, recycling and composting, and combustion and disposal in properly designed, constructed, and managed landfills. Each of these activities requires careful planning, financing, collection, and transport. (US Environmental Protection Agency)

Goal:

- We will lessen our environmental footprint by embracing the 'reduce, reuse, and recycle' approach to waste management.

Objectives:

- Educate members and generate awareness on reducing, reusing, recycling, and proper waste disposal.
- Develop and implement a community composting program.
- Enforce proper solid waste handling and disposal procedures.
- Reduce and eliminate illegal dumping.
- Work with developers and companies who promote and facilitate leadership in waste reduction.
- Become part of the "Zero Waste Challenge".

Environmental Operating Procedure No. 9	EOP Revision: 01
Responsibility: Lands Manager, Lands Advisory Committee, Developers/Proponents, Band Members	Revision Date: July 25, 2013



Terminology

Municipal solid waste: commonly known as trash or garbage generally refers to waste consisting of everyday items that are discarded by the public. It does not include industrial waste, agricultural waste, medical waste, radioactive waste or sewage sludge.

Residential Sector: Waste materials are often classified by source. Waste generated by single family and multi-family residential households is referred to as “residential sector” waste.

ICI (Industrial, Commercial and Institutional) sector: Waste materials are often classified by source. Waste generated through industrial, commercial and institutional activities is referred to as “ICI sector” waste.

Waste stream: Waste can also be classified by stream or material. Typical terminology used by the municipal waste stream is provided in Appendix I.

Legislation, Standards and Policies

- *Canadian Environmental Protection Act, 1999 (CEPA 1999)*
- *Export and Import of Hazardous Waste and Hazardous Recyclable Material Regulations*
- *Interprovincial Movement of Hazardous Waste Regulations*
- *British Columbia's Environmental Management Act (Part 3 – Municipal Waste Management)*
- *British Columbia Recycling Regulation (B.C. Reg. 132/2011)*
- *BC Waste Discharge Regulation (B.C. Reg. 320/2004)*
- *Fraser Valley Regional District Integrated Solid Waste Management Plan (Draft, April 18, 2011) – contains information on waste policies and goals and how waste materials will be managed in the region.*
- *Municipal policies and bylaws – can contain information on material bans; i.e., materials which are prohibited or banned from disposal at municipal landfills. Because waste generated on the reserve is collected and transported off-site for disposal, banned materials cannot be included in the garbage. Inclusion of these banned materials in the waste stream can result in fines and charges, which would be levied on the collection contractor and likely passed on to Sema:th Nation.*



- British Columbia Extended Producer Responsibility (EPR) Programs
BC's policies and programs are designed to have producers of designated products take responsibility of the full life-cycle management of their items, including costs, collection, recycling and final disposal. EPR programs shift responsibility to the producer and away from local waste authorities. It also provides incentives for producers to incorporate environmental considerations and waste reduction measures into the design of their products. EPR materials should be managed responsibly. A list of current EPR products available on the Recycling Council of British Columbia (RCBC) website: <http://rcbc.bc.ca/education/product-stewardship/programs#Top>

Potential Impacts

Waste materials introduced into the environment, through unauthorized burning, landfilling, burying, littering and storage, can cause pollution of the environment, including the land, air and water.

As stewards of the environment, Sema:th will take the necessary precautions and steps to ensure waste is managed responsibly on its lands. This includes responsible management of waste materials generated by residents and activities on the reserve, and the importation of waste materials onto Reserve lands.

Best Management Practices

This section will provide some guidance and management practices that will assist Sema:th in acting as stewards of the environment. Understanding the standards an activity/development must meet will allow Sema:th to carry out future development in a safe and sustainable manner.

Waste Management Hierarchy

The waste management hierarchy is a nationally and internationally accepted guide for prioritizing waste management practices with the objective of achieving optimal environmental outcomes. It sets out the preferred order of waste management practices, from most to least preferred.

The waste management hierarchy is generally referred to as the 6 R's of waste management:

- Rethink: to re-evaluate our current lifestyle and the way in which products are designed and produced in an effort to minimize/reduce/eliminate waste.



- Reduce: to minimize the amount of material and energy used in a product's life cycle.
- Reuse: to use an existing product (that would otherwise become waste) for another purpose, without processing it.
- Recycle: to remove a product from the waste stream before it is disposed and to process it into a new product.
- Recover: to reclaim a material or product destined for the landfill for an alternate use.
- Residual management: to responsibly manage any remaining waste that cannot be reduced, reused, recycled or recovered, preferably using a triple bottom line approach.

Zero Waste Challenge

The term "Zero Waste" is a concept that promotes a future where landfills are no longer needed. The term is intended to encourage people to think more holistically about their waste and to view it as a resource instead of garbage destined for burial. Zero Waste is a mindset meant to propel change in the existing solid waste management system and to promote the adoption of more aggressive waste reduction policies aimed towards stopping waste before it is created and maximizing reuse and recycling programs.

Strategy 1: Understand current waste streams and quantities

A first step in any waste management program is to gain an understanding of current or existing waste quantities and sources. A thorough review and understanding of the current position is essential to understand "where we are now". In addition, the definition of a baseline year (or years) serves as the benchmark against which future progress can be measured.

'Typical' municipal waste streams generated on Sema:th Lands are summarized in Appendix I: Municipal Waste Streams. Follow Appendix II: EOP Process, Solid Waste Management for responsible management of municipal waste materials.

Sema:th will work with its waste collection contractor and other relevant parties (e.g., consultants) to define a methodology for tracking the quantity of waste generated on the reserve. Opportunities to more accurately determine the composition of the waste streams (such as waste compositions studies / waste audits) will also be investigated. Information on waste quantities and composition will be used to (a) define a baseline against which progress can be measured and (b) inform waste reduction, reuse and recycling programs going forward.



Strategy 2: Provide municipal household waste collection

Sema:th will ensure that waste collection services are provided by an authorized waste contractor and the collected waste must be disposed of at an appropriately licensed waste facility (e.g., Landfill, Transfer Station, Composting Facility and/or Material Recovery Facility).

A list of questions to ask potential waste collection contractors is provided in Appendix III: Questions to Ask When Selecting a Waste Collection Provider.

Strategy 3: Manage illegal dumping

Littering is an offence under the *BC Environmental Management Act*. Sema:th will enact a law which prohibits individuals from littering or dumping waste materials on Sema:th Lands.

Other proactive and reactive approaches (or a combination of) can be considered for adoption. As with Strategy 1, the first step should be to establish a more accurate picture of the current (baseline) situation; which will include the introduction of a process to record incidents of illegal dumping (date, time, location, items disposed, approximate quantity, etc.).

Proactive approaches:

- Waste attracts waste – keep areas clean and tidy;
- Access prevention measures – fencing, placement of large stones at ‘hotspots’;
- Signage – erect signage “Protection of our lands is important to us; please don’t litter / dump waste”;
- Patrols of volunteer groups; and
- Method for recording illegal dumping incidents – date, time, location, materials left, action taken.

Reactive approaches:

- Organize clean-up days;
- Adopt-a-Street;
- Utilize FVRD’s Illegal Dumping Hotline 1-800-655-DUMP (3867) or call the RCMP. Callers are asked to make note of the 4W’s when reporting an incident:
 - Where did the illegal dumping take place?
 - When did you notice the illegal dumping?
 - What materials were illegally dumped?
 - Who committed the illegal dumping?



Strategy 4: Prohibit illegal burning of waste

The burning of any household or hazardous waste is prohibited under the *Indian Reserve Waste Disposal Regulations* (Section 10) and will not occur on Sema:th Lands (EOP 1). Instead, waste shall be removed from the area and taken to the authorized recycling facilities or an authorized landfill.

Strategy 5: Prohibit illegal burial of waste

The illegal burial of waste is prohibited under the *Indian Reserve Waste Disposal Regulations* (Section 3) and will not occur on Sema:th Lands, except in accordance with a permit issued under Section 5 of the *Indian Reserve Waste Disposal Regulations*. Waste burial sites, especially in areas with lots of precipitation, can easily produce harmful leachate that can flow as surface water or migrate to the groundwater or other nearby surface water bodies. Instead, waste shall be removed from the area and taken to the authorized recycling facilities or an authorized transfer station or landfill.

Strategy 6: Create Education and Awareness Campaign

Develop community waste management awareness through education and outreach programs including, but not limited to:

- Waste management hierarchy (Reduce, Reuse, Recycle);
- Zero Waste Challenge;
- Responsible management of waste materials (Appendix II: EOP Process, Solid Waste Management);
- Ban on burning of waste materials (Strategy 4); and
- Ban on unauthorized burial of waste materials (Strategy 5).



Appendix I Municipal Waste Streams

Waste Stream	Typical Materials / Examples
Garbage or 'residual waste'	<ul style="list-style-type: none">Materials that cannot be recycled, composted or diverted through other programs include:DiapersSanitary productsStyrofoamCigarette buttsLint
Recyclables or 'blue box / bag' materials	<ul style="list-style-type: none">Paper and envelopesNewspapers, magazines, flyersCardboardBoxboard (e.g., cereal boxes)Milk cartons and juice boxesContainers – plastic, metal and glass
Organic or 'compostable' waste	<ul style="list-style-type: none">'Green Waste' – yard trimmings, grass, clippings, branches, etc.Food waste scrapsTissue paperFood-soiled paper packaging
Demolition and Land Clearing (DLC) waste (also referred to as Construction and Demolition (C&D) waste)	<ul style="list-style-type: none">Building / demolition materialsBricksConcreteGypsum / drywallWood
Household Hazardous Waste (HHW)	<ul style="list-style-type: none">BatteriesElectronic wasteFluorescent tubes and compact fluorescent lightsHousehold paintsPesticides and flammable liquids, medicationsWaste oil, filters and containers

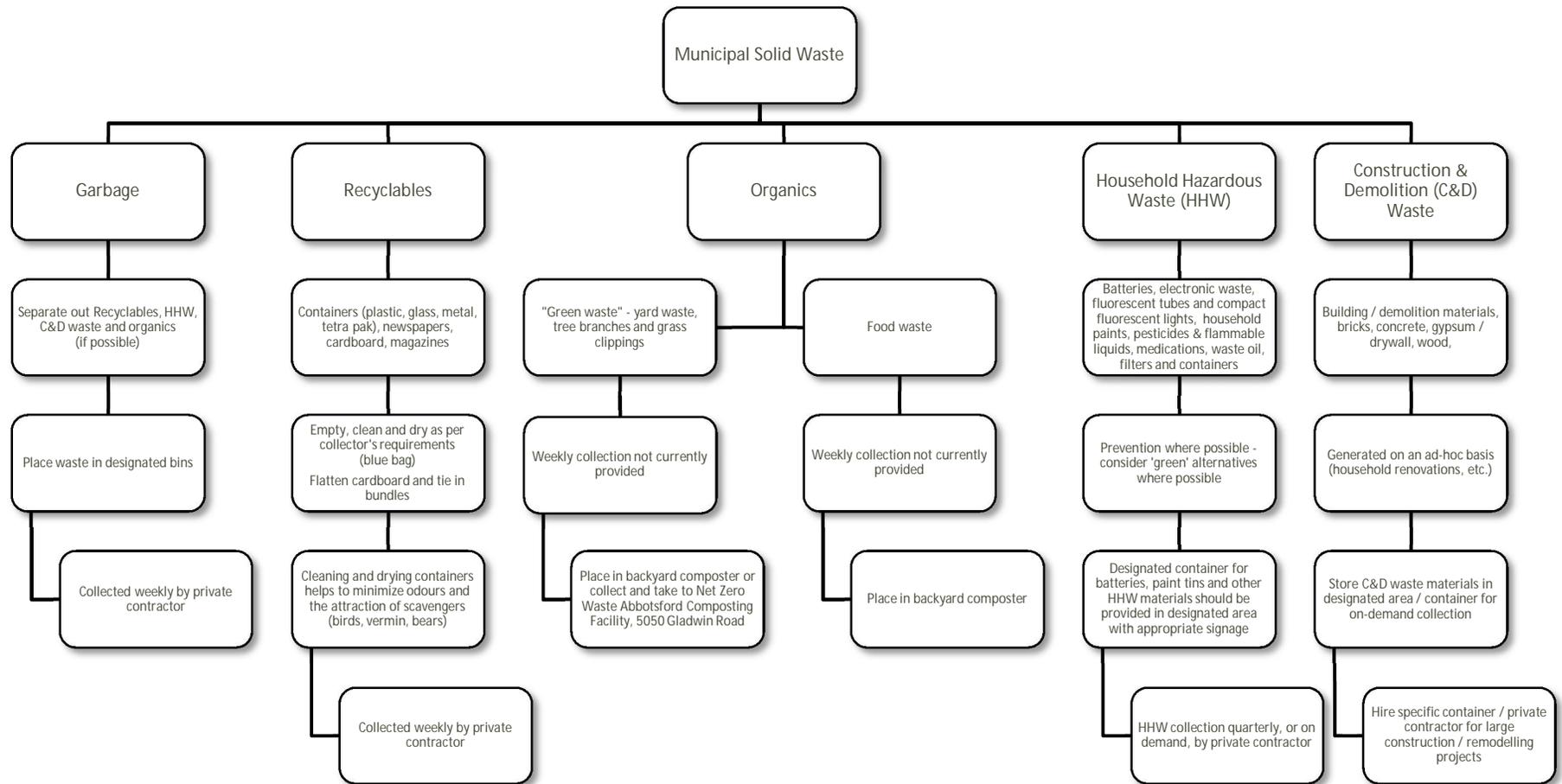


Waste Stream	Typical Materials / Examples
Extended Producer Responsibility (EPR) Materials	<ul style="list-style-type: none">▪ Expired smoke alarms▪ Cell phones▪ Antifreeze, lubricating oil, oil filters and oil containers▪ Rechargeable batteries and cell phones▪ Electronic products and small appliances▪ Light bulbs▪ Medications▪ Paint, flammable liquids, domestic pesticide and gasoline▪ Thermostats▪ Tires



Appendix II

EOP Process: Municipal Solid Waste Management





Appendix III

Questions to Ask When Selecting a Waste Collection Contractor

- What materials do you collect?
 - Garbage
 - Organics
 - Yard trimmings and grass clippings
 - Food waste
 - Recyclables
 - Single stream recycling – paper cardboard and containers mixed together
 - Three stream recycling – recyclables separated into three streams (newspapers, paper and cardboard, containers)
 - Other materials, for example:
 - White goods
 - Waste oil
- What types of containers do you provide?
 - Front load containers
 - Toters
 - Other
- What signage do you provide for our containers?
 - Symbols, text, pictures to educate users as to “what goes in what bin”
- What educational materials do you provide?
 - Brochures, pamphlets, etc. to educate users as to “what goes in what bin”
- Where do you take the waste you collect from our Reserve?
 - Garbage
 - Landfill - name, location
 - Transfer Station - name, location
 - Recyclables
 - Material Recovery Facility - name, location
 - Transfer Station - name, location
- What information can you provide us on the quantities of waste you collect from our Reserve?
 - Estimated based on collection frequency and bin size
 - Actual weights (on board scale or transfer station scale)
- What do your services cost?
 - Cost per lift
 - Cost per agreed collection schedule (e.g., weekly, bi-weekly)
 - Cost per on-demand pick up



EOP 10

Surface Water Management

Surface water refers to water flowing across or accumulating on the ground surface as a result of precipitation processes and most often due to the influence of rainfall and snowmelt. As water inundates and accumulates on the surface, it begins to flow towards creeks, streams, lakes, ditches, or installed storm sewer systems or reservoirs. Regionally, surface water originates in mountainous areas and then flows through creeks, streams, and as overland flow to larger creeks and streams in lowland areas.

Goal:

- We will keep our waterways clean for the protection of all living things.

Objectives:

- Ensure compliance with applicable legislation and regulations.
- Evaluate the quality and quantity of surface water on Sema:th Lands.
- Monitor surface water quality to track long-term trends and to assess the effectiveness of surface water management programs.
- Educate the community to generate awareness about environmental stewardship and Sema:th Traditional Ecological Knowledge.

Environmental Operating Procedure No. 10	EOP Revision: 01
Responsibility: Lands Manager, Lands Advisory Committee, Developers/Proponents, Band Members	Revision Date: July 25, 2013



Terminology

Base Flow: Portion of (stream) flow that comes from groundwater or other delayed sources.

Peak Flow: The maximum instantaneous discharge of a stream at a specific location. Corresponds to the highest stage of a flood.

Legislation, Standards, and Policies

- *Fisheries Act (1996)*
- *BC Water Protection Act (1996)*
- Environment Canada's Federal Water Policy (1987)
- Canadian Environmental Quality Guidelines

Potential Impacts

Surface water can be negatively impacted through contamination from human and natural sources. Human-caused contamination can occur through the release of hazardous materials to surface water from residential, industrial, and commercial operations. For example, water within a creek which runs through an agricultural area can be negatively impacted if pesticides and fertilizers are released into the creek. Pesticides and fertilizers may cause detrimental impacts to the aquatic life of the creek, reducing the creek's productivity, and reducing the quality of the surface water.

Natural sources of surface water contamination include bacteria, viruses, or toxins within the water which are naturally occurring. If the water is consumed by wildlife or humans, they may become ill.

Surface water quantity impacts are often due to peak flow increases, reduction in baseflows and general loss of infiltration to groundwater resources.

The following major surface water bodies collect surface water and flowing through or adjacent to Sema:th Lands:

- Sumas River – The Sumas River is a 32 km long tributary to the Fraser River. Impacts to this river are largely from influences from adjacent agricultural activities and runoff.
- Marshall Creek – Marshall Creek flows west through Sema:th Lands on the north side of Highway 1, originating as a branch off of Sumas River, found west of Lakeview Drive. Marshall Creek flows west for approximately 6 km then crosses south to confluence with Sumas River again, approximately 1.5 km west of Whatcom Road.
- Kilgard Creek – Discharges south from McKee Peak through Sema:th Lands to its confluence with Marshall Creek near the south end of Sumas Mountain Road.



Best Management Practices

All development must comply with applicable Sema:th, federal, and provincial regulations, permits, authorizations, conditions, and agreements with respect to surface water protection. Additional BMPs, environmental standards, and guidelines that could be applied are described below.

Canadian Council of Minister of the Environment (CCME) and the BC Ministry of Environment (MoE) have a series of guidelines that act as benchmarks to identify the safe level of substances for the protection of a given water use. For example, the water quality guidelines are specified as a single maximum value to protect aquatic life where the BC water quality guidelines are specified as two values: one to protect aquatic life from short-term lethal effects and the other to protect from long-term sub-lethal effects.

Best practices for the protection of surface water, ensure compliance with the following guidelines:

- BC Approved Water Quality Guidelines (2006 Edition);
- A Compendium of Working Water Quality Guidelines for BC;
- Ambient Water Quality Guidelines;
- CCME Water Quality Guidelines for the Protection of Aquatic Life; and
- CCME Water Quality Guidelines for the Protection of Agricultural Water Uses.

General BMPs for the protection of surface water quality include, but are not limited to:

- All surface water leaving a work area (e.g., construction site) must meet or exceed CCME and BC Water Quality Guidelines for the Protection of Freshwater Aquatic Life;
- Areas of exposed soil must be properly contained and/or covered to prevent the mobility of sediments into receiving surface water bodies;
- Soils or other loose materials should not be stockpiled adjacent surface water body without proper management;
- Stormwater runoff from roads and hard surfaces may contain grit, sediment and petrochemical residues. Road runoff should go through a solids interceptor prior to its discharge into watercourses.



Additional guidelines, protocols, and BMPs for designing and implementing a water quality monitoring program include:

- BC Resource Information Standards Committee (RISC) guideline documents for Designing and Implementing a Water Quality Monitoring Program in BC;
- RISC Guidelines for Interpreting Water Quality Data;
- CCME Protocols Manual for Water Quality Sampling in Canada; and
- US Environmental Protection Agency State Monitoring and Assessment Program Guidelines.

Common water quality issues and their associated pollution sources that are likely to be encountered are provided in Appendix I.

Strategy 1: Develop a baseline surface water overview

Work collaboratively with proponents (through the development process – see Appendix II, EOP Process: Surface Water Management for Proposed Development) and other agencies (e.g., Environment Canada) to develop an on-going baseline overview of surface water resources on Sema:th Lands. Previous studies will also contribute to the overview (e.g., Ambient Water Quality Monitoring in Kilgard Creek, 2001). The baseline should include but is not limited to the identification of:

- Existing surface water conditions to determine overall health including hydrological regime (i.e., quantity);
- Specific pollutants and sources of pollution (i.e., point and non-point sources); and
- Designated uses (e.g., fishing, swimming, suitable for fish and other aquatic organisms) and whether surface water resources are meeting applicable requirements.

The Lands & Resources Department will maintain a database of all files (e.g., shape, drawing), maps, studies, and analytical results at the Lands & Resources Department Office.

Strategy 2: Promote surface water protection and enhancement

Through the surface water assessment process (see Appendix II, EOP Process: Surface Water Management for Proposed Development), Sema:th will promote protect and enhance by identifying potential impacts, assessing proposed mitigation, determining net effects, and providing relevant recommendations and comments to promote surface water protection and enhancement measures.



Strategy 3: Ongoing monitoring

The Lands & Resources Department shall review annual monitoring reports for approved developments and assess for compliance with associated mitigation measures. Sema:th will work collaboratively with the proponent to address any monitoring issues.

Strategy 4: Fuel spill response

In the case of a spill threatening a water source refer to EOP 7 Process: General Spill Response.

Strategy 5: Participate in watershed management initiatives

Sema:th Lands have nearby activities (e.g., residential and commercial development) that may affect our surface water resources but are out of our jurisdiction. By participating in regional committees, we will be more likely to affect change in the best interest of our resources.

Participation in these committees will also allow for Sema:th to draw upon the existing efforts of regional watershed management planning and assist us in defining baseline conditions and developing and implementing water quality and quantity monitoring programs.

Strategy 6: Consider policies to enforce surface water protection

Sema:th will consider the adoption of policies, supported where necessary by bylaws. An example includes the City of Abbotsford's Erosion and Sediment Control Bylaw (No. 1989-2010) that was established to help reduce the amount of sediment-laden water entering the drainage system. This bylaw requires the implementation of BMPs on construction sites to ensure that discharge water quality standards are met.

Strategy 7: Education and awareness

Develop surface water resources awareness through education and training, emphasis on natural resources and Traditional Ecological Knowledge. This may include, but may not be limited to:

- Collaborating with agencies to develop surface water protection programs;
- Promoting awareness of Traditional Ecological Knowledge (e.g., Elders workshops, signage of creeks);
- Providing community awareness on surface water resources within or adjacent to Sema:th Lands;
- Raising awareness to empower community members to identify and report environmental incidences (i.e., "Community Environmental Watch"); and
- Training for Sema:th members to work as environmental/construction monitors, field assistants, etc.



Appendix I

Common Activities, Pollutant Sources, and Associated Surface Water Quality Parameters

Land Use/Monitoring Activity: Agricultural Runoff	
<p>Priority Parameters:</p> <ul style="list-style-type: none"> ▪ Turbidity; ▪ Total suspended solids (TSS); ▪ Nitrates; ▪ Temperature; ▪ Phosphorus; ▪ Dissolved oxygen; and ▪ Microbiological parameters (E. coli, faecal coliforms). <p>Secondary Parameters:</p> <ul style="list-style-type: none"> ▪ pH; ▪ Conductivity; and ▪ Nutrients. 	<p>Potential Sources of Pollution:</p> <ul style="list-style-type: none"> ▪ Effluent from septic systems or sewage discharges; ▪ Runoff of organic contaminants (e.g., manure and biosolids); ▪ Runoff of chemical and organic fertilizers and pesticides; ▪ Excess accumulation of heavy metals (e.g., selenium) from irrigation; and ▪ Soil erosion and sedimentation.
Land Use/Monitoring Activity: Industrial Effluent Discharge	
<p>Priority Parameters:</p> <ul style="list-style-type: none"> ▪ Temperature; ▪ Conductivity; ▪ pH; ▪ Turbidity; ▪ TSS; and ▪ Total and dissolved metals. <p>Secondary Parameters:</p> <ul style="list-style-type: none"> ▪ pH; ▪ Conductivity; ▪ Dissolved oxygen; and ▪ Nutrients. 	<p>Potential Sources of Pollution:</p> <ul style="list-style-type: none"> ▪ Effluent from industrial activities (e.g., acids, toxic metals, dyes, etc.); ▪ Oil spills; and ▪ Urban runoff of grease and toxic chemicals.



Land Use/Monitoring Activity: Urban Runoff

Priority Parameters:

- Turbidity;
- Phosphorus;
- Nitrates;
- Temperature;
- Conductivity;
- Dissolved oxygen;
- Biochemical oxygen demand;
- Total and dissolved metals; and
- Hydrocarbons.

Secondary Parameters:

- pH;
- Dissolved oxygen; and
- Nutrients.

Potential Sources of Pollution:

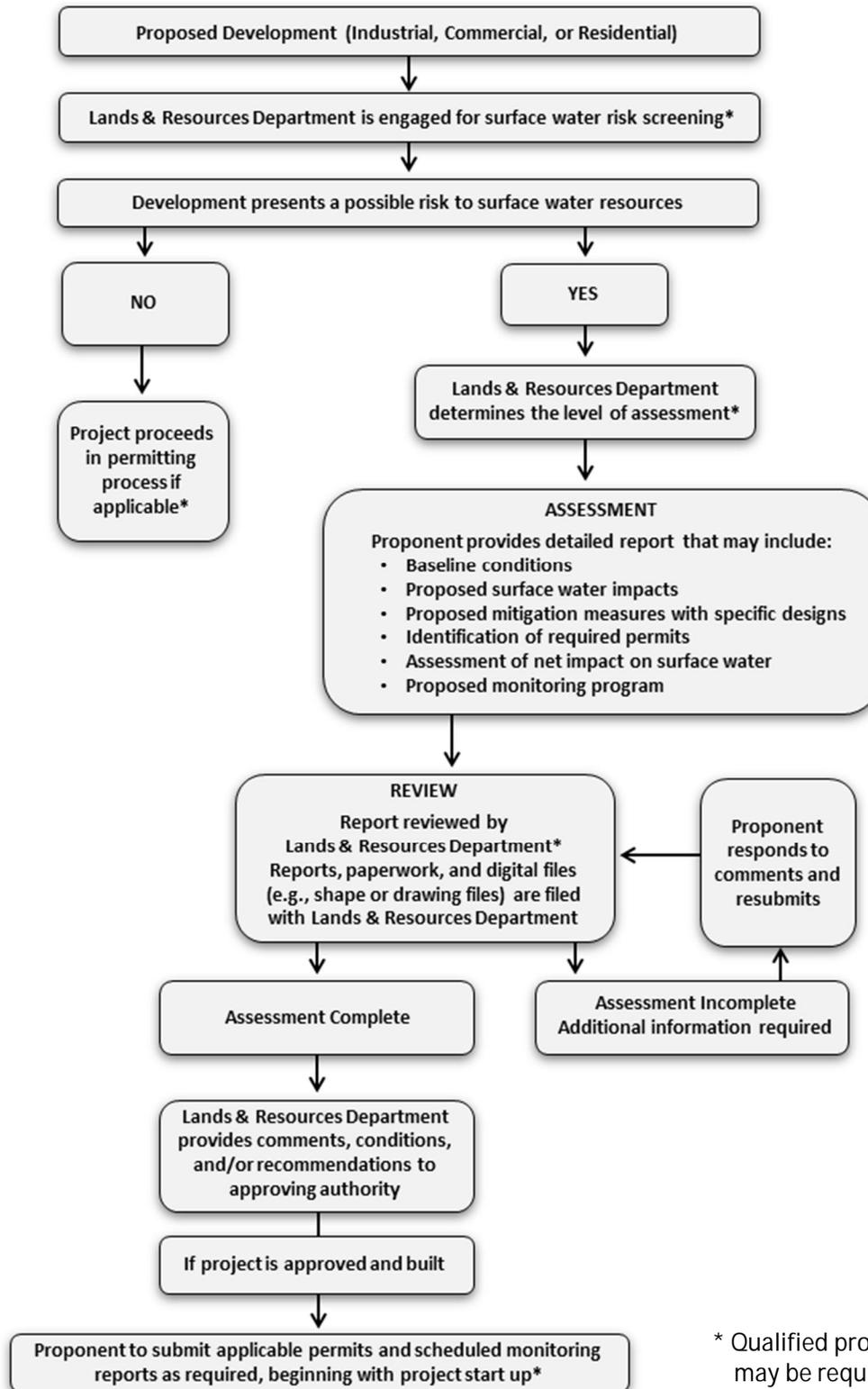
- Stormwater runoff;
- Snow melt; and
- Construction-related activities or land development.

Source of information: <http://water.epa.gov/type/rsl/monitoring/vms50.cfm>

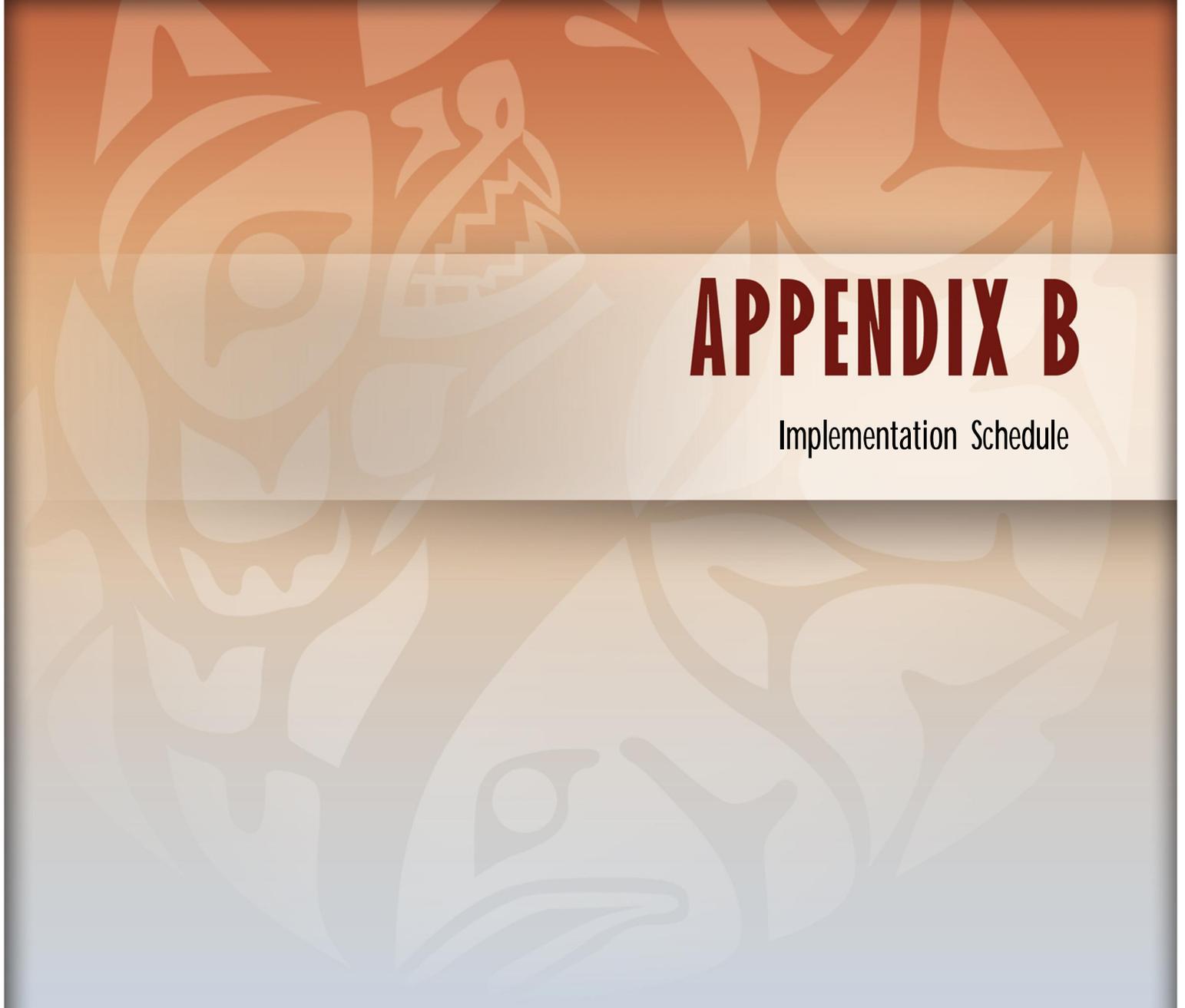


Appendix II

EOP Process: Surface Water Management for Proposed Development



* Qualified professional services may be required.



APPENDIX B

Implementation Schedule





SLIAMMON FIRST NATION

AMENDED LAND CODE

dated for reference December 2011

APPROVED



TABLE OF CONTENTS

DECLARATION AND PREAMBLE4

PART 15

PRELIMINARY MATTERS.....5

 1. Amendment and New Title.....5

 2. Interpretation.....5

 3. Authority to Govern.....9

 4. Purpose10

 5. Description of Sliammon Lands10

PART 212

SLIAMMON FIRST NATION LEGISLATION.....12

 6. Law-Making Powers.....12

 7. Law-Making Procedure14

 8. Regulation-Making Procedure.....17

 9. Publication of Laws and Regulations18

PART 318

MEMBER INPUT AND APPROVALS18

 10. Rights of Eligible Voters18

 11. Community Land Code Meetings.....19

 12. Meeting of Members.....19

 13. Procedure at a Meeting of Members.....20

 14. Ratification Votes21

PART 422

EXPROPRIATION AND LAND EXCHANGE22

 15. Expropriation by Sliammon First Nation.....22

 16. Heritage Sites.....25

 17. Voluntary Land Exchange25

PART 527

ACCOUNTABILITY27

 18. Application27

 19. Conflict of Interest.....27

 20. Procedure for a Conflict of Interest or Appearance of a Conflict of Interest.....28

 21. Competition with Sliammon First Nation Businesses.....29

 22. Financial Management.....30

 23. Financial Records31

 24. Audit32



25. Annual Report.....	33
26. Access to Financial Information	33
PART 6.....	34
LAND ADMINISTRATION	34
27. Sliammon Lands Office	34
28. Lands Committee.....	35
29. Officers, Employees and Contractors	38
30. Registration of Interests and Licences	39
PART 7.....	40
INTERESTS AND LICENCES IN LAND.....	40
31. Interests and Licences	40
32. Existing Interests.....	41
33. New Interests and Licences.....	41
34. Permanent Interests.....	41
35. Limits on Mortgages and Seizures.....	42
36. Residency and Access Rights	43
37. Transfers on Death or Mental Incompetence.....	45
38. Spousal Property Law	46
PART 8.....	47
DISPUTE RESOLUTION	47
39. Informal Resolution of Disputes.....	47
40. Adjudicator Established.....	47
41. Application Procedure	47
42. Referral to Adjudicator.....	48
43. Duties and Powers of the Adjudicator	48
44. Costs	50
45. Appeals to Alternate Forums	51
PART 9.....	51
OTHER MATTERS	51
46. Liability.....	51
47. Offences.....	51
48. Amendments to Land Code	52
49. Commencement	52



SLIAMMON FIRST NATION AMENDED LAND CODE

DECLARATION OF THE SLIAMMON FIRST NATION

We are known collectively as the Sliammon First Nation and through this Land Code, we declare our sovereignty and jurisdiction. We speak our Sliammon language and are part of the larger grouping of the Coast Salish peoples.

Since the beginning of time, our people have lived on the lands that the Creator provided for our Ancestors. They lived by our traditional system of governance that sustained us and our lands and resources for thousands of years. Our society governed all forms of environmental, social and political relations through a sophisticated system of traditional laws, as is our traditional way.

It is from this proud history that Sliammon derives our inherent right of self-government. With jurisdiction and responsible leadership, we will create economic and employment opportunities to sustain and improve the quality of life for present and future generations.

PREAMBLE

WHEREAS the Sliammon First Nation, as it has always done, continues to occupy its lands and based on its traditional teachings, it will empower its Members to be healthy, self-governing stewards of its lands and resources, today and always;

AND WHEREAS the Sliammon First Nation honours its connection to the land, resources and elements of the natural world that provide for its physical and spiritual needs;

AND WHEREAS the Sliammon First Nation recognizes its responsibility to protect the land and its resources for future generations and to protect the rights of the Sliammon First Nation and its Members;

AND WHEREAS the Members of the Sliammon First Nation are a proud, united people whose purpose is to promote a healthy and prosperous future that ensures the continued existence of the Sliammon First Nation as a strong political, social and cultural community that aspires to move ahead as an organized, highly-motivated, determined and self-reliant nation;

AND WHEREAS the Sliammon First Nation values the need to respect, protect and promote its heritage, culture and traditions as the driving force of its success and destiny while understanding that these practices may change and require contemporary expression;



AND WHEREAS Sliammon First Nation wished to manage its land and resources under First Nation Land Management by entering into the Framework Agreement and Individual Agreement with Canada;

AND WHEREAS the Framework Agreement, Individual Agreement and *Sliammon First Nation Land Code* were ratified by Sliammon First Nation on March 20, 2004;

AND WHEREAS the *Sliammon First Nation Land Code* came into force on September 30, 2004;

AND WHEREAS the *Sliammon First Nation Land Code* provides for its amendment with the approval of Members at a Meeting of Members;

NOW THEREFORE, THE SLIAMMON FIRST NATION LAND CODE IS HEREBY AMENDED.

PART 1 PRELIMINARY MATTERS

1. Amendment and New Title

Amendment

1.1 The *Sliammon First Nation Land Code* is hereby repealed and replaced with this law.

New Title

1.2 This law may be cited as the *Sliammon First Nation Amended Land Code*.

2. Interpretation

Definitions

2.1 The following definitions apply in this Land Code:

“Act” means the *First Nations Land Management Act*, S.C. 1999, c. 24;

“Adjudicator” means the person appointed by Council to the Office of the Adjudicator;

“Canada” means Her Majesty the Queen in Right of Canada;

“Chief” means the lawfully elected Chief of Sliammon First Nation;



“Common-law Marriage” means two persons not married to each other that have lived together as Spouses for a period of not less than one year;

“Community Lands” means any Sliammon Lands in which all Members have a common interest;

“Community Land Code Meeting” means a Community Land Code Meeting convened in accordance with sections 11.2 or 11.3 of Part 3;

“Council” means the lawfully elected government of the Sliammon First Nation and includes the Chief;

“Cultural Resource” means an object, site or location of a traditional or cultural practice that is of historical, cultural or archaeological significance to the Sliammon First Nation;

“Eligible Voter” means a Member who has attained the age of 18 years on or before the day of the vote;

“Extended Family”, in relation to a person, means the person’s Immediate Family, grandparent, uncle, aunt, cousin or grandchild;

“First Nation Land Register” means the First Nation Land Register established by the Minister under subsection 25(1) of the Act;

“Framework Agreement” means the *Framework Agreement on First Nation Land Management* entered into between Canada and fourteen First Nations on February 12, 1996, and includes any amendments to the agreement;

“Immediate Family”, in relation to a person, means the person’s parent, sister, brother, child or Spouse;

“Indian Act” means the *Indian Act*, RSC 1985, c.I-5;

“Individual Agreement” means the agreement, dated July 30th, 2004, entered into between the Sliammon First Nation and Canada in accordance with clause 6.1 of the Framework Agreement and subsection 6(3) of the Act;

“Land Code” means this *Sliammon First Nation Amended Land Code*;

“Lands Authority” means the Lands Authority established under the *Sliammon First Nation Land Code*;



“Lands Committee” means the Lands Committee established under section 28.1;

“Lands Manager” means the person appointed by Council to manage the Sliammon Lands Office;

“Law” means a law enacted under this Land Code but does not include a Resolution;

“Majority” means fifty percent plus one (50% + 1);

“Meeting of Members” means a Meeting of Members convened in accordance with sections 13.5 and 13.6 of Part 3;

“Member” means a person registered on the Membership List;

“Membership List” means the list of names of Members maintained by Sliammon First Nation;

“Minister” means the Minister of Aboriginal Affairs and Northern Development;

“Office of the Adjudicator” is the Office of Adjudicator established under section 40.1 of Part 8;

“Ratification Vote” means a Ratification Vote convened in accordance with section 14.3 of Part 3;

“Resolution” means a formal motion moved by a Council member, seconded by another Council member and passed by a quorum of Council at a duly convened meeting;

“Sliammon First Nation” means the Sliammon First Nation band within the meaning of the *Indian Act* for whose use and benefit in common the Sliammon Lands has been set apart by Canada;

“Sliammon Lands” means the lands described in section 5.1;

“Sliammon Lands Office” means the office established by Council to assist in the management and administration of Sliammon Lands;

“Sliammon Lands Register” means the register of Sliammon Lands maintained by the Sliammon Lands Office;

“Spouse” means a person who is married to another, whether by a traditional, religious or civil ceremony, and includes a spouse by Common-law Marriage; and



“Verifier” means a verifier appointed in accordance with clause 8.1 of the Framework Agreement.

Paramountcy

- 2.2 If there is an inconsistency or conflict between this Land Code and any other enactment of the Sliammon First Nation, this Land Code shall prevail to the extent of the inconsistency or conflict.
- 2.3 If there is an inconsistency or conflict between this Land Code and the Framework Agreement, the Framework Agreement shall prevail to the extent of the inconsistency or conflict.

Culture and Traditions

- 2.4 The structures, organizations, laws and procedures established by or under this Land Code shall be interpreted in accordance with the culture, traditions and customs of the Sliammon First Nation, unless otherwise provided.

Non-abrogation

- 2.5 This Land Code is not intended to abrogate or derogate from any aboriginal, treaty or other right or freedom that pertains now or in the future to the Sliammon First Nation or its Members.
- 2.6 This Land Code is not intended to affect the eligibility of the Sliammon First Nation or any Member to receive services or participate in such public or aboriginal programs as may be established from time to time to the extent that the Sliammon First Nation has not assumed responsibility for such services or programs.

Interpretation

- 2.7 This Land Code shall be interpreted in a fair, large and liberal manner.
- 2.8 The principles set out in the Preamble to this Land Code may be used to interpret this Land Code.
- 2.9 In this Land Code:
- (a) the use of the word “shall” denotes an obligation that, unless this Land Code provides to the contrary, shall be carried out as soon as practicable after this Land Code comes into effect or the event that gives rise to the obligation;



- (b) unless it is otherwise clear from the context, the use of the word “including” means “including, but not limited to”, and the use of the word “includes” means “includes, but is not limited to”;
- (c) headings and subheadings are for convenience only, do not form a part of this Land Code and in no way define, limit, alter or enlarge the scope or meaning of any provision of this Land Code;
- (d) a reference to a statute includes every amendment to it, every regulation made under it and any law enacted in substitution for it or in replacement of it;
- (e) unless it is otherwise clear from the context, the use of the singular includes the plural, and the use of the plural includes the singular; and
- (f) unless it is otherwise clear from the context, the use of the masculine includes the feminine, and the use of the feminine includes the masculine.

Fiduciary Relationships

- 2.10 This Land Code is not intended to abrogate the fiduciary relationships between Canada, the Sliammon First Nation and its Members.

Land and Interests Affected

- 2.11 A reference to “land” in this Land Code is, unless the context otherwise requires, a reference to Sliammon Lands and all rights and resources in and of such land, including:
- (a) the water, beds underlying water, riparian rights, minerals and subsurface resources and all other renewable and non-renewable natural resources in and of that land, to the extent that these are under the jurisdiction of Canada or the Sliammon First Nation; and
 - (b) all the interests and licences granted to the Sliammon First Nation by Canada listed in the Individual Agreement.

3. Authority to Govern

Origin of Authority

- 3.1 By enacting this Land Code the Sliammon First Nation is giving effect to its aboriginal title to that portion of its territories comprised of Sliammon Lands.



Flow of Authority

- 3.2 The authority of the Sliammon First Nation to govern its land and resources flows from its aboriginal title and inherent right of self-government.
- 3.3 Through this Land Code, the Sliammon First Nation will exercise its inherent right of self-government and provide for governance that is accessible, stable, effective, accountable and transparent.

4. Purpose

Purpose

- 4.1 The purpose of this Land Code is to set out the principles and legislative and administrative structures that apply to Sliammon Lands and by which the Sliammon First Nation shall exercise authority over that land.

5. Description of Sliammon Lands

Sliammon Lands

- 5.1 The Sliammon Lands that is subject to this Land Code has the same meaning as “first nation land” in the Act and more specifically means the lands described under section 2 of the Individual Agreement as follows:
- (a) Tee shoh sum, Sliammon Indian Reserve No. 1, being those lands within the Province of British Columbia, Canada, as described in the following documents which either set aside lands as reserve for the benefit of the Sliammon First Nation, or alternatively remove these lands from reserve status:
 - (i) the lands described in Provincial Order in Council No. 1036, dated July 29, 1938 and recorded in the Indian Lands Registry as number 8042;
 - (ii) the lands described in the Order in Council of the Privy Council No. 2632, dated November 30, 1932 and recorded in the Indian Lands Registry as number 9381-316;
 - (iii) the lands described in Order in Council of the Privy Council No. 1404, dated July 13, 1933 and recorded in the Indian Lands Registry as number 9382-316; and



- (iv) the lands described in Order in Council of the Privy Council No. 1968-1213, dated June 28, 1968 and recorded in the Indian Lands Registry as number 253606.
- (b) Ah gyk son, Harwood Island Indian Reserve No. 2, being those lands within the Province of British Columbia, Canada, as described in the following document which sets aside lands as reserve for the benefit of the Sliammon First Nation:
 - (i) the lands described in Order in Council of the Privy Council No. 1973-3159 dated October 16, 1973, and recorded in the Indian Lands Registry as number X18885.
- (c) Pah Kee ahjim, Paukeanum Indian Reserve No. 3, being those lands within the Province of British Columbia, Canada, as described in the following document which sets aside lands as reserve for the benefit of the Sliammon First Nation:
 - (i) the lands described in Provincial Order in Council No. 1036, dated July 29, 1938 and recorded in the Indian Lands Registry as number 8042.
- (d) Toh Kwon_non, Toquana Indian Reserve No. 4, being those lands within the Province of British Columbia, Canada, as described in the following document which sets aside lands as reserve for the benefit of the Sliammon First Nation:
 - (i) the lands described in Provincial Order in Council No. 1036, dated July 29, 1938 and recorded in the Indian Lands Registry as number 8042.
- (e) Tohk_natch, Tokenatch Indian Reserve No. 5, being those lands within the Province of British Columbia, Canada, as described in the following document which sets aside lands as reserve for the benefit of the Sliammon First Nation:
 - (i) the lands described in Provincial Order in Council No. 1036, dated July 29, 1938 and recorded in the Indian Lands Registry as number 8042.
- (f) Kah kee ky, Kahkaykay Indian Reserve No. 6, being those lands within the Province of British Columbia, Canada, as described in the following document which sets aside lands as reserve for the benefit of the Sliammon First Nation:
 - (i) the lands described in Provincial Order in Council No. 1036, dated July 29, 1938, and recorded in the Indian Lands Registry as number 8042.



Additional Land

- 5.2 The following lands may be made subject to this Land Code if they are, or become, reserve land and the following conditions are met:
- (a) any land owned jointly by the Sliammon First Nation and one or more other First Nations, when the First Nations agree upon a joint management scheme for that land; and
 - (b) any land or interest acquired by the Sliammon First Nation after this Land Code comes into force, whether by land claim, purchase or other process, when an environmental audit declares it free of environmental hazard and safe for Sliammon First Nation use.

Land Exchange

- 5.3 For greater certainty, section 5.2 does not apply to land acquired by voluntary land exchange in accordance with section 17.

Inclusion of Land or Interest

- 5.4 If the relevant conditions in section 5.2 are met, Council shall call a Community Land Code Meeting in accordance with sections 11.3 and 11.14 and, after receiving input from Members, Council may, by Resolution, declare the land or interest to be subject to this Land Code.

**PART 2
SLIAMMON FIRST NATION LEGISLATION**

6. Law-Making Powers

General

- 6.1 Council shall develop laws consistent with this Land Code regarding the management, administration, use and protection of Sliammon Lands.

Council May Make Laws

- 6.2 Without limiting the generality of section 6.1, Council may make laws in relation to:
- (a) development, conservation, protection, management, use and possession of Sliammon Lands;



- (b) interests in and licences to use Sliammon Lands;
- (c) any matter necessary to give effect to this Land Code; and
- (d) any matter necessary or ancillary to a law in relation to Sliammon Lands.

6.3 Council may make regulations authorized to be made under a law.

Examples of Laws

6.4 For greater certainty, Council may make laws in relation to Sliammon Lands including:

- (a) zoning and land use planning;
- (b) regulation, control, authorization and prohibition of the occupation and development of land;
- (c) creation, regulation and prohibition of interests and licences;
- (d) environmental assessment and environmental protection;
- (e) archaeological assessment and protection of archaeological and Cultural Resources;
- (f) provision of local services and imposition of user charges;
- (g) enforcement of laws;
- (h) provision of services for the resolution, outside the courts, of disputes;
- (i) setting aside and regulation of parks, parklands and recreational lands;
- (j) setting aside and regulation of heritage lands;
- (k) rules and procedures for the receipt, management, expenditure, investment and borrowing of moneys, including the establishment of administrative structures to manage such moneys;
- (l) creation of management and administrative bodies or agencies;
- (m) removal and punishment of persons trespassing upon Sliammon Lands or



frequenting Sliammon Lands for prohibited purposes;

- (n) public nuisance and private nuisance;
- (o) regulation of sanitary conditions and the provision of sanitary services in private premises and public places;
- (p) construction and maintenance of boundary and internal fences;
- (q) construction, maintenance and management of roads, water courses, water diversions, storm drains, bridges, ditches and other local and public works; and
- (r) regulation of traffic and transportation.

6.5 Council shall perform all the duties and functions, and exercise all the powers, of the Sliammon First Nation that are not specifically assigned to an individual or body established under this Land Code.

6.6 Notwithstanding section 6.5, Council may, by Resolution, delegate administrative authority to an individual or body established or authorized under this Land Code.

7. Law-Making Procedure

General

7.1 Council shall enact laws under this Land Code in accordance with this part.

Development of Laws

7.2 The development of a draft law shall be initiated by:

- (a) a Resolution, setting out the specific subject matter of the proposed law; or
- (b) a petition presented to Council signed by at least forty (40) Eligible Voters, setting out the request for development of a law and setting out the specific subject matter of the proposed law.

First Reading: Draft Law

7.3 Upon completion of the draft law, Council shall table it at a regular meeting of Council for consideration.



Decision on Draft Law

- 7.4 After considering the draft law, Council shall, by Resolution:
- (a) accept the draft law in principle;
 - (b) reject the draft law; or
 - (c) direct further work on the draft law and specify a return date to re-table the draft law at a future Council meeting.

Explanation for Rejection

- 7.5 Upon the request of any Eligible Voter, Council shall explain the reasons for rejecting a draft law.

Second Reading: Community Land Code Meeting on Draft Law

- 7.6 If Council has accepted the draft law in principle, Council shall schedule a Community Land Code Meeting in accordance with sections 11.3 and 11.14 for the purpose of consulting with Members on the draft law.

Written Notice of Meeting

- 7.7 The notice of the Community Land Code Meeting shall include:
- (a) a summary of the draft law;
 - (b) notification that a full copy of the draft law may be obtained by Members at the Sliammon First Nation administration building;
 - (c) an invitation for Members to provide written comments to Council on the draft law; and
 - (d) the return date by which Members must provide written comments to Council, which date shall be at least twenty (20) days from the date of the Meeting of Members.

Conduct of Meeting

- 7.8 Copies of the draft law shall be made available to Members attending the Community Land Code Meeting.



7.9 At the Community Land Code Meeting, Council or its delegate shall explain the purpose and provisions of the draft law, and invite questions and comments by Members.

Council Shall Consider Comments

7.10 After the expiry of the time specified under subsection 7.7(d) for written comments from Members, Council shall consider any comments received, the needs of the community and any other relevant matters, and shall prepare or cause to be prepared a final draft law.

Third Reading: Final Draft Law

7.11 Upon completion of the final draft law, Council shall table it at a regular meeting of Council for consideration.

Decision on Final Draft

7.12 Subject to section 12.1 (*Matters Requiring Approval at Meeting of Members*) and section 14.1 (*Matters Requiring Approval by Ratification Vote*), after considering the final draft law Council shall, by Resolution:

- (a) enact the final draft law;
- (b) make changes to the final draft law;
- (c) reject the final draft law;
- (d) schedule a Community Land Code Meeting in accordance with sections 7.6 and 7.7 for consideration of the final draft law by Members; or
- (e) refer the final draft law for approval by Eligible Voters at a Meeting of Members or in a Ratification Vote.

Written Notice of Approval Meeting

7.13 If a Meeting of Members or a Ratification Vote is called under subsection 7.12(e), section 12.1 or section 14.1 to approve the final draft law, the notice of the meeting or vote shall include:

- (a) a summary of the final draft law; and
- (b) notification that a full copy of the final draft law may be obtained by Members at the Sliammon First Nation administration building.



Enactment of Law by Council

7.14 A law is enacted on the date that it is approved and adopted by Resolution of Council.

Enactment of Law by Eligible Voters

7.15 If a law is approved by Eligible Voters at a Meeting of Members or in a Ratification Vote, the law shall be deemed to be enacted on the date of its approval and it shall have the same force and effect as a law enacted by Resolution of Council.

Enactment of Law on Urgent Matters

7.16 Council may enact a law without calling a Community Land Code Meeting, Meeting of Members or a Ratification Vote if Council is reasonably of the opinion that the law is required urgently to protect Sliammon Lands or Members.

7.17 A law enacted under section 7.16 shall be deemed to have been repealed and to have no force and effect as of twenty-eight (28) days after its enactment, but it may be re-enacted in accordance with this part.

Amendments

7.18 A law may be repealed or amended by following the procedure specified in the law.

7.19 If a law does not specify a procedure for its repeal or amendment, the law may be repealed or amended by the same procedure that was followed to enact it.

Commencement Date

7.20 If the date of commencement is not specified in a law, the law shall come into force on the date of its enactment.

8. Regulation-Making Procedure

8.1 Council may initiate the development of a regulation by Resolution.

8.2 Council may, at any time and in any manner Council considers advisable, consult with Members regarding a proposed regulation.

8.3 A regulation is enacted on the date that it is approved and adopted by Resolution.



9. Publication of Laws and Regulations

Publication

9.1 All laws and regulations enacted by Resolution shall be published in the minutes of Council meeting.

Posting Laws

- 9.2 Within seven (7) days after a law or regulation has been enacted, Council shall:
- (a) post a copy of the law or regulation in a public area of the Sliammon First Nation administration offices; and
 - (b) deposit an original copy of the law or regulation in the register of laws referred to in section 9.3.

Register of Laws

- 9.3 Council shall cause to be kept, at the Sliammon First Nation administration offices, a register of laws containing the original copy of all laws and regulations, including any that have been repealed or that are no longer in force.
- 9.4 Any person may have, during regular business hours at the Sliammon First Nation administration offices, reasonable access to the register of laws.

Copies for Any Person

- 9.5 Any person may obtain a copy of a law or regulation upon payment of such reasonable fee as may be set by Council.
- 9.6 Section 9.5 does not preclude Council from making copies of a law or regulation available to Members without a fee.

**PART 3
MEMBER INPUT AND APPROVALS**

10. Rights of Eligible Voters

Rights of Eligible Voters

10.1 Every Eligible Voter may vote at a Meeting of Members and in a Ratification Vote.



11. Community Land Code Meetings

Community Consultations

- 11.1 The Council, Lands Manager and Lands Committee may hold Community Land Code Meetings to consult with Members on matters relating to Sliammon Lands.
- 11.2 If a Community Land Code Meeting is called under section 11.1, notice shall be given to Members by any method that the Council, Lands Manager or Lands Committee may consider appropriate in the circumstances.

Written Notice of Community Land Code Meeting

- 11.3 If a Community Land Code Meeting is required to be held under this Land Code, written notice of the meeting shall be provided to Eligible Voters at least ten (10) business days before the date of the meeting by:
- (a) a notice delivered or mailed to Eligible Voters at their last known address; or
 - (b) publication of a notice in the Sliammon First Nation newsletter delivered or mailed to Eligible Voters at their last known address; and
 - (c) posting of a notice in a public area of the Sliammon First Nation administration offices.
- 11.4 The written notice of a Community Land Code Meeting shall:
- (a) specify the date, time and place of the meeting; and
 - (b) include a summary of the matter to be discussed at the meeting.

Who May Attend a Community Land Code Meeting

- 11.5 Any Member may attend a Community Land Code Meeting.

12. Meeting of Members

Matters Requiring Approval by Members

- 12.1 Approval at a Meeting of Members shall be obtained for:
- (a) subject to section 16, any land use plan or amendment to a land use plan;
 - (b) a conflict of interest under section 20.10;



- (c) a law enacted under section 38;
 - (d) an amendment to this Land Code; and
 - (e) any law or class of law that Council, by Resolution, declares to be subject to this section.
- 12.2 Subject to section 12.3, any matter requiring approval at a Meeting of Members must receive a Majority vote in favour of the matter in accordance with section 13.3.
- 12.3 Council may, by Resolution, provide that any matter that requires approval at a Meeting of Members may instead be decided by:
- (a) mail-in ballots in accordance with the same standards of quorum and approval that apply under section 13.3; or
 - (b) a Ratification Vote.

13. Procedure at a Meeting of Members

Quorum for a Meeting of Members

- 13.1 The quorum for a Meeting of Members is twenty-five percent (25%) of Eligible Voters.

Voting at a Meeting of Members

- 13.2 Voting at a Meeting of Members shall be conducted by a combination of ballots cast in person at the meeting and mail-in ballots.

Requirements for Approval at a Meeting of Members

- 13.3 A matter shall be considered to be approved at a Meeting of Members if:
- (a) at least 25% of Eligible Voters cast a ballot either in person at the meeting or by mail-in ballot; and
 - (b) the Majority of Eligible Voters who cast a ballot vote in favour of the matter.
- 13.4 Voting in person at a Meeting of Members shall be by secret ballot.



Written Notice of a Meeting of Members

- 13.5 Written notice of a Meeting of Members shall be given to Eligible Voters at least ten (10) business days before the meeting by:
- (a) a notice delivered or mailed to Eligible Voters at their last known address; or
 - (b) publication of a notice in the Sliammon First Nation newsletter delivered or mailed to Eligible Voters at their last known address; and
 - (c) posting of a notice in a public area of the Sliammon First Nation administration offices.
- 13.6 The written notice of a Meeting of Members shall:
- (a) specify the date, time and place of the meeting; and
 - (b) include a summary of the matter to be discussed and decided at the meeting.

Who May Attend a Meeting of Members

- 13.7 Any Member may attend a Meeting of Members.
- 13.8 Council may, by Resolution, declare a Meeting of Members to be a closed meeting that only Members and any other persons identified in the Resolution may attend.

Council May Schedule More Meetings

- 13.9 Council may schedule more than one Meeting of Members to discuss and decide a matter that requires approval at a Meeting of Members.

14. Ratification Votes

Matters Requiring Approval by Ratification Vote

- 14.1 Approval by a Ratification Vote shall be obtained for:
- (a) development on a heritage site designated in a land use plan;
 - (b) voluntary exchange of Sliammon Lands;
 - (c) expropriation of a Member's interest;



- (d) amendment to the Individual Agreement that reduces the amount of funding provided by Canada; and
- (e) any law or class of law that Council, by Resolution, declares to be subject to this section.

Individual Agreement

- 14.2 For greater certainty, an amendment to, or renewal of, the Individual Agreement shall not require approval by a Ratification Vote unless the amendment or renewal reduces the amount of funding provided by Canada.

Ratification Vote Process

- 14.3 Subject to section 14.4, a Ratification Vote under this Land Code shall be conducted in substantially the same manner as that set out in the *Sliammon First Nation Community Ratification Process* that was used to ratify the *Sliammon First Nation Land Code*.

No Verifier Required

- 14.4 A Verifier is not required for a Ratification Vote under this Land Code.

Requirements for Approval by Ratification Vote

- 14.5 A matter shall be considered approved by a Ratification Vote if:
- (a) at least the Majority of Eligible Voters participate in the vote; and
 - (b) the Majority of those participating in the vote cast a vote in favour of the matter.

PART 4 EXPROPRIATION AND LAND EXCHANGE

15. Expropriation by Sliammon First Nation

Rights and Interests That May be Expropriated

- 15.1 An interest or licence in Sliammon Lands or in any building or other structure on such land may only be expropriated by the Sliammon First Nation in accordance with the Framework Agreement and a law enacted in accordance with section 15.3.



Community Purposes

- 15.2 The Sliammon First Nation may expropriate only for a necessary community purpose or works of the Sliammon First Nation, including a fire hall, sewage or water treatment facility, community center, public work, road, school, day-care facility, hospital, health-care facility or retirement home.

Expropriation Laws

- 15.3 Council shall enact a law setting out the rights and procedures for expropriation, including provisions in relation to:
- (a) taking possession of the interest or licence;
 - (b) transfer of the interest or licence;
 - (c) notice of expropriation;
 - (d) service of a notice of expropriation;
 - (e) entitlement to compensation;
 - (f) determination of the amount of compensation; and
 - (g) the method of payment of compensation.

Public Report

- 15.4 Before the Sliammon First Nation may expropriate an interest or licence, Council shall:
- (a) prepare a report on the reasons for the expropriation; and
 - (b) post a copy of the report in the Sliammon First Nation administration offices.

Rights that May Not be Expropriated

- 15.5 An interest of Canada, or an interest previously expropriated under section 35 of the *Indian Act*, is not subject to expropriation by the Sliammon First Nation.

Mutual Agreement

- 15.6 Sliammon First Nation may expropriate only after a good faith effort to acquire, by mutual agreement, the interest or licence in Sliammon Lands.



Limitation

- 15.7 The law enacted under section 15.3 shall include provisions having the following effect:
- (a) an expropriation shall be made only for the smallest interest necessary and for the shortest time necessary; and
 - (b) where less than a full interest is expropriated, a person whose interest is expropriated may continue to use and occupy the land for purposes that are not inconsistent with the expropriation.

Notice and Compensation

- 15.8 The Sliammon First Nation shall, in accordance with a law enacted under section 15.3 and the Framework Agreement:
- (a) serve reasonable notice of the expropriation on each affected holder of the interest or licence to be expropriated; and
 - (b) pay fair and reasonable compensation to the holder of the interest or licence being expropriated.

Compensation Calculation

- 15.9 The total value of compensation under subsection 15.8(b) shall be based on:
- (a) the fair market value of the interest or licence being expropriated;
 - (b) the replacement value of any improvement to the land being expropriated;
 - (c) the damages attributable to any disturbance; and
 - (d) damages for any reduction in the value of a remaining interest.

Market Value

- 15.10 The fair market value of an expropriated interest or licence is equal to the amount that would have been paid for the interest or licence if it had been sold on Sliammon Lands by a willing seller to a willing buyer.

Dispute Resolution

- 15.11 Subject to section 15.13, the resolution of disputes concerning the right of the Sliammon



First Nation to expropriate shall be determined by neutral evaluation in the same manner as provided in Part IX of the Framework Agreement.

- 15.12 The 60 day period referred to in clause 32.6 of the Framework Agreement shall be applied, as appropriate in the circumstances, by the neutral evaluator.
- 15.13 The resolution of the following disputes shall be determined by arbitration in the same manner as provided in Part IX of the Framework Agreement:
- (a) a dispute concerning the right of the holder of an expropriated interest or licence to compensation; and
 - (b) a dispute concerning the amount of compensation.

16. Heritage Sites

Approval of Amendments

- 16.1 No amendment may be made to a land use plan to develop or delete from the land use plan a heritage site designated under that plan unless the amendment receives prior approval by a Ratification Vote.

17. Voluntary Land Exchange

Conditions for a Land Exchange

- 17.1 The Sliammon First Nation may agree with another party to exchange Sliammon Lands for land from that other party in accordance with this Land Code and the Framework Agreement.

No Effect

- 17.2 A land exchange is of no effect unless it approved by a Ratification Vote.

Land to be Received

- 17.3 A land exchange may proceed to a Ratification Vote only if the land to be received by the Sliammon First Nation:
- (a) is of equal or greater area than the Sliammon Lands to be exchanged;
 - (b) is of a value comparable to the appraised value of the Sliammon Lands to be exchanged; and



- (c) is eligible to become a reserve under the *Indian Act* and Sliammon Lands subject to this Land Code.

Negotiators

- 17.4 A person who negotiates a land exchange on behalf of the Sliammon First Nation shall be designated by Resolution.

Additional Land

- 17.5 The Sliammon First Nation may receive additional compensation, including money or other land in addition to the land referred to in section 17.3.
- 17.6 Such other land may be held by the Sliammon First Nation in fee simple or other manner.

Federal Consent

- 17.7 Before the Sliammon First Nation concludes a land exchange agreement, it shall receive a written statement from Canada stating that Canada:
- (a) consents to set aside as a reserve the land to be received in the land exchange under section 17.3, as of the date of the land exchange or such later date as Council may specify by Resolution; and
 - (b) consents to the manner and form of the exchange as set out in the land exchange agreement.

Community Notice

- 17.8 At such time as negotiation of a land exchange agreement is concluded, and at least twenty-one (21) days before the Ratification Vote provided for in section 17.2, Council shall provide the following information to the Members:
- (a) a description of the Sliammon Lands to be exchanged;
 - (b) a description of the land to be received by the Sliammon First Nation;
 - (c) a description of any other compensation to be received;
 - (d) a report of a certified land appraiser stating that the conditions in subsections 17.3(a) and (b) have been met;
 - (e) a copy of the land exchange agreement; and



- (f) a copy of the statement from Canada referred to in section 17.7.

Process of Land Exchange

17.9 A land exchange agreement shall provide that:

- (a) the other party to the exchange shall transfer to Canada the title to the land that is to be set aside as a reserve;
- (b) Council shall pass a Resolution authorizing Canada to transfer title to the Sliammon Lands being exchanged, in accordance with the land exchange agreement; and
- (c) a copy of the instruments transferring title to the relevant parcels of land shall be registered in the Sliammon Lands Register and the First Nation Land Register.

PART 5 ACCOUNTABILITY

18. Application

18.1 This part applies only to conflicts of interest and financial matters in relation to the management and administration of Sliammon Lands under this Land Code.

19. Conflict of Interest

General Duties and Definitions

- 19.1 No member of Council shall be involved in any transaction or matter where they are in a conflict of interest or appear to be in a conflict of interest.
- 19.2 A conflict of interest exists where a member of Council or a member of their Immediate Family has a personal or business interest in a transaction or matter under consideration by Council which competes, or appears to compete with the interests of the Sliammon First Nation or the objective exercise of the Council members' powers, duties, functions or responsibilities.
- 19.3 No conflict of interest or appearance of a conflict of interest exists where:
 - (a) the member of Council or a member of their Immediate Family holds an interest



in the same manner and under the same conditions as other Members;

- (b) Council enacts a law or develops a policy providing members of Council with reasonable remuneration, vacation, sick leave or other benefits for services as elected officials of the Sliammon First Nation; or
- (c) the interests are so remote or insignificant that they could not be reasonably regarded as likely to influence the individual Council member in the exercise of a power or performance of a duty or a function.

20. Procedure for a Conflict of Interest or Appearance of a Conflict of Interest

- 20.1 A member of Council who has, or believes that they have, a conflict of interest shall disclose the nature and extent of the conflict of interest at the first Council meeting after the conflict becomes known to the member of Council, whether or not the transaction or matter giving rise to the conflict has been concluded.
- 20.2 Where the interest of a member of Council has not been disclosed as required by section 20.1 by reason of the member of Council's absence from the meeting at which the matter was first raised, the member of Council shall disclose the interest and comply with this Part at the next meeting of Council.
- 20.3 A member of Council may request a decision of Council on whether there is a conflict of interest.
- 20.4 After declaring the conflict of interest, the member of Council shall:
- (a) leave the meeting during consideration of the matter in question;
 - (b) not be counted in the quorum; and
 - (c) not participate in the discussion or vote on the matter in question.
- 20.5 A member of Council who is in a conflict of interest shall not attempt in any way or at any time to influence the discussion or vote on the matter in question.
- 20.6 Every declaration of a conflict of interest and the details thereof shall be recorded in the minutes of the Council meeting.
- 20.7 Notwithstanding section 19.1, Council may approve a transaction or matter by Resolution where:



- (a) the member of Council has complied with subsections 20.1 through 20.5; and
 - (b) Council determines the transaction or matter is fair and reasonable.
- 20.8 Where a member of Council is shown to have withheld material information or to have provided false or misleading information for consideration in a Resolution approving a transaction or matter under section 20.7, the Resolution shall be without force and effect.
- 20.9 A Resolution authorizing a transaction or matter may be made conditional upon the member of Council taking such steps as Council may prescribe to protect the interests of Council or the Sliammon First Nation or to maintain trust in the conduct of Council's activities.
- 20.10 Where as a result of a conflict of interest a quorum of Council cannot be met, the matter shall be decided at a Meeting of Members.
- 20.11 Notice of a Meeting of Members under section 20.10 shall be provided in accordance with sections 13.5 and 13.6 and shall further include:
- (a) notification that a report on the matter may be obtained at the Sliammon First Nation administration offices; and
 - (b) a statement that a determination of the matter shall be made by a vote of the Eligible Voters in accordance with section 13.3.
- 20.12 At the Meeting of Members Council shall present the report on the matter and invite questions and comments by the Members.
- 20.13 The Eligible Voters present at the Meeting of Members shall vote on whether to approve or reject the transaction or matter, with or without conditions, or make such other decision as may be appropriate in the circumstances.
- 20.14 The decision of the Eligible Voters present at the Meeting of Members shall be recorded in the minutes and, where required, shall have the same effect as a Resolution under section 20.7.

21. Competition with Sliammon First Nation Businesses

- 21.1 No Member of Council shall, during their term of office, engage as a partner, officer, director, shareholder, advisor, employee, or in any other capacity, in any business that is in competition with a business carried on by the Sliammon First Nation, without first complying with the provisions of section 20.7.



22. Financial Management

Financial Management and Policy

- 22.1 Council shall continue or implement a system of financial planning and financial administration for the management of Sliammon First Nation moneys through which Council, Sliammon First Nation employees and other persons who manage moneys in relation to Sliammon Lands are accountable to the Members within the meaning of clause 5.2(d) of the Framework Agreement.
- 22.2 Council may, in accordance with this Land Code, adopt a financial policy to further manage moneys in relation to Sliammon Lands.

Establishment of Bank Accounts

- 22.3 Council shall maintain one or more financial accounts in a financial institution and shall deposit in those accounts:
- (a) transfer payments received from Canada for the management and administration of Sliammon Lands;
 - (b) moneys received by the Sliammon First Nation from the grant or disposition of interests or licences in Sliammon Lands;
 - (c) all fees, fines, charges and levies collected under a law or Resolution;
 - (d) all capital and revenue moneys received from Canada from the grant or disposition of interests and licences in Sliammon Lands; and
 - (e) any other land revenue received by the Sliammon First Nation.

Signing Officers

- 22.4 Council shall authorize the signing officers of the Sliammon First Nation to sign cheques and other bills of exchange or transfer drawn on a financial account maintained under section 22.3.

Fiscal Year

- 22.5 The fiscal year of the Sliammon First Nation shall begin on April 1 of each year and end on March 31 of the following year.



Adoption of Budget

- 22.6 Council shall, by Resolution prior to the beginning of each fiscal year, adopt a land management budget for that fiscal year and may, if Council deems it necessary in the course of the fiscal year, adopt one or more supplementary budgets for that fiscal year.
- 22.7 Prior to adopting a budget referred to in section 22.6, Council shall consult with the Lands Manager.

Procedure

- 22.8 After adopting a land management budget or supplementary budget, Council shall, as soon as practicable, make a copy of the budget or supplementary budget available at the Sliammon First Nation administration offices for inspection by Members.

Expenditures

- 22.9 Council may not expend moneys in relation to Sliammon Lands or commit itself, by contract or otherwise, to expend moneys in relation to Sliammon Lands unless the expenditure is authorized by a Sliammon Law or an adopted budget.

Other Laws and Policies

- 22.10 Council shall establish a process for determining:
- (a) fees and rents for interests and licences in Sliammon Lands; and
 - (b) fees for services provided in relation to Sliammon Lands and compliance with this Land Code.

23. Financial Records

Financial Records

- 23.1 The Sliammon First Nation shall keep financial records in accordance with generally accepted accounting principles.

Offences

- 23.2 A person who has control of the financial records of the Sliammon First Nation and who impedes or obstructs anyone from exercising a right to inspect those records is guilty of an offence.



Preparation of Financial Statement

- 23.3 Within 90 days after the end of each fiscal year, Council shall prepare a financial statement in comparative form, containing:
- (a) a balance sheet;
 - (b) a statement of revenues and expenditures and a comparison of these with the amounts stated in the land management budget and any supplementary budget; and
 - (c) any other information necessary for a fair presentation of the financial position of Sliammon First Nation in relation to Sliammon Lands.

Consolidated Accounts

- 23.4 The accounting, auditing and reporting requirements of this Land Code may be consolidated with other accounts, audits and reports of the Sliammon First Nation.

24. Audit

Appointment of Auditor

- 24.1 For each fiscal year, Council shall appoint a duly accredited auditor to audit the financial records of the Sliammon First Nation in relation to Sliammon Lands.

Vacancy in Office

- 24.2 If a vacancy occurs during the term of an auditor, Council shall forthwith appoint a new auditor for the remainder of the former auditor's term.

Remuneration

- 24.3 An appointment under section 24.1 shall contain a statement approving the remuneration to be paid to the auditor.

Duty of Auditor

- 24.4 The auditor shall, within 120 days after the end of the Sliammon First Nation's fiscal year, prepare and submit to Council an audit report on the Sliammon First Nation's financial statement stating whether, in the opinion of the auditor, the financial statement presents fairly and accurately the financial position of the Sliammon First Nation in accordance with generally accepted accounting principles applied on a basis consistent



with that applied in the previous fiscal year.

Access to Records

24.5 The auditor may at any reasonable time inspect any financial records of the Sliammon First Nation and the financial records of any person or body authorized to administer money in relation to Sliammon Lands.

Presentation of Audit Report

24.6 Council shall present the audit report at a Meeting of Members.

25. Annual Report

Publish Annual Report

25.1 Council shall ensure, within thirty (30) days of receiving an audit report under section 24.4, that an annual report on Sliammon Lands management is prepared.

25.2 The annual report prepared under section 25.1 shall include:

- (a) an annual review of land management activities;
- (b) a copy and explanation of the audit report as it applies to Sliammon Lands; and
- (c) such other matters as may be directed by Council or reasonably requested by the Lands Manager.

26. Access to Financial Information

Access Law

26.1 Council shall, in consultation with the Lands Manager, develop policies and procedures setting out the rights and procedures by which Members and other persons may exercise access to Sliammon First Nation financial information.

26.2 The policies and procedures developed under section 26.1 shall:

- (a) take protection of privacy into account; and
- (b) provide that a Member may, during normal business hours at the Sliammon First Nation administration offices, inspect a copy of the audit report, the annual report on Sliammon Lands management, the budget or the supplementary budget.



PART 6
ADMINISTRATION OF SLIAMMON LANDS

27. Sliammon Lands Office

27.1 The Sliammon Lands Office shall carry out duties and responsibilities delegated or assigned to it under this Land Code and any other applicable law.

27.2 Without limiting the generality of section 27.1, the Sliammon Lands Office shall:

- (a) administer Sliammon Lands in accordance with this Land Code and any other applicable law or regulation;
- (b) develop forms of written instruments for use in registering or recording interests or licences in the Sliammon Lands in the Sliammon Lands Register if it is deemed necessary and advisable by the Sliammon Lands Office;
- (c) process applications for the registration or recording of written instruments and documents in the Sliammon Lands Register in relation to interests or licences in Sliammon Lands;
- (d) provide electronic copies of applications for the registration and recording of written instruments and documents in the Sliammon Lands Register in relation to interests or licences in Sliammon Lands to the First Nation Land Register;
- (e) arrange for the execution of written instruments and documents on behalf of Sliammon First Nation;
- (f) maintain and protect records in relation to Sliammon Lands; and
- (g) perform such other duties and functions consistent with this Land Code as Council may direct.

Lands Manager

27.3 The Lands Manager shall manage the Sliammon Lands Office and perform such duties and responsibilities delegated or assigned to the Lands Manager under this Land Code or any other applicable law.

27.4 In consultation with Council, the Lands Manager may develop policies and procedures required for the proper administration and management of the Sliammon Lands Office and the Sliammon Lands Register.



- 27.5 Without limiting the generality of sections 27.1, 27.3 and 27.4, the Lands Manager shall:
- (a) oversee the day-to-day operations of the Sliammon Lands Office;
 - (b) advise the Lands Committee and Council on matters in relation to Sliammon Lands;
 - (c) make recommendations to the Lands Committee and Council on the development of laws, policies and procedures in relation to Sliammon Lands;
 - (d) subject to Part 8 (Dispute Resolution), hold regular and special meetings with Members to discuss issues related to Sliammon Lands, and make recommendations to the Lands Committee and Council on the resolution of such issues;
 - (e) assist in the exchange of information between Members and Council regarding Sliammon Lands issues;
 - (f) oversee community consultations under this Land Code;
 - (g) schedule and oversee Land Committee elections;
 - (h) monitor community approvals under this Land Code; and
 - (i) perform such other duties and functions consistent with this Land Code as Council may direct.

28. Lands Committee

Lands Committee Established

28.1 The Lands Authority is hereby dissolved and the Lands Committee is established.

28.2 The Lands Committee shall:

- (a) assist the Lands Manager with administrative decisions in relation to Sliammon Lands;
- (b) review draft laws and provide comments to Council;
- (c) recommend to Council laws, policies and procedures in relation to Sliammon



Lands;

- (d) consult with Members on land issues; and
- (e) perform such other duties and functions as Council or the Lands Manager may direct.

Composition

28.3 The Lands Committee shall be composed of:

- (a) the Lands Manager;
- (b) one member of Council appointed by Council; and
- (c) four (4) members elected at a Community Land Code Meeting.

Eligibility for Election to Lands Committee

28.4 Any Eligible Voter, whether or not resident on Sliammon Lands, shall be eligible for election to the Lands Committee, except for the following:

- (a) a person convicted of an offence by way of indictment or felony conviction within five (5) years prior to the date of the election; and
- (b) any person convicted of a corrupt practice in connection with an election, including accepting a bribe, dishonesty or wrongful conduct.

Staggered Terms of Office

28.5 Subject to section 28.8, Lands Committee members shall hold the following terms of office:

- (a) Council shall appoint a member of Council as soon as practicable following Council elections and that member shall sit on the committee until the next Council election;
- (b) the Lands Manager shall sit on the committee for as long as he or she holds the position of Lands Manager;
- (c) elected members shall sit on the committee for a maximum of four (4) years, but they are not precluded from being elected for further terms; and



- (d) an election for two (2) elected positions on the committee shall be held every two years to ensure that elected members serve staggered terms.

Elections

28.6 Elections for Land Committee members shall be held at a Community Land Code Meeting called by the Lands Manager in accordance with sections 11.3 and 11.4.

Voting at Elections

28.7 Every Eligible Voter may vote at a Lands Committee election.

Vacancies

28.8 The office of a Lands Committee member shall become vacant if that member:

- (a) resigns;
- (b) is convicted of an offence under the *Criminal Code*;
- (c) is no longer the Lands Manager;
- (d) is an elected member who ceases to be an Eligible Voter;
- (e) is an appointed member who ceases to be a member of Council;
- (f) dies or becomes mentally incapacitated.; or
- (g) is terminated under section 28.9.

Terminations

28.9 The Council may, by Resolution, terminate the remaining term of a Lands Committee member if:

- (a) the member is absent from three (3) consecutive Lands Committee meetings for a reason other than illness or incapacity without being authorized to be absent by the chairperson; or
- (b) the member fails to perform any of his or her duties in good faith and in accordance with the terms of this Land Code.

Council Fills Vacancies



- 28.10 Council may appoint a new member to the Lands Committee to fill a vacancy under section 28.8.
- 28.11 The member appointed under section 28.10 shall serve out the balance of the term of the member whose office was vacated.
- 28.12 The Council may develop policies regarding the eligibility criteria for appointments to the Lands Committee

Chairperson of Lands Committee

- 28.13 The Lands Manager shall be the chairperson of the Lands Committee.
- 28.14 The Lands Committee shall select an alternate chairperson to perform the functions of the chairperson if the Lands Manager is unavailable.

Rules and Procedures of Lands Committee

- 28.15 In consultation with Council, the Lands Manager shall establish rules and procedures governing Lands Committee elections.
- 28.16 In consultation with Council and the Lands Committee, the Lands Manager may establish policies, rules and procedures governing committee meetings and the administration of the general affairs of the committee.

29. Officers, Employees and Contractors

General

- 29.1 Council shall provide for the appointment of officers and the hiring of other employees to administer this Land Code in an effective and fiscally responsible manner in accordance with this Land Code and any other applicable law.

Appointment of Lands Manager

- 29.2 Council shall, by Resolution, appoint a Lands Manager and an alternate to act in the place of the Lands Manager when he or she is absent.

Standards and Qualifications of Employees

- 29.3 The Lands Manager may, subject to the approval of Council, establish a process for determining standards and qualifications for employees and contractors hired for purposes of implementing and administering this Land Code.



30. Registration of Interests and Licences

Sliammon Lands Register

30.1 The Sliammon Lands Office shall maintain the Sliammon Lands Register in substantially the same form and with the same content as the First Nation Land Register.

Enforcement of Interests and Licences

30.2 An interest or licence in Sliammon Lands created or granted after September 30, 2004, is not enforceable unless it is registered or recorded in the Sliammon Lands Register.

Duty to Deposit

30.3 The Sliammon Lands Office shall ensure that an original copy of the following instruments received is registered or recorded in the Sliammon Lands Register and the First Nation Land Register:

- (a) an interest or licence in Sliammon Lands granted by Sliammon First Nation;
- (b) an interest in Sliammon Lands transferred or assigned by Sliammon First Nation; and
- (c) this Land Code and any amendment to this Land Code.

30.4 Every person who receives an interest or licence in Sliammon Lands shall register or record an original copy of the relevant instrument in the Sliammon Lands Register.

30.5 The deposit of an instrument in the Sliammon Lands Register and the First Nation Lands Register does not imply that the instrument is validly made or that it has been registered as opposed to having been recorded.

Registration of Consent or Approval

30.6 No instrument that requires the consent of Council, approval of the Sliammon Lands Office, or approval of Members at a Meeting of Members or in a Ratification Vote may be registered or recorded in the Sliammon Lands Register unless a certified copy of the document that records the consent or approval is attached to the instrument.

30.7 Notwithstanding section 30.1, nothing in this Land Code precludes Council from enacting a law providing for the maintenance of the Sliammon Lands Register in such other land registry system or facility as may meet the requirements of the Sliammon First Nation.

Registration Fees



- 30.8 The Sliammon Lands Office may establish and charge reasonable fees for services provided to the public including processing applications for the registration or recording of instruments in the Sliammon Lands Register.
- 30.9 Section 30.8 does not preclude the Sliammon Lands Office from providing services to Members without a fee.

PART 7 INTERESTS AND LICENCES IN SLIAMMON LANDS

31. Interests and Licences

General

- 31.1 The occupation, use and development of Sliammon Lands is subject to this Land Code and any other applicable law.

No Interest or Licence Created

- 31.2 No person may acquire an interest or licence in Sliammon Lands by use, occupation or by any other means that is not authorized under this Land Code or a law enacted under it.

All Dispositions in Writing

- 31.3 An interest or licence in Sliammon Lands may only be created, granted, disposed of, assigned or transferred by a written instrument issued in accordance with this Land Code.

Non-Members

- 31.4 A person who is not a Member may hold a lease, licence, easement, mortgage or permit in Sliammon Lands.

Grants to Non-Members

- 31.5 The written consent of Council shall be obtained for the original grant of a lease, licence, easement or permit in Sliammon Lands to a person who is not a Member.
- 31.6 Notwithstanding section 31.5, if Council has consented to the original grant of a lease in Sliammon Lands to a person who is not a Member, that leasehold interest may be subsequently mortgaged, transferred or assigned without the consent of Council or approval of Members.



32. Existing Interests

Continuation of Existing Interests

- 32.1 An interest or licence in Sliammon Lands, whether held by a Member or a person other than a Member, that is in effect on September 30, 2004 shall, subject to this Land Code, continue in force in accordance with the terms and conditions of that interest or licence.
- 32.2 Council may, subject to an applicable ruling under Part 8 or by a court of competent jurisdiction:
- (a) cancel or correct any interest or licence in Sliammon Lands issued or allotted in error, by mistake or by fraud; and
 - (b) issue a replacement instrument if required.

33. New Interests and Licences

Authority to Make Grants

- 33.1 Subject to this Land Code, Council may grant:
- (a) interests in Community Lands; and
 - (b) licences and permits to take resources from Community Lands.

Conditional Grant

- 33.2 The grant of an interest, licence or permit in Community Lands may be made subject to conditions.

Role of Lands Manager

- 33.3 The Lands Manager may advise Council on the granting of interests, licences and permits in Community Lands and may be authorized to act as a delegate of Council under this part.

34. Permanent Interests of Members

Nature of Interest

- 34.1 Council may enact laws providing for an interest in Sliammon Lands that entitles a Member holding that interest to:



- (a) permanent possession of the land;
- (b) benefit from the resources in and of the land;
- (c) grant subsidiary interests, licences and permits in the land;
- (d) transfer, devise or otherwise dispose of the land to another Member; and
- (e) any other rights, consistent with this Land Code, that are attached to Certificates of Possession under the *Indian Act*.

34.2 For greater certainty, no interest under section 34.1 may be granted to or held by a person who is not a Member.

Transfer and Assignment of Interests

34.3 Members may transfer or assign their interest in Sliammon Lands to the Sliammon First Nation or a Member without the consent of Council or approval of Members.

34.4 For greater certainty, Members may transfer their interest to themselves.

35. Limits on Mortgages and Seizures

Protections

35.1 In accordance with the Framework Agreement and the Act, sections 29, 87, 89(1) and 89(2) of the *Indian Act* continue to apply to Sliammon Lands.

35.2 The Sliammon Lands Office and the Lands Manager shall not be responsible or liable for ensuring that a lease in Sliammon Lands permits the leasehold interest to be mortgaged or charged, that the lease is in good standing or that the leaseholder is in compliance with the terms of the lease.

35.3 Disputes in relation to mortgages of leases shall be determined as follows:

- (a) the parties to the dispute may agree that the dispute may be determined by mediation, arbitration or other dispute resolution mechanism agreed to by the parties; or
- (b) if the parties to the dispute do not agree on a dispute resolution mechanism, the dispute shall be determined by a court of competent jurisdiction.



Mortgage of a Leasehold Interest in Sliammon Lands Held by a Person Who is Not a Member

- 35.4 A leasehold interest in Sliammon Lands held by a person who is not a Member is subject to charge, pledge, mortgage, attachment, levy, seizure, distress and execution without the consent of Council or approval of Members.

Mortgage of Leasehold Interests in Community Lands or in Sliammon Lands Held by a Member

- 35.5 The interest of a Member in Sliammon Lands which is not a leasehold interest may be subject to a mortgage or charge only to the Sliammon First Nation or a Member.
- 35.6 An Indian, as that term is defined in the *Indian Act*, including a Member, may grant a lease to him or herself in the same manner as to another person.
- 35.7 The leasehold interest in Sliammon Lands of an Indian, as that term is defined in the *Indian Act*, including a Member, may be subject to charge, pledge, mortgage, attachment, levy, seizure, distress and execution without the consent of Council or approval of Members, and the mortgagee has the same legal and equitable rights it would have if the leasehold interest was held by a non-Indian.
- 35.8 A leasehold interest in Community Lands is subject to charge, pledge, mortgage, attachment, levy, seizure, distress and execution by the mortgagee.

Default in Mortgage

- 35.9 In the event of default in the terms of a mortgage or charge of a leasehold interest in Sliammon Lands, the leasehold interest is not subject to possession by the mortgagee or chargee, foreclosure, power of sale or any other form of execution or seizure, unless:
- (a) the mortgage or charge was registered in the Sliammon Lands Register; and
 - (b) reasonable notice of the foreclosure was provided to Council.

Power of Redemption

- 35.10 If Council exercises an option to redeem with respect to a leasehold interest under subsection 35.8(b), the Sliammon First Nation becomes the lessee of the leasehold lands and, with the consent of the lender, takes the position of the mortgagor or chargor for all purposes after the date of redemption.

36. Residency and Access Rights



Right of Residence

36.1 The following persons may reside on Sliammon Lands:

- (a) a Member;
- (b) a Member who has been allocated a residential lot by Council;
- (c) a Spouse and child of a Member referred to in subsection (b);
- (d) a Member with a registered interest in Sliammon Lands;
- (e) an invitee of a Member referred to in subsection (b) or (c); and
- (f) a lessee or permittee, in accordance with the provisions of the instrument granting the lease or permit.

36.2 A right of residence under section 36.1 does not imply any financial obligation on the part of the Sliammon First Nation.

Right of Access

36.3 The following persons have a right of access to Sliammon Lands:

- (a) a lessee or mortgagee of Sliammon Lands;
- (b) an invitee of a lessee of Sliammon Lands;
- (c) a permittee and any person who is granted a right of access under the permit;
- (d) a Member;
- (e) a Member's Spouse and children;
- (f) a person who is authorized by a government body or any other public body, established by or under an enactment of the Sliammon First Nation, Canada or British Columbia to establish, operate or administer a public service, to construct or operate a public institution or to conduct a technical survey;
- (g) a person authorized in writing by Council or the Lands Manager; or
- (h) a person authorized by any applicable law.



Public Access

- 36.4 A person may have access to Sliammon Lands for social or business purposes if that person:
- (a) does not trespass on occupied land;
 - (b) does not interfere with an interest or licence in land;
 - (c) complies with all applicable laws; and
 - (d) no Resolution has been enacted prohibiting that person from having access to Sliammon Lands.

Trespass

- 36.5 Any person who resides on, enters or remains on Sliammon Lands other than in accordance with a right of residence or access under this Land Code is guilty of an offence.

Civil Remedies

- 36.6 Subject to any law enacted under this Land Code, all civil remedies for trespass are preserved.

37. Transfers on Death or Mental Incompetence

- 37.1 A Member who receives an interest in Sliammon Lands by testamentary disposition, succession or through a declaration of mental incompetence is entitled to have that interest registered in the Sliammon Lands Register provided that the written instrument transferring the interest is duly executed by the person duly appointed under the *Indian Act* as the personal representative of the estate of the deceased or the mentally incompetent Member.
- 37.2 A Member who purchases an interest in Sliammon Lands under subsection 50(2) of the *Indian Act* is entitled to have that interest registered in the Sliammon Lands Register provided that:
- (1) the written instrument transferring the interest is duly executed by the person duly authorized under the *Indian Act* to transfer the interest; and



- (2) Council has, by Resolution, consented to the written instrument transferring the interest to the purchasing Member.

37.3 Council may, by Resolution, authorize the Lands Manager to act as a delegate of Council under section 37.2.

37.4 An interest in Sliammon Lands that reverts to Sliammon First Nation under subsection 50(3) of the *Indian Act* shall become Community Lands on the date of reversion or on such other date that the Minister or the Minister's duly authorized delegate may specify.

38. Spousal Property Law

Development of Rules and Procedures

38.1 Council shall enact a spousal property law providing rules and procedures applicable on the breakdown of a marriage of a Member to:

- (a) the use, occupancy and possession of an interest in Sliammon Lands held by the Member; and
- (b) the division of that interest in land.

Enactment of Rules and Procedures

38.2 The rules and procedures contained in the spousal property law shall be developed by the Lands Manager in consultation with Members.

General Principles

38.3 The rules and procedures developed under section 38.2 shall take into account the following general principles:

- (a) the children of the Spouses, if any, should have a right to reside in the matrimonial home until the age of majority or until other arrangements have been made in the best interests of the children;
- (b) each Spouse should have an equal right to possession of the matrimonial home;
- (c) each Spouse should be entitled to an undivided half interest in the matrimonial home as a tenant in common;



- (d) the rules and procedures shall not discriminate on the basis of sex;
- (e) a mortgage of lease of spousal property shall not be set aside if the mortgagee acquired it for value and acted in good faith; and
- (f) only Members are entitled to hold a permanent interest in Sliammon Lands or a charge against a permanent interest in Sliammon Lands.

PART 8 DISPUTE RESOLUTION

39. Informal Resolution of Disputes

Intent

- 39.1 The Sliammon First Nation intends that whenever possible, a dispute in relation to Sliammon Lands shall be resolved through informal discussion by the parties to the dispute and nothing in this part shall be construed to limit the ability of the parties to a dispute to settle a dispute without recourse to this part.

40. Adjudicator Established

Office of the Adjudicator

- 40.1 The Office of the Adjudicator is hereby established to hear and resolve disputes in relation to Sliammon Lands in accordance with this Land Code and any other applicable laws and policies.
- 40.2 The Adjudicator shall be a Barrister and Solicitor and a member of the Law Society of British Columbia who is independent of the parties to a dispute and to other interests in the dispute.

41. Application Procedure

Reference to Adjudicator

- 41.1 The following persons may notify the Lands Manager that they wish to refer the dispute to the Adjudicator for resolution under this part:
- (a) a Member who claims an interest in Sliammon Lands based on a registered interest;
 - (b) a person who has a dispute with another person or with the Sliammon First Nation



- in relation to the possession, use or occupation of Sliammon Lands;
- (c) the Sliammon First Nation when asserting an interest in Sliammon Lands; and
- (d) the Sliammon First Nation when disputing the possession, use or occupation of Sliammon Lands.

Dispute Resolution Not Available

- 41.2 Dispute resolution processes under this Land Code are not available under this part for disputes in relation to:
- (a) mortgages of lease;
 - (b) decisions relating to housing allocation; or
 - (c) decisions of Council to grant or refuse to grant an interest or licence in Sliammon Lands.

Disputes Originating Prior to Land Code

- 41.3 Disputes that originated before September 30, 2004 may be decided under this part.

Demonstration of Reasonable Effort to Resolve

- 41.4 Persons applying for adjudication under section 41.1 shall demonstrate that they have made reasonable efforts to resolve the dispute.

Limitation Period

- 41.5 Parties may request a referral to the Adjudicator no later than:
- (a) 60 days after the day the decision, act or omission that is the subject of the dispute occurred; or
 - (b) 30 days after an attempt to resolve the dispute informally, in accordance with section 41.4, has failed.

42. Referral to Adjudicator

Lands Manager Shall Establish Procedures

- 42.1 In consultation with the Lands Committee and Council, the Lands Manager shall establish procedures for referring disputes to an Adjudicator.
- 42.2 Subject to section 42.3, the Lands Manager shall, in a timely manner as required to settle



the dispute, appoint the Adjudicator in accordance with the procedures established by Council.

Agreement to be Bound

- 42.3 The Lands Manager shall not refer a dispute to the Adjudicator unless all parties to the dispute agree to be bound by the decision of the Adjudicator, in a form prescribed by Council in consultation with the Lands Manager.

43. Duties and Powers of the Adjudicator

Duty to Act Impartially

- 43.1 The Adjudicator shall act impartially and without bias or favour to any party in a dispute.
Offense
- 43.2 It is an offense for a person to act, or attempt to act, in an improper way to influence the decision of the Adjudicator.

Rejection of Application

- 43.3 In addition to any other penalty provided for an offence under section 43.2, the Adjudicator may refuse to hear or decide an application if, regardless of whether a person has been found to have committed an offence under section 43.2, the Adjudicator reasonably concludes that the applicant acted, or attempted to act, in a way to improperly influence the Adjudicator's decision.

Rules of Adjudicator

- 43.4 The Adjudicator may, consistent with this Land Code, establish rules for procedure at hearings and for the general conduct of proceedings.

Professional Services

- 43.5 Prior to retaining the services of any professionals to assist in fulfilling his or her functions, the Adjudicator shall notify the parties to the dispute of the proposed professionals and their estimated services and costs.
- 43.6 Upon agreement of the parties, the Adjudicator may retain the services of professionals to assist in fulfilling his or her functions, in which case they shall make best efforts to use professional services available in the community who do not have a conflict of interest.
- 43.7 The Adjudicator may refuse to hear or decide an application if one or more of the parties refuse to accept the Adjudicator's proposal to retain professionals who are, in the reasonable opinion of the Adjudicator, required to resolve the dispute.



43.8 The Adjudicator may, after hearing a dispute:

- (a) confirm or reverse the decision in dispute, in whole or in part;
- (b) substitute the Adjudicator's own decision for the decision in dispute;
- (c) direct that an action be taken or ceased;
- (d) refer the matter or dispute for reconsideration by the decision-maker; or
- (e) refer the matter to a court of competent jurisdiction or other forum.

Decisions

43.9 The Adjudicator shall give written reasons for a decision and shall sign the written reasons.

43.10 Subject to section 45.1(Appeal of Decision) a decision of the Adjudicator is binding.

43.11 An order from an Adjudicator may be entered into court and enforced through the court of competent jurisdiction.

44. Costs

Costs

44.1 Unless otherwise ordered by the Adjudicator under section 44.2 or by an appellate court, the parties to a dispute shall bear their own costs and an equal share of the costs of the adjudication process.

44.2 The Adjudicator has the authority to order one, both or all of the parties to pay some or all of the costs of the adjudication process, including but not limited to the costs of the Adjudicator and any professionals retained, taking into account:

- (a) the reasonableness of the parties in their positions;
- (b) the conduct of the parties;
- (c) the result of the adjudication;
- (d) the use of professional services; and



- (e) any other relevant factor.

Sliammon First Nation Liability

44.3 For greater certainty, the Sliammon First Nation shall not be liable or responsible for the costs of adjudication under this part, or of any dispute resolution process, where the Sliammon First Nation is not a party.

45. Appeals and Alternate Forums

Appeal of Decision

45.1 Subject to any exception established by a law, a decision of the Adjudicator may be appealed to a court of competent jurisdiction.

Alternate Forums

45.2 Nothing in this part precludes Council from establishing additional processes or laws for resolving disputes, which processes may include facilitated discussion, mediation, administrative appeals, or referral to another forum.

PART 9 OTHER MATTERS

46. Liability

Liability Coverage

46.1 Council shall arrange for, maintain and pay insurance coverage for:

- (a) liability of the Sliammon First Nation in relation to Sliammon Lands; and
- (b) personal liability of the Sliammon First Nation's officers and employees for acts done or omitted to be done in good faith while engaged in carrying out duties in relation to Sliammon Lands.

Extent of Coverage

46.2 Council shall determine the extent of insurance coverage under section 46.1.



47. Offences

Application of Criminal Code

47.1 Unless otherwise provided by a Law, the summary conviction procedures of Part XXVII of the *Criminal Code* apply to offences under this Land Code and offences under a Law.

Justices of the Peace

47.2 Council may enact Laws in relation to appointment of justices of the peace for the enforcement of this Land Code and Laws.

Provincial Courts

47.3 If no justice of the peace is appointed, this Land Code and Laws shall be enforced in the Provincial Court of British Columbia or British Columbia Supreme Court or any court of competent jurisdiction as the case may require.

48. Amendments to Land Code

48.1 Amendments to this Land Code shall be approved at a Meeting of Members.

49. Commencement

49.1 This Land Code shall come into force on the date that it is approved at a Meeting of Members.



Siammon Land Use And Development Law

July 2011

SLIAMMON LAND USE AND DEVELOPMENT LAW

WHEREAS the Council of Sliammon First Nation deems it advisable and in the best interests of the Sliammon Nation to enact a law to establish specific development zones and controls within Teeshohsum (Sliammon IR#1) to regulate the size and shape of land parcels, the activities and intensity of uses that might occur on those parcels, and the siting and configuration of buildings on those parcels in Teeshohsum;

NOW THEREFORE Council enacts the *Sliammon Land Use and Development Law* as a law of the Sliammon First Nation.

PART I INTERPRETATION AND APPLICATION

1.0 Short Title

1.1 This Law may be cited as the “*Sliammon Land Use and Development Law*”.

2.0 Definitions

2.1 In this Law:

The following words and terms have the meanings set out in subsection 1.4 of the *British Columbia Building Code*: assembly occupancy, building, building area, building height, business and personal services occupancy, care or detention occupancy, constructor, coordinating registered professional, designer, dwelling unit, field review, high hazard industrial occupancy, industrial occupancy, low hazard industrial occupancy, mercantile occupancy, medium hazard industrial occupancy, occupancy, owner, registered professional, and residential occupancy;

“**accessory building or structure**” means a detached building or structure, the use of which is incidental or secondary to that of the main building;

“**accessory use**” means a use customarily incidental and subordinate to the principal use;

“**adjacent ground level**” means the level of the ground surface for a minimum of 0.6 metres (2 ft) beyond the outside perimeter of the deck, building or structure;

“**agent**” means a person, firm, or corporation representing the land holder, by designation or contract, and includes a hired tradesman or contractor who may be granted a permit for work within the limitations of his/her licence;

“application” means the form of application for a permit established by Council, from time to time, which is to be completed by any person who carried out or intends to carry out any work on Sliammon Lands;

“approved” means approved in writing;

“assembly hall” means a building or part of a building in which facilities are provided for such purposes as meetings for civic, education, political, religious or social purposes, and includes a banquet hall;

“attached” means a building otherwise complete in itself, which depends for structural support, or complete enclosure, upon a division wall or walls shared in common with adjacent building or buildings;

“building” means any structure used or designed to be used for shelter, accommodation or enclosure of persons, animals, or chattels;

“Building Code” means the *British Columbia Building Code* as adopted, amended or superseded from time to time, by the Province of British Columbia;

“building coverage” means the area covered by all building foundations including garages and accessory structures divided by the area of the lot;

“building inspector” means the person appointed from time to time by Council, or with whom Council has an agreement, to act as building inspector for the purpose of enforcing and carrying out the provisions of this Law and includes any delegate;

“business and professional office” means an office in which any business is carried on or any profession is practised;

“community facility” means any tract of land or buildings or any part of any buildings used for community activities, whether used for commercial purposes or not, the control of which is vested in the Sliammon Nation or a Sliammon Corporation;

“conservation area” means the maintenance of the natural environment for the purpose of preservation, research, observation and outdoor uses such as hiking, hunting and fishing, and includes the erection and use of trail shelters and other similar structures ancillary to the foregoing uses, but does not include the use of a dwelling house, a mobile home, a tourist vehicle or a tourist trailer;

“convenience store” means a retail commercial establishment supplying groceries, sundries and other daily household necessities to the immediate surrounding area;

“cottage industry” means a use accessory to a single family dwelling, and includes a carpentry shop, a craft shop, a plumbing shop, a metal working shop, an electrical shop, a welding shop, a storage building for school buses, boats or snowmobiles, a repair shop for farm equipment, or any similar use;

“construction” or **“constructed”** means any reconstruction, erection, alteration, enlargement, addition, demolition, or removal;

“Council” means the Chief and Councillors of Sliammon Nation or any successor elected government;

“community land” means any Sliammon Lands that is subject to the *Land Code*, in which all Members have a common interest;

“duplex” means a building that is divided horizontally into two dwelling units, each of which has an independent entrance;

“dwelling unit” means one or more habitable rooms designed for use by and occupied by not more than one family and in which separate kitchen and sanitary facilities are provided for the exclusive use of such a family, with a private entrance from outside the building or from a common hallway or stairway inside the building;

“enactment” includes laws and regulations;

“erect” means build, construct, reconstruct, or relocate, and includes any preliminary physical operations such as cutting, grading, excavating, filling or draining, and any altering of an existing building by an addition, extension or other structural change;

“flood construction level” is the calculated elevation of potential floodwaters plus the allowance for freeboard and establishes the elevation of the underside of a wooden floor system or top of concrete slab for habitable buildings;

“flood proofing” means the alteration of land or structures either physically or in use to reduce flood damage and includes the use of building setbacks from water bodies to maintain a floodway and to allow for potential erosion;

“garage, commercial” means a building, structure or lot where commercial vehicles are stored or where vehicles are repaired or maintained;

“hazard land” means land which is not suitable to be used for the erection of any building because it is on a flood plain, is subject to erosion, has steep slopes, has organic soil or has a high water table;

“height” means, when used with reference to a building, the vertical distance between the average elevation of the finished surface of the ground at the front of the building and:

- In the case of a flat roof, the highest point of the roof surface or the parapet, whichever is the greater;
- In the case of a mansard roof, the deck roof line; and
- In the case of a gable, hip or gambrel roof, the height that is half way between the eaves and ridge.

“home occupation” means an occupation, trade, business profession or craft carried on as an accessory use to the use of a dwelling that is the private residence of the person carrying on the occupation, trade, business, profession or craft;

“impervious surface” means any surface or structure covering an area of a lot that prevents rainwater from naturally infiltrating into the soil below that area;

“impervious surface coverage” means the total area of impervious surfaces (including for example all building foundations and paved areas) divided by the area of the lot;

“Land Code” means the *Sliammon Nation Amended Land Code* Sliammon;

“land holder” means a person who is registered in the Sliammon Lands Register as the holder of an interest in Sliammon Lands and, where applicable, includes a person whose interest in Sliammon Lands is not registered but has authorization from Council, by Resolution, to engage in construction on the land;

“manufactured home” means either a mobile home or modular home.

“manufactured home” means a building that is manufactured in a factory for transport, assembly, and completion as a residence, including placement on a foundation, and is certified as being constructed to the requirements of the CSA National Standard CAN/CSA-Z240 or A277 but is not designed to be transported on its own wheels or undercarriage;

“modular home” means a detached dwelling unit conforming to the CAN/CSA A277-90 standard which is completely constructed in a factory but is not designed to be transported on its own wheels or undercarriage;

“natural boundary of the sea” means the visible high watermark of the sea;

“non-conforming” means that which does not conform, comply or agree with the provisions of this Law as of the date it was made;

“noxious use” means any use which is offensive or dangerous by reason of the emission of odour, smoke, dust, noise, gas, fumes, vibration or refuse matter;

Sliammon Land Use and Development Law July 18, 2011

“occupant” or **“occupier”** means a person who is legally entitled to occupy or simply occupies a parcel of land, building, dwelling or premises within Sliammon Lands;

“one family” or **“single family”** means a separate building containing only one dwelling unit;

“permit” means a permit required by or issued under this Law;

“person” in addition to the ordinary meaning, includes any association, household, society, corporation, partnership or party, whether acting by themselves or by a servant, agent or employee, and the successors, assigns and personal or other legal representative of such person to whom the context can apply according to law;

“registered professional” means:

- (a) a person who is registered or licenced to practice as an architect under the *Architects Act*; or
- (b) a person who is registered or licensed to practice as a professional engineer under the *Engineers and Geoscientists Act*;

“restaurant” means a building or part of a building where food is offered for sale or sold to the public for immediate consumption therein, but does not include a boarding or lodging home;

“retail store” means a building or part of a building in which goods, wares, merchandise, substance, articles or things are offered or kept for sale at retail;

“semi-detached” means a building that is divided vertically into two dwelling units;

“Sliammon” or **“Sliammon Nation”** means the Sliammon First Nation;

“Sliammon Corporation” means a corporation in which at least a majority of the shares are held in trust for the benefit of Sliammon Nation or all the members of Sliammon;

“Sliammon Lands” means

- (a) Sliammon Lands or portions thereof; and
- (b) any additional lands that may be acquired by Sliammon, whether by treaty, accretion, purchase or other process, that are subject to the Land Code.

“Sliammon Planner” means the person appointed or designated by the Council under this Law and charged with the duty of administering and enforcing the provisions of this Law.

“structure” means a construction or portion thereof of any kind, whether fixed to, supported by or sunk into land, but specifically excludes landscaping, fences, paving and retaining structures less than 1.5 metres (5 ft) in height;

“temporary building” means a building or any part thereof that will be used for a period of time, not exceeding two years, unless an extension has been requested by the land holder and approved by the building inspector, and that has no permanent foundation or construction associated with it, other than footings;

“traditional cultural uses and activities” means activities and uses historically or traditionally carried out by Sliammon members, and recognized by the community as traditional or cultural, and does not include large scale, commercial, industrial or mechanized excavation of land, extraction of resources, construction of structures, or development of land;

“triplex” means the whole of a building that is divided horizontally into three separate dwelling units, each of which has an independent entrance, either directly from the outside, or through a common vestibule;

“two family” means a separate building containing only two dwelling units;

“wetland” means land that is saturated with water long enough to promote wetland or aquatic processes as indicated by poorly drained soils, hydrophytic (water-loving) vegetation, and various kinds of biological activity which are adapted to a wet environment.

“work” means any construction, erection, repair, alternation, enlargement, addition, demolition, removal or excavation; and

“zone” means a designated area of land use shown on Schedule "B" hereto.

- 2.2 Words in this Law that are in the singular include the plural, and words in the plural include the singular.
- 2.4 Where a provision in this Law is expressed in the present tense, the provision applies to the circumstances as they arise.
- 2.5 Except where otherwise defined, words and expressions used in this Law have the meanings given to them in the Land Code.
- 2.6 A reference in this Law to an enactment is a reference to the enactment as it is amended or replaced from time to time, and includes any regulations made under the enactment.
- 2.7 The provisions of this Law are severable, and where any provision of this Law is for any reason held to be invalid by a decision of a court of competent jurisdiction, the invalid portion shall be severed from the remainder of this Law and the decision that it is invalid shall not affect the validity of the remaining portions of this Law.

2.8 This Law shall be construed as being remedial and shall be given such fair, large and liberal construction and interpretation as best ensures the attainment of its objectives.

3.0 Application of Law

3.1 This Law applies to:

- (a) Any project requiring a building permit, except renovations that do not change the size, use, or location of a building or structure;
- (b) The subdivision of any land;
- (c) Construction of, additions to, demolition of, or relocation of a building or other structure, except a structure with an area less than 9.2 square metres (100 square feet) if it is not located within a Sensitive Area;
- (d) Any construction or landscaping within 91 metres (300 feet) of a water body or waterway, measured from the high-water boundary or top of bank;
- (e) Any construction or landscaping within an identified Hazard Area or Sensitive Area;
- (f) Landscaping that includes removal of mature trees or native vegetation, installation of impervious paving, removal of soil, or alterations to drainage patterns;
- (g) Changes to the use of a parcel of land or existing structure;
- (h) Filling of land; and,
- (i) New signage.¹

3.2 This Law does not apply to:

- (a) Minor repairs that do not expand or alter the size, use, or location of a structure; and,
- (b) Fences or other landscaping outside of Sensitive Areas that do not alter site drainage or remove trees larger than 20cm (7.9 inches) diameter when measured at chest height.

3.3 Where any federal or provincial enactment, or any other Sliammon law may apply to any matter covered by this Law, compliance with this Law will not relieve the person from also complying with the provisions of the other applicable enactment.

3.4 The headings given to the sections and paragraphs in this Law are for convenience of

¹ For example, the construction of a parking lot requires a Development Permit because it changes the use of a parcel of land and may involve new signage, fill, and alterations to drainage patterns.

Sliammon Land Use and Development Law July 18, 2011

reference only, and do not form part of this Law and will not be used in the interpretation of this Law.

- 3.5 Unless otherwise noted, any specific statute named in this Law if a reference to a statute of British Columbia and the regulations thereto, as amended, revised, consolidated or replaced from time to time, and any Sliammon law referred to herein is a reference to a law or regulation enacted by the Sliammon First Nation, as amended, revised, consolidated or replaced from time to time.

4.0 Administration

- 4.1 Council must appoint, from time to time, a Zoning Administrator (Sliammon Planner or equivalent) who will carry out the duties set out in this Law pursuant to the terms and conditions established by Council.
- 4.2 All dimensions and other measurements in this Law are expressed in Standard International Units (the metric system); approximate Imperial System equivalents shown bracketed are included for convenience only and do not form a part of this Law. The metric measurement shall take precedence.

PART II GENERAL PROVISIONS

5.0 Prohibition

- 5.1 No building or structure shall hereafter be erected or altered, nor shall the use of any land, building or structure hereafter be changed, in whole or in part, except in conformity with the provisions of this Law.
- 5.2 Notwithstanding any other Sliammon law, no building permit shall be issued where the proposed building, structure or use would be in violation of any provision of this Law.
- 5.3 No land shall be subdivided in contravention of this Law.

6.0 Non-Conforming Uses

- 6.1 Nothing in this Law prevents the use of any land, building or structure for any purpose prohibited by this Law if such land, building or structure was lawfully used for such purpose on the day this Law was made, so long as it continues to be used for that purpose.
- 6.2 If a building or structure which does not conform with the requirements of this Law with respect to use, lot occupancy, or height is destroyed, said building or structure may be

restored to its original dimensions and strengthened to a safe condition, provided that such restoration or strengthening does not further increase the extent of non-conformity of such building or structure, and provided that all other applicable provisions of this Law are complied with and the use is not a noxious use.

7.0 Temporary Construction Uses Permitted

7.1 Nothing in this Law prevents uses incidental to construction, such as a construction camp or other such temporary work camp, a tool shed, scaffold or other building or structure incidental to the construction, or a sign not more than four and one-half (4.5) square metres in area incidental to the construction, if these uses are permitted only for so long as they are necessary for work in progress which has neither been finished nor abandoned.

8.0 Occupancy of Incomplete Buildings

8.1 In any zone, no new buildings shall be occupied before the main side walls and roof have been erected and roofing has been completed and, in the case of a dwelling, kitchen, heating and sanitary conveniences have been installed and rendered useful.

9.0 Occupation of Vehicles

9.1 No car, truck, coach or streetcar body shall be used for permanent human habitation in any zone, whether or not mounted on wheels.

10.0 Home Occupations and Cottage Industries

10.1 Where the zone allows, a home occupation or cottage industry is permitted if:

- (a) All uses are conducted entirely within a completely enclosed building permitted in this Law with no external storage of materials, equipment, containers, or finished products, except for daycare use and instruction in outdoor recreational activities;
- (b) There is no external display or advertising other than a non-illuminated sign, not more than three tenths of a square metre (.3m²) in area, to indicate to persons outside that any part of the dwelling unit or lot is being used for a purpose other than residential;
- (c) Not more than 25% of the dwelling unit area is used for the purpose of the home occupation or cottage industry;
- (d) The home occupation or cottage industry is secondary to the main residential use and does not change the residential character of the dwelling home or dwelling unit;
- (e) There are no toxic, noxious, corrosive, explosive, flammable, or otherwise hazardous materials stored on the premises;

Siammon Land Use and Development Law July 18, 2011

- (f) The home occupation or cottage industry does not create or become a nuisance in particular, in regard to noise, traffic or parking; and,
- (g) The home occupation or cottage industry does not interfere with television or radio reception.

10.2 Where the zone allows for home occupation or cottage industry activities, the following uses, and businesses are strictly prohibited:

- (a) Any onsite use involving mechanical repair or servicing of heavy duty equipment or boats;
- (b) Sawmills and/or any lumber processing;
- (c) Industrial scale welding;
- (d) Animal kennels and/or other animal related uses excluding grooming;
- (e) Cutting and/or wrapping of wild game or other animal products;
- (f) Industrial scale business use;
- (g) Hazardous business use;
- (h) Adult business use;
- (i) Any resale outlets such as pawnbrokers, mushroom buyers or similar uses; and,
- (j) Dry cleaning or laundry services.

11.0 Noxious Uses

11.1 Except by specific approval from Council, no use is permitted which is offensive or dangerous by reason of the emission of odour, smoke, dust, noise, gas, fumes, vibration or refuse matter, or which from its nature or the materials used therein is declared to be a noxious trade, business or manufacturer.

12.0 Accessory Buildings and Structures

12.1 Accessory uses, buildings and structures, including private garages, are permitted in any zone within Teeshohsum, but shall not be used for human habitation, except where a dwelling is a permitted accessory use. To take advantage of the benefits of sharing walls, reducing material use, and to provide additional passive insulation to a dwelling, accessory buildings should be attached to dwelling units or garages wherever practical and feasible.

13.0 Multiple Uses

13.1 Where any land or building is used for more than one purpose, all provisions of this Law relating to each use shall be satisfied and, where there is a conflict, the higher or more stringent standard shall prevail.

14.0 Soil and Aggregates

14.1 Except by specific approval from Council, removal of soil and/or aggregate materials such as gravel is prohibited in all zones except as required in the normal course of excavation and grading for construction of permitted structures.

15.0 Setbacks from Highway 101

15.1 As per Ministry of Transportation requirements², no building or structure is permitted in any zone within 4.5 metres (14.76 feet) of the highway right-of-way except:

- (a) By permission from the BC Ministry of Transportation; or
- (b) Where the lot has access from another street, the setback may be 3 metres (9.84 feet).

16.0 Setbacks from Sensitive, Hazard and Conservation Areas

16.1 No building, structure, land clearing or grading, or removal of trees or vegetation is permitted in any zone within the following required setbacks from sensitive, hazardous or conservation areas:

- (a) 15m (50 feet) from archaeological sites;
- (b) 15m (50 feet) from the stream top of bank along Sliammon Creek within the Ookts oht yiqush (Community Use) designation;
- (c) 30m (100 feet) from the stream top of bank along Sliammon Creek within the Uhmsnah jehjeum (Forest Management) designation;
- (d) 15m (50 feet) from the stream top of bank along Kwolan Creek;
- (e) 30m (100 feet) from the natural boundary of the Scuttle Bay wetlands;
- (f) 30m (100 feet) from the natural high water boundary of the sea (Malaspina Strait);
- (g) 100m (330 feet) from any eagle nesting tree; and,
- (h) 200m (655 feet) from any other raptor nest or heron colony or heron nesting tree.

17.0 Exceptions to Height Limitations

17.1 The height limitations of this Law do not apply to solar collectors, chimneys, traditional house posts or totem poles, church spires, public buildings, elevator enclosures, flag poles, television or radio antennae, electrical transmission facilities, ventilators or skylights.

18.0 Secondary Units

18.1 Secondary units are conditionally permitted in all residential zones, and may either be included in the primary residential structure or in a secondary structure (e.g., cottage house), provided that:

² see <http://www.th.gov.bc.ca/permits/Structures%20Permits.asp>

- (a) there is sufficient infrastructure to support the additional unit;
- (b) any unit within the primary residential structure does not occupy more than 30% of the floor area of that structure; and,
- (c) all structures conform to all dimensional standards in that zone.

19.0 Subdivision Requirements

- 19.1 Rights of way for roads and public trails must be provided in accordance with the Transportation and Servicing sub-plan (Schedule E of the Sliammon Land Use Plan: Teeshohsum)
- 19.2 Building lots must conform with the requirements of the zone within which they will be created.
- 19.3 Building lots must be arranged and located so that physical, environmental, and cultural features do not unduly constrain or conflict with the intended use of any lot.
- 19.4 Drainage systems must be designed to have no net impact on surrounding properties or on the hydrology of any nearby ecosystems.

20.0 Parking

- 20.1 Parking and driveways should be located at the side or rear of any building and not at the front or on any side abutting a street.
- 20.2 Paving for driveways and parking a may not occupy more than 25% of the lot frontage.

21.0 Storage and Waste Management

- 21.1 Each residential unit should have space allocated for storage of waste and recyclables.
- 21.2 Each building must have an area for storage of waste and recyclables that is either within a building or structure or screened from view of the street. Screening may be accomplished with a landscaped area or a fence, or both.

PART III

SPECIFIC PROVISIONS

22.0 Establishment and Mapping of Zones

- 22.1 For the purpose of this Law, Teeshohsum is hereby divided into the following zones, the metes and bounds are as shown on “Schedule B: Zoning Map” attached hereto and form part of this Law:

- (a) L - Limited Use Areas
- (b) CF - Community Facilities
- (c) TR - Sliammon Residential (Sliammon Member/Citizen Housing)
- (d) LR - Leasehold Residential (Leased Housing)
- (e) I – Light Industrial
- (f) TC - Sliammon Commercial
- (g) TF - Sliammon Forest
- (h) U - Utilities

23.0 Limited Use Areas (L)

23.1 Land, buildings, and structures may be used only for:

- a) Traditional cultural uses and activities;
- b) Recreational, tourism, or education activities that are related to the promotion and dissemination of Sliammon culture;
- c) Hunting, fishing, trapping;
- d) Ecological restoration; and,
- e) Conservation areas.

23.2 Development and Design review

Limited Development Areas include numerous unique cultural and/or environmental conditions and should be approached with the highest degree of care and sensitivity to the landscape. It is recommended that a development and design review committee be established to review any proposals for development or construction in these areas. Sliammon Land Use Plan *Cultural and Environmental Areas Guidelines* and *Hazard Areas Guidelines* should be consulted.

24.0 Community Facilities (CF)

24.1 Land, buildings, and structures may be used only for:

- a) A community centre;
- b) A recreation facility;
- c) A cultural centre;
- d) A school;
- e) Any space for the purpose of supporting community programs and activities;
- f) Sliammon administration offices;
- g) A health clinic;
- h) Elders' care facility;
- i) Elders housing;
- j) Supportive housing;
- k) A cemetery;
- l) Outdoor sports and recreation facilities;
- m) Community gardens;

- n) Conservation areas;
- o) Trails;
- p) Boat yards and docks;
- q) Cemeteries; and,
- r) A use accessory to any of the foregoing permitted uses.

24.2 As Community Facilities serve unique and varied purposes and are built for the benefit of all members and residents, dimensional standards are not established for this zone. It is recommended that a development and design review committee be established to review community facility proposals.

25.0 Siammon Residential (TR) - Siammon Member and Siammon Citizen Housing

25.1 Land, buildings, and structures may be used only for:

- a)
 - b) A single family dwelling;
 - c) A two family dwelling;
 - d) A duplex dwelling;
 - e) A semi-detached dwelling;
 - f) A group home;
 - g) A home daycare;
 - h) A mobile home dwelling;
 - i) A home occupation;
 - j) A cottage industry;
 - k) A park or playground; and,
 - l) A use accessory to any of the foregoing permitted uses.

Figure: Illustration of lot dimensional standards

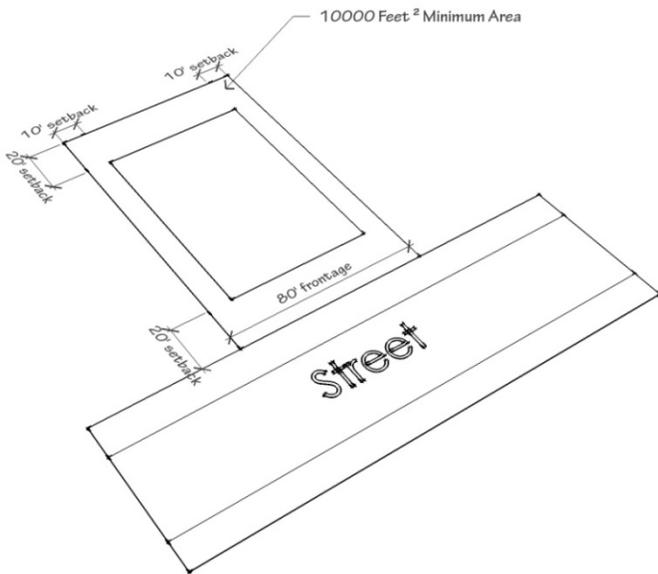
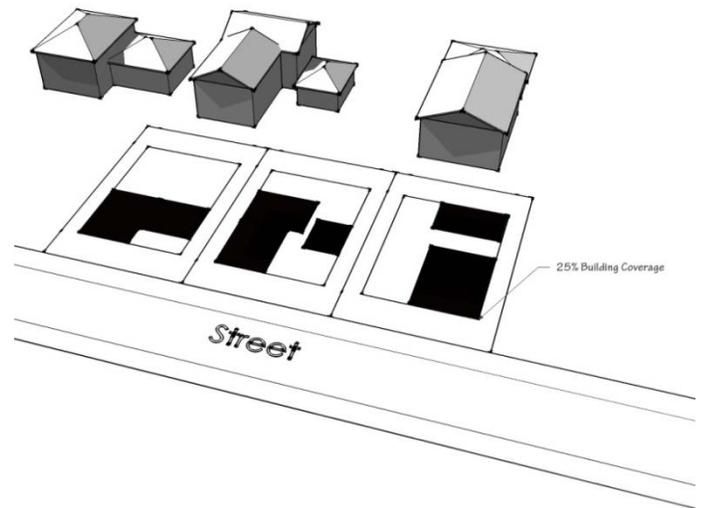


Figure: Illustration showing various lot coverage



25.2 Land may be used and buildings and structures may be erected, altered or used only where the following specifications are complied with:

Lot Size and Frontage	
minimum allowed lot size	930 metres (10,000 square feet)
minimum allowed street frontage	24 metres (80 feet); or, on curving roads this may be relaxed to 15 metres (50 feet) providing that the lot measures 24 metres (80 feet) at 1/3 the depth of the lot
Building Coverage	
maximum allowed building coverage	20%
maximum allowed impervious surface coverage	30%
Building Size and Setbacks	
maximum allowed building height	11 metres (36 feet)
minimum required setback from any street frontage	6 metres (20 feet)
minimum required rear setback	6 metres (20 feet)
minimum required side setbacks	3 metres (10 feet)
setback exceptions for decks, porches, stairs, ramps, and roof eaves	up to .3 metres (1 foot) from lot line
minimum separation between structures	6 metres (20 feet)
Landscaping and Amenity Space	
required landscaping	A landscaped area or front yard at least 3 metres (10 feet) deep and 60% of the lot width must be maintained between the street and any building on the lot.

26.0 Leasehold Residential (LR) - Leased non-Sliammon Member and Sliammon Citizen Housing

26.1 Land, buildings, and structures may be used only for:

- a) A single family dwelling;
- b) A two family dwelling
- c) A duplex dwelling;
- d) A semi-detached dwelling;
- e) A home daycare;
- f) A home occupation;
- g) A cottage industry;
- h) A park or playground; and,
- i) A use accessory to any of the foregoing permitted uses.

26.2 Land may be used and buildings and structures may be erected, altered or used only where the following specifications are complied with:

Lot Size and Frontage	
minimum allowed lot size	930 metres (10,000 square feet)
minimum allowed street frontage	24 metres (80 feet); or, on curving roads this may be relaxed to 15 metres (50 feet) providing that the lot measures 24 metres (80 feet) at 1/3 the depth of the lot
Building Coverage	
maximum allowed building coverage	20%
maximum allowed impervious surface coverage	30%
Building Size and Setbacks	
maximum allowed building height	11 metres (36 feet)
minimum required setback from any street frontage	6 metres (20 feet)
minimum required rear setback	6 metres (20 feet)
minimum required side setbacks	3 metres (10 feet)
setback exceptions for decks, porches, stairs, ramps, and roof eaves	up to .3 metres (1 foot) from lot line
minimum separation between structures	6 metres (20 feet)
Landscaping and Amenity Space	
required landscaping	A landscaped area or front yard at least 10' deep and 60% of the lot width must be maintained between the street and any building on the lot.

27.0 Light Industrial (I)

27.1 Land, buildings, and structures may be used only for:

- a) Manufacturing;
- b) Packaging;
- c) Food processing;
- d) Storage or warehousing;
- e) An automobile service station, commercial garage or automobile business, including sales and rentals;
- f) Industrial equipment sales and service;
- g) A garden nursery and/or commercial greenhouse;
- h) A business or professional office;
- i) Vocational instruction;
- j) A caretaker's residence; or
- k) A use accessory to any of the foregoing permitted uses.

27.2 No use will be allowed unless:

- a) It is carried on wholly within a completely enclosed building, except for parking and loading, and displays;
- b) All bulk storage is wholly contained within a completely enclosed building, unless the yard or portion of the yard containing the goods or materials is enclosed by a suitable fence or wall restricting public access;
- c) There is no bulk storage of explosive, flammable, or otherwise toxic or hazardous materials;
- d) Bulk storage of toxic, corrosive, or hazardous materials or materials that would attract pests is wholly contained within a completely enclosed building; and,
- e) Appropriate measures are taken, to the satisfaction of Council, to eliminate any dangerous, injurious, noxious or otherwise objectionable impact that could adversely affect the surrounding area and adjoining non-industrial districts, including ventilation and air filtering, noise mitigation, and dust and odour control.

27.3 Land may be used and buildings and structures may be erected, altered or used only where the following specifications are complied with:

Lot Size and Frontage	
minimum allowed lot size	1,395 square meters (15,000 square feet)
minimum allowed lot dimension, as measured across the lot from any opposing sides	36.5 metres (120 feet)
minimum allowed street frontage	11 metres (36 feet)
Building Coverage	
maximum allowed building coverage	60%
maximum allowed impervious surface coverage	75%
Building Size and Setbacks	
maximum allowed building height	16.7 metres (55 feet)
minimum required setback from any street frontage	6 metres (20 feet)
minimum required rear setback	6 metres (20 feet)
minimum required side setbacks	6 metres (20 feet) when abutting a lot in a commercial zone or industrial zone; 10 metres (33 feet) when abutting a lot in any other zone
minimum separation between structures	6 metres (20 feet)
Landscaping and Site Design	
entrances	Landscaping must be used to distinguish building

	entrance areas from parking and driveways (e.g. courtyard or patio entrance)
pedestrian access	A pedestrian walkway must be provided along any street frontage to safely control pedestrian/vehicle circulation; and, A pedestrian walkway must be provided from the street frontage to any building entrance.
separation of pedestrians and vehicles	A minimum .9 metre (3 foot) planting strip with low landscaping and high branching trees is required to provide separation between moving traffic and pedestrians.
buffering	A minimum 4.5 metre (15 foot) planting strip with a mix of densely vegetated, mixed canopy height plants is required along any lot edge that abuts a lot in a non-industrial zone.

28.0 Sliammon Commercial (TC)

28.1 Land, buildings, and structures may be used only for:

- a) An automobile service station, commercial garage or automobile business, including sales and rentals;
- b) A car wash;
- c) A bank or other financial institution;
- d) A personal service shop;
- e) A boat, snowmobile, trailer or cycle business, including sales and rentals;
- f) A business or professional office;
- g) A convenience store;
- h) A laundry or dry cleaning establishment;
- i) A restaurant or other eating establishment;
- j) A commercial kitchen used for processing or preparation of food;
- k) A hotel;
- l) Tourist accommodations;
- m) A post office;
- n) A recreational use;
- o) A retail store;
- p) Apartments, caretakers residence, or other residence (conditionally); or
- q) A use accessory to any of the foregoing permitted uses.

28.2 Residential uses are allowed only if:

- a) a commercial use is included and the commercial use is located on the ground floor facing the street; and,
- b) the commercial use occupies at least 60% of the building frontage and 50% of the ground floor area.

28.3 Land may be used and buildings and structures may be erected, altered or used only where the following specifications are complied with:

Lot Size and Frontage	
minimum allowed lot size	1,395 square meters (15,000 square feet)
minimum allowed lot dimension, as measured across the lot from any opposing sides	36.5 metres (120 feet)
minimum allowed street frontage	11 metres (36 feet)
Lot Area per Dwelling Unit	
	1 unit per 150 square meters (1600 square feet) of lot area
Building Coverage	
maximum allowed building coverage	60%
maximum allowed impervious surface coverage	75%
Building Size and Setbacks	
maximum allowed building height	16.7 metres (55 feet)
minimum required setback from any street frontage	0 feet
minimum required rear setback	6 metres (20 feet)
minimum required side setbacks	6 metres (20 feet) when abutting a lot in a commercial zone; 10 metres (33 feet) when abutting a lot in any other zone
minimum separation between structures	6 metres (20 feet)
Landscaping	
entrances	Landscaping must be used to distinguish building entrance areas from parking and driveways (e.g. courtyard or patio entrance)
pedestrian access	A pedestrian walkway must be provided along any street frontage to safely control pedestrian/vehicle circulation; and, A pedestrian walkway must be provided from the street frontage to any building entrance.
separation of pedestrians and vehicles	A minimum .9 metre (3 foot) planting strip with low landscaping and high branching trees is required to provide separation between moving traffic and pedestrians.

29.0 Sliammon Forest (TF)

29.1 Land, buildings, and structures may be used only for:

- a) Silviculture;
- b) Log yarding and loading;
- c) Portable sawmills;
- d) Fish hatcheries;
- e) Public utilities;
- f) Traditional cultural uses and activities;
- g) Recreational, tourism, or education activities;
- h) Hunting, fishing, trapping;
- i) Ecological restoration; and,
- j) Conservation areas.

29.2 Land may be used and buildings and structures may be erected, altered or used only where the following specifications are complied with:

Building Size and Setbacks	
maximum allowed building height	16.7 metres (55 feet)
minimum required setback from any street frontage or lot line	30 metres (99 feet)
Landscaping	
leave strip	A 30 metre (99 foot) buffer zone of existing vegetation and trees must be preserved along the frontage of any public road.

30.0 Utilities (U)

30.1 Land, buildings, and structures may be used only for:

- a) Housing of equipment related to utility services and infrastructure;
- b) Offices relating to utility management and maintenance;
- b) Storage of maintenance equipment and vehicles;
- c) Communication towers and equipment; and,
- d) Other uses relating to infrastructure and delivery of infrastructure services.

30.2 Land may be used and buildings and structures may be erected, altered or used only where the following specifications are complied with:

Building Size and Setbacks	
maximum allowed building height	16.7 metres (55 feet)

minimum required setback from any street frontage or lot line	30 metres (99 feet)
Landscaping	
vegetative buffers	A vegetative screen of shrubs and trees should be planted or retained to minimize the visual impact of utility related structures on residential, commercial, or community facility areas or on public roads.

PART V APPLICATION PROCEDURES

31.0 Types of Permits and Requirements of Permit Applications

31.1 A Development Permit is required for:

- (a) Any project requiring a building permit, except renovations that do not change the size, use, or location of a building or structure;
- (b) The subdivision of any land;
- (c) Construction of, additions to, demolition of, or relocation of a building or other structure, except a structure with an area less than 9.2 square metres (100 square feet);
- (d) Any construction or landscaping within 91 metres (300 feet) of a water body or waterway, measured from the high-water boundary or top of bank;
- (e) Any construction or landscaping within an identified Hazard Area or Sensitive Area;
- (f) Landscaping that includes removal of mature trees or native vegetation, installation of impervious paving, removal of soil, or alterations to drainage patterns;
- (g) Changes to the use of a parcel of land or existing structure;
- (h) Filling of land; and,
- (i) New signage.³

31.2 A Development Permit is not required for:

- (a) Minor repairs that do not expand or alter the size, use, or location of a structure; and,
- (b) Fences and other landscaping that does not alter site drainage or remove significant trees or native vegetation.

³ For example, the creation of a parking lot does not require a Building Permit, but does require a Development Permit because it changes the use of a parcel of land and may involve new signage and fill.

Sliammon Land Use and Development Law July 18, 2011

- 31.3 The following types of Development Permits will be issued:
- (a) use and subdivision of land;
 - (b) new use and development of a building lot;
 - (c) change of use on an existing lot; or,
 - (d) renovation or expansion of existing structures.
- 31.4 Development permit applications must include, at the discretion of the Zoning Administrator:
- (a) a statement of the intended future use of the land;
 - (b) a statement describing any legally non-conforming uses or structures that will be retained;
 - (c) a dimensioned survey of the land showing existing site features including any vegetation, topography, cultural features, or environmental features;
 - (d) dimensioned plan(s) of the proposed subdivision or site plan, including grading and landscaping plans, proposed lot lines or building footprints, existing site features and features to be retained including protective structures such as construction fencing, site servicing plans, and phasing plans;
 - (e) geotechnical or hazardous conditions report;
 - (f) archaeological survey report;
 - (g) environmental survey and impact report; and/or,
 - (h) an appeal and justification for a minor variance.
- 31.5 In addition to the requirements of subsection 30.4, the Zoning Administrator may require any other information to be submitted with a permit application to establish substantial compliance with this Law and other Sliammon laws with respect to land development and public safety in Teeshohsum.
- 31.6 In addition to applicable fees and charges required under other Sliammon laws, a permit application fee will be required with every application, calculated in accordance with current Sliammon Development Permit application fee policies. No application will be considered until the permit application fee has been paid.
- 31.7 An application made for all permits issued under this Law must be in the form provided by Sliammon First Nation and signed by the land holder making the application.
- 31.8 Every Development permit is issued upon the condition that the permit shall expire and the rights of the land holder under the permit shall terminate if the proposed work does not proceed within six (6) months from the date of permit issuance;
- 31.9 The Zoning Administrator may extend the period of time set out under subsection 30.4 where development activities have not commenced or where development has been discontinued due to adverse weather, strikes, material or labour shortages, economic

conditions or similar hardship beyond the land holder's control.

32.0 Duties and Responsibilities of the Applicant

- 32.1 Every Applicant shall ensure that all development complies with this Law and other applicable enactments respecting safety.
- 32.2 Every Applicant must obtain all permits and approvals required in connection with proposed work, prior to commencing such work.
- 32.3 Prior to commencement of any construction, every successful Applicant must apply for and receive as building permit, as required by the Sliammon Building Law.
- 32.4 Every Applicant when required by the Zoning Administrator, must provide, in a form satisfactory to the Zoning Administrator, evidence to certify compliance with the requirements of this Law and of any permits required.

33.0 Duties and Responsibilities of the Zoning Administrator

- 33.1 The Zoning Administrator is responsible for the administration and enforcement of this Law.
- 33.2 The Zoning Administrator must work with other Sliammon departments in a coordinated effort toward achieving the community development objectives identified in both the Sliammon Land Use Plan and Sliammon Comprehensive Community Plan and that are expressed through this Laws general zoning provisions.
- 33.3 The Zoning Administrator must keep copies of all permit applications, permits, notices and orders issued, and of all documents related to the administration of this Law or make digital copies of such documents.
- 33.4 The Zoning Administrator must issue such notices or orders as may be required to inform the land holder where a contravention of this Law has been observed;
- 33.5 The Zoning Administrator may reject an application for insufficient or incomplete information or for non-compliance with this Law;
- 33.6 The Zoning Administrator must distribute applications for review by other Sliammon staff as necessary, or as required by this Law;
- 33.7 The Zoning Administrator must prepare an Approval Review package for Council, including the full application with comments and recommendations, and submit to Council for final review where Council may:

Sliammon Land Use and Development Law July 18, 2011

- (a) Reject the application for non-compliance this Law;
- (b) Defer approval due to the need for further review or evaluation;
- (c) Provide conditional approval subject to any changes recommended by the Zoning Administrator; or,
- (d) Approve the proposal with no changes.

34.0 Powers of the Zoning Administrator

34.1 The Zoning Administrator is empowered to order:

- (a) A person who contravenes this Law to comply with this Law in a specified time period;
- (b) Work to stop on a building or part thereof, if work is proceeding in a contravention of this Law or the *Sliammon Building Law*;
- (c) The removal of any unauthorized encroachment on community lands; and
- (d) The termination of any occupancy, in the contravention of this Law or other applicable Sliammon law.

34.2 The Zoning Administrator may revoke a permit:

- (a) if there is a contravention of any condition under which the permit was issued;
- (b) that was issued in error; and
- (c) that was issued on the basis of incorrect information.

34.3 Any revocation of a permit made under section 33.3 must be in writing and transmitted to the permit holder by registered mail.

35.0 Minor Variance

35.1 If site conditions present unique circumstances that are not anticipated by this Law and would prohibit the practical development of that site for its intended use, the owner of any land, building or structure affected by this by-law may apply to the Council for a minor variance from the provisions of this by-law, in respect of the land, building or structure, or use thereof. The non-conforming structure or use allowed by such variance will apply only to a relaxation of lot dimensional standards and not to any requirement relating to environmental, cultural, or hazardous areas.

36.0 Non-Conforming Uses

36.1 Any land, building or structure that was constructed or used for a purpose prohibited by a law prior to the day this Law was made will be considered 'legally non-conforming', the land holder may apply to the Council for authorization to:

Sliammon Land Use and Development Law July 18, 2011

- (a) enlarge or extend the building or structure if such work does not further encroach upon the conditions that cause it to be non-conforming; ; or
- (b) use such land, building or structure for a purpose that is similar to the purpose for which it was used on the day this Law was made, or is more compatible with the uses permitted by this Law than the purpose for which it was used on the day this Law was made.

37.0 Criteria for Permit Recommendations made by the Zoning Administrator

37.1 The Zoning Administrator shall submit a recommendation to Council to issue the permit for which the application is made provided:

- (a) A completed application including all required supporting documentation has been submitted;
- (b) The proposed work set out in the application substantially conforms with this Law and all other applicable laws and enactments;
- (c) The land holder, applicant and/or his/her agent has paid all applicable fees set out in current Sliammon Development Permit application fee policies;
- (d) The land holder, applicant and/or his/her agent has paid all charges and met all requirements imposed by any other enactment or law; and
- (e) No covenant, agreement, or regulation in favour of Sliammon, or Sliammon law or other enactment authorizes the permit to be withheld;

37.2 The Zoning Administrator may recommend to Council to refuse or defer to issue a permit if:

- (a) Information submitted is inadequate to ensure compliance with this or any other applicable Sliammon law;
- (b) Incorrect information is submitted;
- (c) The proposed work would be prohibited by any other law, Act or regulation;
- (d) Site work has been carried out previous to issuance of a permit, including but not limited to, excavation or fill; and,
- (e) The need for further, more detailed review or evaluation, or community consultation has been identified.

38.0 Procedures

38.1 Within ninety days of the filing of a properly completed application, the Council shall hold a hearing with respect to the application.

38.2 At least fourteen days prior to the hearing, the Zoning Administrator shall:

Sliammon Land Use and Development Law July 18, 2011

- (a) Give notice to the applicant of the date, time and place of the hearing and informing the applicant, and any other resident of the reserve, that they have the right to appear at the hearing and to be heard in respect of the application;
 - (b) Post in the Sliammon Office a copy of the notice; and
 - (c) Refer the application for comment to appropriate Sliammon departments and external agencies as necessary.
- 38.3 At the hearing, the Council shall:
- (a) provide the applicant with an opportunity to present evidence and to make oral or written submissions in support of the application; and
 - (b) provide any Sliammon member, citizen or community resident present at the hearing with an opportunity to be heard.
- 38.4 Council may make rules of procedure governing the hearing of applications and shall keep records of its proceedings.
- 38.5 After it has heard all of the evidence and submissions, the Council shall meet in private to consider the application.
- 38.6 Council may seek the input and recommendations of the Zoning Administrator to determine how the application meets Sliammon Land Use Plan objectives.
- 38.7 In determining whether an application for a permit should be granted, the Council shall take into consideration:
- (a) the recommendations made by staff and comments made by staff, community members, and external agencies;
 - (b) whether the general intent and purpose of the Sliammon Land Use Plan will be maintained; and
 - (c) whether the general intent and purpose of this Law will be maintained.
- 38.8 Within ten days after the hearing, the Council shall render its decision on the application and shall give a written notice of its decision to the applicant which incorporates written reasons in support of its decision.
- 38.9 Within five days after disposing of the application, the Council shall post a notice of its decision in the Sliammon office.

PART VI

ENFORCEMENT

39.0 Notices and Charges Against Land Holders

39.1 Where Sliammon is required to give notice to or imposes an additional cost or charge against the land holder and two or more persons are shown as land holders in respect of a parcel of land, then a notice given to or a cost or charge imposed against one land holder is not invalidated by the failure to give notice to or to impose a charge against any other land holder.

40.0 Offences and Enforcement

40.1 Any person who contravenes this Law is liable upon summary conviction to a fine not exceeding \$10,000 and the cost of prosecution, every day during which there is an infraction of this Law constituting a separate offence.

40.2 Any person who:

- (a) fails to comply with any order or notice issued by the Zoning Administrator;
- (b) who allows a violation of this Law to continue

contravenes this Law.

40.3 A person who commences any development or construction activities prior to obtaining a permit as required by this Law shall pay double the permit fee calculated as prescribed in current Sliammon development permit fee policy to this Law to a maximum fee of \$5,000.

40.4 For the purposes of subsection 49.3, development shall be deemed to have commenced when:

- (a) land is cleared, brushed, or graded for construction; or
- (b) a building or structure or portion thereof has been demolished for reasons other than ensuring occupant or community safety.

40.5 The Zoning Administrator may order the cessation of any work that is proceeding in contravention of this Law by posting a stop work notice on the building, structure or land in the form provided by Sliammon First Nation.

40.6 The land holder on which a stop work notice has been posted, and every other person, must cease all construction and development work immediately and shall not do any work until all applicable provisions of this Law have been substantially complied with and the stop work notice has been rescinded in writing by the Zoning Administrator.

41.0 Appeal

- 41.1 A decision of Council, subject to section 41.2, may be appealed.
- 41.2 An appeal against a decision of Council may be submitted to the Zoning Administrator by any applicant who:
- (a) has applied under the provisions of this Law for a permit which has not been granted; or
 - (b) has had a permit revoked.
- 41.3 The appellant must file with the Zoning Administrator a statement in writing in such detail as will enable the Zoning Administrator to properly consider the appeal, setting out:
- (a) the address of the proposed development affected by the appeal;
 - (b) the sections of this Law that are relevant to the appeal; and
 - (c) the grounds for appeal.
- 41.4 The Zoning Administrator may confirm, reverse or modify their decision within a reasonable period following the written appeal.
- 41.5 If the appellant is dissatisfied with the decision of the Zoning Administrator, they may appeal in writing to Council.
- 41.6 Council must:
- (a) consider the appeal at a regular Council meeting within a reasonable time of receiving the appeal;
 - (b) notify the Zoning Administrator and the appellant of the time and place of the meeting;
 - (c) provide the appellant with an opportunity to be heard when the appeal is being heard by Council; and
 - (d) render its decision within a reasonable time of hearing the appeal.

42.0 Immunity

- 42.1 No action for damages lies or may be instituted against past or present Council, the building inspector or members, employees, servants or agents of either Sliammon Nation or Council:
- (a) For anything said or done or omitted to be said or done by that person in the performance or intended performance of the person's duty or the exercise of the

person's authority; or

- (b) Any alleged neglect or default in the performance or intended performance of the person's duty or the exercise of the person's authority.

42.2 Section 50.1 does not provide a defense if:

- (a) Council, the Zoning Administrator, members, employees, servants or agents have, in relation to the conduct that is the subject matter of the action, been guilty of dishonesty, gross negligence, or malicious or willful misconduct; or
- (b) The cause of action is libel or slander.

42.3 Sliammon, present or past Council, or members, employees, servants or agents of any of Sliammon or Council is not liable for any damages or other loss, including economic loss, sustained by any person, or to the property of any person, as a result of neglect or failure, for any reason, to discover or detect any contravention of this Law or any other Sliammon law, or from the neglect or failure, for any reason or in any manner, to enforce this Law or any other Sliammon law. .

42.4 All actions against Sliammon for the unlawful doing of anything that:

- (a) Is purported to have been done by Sliammon under the powers conferred by this Law or any Sliammon law; and
- (b) Might have been lawfully done by Sliammon if acting in the manner established by law,

must be commenced within six (6) months after the cause of action first arose, or within a further period designated by Council in a particular case, but not afterwards.

42.5 Sliammon is in no case liable for damages unless notice in writing, setting out the time, place and manner in which the damage has been sustained, is delivered to Sliammon, within two (2) months from the date on which the damage was sustained.

42.6 In the case of the death of a person injured, the failure to give notice required under section 50.4 is not a bar to the maintenance of the action.

42.7 Failure to give the notice or its insufficiency is not a bar to the maintenance of the action if the court before whom it is tried, or in the case of appeal, the Court of Appeal, believes:

- (a) There was a reasonable excuse; and
- (b) Sliammon has not been prejudiced in its defense by the failure or insufficiency.

43.0 Amendment of Law

43.1 Council may consider and make amendments to this Law in accordance with the Land Code. Provided that the amendment conforms to and supports the Vision, Objectives, and General Land Use designations of the Sliammon Land Use Plan, amendments may:

- (a) Create new zoning districts and standards for that district;
- (b) Modify the boundaries of existing zoning districts;
- (c) Revise the standards for an existing zoning district;
- (d) Revise the general standards for all districts; or,
- (e) Revise any portion of the Applications section of this Law.

(Amendments that would be applicable only to a single building lot will be considered a variance as described in section 35.0).

THIS LAW IS HEREBY DULY ENACTED by Council on the _____ day of _____, 20____, at Powell River, in the Province of British Columbia.

A quorum of Council consists of five members of Council.

_____ Chief Clint Williams	_____ Councillor Eugene Louie	_____ Councillor Vern Pielle
_____ Councillor Gloria Francis	_____ Councillor Walter Paul	_____ Councillor Denise Smith
_____ Councillor Bruce Point	_____ Councillor Larry Louie	_____ Councillor John S. Hackett
_____ Councillor Dillon Johnson	_____ Councillor Clint Williams	

SCHEDULE "A" GENERAL LAND USE DESIGNATIONS - TEESHOSUM

A.1 Purpose

- (a) The land use designations are established to ensure future development occurs in appropriate areas and that land is allocated in a way that meets community objectives on Ahgykson and in Teeshohsum. The designations set out broad management objectives and provide broad guidelines on allowed uses for designated land areas.

A.2 Application

- (a) Zoning designations, development plans, permitted developments, and land management activities in any specific area should conform to the management objectives and allowed uses of the land use designation for that area.

A.3 Permitted Uses

- (a) **Ookt soht yiqush** (Community Use): The following uses are allowed in this designation:

- a) Member housing (single- and multi-family, Elders, other options)
- b) Non-member, leasehold housing (single-family)
- c) Parks and recreation facilities (fields & ancillary buildings)
- d) Sliammon program offices (administration and program delivery)
- e) Community facilities (gym, meeting space, program offices, youth centre)
- f) Cultural facilities and buildings (Longhouse, Cultural Centre)
- g) Elders Care facility
- h) Health Centre
- i) Schools and day care, including adult education
- j) Cemetery
- k) Local food production (e.g., community gardens, orchards)
- l) Supporting infrastructure (water, sewer, power, roads)

- (b) **Nineh jeh tahla** (Economic Development): The following uses are allowed in this designation:

- a) Commercial retail (Sliammon-owned/joint venture, leased)
- b) Commercial enterprises (Sliammon-owned/joint venture, leased)
- c) Commercial office (aboriginal professional and leased)
- d) Light industrial and manufacturing (e.g., value-added wood products manufacturing, in-vessel composting, etc.)
- e) Supporting infrastructure (water, sewer, power, roads)

(c) **Uhmsnah jehjeum** (Forest Management) : The following uses are allowed in this designation:

- a) Timber harvesting and restoration
- b) Traditional and cultural uses and activities
- c) Non-timber forest products
- d) Agro-forestry and agriculture
- e) Limited eco- and cultural tourism
- f) Habitat protection and stewardship

(d) **Uhmsnah kootkoo** (Marine Management): The following uses are allowed in this designation:

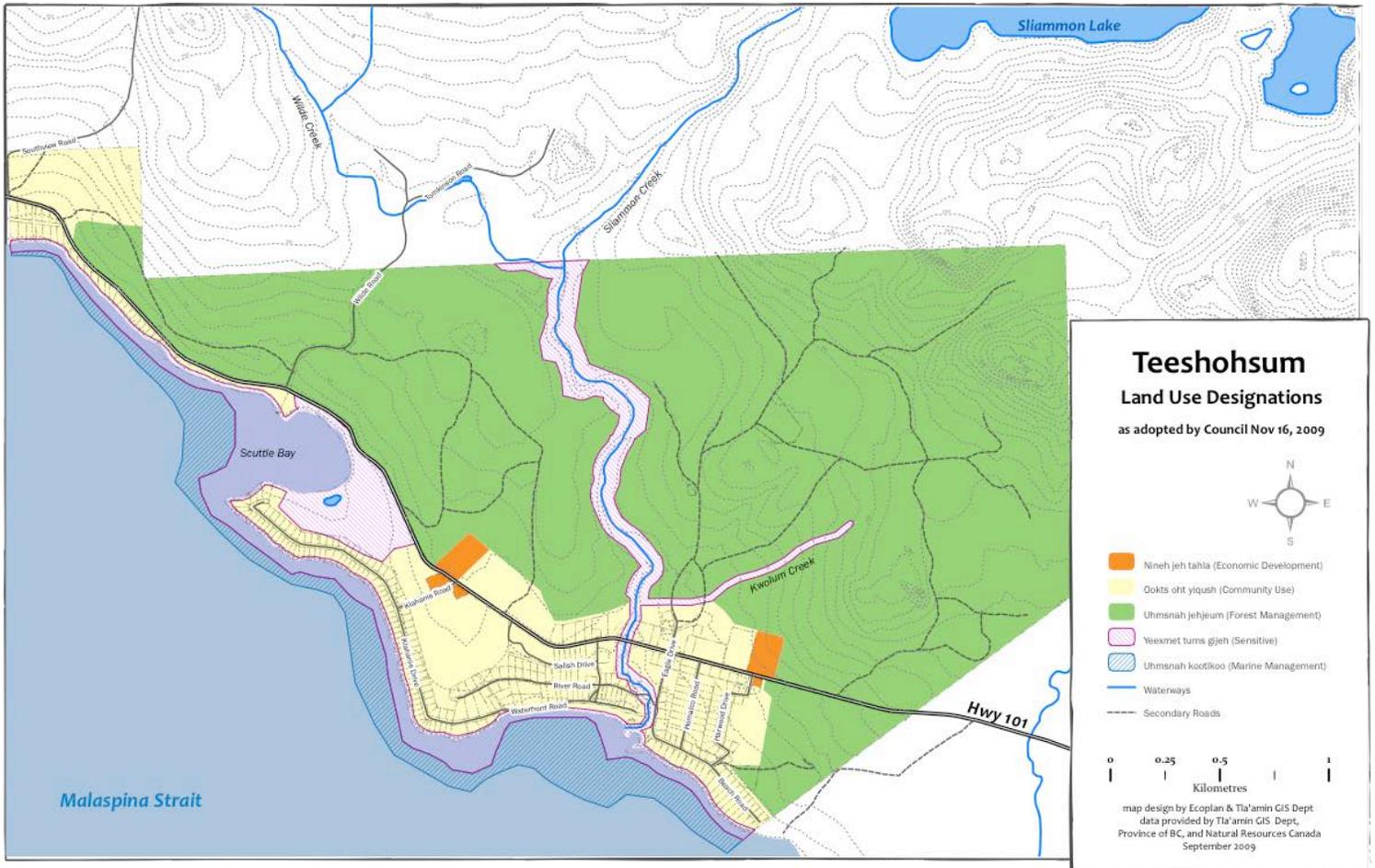
- a) Traditional and cultural uses and activities
- b) Limited eco- and cultural tourism and recreation
- c) Shellfish/fin fish harvesting (commercial/food)
- d) Habitat protection and stewardship

(e) **Yeexmet tums gijeh** (Sensitive Area): The following uses are allowed in this designation:

- a) Limited eco- and cultural tourism
- b) Protected environmental areas (i.e., creeks, foreshore, wetlands, etc.)
- c) Protected wildlife areas (i.e., eagle and heron nesting sites, etc.)
- d) Protected cultural areas (i.e., traditional use sites, archaeological sites, etc.)
- e) Traditional and cultural uses and activities

A.4 Area

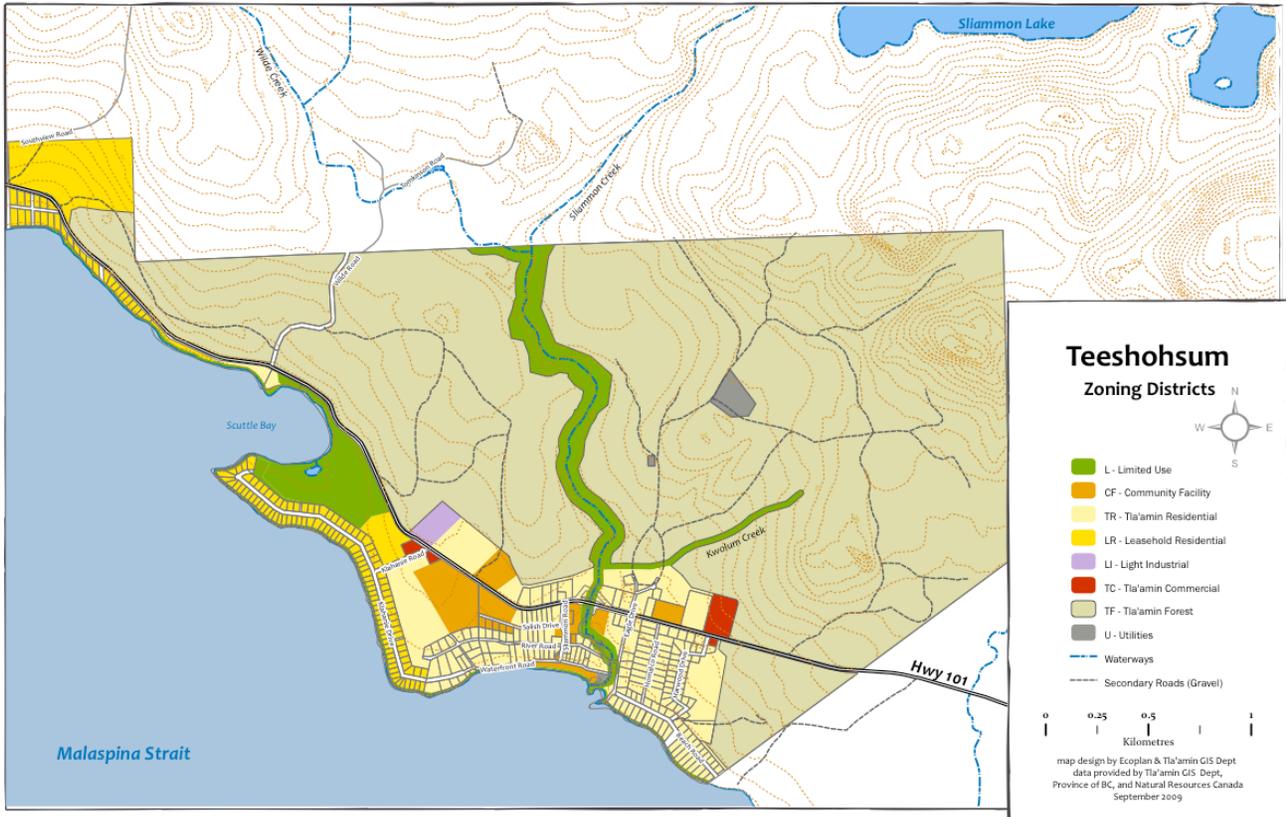
(a) General Land Use Designations for Teeshohsum are allocated to the land areas indicated on the following map.

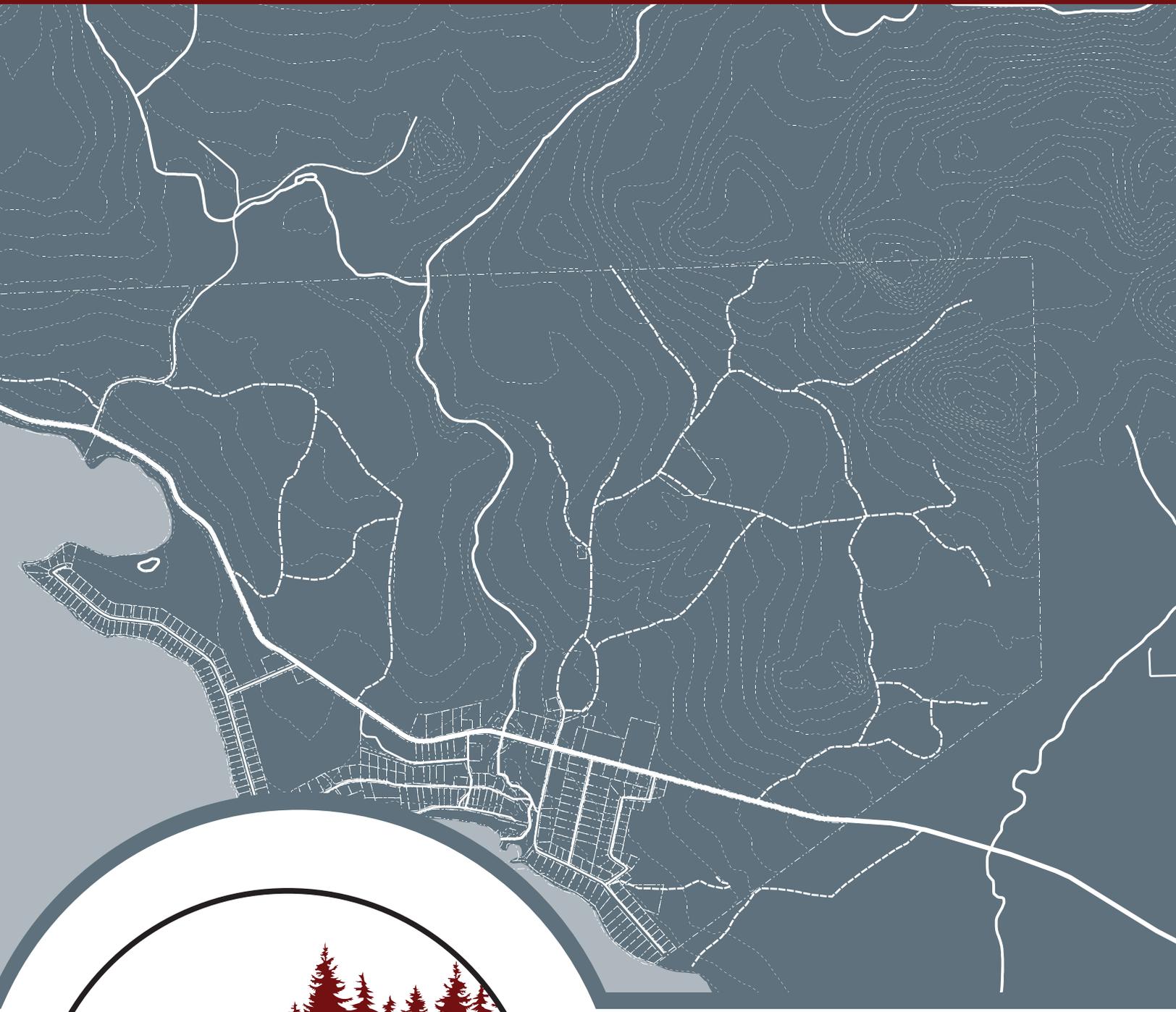


SCHEDULE “B” ZONING - TEESHOSUM

B.1 Area

(a) Zones for Teeshohsum are allocated to the land areas indicated on the following map.





TLA'AMIN

LAND USE PLAN

MARCH 2010



A note about names

This Land Use Plan uses spellings from our official phonetic place names list. Tla'amin is also used instead of the mispronunciation, Sliammon. Older project reports referenced in this Land Use Plan go by their original titles and use English place names that were given after contact. Tla'amin people were not consulted in their own territory and these place names legally went into effect. Please see the Glossary for more information.

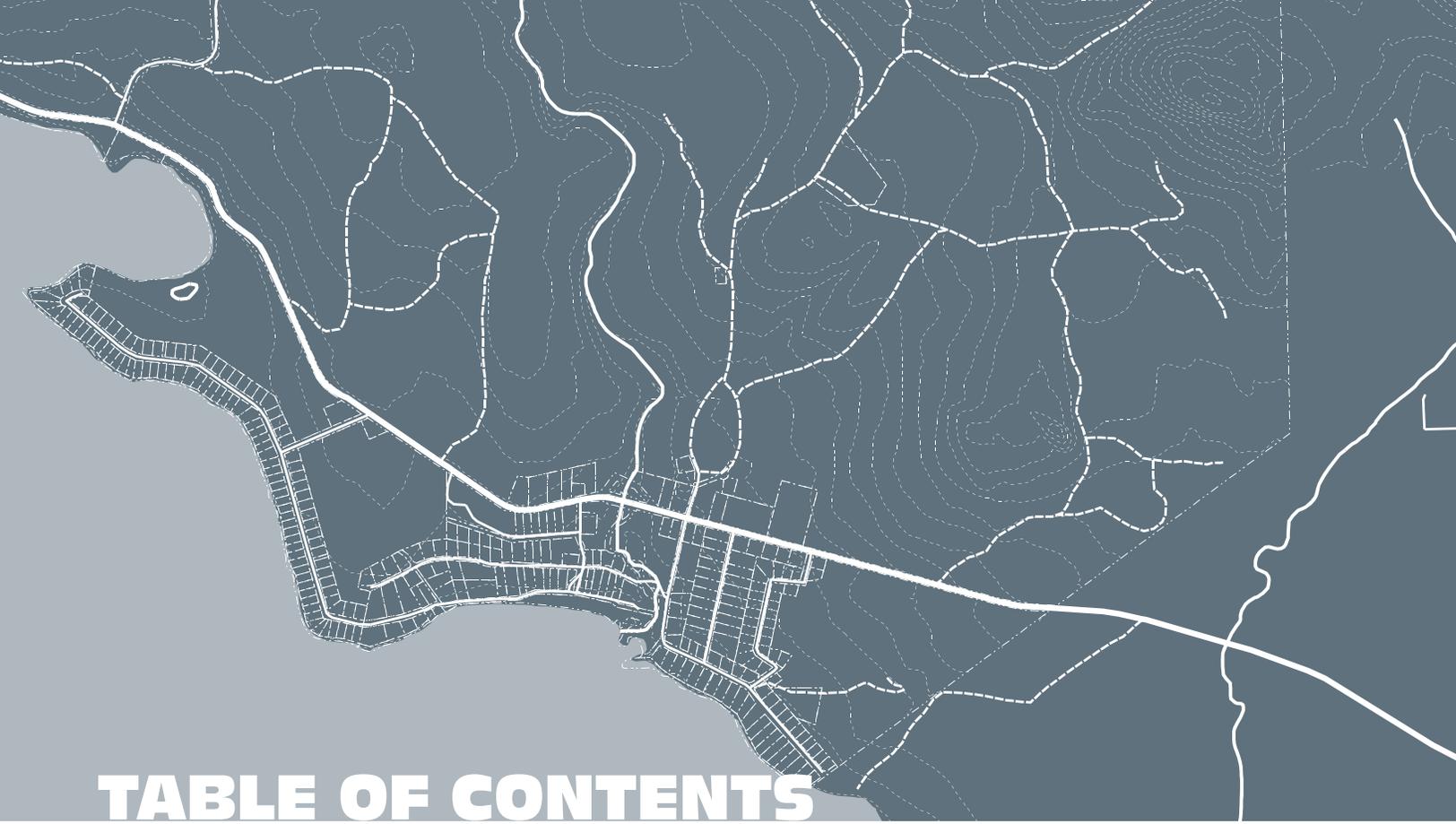


TABLE OF CONTENTS

1.0 INTRODUCTION	4	5.0 HOW DO WE GET THERE?	39
1.1 Summary	4	5.1 Development and Building Procedures	40
1.2 Planning Approach	8	5.1.1 Development and Building Review	40
2.0 WHERE HAVE WE BEEN?	11	5.1.2 Land Use Harmonization	40
2.1 People and History	12	5.2 Land Use Policies and Guidelines	41
2.2 Past Plans	15	5.2.1 General Land Use Designations	41
2.3 Planning Process	16	5.2.2 Teeshohsum Village Zoning	41
2.4 Working with our Community	16	5.2.3 Sensitive and Hazard Area Guidelines	42
3.0 WHERE ARE WE NOW?	19	5.2.4 Transportation & Servicing and Community Facility Sub-Plans	43
3.1 Our Lands	20	6.0 HAVE WE ARRIVED?	45
3.2 Our People	20	6.1 Monitoring and evaluation	46
3.3 Our Community Needs	21	6.2 Amendments	47
3.3.1 Housing	22	SCHEDULES and POLICIES	49
3.3.2 Facilities	23	A: Development & Building Procedures	51
3.3.3 Economic Development	24	B: General Land Use Designations	59
3.4 Land Development Considerations	26	C: Teeshohsum Village Zoning	67
3.4.1 Land Requirements	26	D: Sensitive & Hazard Areas Guidelines	73
3.4.2 Development Constraints	28	D1: Cultural and Environmental Areas Guidelines	73
4.0 WHERE DO WE WANT TO GO?	33	D2: Hazard Areas Guidelines	78
4.1 Our Land Use Vision	34	E: Sub-Plans	83
4.2 Our Land Use Objectives	36	E1: Transportation And Servicing	83
4.3 Anticipating the Future	37	E2: Community Facilities	87
		Glossary	95



1.0 INTRODUCTION

1.1 SUMMARY

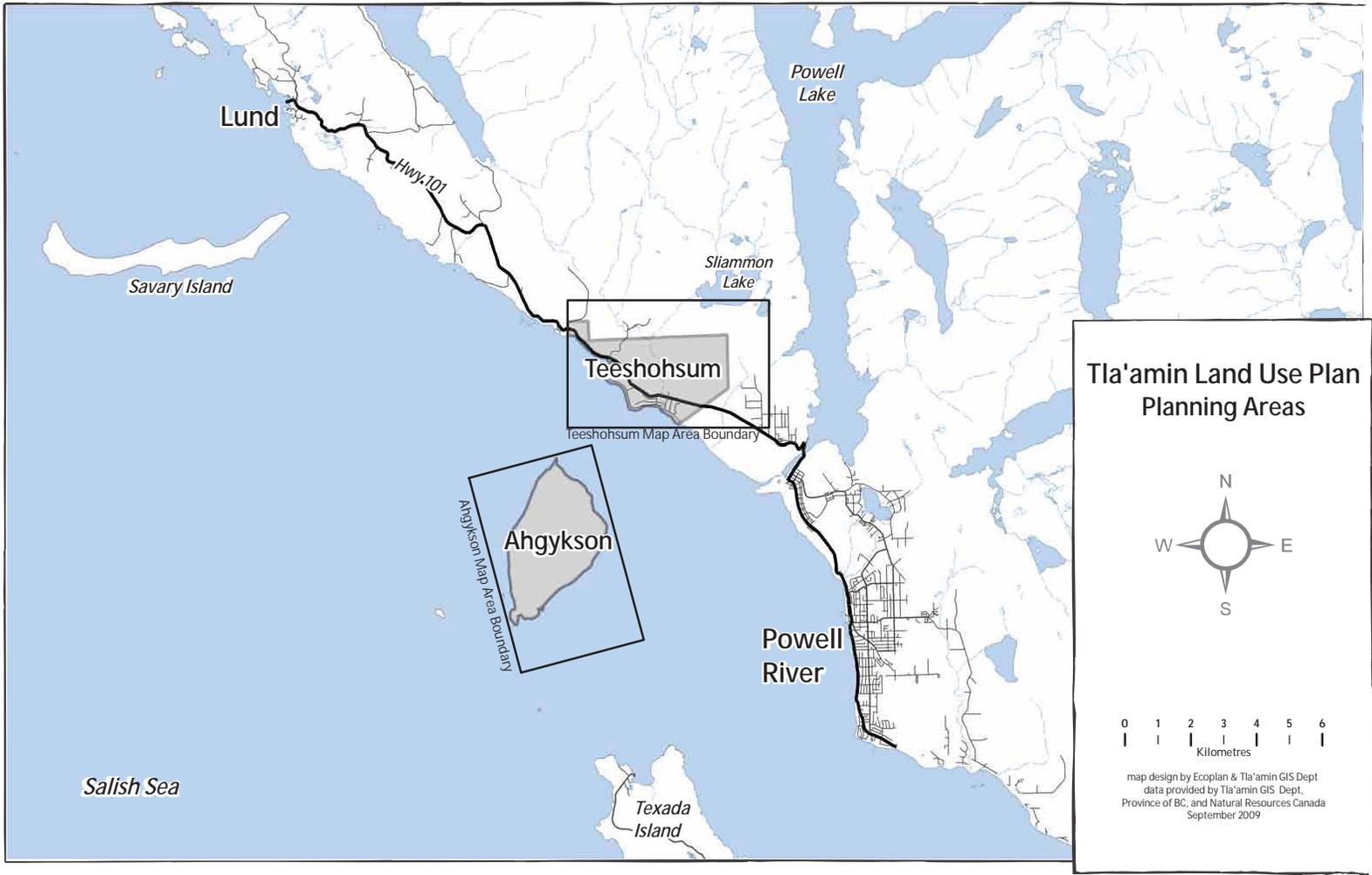
Our Land Use Plan directs **land use and development** on Teeshohsum (Sliammon IR 1) and Ahgykson (Harwood Island IR 2). It establishes direction by describing our vision and broad concepts for how we use and develop these lands. It also describes **how, where and when** people will be allowed use and develop **specific areas** within these lands.

This plan includes a **framework** for **land use decisions** that are to be made for all of our lands and properties, and **guidelines** on **how new development will be reviewed**, by whom, and when. It provides certainty around development in Teeshohsum and on Ahgykson and is a tool for **fair, transparent and consistent decision-making** by staff and leadership. This plan will help us move forward with important capital projects and upgrades (e.g., new water and sewer services, roads, new community facilities, etc.). It also supports our ongoing economic development planning and implementation.

Our Land Use Plan includes:

- General **land use designations** for our lands with a list of potential uses for each designation;
- **Zoning designations and regulations** for our main population centre, Teeshohsum;
- **Guidelines** to protect **environmentally** and **culturally sensitive areas**; and,
- A **development review process** that provides a **clear, transparent and strategic** framework for future land-use decision-making.

The objectives, principles and policies of this Land Use Plan are enacted under our Land Code through the **Tla'amin Land Use and Development Law**. All members, staff and leadership are bound to this law, as are any third-party development partners we may work with in the future.



**Tla'amin Land Use Plan
Planning Areas**



0 1 2 3 4 5 6
Kilometres

map design by Ecoplan & Tla'amin GIS Dept
data provided by Tla'amin GIS Dept,
Province of BC, and Natural Resources Canada
September 2009



1.2 PLANNING APPROACH

This Land Use Plan incorporates the same Tla'amin teachings that have guided our past planning work. The following teachings are particularly important to our land use decisions and policies:

- **Accountability (Yeeqotltlet)** – Regular and relevant reporting will be made throughout the process to elected leaders and community members with responsibility at the forefront of planning.
- **Communication (Qwakwistowtl)** – Work diligently to ensure two way consultation process is in place to provide clear and accurate information from the many perspectives of our people.
- **Fairness (Thahthxwen)** – Make every effort to ensure that everyone is given equal opportunity to witness and be included in the process through consensus decision-making.
- **Honesty (Ganuxwet)** – Be truthful, sincere and practical in the information provided to our people. Transparency and openness will resolve peoples concerns.
- **Respect (Teestahm)** – Honor our ancestors, our connection to the land and a sustainable future for our children by keeping them at the forefront of all processes.

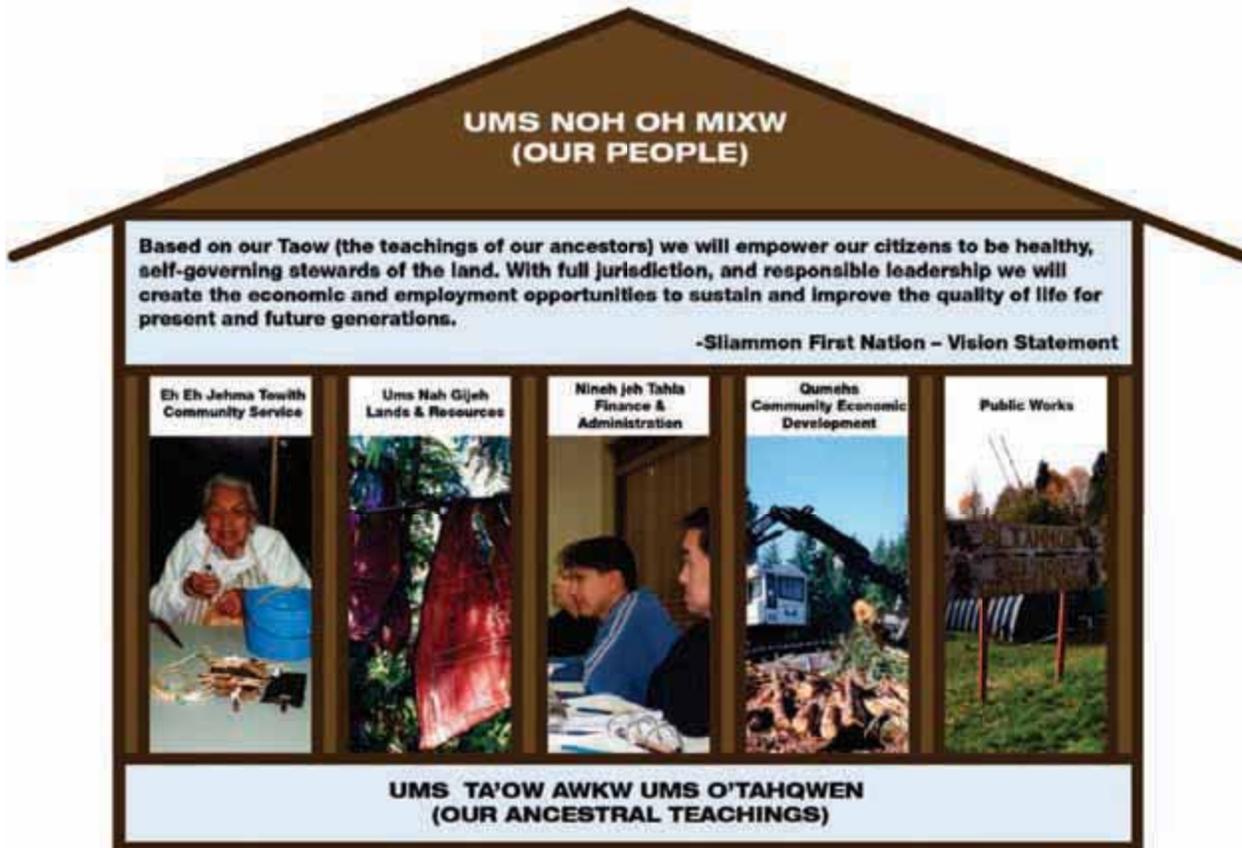
Over the past two decades, we have carried out a considerable amount of land use planning work. These projects generated a number of relevant and important land use policies and preliminary land use designations which informed and guided our final Land Use Plan.

Our past planning work is extremely important not only for the policies they created, but because of the **extensive member engagement** that was part of them, including the active involvement of many Elders who are no longer with us. These initiatives also required **considerable staff time and leadership input**. Our Land Use Plan carefully **built upon, confirmed and incorporated** this community feedback

The House of Governance model illustrated on the facing page was first developed for the 2004 *Reflecting on Traditional Governance* report and refined in 2007 for our *Comprehensive Community Plan*. Presented in the form of a longhouse, the Land Use Plan incorporated the model and was led by its Vision Statement. The components of the longhouse include:

- **Outer House Structure** – represents the Nation and all of the things that encompass the Governing of the Nation.
- **Foundation** – is comprised of Ums t'aow awkw ums O'tahqwen (our ancestral teachings) and signifies our inherent rights through the respect that Tla'amin have for the teachings and the land they left us, and the guidance they still provide.
- **Rafters** – the Tla'amin people are at the top in the rafters as a reminder that we are here for our people above all else.

- **Support Beam** – our vision statement is shown as the support beam across the top that connects everything in the house.
- **House Posts** – the organizational level is made up of house posts for each area of the Nation. Finance & Administration is shown as the central house post to signify the central role it plays in relation to the other house posts.







2.0 WHERE HAVE WE BEEN?

This section begins the story of our Land Use Plan. It provides a brief overview of our history and the two small reserves this Land Use Plan applies to. It also provides details on the planning process we used and summarizes the work we did with our community in developing the plan.

2.1	People and History	12
2.2	Past Plans	15
2.3	Planning Process	16
2.4	Working with our Community	16



2.1 PEOPLE AND HISTORY

Since the beginning of time, our people have lived on the lands that the Creator provided for our ancestors. Our creation stories speak of how the Creator put Tla'amin people on this land. We have a deep connection to it, established at the time of our birth when our umbilical cord was buried into the ground.

This connection is nourished by our teachings, which show how we are bound to the forests and waters of our territory. Our people have depended on this land for their survival since time immemorial. Archaeologists date some of the known archaeological sites to over 8,000 years ago.

Our teachings tell us about a vast traditional territory that once belonged to Tla'amin people. This traditional territory stretched along the northern Sunshine Coast, extending along both sides of the Straight of Georgia. The entire territory occupied an area about 400 square kilometers, and consisted of numerous temporary and permanent settlements within the region.

It is from our proud and long history that we derive our inherent right to self-government. With jurisdiction and responsible leadership, we will create economic and employment opportunities to sustain and improve the quality of life for present and future generations.

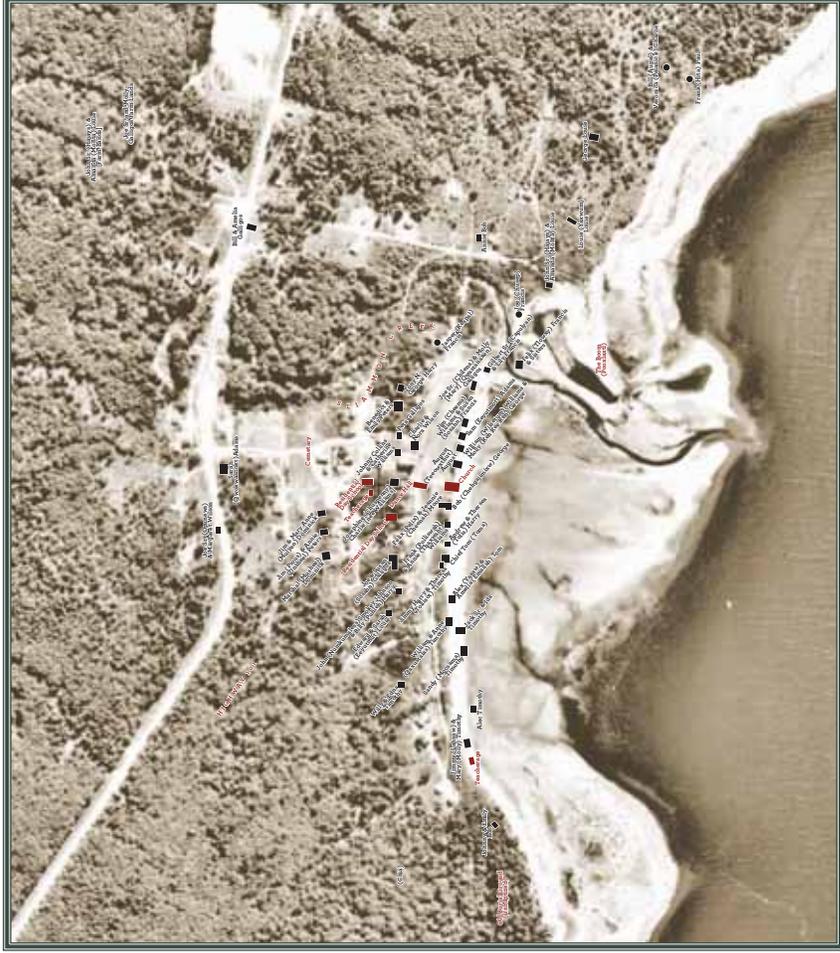
TEESHOSUM COMMEMORATIVE MAP

The map on the next page was started in 2004 when Elders were working on several Governance and Language project initiatives that kept coming back to discussions about where people lived and worked, life changing events and the people that passed on years before. There was very valuable information in the conversations, so we decided to get a blank map and start identifying Elders' earliest memories to the best of their recollection of where the main residences were on I.R.#1 prior to 1945. The Elders wanted to commemorate the memory of many of the early Teeshohsum residents. Prior to this families that held vast tracts of lands throughout the traditional territory.

Catastrophic disease, the church and residential schools, and the great fires (including the 1918 fire) were just some of the reasons Elders talked about people centralizing at Teeshohsum. Reserves were issued in 1879 and provincial laws followed about being on reserve from dusk till dawn. In 1900, Christian names were issued to simplify status and band membership and some people were automatically transferred out of their nation when they married. Some people were able to maintain fishing, hunting and trapping cabins located throughout the territory and continued to move according to seasonal gathering patterns. More recently, the commercial fishing and forestry sector took many people from the community for extended periods each year and many were forced to sign away status (enfranchise) so they could work off reserve.

The first lot surveys were carried out on Teeshohsum by the Department of Indian Affairs in 1958 which started a decades long battle over traditional properties versus Department of Indian Affairs certificates of possession which are registered legal interests.

The commemorative map celebrates our collective past at Teeshohsum and those Elders who lived and worked there in the early part of last century.



TEESHOSHUM COMMEMORATIVE MAP

APPROXIMATE 1920 TO 1945 - AERIAL PHOTOGRAPH 1965

The work on this draft map started in 2004 when the Elders group was working on several Governance and Language Project initiatives that kept coming back to where people lived and worked, life changing events and people that passed on years before. There was very valuable information, so we decided to get a blank map and start drawing names of where the Elders earliest memories of main residences were on IR #1.

The people shown on this map were born between 1870 and 1925. This map depicts approximately where they lived from 1920 to 1945. Because no earlier aerial photographs were available, some homes of younger generations are also shown, but were left out because they were built later.

To the best of their recollection, the older people wanted to honor the memory of many of the early Teeshohsum people that resided, but lost track of lands through out the traditional territory and lived according to our Teton. This map only depicts their main residences. Some people maintained fishing, hunting and trapping cabins located throughout the territory and continued to move according to seasonal gathering patterns. This seasonal pattern continued later when the commercial fishing and forestry sector took many people from the community for extended periods of time.

Catastrophic disease, the church, residential schools, and the great fires (including the 1918 fire) were just some of the reasons mentioned for people centralizing at Teeshohsum. Reserves were issued in 1879 and laws followed about being on reserve from dusk till dawn. In 1900 Christian names were issued to simplify status and band membership and some people were automatically stripped of their status or transferred out of their nation when they married.

The first lot surveys on IR #1 were carried out by the Department of Indian Affairs in 1988 which started a decades long battle over traditional properties versus DIA certificates of possession and some to be registered legal interests transferred through 1918 Estates. This map provides legal surveys and is not to be used for defining land boundaries. It is to be used for illustrative purposes only.

Special thanks to Katherine Blaney, Bob and Elizabeth Blaney, Charlie, Charlie, Anita and Dave Dominick, Mary George, Peggy Barry, Mildred Harry, Rose Louie, Agnes Megees, Blue Paul, Joe Paul and Lorraine Wilson. For all the memories, all the laughs, all the sacrifices and all the teachings, - we dedicate this work to you.

2.2 PAST PLANS

This Land Use Plan **builds on previous planning** and capacity building projects and initiatives. Over the past two decades, we have carried out a considerable amount of land use planning work for our reserves, Treaty Settlement Lands and with neighbouring local governments and other First Nations. These projects generated a number of **important and relevant land use policies**, many of which are carried over into this plan.

- •  **1) Physical Development Plan Update for Sliammon Indian Reserve No. 1 (1996)**
This plan established long term development goals, land use goals and a capital plan. While out dated, it is the only current plan that addresses infrastructure planning and engineering for Teeshohsum.
- •  **2) Highest & Best Use Analysis of Treaty Settlement and Reserve Land (2003)**
This analysis addresses characteristics of the land, the market for a variety of uses, the constraints and opportunities, and ultimately the highest and best use Tla'amin lands.
- •  **3) Land and Resource Management Plan for Sliammon Reserve Lands (2003)**
This plan established a community vision for reserve lands, general land use designations and management objectives. The plan's designations provided the foundation of the new Land Use Plan.
- •  **4) Land and Water Use Plan for Tla'amin Traditional Territory (2005)**
An expression of Tla'amin interests across the traditional territory and a guide for land use allocation and resource management decision-making.
- •  **5) Sliammon Comprehensive Community Plan (2007)**
This plan established a community vision for community development, updated zoning for reserve lands and technical background report with population projections.
- •  **6) Sliammon First Nation Environmental Management Framework (2007)**
This agreement established a strategy for managing environmental issues on reserve lands.
- •  **7) Sliammon- Powell River Regional District Harmonization Project (2008)**
This project made recommendations for harmonized land use planning in buffer zones between Sliammon lands and Powell River Regional District lands.
- •  **8) Sliammon Reserve Land Interest Verification Project - Phases 1 & 2 (2008)**
This project made recommendations for resolving outstanding land disputes on Teeshohsum.
- •  **9) Sliammon - SFU Archaeology and Heritage Stewardship Project (2008 - 2012)**
This project is expanding the inventory of archaeological sites and making recommendations on heritage stewardship.
- •  **10) Sliammon Woodlot License Plan (2009)**
This plan outlines a tree harvest and replanting program for Sliammon's community woodlot that covers a large portion of Teeshohsum, north of the main village area.



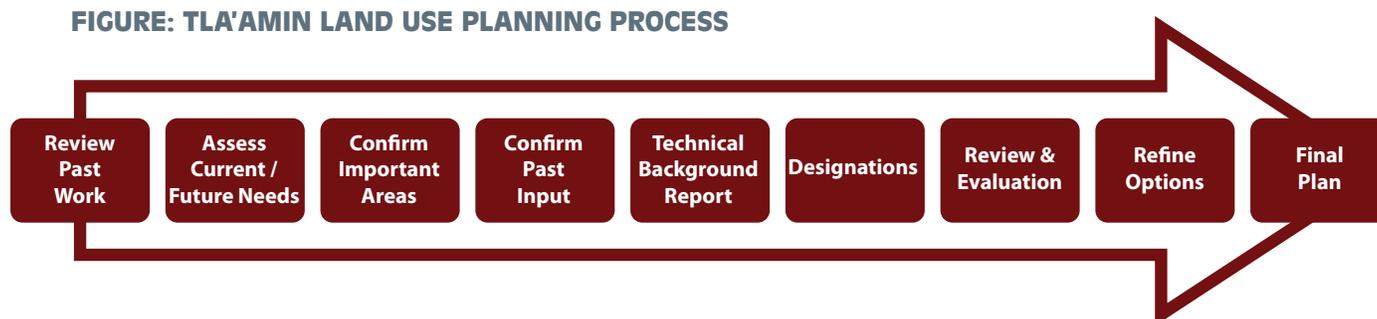
HOW IT ALL FITS TOGETHER

This graphic illustrates where the Land Use Plan fits in relation to our major laws and policies. It shows how this Land Use Plan fits under our Land Code and will be implemented through two laws, the Tla'amin Land Use and Development Law and the Tla'amin Building Law.

2.3 PLANNING PROCESS

Our Land Use Plan project started in August 2009. It included community input at each step and review by Tla'amin leadership at key junctures. The key steps in our process are illustrated in the graphic below.

FIGURE: TLA'AMIN LAND USE PLANNING PROCESS



1. Review past planning work and identify planning gaps and information needs;
2. Assess current and future needs for housing and community facilities;
3. Confirm culturally and environmentally sensitive areas and other land development constraints;
4. Confirm community-identified values and preferences from past plans;
5. *Technical Background Report* summarizing first four steps;
6. Generate land use designations based on past planning work, modified where necessary and appropriate;
7. Review options with community and leadership to determine critical choices and preferences, as well as decisions/opportunities that require further information (e.g., new administration building location, new sewage treatment facility, potential in-vessel composting system, etc.);
8. Refine preferred options to develop 'best' option; and,
9. Develop Final Land Use plan that directs Tla'amin towards the preferred option.

2.4 WORKING WITH OUR COMMUNITY

As already highlighted in Section 1.2, the development of this plan was **community-based and member-driven**. It involved on- and off-reserve members, Elders, youth and staff, leadership and committees.

Our approach recognized the fact that there were many other important initiatives underway in our community. Our **Constitution, Treaty**, and ongoing **Land Code** work have all required extensive and ongoing community engagement and input. This plan respects those efforts by including the community input from those processes.

Some of our Land Use Plan engagement activities are summarized below.

- **Project Support Team:** A core project team of senior staff (including one Councilor) met regularly to help guide the project and to work with our consultant team.
- **Steering Committee:** An advisory group made up of additional senior staff was established and met at key project junctures.
- **Chief and Council:** Our leadership kept up-to-date on the project through three presentations and working sessions, and provided direction on critical decisions. A Council representative was also a member of the Project Support Team.
- **Project web site:** We set up a project website (www.sliammon-lup.ca) where we posted all project information. Visitors could download copies of project materials or provide information through on-line surveys and questionnaires.
- **Community survey:** About 20% of our adult, on-reserve population (a very high response rate!) completed a questionnaire. The survey confirmed Land Use Plan directions and themes.
- **Community posters:** We developed a series of Community Information Posters that we displayed at community venues around Teeshohsum and at community events.
- **Neh Motl articles:** We produced regular monthly articles for Neh Motl to keep community members up-to-date on the project.
- **Elders' presentation:** A summary of the project was provided to 20 Elders at a luncheon and they completed questionnaires.
- **Community open houses:** We organized two open houses to gather input and feedback. Almost 40 people attended our first open house in December 2009, while 17 attended an open house in February 2010.
- **Chief and Council AGMs:** The Project Support Team attended an AGM in Teeshohsum and in Vancouver to gather input on components of the land use plan.





3.0 WHERE ARE WE NOW?

This section provides an overview of our lands within Teeshohsum and Ahgykson. It summarizes how we are currently using these lands and talks about what opportunities, needs, and constraints we considered while developing our Land Use Plan.

3.1	Our Lands	20
3.2	Our People	20
3.3	Our Community Needs	21
3.4	Land Development Considerations	26



3.1 OUR LANDS

TEESHOSUM

Located 130 km northwest from Vancouver on the northern Sunshine Coast and just outside the City of Powell River, Teeshohsum has been an important settlement area for our people throughout our history and is our main village site today.

Teeshohsum is currently our only populated reserve. Given the infrastructure and services already in place there, and the existing population, our Land Use Plan recommends that Teeshohsum remain the main area for residential and commercial development well into the future. This recommendation has been made previously by the Highest & Best Use Analysis of Treaty Settlement and Reserve Land (2003).

AHGYKSON

Located in the Salish Sea (Georgia Strait) about two kilometres south west of Teeshohsum, Ahgykson is our largest reserve at 848 hectares (2,095 acres). It is entirely undeveloped and a popular hunting, traditional gathering and camping destination for our members. There are also many important archaeological sites on the island. Ahgykson is the largest uninhabited island of all the Gulf Islands.

Ahgykson is abundant with natural resources. It is lined with sandy beaches, has several aquifers providing fresh water and has significant wildlife habitat value. Silica deposits have also been identified. Unfortunately, beaches on the south-east coast of the island have been contaminated by pulp mill effluent from Powell River and there have been shellfish closures there.

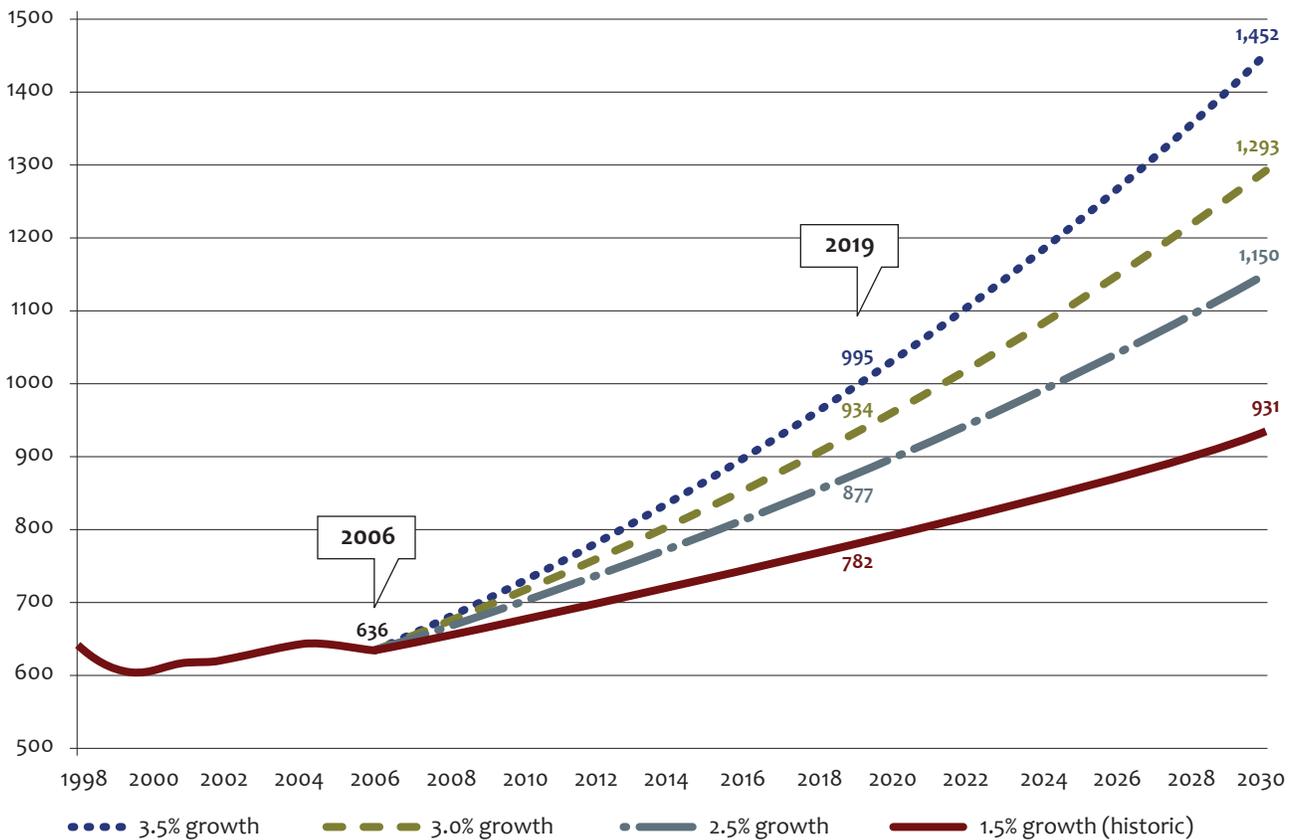
Extensive past community engagement has clearly shown that most community members have significant concerns around protecting the natural and cultural resources of Ahgykson and would like to see the island left as natural as possible.

3.2 OUR PEOPLE

In 2009, our total membership was estimated at about 1,000 people. Of these, almost 700 lived in Teeshohsum¹, or almost 70% of our population. Based on past population trends, it is expected that between 782 and 995 members could be living in Teeshohsum in 10-years time. Of course, our future on-reserve population will depend on a number of factors, including the diversity of housing available to members (i.e., homes for families, single people, Elders, etc.), the regional economy, and general living conditions in Teeshohsum. If current growth trends continue, Teeshohsum could conservatively be home to between 930 and 1,150 people by 2030.

1 Sliammon Comprehensive Community Plan – Community profile (2007).

FIGURE: TLA'AMIN ON- RESERVE POPULATION FORECAST, 2009 TO 2030



3.3 OUR COMMUNITY NEEDS

To help us determine what kinds of land uses should be permitted, we first had to determine **what our community's needs** were and then find out how much land we would need to meet them. Some of the questions we asked included:

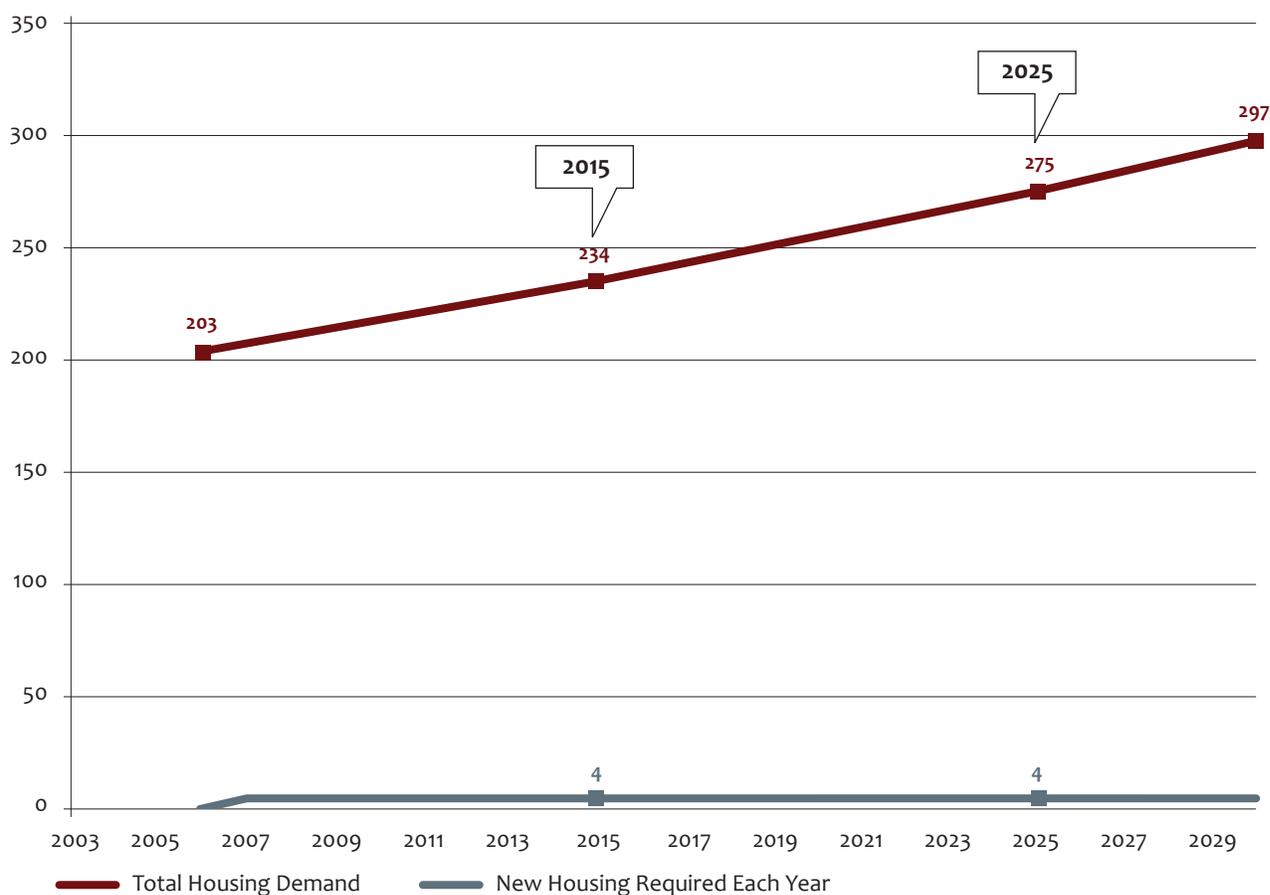
- What are our members' housing needs? How much housing is needed? What kind of housing is needed (e.g., single family, multi-family, social housing, Section 10 housing, etc.) and how will this need change over time?
- What kinds of new facilities are needed and why?
- How can we use our lands to generate revenue for the Band and to generate economic opportunities for our members?

3.3.1 Housing

Despite having no real housing wait list, **member housing** is still a key community concern. In particular, variety and choice of housing types was highlighted as an important need. Currently, our housing stock is mostly limited to detached single-family homes that do not meet the needs of all our members.

As illustrated in the chart, our housing needs are projected to grow over the next 20-years. The housing projections are based on our on-reserve population and demographic projections. They use the current rate of 3.13 people per dwelling unit. This shows that we will need approximately **95 new homes over the next 20-years** if our historic growth rate of about 1.6% continues into the future. If a higher growth rate was experienced (i.e., 3.5%), we would require almost 240 new homes over the next 20-years.

FIGURE: TEESHOSUM HOUSING PROJECTIONS, 2009 TO 2030



Currently, we are still working on the development of a new, 54-lot subdivision between our Health Centre and the Klahanie lease-hold lands that would address our short term needs (i.e., 10-years). From 2020 to 2030, following the completion of our new subdivision, we would need to build an average of **5 new housing units per year**.

TABLE: TEESHOHSUM MEMBER HOUSING OPPORTUNITIES AND CAPACITY

Housing Opportunities	Quantity or Land Area	Unit Capacity	Population Capacity
Vacant, serviced Lots	1 lot	4 residences, plus suites or duplexes	12 to 16 people
New subdivision west of Health Centre	9.8 hectares (24.2 acres)	54 residences, plus suites or duplexes	169 to 180 people
Addition of suites to existing member housing	203 current housing units	20 new suites or detached cottage units (10% uptake)	30 to 45 people
Total potential capacity		58 residences plus 20+ suites or cottage units	210 to 240 people
Additional 20-year capacity required to meet maximum population projections	At 7.5 units per hectare: 10 hectares (24.7 acres)	up to 75 units	up to 240 people

Assumptions:

- 3.13 persons per household for primary residential units
- 2.2 persons per household for suites, duplex units, and rental units
- 1 of 10 residential units includes a secondary suite, detached cottage, or is a duplex
- 230 to 450 new Teeshohsum residents (members) in 20 years

3.3.2 Facilities

Our top community facility needs as identified in our 2007 Comprehensive Community Plan and confirmed during this project include a new **Administration Building, a Cultural Facility, Longhouse** and a new **Elders Centre and Lodge**. We have carried out preliminary planning and feasibility work on these facilities, including location and siting preferences. The following table summarizes our facility needs.

TABLE: TEESHOHSUM FACILITY NEEDS

Facility	Current Planning Phase	Location(s)	Land Area required
Administration Building and Cultural Facility	<ul style="list-style-type: none"> • 2007 Cultural Building & Admin Facility Report 	<ul style="list-style-type: none"> • 2007 facility report and member vote selected site near Salish Centre • Land recently cleared across from Xwup-Xwup store for facility 	.8 hectares (2 acres)
Elders' Facility	<ul style="list-style-type: none"> • 2005 Feasibility Study 	<ul style="list-style-type: none"> • Potential site adjacent to Health Centre 	.1 hectares (.25 acres)
Cemetery	<ul style="list-style-type: none"> • 2006 CCP community visioning identified potential site 	<ul style="list-style-type: none"> • Potential site across Highway 101 from Salish Centre 	4 hectares (10 acres)

Facility	Current Planning Phase	Location(s)	Land Area required
Longhouse	<ul style="list-style-type: none"> • Discussion only • 2006 CCP community visioning identified potential site 	<ul style="list-style-type: none"> • Potential site north of Highway 101 above Salish Centre 	2 hectares (5 acres) for facility & parking, screening
Youth Centre	<ul style="list-style-type: none"> • 2009 discussion only • Project of new Tla'amin Youth Wellness Society 	<ul style="list-style-type: none"> • Proponent wants to locate it in 'Village Centre' near Salish Centre and Health Centre 	.1 hectares (.25 acres)
Wellness Centre	<ul style="list-style-type: none"> • 2009 discussion only • Project of new Tla'amin Youth Wellness Society 	<ul style="list-style-type: none"> • Proponent wants to locate it in 'Village Centre' near Salish Centre and Health Centre 	.1 hectares (.25 acres)
TOTAL			7.1 hectares (17.5 acres)

3.3.3 Economic Development

Our lands are the foundation of our economic development initiatives. As such, they must be able to provide **adequate opportunities for business development, revenue-generation and member employment**. While this land use plan recognizes the importance of economic development, it also understands that additional work, including the creation of an Economic Development Strategy, is required to properly determine our land requirements for economic development.

For Teeshohsum, our use of land for economic development consists primarily of **leasehold residential housing** and some limited commercial forestry. Currently, Teeshohsum includes the 111-lot Klahanie subdivision and 29-lot Southview subdivision, both of which are leased out to non-members and are significant revenue generators for Tla'amin.

Over the years, numerous development opportunities have been proposed, but few have been implemented. It is worth noting that the current Economic Development designations in this Land Use were based on specific development ideas that included everything from a golf course to a computer manufacturing facility. While some of the concepts still could be further explored and tested for financial feasibility, some, we know, are not likely feasible in the short- or long-term (e.g., computer manufacturing facility)

The table below summarizes some of the concepts and their status. Newer ideas developed through the land use planning process are also noted.

TABLE: TLA'AMIN ECONOMIC DEVELOPMENT OPPORTUNITIES AND LAND NEEDS

Development Opportunity	Current Planning Phase	Potential Location(s)	Land Area required or designated
New Lease-Hold Subdivision(s)	<ul style="list-style-type: none"> • Discussion only • Feasibility to be determined 	Southview extension, north west corner of Teeshohsum above Highway 101	18.5 hectares (45 acres)
		Klahanie extension, Scuttle Bay area below Highway 101	3.5 hectares (9 acres)
Industrial Park / Light Manufacturing	<ul style="list-style-type: none"> • Identified in CCP • No detailed planning • Feasibility to be determined 	Land designated above Highway 101, north west of Salish Centre	2.65 hectares (6.55 acres)
Office space	<ul style="list-style-type: none"> • Discussion only • Feasibility to be determined 	Economic Development designated land across from Xwup-Xwup	2.48 hectares (6.12 acres)
Computer Manufacturing Facility	<ul style="list-style-type: none"> • Identified in CCP • Unlikely due to technical and business feasibility 	NA	NA
Golf Course	<ul style="list-style-type: none"> • Identified in CCP • No detailed planning • Likely need to be linked to lease-hold housing project to be feasible 	Forested land above Scuttle Bay, above Highway 101	56.5 hectares (140 acres)
Winery	<ul style="list-style-type: none"> • Identified in CCP • No detailed planning • Unlikely in short-term 	Forested land above Scuttle Bay, above Highway 101	81 hectares (200 acres)
Gravel pit	<ul style="list-style-type: none"> • Potential site of moderate quality on Teeshohsum 	North-east corner of Teeshohsum	50 hectares (125 acres)
Eco-tourism	<ul style="list-style-type: none"> • Identified in CCP • No detailed planning 	Numerous opportunities and sites, particularly on Ahgykson	4 hectares (10 acres)

3.4 LAND DEVELOPMENT CONSIDERATIONS

3.4.1 Land Requirements

We will require up to 17 hectares (42 acres) to meet our community housing and facilities needs on Teeshohsum over the next 20-years. We have ensured that adequate and appropriate land is available to accommodate these needs through our land use designations and zoning.

Because our Economic Development requirements and opportunities are not yet clarified, we have identified specific land areas that are most suitable for economic uses or leasehold housing. Suitability includes factors such as proximity to infrastructure and access to major roads. These areas are large enough to accommodate a wide range of potential economic activities.

TABLE: COMMUNITY LAND NEEDS AND REQUIREMENTS

Community Need	Current Designated land area	Additional Land Requirements	Notes
Member housing	42.2 hectares (104.3 acres)	10 hectares (24.7 acres)	<ul style="list-style-type: none"> • There are no members currently on our housing wait list. Our new subdivision could potentially meet our housing needs for 10-years. After 2020, we would need to build an average of 5 units per year to meet expected demands. • There are many ways to build housing that would reduce our land requirements and make servicing each house more cost effective. • The addition of secondary suites or cottages with existing homes would create more opportunities for our elders, our young people, and young families to live on reserve. • Additional member housing sites identified in Community Use designation north of Highway 101 above Salish Centre and below Xwup-Xwup store
Community facilities	7.7 hectares (19 acres)	7.1 hectares (17.5 acres)	<ul style="list-style-type: none"> • If we build our new Administration and Cultural facility as planned, we could use the old Administration site for housing or cemetery expansion. • As our community grows, we will consider and plan for new facility needs within each new area of development.
Economic development – Leasehold Housing	18.7 hectares (47.74 acres)	22 to 30 hectares (54 to 74 acres)	<ul style="list-style-type: none"> • Enough space to expand our leasehold housing above our Southview subdivision and next to our Klahanie subdivisions. Potential to develop 54 to 150+ new leasehold lots depending on lot layout, sizing and servicing.



3.4.2 Development Constraints

We identified and mapped general land constraints for both Teeshohsum and Ahgykson. Constraints are limitations to development that either make new development impossible or limit it. Examples of land constraints include:

- **physical constraints** (e.g., steep and unstable slopes, high water table levels, flood threat, etc.);
- **cultural constraints** (e.g., known archaeological sites, cultural sites, etc.); and,
- **environmental constraints** (sensitive ecological areas like Sliammon Creek and the foreshore, etc.).

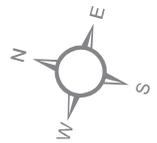
Knowing the location of these constraints also helped us better understand where our development opportunities are.

WATER AND SEWER

We also know that our current infrastructure and servicing capacity will limit development. Teeshohsum is nearing capacity for water services, so new residential and community facilities may require increased water services capacity or improved demand management strategies. We are in the process of addressing our future water needs and the management of this critical resource.

Our current sewer facility for Teeshohsum is also nearing maximum capacity. We are currently in planning stages to develop a new system to address current and future needs.

Ahgykson Land Use Constraints



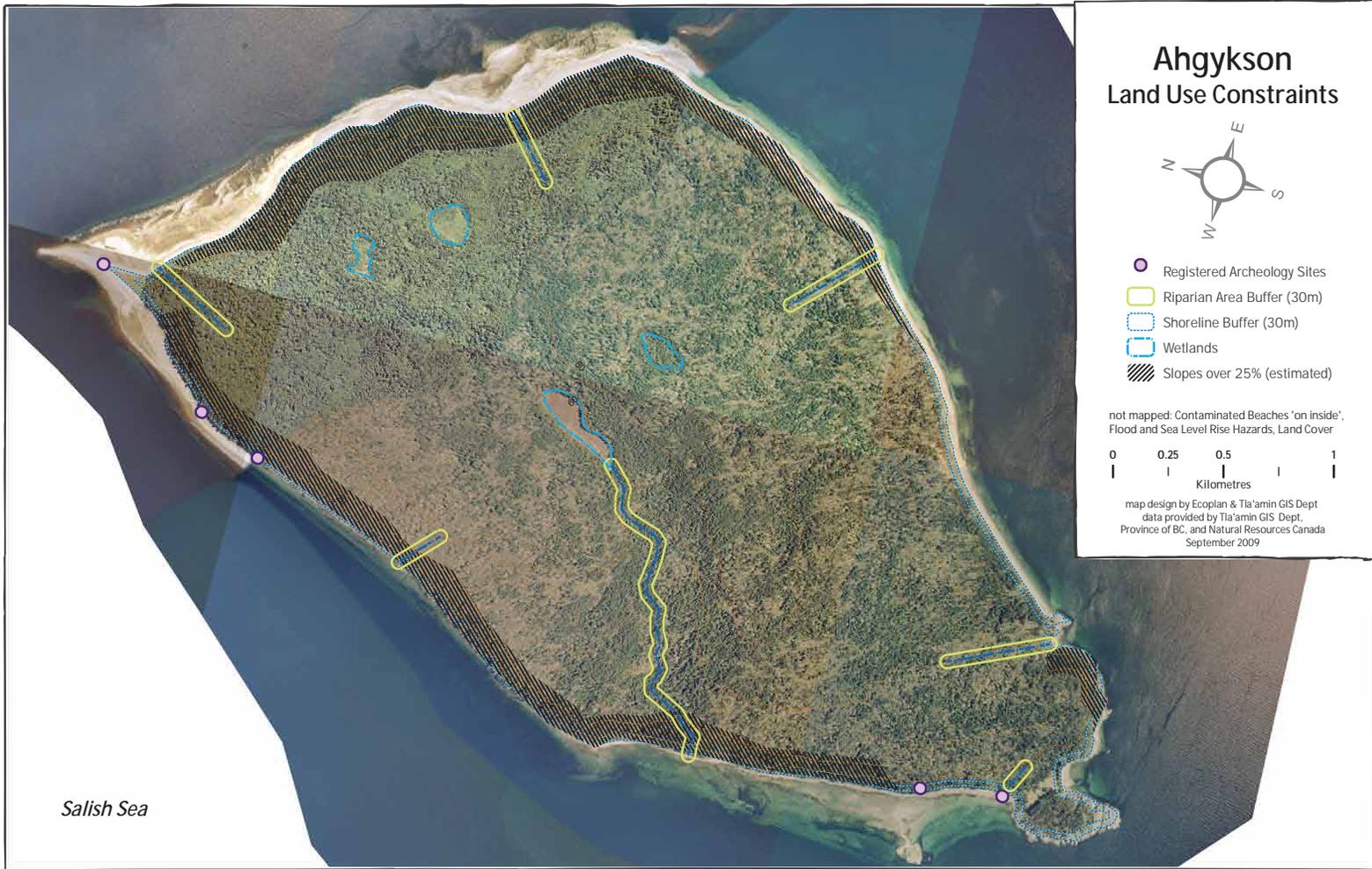
- Registered Archeology Sites
- Riparian Area Buffer (30m)
- Shoreline Buffer (30m)
- Wetlands
- Slopes over 25% (estimated)

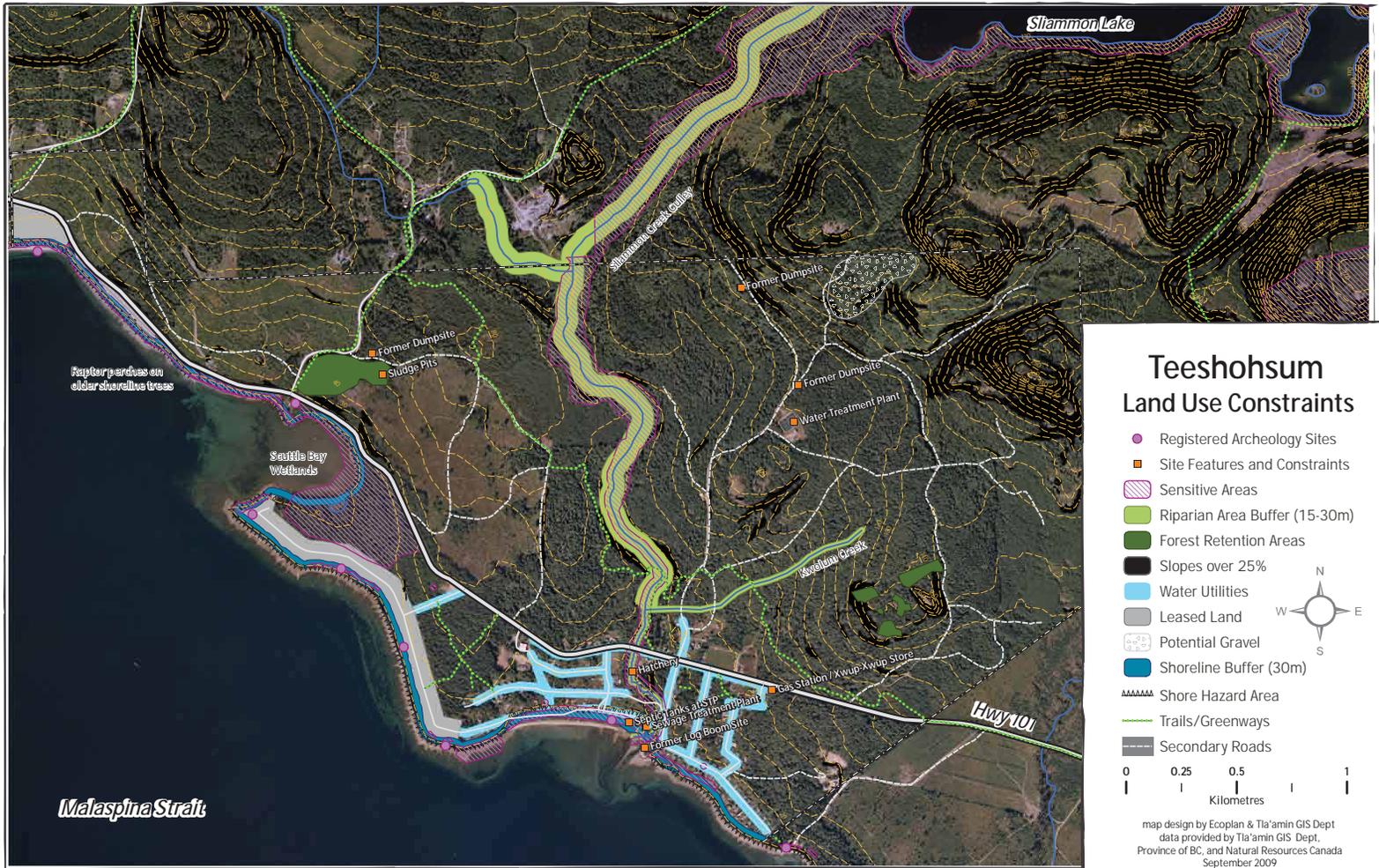
not mapped: Contaminated Beaches 'on inside',
Flood and Sea Level Rise Hazards, Land Cover



map design by Ecoplan & Tla'amin GIS Dept
data provided by Tla'amin GIS Dept,
Province of BC, and Natural Resources Canada
September 2009

Salish Sea





Malaspina Strait

Slammom Lake

Redberry arduous on
elder shorelines trees

Seafille Bay
Wetlands

Shishamook Creek Gully

Former Dumpsite

Former Dumpsite
Sludge Pits

Former Dumpsite

Water Treatment Plant

Koselium Creek

Hatchery

Gas Station / Xwup Xwup Store

Septic Tanks at STP
Sewage Treatment Plant

Former Log Boom Site

Hwy 101



4.0 WHERE DO WE WANT TO GO?

This section describes our land use vision and the larger, strategic community development objectives we used to guide our land use planning process.

4.1	Our Land Use Vision	34
4.2	Our Land Use Objectives	36
4.3	Anticipating the Future	37



4.1 OUR LAND USE VISION

Our vision statement from our 2007 *Comprehensive Community Plan* reads:

Based on our Taow, we will empower our citizens to be healthy, self-governing stewards of the land. With full jurisdiction, and responsible leadership we will create the economic and employment opportunities to sustain and improve the quality of life for present and future generations.

Our Land Use Plan supports this vision.

When reviewing member feedback provided during past planning initiatives (e.g., *Sliammon Comprehensive Community Plan*, 2007) and feedback provided specific to this process, we heard some consistent ideas and thoughts from our members. We heard:

Teeshohsum is our home community

- This should be the core location for new member housing and facilities.
- Facilities should feel welcoming & accommodate the diverse needs of our membership.

A good Community is more than just houses

- Our community should be where we work, learn, play and gather.
- Our community should include parks, open spaces and natural areas.

Teeshohsum and Ahgykson must both sustain Tla'amin culture

- Our facilities in Teeshohsum should include a cultural centre.
- Special areas should be protected for ceremonial activities.
- Certain historic and cultural areas should be protected from all development.

Ahgykson should be protected

- Development on Ahgykson should be limited to traditional and cultural activities, or small-scale eco-tourism where practical and feasible.

Land use decisions for our lands must be transparent and involve members

- Development on our lands affects everyone, so members should be involved in reviewing major projects.
- Development review should be open, transparent and accountable.



4.2 OUR LAND USE OBJECTIVES

Our 2003 *Land & Resource Management Plan for Sliammon Reserve Lands (LRMP)* developed preliminary land use designations that were refined in this Land Use Plan. The LRMP also identified management objectives for the land use designations which are summarized below.

Because of overlapping objectives and designations, our Land Use Plan combined the Uhmsnahkayeh (Watershed Management) designation with the Yeexmet tums gijeh (Sensitive) designation to simplify and improve the designations. The management objectives for both designations were brought forward in the new designation.

TABLE: TLA'AMIN LAND USE DESIGNATION MANAGEMENT OBJECTIVES

Designation	Management Objectives
Ookts oht yiqush (Community Use)	<ul style="list-style-type: none"> • Encourage diverse housing options to meet demographic needs • Encourage infill of existing serviced areas • Provide adequate recreational, cultural, government amenities • Maintain and enhance the rural village character in Teeshohsum • Promote sustainability (e.g., community gardens, orchards) • Encourage home-based businesses
Nineh jeh tahla (Economic Development)	<ul style="list-style-type: none"> • Minimize environmental and community impacts • Permit community-supportive commercial recreation facilities
Uhmsnah jehjeum (Forest Management)	<ul style="list-style-type: none"> • Promote and support sustainable forestry • Create a multi-use community forest (i.e., recreational and commercial uses) • Permit all traditional and cultural uses of Tla'amin forestlands
Uhmsnah kootlkoo (Marine Management)	<ul style="list-style-type: none"> • Encourage sustainable use of intertidal and coastal resources • Recognize area as Tla'amin "asset in common" • Permit traditional and cultural uses
Yeexmet tums gijeh (Sensitive Area)	<ul style="list-style-type: none"> • Protect traditional and cultural use sites whenever possible • Protect known archaeological sites whenever possible • Protect and buffer riparian habitat fish • Permit and support traditional and cultural uses • Accommodate non-consumptive uses, including sensitive recreational uses

4.3 ANTICIPATING THE FUTURE

A challenging aspect of describing ‘Where Do We Want to Go?’ is the uncertain risks posed by the effects of climate change. Scientific debate has from “*Is this a real threat?*” to “*What will happen, by how much, and what can we do about it?*” This threat plays a significant role in shaping our long-term vision for our land.

Climate change scientists predict that BC will experience (and in some cases already is experiencing) the following impacts due to climate change²:

- Increasing temperatures will shift ecosystems to the north and to higher elevations.
- Increasing water temperatures will disturb aquatic ecosystems.
- Shifts in weather and precipitation patterns may disturb ecosystems that are sensitive to these cycles, as well as water supply infrastructure that is designed for specific conditions
- Coastal storm activity will increase in intensity and frequency, exposing coastal housing and infrastructure to greater risk.
- More intense and more frequent storms may damage and interrupt the provision of basic services such as water, power, fuel, and transportation.
- Sea levels could rise by as much as 1.2 metres, causing permanent flooding of low-lying areas and increasing the impacts of flood and storm events.

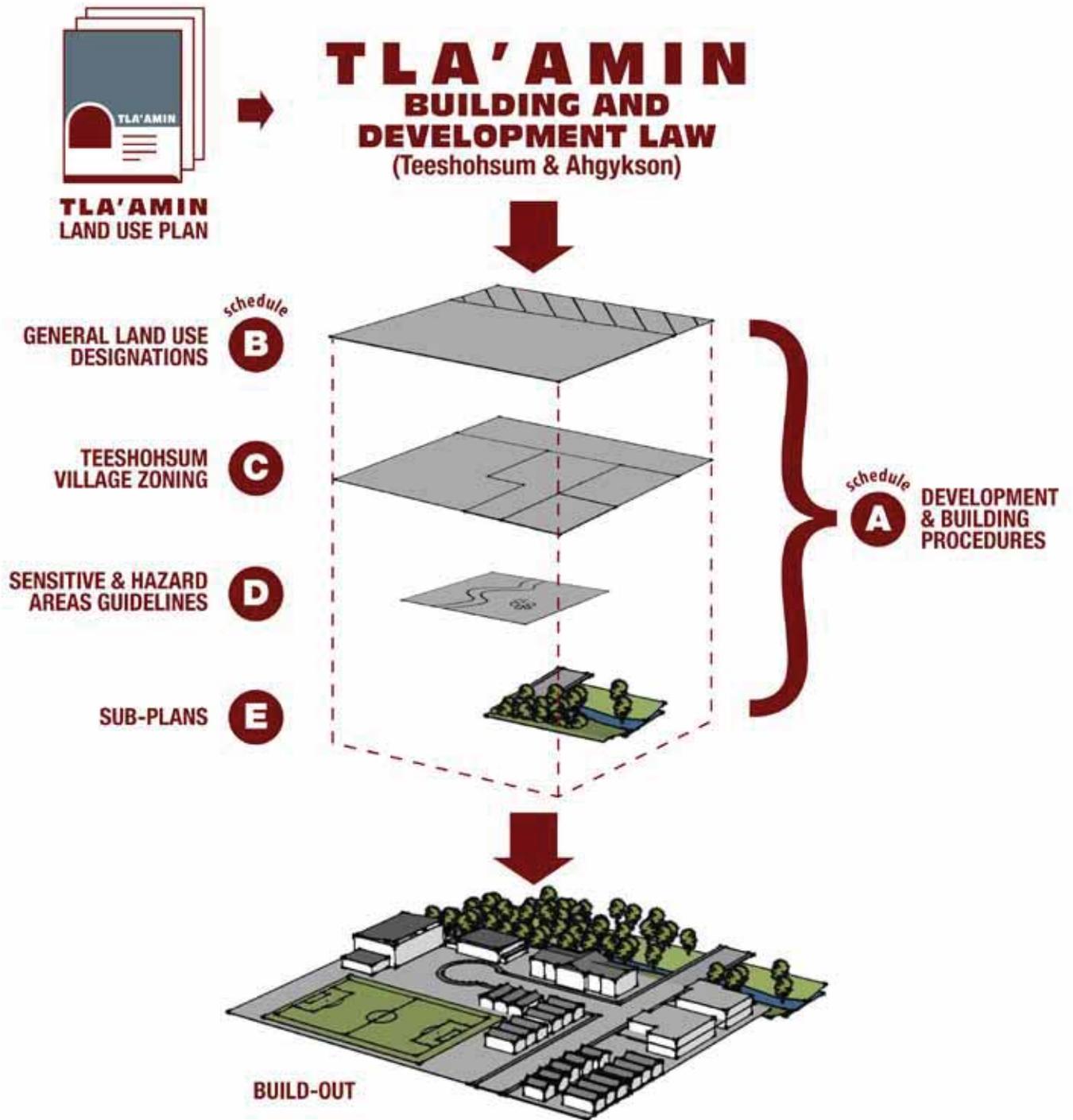
An example of our uncertainty is the projected height of actual sea level rise. Current provincial estimates for our traditional territory range from 0.04 to 1.03 metres by the year 2100³. Considering our time living on these lands, that year is not far away.

We want to manage our exposure to climate change risks and start preparing now. Though many of these impacts are beyond our ability to control, we can manage our exposure to hazards and our use of water and energy. The following summary of strategies refers to guidelines found elsewhere in this plan.

Strategy	Plan Component
Minimize the need to drive by providing our members with local facilities and resources	Schedule B: General Land Use Designations locate most housing within walking distance of our commercial and community services.
Be prepared for sea level rise	Schedule D-2: Hazard Areas Guidelines recommend a 30-metre setback from high water and a minimum flood elevation level to protect future developments.
Protect important ecological features and maximize ecological functioning	Schedule D-1: Sensitive Areas Guidelines recommend the protection of environmentally sensitive areas such as riparian corridors and wetlands.

² Adapted from “Climate Change Adaptation: Planning for BC”, Harford et al. November 2008

³ British Columbia Coast and Marine Environment Project, BC Ministry of Environment. 2006





5.0 HOW DO WE GET THERE?

This section summarizes the policies, guidelines and sub-plans that together make up the technical Land Use Plan for Teeshohsum and Ahgykson.

The graphic on the facing page illustrates how the different policies and guidelines fit together to create a comprehensive planning framework where development proposals go through a number of layers, or filters, as they are evaluated and refined.

The policies, guidelines and sub-plans that are attached as Schedules to this Land Use Plan describe how the Land Use Plan is enacted and implemented for day-to-day planning through the Tla’amin Building Law and the Tla’amin Land Use and Development Law – Teeshohsum.

5.1	Development and Building Procedures	40
5.2	Land Use Policies and Guidelines	41



5.1 DEVELOPMENT AND BUILDING PROCEDURES

This section summarizes how our Land Use Plan policies will be implemented through Tla'amin laws and harmonized with those of our neighbours.

5.1.1 Development and Building Review

Our development and building review procedures are attached as **Schedule A**.

Our development and building procedures describe how development on our lands is reviewed and new buildings approved. The policies are established for the benefit of our community and our members to ensure that:

- Everyone is **treated fairly and equally**;
- Development planning is a **transparent and efficient process**;
- Land is developed and buildings constructed in a manner that **protects the health and safety** of members, residents, and visitors to Teeshohsum and Ahgykson; and,
- Land is developed and buildings constructed in a manner that **achieves community development objectives**.

With few exceptions, a permit will be required for all construction and land development. The process by which permits are reviewed and issued is defined and enforced by the **Tla'amin Land Use and Development Law** and the **Tla'amin Building Law**.

5.1.2 Land Use Harmonization

We are committed to working with our neighbours to ensure that land uses in Teeshohsum and on Ahgykson do not conflict with those in neighbouring jurisdictions, and vice versa.

Our Land Use Plan acknowledges and respects the existing **protocols** we have already established with the **City of Powell River** and the **Regional District of Powell River**. The following protocols and related planning initiatives are specifically acknowledged:

- Sliammon – City of Powell River Protocol Agreement on Culture, Heritage and Economic Development (2004) *Note: currently under a review and amendment process to strengthen cultural site protection*
- Sliammon – Powell River Regional District Protocol Agreement for Communication and Cooperation (2004)
- Sliammon – Powell River Regional District Harmonization Project (2007)

5.2 LAND USE POLICIES AND GUIDELINES

5.2.1 General Land Use Designations

Our general land use designation policies are attached as **Schedule B**.

Our Land Use Plan provides **general land use designations** for Teeshohsum and Ahgykson. The designations are established to ensure:

- **Future development** occurs in appropriate areas; and,
- Land is allocated in a way that **meets community development objectives** for both Ahgykson and Teeshohsum.

The land use designations guide all land use and development decisions. Zoning designations, development plans, permitted developments, and land management activities in any specific area should conform to the **management objectives** and **allowed uses** of the land use designation for that area.

Our land use designations were first created for our 2003 *Land & Resource Management Plan for Sliammon Reserve Lands* and carried over into our 2007 *Sliammon Comprehensive Community Plan*. While we maintained the designations, the list of permitted uses for them was further refined.

The land use designations were unanimously endorsed by Tla'amin Council on November 16, 2009.

5.2.2 Teeshohsum Village Zoning

Teeshohsum Village Zoning policies are attached as **Schedule C**.

Specific **zones** are established within Teeshohsum to provide additional development control in our main population centre. The zoning establishes **specific policies** regarding the size and shape of parcels, the activities and intensity of uses that might occur on those parcels, and the siting and configuration of buildings on those parcels in Teeshohsum.

Teeshohsum zoning is implemented through the **Tla'amin Land Use and Development Law** and must be considered during the planning and development of any land or structures in Teeshohsum.

5.2.3 Sensitive and Hazard Area Guidelines

These development guideline policies are attached as **Schedule D**.

- **Sensitive Areas:** Our people have been present in Teeshohsum and on Ahgykson for thousands of years. While we have identified many important archeological and cultural sites, many more wait to be discovered. These guidelines will help protect historic sites and sacred places from being damaged or lost during land development. We also accept our role of stewards of our lands and waters and take the challenge very seriously. These guidelines describe important ecological areas and illustrate how we will protect them from development activities.

Sensitive Areas guidelines are established to ensure that future lands are allocated and buildings constructed in a manner that protect our culture, heritage, and natural environment from damage or degradation due to construction and development impacts. Any construction work that we do in the indicated Sensitive Areas should consider these guidelines, including site works, landscaping, and the construction of homes or community buildings.

- **Hazard Areas:** As a coastal people, we are especially exposed to the threats posed by ocean storm surges and the potential impacts of sea level rise. These guidelines are established to ensure that future lands are allocated and buildings constructed in a manner that protect our people from harm and our investments in buildings and infrastructure from unnecessary damage due to coastal hazards. Any construction work that we do in the indicated Hazard Areas should consider these guidelines, including site works, landscaping, and the construction of homes or community buildings.

DEVELOPMENT PLANNING, DESIGN AND CONSTRUCTION GUIDELINES

We are planning on creating special guidelines that will represent our commitment to developing our lands in the most environmentally sustainable, economically responsible and socially appropriate manner possible. We accept our role of *stewards of our lands* and take the challenge very seriously. We expect all our development partners – from our members to our joint-venture collaborators - to work with us to ensure that our new developments meet the highest standards.

When completed, our planning, design and construction guidelines will be used in conjunction with our Land Use Plan, to achieve the following goals:

- All new development will *respect the natural environment* and take a holistic approach to *integrate new buildings* with the land and the particular site.
- All new buildings will *minimize resource consumption* (energy, water, land, and materials).
- All new buildings will be built to last and will *protect the health and safety* those living, working and playing in them.
- All new development will be *cost-effective* and make our homes and community facilities more affordable to build and maintain over the long-term.

5.2.4 Transportation & Servicing and Community Facility Sub-Plans

These sub-plan policies are attached as **Schedule E**.

This section describes two sub-plans that should be **referred to during all phases of land use planning, development planning, and construction**.

- **Transportation & Servicing:** As land is developed on our reserve and our on-reserve membership increases, we will need to expand our services infrastructure, our transportation network, and our mobility-related amenities. This sub-plan conceptually describes the key features of our transportation and servicing needs that will support our land use plan.
- **Community Facilities:** This sub-plan describes the community facilities that will support and strengthen our community and encourage our members to be physically and socially active in our community, such as outdoor spaces, parks, recreation facilities and community facilities. The plan conceptually describes those features and their general location.







6.0 HAVE WE ARRIVED?

The final step in our planning approach asks the question “Have we arrived?” It involves the monitoring and evaluation of our Land Use Plan to make sure that it works as anticipated, and helps us meet our vision and land management objectives.

6.1	Monitoring and evaluation	46
6.2	Amendments	47



6.1 MONITORING AND EVALUATION

We see our Land Use Plan as a **living document**. We will actively track our progress in meeting our vision and achieving our community development objectives. We will also review our Plan with leadership and members, and modify plan policies and guidelines as required.

This plan includes the following regular review period, benchmarks and general monitoring and evaluation framework.

STEP 1: PLAN LAUNCH – INITIAL TRAINING

- Tla’amin Community Planner (or equivalent) to conduct a **familiarization workshop** on the on the Tla’amin Land Use and Development Law, Tla’amin Building Law, and the Tla’amin Land Use Plan for all **senior staff**.
- Tla’amin Planner to conduct a **familiarization workshop** on the on the Tla’amin Land Use and Development Law, Tla’amin Building Law, and the Tla’amin Land Use Plan for **Chief and Council**.

STEP 2: ANNUAL REPORTING

- Tla’amin Planner to prepare **bi-annual report** (i.e., every six months) that summarizes any new developments, approvals, etc. The Planning report is to be presented to Council and distributed to members and staff via the Neh motl newsletter.

STEP 3: LEADERSHIP TRAINING

- Tla’amin Planner to conduct **familiarization workshop** on the Tla’amin Land Use and Development Law, Tla’amin Building Law, and the Tla’amin Land Use Plan within four months of beginning of term **with each new Council**.

STEP 4: FORMAL REVIEW

- Tla’amin Planner to conduct a formal evaluation of the Tla’amin Land Use and Development Law, Tla’amin Building Law, and the Tla’amin Land Use Plan every **six years**. Formal review to include an assessment of:
 - Development review process – *Is it working? Are decisions transparent, accountable and transparent? Does the community understand and support the Land Use Plan?*
 - Land Use Plan enforcement – *Has enforcement been required? Did it work? Could it be improved?*
 - Development Guidelines – *Based on current conditions, do the sea-level rise areas need revising? Have cultural and ecological resources been adequately protected?*
 - Data and mapping – *Based on new development, is Tla’amin mapping and land development data up-to-date?*
 - Plan coordination and integration – *Is the Land Use Plan still supporting Comprehensive Community Plan objectives? Does it need to be coordinated with other planning initiatives that may have started up?*

6.2 AMENDMENTS

We will need to revise and amend our Land Use Plan's policy Schedules and corresponding laws as our community develops and expands, and as new information and/or issues requiring our attention and action arise (e.g., new archeological sites are identified). Any development plan that proposes to deviate from this Land Use Plan or its Schedules will first require that the appropriate policies be amended.

The policy Schedules in this Land Use Plan may be revised from time to time as directed and approved by Tla'amin Council by Council motion. The Tla'amin Planner (or equivalent) will guide the amendment process. The Schedules may be amended individually with the revised Schedule replacing the old Schedule. The date of amendment will be noted along with addition and/or deletion and attached to the Land Use Plan. Amendments will also be published in Neh motl and posted in the Band Administration building for general community information.

An amendment process for the Tla'amin Land Use and Development Law and the Tla'amin Building Law require an amendment process outlined in those laws.







SCHEDULES AND POLICIES

The guidelines and sub-plans attached as Schedules to this Land Use Plan describe how the Land Use Plan is enacted and implemented for day-to-day planning. The policies and information included here as Schedules B and C will be incorporated into the Tla’amin Land Use and Development Law – Teeshohsum. The Development Procedures described in Schedule A will also be incorporated into this law. The Building Procedures described in Schedule A will be incorporated into the Tla’amin Building Law, which will regulate the actual construction of buildings and structures.

While the main section of our Land Use Plan established our vision and objectives for how our community develops over time, these Schedules describe how they are to be achieved at the policy and development review level in compliance with the Tla’amin Land Code.

These policies can be changed and amended over time where and when required, as long as they meet our land use management objectives, this Land Use Plan’s intent, and our guiding principles (Ta’ow).

Amendments to the Tla’amin Building Law and the Tla’amin Land Use and Development Law require an amendment process outlined in those laws.

The schedules include:

A: Development and Building Procedures	51
B: General Land Use Designations	59
C: Teeshohsum Village Zoning	67
D: Sensitive and Hazard Areas Guidelines	73
E: Sub-Plans – Transportation & Servicing, Community Facilities	83





A: DEVELOPMENT & BUILDING PROCEDURES

PURPOSE

Development and Building Procedures policies describe the process by which a proponent may be given permission to develop land or construct a structure on our lands. They are established for the benefit of all Tla'amin members and other community members living and working on Tla'amin lands to ensure that:

- Everyone is **treated fairly**;
- Development planning is a **transparent and efficient process**;
- Land is developed and buildings constructed in a manner that protects the health and safety of members, residents, and visitors to Teeshohsum and Ahgykson;
- Land is developed and buildings constructed in a manner that **achieves community objectives**;
- Land is developed and buildings constructed in **compliance with the Tla'amin Land Code**.

APPLICATION

A permit is required for all construction and land development. The process by which permits are reviewed and issued is defined and enforced by the **Tla'amin Development and Land Use Law** and the **Tla'amin Building Law**.

The two permit types are:

- **Development Permit:** A Development Permit must be obtained for subdivisions, new construction of any building or facility, and renovations that change the size or use of a building or structure. A Development Permit approves the location, size and use of any parcel of land or of any building on that parcel, and allows the proponent to apply for a Building Permit. Development Permits ensure that land development and proposed building projects conform to the Tla'amin Land Use Plan and zoning and development laws. These are issued in accordance with the **Tla'amin Development and Land Use Law**.
- **Building Permit:** Building Permits allow a proponent to begin and proceed with the construction of landscapes and structures. These permits ensure that individual buildings and structures meet the requirements of the B.C. Building Code. In Teeshohsum, a Building Permit cannot be issued until a Development Permit is first issued. Building permits are issued in accordance with the Tla'amin Building Law.

In **general terms**, Development and Building Permits are required in the following circumstances (Note: Please review Tla'amin Building Law and Tla'amin Land Use and Development Law – Teeshohsum for full requirements).

A.1 A Development Permit is required before proceeding with:

- a. Any project requiring a Building Permit, except renovations that do not change the size, use, or location of a building or structure;
- b. Construction of, additions to, demolition of, or relocation of a building or other structure, except a structure with an area less than 9.2 square metres (100 square feet) if it is not located within a Sensitive Area;
- c. Any construction or landscaping within 91 metres (300 feet) of a water body or waterway, measured from the high-water boundary or top of bank;
- d. Any construction or landscaping within an identified Hazard Area or Sensitive Area;
- e. Landscaping that includes removal of mature trees or native vegetation, installation of impervious paving, removal of soil, or alterations to drainage patterns;
- f. Changes to the use of a parcel of land or existing structure;
- g. Filling of land; and,
- h. New signage.¹

A.2 A Development Permit is not required for:

- a. Minor repairs that do not expand or alter the size, use, or location of a structure; and,
- b. Fences or other landscaping outside of Sensitive Areas that do not alter site drainage or remove trees larger than 20cm (7.9 inches) diameter when measured at chest height.

A.3 A Building Permit is required before proceeding with:

- a. Construction of a building or structure;
- b. Installation of a manufactured home or modular home;
- c. Construction requiring modifications or additions to any building utility such as plumbing, wiring, electrical, heating, and gas or other fuel systems equipment and fittings, except as noted in A.4.e;
- d. Construction or installation of a pool;
- e. Moving a building or structure;
- f. Demolition of a building or structure; and
- g. Construction of a masonry fireplace, the installation of a wood burning appliance or a chimney.

A.4 A Building Permit is not required for:

- a. Buildings or structures exempted by Division A, Part 1 of the BC Building Code, or as expressly provided in the Tla'amin Building Law;

¹ For example, the construction of a parking lot requires a Development Permit because it changes the use of a parcel of land and may involve new signage, fill, and alterations to drainage patterns.

- b. Fences under 1.5 metres (5 feet) in height;
- c. Decks that are not over 0.6 metres (2 feet) above grade;
- d. Repairs to an existing fireplace, wood burning appliance or factory constructed chimney or masonry chimney;
- e. The repair or replacement of a valve, faucet, fixture, sprinkler head or piping in a plumbing system if no change in piping configuration is required; and
- f. Recreational vehicles used for temporary accommodation (less than 30-days) for recreation or vacation purposes only; and,
- g. Structures such as greenhouses or storage facilities, that are constructed of a wood, steel or plastic frame covered with sheet polyethylene, fabric, tarps or glass that are intended to be used temporarily on a seasonal basis and will be removed seasonally.

IMPLEMENTATION – TLA’AMIN PLANNER

The Tla’amin Lands Department shall be responsible for development and building permitting under the Tla’amin Land Use Plan, Land Use and Development Law, and Building Law. Subject to available funding, it is anticipated that in the longer term (i.e., Treaty Effective Date) a new ‘Tla’amin Planner’ position will be created to ensure the effective administration of Tla’amin Land Use Plan, Land Use and Development Law, and Building Law. For the initial implementation of the Tla’amin Land Use Plan, and until a new position is created, the Tla’amin Land Use Coordinator working in partnership with the Tla’amin Lands Manager will carry out the duties of the Tla’amin Planner.

A.5 The duties of the Tla’amin Planner are:

- a. To monitor Tla’amin member and leaseholder compliance with the **Tla’amin Building Law** and **Tla’amin Land Use and Development Law**;
- b. To enforce the Tla’amin Building Law and Tla’amin Land Use and Development Law **where expressly provided** in those laws;
- c. Process and manage **Development Permit** applications;
- d. Process and manage **Building Permit** applications with the assistance of a qualified Building Inspector(s) where necessary and required;
- e. Prepare basic information concerning land use planning and act as a resource person for Tla’amin departments, members and Council on land use planning processes, procedures and laws; and,
- f. Work with other Tla’amin departments in a coordinated effort toward achieving the community development objectives identified in both the Tla’amin Land Use Plan and Sliammon Comprehensive Community Plan.

As proposed, a qualified Building Inspector(s) will support the Tla’amin Planner on a fee-for-service basis with building inspections and enforcement of the **Tla’amin Building Law**.

- A.6** The duties of the Building Inspector(s) are:
- a. To support the Tla’amin Planner in the **management and enforcement** of the **Tla’amin Building Law**;
 - b. To work with the Tla’amin Planner in the processing of **Building Permit** applications.
 - c. To conduct **building inspections** as required by the Tla’amin Building Law and BC Building Code; and
 - d. To support the Tla’amin Planner in the enforcement of the Tla’amin Building Law **where expressly provided** in that law.

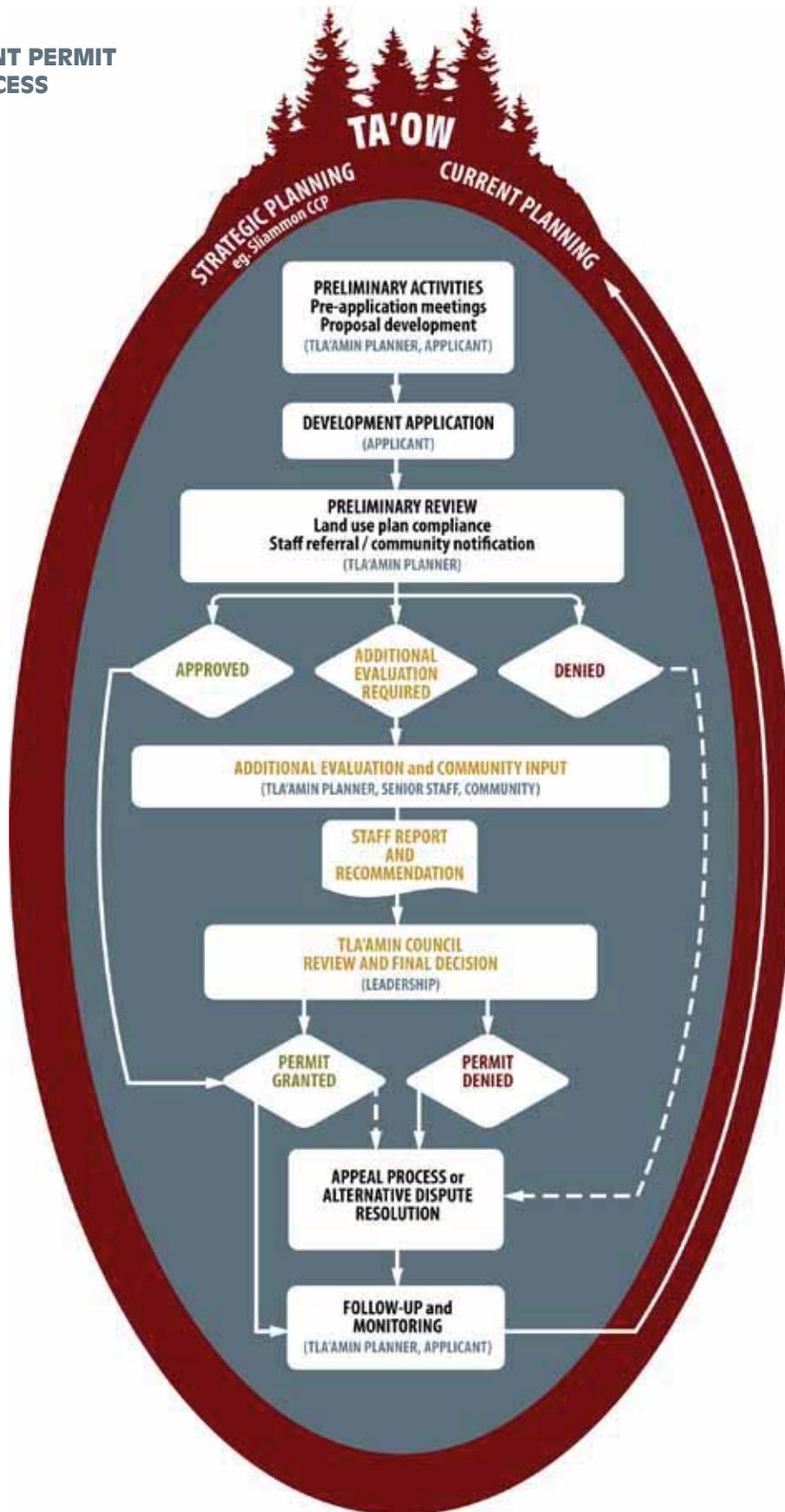
GENERAL PROCEDURES – DEVELOPMENT & BUILDING PERMIT REVIEW

A generalized development review and permitting process is illustrated. Detailed procedures and requirements are provided in **Tla’amin Land Use and Development Law** and in the **Tla’amin Building Law**.

As illustrated, Tla’amin Council controls the issuance of Development Permits. The Tla’amin Planner (or equivalent) with the support of a contracted Building Inspector issue Building Permits. For Development Permits, the **Tla’amin Planner** will guide and facilitate the review process and make reports and recommendations to Council on Development Permit applications.

As the law-making body on the reserve, Council will not be **directly** involved in the enforcement of either the Tla’amin Building Law, or the Tla’amin Land Use and Development Law. A Chief or Council member cannot interfere in individual cases, for example, by seeking preferred or punitive treatment on behalf of certain individuals or groups.

**FIGURE:
DEVELOPMENT PERMIT
REVIEW PROCESS**



DEVELOPMENT PERMIT PROCEDURES

The **generalized** Development Permit Review Process applies to:

- Any **minor projects** such as residential home improvements and renovations that change the size, use, or location of a building, multifamily conversions, and new construction of a home on a single lot; and,
- Any **major development projects** that include subdividing and developing land, constructing community facilities or new streets and infrastructure, and any other activities having a long-term impact on land use and community resources.
- Individual parcels only. For example, a permit may be granted to subdivide a parcel of land and develop that land to service the newly created parcels. Following this process, an additional development permit will be required for construction on each of the new parcels.

1. Preliminary Meeting

- a. The proponent meets with the Tla'amin Lands Department and Tla'amin Planner (or equivalent) and other staff as necessary to review the site location, potential constraints, and application requirements;
- b. For **major projects** involving Band-owned lands or properties, the proponent may be a person designated by Council.
- c. The proponent identifies the location of their project and describes their intentions to the staff (sketch plans should be provided if possible but are not required);
- d. The Tla'amin Planner (or equivalent) reviews the permitting process and requirements with the proponent, identifies any special conditions that could constrain the project, and provides application materials (i.e., forms); and,
- e. For **major projects**:
 - i. The Tla'amin Planner (or equivalent) prepares a report describing the proposed project, preliminary comments from staff and committees, and the preliminary considerations described above and submits report to Council; and,
 - ii. Council may deny that the project should proceed, or approve that the project should continue and request that further evaluation be conducted.

2. Application

- a. Applicants are encouraged to seek assistance from the Tla'amin Lands Department and Tla'amin Planner (or equivalent) for the development of their application package;
- b. Applications are submitted to the Tla'amin Lands Department; and,
- c. Applications can be submitted by the owner of the property or the owner's agent (builder, architect, etc) and will include the materials required by the Tla'amin Land Use and Development Law.

3. Review

- a. The Tla'amin Lands Department and Tla'amin Planner (or equivalent) reviews the application to ensure compliance with the Tla'amin Land Use and Development Law and to ensure it meets the objectives of the Tla'amin Land Use Plan;
- b. The Tla'amin Lands Department may reject an application for insufficient or incomplete information or for non-compliance with the Tla'amin Land Use and Development Law;
- c. The Tla'amin Planner (or equivalent) distributes the application for review by other Tla'amin staff as necessary, or as required by the Tla'amin Land Use and Development Law;
- d. The Tla'amin Planner (or equivalent) will make the application available for public review using a method and time period defined by the Tla'amin Land Use and Development Law.
- e. Within the prescribed time period, any member or staff may submit comments of approval or concern relating to the proposal to the Tla'amin Lands Department, with these comments being included as information in the Approval Review package;
- f. For **major projects**:
 - i. Where necessary, or if Council requests further evaluation, the Tla'amin Lands Department and Tla'amin Planner (or equivalent) will conduct a more in depth review of the potential project as per the requirements laid out in the Tla'amin Land Use and Development Law; and
 - ii. Member input will be solicited during this phase of project as per the requirements laid out in the Tla'amin Land Use and Development Law.

4. Approval

- a. The Tla'amin Planner (or equivalent) submits an Approval Review package, including the full application with comments and a recommendation, to Council for their considerations and recommendation. The Council may:
 - i. Deny issuance of a permit for having insufficient or incomplete information or for non-compliance with Tla'amin Land Use and Development Law;
 - ii. Defer consideration of the application and recommend further review or evaluation required prior to further consideration;
 - iii. Authorize the issuance of a permit subject to specific conditions as determined by Council; or,
 - iv. Authorize the issuance of a permit with no changes.

5. Additional Evaluation or Review

- a. If Council defers approval, Council should provide direction regarding further review or evaluation, including any study or member consultation.

- b. If approval is conditionally granted, Council will provide direction on the subject conditions.
- c. Following deferred or conditional approval, the proponent and staff will arrange to review, amend, and resubmit the proposal as necessary. This review may include revisions to the plans and specifications, consultation with relevant committees, or broader member consultation. It may also include legal review or expert analysis where necessary.

6. Final Approval

- a. When Council grants an approval with no changes, the Tla’amin Planner (or equivalent) will issue a development permit that allows the project to continue.
- b. A **Building Permit is required for all subsequent construction activities**. The procedure for Building Permits and inspections is established in the **Tla’amin Building Law**.

7. Implementation

- a. Upon Council approval to continue the project, the Tla’amin Lands Department and Tla’amin Planner (or equivalent) will initiate appropriate development procedures.

8. Appeals

- a. The proponent can appeal a decision as described in the Tla’amin Land Use and Development Law.
- b. Council will not reconsider a permit application for a parcel that has previously been refused a permit for 6 months following the date of the refusal.

PROCEDURES – BUILDING PERMITS

Building permits will be issued according the authority and procedures described in the **Tla’amin Building Law**.

B: GENERAL LAND USE DESIGNATIONS

PURPOSE

The land use designations are established to ensure **future development occurs in appropriate areas** and that land is allocated in a way that **meets community objectives** on Ahgykson and in Teeshohsum. The designations set out broad management objectives and provide broad guidelines on allowed uses for designated land areas.

APPLICATION

The land use designations guide all land use and development decisions. Zoning designations, development plans, permitted developments, and land management activities in any specific area should conform to the **management objectives** and **allowed uses** of the land use designation for that area.

MANAGEMENT OBJECTIVES

The following management objectives are established for the land use designations and should be considered during the planning and development of any land or structures in Teeshohsum or on Ahgykson. The management objectives were first developed for the 2003 *Tla'amin Land and Resource Management Plan*.

OOKTS OHT YIQUSH (COMMUNITY USE)²

B.1 Management objectives for the Ookts oht yiqush (Community Use) designation are:

- a. Encourage diverse housing options to meet demographic needs;
- b. Encourage infill of existing serviced areas;
- c. Provide adequate recreational, cultural, government amenities;
- d. Maintain and enhance the rural village character in Teeshohsum;
- e. Promote sustainability (e.g., community gardens, orchards); and,
- f. Encourage home-based businesses.

NINEH JEH TAHLA (ECONOMIC DEVELOPMENT)

B.2 Management objectives for the Nineh jeh tahla (Economic Development) designation are:

- a. Promote and support sustainable economic development opportunities;
- b. Encourage and expand a diversified local economy with increased employment opportunities;

² The English names for the land use areas are not literal translations. Please see the Glossary for a fuller description of the Tla'amin names.

- c. Provide opportunities for industrial and commercial development of a type and scale compatible with the natural environment;
- d. Minimize environmental and community impacts; and,
- e. Permit community-supportive commercial recreation facilities.

UHMSNAH JEHJEUM (FOREST MANAGEMENT)

B.3 Management objectives for the Uhmsnah jehjeum (Forest Management) designation are:

- a. Promote and support sustainable forestry;
- b. Create a multi-use community forest (i.e., recreational and commercial uses); and,
- c. Permit all traditional and cultural uses of Tla’amin forestlands.

UHMSNAH KOOTLKO (MARINE MANAGEMENT)

B.4 Management objectives for the Uhmsnah kootlko (Marine Management) designation are:

- a. Encourage sustainable use of intertidal and coastal resources;
- b. Recognize area as Tla’amin’s valuable “asset in common”; and,
- c. Permit and support traditional and cultural uses and activities³.

YEEXMET TUMS GIJEH (SENSITIVE AREA)

B.5 Management objectives for the Yeexmet tums gijeh (Sensitive Area) designation are:

- a. Protect traditional and cultural use sites whenever possible;
- b. Protect known archaeological sites whenever possible;
- c. Protect and buffer riparian habitat fish;
- d. Permit and support traditional and cultural uses and activities; and,
- e. Accommodate non-consumptive uses, including sensitive recreational uses.

ALLOWED USES

OOKTS OHT YIQUSH (COMMUNITY USE)

B.6 To support the Ookts oht yiqush (Community Use) designation’s management objectives the following uses are allowed in the designation:

- a. Member housing (single- and multi-family, Elders, other options)
- b. Non-member, leasehold housing (single-family)
- c. Parks and recreation facilities (fields & ancillary buildings)

³ “traditional cultural uses and activities” means activities and uses historically or traditionally carried out by Tla’amin members, and recognized by the community as traditional or cultural, and does not include large scale, commercial, industrial or mechanized excavation of land, extraction of resources, construction of structures, or development of land;

- d. Tla'amin program offices (administration and program delivery)
- e. Community facilities (gym, meeting space, program offices, youth centre)
- f. Cultural facilities and buildings (Longhouse, Cultural Centre)
- g. Elders Care facility
- h. Health Centre
- i. Schools and day care, including adult education
- j. Cemetery
- k. Local food production (e.g., community gardens, orchards)
- l. Supporting infrastructure (water, sewer, power, roads)

NINEH JEH TAHLA (ECONOMIC DEVELOPMENT)

B.7 To support the Nineh jeh tahla (Economic Development) designation's management objectives the following uses are allowed:

- a. Commercial retail (Tla'amin-owned/joint venture, leased)
- b. Commercial enterprises (Tla'amin-owned/joint venture, leased)
- c. Commercial office (aboriginal professional and leased)
- d. Light industrial and manufacturing (e.g., value-added wood products manufacturing, in-vessel composting, etc.)
- e. Supporting infrastructure (water, sewer, power, roads)

UHMSNAH JEHJEUM (FOREST MANAGEMENT)

B.8 To support the Uhmsnah jehjeum (Forest Management) designation's management objectives the following uses are allowed:

- a. Timber harvesting and restoration
- b. Traditional and cultural uses and activities
- c. Non-timber forest products
- d. Agro-forestry and agriculture
- e. Limited eco- and cultural tourism
- f. Habitat protection and stewardship

UHMSNAH KOOTLKOO (MARINE MANAGEMENT)

B.9 To support the Uhmsnah kootlkoo (Marine Management) designation's management objectives the following uses are allowed:

- a. Traditional and cultural uses and activities
- b. Limited eco- and cultural tourism and recreation
- c. Shellfish/fin fish harvesting (commercial/food)

- d. Habitat protection and stewardship

YEEXMET TUMS GIJEH (SENSITIVE AREA)

B.10 To support the Yeexmet tums gijeh (Sensitive Area) designation’s management objectives the following uses are allowed:

- a. Protected environmental areas (i.e., creeks, foreshore, wetlands, etc.)
- b. Protected wildlife areas (i.e., eagle and heron nesting sites, etc.)
- c. Protected cultural areas (i.e., traditional use sites, archaeological sites, etc.)
- d. Traditional and cultural uses and activities
- e. Limited eco- and cultural tourism

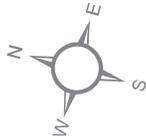
DESIGNATIONS MAPS – TEESHOHSUM & AHGYKSON

B.11 Designations are allocated to the land areas indicated on the following maps.



Ahgykson Land Use Designations

as adopted by Council Nov 16, 2009



- Nineh jeh tahla (Economic Development)
- Ookts oht yiqush (Community Use)
- Uhmsnah jehjeum (Forest Management)
- Yeexmet tums gijeh (Sensitive)
- Uhmsnah kootkoo (Marine Management)
- Waterways

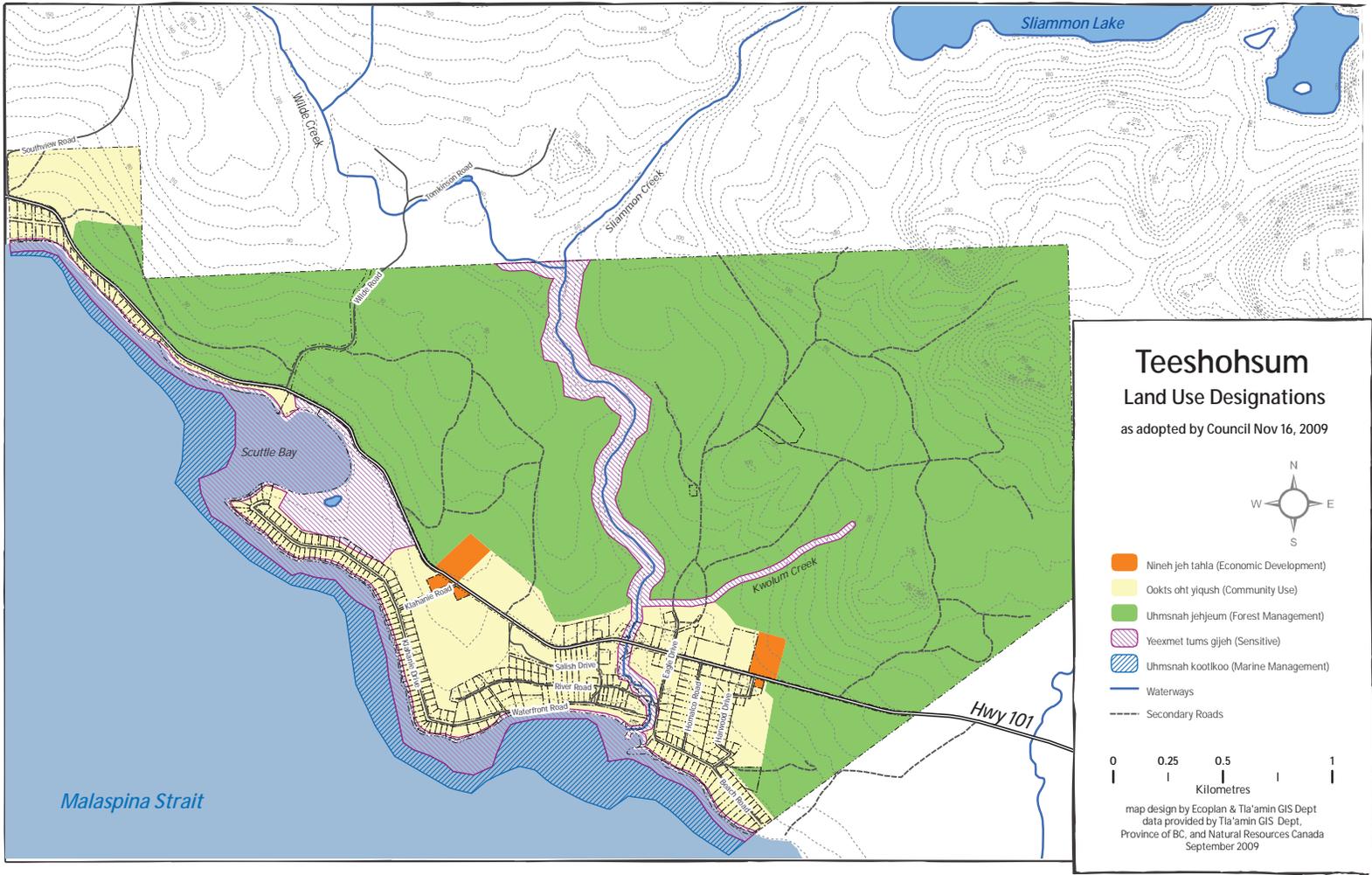


map design by Ecoplan & Tla'amin GIS Dept
 data provided by Tla'amin GIS Dept,
 Province of BC, and Natural Resources Canada
 September 2009

Salish Sea

Algerine Passage

Teshonsum



C: TEESHOHSUM VILLAGE ZONING

PURPOSE

Specific **zones** are established within Teeshohsum to provide additional development control in our main population centre. The zoning establishes **specific policies** regarding the size and shape of parcels, the activities and intensity of uses that might occur on those parcels, and the siting and configuration of buildings on those parcels in Teeshohsum.

APPLICATION

Teeshohsum zoning is implemented through the **Tla'amin Land Use and Development Law** and must be considered during the planning and development of any land or structures in Teeshohsum.

GENERAL ZONING PROVISIONS

Teeshohsum is divided into the following zones, as shown on the Zoning Map:

- a. **L** – Limited Use Areas
- b. **CF** – Community Facilities
- c. **TR** – Tla'amin Residential (Member Housing)
- d. **LR** – Leasehold Residential (Leased Housing)
- e. **I** – Light Industrial
- f. **TC** – Tla'amin Commercial
- g. **TF** – Tla'amin Forest
- h. **U** – Utilities

General permitted uses in the zones are:

- a. **L – Limited Use Areas**
 - Traditional and cultural uses and activities;
 - Recreational, tourism, or education activities that are related to the promotion and dissemination of Tla'amin culture;
 - Hunting, fishing, trapping;
 - Ecological restoration; and,
 - Conservation activities and areas.
- b. **CF – Community Facilities**
 - A community centre;
 - A recreation facility;

- A cultural centre;
- A school;
- Any space for the purpose of supporting community programs and activities;
- Band administration offices;
- A health clinic;
- Elders' care facility;
- Elders housing;
- Supportive housing;
- A cemetery;
- Outdoor sports and recreation facilities;
- Community gardens;
- Conservation areas;
- Trails;
- Boat yards and docks;
- Cemeteries; and,
- A use accessory to any of the foregoing permitted uses.

c. TR – Tla'amin Residential (TR) - Tla'amin Member and Tla'amin Citizen Housing

- A single family dwelling;
- A two family dwelling
- A duplex dwelling;
- A semi-detached dwelling;
- A triplex dwelling;
- A group home;
- A home daycare;
- A mobile home dwelling;
- A home occupation;
- A cottage industry;
- A park or playground; and,
- A use accessory to any of the foregoing permitted uses.

d. LR – Leasehold Residential (LR) - Leased non-Tla'amin Member and Tla'amin Citizen

- A single family dwelling;
- A two family dwelling

- A duplex dwelling;
- A semi-detached dwelling;
- A home daycare;
- A home occupation;
- A cottage industry;
- A park or playground; and,
- A use accessory to any of the foregoing permitted uses.

e. I – Light Industrial

- Manufacturing;
- Packaging;
- Food processing;
- Storage or warehousing;
- An automobile service station, commercial garage or automobile business, including sales and rentals;
- Industrial equipment sales and service;
- A garden nursery and/or commercial greenhouse;
- A business or professional office;
- Vocational instruction;
- A caretaker’s residence; or
- A use accessory to any of the foregoing permitted uses.

f. TC – Tla’amin Commercial

- An automobile service station, commercial garage or automobile business, including sales and rentals;
- A car wash;
- A bank or other financial institution;
- A personal service shop;
- A boat, snowmobile, trailer or cycle business, including sales and rentals;
- A business or professional office;
- A convenience store;
- A laundry or dry cleaning establishment;
- A restaurant or other eating establishment;
- A commercial kitchen used for processing or preparation of food;
- A hotel;



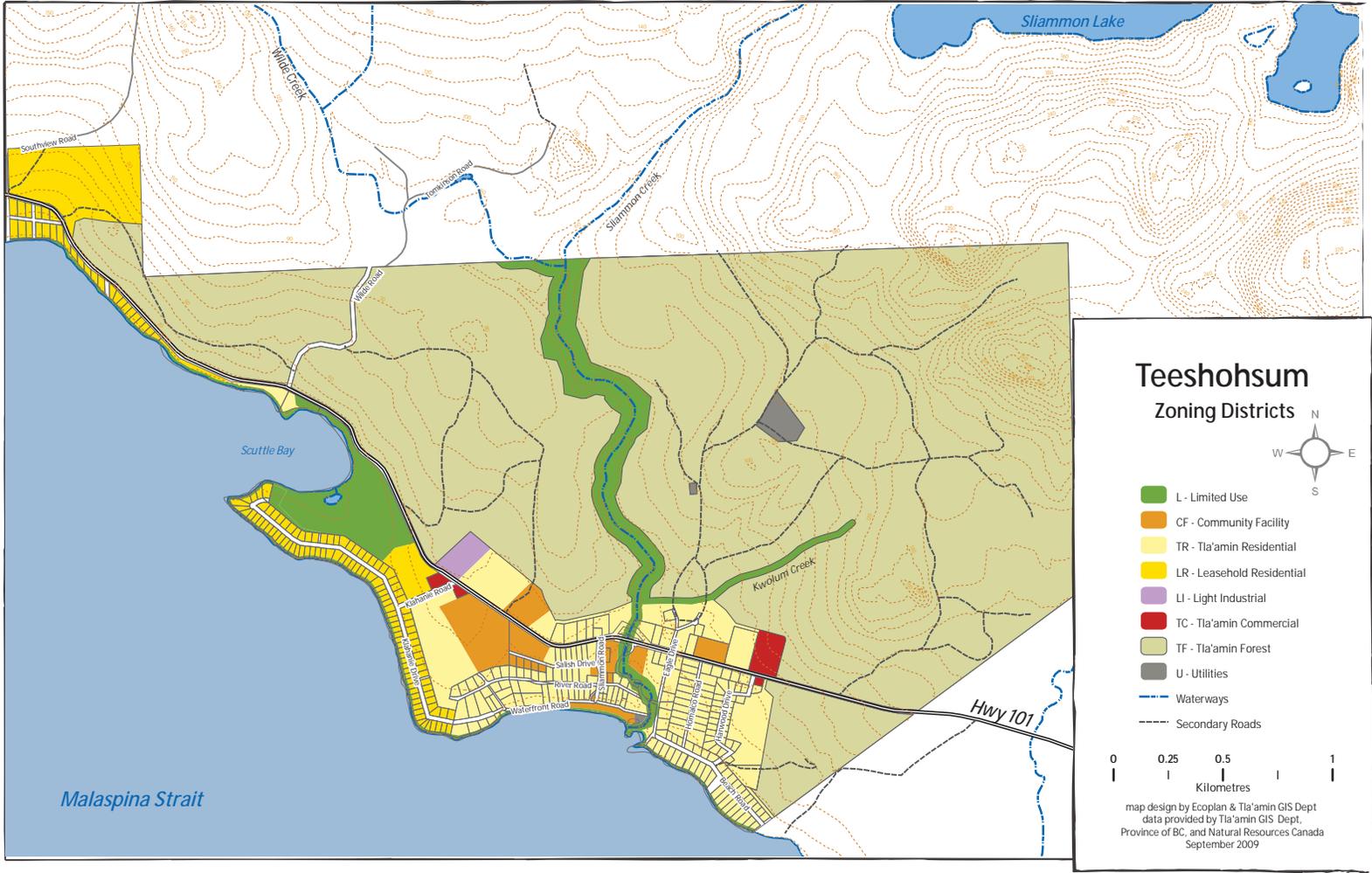
- Tourist accommodations;
- A post office;
- A recreational use;
- A retail store;
- Apartments, caretakers residence, or other residence (conditionally); or
- A use accessory to any of the foregoing permitted uses.

g. TF – Tla’amin Forest

- Silviculture;
- Log yarding and loading;
- Portable sawmills;
- Fish hatcheries;
- Public utilities;
- Traditional cultural uses and activities;
- Recreational, tourism, or education activities;
- Hunting, fishing, trapping;
- Ecological restoration; and,
- Conservation areas.

h. U – Utilities

- Housing of equipment related to utility services and infrastructure;
- Offices relating to utility management and maintenance;
- Storage of maintenance equipment and vehicles;
- Communication towers and equipment; and,
- Other uses relating to infrastructure and delivery of infrastructure services.



Malaspina Strait

Scuttle Bay

Slammom Lake

Kwollum Creek

Hwy 101

Southview Road

Widac Creek

Widac Road

Cohawie Road

Salish Drive

River Road

Waterfront Road

D: SENSITIVE & HAZARD AREAS GUIDELINES

D1: Cultural And Environmental Areas Guidelines

PURPOSE

The Sensitive Areas Design Guidelines are established to ensure that future lands are allocated and buildings constructed in a manner that protect our culture, heritage, and natural environment from damage or degradation due to construction and development impacts. Any construction work that we do in the indicated Sensitive Areas should consider these guidelines, including site works, landscaping, and the construction of homes or community buildings. The 2006 *Sliammon First Nation Handbook for Emergencies and Disasters* and the 2007 *Sliammon Environmental Management Framework* should both be referenced when assessing hazard areas.

APPLICATION

These guidelines are implemented through the Tla'amin Land Use and Development Law and must be enforced during the planning and development of any land or structures that (1) fall within or near an area designated Yeexmet tums gijeh (Sensitive Area), or (2) that are in or near a Sensitive Area as determined by a pre-development survey and /or by Tla'amin Council.

MAPPING AND DELINEATION

- D.1** This map was developed using current data indicating all known culturally significant, historic, or environmentally significant areas (December 2009). It is very likely that other sites exist that have not been mapped or identified, and that the actual boundaries of the mapped areas will require more accurate surveying on the ground. Information on the nature, importance, extent, and use of these areas are not indicated and should be examined on a case by case basis.
- D.2** It should be assumed that all lands on Teeshohsum and Ahgykson are potentially sensitive lands, and all major projects should employ a site specific survey as well as a monitoring program during any excavation.

TYPES OF CULTURALLY AND ENVIRONMENTALLY SENSITIVE AREAS

Sensitive areas include **culturally and environmentally sensitive places and features**.

- D.3** Culturally sensitive features include:
- a. Archaeological sites;
 - b. Areas that are currently used for cultural activities; and,
 - c. Culturally significant landmarks or landscape features.

- D.4** Environmentally sensitive areas include:
- a. Waterways (fish-bearing and non-fish bearing);
 - b. Wetlands;
 - c. Estuaries;
 - d. The edge of the sea and the intertidal zone;
 - e. Riparian areas associated with a, b, c, and d;
 - f. Coastal bluffs;
 - g. Areas with high habitat value and rare or endangered species; and,
 - h. Heron and raptor nesting trees.

DESIGN GUIDELINES

CONSTRUCTION AND DEVELOPMENT PLANNING AND MONITORING

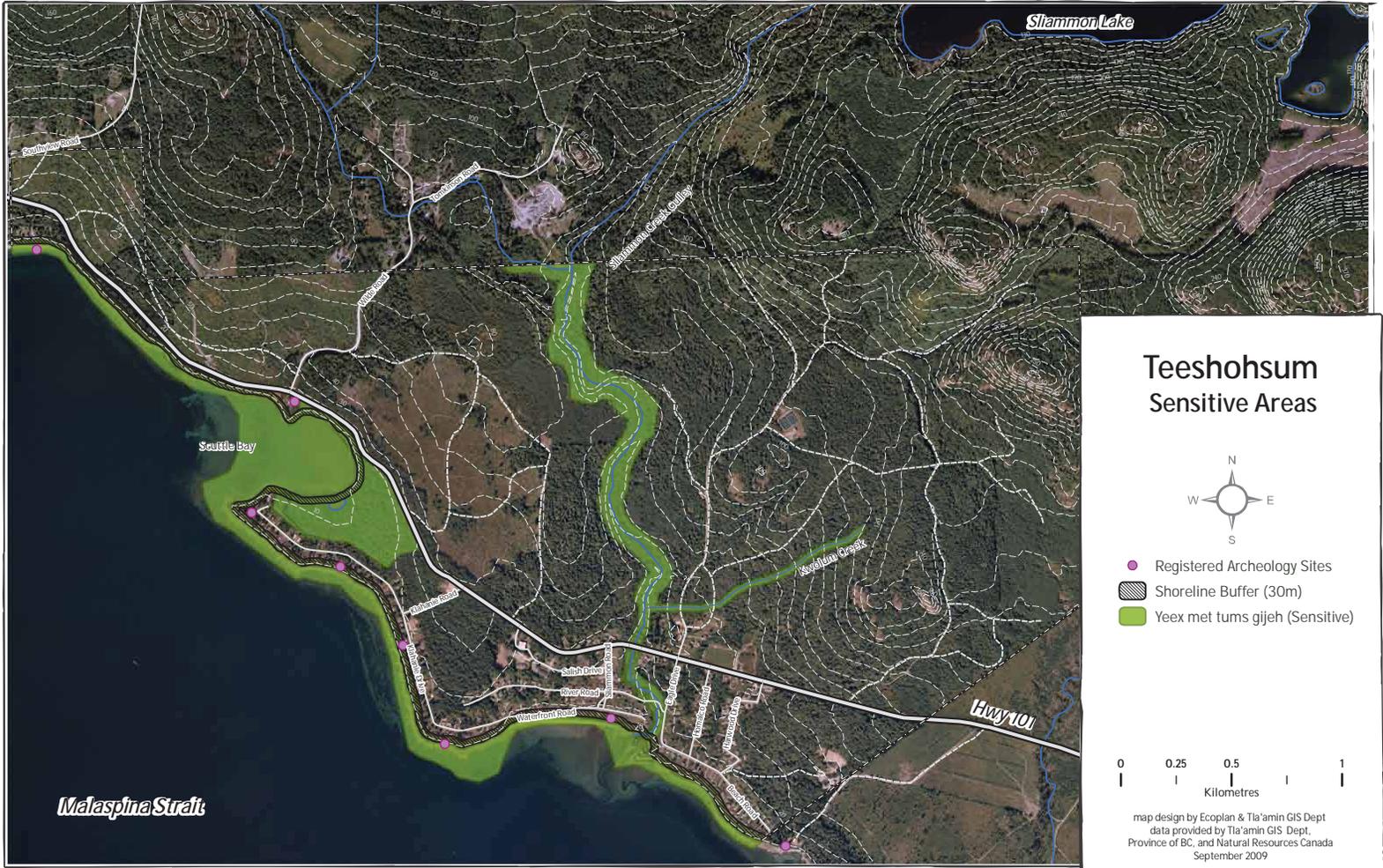
- D.5** All major projects should include a professional archaeological assessment and survey, conducted during preliminary planning phases, indicating known or potential cultural sites within or adjacent to the project area.
- D.6** All major projects should include a professional environmental assessment and survey, conducted during preliminary planning phases, indicating environmentally sensitive sites within or adjacent to the project area.
- D.7** Major projects include any extensive site works (such as dikes or sports fields), subdivisions, band related or community facility, or multifamily building.
- D.8** A designated qualified person should observe any excavation activity.

TIMING OF CONSTRUCTION

- D.9** Waterways should be protected from sedimentation and erosion by coordinating grading and excavation activities during dry months of the year.
- D.10** Nesting sites should be protected by avoiding construction activities when eggs or young are present in the nest.

TREE AND SOIL PROTECTION

- D.11** On any construction site, mature trees and woody vegetation should be retained to the maximum extent possible.
- D.12** A tree protection plan should be submitted with any development application. This plan should indicate the type and location of all existing trees and vegetation, trees and vegetation identified for removal, and the location of construction fencing to be erected to protect those areas identified for protection. Trees and landscaping identified for protection should be indicated on any site plans and grading and drainage plans.



Malaspina Strait

Slammom Lake

Seville Bay

Huynoi



- Registered Archeology Sites
- ▨ Shoreline Buffer (30m)
- Yeex met tums gijeh (Sensitive)

0 0.25 0.5 1
 Kilometres

map design by EcoPlan & Tla'amin GIS Dept
 data provided by Tla'amin GIS Dept,
 Province of BC, and Natural Resources Canada
 September 2009

BUILDING SETBACKS

D.13 No building should be constructed within:

- a. 15 metres (50 feet) of the perimeter of a known cultural site;
- b. 15 metres (50 feet) of the top of bank of Sliammon or Kwolan Creeks within any areas designated 'Ookts oht yiqush (Community Use)';
- c. 30 metres (100 feet) of the top of bank of Sliammon or Kwolan Creeks within any areas designated 'Uhmsnah jehjeum (Forest Management)';
- d. 30 metres (100 feet) of the natural boundary of the sea;
- e. 100 metres (300 feet) of an eagle nesting tree;
- f. 200 metres (600 feet) of any other raptor nesting tree; and,
- g. 200 metres (600 feet) of any heron nesting trees or colony.

D.14 Structures in sensitive areas may be allowed where they will not impact any culturally or environmentally sensitive feature and not inhibit the possibility for future archaeological work. This may include structures such as interpretive signage, footpaths, landscaping, or boardwalks.

D.15 Improvements to non-conforming structures (those that are already built within prescribed sensitive areas setbacks) should not further extend into these setbacks.

FENCING AND LIMITS TO CONSTRUCTION RELATED ACTIVITIES

D.16 Construction fencing should be erected at or outside the drip line of the canopy of any tree identified for protection.

D.17 High visibility construction fencing should be erected prior to any other construction activity that delineates the maximum limit of construction related activity according to the setbacks described herein.

D.18 Where the sensitive area is a riparian zone or waterway and is down slope from the construction area, sediment fencing should also be erected prior to any other construction activity that delineates the maximum limit of construction related activity according to the setbacks described herein. The sediment fencing should not be removed until construction is complete and all bare soils have been revegetated.

D.19 No construction related activity can occur within 10 metres (30 feet) of the perimeter of a cultural site, including excavation, earthworks, material storage, waste storage, machinery or vehicle storage or operations, and vehicle access and loading or unloading.

D.20 Within areas designated Ookts oht yiqush (Community Use) or adjacent Yeexmet tums gijeh (Sensitive) areas, no construction related activity can occur within 15 metres (50 feet) of the top of bank of Sliammon or Kwolan Creeks, including excavation, earthworks, material storage, waste storage, machinery or vehicle storage or operations, and vehicle access and loading or unloading.

D.21 Within areas designated Uhmsnah jehjeum (Forest Management) or adjacent Yeexmet tums gijeh (Sensitive) areas, no construction related activity can occur within 30 metres of the top of bank of Sliammon or Kwolan Creeks, including excavation, earthworks, material storage, waste storage, machinery or vehicle storage or operations, and vehicle access and loading or unloading.

D2: HAZARD AREAS GUIDELINES

PURPOSE

The Hazards Areas Design Guidelines are established to ensure that future lands are allocated and buildings constructed in a manner that protect residents and people working in and on Tla’amin lands from harm and buildings and infrastructure from unnecessary damage due to coastal hazards. Any construction work that we do in the indicated Hazard Areas should consider these guidelines, including site works, landscaping, and the construction of homes or community buildings.

APPLICATION

- D.22** These guidelines should be referred to during the planning and development of any land or structures that fall within the Shore Hazard Area or Steep Slopes Areas indicated by the Hazard Areas map.
- D.23** These guidelines should be enforced upon the determination of a qualified surveyor that the land or structure falls within the delineated areas described below.

MAPPING AND DELINEATION

The Hazard Areas map indicates estimated hazard areas and is intended for reference only. Actual hazard area delineations are described below and should be measured on site during site design and construction.

- D.24** The natural boundary of the sea is located at the limit of permanent terrestrial vegetation.
- D.25** Until such time that a specific study is available delineating the extents of coastal hazards including sea level rise and climate change impacts, the Shore Hazard Area is any land that lies between 0 and 3 vertical metres (10 feet) above the natural boundary of the sea.
- D.26** The Steep Slopes Hazard Area includes any portion of land that is steeper than a 25% grade (22.5 degrees incline).

DESIGN GUIDELINES

SETBACKS

- D.27** Buildings should be setback 30 horizontal metres (100 feet) from the natural boundary of the sea.
- D.28** Landfill or structural support for a coastal development or type of development shall be permitted a setback of 15 metres (50 feet) from the natural boundary of the sea where the sea frontage is protected from erosion by a natural bedrock formation or works designed by a professional engineer and maintained by the owner of the land.



- D.29** The setbacks may be increased on a site-specific basis such as for exposed erodible beaches and/or in areas of known erosion hazard.
- D.30** Where the building site is at the top of a steep coastal bluff and where the toe of the bluff is subject to erosion and/or is closer than 15 metres (50 feet) from the natural boundary of the sea, the setback shall be a horizontal distance equal to 3.0 times the height of the bluff as measured from the toe of the bluff. For practical application, this setback condition will require site-specific interpretation and could result in the use of a minimum distance measured back from the crest of the bluff. This setback may be reduced provided the reduction is supported by a report prepared by a suitably qualified professional.
- D.31** Where a building may be located near any other steep slope, safe setbacks from the toe or top of that slope must be determined by a qualified professional.

FLOOD CONSTRUCTION LEVEL

- D.32** The Flood Construction Level shall be at least 2.0 vertical metres (6 feet) higher than the natural boundary of the sea.
- D.33** No habitable floor space or framing supporting habitable floors (including sills, joists and sheathing) should be constructed below the Flood Construction Level (FCL).
- D.34** Areas below the FCL should not be used for the installation of furnaces, major electrical switchgear, or other fixed equipment susceptible to damage by floodwater.
- D.35** The following spaces and structures will be allowed an exception from the Flood Construction Level requirement, subject to the condition that all enclosed areas built below the Flood Construction Level must provide an unobstructed means of pedestrian ingress and egress:
- a. Renovation of an existing building or structure that does not involve an addition or the 'finishing' of a basement for regular habitation;
 - b. Additions to legally non-conforming structures, at the original non-conforming floor elevation, that would increase the size of the building or structure by less than 25 percent of the floor area existing at the time of enactment of such flood proofing requirements, provided that the degree of nonconformity regarding setback is not increased;
 - c. That portion of a building or structure that is to be used as a carport, garage or entryway;
 - d. Other minor buildings such as storage buildings, porches and domestic greenhouses;
 - e. Parking areas;
 - f. Boat related facilities such as docks, ramps, and piers;
 - g. Recreation shelters, stands, campsite washhouses and other outdoor facilities susceptible to only marginal damage by floodwaters do not require flood proofing by elevation.

ELEVATION BY LANDFILL

D.36 Where landfill is used to raise the natural ground elevation, it should be adequately compacted and the toe of the landfill slope should be no closer to the natural boundary than the prescribed setback. In addition, the face of the landfill slope should be adequately protected against erosion from flood flows, wave action, ice or other debris. The fill must not adversely impact neighbouring properties by increasing the surface water elevation or directing flows toward those properties.

EXISTING COASTAL LOTS AND BUILDINGS

D.37 In the case of the existing lots, where the above setback distances prevent construction, and where it is not possible to provide sufficient protection through works designed by a suitably qualified professional, the approving officer may: (1) agree to modifying setback requirements to permit construction provided this is augmented through a restrictive covenant stipulating the hazard, building requirements, and liability disclaimer; or, (2) agree to waive other setback or yard requirements as required by any other building and construction bylaws.

STEEP SLOPES

D.38 On any portion of land that is steeper than 25 % (22.5 degree incline), there should be no construction or clearing, grading, or excavation of land.

E: SUB-PLANS

E1: TRANSPORTATION AND SERVICING

PURPOSE

As land is developed in Teeshohsum and our population increases, we will need to expand our services infrastructure, our transportation network, and our mobility-related amenities. This Sub-plan conceptually describes the key features of our transportation and servicing needs that will support our land use plan.

APPLICATION

- E.1** Staff and Council should consider this Sub-plan during any development planning process.
- E.2** This Sub-plan should be referred to during the Development Permit review process (Application & Review stage).
- E.3** Development applications should consider how they could expedite the realization of the transportation and servicing concept identified in this Sub-plan.

FEATURES – TRANSPORTATION & SERVICING CONCEPT PLAN

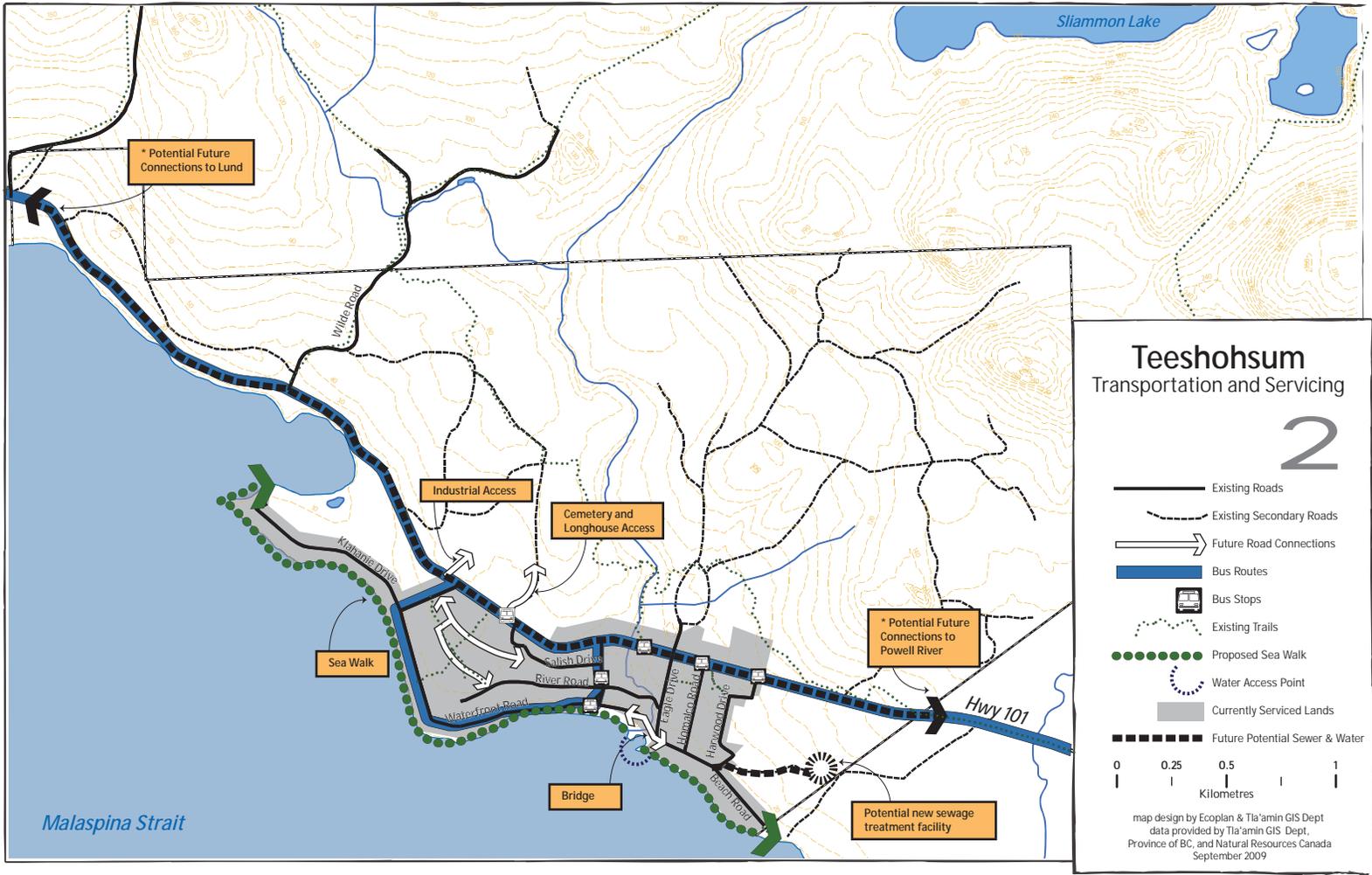
The table summarizes key features of the long-range Transportation and Servicing Concept Plan.

TABLE: FEATURES OF THE 'TRANSPORTATION AND SERVICING PLAN'

Future Road Connections	Several areas have been identified for future development, such as the economic development areas and the new Longhouse and Cemetery sites north of the highway. These areas will require road access. Other new roads are indicated where our neighbourhoods require better connectivity. Wherever possible, new roads should create connections between different areas of our community.
Sidewalks and Accessibility (not shown)	As we develop new neighbourhoods and build new streets, we should remember that some people feel safer on a sidewalk. Many of those people are pushing strollers, pulling wagons with children, or using a walker or a wheelchair to get around. We should include sidewalks on our streets and remember to include ramps at every street crossing so that these members can feel safe and get around more comfortably.
Transit routes and stops	Existing transit routes and stops are identified along with potential future extensions and/or stops that would connect our neighbourhoods to new community facilities.
Trails	There are a number of existing trails passing through our lands. We will continue to expand this network of trails, and develop a waterfront 'Seawalk' to emphasize and attract our members to this key feature of our community.



Ocean Access points	Our shoreline is already an important part of our community. We will improve this area and identify an area where members can launch and moor boats and small craft over the long-term.
Water and Sewer Services	It is our intent to extend sewer and water servicing along Highway 101 to provide services “from end-to-end” of Teeshohsum. Spur lines would be developed for new Community Use and Economic Development developments where and when developed. In the future, sewage treatment facilities could be improved and expanded to provide fee-for-service sewage treatment to portions of the City of Powell River and properties located in the Powell River Regional District to the north of Teeshohsum along Highway 101.



* Potential Future Connections to Lund

Sea Walk

Industrial Access

Cemetery and Longhouse Access

* Potential Future Connections to Powell River

Bridge

Potential new sewage treatment facility

Malaspina Strait

Slammon Lake

Wide Road

Maritime Drive

Waterfront Road

River Road

Salish Drive

Engle Drive

Hornet Drive

Harbour Drive

Beach Road

Hwy 101

E2: COMMUNITY FACILITIES

PURPOSE

This sub-plan describes the **community facilities that will support and strengthen our community** and encourage residents to be physically and socially active in our community, such as outdoor spaces, parks, recreation facilities and community facilities. The plan conceptually describes those features and their general location.

APPLICATION

- E.4** Staff and Council should refer to this Sub-plan during any facility planning or development project.
- E.5** This Sub-plan should be referred to during the Development Permit review process (Application & Review stage).
- E.6** Development applications should consider how they could expedite the realization of the transportation and servicing concept identified in this Sub-plan.

FEATURES – TRANSPORTATION & SERVICING CONCEPT PLAN

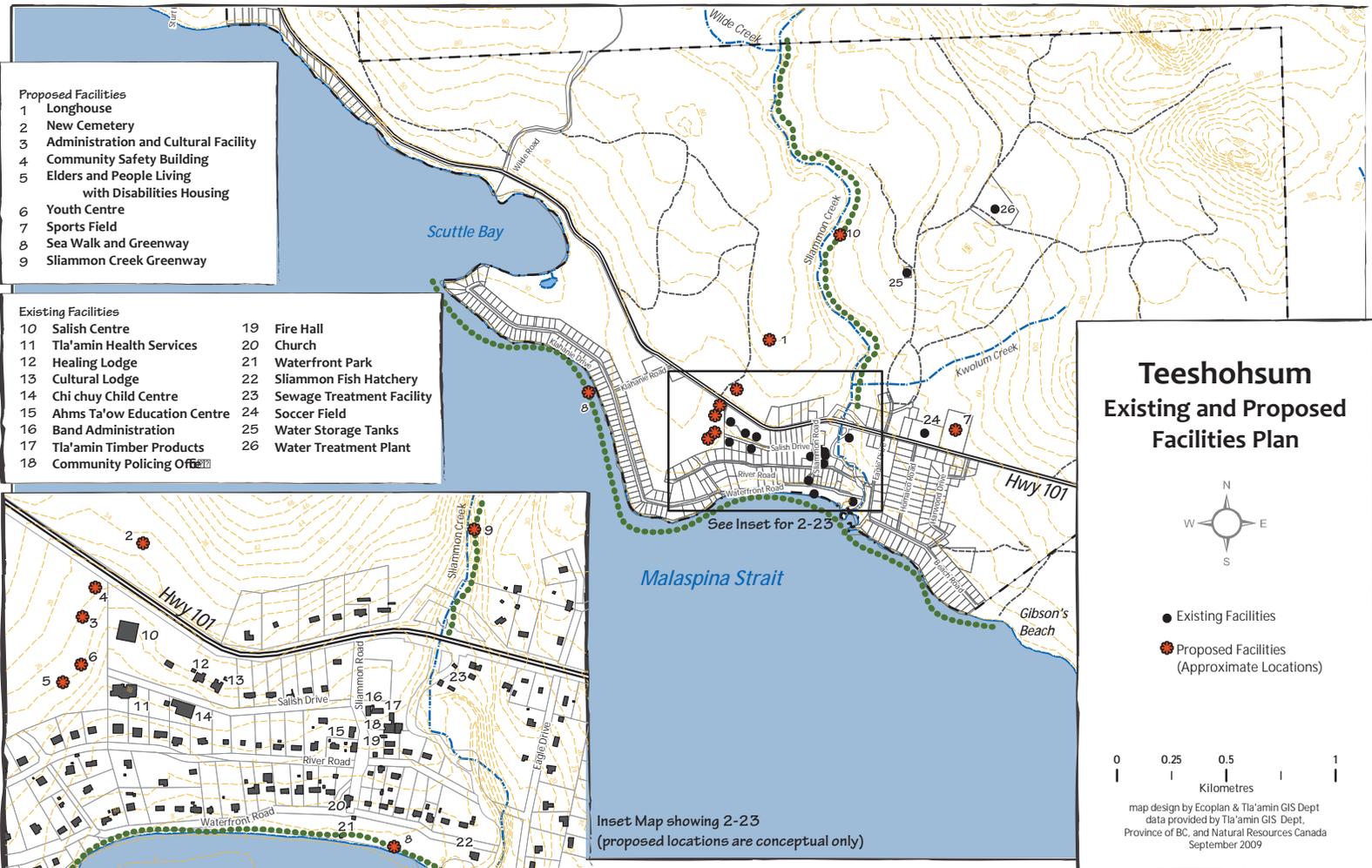
The table summarizes key features of the long-range Community Facilities Concept Plan.

TABLE: FEATURES OF THE 'COMMUNITY FACILITIES PLAN'

Parks & Recreation		
Name	Status	Description
Salish Centre 	Existing Proposed improvements	Completed in 1976, this older facility was renovated (interior and exterior) fall/winter 2009/2010. It includes a full-sized gym and offices for Development Corporation and Treaty Society. It is used extensively for all community functions. Once a new Administration Building is completed, we hope to move our Development Corporation and Treaty Society offices and replace them with a fitness centre with multi-purpose rooms for special classes.
Sports Field 	Existing Proposed improvements	There is currently one well-used grass soccer field and clubhouse building. Many members have expressed interest in developing a second all-weather field immediately adjacent to the existing field that would allow Tla'amin to host larger soccer and multi-use field sport tournaments.

Parks & Recreation (continued)		
Name	Status	Description
Waterfront Park 	Existing Improvements proposed	Our Waterfront Park is an important community hub. This park shall remain our principal community park and be upgraded over time to include a community barbecue/event area, an accessible waterfront walkway/boardwalk and a canoe storage shed. We will also plant areas with native species for cultural learning.
Sea Walk and Greenway	Proposed	<p>Our beach and foreshore is an important feature of our lands and should be accessible to all of our members. We will respect and restore the vegetation along the shore, set new buildings well away from the high water mark, and continue to designate that setback area as a community green space.</p> <p>Our long-term goal is to develop a Sea Walk pathway that would run from Scuttle Bay to Gibson’s Beach. Portions could be developed to protect especially sensitive or threatened lands from storm surges. Future connections could connect it northward to Lund and south to Powell River. The pathway would be quite naturalized in places and minimize visual impacts to waterfront homes. Connections to this pathway from residential areas using existing right-of-ways would be included in each neighbourhood and any new subdivisions.</p>
Sliammon Creek Greenway	Proposed	Our creeks run through the heart of our lands and will be protected from development and restored wherever possible. Small pathways will follow the creeks, connecting neighbourhoods to each other, to the ocean, and to community facilities.

Community Health and Well-Being		
Name	Status	Description
Tla’amin Health Services 	Existing	Our newest facility was completed in 2006. The Health Centre provides community health care services to our members in addition to community meeting space.
Elders Cultural Lodge 	Existing	Built as a residential group home in 1982, the facility offers cultural and language programs.



- Proposed Facilities**
- 1 Longhouse
 - 2 New Cemetery
 - 3 Administration and Cultural Facility
 - 4 Community Safety Building
 - 5 Elders and People Living with Disabilities Housing
 - 6 Youth Centre
 - 7 Sports Field
 - 8 Sea Walk and Greenway
 - 9 Slammom Creek Greenway

- Existing Facilities**
- 10 Salish Centre
 - 11 Tla'amin Health Services
 - 12 Healing Lodge
 - 13 Cultural Lodge
 - 14 Chi chuy Child Centre
 - 15 Ahms Ta'ow Education Centre
 - 16 Band Administration
 - 17 Tla'amin Timber Products
 - 18 Community Policing Office
 - 19 Fire Hall
 - 20 Church
 - 21 Waterfront Park
 - 22 Slammom Fish Hatchery
 - 23 Sewage Treatment Facility
 - 24 Soccer Field
 - 25 Water Storage Tanks
 - 26 Water Treatment Plant

Teeshohsum Existing and Proposed Facilities Plan

- Existing Facilities
- Proposed Facilities (Approximate Locations)

Kilometres

map design by EcoPlan & Tla'amin GIS Dept
data provided by Tla'amin GIS Dept,
Province of BC, and Natural Resources Canada
September 2009

Inset Map showing 2-23
(proposed locations are conceptual only)

Community Health and Well-Being (continued)

Name	Status	Description
Elders and People Living with Disabilities Housing	Proposed	To be located near the existing Health Centre, staff and members have both shown high interest and support for development of the facility. It would include several supportive housing units for our Elders who require them.



Healing Lodge	Existing	The facility provides healing programs for Tla'amin members.
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**Education and Culture**

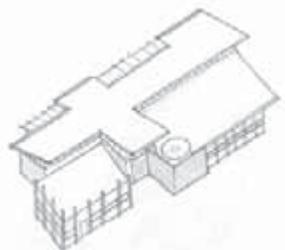
Name	Status	Description
Ahms Ta'ow Education Centre	Existing	Built in 1954 as a Residential Day School, Ahms Ta'ow is open to people of all ages and provides courses and educational facilities. The facility includes a small playground and community garden. The facility, playground and community garden will all be maintained for future use.



Chi chuy Child Development and Resource Centre	Existing	Our licensed daycare, preschool and kindergarten teaches and promotes important cultural values. It was built in 1996 and serves both members and neighbouring communities.
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Tla'amin Cultural Centre	Proposed	A Cultural Facility with a small museum/display space, gift shop, and artefact storage is proposed to be developed with the proposed new Administration Building.
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Services, Utilities & Public Safety		
Name	Status	Description
<p>Fire hall</p> 	<p>Existing New facility proposed</p>	<p>Built in 1975, the hall houses our fire truck and is staffed by a volunteer crew that provides first response for fire and other emergencies in Teeshohsum.</p> <p>We would like to develop a new Community Safety building closer to the village centre and Highway 101 and improve our fire safety services when funding becomes available.</p>
<p>Community Policing Office (Old RCMP Building)</p> 	<p>Existing New facility proposed</p>	<p>The station is located in a late 1980s portable that needs upgrading and/or replacement.</p> <p>Our proposed new Community Safety building closer to the village centre could include space for a community policing office.</p>
<p>Maintenance Shed</p> 	<p>Existing</p>	<p>This older structure houses building materials and supplies and was constructed in the late 1970s. While it is still functional, some upgrades and repairs are necessary.</p>
<p>Water Treatment Plant</p> 	<p>Existing</p>	<p>Our state-of-the-art water treatment plant was built in 1999 and provides high quality water for Teeshohsum and the Klahanie subdivision.</p>
Government Services		
Name	Status	Description
<p>Administration Building</p> 	<p>Existing New facility proposed</p>	<p>This old army building was moved here in 1973 and provides administration office space. The facility includes two older portables.</p> <p>There are plans to replace it. While two locations have been suggested, two rounds of community consultation (one during the Comprehensive Community Plan in 2007 and one during the Land Use Plan in 2009) confirm overwhelming member support to locate it next to the Salish Centre rather than a second location next to the soccer field.</p>

Government Services (continued)		
Name	Status	Description
Tla'amin Timber Products 	Existing New facility proposed	Built in 1977, these portables house our forestry company, GIS and associated departments. The building requires upgrades and repairs. The offices could be relocated to the proposed new Administration Building or another location closer to the Salish Centre and other community buildings.
Other Facilities		
Name	Status	Description
Sacred Heart Church 	Existing	Originally built in 1896, it was rebuilt after burning down in 1918. Our community still regularly uses it.
Cemetery 	Existing New facility proposed	Our cemetery has been used since 1897, and is nearing capacity. We have selected a site for a new cemetery across the highway from the Salish Centre we plan to develop soon.
Salmon Hatchery 	Existing Improvements proposed	Built in stages beginning in 1976, our fish hatchery includes a number of buildings and facilities. Some require upgrades and renovations.



GLOSSARY

This Land Use Plan uses Tla’amin words and spellings from our official Sliammon Culture, Heritage and Language Committee phonetic place names list. These names will be changed legally in the BC Geographical Naming system through the Treaty Process.

TEESHOHSUM

This area was issued Reserve status in 1945 and incorrectly registered as Sliammon IR #1, a mispronunciation of Tla’amin, which refers to the people - not the place. The name Teeshohsum translates to “waters milky white with herring spawn” which was a descriptor of the abundance of this important resource to the people in the ancient village situated around the bay. Teeshohsum is currently the main village site for the Tla’amin people and includes numerous culturally and spiritually significant sites.

AHGYKSON

This area was issued Reserve status in 1945 and incorrectly registered as Harwood Island IR #2. In 1798 Captain Vancouver named the island after a navy surgeon aboard the HMS Providence. The name Ahgykson translates to “pointed nose” in reference to the island’s shape. Ahgykson was a village site for thousands of years, as evidenced by numerous archaeological sites. Today, many Tla’amin people still use Ahgykson to hunt, fish and gather a variety of traditional foods and medicines.

.....

Although there are many related terms in the language, these were the closest we could find for shoo-oh (selecting areas) to zone and manage for the benefit of future generations.

NINEH JEH TAHLA

The name for our “economic development designation” refers to dealing with economic and monetary matters.

OOKTS OHT YIQUSH

The name for our “community use designation” refers to collectively shared areas that everyone is allowed to use.

UHMSNAH JEHJEUM

The name for our “forest management designation” refers to taking care of our wooded areas and its resources.

UHMSNAH KOOTLKO

The name for our “marine management designation” refers to taking care of our salt water and its resources.

YEEXMET TUMS GIJEH

The name for our “sensitive area designation” refers to protecting and taking care of special spiritual, cultural and sensitive habitat places.

Tla'amin First Nation

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Powell River, B.C. V8A 4Z3
604 483 9646

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STÓ:LŌ HERITAGE POLICY MANUAL

Xólhmet te mekw'stám ít kwelát.
We have to look after everything that belongs to us.

Approved by the
Stó:lō Nation Lalems ye Stó:lō Si:ya:m (LYSS)

May 5, 2003

Table of Contents

1.0	FORWARD.....	1
1.1	PREAMBLE	1
1.2	VISION	2
1.3	PURPOSE.....	2
2.0	CENTRAL PRINCIPLES AND POLICIES ON THE RESPECTFUL TREATMENT OF STÓ:LŌ HERITAGE	4
2.1	Determining Ownership and Care-Taking Responsibility –.....	4
2.1.1	Policy Statement:	4
2.2	Xaxastexw te mekw’ stam (Respect all things).....	5
2.2.1	Policy Statement:	5
2.3	Xólhmet et mekw’ stam s’i:wes te selsila:lh chet (Take care of everything our great grandparents taught [showed] us) / Haqlés chexw xwelmi:ay staxwelh (Remember the future generations).....	5
2.3.1	Policy Statement:	5
2.4	Ewe chexw qelqelit te mekw’ stam loy qw’ esli hokwex yexw lamexw ku:t (Don’t ruin waste, destroy everything; just take what you need).....	5
2.4.1	Policy Statement:	6
2.5	Know your history.	6
2.5.1	Policy Statement:	6
3.0	DEFINITIONS.....	7
3.1	General Terminology	7
4.0	STÓ:LŌ HERITAGE - RECOGNIZED SITES, OBJECTS, ACTIVITIES, AND KNOWLEDGE	9
4.1	Sxwôxwiyám Sites.....	9
4.1.1	<i>Iyoqthet (Transformation) Sites.</i>	9
4.2	Xá:Xa Sites	9
4.2.1	<i>Questing Places</i>	9
4.2.2	<i>Stl’áleqem Sites</i>	9
4.2.3	<i>Spirited Places</i>	9
4.2.4	<i>Spirit Pole Sites</i>	9
4.2.5	<i>Sxwó:yxwey</i>	9
4.3	Ceremonial Regalia Sites.....	9
4.3.1	<i>Sxwó:yxwey</i> Regalia Sites.....	9
4.3.2	<i>Spirit Pole Sites</i>	9
4.4	Traditional Activities and/or Sites	9
4.5	Material Culture Objects and Sites	10
4.6	<i>Stó:lō</i> Ancestral Human Remains	10
4.7	<i>Stó:lō</i> Intellectual Property	10
4.7.1	<i>Place Name(s)</i>	11
4.7.2	<i>Oral History</i>	11
4.7.3	<i>Family Names</i>	11
4.7.4	<i>Songs</i>	11
4.7.5	<i>Dances</i>	11
4.7.6	<i>Designs / Images / Crafts / Arts [Artistic Style]</i>	11
4.7.7	<i>Language</i>	11

5.0	GENERAL POLICIES - HERITAGE SITE MANAGEMENT OPTIONS.....	12
5.1	Determining Cultural Value and Respectful Treatment	12
5.2	A Framework of Management Measures and Options for <i>Stó:lō</i> Heritage Sites	13
5.3	Management Options by Heritage Type.....	13
5.3.1	<i>Sxwóxwiyám</i> Sites	13
5.3.2	<i>Xá:xa</i> Sites.....	14
5.3.3	Ceremonial Regalia.....	15
5.3.4	Traditional Activities / Sites	15
5.3.5	Material Culture Sites / Objects.....	15
5.3.6	<i>Stó:lō</i> Ancestral Human Remains.....	15
5.3.7	<i>Stó:lō</i> Intellectual Property	17
5.4	Theft and / or Sale / Trade / Exchange of material cultural artifacts.....	18
6.0	MANAGEMENT PROCESSES - ASSESSING IMPACTS TO STÓ:LŌ HERITAGE.....	19
6.1	Heritage Resource Assessment Requirements.....	19
6.1.1	Heritage Resource Overview Assessments (HROA).....	19
6.1.2	Heritage Resource Impact Assessments (HRIA).....	19
7.1	<i>Stó:lō</i> Nation Heritage Investigation Permit and Permitting Process.....	20
8.0	COLLECTION OF STÓ:LŌ HERITAGE ARTIFACTS.....	23
8.1	Incidental Finding and Collection.....	23
8.2	Investigation Project-Related Collection	23
8.2.1	<i>Heritage Impact Assessment – (minor testing)</i>	23
8.2.2	<i>Research / Data collection / mitigation – (major testing)</i>	24
8.3	Artifact Collector Protocol.....	24
9.0	CURATION OF ARTIFACTS.....	25
9.1	Artifacts Collected under <i>Stó:lō</i> Nation Heritage Investigation Permit	25
9.2	<i>Stó:lō</i> Nation Material Culture Repository	25
	Appendix I - <i>Stó:lō</i> Nation Heritage Investigation Permit Application Form.....	27
	Appendix II - <i>Stó:lō</i> Nation Heritage Investigation Permit	31
	Appendix III - Heritage Investigation Project Summary Form	33

S'ólh Téméxw te íkw'élò. Xólhmet te mekw'stám ít kwelát.

(This is our land. We have to look after everything that belongs to us.)

1.0 FORWARD

Stó:lō heritage is complex and dynamic. We carry on and express our traditions in relation to the ever-changing world of which we are a part. This policy manual is a living document that reflects our views on heritage. The policies presented in this document are subject to periodic reconsideration and revision.

1.1 PREAMBLE

Since the time of *sxwōxwiyám*, time immemorial, we, the *Stó:lō*, have occupied our territory – *S'ólh Téméxw* – what is now known as southwestern British Columbia and northwestern Washington State (see Figure 1).

“*Stó:lō*” is the *Halq'eméylem* word for “river” and also for the Halkomelem-speaking people who live within the lower Fraser River watershed. We, as the *Stó:lō*, are a collective community who hold rights and title within all of *S'ólh Téméxw* – “our world”. In the past, we moved freely amongst the villages according to where our extended family members lived. We were put here by the Creator, *Chichelh Siya:m*, but the world was chaotic. So, *Xexá:ls* (the Transformers) and *Tel Sweyal* (Sky-Borne People) came to make the world right and transform it into its present form.

In their travels through our territory *Xexá:ls* punished many of the hurtful and inconsiderate people responsible for the chaos affecting our world. Some of these people were turned to stone and remain, to this day, in this form. To complete their work *Xexá:ls* changed some good people into valuable and useful resources like the cedar tree, salmon, beaver, and black bear. Some, like *Lhilheqey* (Mt. Cheam), were transformed into mountains. We have depended upon these and other resources for our survival and prosperity. These resources were used in a way that was consistent with the special bond that exists between them and us. Due to the way our family tree connects the past and future generations, we regard these transformed ancestors as still living with and amongst us. In today's world as in the distant past, their *shxwelí* - spirit or life force - inhabits the resources in our territory. Before we change or alter our environment we must consider the way our actions will affect these resources - the living spirits of our ancestors. The way we use the landscape must be consistent with our beliefs, our relations and our general world view.

In our *Stó:lō* culture a special link exists between the past, present and future. We express this connection in many ways. In our *Halq'eméylem* language, for instance, we have the word *tómiyeqw* which translates into English as both great-great-great-great-grandparent and great-great-great-great-grandchild. The relationship expressed in this

word connects people seven generations past with those seven generations in the future. The connection between the past and future rests with those of use living today, in the present.

Our heritage stems from our occupation and use of *S'ólh T'é México* since the beginning of time, as the first inhabitants of this land. Our world, unlike that of many of our present-day neighbours, includes inseparable spiritual and material realms. The transformation events of *Xexá:ls* and *Tel Swayel* (Sky-Borne People) created places that prove our direct link to *Chichelh Siya:m*. We view our place and actions in our world as the center of a continuum extending seven generations past and seven generations forward. We live today in the world of both our ancestors and relatives yet to come. Our heritage - including our land, resources, people and ancestors - is ultimately all that we are. Our heritage must be treated with respect.

The historic and on-going influx of as many as 50,000 *Xwelítem* (in-migrating people without land title; see Definitions) per year into *S'ólh T'é México* has profoundly impacted our heritage. Since our first contact with small-pox in the late 1700s, the *Xwelítem* society has acted consistently in a manner that has greatly disturbed our way of life. The loss of our land, heritage sites and people, and the clear and continuing impacts to our culture are due largely to the *Xwelítem* society's failure to understand and respect our way of life, our actions and beliefs, our belongings, and the *Stó:lō* as a people with a unique heritage. We must protect and ensure the preservation of our heritage.

1.2 VISION

We, the *Stó:lō*, make public our *Stó:lō Heritage Policy Manual*. We do this with the intent that all who live here and care about the future of *S'ólh T'é México* will come to understand and respect us - our concerns, our heritage, our land and its treatment. We are determined to promote the integrity and well being of our *Stó:lō* heritage in all its forms. We wish to share our heritage with our neighbours. We promote better understanding between peoples in order to create a better and healthier way of life for all living within *S'ólh T'é México*. We believe this policy manual will aid us in these endeavours.

1.3 PURPOSE

The purpose of this Policy is to allow the *Stó:lō* to:

- protect, preserve and manage *Stó:lō* heritage - in all its forms – in a manner consistent with *Stó:lō* values, beliefs and traditions
- cooperate with other organizations - both *Stó:lō* and non-*Stó:lō* - in the protection, preservation and management of *Stó:lō* heritage
- protect and preserve *Stó:lō* religious freedom in all its expressions
- maintain the integrity of the *Stó:lō* spiritual world

- maintain healthy relations between the contemporary *Stó:lō* community and *Stó:lō* ancestors – past, present and future
- maintain the integrity of *Stó:lō* history and heritage through the respectful treatment of *Stó:lō* knowledge, heritage objects and sites
- advance knowledge and understanding of *Stó:lō* heritage
- maintain continuity in *Stó:lō* heritage and the practice of cultural traditions in forms both old and new
- advance *Stó:lō* cultural revival

2.0 CENTRAL PRINCIPLES AND POLICIES ON THE RESPECTFUL TREATMENT OF STÓ:LŌ HERITAGE

Central to Stó:lō Nation's policies on the treatment of heritage, its sites and objects, are guiding principles drawn from *Stó:lō* teachings. These principles are interconnected. Presented below are five such guiding principles applied throughout this Manual:

2.1 Determining Ownership and Care-Taking Responsibility –

A central principle to Stó:lō Nation's policies on the ownership and care-taking of heritage sites and objects are words of guidance provided by the Old People. *Stó:lō* Elders teach that heritage “artifacts” *belong to those who made them*. Viewed as their makers' “treasures,” the Old People stress the importance of finding out where these artifacts came from and who owned them. Lineage plays a major role in determining who owns the material past.

Defining rights to heritage sites and objects – both material and non-material -- is like creating a family tree: the trunk stems from the artifact and branches out to its custodians. At its simplest, this tree consists of only a single trunk leading directly to an individual. In other cases, the trunk of the heritage tree branches into a few primary stems equivalent to family lineage. In cases involving artifacts from the more distant past, including most pre-contact material culture sites, the heritage tree develops numerous branches as it follows relations between individuals, families, communities and tribes. Many generations of intermarriage and movement between *Stó:lō* communities link interests in pre-contact sites. In some cases, heritage lineages are complicated by the fact that entire communities were “lost” to epidemics and relocation events triggered by European contact. Regardless, given the complexity of even a single family tree over only a few generations, a complete rendition of any archaeological site heritage tree would be far too complicated to completely identify or portray. Even a fraction of such a tree, however, demonstrates that rights and responsibilities to the pre-contact past generally exist at an inter-community, or ‘national,’ level branching across *S’ólh T’éméxw*.

2.1.1 Policy Statement:

The *Stó:lō* maintain ownership of and jurisdiction over all *Stó:lō* heritage sites and objects. On behalf of the broader Halkomelem-speaking community, Stó:lō Nation maintains jurisdiction over *Stó:lō* heritage sites and objects not otherwise linked directly to a family or individual. Stó:lō Nation recognises and accepts the shared heritage interests of other traditionally Halkomelem speaking communities and organisations not directly associated with the Nation. Stó:lō Nation endeavours to establish heritage related Protocol Agreements, as needed, with such Halkomelem communities and organisations. Stó:lō Nation may also develop heritage related Protocol Agreements with non-Aboriginal governments and resource management agencies.

2.2 Xaxastexw te mekw' stam (Respect all things)

Two sets of teachings affect the respectful treatment of things - *shxweli* and *spoleqwith'a*. *Shxweli* is the life force that exists in all things. Since all things are alive with *shxweli*, they must not be taken for granted. Also, the Old People warn that if the “artifacts” (heritage sites and objects) are not taken care of, the maker's *spoleqwith'a* (ancestor spirit, ghost or shadow) may “bother you”. For those directly or indirectly involved in dealing with *Stó:lō* heritage sites and objects, being “bothered” can range from experiencing visitations to suffering spiritual illness and even death due to loss of the *smestyexw* (consciousness, soul or spirit). Through the respectful treatment of heritage sites and objects in today's world, respect is shown for *Stó:lō* ancestors' *spoleqwith'a*. Practising this principle of respect in the treatment of *Stó:lō* heritage sites and objects is an important part of maintaining the integrity of these sites as well as a spiritually healthy community.

2.2.1 Policy Statement:

Stó:lō heritage sites and objects must be treated with respect.

2.3 Xólhmet et mekw' stam s'i:wes te selsila:lh chet (Take care of everything our great grandparents taught [showed] us) / Haqls chexw xwelmi:ay staxwelh (Remember the future generations)

In *Stó:lō* culture a special link exists between the past, present and future. We express this connection in many ways. In *Halq'emeylem*, for instance, we have the word *tómiyexw* which translates into English as both great-great-great-great-grandparent and great-great-great-great-grandchild. The relationship expressed in this word connects people seven generations past with those seven generations in the future. The connection between the past and future rests with those of use living today.

2.3.1 Policy Statement:

The management of heritage sites, objects and information must reflect ancestral *Stó:lō* values for the purpose of protecting and preserving our way of life into the future. We must consider our heritage accordingly and be respectful of our relatives seven generations past and future.

2.4 Ewe chexw qelqelit te mekw' stam loy qw' esli hokwex yexw lamexw ku:t (Don't ruin waste, destroy everything; just take what you need)

Shxweli is the life force that exists in all things and which must not be needlessly consumed or destroyed. Wisdom must be used to avoid taking more than is needed thereby turning 'use' into 'waste'.

2.4.1 Policy Statement:

Resource and land use must be planned such that they conflict as little as possible with *Stó:lō* heritage interests. Mitigation and/or compensation is required where impacts to *Stó:lō* heritage are unavoidable or otherwise occur. Conflicts with and impacts to *Stó:lō* heritage must be justified as well as minimized.

2.5 Know your history.

Knowing your history is tied to knowing your identity and knowing how to behave properly in today's world, considering the ancestors past and those yet unborn.

2.5.1 Policy Statement:

We must make efforts to respectfully and accurately learn about and share our history with others.

3.0 DEFINITIONS

For the purposes of this Policy, Stó:lō Nation recognizes and defines the following terms.

3.1 General Terminology

Chichelh Siya:m the Creator

Stó:lō Heritage all aspects of *Stó:lō* culture and lifeways - both tangible and intangible - of the past, present and future, including but not limited to: language, physical / spiritual landscapes; place names; ceremonial sites; burials and burial sites; spirited places; songs; dances; art; craft; design; religious / spiritual / ceremonial practices; places and materials; subsistence and material gathering practices and sites; oral histories including all sqwelqwel and *sxwôxwiyám*; traditional / historical knowledge; family names; archaeological sites, features and objects; historic sites, documents and objects. *Stó:lō Heritage* can be classified by 'type', such as *Sxwôxwiyám*, *Xá:Xa*, *Ceremonial Regalia*, etc., as presented in section 4.0. Also referred to as '*Stó:lō Heritage Resources*' in relation to resource management (see section 6.0).

Halkomelem One of the languages spoken by the Coast Salish peoples of the southern Northwest Coast. Halkomelem is the native language of the *Stó:lō* of the lower Fraser River watershed and their relatives and neighbors from southeastern Vancouver Island. Halkomelem is made up of three dialects - *Hul'q'umín'um* ('Island' Halkomelem dialect), *Hun'qumyi'num* ('Downriver' Halkomelem dialect) and *Halq'eméylem* ('Upriver' Halkomelem dialect).

Iyoqthet transformed

Shxwlá:m Indian doctor(s)

S'iltexwáwtxw Plankhouse

S'ólh T'é méxw Stó:lō Territory; the *Halq'eméylem* word for “our world” or “our land”, including the lower Fraser River watershed downriver of Sailor Bar Rapids in the lower Fraser River Canyon. *S'ólh T'é méxw* represents the world transformed by the actions of the Xexa:ls, Tel Sweyal and other 'agents' of *Chichelh Siya:m*. *S'ólh T'é méxw* is defined through the known extent of occupation and land use of the Halkomelem speaking peoples of mainland British Columbia. The map in Appendix I defines *S'ólh T'é méxw* for the purpose of this Policy.

Sqémél Pithouse

<i>Sqwelqwel</i>	“True Story” (or stories); oral narratives relating to personal history
<i>Stl’áleqem</i>	The word the Old People use to categorize certain spiritual beings inhabiting parts of <i>S’ólh T’éméxw</i> (similar to 'supernatural beings')
<i>Stó:lō Intellectual Property</i>	Knowledge, the nature of use of which has been transmitted from generation to generation, which is regarded as <i>Stó:lō</i> and as belonging to <i>Stó:lō</i> individuals, families, communities or the Nation as a whole. <i>Stó:lō</i> Intellectual Property, though rooted in the past, is contemporary knowledge that changes with time. <i>Stó:lō</i> Intellectual Property includes: place names; oral history; family names; songs; dances; designs/ images / arts; language; knowledge, as presented in Section 4.7.
<i>Sxoxomes</i>	Gifts of the Creator
<i>Sxwôxwiyám</i>	oral histories that describe the distant past "when the world was out of balance, and not quite right." <i>Sxwôxwiyám</i> account for the origins and connections of the <i>Stó:lō</i> , their land, resources and <i>sxoxomes</i> ('gifts of the creator'). There are many heritage sites throughout <i>Stó:lō</i> Territory that relate to <i>sxwôxwiyám</i> . These sites are among the most culturally important <i>Stó:lō</i> heritage sites and continue to function as essential parts of the contemporary <i>Sto:lo</i> world.
<i>Sxwó:yxwey</i>	The <i>sxwó:yxwey</i> mask, dance, regalia and songs are integral aspects of traditional culture within the contemporary <i>Stó:lō</i> community.
<i>Tel Swayel</i>	'Sky-Borne People' who's actions of the distant past account in part for "making the world right."
<i>Xá:Xa</i>	spiritually potent; roughly translates as “taboo.”
<i>Xexá:ls</i>	the 'Transformers' who's actions of the distant past account in part for "making the world right."
<i>Xwelítem</i>	literally translates as ' <i>hungry people</i> ' describing the condition of some of the first non-Aboriginal immigrants into <i>S’ólh T’éméxw</i> (during the 1858 Gold Rush) who lacked access to the resources and food needed to ensure their survival. In later times, the <i>Stó:lō</i> used this term to describe the seemingly insatiable appetite of Colonial-period immigrants in consumption the land and resources of <i>S’ólh T’éméxw</i> . This term is currently applied to those in-migrating (or in-migrated) people who lack land title supported by spiritual / ancestral / historical connections to <i>S’ólh T’éméxw</i>).

4.0 STÓ:LŌ HERITAGE - RECOGNIZED SITES, OBJECTS, ACTIVITIES, AND KNOWLEDGE

4.1 Sxwôxwiyám Sites

- sites associated with sxwôxwiyám, including:

4.1.1 Iyoqthet (Transformation) Sitesⁱ

- features of the landscape created through the transformations of *Xexá:ls*, *Tel Swayel* or any other agent of *Chichel Siya:m*

4.2 Xá:Xa Sites

- sites associated with spiritually potent ‘taboo’ places in the landscape, including:

4.2.1 Questing Places

- places where people, particularly *shxwlá:m* (Indian doctors), go in quest of interacting with the spiritual or *xá:xa* realm(s)

4.2.2 Stl’áleqem Sitesⁱⁱ

- sites on the landscape associated with *stl’áleqem* (certain types of spiritual beings inhabiting parts of *S’ólh T’éméxw*)

4.2.3 Spirited Places

- places on the landscape inhabited by spiritual beings other than *stl’áleqem* (that is, *s’ó:lméxw*, *miméstíyexw*)

4.2.4 Spirit Pole Sites

- Places where spirit poles have been put away

4.2.5 Sxwó:yxwey

- places in the landscape associated with the origin(s) of the *sxwó:yxwey* mask, regalia, song, dance and ceremonialⁱⁱⁱ

4.3 Ceremonial Regalia Sites

- sites on the landscape where ceremonial regalia is or was stored or put away (and which may be spiritually potent), including:

4.3.1 Sxwó:yxwey Regalia Sites

- Sites used (currently or previously) for the storage of *Sxwó:yxwey* regalia

4.3.2 Spirit Pole Sites

- Places where spirit poles have been put away

4.4 Traditional Activities and/or Sites

- activities carried out in the past or present, the nature of which are regarded as *Stó:lō* and which have been transmitted from generation to generation; as well as those places/sites in the landscape where *Stó:lō* cultural activities are or were carried out. *Stó:lō* Traditional Activities and Sites, though rooted in the past, include contemporary activities which evolve and continue to change in nature over time, including:

- religious / ritual / spiritual / ceremonial activities (e.g., bathing; putting away spirit poles; fasting; running; sweats; spirit-power questing, praying)
- food collection (fishing, hunting)
- medicine collection
- resource extraction (e.g., timber harvesting; mineral / gravel extraction)
- resource management (e.g., berry patch / prairie burning, tree / ‘forest resource’ planting and maintenance)
- general religious / ritual / spiritual / ceremonial-related resource gathering
- general craft / art-related resource gathering
- camping
- settlement development
- travelling

4.5 Material Culture Objects and Sites^{iv}

- places with *material* evidence of human activity - past or present. ‘Material culture’ sites and objects are commonly conceived of and referred to as ‘archaeological’ / ‘historic’ sites and remains. Age, however, is not a factor in the inclusion of material objects in this site category. Recognized in this Policy are *all* material remains that are, in likelihood, of *Stó:lō* origin, ancestry, or otherwise have a cultural connection to the *Stó:lō* through their use. Material culture sites are generally comprised of and include one or both of the following types of objects:

- *features* -- objects that form a permanent part of the site of which they are a part; objects that cannot physically be removed from the site of which they are a part - at least not without significant effort or without destroying the object (e.g., sqémél depressions; shell heaps; cache pits; earthworks; culturally modified trees; house frames / foundations; rock walls; pit-fall traps; trails; roasting pits; hearths; stone quarries; burial mounds / pits; monuments; roads / trails; etc.).
- *artifacts* -- objects that can be readily removed from the site of which they are a part; moveable objects (e.g., chipped stone flakes, knives, spears and arrowheads; tin cans; glass bottles and jars; basketry; personal gear; groundstone hand-mauls; bone pins; antler wedges; glass beads; looms; instruments; etc.).

4.6 *Stó:lō* Ancestral Human Remains

- the skeletal or otherwise physical remains of a deceased person or persons in all likelihood of *Stó:lō* ancestry.

4.7 *Stó:lō* Intellectual Property

- knowledge, the nature of use of which has been transmitted from generation to generation, which is regarded as *Stó:lō* and as belonging to *Stó:lō* individuals, families, communities or the Nation as a whole. *Stó:lō* Intellectual Property,

though rooted in the past, is contemporary knowledge that changes with time.
Stó:lō Intellectual Property includes:

- 4.7.1 *Place Name(s)*
 - the Halkomelem name(s) of a place or places in the landscape of *S'ólh T'éméxw*. Place names are particularly important because they may indicate the significance of a place, whether it is a sacred place, and what oral histories are tied to or come from the place.
- 4.7.2 *Oral History*
 - *Sqwelqwel*, *sxwôxwiyám* and other forms of oral history and narratives originating from the *Stó:lō*.
- 4.7.3 *Family Names*
 - culturally inherited and owned names.
- 4.7.4 *Songs*
 - culturally inherited or spiritually acquired songs.
- 4.7.5 *Dances*
 - culturally inherited or spiritually acquired dances.
- 4.7.6 *Designs / Images / Crafts / Arts [Artistic Style]*
 - Traditional *Stó:lō* images, designs and artistic styles.
- 4.7.7 *Language*
 - the Halkomelem language.

5.0 GENERAL POLICIES - HERITAGE SITE MANAGEMENT OPTIONS

This section provides general policy statements regarding the treatment of the elements of *Stó:lō* heritage recognized in this Policy.

5.1 Determining Cultural Value and Respectful Treatment

All of *Stó:lō* heritage has an inherent cultural value – some elements greater than others. ‘Cultural value’ stands apart from the other types of ‘significance’ - economic, educational, historic, and scientific - often assigned to cultural sites and objects by non-*Stó:lō* investigators using provincial guidelines and standards. ‘Cultural value,’ alone, can only be determined from within the *Stó:lō* community and is therefore presented as a part of this Policy.

Determining a cultural value rating, in addition to the other commonly applied significance ratings, is an essential part of determining a deserving level of respectful treatment for any given element of *Stó:lō* heritage. Respectful treatment may range from total avoidance of a site to the collection or removal of objects from a site in order to avoid further disturbance, while following appropriate cultural protocols. Such ratings are most commonly determined in relation to the development of management plans -- whether applied to resolving a conflict between a heritage site and a proposed development, or identifying heritage objects for repatriation to the *Stó:lō*. ‘Cultural value’ is particularly useful in identifying the parameters of such management plans and ensuring sensitivity to appropriate levels of respectful treatment of *Stó:lō* heritage.

The cultural value of any particular element of *Stó:lō* heritage reflects the nature of the attachment between the object, site, or knowledge and its original owner(s) / maker(s) / caretaker(s) (see Introduction). Thus, objects, sites, or knowledge of the highest cultural value are those that were held dearest by their maker(s)/owner(s) – and may include such things as Transformer sites, *sxwóxwiyám*, and ancestral burials. Objects on the lower end of the cultural value scale are those held least dear by their maker(s) – and may include such things as refuse heaps (e.g., shell middens) and debris from stone tool making.

The responsibility for determining cultural value rests with whoever may be determined to be the current caretaker. Determinations of cultural value made by *Stó:lō* Nation may not represent that of other *Stó:lō* organizations with cultural connections to and interest in the object, feature, etc. being assessed.

Cultural value, as a form of significance rating, should be identified on a scale from ‘high’ to ‘low.’ While a ‘high’ cultural value rating alone may ensure the protection / preservation of a cultural site or object, a ‘low’ cultural value rating must be viewed as only one of the full set of significance ratings needed to identify appropriate site treatment or management measures. Assigning a heritage site or object a ‘low’ cultural value rating is *not* an act of disrespect. In *all* cases, no matter what the ‘cultural value,’ *Stó:lō* heritage must be treated with deserving respect.

5.2 A Framework of Management Measures and Options for *Stó:lō* Heritage Sites

The table below provides a framework for the management of *Stó:lō* heritage sites.

Site Type	Preferred Management Measure	Secondary Option(s)	Comments
sxwôxwiyám; xaxa; sxwó:yxwey	avoidance / no impact	n/a	
<i>stl'álegem</i>	avoidance / no impact	minimize impact & mitigate impact (to area)	refer to environmental assessment process; enhance the natural qualities of the area if possible / applicable
ceremonial regalia	avoidance / no impact	options potentially available per consultation with and approval of the <i>Stó:lō</i> Nation / Tribal Council	<i>exception</i> - spirit poles are not to be disturbed or moved as a means of avoiding impact
burial / cemetery	avoidance / no impact	options potentially available per consultation with and approval of the <i>Stó:lō</i> Nation / Tribal Council	burials <i>may</i> be recovered and reburied under some circumstances
material culture	avoidance / no impact	minimize impact & mitigate impact (to area)	
traditional activities	enhancement / avoidance / no impact /	minimize impact & mitigate impact (to area)	maintain or enhance the traditional use activity potential of the area
named place	avoidance / no impact	minimize impact & mitigate impact (to area)	refer to environmental assessment process; enhance the natural qualities of the area if possible / applicable

5.3 Management Options by Heritage Type

5.3.1 *Sxwôxwiyám* Sites

5.3.1.1 *Transformer Sites* -

Policy Statement:

Transformer sites must be preserved and protected from adverse impact.

5.3.1.2 *Ancestral / Transformer Species and Resources -*

Policy Statement:

It is necessary to protect, preserve and / or rehabilitate the habitats and populations of all ancestral / transformer species such as is required to maintain healthy habitats and populations.

5.3.2 *Xá:xa Sites*

5.3.2.1 *Stl'álegem Sites -*

Policy Statement:

All *stl'álegem* sites are both 'sacred' and immovable, and *stl'álegem* themselves are essential to Stó:lō well-being. It is therefore essential that their homes be protected from disturbance.

5.3.2.2 *Spirit Poles -*

Policy Statement:

Spirit poles, though a type of ceremonial regalia, are included in the *Xá:xa* site category because they must not be physically contacted or interfered with in any way once put away by their owner. If found, spirit poles *should not be disturbed*. If found to be in conflict with a proposed development, necessary measures must be taken to ensure that the identified spirit pole and any associated objects are in *no way disturbed* by the development or any development-related staff, either in the process of developing, finalizing and / or implementing management actions and / or alterations to proposed development plans. The term "*disturbed*" refers to the following: touching or handling, visiting, photographing or depicting in any way, or discussing or transmitting in any way the location of the spirit pole(s) to 'non-essential' development-related staff. Disturbance of spirit poles, inadvertently or otherwise, could cause significant harm to the owner of the spirit pole.

In regards to development plans, a physical distance sufficient to ensure safety from any type of direct or indirect disturbance must be maintained around any identified spirit pole.

It is imperative that the highest levels of confidentiality be maintained among any development-related staff working in the proposed development area regarding the location of any identified spirit pole. If required, identified spirit poles and associated objects should be referred to indirectly for management purposes using appropriate generic management terminology (e.g., 'no work zone,' 'management zone,' 'sensitive resources'). The sections of documents containing information about identified spirit poles are to be treated as containing confidential information, exempt from the Freedom of Information Act.

In the event of disagreement over management actions for identified spirit poles, appropriate Smokehouse leaders should be contacted and consulted.

5.3.2.3 *Sxwó:yxwey Origin Places*

Policy Statement:

The integrity of *Sxwó:yxwey* origin sites should be maintained.

5.3.3 Ceremonial Regalia

5.3.3.1 *Sxwó:yxwey Regalia*

Policy Statement:

For its preservation and protection, the *sxwó:yxwey* is kept from general/non-ceremonial public display. Modern protocols, as determined by the families 'holding' *sxwó:yxwey* regalia and songs, generally prohibit the recording of *sxwó:yxwey* songs and the photographing of *sxwó:yxwey* masks and regalia. *Sxwó:yxwey regalia* should not be handled, viewed or otherwise disturbed without the 'holder's consent.

5.3.3.2 *Spirit Poles -*

Policy Statement:

See section 5.3.2.2.

5.3.4 Traditional Activities / Sites

Policy Statement:

Access to traditional activity areas and associated resources for use by the *Stó:lō* must be maintained and, as much as possible, re-established and enhanced.

5.3.5 Material Culture Sites / Objects

Policy Statement:

Material Culture Sites and/or Objects, including among other things archaeological and historic remains, may not be disturbed either intentionally or otherwise without a *Stó:lō* Heritage Investigation Permit (see sections 6.0 and 7.0). Under permit, Material Culture Sites/Objects should not be unnecessarily or unduly disturbed. The unpermitted disturbance of any Material Culture Site/Object - documented or otherwise - may result in investigation by the RCMP and punishment under existing law.

5.3.6 Stó:lō Ancestral Human Remains

Policy Statement:

This section refers to the treatment of *found* human remains of *Stó:lō* / Aboriginal ancestry. There are various historical contexts in which the *Stó:lō* Ancestral Human Remains have encountered and dealt following their initial burial. These include:

- incidental discovery
- development-related disturbance
- disturbance resulting from natural factors (e.g., river erosion)
- archaeological investigation
- repatriation

5.3.6.1 *Incidental Discovery of Stó:lō Ancestral Human Remains -*

Policy Statement:

The Stó:lō Nation Archaeologist and Cultural Advisor should be immediately notified of the identification and / or recovery of any human remains either known to be of Aboriginal / Stó:lō ancestry, or potentially of Aboriginal / Stó:lō ancestry.

In cases where the ancestry of the remains is uncertain, appropriate analyses (physical / spiritual) should be conducted to determine, with as much certainty as possible, the ancestry, sex, age, and any other pertinent information about the individual(s).

In cases where the ancestry of the remains is determined to be Aboriginal / Stó:lō, the remains should be turned over to the Stó:lō Research & Resource Management Centre (SRRMC) - on behalf of the Stó:lō Nation / Tribal Council - in a timely fashion. Otherwise, if familial relations can be determined, the associated family should be consulted regarding the further care and treatment of the remains.

Either at the time of recovery or as soon as possible following recovery, the ancestral remains should be placed in a wooden (western redcedar) box and wrapped in red, cotton cloth. These procedures should be performed by or under the instruction of a *shxwlá:m*. The wrapped and packaged remains may be temporarily housed in the Stó:lō Material Culture Repository, or other appropriate facility, while analyses - if any - are carried out and reburial plans are made.

Acceptable analyses may include sampling for radiocarbon dating, dietary analysis, and DNA analyses. Collected remains should be described and analyzed by a professional physical anthropologist. Analyses should be overseen by the SRRMC Archaeologist to ensure maximum analytic accuracy and to ensure that cultural protocols are followed. Such analyses and/or sampling should be completed prior to reburial.

The Stó:lō Cultural Advisors, if necessary, may facilitate reburial plans. In cases of family jurisdiction, the assistance of Stó:lō Cultural Advisors is available upon request.

Reburial should be conducted as soon as possible following the receipt and analysis of any ancestral human remains. If facilitate by Stó:lō Cultural

Advisors, a cemetery should be identified for the reburial event, preferably as volunteered by the Chief of one of the *Stó:lō* communities, as a hosting community. The reburial proceedings should include a burning ceremony sponsored and arranged by the hosting community, with the assistance of *Stó:lō* Cultural Advisors.

Records of all found ancestral human remains and their disposition should be maintained by the *Stó:lō* Research & Resource Management Centre.

5.3.6.2 *Other contexts for found Stó:lō Ancestral Human Remains*

Policy Statement:

In relation to the other contexts for the recovery of ancestral human remains, including -

- development-related disturbance
- disturbance resulting from natural factors (e.g., river erosion)
- archaeological investigation
- repatriation

the SRRMC Cultural Advisor and Senior Archaeologist should be consulted for input developing appropriate procedure(s) and protocols at the earliest time possible.

5.3.7 ***Stó:lō Intellectual Property***

This section treats *Stó:lō* Intellectual Property as a whole, rather than individual categories. Place Names and Language are additionally addressed as specific sub-set categories of this section. Policy statements applicable to *Stó:lō* intellectual properties are presented below in reference to:

- Ownership
- Consent
- Recognition
- Misrepresentation
- Fair Use

5.3.7.1 *Ownership of Intellectual Properties*

Policy Statement:

The *Stó:lō*, as individuals, families, communities, or Nation(s), hold Aboriginal rights in and ownership of intellectual properties that are derived from and/or integral to our distinctive *Stó:lō* culture.

5.3.7.2 *Consent to Use Stó:lō Intellectual Property*

Policy Statement:

Informed consent from the owner(s) of *Stó:lō* intellectual property, be it an individual, a family, a community, or the *Stó:lō* Nation/Tribal Council, must

be attained before use of *Stó:lō* knowledge, except in situations of 'fair use' (see section 5.3.7.5)

5.3.7.3 *Recognition of Stó:lō Intellectual Property*

Policy Statement:

All *Stó:lō* intellectual property must be property credited when used, quoted, or referred to.

5.3.7.4 *Misrepresentation of Stó:lō Intellectual Property*

Policy Statement:

No individual or organization may state or imply they are *Stó:lō* or are affiliated or supported by the *Stó:lō* Nation / Tribal Council/community without verification of such claim(s).

5.3.7.5 *Fair Use of Stó:lō Intellectual Property*

Policy Statement:

Exerts from *Stó:lō* intellectual property, except property that is confidential, secret, or private, may be used for educational, informational, commentary, or purposes other than profit, as long as the *Stó:lō* owner is properly referenced. Prior consent is still encouraged for this use, but is not required.

5.3.7.6 *Place Names*

Policy Statement:

The *Stó:lō* Nation / Tribal Council encourage the contemporary re-application of known Halkomelem place names to otherwise alienated or re-named places within *S'ólh T'é méxw*, provided their accurate and appropriate use, as evaluated and approved of by the SRRMC Cultural Advisor, *Stó:lō Halq'eméylem* Language Program, and Cultural Committee(s).

5.3.7.6 *Language*

Policy Statement:

The *Stó:lō* Nation / Tribal Council encourages the general contemporary use of Halkomelem, provided it is consistent and accurate in its application.

5.4 Theft and / or Sale / Trade / Exchange of material cultural artifacts

Policy Statement:

The *Stó:lō* Nation / Tribal Council prohibits the theft and / or sale, and uncondoned trade or exchange of all commonly held cultural artifacts, including - in part - archaeological artifacts, ceremonial regalia, and transformer objects (excluding commonly marketable resources including fish and western redcedar).

6.0 MANAGEMENT PROCESSES - ASSESSING IMPACTS TO STÓ:LŌ HERITAGE

This section defined the conditions under which Stó:lō heritage resources require consideration and assessment in relation to potential disturbance.

6.1 Heritage Resource Assessment Requirements

Stó:lō Nation / Tribal Council requires that impacts to *Stó:lō* heritage resources be considered, assessed, and mitigated from all development-related disturbances and impacts.

Heritage Resource (HR) studies should be undertaken as either *Overview Assessments* or *Impact Assessments* - essential and strategic elements of responsible development planning practice. All such heritage related studies must be conducted by researchers with an appropriate level of experience and training, under the conditions of a Stó:lō Heritage Investigation Permit (see section 7.0). Other types of heritage investigations not directly related to development driven management studies, including those related to research, also share this requirement.

6.1.1 Heritage Resource Overview Assessments (HROA)

HROAs serve the purpose of identifying known or potential heritage sites (recognized in this Policy) within a given area or project area (usually associated with a proposed development plan). The objective of the HROA is to determine impact assessment requirements, based on the known and/or projected risk of encountering and impacting heritage sites.

6.1.2 Heritage Resource Impact Assessments (HRIA)

HRIAs serve the purpose of inventorying and identifying all potential conflicts between heritage resources and proposed development plans. The objective of the HRIA is to develop management measures and options that serve to avoid or mitigate impacts to heritage resources. Management measures should be consistent with the 'Framework of Management Measures and Options for Stó:lō Heritage Sites' included in this Policy (see section 5.2, Table 1). Management recommendations may include additional phases of inventory and/or data collection required in the process of developing a sound management plan.

7.0 RESPONSIBILITIES OF HERITAGE INVESTIGATORS

This section defines the responsibilities of individuals directing heritage-related studies within *S'ólh T'é méxw*.

7.1 Stó:lō Heritage Investigation Permit and Permitting Process

It is the responsibility of the directors of all prospective heritage investigations - management- and research-based alike - to obtain the following permit prior to commencing work:

- **Sto:lo Heritage Investigation Permit** - this type of permit is required for all archaeological studies and/or cultural heritage management related investigations conducted within S'ólh Téméxw (Stó:lō Territory) - details of which are provided below

Prospective investigators are required to submit a *Stó:lō Heritage Investigation Permit Application Form* (see Appendix I) to the SRRMC Senior Archaeologist for review and processing. Permit application submissions must be accompanied by a *\$100.00 processing fee*. This fee must be received prior to processing, except as noted below. In general, permit applications will not be processed without the receipt of the processing fee.

A copy of the Stó:lō Heritage Investigation Permit Application Form and associated *permit terms and conditions* is included Appendix I. This form is also available in hard-copy or digital forms by request from the SRRMC Senior Archaeologist. Applicants are encouraged to submit digital versions of their applications by e-mail to the SRRMC Senior Archaeologist (address available through the Stó:lō Research & Resource Management Centre). In such cases, it is not necessary to submit an associated hard copy. In the case of digital submissions, a typed name will be construed as substituting for the applicant's signature on the last page of the application. Otherwise, hard copy versions can be submitted by fax (number available through the Stó:lō Research & Resource Management Centre) or mail. Faxed or e-mailed applications can be processed prior to the receipt of the processing fee if it is noted that payment has been sent.

Upon receipt of the application form *and* processing fee, the SRRMC Senior Archaeologist will review the document for its technical content. Any concerns (methodology, repository, etc.) will be brought to the attention of the applicant for discussion, revision and re-submission. No fee is required for revised and re-submitted applications. Upon technical approval, the application form will be assigned a permit number and approved for issuance by the SRRMC Senior Archaeologist, who will then distribute the Stó:lō Heritage Investigation Permit (see Appendix II) to the applicant. E-mail is the preferred mode of distribution, however, hard-copy permit forms will be mailed or faxed to the permit holder if necessary. Upon completion of the permitted project, the Chief Investigator / permit holder is required to submit a final report, newly

recorded and/or revised heritage site forms, and the completed Heritage Investigation Project Summary Form (see Appendix III), as per the permit conditions.

The SRRMC Senior Archaeologist will provide information on issued Stó:lō Heritage permits to the provincial 'Archaeology Branch' in relation to their consultative requirements.

Conducting archaeological / cultural resource work without a permit, or failure to comply with the permit terms and conditions, constitutes a violation of this Policy, subject to penalty noted on the researcher's record, and may result in exclusion from future permit holding capacity.

Investigators/applicants are responsible for acquiring all other applicable permits - including those of First Nations with shared interests (as defined by mapped or stated territory boundaries) – prior to commencing work under the Stó:lō Heritage Investigation Permit.

The Stó:lō Heritage Policy and issuance of the Stó:lō Heritage Investigation Permit is independent of, works in mutual compatibility with, and neither infringes on or excludes in any way other applicable First Nations permit(s) which are based upon an interest in and responsibility for Stó:lō heritage as shared amongst the Stó:lō community.

This Permit is not to be construed as a statement of title exclusive of other First Nations' interests.

Though independent, this Policy/Permit is understood by the Stó:lō Nation / Tribal Council to work in conjunction with and in addition to the policies and protocols of other First Nations that share cultural heritage interests with the communities linked to the Stó:lō.

The issuance of Stó:lō Heritage Investigation Permits does not constitute consultation on or participation in any project for which the work proposed in the permit application is a part. The issuance of the Permit is separate and apart from the consultation process associated with any development proposal(s) to which the permitted project is linked, and in no way contributes to or in any way relieves the project proponent's consultative duties with Stó:lō Nation, Stó:lō Tribal Council, and/or any other First Nations. This Permit will be issued to the permit applicant only as a result of having satisfied the process of technical review associated with the proposed program of archaeological investigation.

Nothing in the issuance of the Stó:lō Heritage Investigation Permit is intended to affect the exercise or scope of, or justify any infringement of any *Stó:lō* aboriginal rights or title.

Any sharing of information resulting from the Stó:lō Heritage Investigation Permit process shall not be construed as concurrence with provincial or federal policies or legislation.

8.0 COLLECTION OF STÓ:LŌ HERITAGE ARTIFACTS

This section defines Stó:lō Nation / Tribal Council's position regarding the collection of Stó:lō heritage artifacts.

[Qá:qel - "taking things that don't belong to you."]

Two basic scenarios are identified in which artifacts have historically been collected:

- incidental finding and collection
- investigation project-related collection
 - heritage impact assessment (HIA) - minor archaeological testing
 - research / mitigation - major archaeological testing

Each of these scenarios is discussed below.

8.1 Incidental Finding and Collection

- incidental finds (i.e., surface finds without an associated Stó:lō Heritage Investigation Permit) are encouraged to be left in place, unless in immediate threat of being destroyed, lost due to natural causes (e.g., erosion), or otherwise found and collected. It is recommended that in either case or being collected or left in place, the SRRMC Senior Archaeologist be contacted and informed of the nature and location of the find.

8.2 Investigation Project-Related Collection

- the collection of artifacts related to projects carried out under the Stó:lō Heritage Investigation Permit.

8.2.1 *Heritage Impact Assessment – (minor testing)*

Regarding initial heritage site inventory / impact assessment studies in which the primary objective is to define site presence or absence in a given area using a shovel testing (or alternate sub-surface testing) strategy, investigators are *encouraged* to record, describe, and analyze all found artifacts while 'in-field' and re-inter (if found below the ground surface) - or replace (if found on the ground surface) - such artifacts in the location(s) where they were originally found. Re-interred artifacts should be placed in a labeled bag(s) (include date, investigator, SN permit number; test number / provenience; contents - using indelible marker) and placed at the base of the test in which they were found. All artifact locations are to be plotted on appropriately scaled site maps.

The rationale behind this strategy is to:

- minimize site integrity disruption
- reduce the collection of objects that provide no subsequent information beyond that recoverable in the field
- to reduce unnecessary pressure on repository space and curatorial effort

Alternately, collection should be opted for during HRA inventory work when:

- significant objects are identified (i.e., rare; diagnostic; can provide information not recoverable through in-field documentation; etc.)
- the identified artifacts are in danger of being destroyed
- the identified artifacts are in danger of being lost to natural causes (e.g., erosion)
- the identified artifacts are in danger of being found and collected in an unpermitted context
- The HRIA study is known to be preliminary to a more intensive research / data-collection / mitigation project (see section 8.2.2)

In these cases, artifacts should be collected rather than left in place.

8.2.2 *Research / Data collection / mitigation – (major testing)*

Regarding research / data collection / mitigation studies that involve intensive and controlled excavation (or recovery) of heritage artifacts, all recovered artifacts are to be collected.

8.3 Artifact Collector Protocol

All collectors of artifacts are to follow the Curation procedures outlined in section 9.0

9.0 CURATION OF ARTIFACTS

9.1 Artifacts Collected under Stó:lō Heritage Investigation Permit

Artifacts collected under Stó:lō Heritage Investigation Permit must be housed in an appropriate curatorial facility. In determining an acceptable curatorial facility, three options are generally suggested:

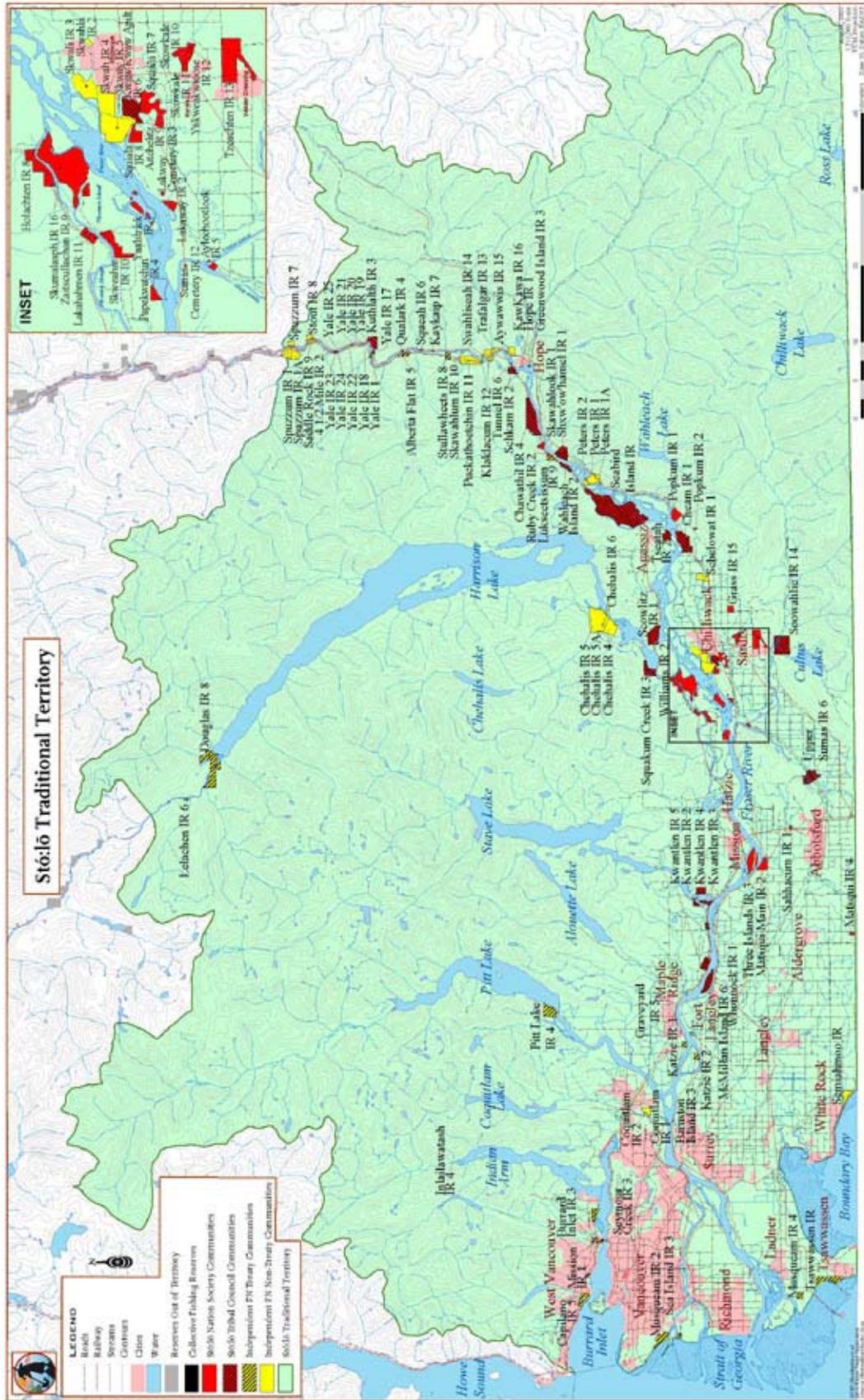
Option A - if there are *existing collections* from the same site(s), then the newly collected artifacts will be incorporate with those existing collections at the associated repository (e.g., SFU, UBC, RBCM), so long as the repository is provincially recognized, meets national curatorial standards, and agrees to maintain the artifacts on behalf of and in trust for the Stó:lō and other associated First Nations. If no such collections exist, then the following two options apply -

Option B – if found to be agreeable to all other involved First Nations parties, then the collected artifacts will be curated at the *Stó:lō Material Culture Repository*. The permit holder will facilitate necessary discussions between all interested First Nations parties on a site-specific basis (relative to the associated areas of interest) and the provincial 'Archaeology Branch' with regards to the implementation of these options. If unanimous agreement on this option cannot be reached between the interested First Nations parties, then the following option (C) will be implemented.

Option C - collected artifacts may be curated at the *Royal British Columbia Museum* (RBCM), University of British Columbia – Laboratory of Archaeology, Simon Fraser University Archaeological Museum, or other acceptable repository (on an 'in trust' basis for interested First Nations parties).

9.2 Stó:lō Material Culture Repository

Refer to the *STÓ:LÔ MATERIAL CULTURE REPOSITORY OPERATING POLICY AND PROCEDURES MANUAL* (see Appendix III) for procedures and protocols associated with the curation of heritage artifacts at the Stó:lō Material Culture Repository.



**Appendix I - Stó:lō Heritage Investigation Permit
Application Form**

Stó:lō Research & Resource Mgmt. Centre

Bldg. #1 - 7201 Vedder Road, Chilliwack, B.C. V2R 4G5
 Tel: 604-858-3366 Fax: 604-824-5124



HERITAGE INVESTIGATION PERMIT APPLICATION

Permit No. (to be assigned)	
Application Submission Date:	
Project Proponent:	
Chief Investigator / Company:	
Project Name:	
Project Location:	
<i>Note: \$100.00 Permit Processing Fee required with submission (please submit a check or money order payable to Stó:lō Nation with your permit application)</i>	

Type of Heritage Project: (check appropriate boxes)

Heritage Overview Assessment	<input type="checkbox"/>
Heritage Site Impact Assessment	<input type="checkbox"/>
Heritage-related Research Project (non-resource management)	<input type="checkbox"/>

Nature of Investigation: (check appropriate box)

Residential property development	<input type="checkbox"/>	Mining-related development	<input type="checkbox"/>
Industrial property development	<input type="checkbox"/>	Other (specify):	
Transportation-related development	<input type="checkbox"/>		
Forestry-related development	<input type="checkbox"/>		

Estimated Project Timeframe:

Start Date: Day/Mo./Yr.	End Date: Day/Mo./Yr.
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Will you be interviewing Stó:lō individuals in the course of this research?

Yes: <input type="checkbox"/>	No: <input type="checkbox"/>
-------------------------------	------------------------------

Other Permits obtained for this Project:

1. First Nations:	
2. Provincial:	
3. Federal:	

(Please Attach Copies with the Application)

STÓ:LŌ HERITAGE INVESTIGATION PERMIT APPLICATION

Project description: (please please attach provincial HCA permit application, including detailed project description, objectives, methodology; or otherwise, provide this information in the space below; use additional pages if required.)

Identified Curatorial Facility:

--

Acceptance of Permit Conditions: As chief investigator for this project, I certify that I understand and hereby agree to abide by policies outlined in the Stó:lō Heritage Policy Manual (2003) and the specific permit conditions associated with this Stó:lō Heritage Investigation Permit:

Chief Investigator:

Name:

Title:

Date:

(Day/Month/Year)

Chief Investigator - Signature

Permitting Authority Approval:

Name:

Title:

Date:

(Day/Month/Year)

Permitting Signatory – Signature

Stó:lō Heritage Investigation Permit - Terms and Conditions:

1. The permit holder is responsible for ensuring that all staff working on this project are familiar with the Stó:lō Heritage Policy Manual (a copy of this document will be provided upon request).
2. The permit holder will make a concerted effort to hire at least one Stó:lō community member (with an appropriate level of experience and training) to assist in conducting this project.
3. In the event that human remains are identified at any time during the course of this project, the permit holder must immediately cease and stabilize any disturbance of the remains, inform the Senior Archaeologist at the Stó:lō Research & Resource Mgmt. Centre (SRRMC) – representing the Stó:lō Nation & Tribal Council - of the nature and location of the remains, and implement any instructions provided by these individuals regarding the treatment of the remains.
4. *Prior* to the production of the final report, the permit holder will provide the Senior Archaeologist at the SRRMC an opportunity to review and comment on proposed management recommendations relating to any cultural heritage sites identified during the course of this project.
5. Implementation and inclusion of editorial comments made by Stó:lō Nation, Stó:lō Tribal Council, and/or SRRMC representatives with regard to management recommendations and/or any other portion of the project report will be negotiated between the permit holder and the Senior Archaeologist at SRRMC, *prior* to report finalization.
6. The permit holder shall provide the Senior Archaeologist at the SRRMC with *one* copy of the final report (*including the Stó:lō Heritage Permit number on the cover*) for this project, *prior* to the expiration of this permit. All final reports are expected to meet or exceed the reporting standards developed by the provincial Archaeology Branch. In the event that provincial reporting standards and/or guidelines are not applicable to this project, the permit holder is responsible for developing such standards/guidelines in consultation with the Senior Archaeologist at the SRRMC.
7. The permit holder shall provide the Senior Archaeologist at the SRRMC one copy of any updated or newly recorded British Columbia Archaeological Site Inventory Form(s) resultant from the project. Site forms should be submitted with the final report (both as hard copy and electronic files).
8. Any application for extension of this permit must be made at least 30 days prior to the permit expiry date.
9. Reasonable amendments to this permit may be requested in writing on an ‘as needed’ basis.
10. A representative(s) of the Stó:lō Nation, Stó:lō Tribal Council, and/or the SRRMC may at any time inspect any project being conducted under this permit.
11. The permit holder shall provide the Senior Archaeologist at the SRRMC with one completed copy of the *Heritage Investigation Project Summary Form* upon submission of the final report.
12. Any project-related disturbance(s) of archaeological sites / project area must be mitigated (i.e., returned to their pre-existing state) upon completion of the project.
13. Failure to comply with any of the above permit conditions may effect future permit eligibility.

Other: (as may be specified upon review of application)

- *Temelh* – red ochre ‘paint’ – may be required to be worn by all participants in archaeological excavations, as deemed necessary by Stó:lō cultural advisors representing the Stó:lō Nation and/or Stó:lō Tribal Council.

Appendix II - Stó:lō Heritage Investigation Permit



STÓ:LŌ



HERITAGE INVESTIGATION PERMIT

No. 2003-00

Permittee: (name)

Project: (title)

Permit Issuance/Expiry Dates: (date) 2003/04

Stó:lō Heritage Investigation Permit - Terms and Conditions:

1. The permit holder is responsible for ensuring that all staff working on this project are familiar with the Stó:lō Heritage Policy Manual (a copy of this document will be provided upon request).
2. The permit holder will make a concerted effort to hire at least one Stó:lō community member (with an appropriate level of experience and training) to assist in conducting this project.
3. In the event that human remains are identified at any time during the course of this project, the permit holder must immediately cease and stabilize any disturbance of the remains, inform the Senior Archaeologist at the Stó:lō Research & Resource Mgmt. Centre (SRRMC) – representing the Stó:lō Nation & Tribal Council - of the nature and location of the remains, and implement any instructions provided by these individuals regarding the treatment of the remains.
4. *Prior* to the production of the final report, the permit holder will provide the Senior Archaeologist at the SRRMC an opportunity to review and comment on proposed management recommendations relating to any cultural heritage sites identified during the course of this project.
5. Implementation and inclusion of editorial comments made by Stó:lō Nation, Stó:lō Tribal Council, and/or SRRMC representatives with regard to management recommendations and/or any other portion of the project report will be negotiated between the permit holder and the Senior Archaeologist at SRRMC, *prior* to report finalization.
6. The permit holder shall provide the Senior Archaeologist at the SRRMC with *one* copy of the final report (*including the Stó:lō Heritage Permit number on the cover*) for this project, *prior* to the expiration of this permit. All final reports are expected to meet or exceed the reporting standards developed by the provincial Archaeology Branch. In the event that provincial reporting standards and/or guidelines are not applicable to this project, the permit holder is responsible for developing such standards/guidelines in consultation with the Senior Archaeologist at the SRRMC.
7. The permit holder shall provide the Senior Archaeologist at the SRRMC one copy of any updated or newly recorded British Columbia Archaeological Site Inventory Form(s) resultant from the project. Site forms should be submitted with the final report (both as hard copy and electronic files).
8. Any application for extension of this permit must be made at least 30 days prior to the permit expiry date.
9. Reasonable amendments to this permit may be requested in writing on an ‘as needed’ basis.
10. A representative(s) of the Stó:lō Nation, Stó:lō Tribal Council, and/or the SRRMC may at any time inspect any project being conducted under this permit.
11. The permit holder shall provide the Senior Archaeologist at the SRRMC with one completed copy of the *Heritage Investigation Project Summary Form* upon submission of the final report.
12. Any project-related disturbance(s) of archaeological sites / project area must be mitigated (i.e., returned to their pre-existing state) upon completion of the project.
13. Failure to comply with any of the above permit conditions may effect future permit eligibility.

Other: (as may be defined)

Appendix III - Heritage Investigation Project Summary Form

- Site form(s) submitted with final report? Yes ___ No ___ (please check the appropriate blank)

Revisited / Revised Archaeological Sites:

Borden Site Designation	Site Type
(provide additional sheet if necessary)	

- Site form(s) submitted with final report? Yes ___ No ___ (please check the appropriate blank)

New radiocarbon dates obtained during this project? ___ Yes ___ No (if *yes*, complete the following table):

New Radiocarbon Dates: (list newly dated sites)

Borden Site Designation	Radiocarbon Lab	Radiocarbon Date(s) / Sample Number(s)
(provide additional sheet if necessary)		

- Radiocarbon date analysis form(s) / date(s) submitted with final report or site form(s)?
Yes ___ No ___ (please check the appropriate blank)

Newly Recorded Traditional Use / Other Types of Heritage Sites:

Site Designation	Site Type
(provide additional sheet if necessary)	

- Site form(s) submitted with final report? Yes ___ No ___ (please check the appropriate blank)

Revisited / Revised Traditional Use / Other Types of Heritage Sites:

Site Designation	Site Type
(provide additional sheet if necessary)	

- Site form(s) submitted with final report? Yes ___ No ___ (please check the appropriate blank)

FOOTNOTES

¹ Into the chaotic world of the distant past, the time of *sxwóxwiyám*, came *Xexá:ls*, the transformers – the three sons and one daughter of Red Headed Woodpecker and Black Bear, who lived in the mountains at the head of Harrison Lake. Black Bear’s jealous second wife, Grizzly Bear, killed Red Headed Woodpecker. The four children – all black bears – left their widowed father and began the process of making the world right through transformations. First, they journeyed down the Harrison River to its confluence with the region's main *stó:lō* (river), now called the Fraser. From there, *Xexá:ls* journeyed upriver to the sunrise and then, ascending, continued westward through the sky to the sunset. Once reaching the sunset, they returned back upriver to the sunrise and were never seen again.

During their travels, *Xexá:ls* (referred to as ‘*Xá:ls*’ when acting as independent beings) performed many transformations. They turned people, often those who acted wrongly, to stone. They rewarded the generosity of others by transforming them into valuable local resources (including the red cedar tree, the sturgeon and the beaver), many of which are the ancestors of the *Stó:lō* people.

In addition to the stories of *Xexá:ls*, other ancient histories tell of *Tel Swayel* (‘Sky-born’ people) who fell from the sky. These first people provide the ancestral root for many *Stó:lō* communities, especially in the down-river area. Like *Xexá:ls*, *Tel Swayel* carried special knowledge and caused transformations which brought order to the world.

Many of the rivers, sloughs, and mountains in *S’ólh T’éméxw* were created or transformed by *Xexá:ls* or *Tel Swayel*. They fixed those people and animals that they chose not to transform into permanent forms, making them no longer mutable. These transformations thus fixed the world and established the present landscape. The rocks and other objects transformed by *Xexá:ls* and *Tel Swayel*, along with their associated *sxwóxwiyám*, bear witness to the unique and long-standing relationship between the *Stó:lō* and the land and resources in *Stó:lō* Territory.

Ancestral / Transformation species and ‘natural’ resources include, but are not limited to:

Land Animals	Fish / Aquatic Mammals	Birds	Plants
Badger	Coho Salmon	Crane	Western redcedar
Beaver	Dog Salmon	Eagle	Bulrush / Cat-tail
Black Bear	Eulachon	Hell Diver	Iris
Black Bear (w/ white spot)	Humpback Salmon	Humming Bird	
Deer	Octopus	King Fisher	
Grizzly Bear	Otter	Loon	
Marten	Salamander	Raven	
Mink	Seals	Red-Headed Woodpecker	
Mountain Goat	Sockeye Salmon	Sandhill Crane	
Muskrat	Steelhead	Sawbill Duck	
Raccoon	Sturgeon	Seagull	
Wolf	Sturgeon Eggs	Cormorant	
Wooly Dog	Sucker Fish	Stellar’s Jay	
	Whale	Swan (white)	
		White Owl	
		Wren	

ii “*Stl’álegem*” is the word the Old People use to categorize certain spiritual beings inhabiting parts of *S’ólh Téméxw*. These beings’ spiritual potency affords them a significant place in *Stó:lō* culture, yet they are difficult to describe or explain to people raised outside of the culture. Metaphors of “monsters” and translations of *stl’álegem* as “supernatural creatures” fall short of conveying the full meaning of the word and carry a western perspective that robs “*stl’álegem*” of its *Halq’eméylem* essence. Likewise, the distinction western society makes between “real” and “unreal” is not applicable in categorizing *stl’álegem*: some spiritual beings, such as the hairy giant *sásq’ets* (sasquatch), the *s’ó:lmexw* (water babies) who live at the bottoms of certain lakes and deep spots in rivers, the *mimestiyexw* (little people) who inhabit various regions of *S’ólh Téméxw* and assist spirit dancers, and the majestic *shxwexwó:s* (thunderbird) whose flapping wings make thunder, whose blinking eyes make lightning, and whose urine is rain, are all thought to be just as real as bears, chipmunks and sturgeon, and are not considered *stl’álegem*.

Perhaps the best way of conveying what a *stl’álegem* is simply to identify them by name and then describe how they are referred to within *sxwōxwiyám* and *sqwelqwel* (oral histories). The Old Ones speak of at least five different types or kinds of *stl’álegem*: *Sí:lhqey*, the two-headed serpent; *St’qoya*, the frightening glowing red eyes sometimes seen at night; *Ápel*, the large maggot who inhabits the rock bluffs and deep bays above and in the southeast corner of Cultus Lake; and *T’litego Spá:th*, the underwater black bear who lives in the waters of the Fraser Canyon near Lady Franklin Rock. An encounter with any one of these creatures can be dangerous, holding the potential for mixed outcomes. *Stó:lō* therefore regard places inhabited by *stl’álegem* as *xá:xa* (spiritually potent; ≅ taboo). Since many current *Stó:lō* activities – hunting, ritualistic spiritual swimming, and “leaving our things” – lead people to visit places where *stl’álegem* reside, it is important to know their locations and to follow proper protocol. Those who have been taught how to act appropriately, such as *shxwlá:m* (Indian doctors), can attain spirit power by showing respect to *stl’álegem*. For instance, rather than turning and running upon seeing a *stl’álegem* – a typical reaction of someone not prepared for the encounter – one should face it and slowly back away until the creature is out of sight. Another teaching specifies that a person should pluck hair from their head and blow it towards the *stl’álegem*. Failure to follow these or other appropriate, sacred teachings can lead to serious consequences. Common reactions to mild, unintentional *stl’álegem* encounters are often described as “causing the hair to rise on the back of your neck” or producing a feeling that an unseen presence is near. Those who are warned away and yet knowingly trespass into a *stl’álegem* site may suffer *xó:lí:s* (to twist up and die). Children are particularly prone to this condition. Those who do not immediately die require the treatment of a *shxwlá:m* to relieve their sickness.

iii The *sxwó:yxwey* mask, dance, regalia and songs are integral aspects of traditional culture within the contemporary *Stó:lō* communities. Taken together, the *sxwó:yxwey* serves primarily as a “cleansing instrument” at significant events such as naming, wedding and funeral ceremonies. Though fulfilling an important function among all *Stó:lō*, the *sxwó:yxwey* is “carried” only in those families who can trace ancestry to its origin along maternal lines. Women, who own the masks, regalia and songs, privilege certain men in their families with the right of performing the *sxwó:yxwey* dance. Women sometimes wear *sxwó:yxwey* regalia, as well as dance. Today, only women are permitted to sing the accompanying songs.

The natural elements of air and water (associated with many *Stó:lō* healing rites and spirit power stories) are closely connected to *sxwó:yxwey* origins. At *Xwméthkwiyem* (Musqueam), oral traditions explain that the *sxwó:yxwey* (mask and rattle) came from the sky, dropped by *Chíchelh*

Siyá:m (the “High *Siyá:m*” or Creator) at the feet of one of their sky-born ancestors. Stories from other *Halq'eméylem* communities where the *sxwó:yxwey* is present (such as at *Sq'éwlets* at the mouth of the Harrison River), describe the original mask as having been fished from the water.

All *sxwó:yxwey* stories share elements of the one associated with *Q'áwq'ewem* (Kawkawa Lake) and *Iwówes*, near Hope, BC, as told by Mrs. Bob Joe in 1949:

Long ago a man determined to commit suicide because some disease was marring his face. He wandered away to Kawkawa Lake near Hope and, seeing some coho salmon in the water, caught one and cooked it. While he was gazing at the cooked fish, his nose began to twitch and, presently, one tiny frog after another leapt from it into the salmon. Greatly depressed, he climbed a neighbouring cliff and leapt into the water, but as he sank below the surface his feet touched a board and he sighted a house. Its inmates, who had heard his descent, lead him inside, where many sick people were lying on the ground and a voice said, “the stranger perhaps can heal them.” He looked at the sufferers and, noticing spittle on this one’s arm, that one’s shoulder and that one’s back – wherever in fact they were feeling pain – he removed it with a stick and healed them, for he now possessed great medicine-power. Then someone who was wearing a masked-dance costume said to him: “I will guide you home. There is a passage from here to the Fraser River.” So his guide conducted him to his home and disappeared in the water again.

When the man entered his house, he said to his sister: “throw my fishing line as far out into the lake as you can. Don’t be terrified by what it catches.” The woman threw out the fishing line and drew in the masked-dance costume that the guide had worn. Her brother permitted her to keep it and later, when she married a Hope Indian, she took it to Hope. One of her daughters married an Indian of Musqueam, and a descendent married a Cowichan Indian. That is why the masked dance has established itself in those places. The costume consisted of a mask of cedar and leggings made either from young goatskin or from the skin of the white swan after removal of the larger feathers.

Assuming 20 years between generations, the origin of the first *sxwó:yxwey* can be traced through the family lineage of those “carrying” the mask back to around 1780. Coupled with this, other versions of the *sxwó:yxwey* story describe the “disease” as “sores” or “leprosy” similar to and more than likely referring to the spots, lesions and blisters of smallpox (*variola major*), which devastated the population of *S’ólh Téméxw* in 1782. While the actual *sxwó:yxwey* mask and regalia appear to be innovations from the contact era, they emerged at least a decade before the first European arrived at the mouth of the Fraser River. Moreover, the associated healing significance and connection to status are ancient – as the Old People say, “thousands of years old”.

^{iv} *Material Culture* sites commonly found in *S’ólh Téméxw* include, but are not limited to:

- house features (e.g., *sqémél*; *s’iltexwáwtxw*; European-style frame houses)
- drawings / paintings (e.g., pictographs; ledger sketches)
- carvings (e.g., petroglyphs; arborglyphs; sculptures)
- culturally modified trees (e.g., bark-stripped trees; logged tree stumps; felled tree sections; trees with test holes; planked trees;

-
- *lithic* (“stone” tool or debris) scatters
 - cooking / food processing features (e.g., roasting pits / trenches)
 - storage features (e.g., cache pits)
 - earthworks (e.g., mounds, embankments)
 - baskets and basketry remains
 - glass beads
 - containers (tin cans, glass jars, wooden bowls)

Material Culture site types unique to or generally uncommon outside of *S'ólh T'éméxw* (as considered the Coast Salish culture area of the Southern Northwest Coast) are:

- earthen burial mounds
- stone burial cairns
- rock wall alignments (fortifications)

Material Culture sites in *S'ólh T'éméxw* can be generally classified as either:

- pre-contact period sites (pre-1782)
- post-contact period sites (post-1782)



**STÁUTW (TSAWOUT) FIRST NATION
SUBDIVISION, DEVELOPMENT AND SERVICING LAW
No. 02-2012**

TABLE OF CONTENTS

PART 1. NAME.....	1
PART 2. PURPOSE.....	1
PART 3. WHERE THIS LAW APPLIES.....	1
PART 4. DEFINITIONS.....	1
PART 5. GENERAL PROVISIONS.....	2
PART 6. SUBDIVISION, DEVELOPMENT AND SERVICING.....	2
PART 7. APPLICATIONS AND APPROVALS.....	3
PART 8. OFFENCES, PENALTIES AND ENFORCEMENT.....	7
PART 9. AMENDING PROCEDURES.....	8
PART 10. REPEAL AND OTHER BYLAWS.....	9
PART 11. COMING INTO FORCE.....	9
Schedule "A".....	10
Schedule "B".....	23
Schedule "C".....	51
Schedule "D".....	56

WHEREAS:

- A. The members of the STÁUTW First Nation have in common inherent rights, customs, and traditions and the inherent right to self-government which are recognized in the Douglas Treaty and affirmed by Section 35 of the *Constitution Act*, 1982;
- B. The STÁUTW First Nation also chose to assume control of its Indian reserve lands and resources pursuant to the *First Nation Land Management Act*, S.C. 1999, c. 24 by entering into the Individual Agreement on First Nation Land Management between Tsawout First Nation and Her Majesty the Queen in Right of Canada, and by adopting the Tsawout First Nation Land Code, which came into force and effect on May 29, 2007; and
- C. Under the *Tsawout First Nation Land Code*, the Council is authorized to make laws respecting the development, conservation, protection, management, use and possession of First Nation Land, including without limitation, laws relating to development, provision of local services, imposition of user charges, and authorization of subdivisions.

NOW THEREFORE this Tsawout First Nation Subdivision, Development and Servicing Law is hereby enacted as a Law of the Tsawout First Nation.

PART 1. NAME

- 1.1 This Law may be cited as the *Tsawout First Nation Subdivision, Development and Servicing Law, No. 02-2012*.

PART 2. PURPOSE

- 2.1 The purpose of this Law is to promote environmentally sustainable, healthy, safe, convenient and well-planned use of First Nation Land.

PART 3. WHERE THIS LAW APPLIES

- 3.1 The provisions of this Law apply to the whole area of First Nation Land as defined in the *Tsawout First Nation Land Code*.

PART 4. DEFINITIONS

- 4.1 For the purposes of this Law, and unless they are otherwise defined in this Law, terms have the same definitions as in the *Tsawout First Nation Land Code*.

4.2 For the purposes of this Law, the following definitions apply:

"Lands Manager" means the Tsawout First Nation employee responsible for the administration of First Nation Land, or a person authorized by Council to act as his or her delegate;

"Law" means this *Subdivision, Development and Servicing Law, 02-2012*, and includes its Schedules;

"MMCD" means Master Municipal Construction Documents as prepared by the Master Municipal Construction Documents Association;

"Person" means any natural person, corporation, and, except where stated otherwise, any person who is a Member of the First Nation;

"Registered Professional" has the same definition as in the *British Columbia Building Code*;

"Tree" means a living, erect, self supporting woody plant that is 5 metres or more in height or 10 centimeters in diameter or greater at 1.4 metres above the ground at the base of the tree and any *Arbutus (Arbutus menziesii)* of any size.

PART 5. GENERAL PROVISIONS

5.1 Headings in this Law are for reference purposes only, and do not form part of this Law.

5.2 In the event that all or any part of any Part, section or paragraph of this Law are found by a court of competent jurisdiction to be invalid, such sections shall be severable, and the remaining portions or sections shall remain in full force and effect.

5.3 In this Law, references to a Part (e.g. Part 1), section (e.g. section 1.1), paragraph (e.g. paragraph 3.4(a)) is a reference to the specified Part, section, or paragraph of this Law, except where otherwise stated.

PART 6. SUBDIVISION, DEVELOPMENT AND SERVICING

Prohibited Activities without Authorization

6.1 None of the following are permitted within First Nation Land except in strict conformity with the requirements of this Law and any other applicable Laws:

- (a) subdivision;
- (b) stratification or other division of legal interests in lands or structures into strata units, sub-leases or shares;
- (c) development;

- (d) installation of roads, intersections, sewer, water and other infrastructure or connection to any existing roads or infrastructure for the purpose of new development;
 - (e) construction, alteration, enlargement, addition, demolition or removal of industrial, commercial or residential structures, including the installation, demolition or removal of swimming pools, fences and decks;
 - (f) deposit or removal of more than 10 cubic metres of soil, gravel or other materials; and
 - (g) cutting, removal or alteration of any Tree.
- 6.2 Without limiting the generality of section 6.1, the following are prohibited:
- (a) subdivision or partitioning of one or more parcels of First Nation Land without subdivision approval by Council in accordance with this Law;
 - (b) stratification or other division of legal interests in lands or structures into strata units, sub-leases or shares without approval by Council;
 - (c) construction or use of a street access or exit driveway that is within 7.5 metres of the point of intersection of the road allowance lines of two streets or a street and a lane when such road allowance intersects at an angle of 135° or less; and
 - (d) carrying out any of the activities set out in paragraphs 6.1 (c), (d), (e) or (g) without a Development Permit.
- 6.3 Despite sections 6.1 and 6.2, and unless they are to be constructed, carried out, or installed within 30 metres of a water body, or they involve the likely release of a polluting substance into a water body, the following do not require any approvals under this Law in and of themselves:
- (a) construction, alteration, enlargement, addition, demolition or removal of any structure the footprint of which is and remains less than 20 square metres;
 - (b) construction or finishing of trails, driveways, or internal roads for single family residential sites on which the internal road or driveway is completely within a single parcel of land;
 - (c) landscaping and minor yard work which does not require an excavation deeper than 1.5 metres or the removal or deposit of more than 10 cubic metres of soil, gravel or other material; and
 - (d) installation of trailers and temporary structures provided such trailers and temporary structures have no hook-ups or connections to services.

PART 7. APPLICATIONS AND APPROVALS

- 7.1 Every applicant applying for an approval to carry out a project, development, activity or procedure set out in section 6.1 or 6.2 shall pay the prescribed fees and submit an application to the Lands Manager in the prescribed form that meets the applicable requirements set out in the following:
- (a) Schedule A - General Engineering Requirements for Land Development on First Nation Land;
 - (b) Schedule B - General Requirements for Environmental Assessments on First Nation Land;

- (c) Schedule C - General Requirements for Heritage Assessments on First Nation Land;
- (d) Schedule D – General Requirements for Timber Harvesting on First Nation Land;
- (e) the British Columbia Building Code (including a completed Schedule B forming part of Subsection 2.2.7, Division C of the British Columbia Building Code); and
- (f) In any directions from Registered Professionals.

- 7.2 Applications shall be reviewed and processed in stages, generally in the following order:
- (a) Rezoning (if required under any applicable Tsawout zoning and land use law);
 - (b) Subdivision;
 - (c) Approval in Principle of Conceptual Plan;
 - (d) Development Permit Approval;
 - (e) Substantial Completion; and
 - (f) Completion.

- 7.3 Applicants shall pay the prescribed fee, post any required bonds, and submit the prescribed application form for each relevant stage set out in this Part.

Concurrent Re-zoning Applications

- 7.4 An applicant may apply for approvals under this Law concurrently with a re-zoning application under any applicable Tsawout zoning or land use law. In the case of concurrent applications:
- (a) all fees payable under both Laws are due at the time of application; and
 - (b) the applicant is required to provide completed applications under both Laws.

Single Family Exemptions

- 7.5 Despite paragraph 7.1(c), a heritage assessment is not required for construction, alteration, enlargement, addition, demolition or removal of single family homes for Tsawout Members unless the proposed activity requires an excavation deeper than 1.5 metres and/or the deposit or removal of more than 10 cubic metres of soil, gravel or other materials.

Review by Land Management Committee and other Departments

- 7.6 As soon as practicable after receiving the prescribed fees and a complete application under this Part, the Lands Manager shall:
- (a) refer the application to a meeting of the Land Management Committee along with all relevant information and documentation;
 - (b) circulate the application and all relevant information and documentation to internal Tsawout departments for comment;
 - (c) for applications for subdivisions, multi-family structures, or significant increases in density, refer the application to all adjacent Permanent Interest holders on First Nation Land; and

(d) if appropriate, refer aspects of the application to the District of Central Saanich.

- 7.7 The Land Management Committee or Lands Manager shall review the application and shall provide recommendations to Council about:
- (a) whether the application should be approved or not; and
 - (b) any suggested modifications, terms or conditions that should be set by Council.

Principles and Factors in Reviewing Applications

- 7.8 For each application, the Land Management Committee shall consider the following general principles and factors:
- (a) the promotion of health, safety, convenience and welfare of Tsawout members and of residents and occupants and other persons who have a lawful interest in First Nation Land;
 - (b) well-planned and orderly development of First Nation Land and the preservation of amenities and special features of First Nation Land;
 - (c) compliance with any applicable Tsawout land use plan, Tsawout zoning and land use law, other Tsawout Law, and applicable federal, provincial and municipal laws and standards;
 - (d) environmental protection and enhancement;
 - (e) adherence to Tsawout housing policies;
 - (f) provision of community benefits including land and/or funds to Tsawout for the development of community amenities;
 - (g) protection and enhancement of cultural and heritage resources and sites;
 - (h) compatibility with Tsawout and Saanich culture;
 - (i) viewscales, aesthetics and visual qualities;
 - (j) ensuring adequate parking, access and emergency access;
 - (k) the character of the proposed activity or project in relation to the character of the zone, neighbourhood, and the buildings already erected;
 - (l) the conservation of property values;
 - (m) potential impacts on adjacent uses, owners and occupants;
 - (n) the development of the zone, neighbourhood and Reserve in a manner that contributes to the economic, environmental, cultural and community health of Tsawout and its Members and the occupants of Tsawout Land;
 - (o) any information provided and any approvals already granted by Council, including any terms or conditions, in relation to the same project or the same parcels of land; and
 - (p) any other factors which may have an impact on the community or First Nation Land.

Examples of Recommendations

- 7.9 In making recommendations to Council, the Land Management Committee may make any relevant recommendations including:
- (a) any recommendation relating to the general factors set out in section 7.8;

- (b) whether there should be bonds, deposits or irrevocable letters of credit posted by the applicant and, if so, in what percentage or amount;
- (c) dedication of up to 5% of the area included in the application for parks, greenspace or community use or a cash donation or other contribution in lieu;
- (d) preferred lot reconfigurations to ensure viable subdivisions;
- (e) construction of intersections, access and emergency access routes;
- (f) construction of parking spaces;
- (g) construction of sidewalks;
- (h) purchase and installation of street lights;
- (i) completion of servicing agreements with the District of Central Saanich;
- (j) provision of updated plans, reports or studies, including as-built drawings after the completion of the project;
- (k) requirements for staging or sequencing of the project including requirements for interim reports;
- (l) set-backs or buffers including set-backs or buffers from property lines and environmental features;
- (m) noise and dust prevention or mitigation measures; and
- (n) any other relevant terms or conditions.

7.10 The Lands Manager shall ensure that recommendations from the Land Management Committee are written up within 7 days after the Land Management Committee meeting.

Lands Manager May Request Further Information

7.11 After reviewing the recommendations from the Land Management Committee and any comments received pursuant to section 7.6, the Lands Manager may request further information, plans, reports, or other relevant material from the applicant which the applicant shall provide.

Timelines

7.12 The Lands Manager shall as soon as practicable after having received the comments under section 7.6 and 7.7, or within 7 days of having received the additional information requested under section 7.11, forward the application to Council along with:

- (a) all relevant documents, maps, plans, reports and other information;
- (b) recommendations from the Land Management Committee;
- (c) any comments received from adjacent land-owners, interest-holders or Members;
- (d) any comments or recommendations from the Lands Manager and other Tsawout managers or departments; and
- (e) any comments from the District of Central Saanich.

Council Decisions

- 7.13 As soon as practicable after receiving the application and information set out in section 7.12, Council shall decide whether or not to approve the application and, without limiting the generality of Council's authority, Council may:
- (a) reject the application; or
 - (b) approve the application with any reasonable terms or conditions, including, but not limited to terms or conditions relating to the items set out in sections 7.8 and 7.9.

Notice of Completion

- 7.14 The Lands Manager shall not issue a Notice of Completion until:
- (a) the Tsawout lands department has received final as-constructed drawings and plans in digital form and to MMCD standards;
 - (b) each Registered Professional of record for the project has completed Schedule C-B forming part of subsection 2.2.7, Division C of the British Columbia Building Code;
 - (c) water and sanitary sewer connection permits have been issued;
 - (d) the proponent and Registered Professional has certified that any conditions of the Development Permit have been complied with; and
 - (e) the applicant has fulfilled all other reasonable requirements of the First Nation.

PART 8. OFFENCES, PENALTIES AND ENFORCEMENT

Penalties

- 8.1 A person who contravenes this Law, the terms or conditions of an authorization issued under this Law, or an order made by a Court pursuant to this Law, is guilty of an offence and liable on summary conviction to a fine of not more than \$10,000 or to imprisonment for a term of not more than three months, or to both.
- 8.2 A fine payable under paragraph 8.1 shall be remitted to the Tsawout First Nation by the Court, after reasonable Court costs have been deducted.

Enforcement and Stop Work Orders

- 8.3 The Lands Manager and any Tsawout contractor or employee acting under his or her authority may, at all reasonable times, enter upon any property for the purpose of administering and enforcing this Law. No person shall prevent or obstruct, or attempt to prevent or obstruct, the entry of any authorized official upon any property as authorized under this Law.
- 8.4 In addition to any other applicable fine, penalty or remedy, Council or the Lands Manager may at any time:

- (a) issue a Stop Work Order to order any Person who has not received full and proper authorization under this Law to cease carrying out any activity, use or construction listed under section 6.1 or 6.2 or any related activity, use or construction;
- (b) order any structures, works or installations carried out in violation of this Law to be removed within 30 days, failing which Council may order them to be removed or may have them removed at the expense of the Permanent Interest holder or the Person who constructed or installed the structures, works or installations without proper authorization;
- (c) seize and detain any timber, any product manufactured from timber, or any other natural resource when they have reasonable grounds to believe it was not obtained in accordance with the terms of this Law or its Schedules or the terms of any authorization under this Law or its Schedules.

8.5 A Stop Work Order imposed under section 8.4:

- (a) may be registered in Court and enforced as a court order; and
- (b) continues in force until the condition that led to it is remedied or until the activity that is the subject of the Stop Work Order receives a permit or authorization under this Law.

8.6 If materials are seized under section 8.4:

- (a) they may be removed to a place that is appropriate for their protection and, if in the care of a carrier at the time of seizure, the carrier may be directed to move the materials to the place so designated;
- (b) the costs of transportation and other charges incurred in the event of a seizure will be included in the costs of seizure and are chargeable to a party found in breach of this Law; and
- (c) seizure shall not prejudice or affect any lien to which a carrier may be entitled in respect of the materials to the time of such seizure.

PART 9. AMENDING PROCEDURES

Substantive Amendments

9.1 Substantive amendments to this Law may only be made in accordance with section 7 under Part 2 of the Land Code and, if the amendment relates to a matter listed in paragraph 10.1 (a) through (i) of the Land Code, subsection 10.1 under Part 3 of the Land Code.

Minor Amendments

9.2 Despite section 9.1 of this Law, Council may adopt minor amendments to this Law by unanimous decision at a duly convened meeting, and expressed by band council resolution.

9.3 For the purposes of section 9.2, minor amendments include:
(a) amendments to correct typographical errors;

- (b) amendments required to reference any relevant new or amended First Nation laws;
- (c) amendments ordered by any court of competent jurisdiction; and
- (d) amendments which serve to clarify the Law, where there is no reasonable dispute about the intention underlying the original provision.

PART 10. REPEAL AND OTHER BYLAWS

- 10.1 The *Tsawout First Nation Land Development Procedures Law*, No. 01-2010 is hereby repealed in its entirety.
- 10.2 The *Tsawout First Nation Waterworks Bylaw No. 2006-2* and the *Tsawout First Nation Sanitary Sewer System Bylaw No. SEW 2005-01* continue in force and effect except to the extent of any inconsistency with this Law, in which case this Law prevails.

PART 11. COMING INTO FORCE

Date Law Comes into Force

- 11.1 This Law shall come into force and effect on the date it is enacted by Resolution after complying with the requirements of section 7 of Part 2 of the *Tsawout First Nation Land Code*.

THIS LAW IS HEREBY ENACTED by Council at a duly convened meeting held on the ____ day of _____, 2012 at _____, British Columbia.

A quorum consists of **five (5)** Council members.

_____ Chief Harvey Underwood	_____ Councillor Allan Claxton
_____ Councillor Louie Claxton	_____ Councillor Eugena (Samantha) Etzel
_____ Councillor Toby Joseph	_____ Councillor Stanley Sam
_____ Councillor Antoine Underwood	_____ Councillor George Underwood

**STÁUTW (Tsawout) First Nation
General Engineering Requirements for Land
Development on First Nation Land**

SCHEDULE "A"

**TSAWOUT FIRST NATION SUBDIVISION, DEVELOPMENT AND SERVICING LAW, 02-2012
PARAGRAPH 7.1(A)**

To be Approved by Tsawout First Nation Council
[Date, 2012]



**STÁUTW (TSAWOUT) FIRST NATION
GENERAL ENGINEERING REQUIREMENTS FOR LAND DEVELOPMENT
ON FIRST NATION LAND**

TABLE OF CONTENTS

GENERAL	12
BUILDING	14
WATER SERVICE.....	14
SANITARY SERVICE.....	16
DRAINAGE	17
TOTAL ESTIMATED COST OF WORKS AND SERVICES	18
ROADS, ACCESS AND PARKING	18
GREENSPACE AND AMENITIES.....	20
FUEL HANDLING.....	20
FIRE PROTECTION.....	20
UTILITIES	21
COMPLETION DOCUMENTATION	21

**STÁUTW (Tsawout) FIRST NATION
GENERAL ENGINEERING REQUIREMENTS FOR LAND DEVELOPMENT
ON FIRST NATION LAND**

Tsawout First Nation requires that a Conceptual Design be deemed satisfactory by Tsawout Council and receive an **Approval in Principle** before any development may proceed. A Final Design must be deemed satisfactory by Tsawout Council before the **Tsawout Development Permit** is issued.

Information items to be provided at the **Conceptual Design/ Approval in Principle Design** stage are indicated by **[Conceptual]**, and those to be provided at the **Final Design/ Development Permit** stage are indicated by **[Final]**.

The applicant is advised that the requirements below are general in nature and are meant to be a guide for submission only. It is possible that some listed requirements may be waived and other new requirements may become applicable as more information on the development is submitted. If the applicant or their consultant or agent regards any of the listed items to be not applicable, they may request a waiver and provide sufficient justification to support their request.

The applicant is further advised that a **Tsawout Development Permit** must be obtained before any improvement or construction work on Tsawout First Nation Lands may begin, irrespective of whether or not a lease is applicable or has been executed. Any work constructed before obtaining the **Tsawout Development Permit** is potentially illegal and is done at the applicant's or developer's own risk. If the applicant cannot produce satisfactory evidence to prove that any construction pre-Development Permit meets all Tsawout laws and standards, such work has to be removed and replaced, all at the applicant's own cost.

The below requirements are based on Aboriginal Affairs and Northern Development Canada's (AANDC) requirements with some modifications. Tsawout plans to eventually transition to MMCD-based guidelines and it is recommended that applicants follow MMCD requirements where such requirements exceed those of the *INAC Standards*.

GENERAL

1. Professional Seal and Signature [Conceptual and Final]

All submission reports, designs, drawings, calculations, specifications and technical documents shall bear the seal and signature of a Registered Professional (Professional Engineer or Registered Architect) qualified for the work. Where applicable, each registered professional of record must submit a BC Building Code Schedule B "Assurance of Professional Design and Commitment for Field Review."

- Provided for Conceptual*
- Provided for Final*

2. INAC Standards [Conceptual and Final]

State on the design drawings that all work is designed to meet or exceed the higher of *INAC Standards* as defined in the *INAC Codes Standards and Guidelines* and MMCD standards for design drawings. A copy of the *INAC Codes-Standards and Guidelines* is contained in the *INAC General Information Package for Leasing*, or may be obtained from INAC upon request. If work is proposed to be designed to standards other than the *INAC Standards* or MMCD, provide certifications of equivalence from a Registered Professional and obtain pre-approval from Tsawout by providing justifications and a copy of the relevant section of the standard used.

- Provided for Conceptual*
- Provided for Final*

3. General Plans [Conceptual and Final]

Provide:

1. a Location Plan showing the geographical area of the proposed development and surrounding roads, highways and topographic features;
 - Provided for Conceptual*
 - Provided for Final*
2. a Layout Plan showing the Lease Area and legal description of the lands to be developed and the boundaries of the Tsawout First Nation Reserve and an outline of the footprint proposed development, and
 - Provided for Conceptual*
 - Provided for Final*
3. a detailed Site Plan showing all existing and proposed works, buildings, streets, lanes, highways, intersections, driveways, parking and loading areas, sidewalks, street lighting, utilities and utility easements, streams and other topographic features of the site.
 - Provided for Conceptual*
 - Provided for Final*

4. Geotechnical Assessment [Conceptual]

Provide a geotechnical assessment to verify the viability of the development on site. Include the existing and proposed grades and their relations to the elevations on adjoining properties, and details of any necessary excavations.

- Provided for Conceptual*

5. Off-Site Work [Conceptual and Final]

If work relating to the development is required to be constructed outside of the Lease Area or will encroach onto private or other CP properties, obtain rights-of-way or other legal permissions to accommodate the work. Show such rights-of-way or other permissions on design drawings.

- Provided for Conceptual*
- Provided for Final*

BUILDING

6. Building Plans [Conceptual and Final]

Provide conceptual plan and elevations of proposed buildings *[Conceptual]* and detailed design drawings of architectural, structural, mechanical, plumbing, fire protection and electrical works *[Final]*.

- Provided for Conceptual*
- Provided for Final*

7. Schedule [Conceptual]

Provide a proposed schedule of construction and an estimated start and completion date.

- Provided for Conceptual*

8. Professional Certifications [Final]

Provide copy of relevant signed and sealed BC Building Code Schedules A, B-1 and B-2, or equivalent letters of assurance, on architectural, structural, mechanical, plumbing, fire suppression systems, electrical and geotechnical works for the proposed buildings.

- Provided for Final*

WATER SERVICE

9. Conceptual Water Design [Conceptual]

Indicate domestic and fire flow requirements, and the proposed water source to meet these demands. Indicate the minimum fire flow available to the development and the minimum pressure available under Maximum Day Plus Fire Flow conditions.

- Provided for Conceptual*

10. Conceptual Water Design Drawings [Conceptual]

Provide conceptual design drawings to show the existing and the proposed water works to service the development.

- Provided for Conceptual*

11. Water Supply from Own Well [Conceptual]

Water supply from the development's own well is only permitted for agricultural/landscaping uses. Domestic and fire flow needs must be met through water supply from an existing water distribution system (see 13).

- Provided for Conceptual*

12. Water Supply from Surface Water [Conceptual]

Water supply from a surface water body is only permitted for agricultural/landscaping uses. Domestic and fire flow needs must be met through water supply from an existing water distribution system (see 13).

- Provided for Conceptual*

13. Water Supply from Existing System [Conceptual]

Verify by network analysis calculations or other means that the existing water distribution system has the capacity to deliver the required domestic and fire flow to the development.

- Provided for Conceptual*

14. Hydrant Locations [Conceptual]

Indicate sufficient hydrants on the conceptual design drawings such that no current or future proposed building is more than 75 m from a hydrant.

- Provided for Conceptual*

15. Watermain Looping [Conceptual]

Loop watermains whenever possible to provide redundancy and improve fire flow.

- Provided for Conceptual*

16. Water Service Agreement – where connecting to a water system other than the Tsawout First Nation water service [Conceptual and Final]

Provide letter of intent or draft servicing agreement [*Conceptual*] and signed servicing agreement [*Final*] with the owner of the existing water system for providing water service to the development.

- Provided for Conceptual*
- Provided for Final*

17. Water Service Permit – where connecting to Tsawout First Nation’s water service [Final]

Provide completed application for a Water Service Permit as required under the *Tsawout First Nation Waterworks Bylaw No. 2006-2*, as amended from time to time [*Final*] for providing water service to the development. Permit is to be issued once the requirements of the Bylaw have been met.

- Provided for Final*

18. Decommissioning Plan for Abandoning Existing Well [Conceptual]

Provide a decommissioning plan if any existing well is to be abandoned.

- Provided for Conceptual*

19. Detailed Water Design Drawings [Final]

Provide detailed design drawings for all proposed water works and treatment facilities to service the development. In particular, show details of connection point to an off-site distribution system, horizontal and vertical profiles of watermains, offsets of watermain from reference objects, horizontal and vertical separation with a sewer, material specifications, trench details, water meters, and details of appurtenances such as valves, air valves, chambers, hydrants, thrust blocks and bearing areas.

- Provided for Final*

20. Disinfection of New Watermain [Final]

Indicate on design drawing method and procedure for disinfecting a new watermain. Indicate on design drawing method of disposal of chlorinated water after completing watermain disinfection such that aquatic life will not be adversely impacted.

- Provided for Final*

21. Service Connection Details, Standards and Identification [Final]

Show on design drawings water service connection details and specify service connections to meet the Canadian Plumbing Code. Specify on design drawings blue marker stakes for identification of any future water service connections.

- Provided for Final*

SANITARY SERVICE

22. Conceptual Sanitary Design Drawings [Conceptual]

Provide conceptual design drawings to show the existing and the proposed sanitary facilities to service the development. Developments must be serviced by an existing sanitary sewer system.

- Provided for Conceptual*

23. Sanitary Service from Existing System [Conceptual]

Verify, through network analysis calculations or other means, that the existing sewer system has the spare capacity to service the development.

- Provided for Conceptual*

24. Sanitary Service Agreement - where connecting to a sanitary sewer system other than Tsawout First Nation sanitary sewer system [Conceptual and Final]

Provide a letter of intent or draft servicing agreement [*Conceptual*] and signed servicing agreement [*Final*] with the owner of the existing sewer system for providing sanitary service to the development.

- Provided for Conceptual*

- Provided for Final*

25. Sanitary Sewer Connection Permit - where connecting to the Tsawout First Nation sanitary sewer system [Final]

Provide a completed Application for Sewer Connection as required under the *Tsawout First Nation Sanitary Sewer System Bylaw No. 2005-01*, as amended from time to time [*Final*] for providing sanitary sewer service to the development. Permit is to be issued once the requirements of the Bylaw have been met.

- Provided for Final*

26. Oil Separator [Conceptual]

Provide oil separator (at a standard which meets or exceeds the requirements applicable in the District of Central Saanich) for discharge to either the sanitary or the storm system from restaurants, gas stations, machine shops, and anywhere oil can be discharged or spilled.

- Provided for Conceptual*

27. Decommissioning Plan for Abandoning Existing Septic Facilities [Conceptual]

Provide a decommissioning plan if any existing septic facilities are to be abandoned. Plan to meet or exceed standards applicable in the District of Central Saanich.

- Provided for Conceptual*

28. Detailed Sanitary Design Drawings [Final]

Provide detailed design calculations and drawings for all proposed sanitary works to service the development. In particular, show horizontal and vertical profiles of the sewers and forcemains, offsets of sewer and forcemain from reference objects, material specifications, sewer slopes, invert elevations, manhole rim elevations, sewer trench details, forcemain thrust block bearing areas, and details of manholes, cleanouts, oil separators, air valves and chambers.

- Provided for Final*

29. Effluent Permit Limits [Final]

Verify that the Effluent Quality Parameters discharged to a disposal or reclaimed water use facility do not exceed the *Waste Management Act Municipal Sewage Regulation* limits for the particular facility.

- Provided for Final*

30. Service Connection Details, Standards and Identification [Final]

Show on design drawings sewer service connection details. Provide inspection chamber. Specify service connection to meet the Canadian Plumbing Code. Specify on design drawings red marker stakes for identification of any future sewer service connections.

- Provided for Final*

DRAINAGE

31. Stormwater Management Plan [Conceptual]

Provide a stormwater management plan showing how the post-development Minor (1:2 Year) and Major (1:50 Year) flows are to be managed. Show grading of lot and in-conduit, in-ditch, and overland flow paths. Registered Professional must confirm that the Stormwater Management Plan meets or exceeds the requirements applicable in the District of Central Saanich.

- Provided for Conceptual*

32. Stormwater Disposal by Drywell [Conceptual]

If stormwater runoff is proposed to be disposed of by drywells, verify by calculations that the drywells have the capacity to dispose of a Minor (1:2 year) storm flow.

- Provided for Conceptual*

33. Stormwater Disposal to Surface Water Body [Conceptual]

If any stormwater runoff is proposed to be discharged into an adjacent surface water body, provide details of sediment control devices and confirm permission with Department of Fisheries and Oceans and Environment Canada.

Provided for Conceptual

34. Stormwater Disposal to Roadside Ditch [Conceptual]

If any stormwater runoff is proposed to be discharged into an adjacent roadside ditch, confirm permission with the owner of the roadside ditch (either the First Nation, municipal, regional or provincial jurisdiction).

Provided for Conceptual

35. 200 Year Flood Level [Conceptual]

State on the conceptual design drawing that the building habitable floor slab elevation is not less than 0.6 m above the 1:200 year flood level.

Provided for Conceptual

36. Tidal Surge Elevation [Conceptual]

State on the conceptual design drawing that the building habitable floor slab elevation is above a safe tidal surge elevation.

Provided for Conceptual

37. Detailed Drainage Design Drawings [Final]

Provide detailed design drawings for all proposed drainage works servicing the development. In particular, show horizontal and vertical profiles of storm sewers and ditches, offsets of storm sewer from reference objects, material specifications, sewer slopes, invert elevations, manhole rim elevations, trench details, and details of manholes, cleanouts, oil and debris separators, drywells, silt traps and detention ponds.

Provided for Final

TOTAL ESTIMATED COST OF WORKS AND SERVICES

38. Total Estimated Cost of Works and Services [Conceptual]

Provide total estimated cost of works and services excluding off-site works and services which are the subject of a servicing agreement with the District of Central Saanich: \$_____

Provided for Conceptual

ROADS, ACCESS AND PARKING

39. Parking [Conceptual]

Provide the estimated number of parking spaces required for the development and the plans to accommodate them. Minimum number of parking spaces and dimensions must be consistent with the requirements applicable in the District of Central Saanich.

Provided for Conceptual

40. Traffic Volume [Conceptual]

Provide the estimated volume of traffic in trips per day that will be generated by the development, and an analysis of the impact of the traffic to be generated on the use of nearby and adjacent land.

- Provided for Conceptual*

41. Conceptual Road Design Drawings [Conceptual]

Provide conceptual design drawings to show the existing and the proposed access and road facilities to service the development, including entry and exit routes and access by fire and emergency vehicles.

- Provided for Conceptual*

42. Cul-de-Sac Length [Conceptual]

Limit length of any cul-de-sac to 150 m maximum in consideration of emergency access and deployment of fire fighting equipment.

- Provided for Conceptual*

43. Utilities in Adjacent or Public Roads [Conceptual]

If utilities servicing the development are to be laid crossing or within the fronting road allowance, confirm permission with the owner of the fronting road (adjacent CP-holder, Tsawout, the District of Central Saanich, or the provincial government)

- Provided for Conceptual*

44. Bridge Across Creek [Conceptual]

Confirm permission from Department of Fisheries and Oceans for access bridge across river or creek.

- Provided for Conceptual*

45. Access Permit [Conceptual and Final]

Provide letter of intent [**Conceptual**] and access permit, easement or right-of-way [**Final**] from the owner of the fronting road (adjacent CP-holder, Tsawout, the District of Central Saanich, or the provincial government) for allowing access to the development.

- Provided for Conceptual*
- Provided for Final*

46. Detailed Parking Design [Final]

Provide detailed design calculations and drawings for all proposed parking areas and spaces.

- Provided for Final*

47. Detailed Road Design Drawings [Final]

Provide detailed design calculations and drawings for all proposed roads and access to service the development.

- Provided for Final*

48. Road Details [Final]

Show design speed, horizontal and vertical road profile, vertical curve data, cross sections, intersection details and pavement structure on design drawings.

- Provided for Final*

49. Signage [Conceptual and Final]

Show the proposed [*Conceptual*] and actual [*Final*] location, size, height, colour, lighting and orientation of all signs.

- Provided for Conceptual*
- Provided for Final*

GREENSPACE AND AMENITIES

50. Greenspace and Public Amenities [Conceptual and Final]

Show the proposed [*Conceptual*] and actual [*Final*] location and treatment of parks, green space, common areas, open spaces, trails, landscaping, fences, recreation features and any other public amenities.

- Provided for Conceptual*
- Provided for Final*

51. Community Services [Conceptual]

Identify the local community services and public facilities that would be affected by the development, including the projected increase in users of existing community services and public facilities, potential increased costs to Tsawout, and strategies to mitigate any negative impacts to community services and public facilities.

- Provided for Conceptual*

FUEL HANDLING

52. Fuel Storage and Dispensing [Final]

For gas station development, provide details of fuel storage tanks, connection piping, dispenser pumps, spill containment, alarm system and an emergency response plan.

- Provided for Final*

FIRE PROTECTION

53. Fire Protection Service Agreement [Conceptual and Final]

Provide letter of intent [*Conceptual*] and service agreement [*Final*] with either Tsawout or the District of Central Saanich for providing fire protection service to the development.

- Provided for Conceptual*
- Provided for Final*

54. Tsawout's Fire Fighting Capability [Conceptual]

If fire protection service is to be obtained from Tsawout, verify the existing capability of Tsawout's equipment and resources to respond to and provide fire fighting service to the development.

- Provided for Conceptual*

UTILITIES

55. Utility Service Agreements [Conceptual and Final]

Provide letter of intent [**Conceptual**] and service agreement [**Final**] with utility companies for electricity, telephone, gas and solid waste disposal services.

- Provided for Conceptual*
- Provided for Final*

COMPLETION DOCUMENTATION

56. Health Canada Permits for Individual Homes [Final]

Provide written commitment from the Professional Engineer or Registered Architect to provide Health Canada permits for in-ground sewage disposal for individual homes [**Final**]. Actual permits are to be provided as part of the completion documentation.

- Provided for Final*

57. Restaurant Permit [Final]

Provide written commitment from the Proponent to provide a copy of Ministry of Health Permit to Operate A Food Service Establishment if kitchen or restaurant service is proposed [**Final**]. Actual permit is to be provided as part of the completion documentation.

- Provided for Final*

58. Registration of Rights of Way, Permits and Easements [Final]

Provide written commitment from the Professional Engineer or Registered Architect to provide copies of all registered rights of way plans, permits and easements [**Final**]. Actual plans and proof of registration must be provided as part of the completion documentation.

- Provided for Final*

59. Registration of Fuel Storage Tanks [Final]

Provide written commitment from the Professional Engineer or Registered Architect to provide a copy of the registration of all underground storage tanks and exterior aboveground storage tanks larger than 4000 litres [**Final**]. Actual registration documents are to be provided as part of the completion documentation.

- Provided for Final*

60. Construction Supervision [Final]

Provide written commitment from the Professional Engineer to provide all necessary construction supervision, inspection, site testing and record keeping during construction of the site work *[Final]*.

Provided for Final

61. O&M Manuals [Final]

Provide written commitment from the Professional Engineer or Registered Architect to provide Operation & Maintenance Manuals for the electrical and mechanical systems upon completion *[Final]*. Actual Operation & Maintenance Manuals are to be provided as part of the completion documentation.

Provided for Final

62. As-Built Drawings [Final]

Provide written commitment from the Professional Engineer or Registered Architect to provide accurate as-built drawings upon completion *[Final]*. Actual as-built drawings are to be provided as part of the completion documentation for all buildings, structures, roads, and works.

Provided for Final

63. Completion Report [Final]

Provide written commitment from the Professional Engineer or Registered Architect to provide a completion report detailing work progress, inspection records, testing results, and problems encountered on site *[Final]*. Actual completion report is to be provided as part of the completion documentation.

Provided for Final

64. Completion Certification [Final]

Provide written commitment from the Co-ordinating Registered Professional who signed the BC Building Code Schedule A for the building to provide the BC Building Code Schedules C-A and C-B *[Final]*.

Provided for Final

Provide written commitment from the Professional Engineer submitting the supporting services plans to provide an Engineer's Certificate certifying that all work is constructed in accordance with approved drawings and specifications *[Final]*.

Provided for Final

Actual Schedules C-A and C-B and Engineer's Certificate are to be provided as part of the completion documentation.

Provided for Final

**STÁUTW (Tsawout) First Nation
General Requirements for Environmental
Assessments on First Nation Land**

SCHEDULE “B”

**TSAWOUT FIRST NATION SUBDIVISION, DEVELOPMENT AND SERVICING LAW, 02-2012 PARAGRAPH
7.1(B)**

To be approved by Tsawout First Nation Council

[Date, 2012]



**STÁUTW (TSAWOUT) FIRST NATION
GENERAL REQUIREMENTS FOR ENVIRONMENTAL ASSESSMENTS ON
FIRST NATION LAND**

TABLE OF CONTENTS

1. INTRODUCTION.....	25
2. DEFINITIONS	25
3. APPLICATION OF THESE REQUIREMENTS.....	26
4. PROJECTS AND APPROVALS THAT ARE EXEMPT FROM THE REQUIREMENT FOR AN ENVIRONMENTAL ASSESSMENT	26
5. HARMONIZING ENVIRONMENTAL ASSESSMENTS CONDUCTED BY MULTIPLE PARTIES.....	27
6. THE TSAWOUT FIRST NATION ENVIRONMENTAL ASSESSMENT PROCESS.....	28
7. ENVIRONMENTAL ASSESSMENT STEPS	29
Step 1: Lands Manager determines whether environmental assessment is required	29
Step 2: Determine the scope and Terms of Reference for the environmental assessment.....	30
Step 3: Conduct the analysis and prepare the environmental assessment report ...	31
Step 4: Review the draft environmental assessment report.....	31
Step 5: Make the environmental assessment decision	32
Step 6: Implement Mitigation and follow-up program, as appropriate	32
FIGURE 1: Process for conducting an environmental assessment.....	34
APPENDIX “A”: Project Description Template	35
APPENDIX “B”: Generic Terms of Reference for Environmental Assessments	53
APPENDIX “C”: Potential topics for inclusion in environmental assessments.....	57
SCHEDULE 1: Definitions	60

THE STÁUTW (TSAWOUT) GENERAL REQUIREMENTS FOR ENVIRONMENTAL ASSESSMENT ON FIRST NATION LANDS

1. INTRODUCTION

An environmental assessment is:

“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”

(International Association of Impact Assessment)

An environmental assessment examines effects of proposed Projects on soil, air quality, water quality and supply, vegetation, fisheries, wildlife, traffic, noise, community health, economic development, archaeology and a variety of other social, economic, and environmental topics. An environmental assessment also examines the Cumulative Effects of a proposed Project combined with other past and foreseeable future human activities. Environmental assessments also identify ways of avoiding or reducing adverse Environmental Effects.

An environmental assessment is a planning tool, a means of reviewing the effects of development, a process of community engagement, and an instrument for complying with regulatory requirements.

The STÁUTW (Tsawout) First Nation seeks the following benefits through the conduct of environmental assessment of activities on, or uses of, its lands:

- ❖ Gather information sufficient to enable the Tsawout First Nation to exercise its decision-making authority over use of its lands
- ❖ Identify components of proposed Projects or plans that could adversely affect natural or human environments, the community, or the economy
- ❖ Propose ways of avoiding or minimizing adverse effects on environment, society and culture
- ❖ Improve Project design, construction, and operation
- ❖ Engage the community in the process of reviewing proposed developments
- ❖ Support better development decisions

2. DEFINITIONS

- 2.1 Unless otherwise defined in Schedule 1 of these Requirements, definitions in these Requirements have the same meaning as in the *Subdivision, Development, and Servicing Law* and the *Tsawout First Nation Land Code*.

3. APPLICATION OF THESE REQUIREMENTS

- 3.1 These Requirements apply to:
- (a) all Projects to which the *Tsawout Subdivision, Development and Servicing Law, 2012-02* applies;
 - (b) any grant or disposition of a lease, license or permit in First Nation Land which must be approved by Council under section 26.6 of the Land Code;
 - (c) any grant by Council of an interest, licence or permit in Band Land under section 28.1 of the Land Code;
 - (d) land developments on First Nation Land that are approved, regulated, funded or undertaken by the Tsawout First Nation; and
 - (e) preparation of Tsawout First Nation land use plans or regulations that specify proposed uses of land, or changes in land use designations (amendments to subdivision, land use, or zoning plans or regulations) for commercial, industrial, or institutional uses.
- 3.2 As a matter of general application, the scope of an environmental assessment shall be commensurate with the size and complexity of a Project and its potential Environmental Effects.
- 3.3 Nothing in these Requirements limits the Lands Manager's ability to:
- (a) require an environmental assessment as part of a Subdivision Approval, Development Permit or leasing, permitting or licensing process if the Lands Manager determines, in his or her sole discretion, that an environmental assessment is warranted in the particular circumstances; or
 - (b) waive the requirement for an environmental assessment of a Project if the Lands Manager determines that an Environmental Assessment is not warranted in the particular circumstances because the proposed Project clearly does not have the potential to cause adverse Environmental Effects; subject to the powers of Council under section 3.4.
- 3.4 A decision by the Lands Manager to waive the requirement for an environmental assessment is subject to review by Council.
- 3.5 A decision by the Lands Manager to proceed with an environmental assessment is not subject to review by Council.

4. PROJECTS AND APPROVALS THAT ARE EXEMPT FROM THE REQUIREMENT FOR AN ENVIRONMENTAL ASSESSMENT

- 4.1 Environmental assessments are not required under the following circumstances, unless otherwise determined by Council:
- (a) administrative actions that do not affect land or resources;
 - (b) emergency repairs or action needed on an urgent basis to avert or respond to emergencies; or

(c) responses to accidents or threats to public health.

4.2 Consistent with the approach taken by the *Canadian Environmental Assessment Act Exclusion List Regulation*, 2007, an environmental assessment will not be required for a Project proposed to occur on First Nation Land that meets all of the following criteria:

- (a) the affected land is more than 30 meters from a water body, environmentally sensitive area (as shown in the Tsawout *Comprehensive Community Plan* 2011), fish habitat, migratory bird habitat, or land considered important for cultural reasons, including traditional use areas;
- (b) the Project complies with prevailing Tsawout First Nation land use plans, zoning designations, and subdivision regulations;
- (c) for Projects involving construction or expansion of a structure, the Project is on a lot serviced by sewer and water;
- (d) the Project would result in the cutting of not more than 7 Trees of 50 cm diameter or less at 1.4 meters height or not more than 4 Trees of 50 cm diameter or greater at 1.4 meters height and would not result in the clearing of more than 10% of the trees from the individual Lot;
- (e) the Project would not emit or release substances that have the potential to pollute air or water;
- (f) the Project would not result in increases of more than 30 vehicle trips per day to and from First Nation Lands;
- (g) the Project would not add more than 20 residents to First Nation Lands; and
- (h) for commercial or industrial development, the Project would not employ more than 10 people.

4.3 Notwithstanding section 4.2, Council may request an environmental assessment where community members have raised a reasonable concern or where Council believes on reasonable grounds that the Project may have harmful Environmental Effects

5. HARMONIZING ENVIRONMENTAL ASSESSMENTS CONDUCTED BY MULTIPLE PARTIES

5.1 The Tsawout First Nation recognizes that federal departments have statutory requirements to conduct environmental assessments on First Nation Land under the *Canadian Environmental Assessment Act* (CEAA) under certain circumstances, and components of Projects occurring on lands adjacent to the reserve may be subject to assessment under the *British Columbia Environmental Assessment Act* (BCEAA). In an effort to avoid duplication, when the Tsawout First Nation determines that an environmental assessment is required for a Project occurring on its lands, or when other governments inform the Tsawout First Nation that their respective legislation requires conduct of an environmental assessment on Tsawout First Nation land or adjacent to Tsawout First Nation land, then the Lands Manager will make best efforts to schedule a meeting of the parties to seek agreement on the following issues:

- (a) the agency and individual that will be the main contact and coordinator of the environmental assessment for each involved jurisdiction;
 - (b) the common information requirements under the federal, provincial and Tsawout First Nation's environmental assessment processes;
 - (c) the manner by which the parties will develop a specific work plan for each Project undergoing a multi-jurisdictional environmental assessment;
 - (d) how the parties will co-ordinate their environmental assessment decisions and associated regulatory decisions with respect to a Project; and
 - (e) for future Projects, how each party will notify the others when an environmental assessment process is initiated under that jurisdictions' law.
- 5.2 Tsawout First Nation recognizes that under clause 25.6 of the Framework Agreement, the Tsawout First Nation and Canada will make best efforts to ensure the Tsawout First Nation's environmental assessment process will be used where there is overlapping jurisdiction. This priority will be reflected in any environmental assessment harmonization plan developed between the Tsawout First Nation, Canada, and British Columbia under clause 25.7 of the Framework Agreement.

6. THE TSAWOUT FIRST NATION ENVIRONMENTAL ASSESSMENT PROCESS

- 6.1 For most Projects, the procedures outlined in Part 7 will be followed. Council or the Lands Manager may alter or amend steps as appropriate. The Tsawout First Nation environmental assessment process is designed to meet the requirements of the Framework Agreement, including:
- (a) that an environmental assessment is triggered in appropriate cases where the First Nation is approving, regulating, funding or undertaking a Project on First Nation Land (Clause 25.4 of Framework Agreement, Section 21(3) of FNLMA),
 - (b) the environmental assessment process must be consistent with requirements of the *Canadian Environmental Assessment Act* (Clause 25.3 of Framework Agreement), and
 - (c) environmental assessments must be conducted as early as possible in the planning stages of the Project, before an irrevocable decision is made (Clause 25.4 of Framework Agreement).
- 6.2 For Projects determined to require an environmental assessment, the Proponent must ensure that an environmental assessment is completed before other approvals are considered by the Tsawout First Nation. Such approvals include negotiating impact benefit agreements, or issuing permits under Tsawout First Nation laws. It is recommended that the Proponent complete all required environmental assessments prior to completing any lease or sub-lease agreements.

7. ENVIRONMENTAL ASSESSMENT STEPS

Step 1: Lands Manager determines whether environmental assessment is required

- (a) For all Projects identified in Part 3, a detailed Project Description will be prepared by the Proponent and submitted to the Lands Manager. Appendix “A” contains a Project Description template to guide the Proponent’s submission.
- (b) Upon receipt of the Project Description, the Lands Manager may forward, or may direct the Proponent to forward, the Project Description to Aboriginal Affairs and Northern Development Canada, the Lands Advisory Board, Fisheries and Oceans Canada, the Canadian Wildlife Service, the District of Central Saanich, the Capital Regional District, or other government departments or authorities. The involvement of other government departments is based on whether those departments have decisions to make or can contribute expert or specialist advice.
- (c) Using the information contained in the Project Description, the Lands Manager will determine whether an environmental assessment is required. This decision must be made within 20 working days of receipt of a Project Description deemed complete by the Lands Manager and the Proponent will be provided notice of the decision within that time. The Lands Manager may determine that a further 20 working days is required to obtain input from other government departments or authorities who have been forwarded the Project Description and will provide notice to the Proponent within the first 20 day timeframe if further time is required. Under section 3.5, a decision that an environmental assessment is required is not reviewable by Council.
- (d) Under section 3.4, Council may review a determination by the Lands Manager that an environmental assessment is not required for a Project. The Lands Manager will inform Council as soon as practicable of a determination not to require an environmental assessment and provide them with a report setting out the reasons for the determination. Within 15 working days of receiving the Land Manager’s determination, Council will either: 1) confirm the determination of the Lands Manager; or, 2) require an environmental assessment notwithstanding the Lands Manager’s determination. Council may extend this time by 5 working days by providing notice to the Proponent. If further time is required by Council, they will seek agreement with the Proponent on an appropriate timeline for finalizing Council’s decision.
- (e) A determination that no environmental assessment is required under these Requirements does not exempt the Proponent from complying with federal environmental assessment requirements or the need to obtain permits under applicable Tsawout First Nation, federal, or provincial laws and regulations.
- (f) If the Lands Manager determines that a Project requires preparation of a Tsawout First Nation environmental assessment, the Lands Manager will report this determination to the Proponent and Council.

- (g) The Lands Manager will post a notice of his or her determination with respect to requiring an environmental assessment in the Tsawout administration office and/or on the Tsawout First Nation website within five working days after the determination is provided to the Proponent.

Step 2: Determine the scope and Terms of Reference for the environmental assessment

- (a) If a Project requires preparation of an environmental assessment, the Lands Manager will oversee the development of, and approve, Terms of Reference for the environmental assessment.
- (b) Although the Proponent bears responsibility for preparing the Terms of Reference, the Proponent is strongly advised to conduct this step in consultation with the Lands Manager or a Tsawout Environmental Specialist to ensure that the environmental assessment will include information considered necessary by the Tsawout First Nation. This consultation is critical to avoid delays in the environmental assessment process.
- (c) As shown in Generic Terms of Reference in Appendix “B”, an environmental assessment report typically includes the following major headings:
 1. **Project setting:** Physical, ecological, social, cultural, and economic setting of the area potentially affected by a Project.
 2. **Project description:** Including design, construction, operation, and decommissioning.
 3. **Project Effects and Mitigation:** Identification of potential Environmental Effects, assessment of the impacts and description of Mitigation measures.
 4. **Cumulative Effects assessment:** Combined environmental, cultural or socio-economic impacts that accumulate from a series of actions, contaminants, or Projects.
 5. **Commitments:** Clear statement of commitments by the Proponent to implement the Mitigation measures described in the environmental assessment.
 6. **Conclusion:** A summary and conclusion of the significance of identified adverse Environmental Effects.
- (d) Appendix “C” of this document contains a list of potential topics to be studied in an environmental assessment. The Lands Manager may require that an environmental assessment includes some or all of the topics listed in Appendix “C”, or additional topics at the Lands Manager’s sole discretion.
- (e) During preparation of the Terms of Reference, the Proponent will identify any liability concerns and potential requirements for professional expertise and input to mediate those concerns.
- (f) The Terms of Reference for an environmental assessment should describe the process to be applied in preparing the assessment, including a list of agencies or individuals to be contacted, description of reports or other deliverables to be prepared, including special studies, and a timeline for the conduct of the work, including meetings and submission of deliverables. The

- Terms of Reference will specify, where appropriate, the professional qualifications of personnel that will prepare the environmental assessment.
- (g) The Lands Manager may retain the assistance of specialists in relevant fields to assist in reviewing Terms of Reference submitted by the Proponent. The Proponent is required to cover any costs incurred by the Tsawout First Nation in retaining such specialist assistance.
 - (h) Where the Project has the potential to have a significant effect on Band Land or resources, or on the interests of the Tsawout community as a whole, the Lands Manager may: (a) refer the draft Terms of Reference to the Land Management Committee, and, (b) engage the Tsawout community in a review of the Terms of Reference for the environmental assessment. The Lands Manager may circulate the draft Terms of Reference to other governments for review and comment, as deemed necessary and appropriate by the Lands Manager.
 - (i) Following review, the Lands Manager will determine whether the Terms of Reference include the issues necessary for inclusion in the subsequent environmental assessment, and whether the process for preparing the environmental assessment is considered adequate. The Lands Manager will inform the Proponent of this determination.

Step 3: Conduct the analysis and prepare the environmental assessment report

- (a) After the Terms of Reference have been approved by the Lands Manager, the Proponent will assume responsibility for conducting the environmental assessment. Typically, the Proponent retains professionals with the requisite expertise to study specified issues, identify potential Environmental Effects, propose measures to mitigate those effects, and prepare resulting reports.
- (b) The Proponent will prepare and submit a stand-alone draft environmental assessment report to the Lands Manager. The report will be accompanied by a table indicating that the topics and actions specified in the Terms of Reference have been completed and will identify the preparers of the report and describe their professional qualifications.
- (c) The Tsawout First Nation desires clear environmental assessments that provide information on specified topics and reach clear conclusions about Environmental Effects and Mitigation. Excessive data collection, superfluous text, or unnecessarily complex analysis is discouraged. Honest and unbiased assessment of impacts is an absolute requirement. Failure to meet this requirement will result in the Proponent being required to revise and re-submit the report.

Step 4: Review the draft environmental assessment report

- (a) The Lands Manager will determine the process for reviewing the draft environmental assessment and will specify the parties to be involved. The Proponent will be expected to cover the Tsawout First Nation's costs incurred in reviewing the draft environmental assessment report.
- (b) An important function of an environmental assessment is to communicate findings to the community. For large Projects with the potential to affect the

entire community, open houses or workshops may be conducted. For smaller Projects, it may be adequate to notify the membership that a report is available for members' review and comment.

- (c) The Lands Manager will forward the draft environmental assessment report to the Land Management Committee, and may direct the Proponent to circulate the draft environmental assessment report to federal or provincial agencies or to local governments for their review and comment.
- (d) The Lands Manager may seek independent review of the draft environmental assessment report by expert specialists. The Project Proponent is required to cover the Tsawout First Nation's costs in retaining such specialists.
- (e) The Lands Manager will submit comments on the draft environmental assessment report to the Proponent.

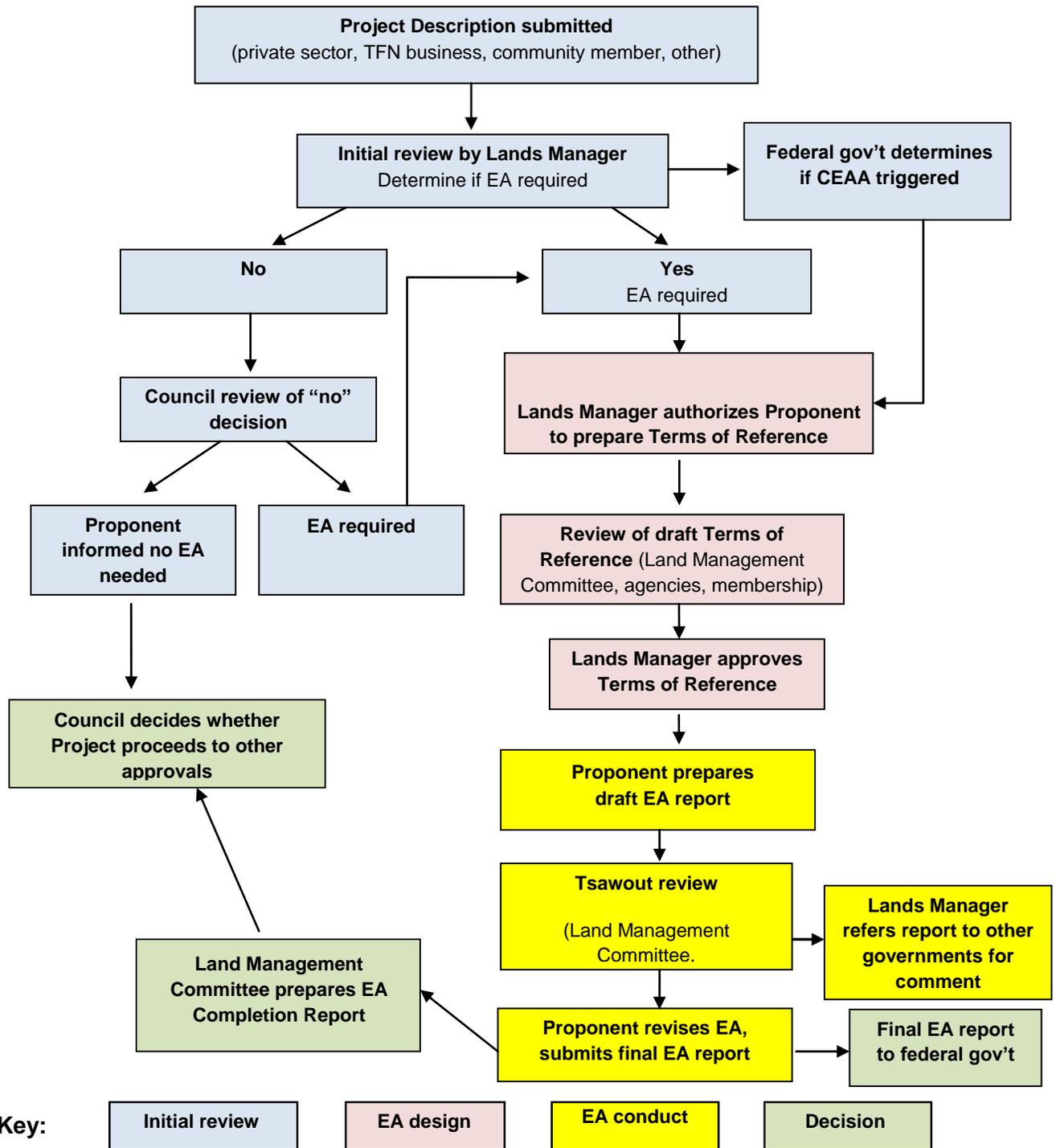
Step 5: Make the environmental assessment decision

- (a) Responding to the comments on the draft environmental assessment report provided by the Lands Manager, the Proponent will amend the draft report and submit to the Lands Manager a revised final version of the document.
- (b) The Lands Manager will convene the Land Management Committee to review the final environmental assessment report. The Lands Manager also may:
 - i. obtain comment from specialist experts at the cost of the Proponent,
 - ii. circulate the report to staff of other government agencies, and
 - iii. make the report available to the community for comment.
- (c) The Lands Manager, on behalf of the Land Management Committee, will prepare an environmental assessment completion report that:
 - i. Summarizes comments from the Land Management Committee, specialists, the community, or others on the quality and findings of the environmental assessment report;
 - ii. Presents conclusions about the nature and significance of potential Environmental Effects and the effectiveness of Mitigation measures identified; and
 - iii. Provides the comments of the Lands Manager and the Land Management Committee on: 1) the implications of allowing the Project to proceed to other approval processes; and, 2) what conditions may be attached to future approvals or permits that would likely mitigate identified environmental impacts or enhance identified benefits.
- (d) Neither the environmental assessment report nor the environmental assessment completion report will conclude whether a Project should proceed, but rather will focus on the potential effects of implementing a Project. Decisions about Project approval or rejection reside with Council, primarily through permits and other approvals issued under the *Tsawout Subdivision, Development and Servicing Law*. Permits may also be required under other applicable legislation (e.g., *Fisheries Act*) the issuance of which is not controlled by the Tsawout First Nation.

Step 6: Implement Mitigation and follow-up program, as appropriate

- (a) The Mitigation measures identified in the report will be incorporated into any design plans, site plans, timber-harvesting Development Permits, construction tender, and implemented with the Project. If so instructed by the Lands Manager, a Proponent may be required to prepare an Environmental Protection Plan that specifies how impacts will be avoided or mitigated, how land will be restored following construction, etc. Mitigation measures will also form part of the conditions of a development permit.
- (b) Where appropriate and required by the Lands Manager, the Proponent will prepare and conduct a monitoring program to verify the findings of the environmental assessment and to assess the effectiveness of the Mitigation measures. Alternatively, the Proponent may fund monitoring to be conducted by the Tsawout First Nation, subject to mutual agreement of the Proponent and the Lands Manager.

FIGURE 1: Process for conducting an environmental assessment



APPENDIX “A”: Project Description Template

Proponents are to complete this Project Description and submit to the Tsawout First Nation Lands Manager. Submission of this form initiates the Tsawout First Nation environmental assessment process.

1.0 GENERAL INFORMATION

1.1 Contact Information

Project Title	
Proponent Contact (job title)	
Address	
Telephone Number	
Fax Number	
Email	

If Applicable:

Co-Proponent Name	
Contact and title	
Address	
Telephone Number	
Fax Number	
Email	

If Applicable:

Environmental Consultant	
Contact and title	
Address	
Telephone Number	
Fax Number	
Email	

Reserve Name and Number:

- E. Saanich I.R. No. 2
- Fulford Harbour I.R. No. 5

1.2 Potential Regulatory Requirements

a) Is there Federal financial support for this Project? Yes No

If yes, then from which department?

b) Is there Tsawout First Nation financial support for this Project? Yes No

c) Please list other environmental assessment regimes or potential permits, approvals, or authorizations from Canada, the province, municipal, or international governments to which the Project may be subject or require (e.g. *Fisheries Act, SARA, Canadian Environmental Protection Act, Provincial water licence, municipal rezoning, etc.*)?

2.0 PROJECT INFORMATION

2.1 Project Title

2.2 Project Description

a) Project rationale (need for the Project, goals, purpose)

b) Briefly describe the Project (its market, permanent or temporary structures, affected land area, etc.)

c) Are there subsequent phases or expansion, or other facilities or activities associated with the Project that are not included in this Project Description? Yes___ No ___

If “yes,” please describe:

d) Does this Project involve cutting of trees on Tsawout First Nation land? If so, how many, species, size, health?

e) Estimated capital cost: _____

2.3 Detailed Project Location

Geographical Location and/or GPS Coordinates:

Legal Land Description:

Attach a detailed map of the Project footprint and affected area, conceptual plans, and other facility designs or plans if available.

2.4 Resource and Material Requirements

a) Does this Project involve gravel, sand, or any other non-metallic minerals from Tsawout First Nation land? If yes, which reserve? What raw materials will be processed (including gravel, metals, or others)?

b) What are the energy sources for the operation of this development (propane, natural gas, electrical, diesel etc.)? How much energy will be required for its operation?

c) How much water will be used, for what purpose, and from what source?

2.5 Waste Disposal

a) What types of wastes will be generated during construction and operation of this Project?

b) How and where will wastes be disposed?

2.6 Associated Infrastructure

a) Describe infrastructure required by this Project (roads, transit, water supply, power, sewers, other).

2.7 Project activities

a)Project construction:

- Start and finish date: _____

- List activities in sequence:

- Number of workers

- Total

- Per average day

- Tsawout First Nation members

- Vehicles per day (trucks and cars, maximum and daily average):

- Where will vehicles park:

b) Project operation:

- Project activities:

- Number of workers

- Total

- Per average day

- Tsawout First Nation members

- Vehicles per day (trucks and cars, maximum and daily average)

- Where will vehicles park:

- Noise generation:

- Air, water, or other emissions:

c) Decommissioning:

- Activities:

- Materials generated and method of disposal:

3.0 ENVIRONMENTAL FEATURES

a) Map and describe the environmental features in the area of the development.

- i. Site topography (for facilities and access)
- ii. Soils (type and depth, productivity, erodability)
- iii. Surface water, such as lakes or streams, nearby
- iv. Watercourse crossings or development near water
- v. Wetlands or estuaries
- vi. Aquifers
- vii. Vegetation
- viii. Wildlife habitat
- ix. Fish habitat
- x. Other areas of special concern or environmentally sensitive areas
- xi. Known species as identified in the SARA in or adjacent to the proposed Project area
- xii. Registered or unregistered archaeological sites or features
- xiii. Areas of moderate to high archaeological potential
- xiv. Areas used for traditional aboriginal purposes
- xv. Visual aesthetic character

b) Other additional information you may want to provide (e.g., community or cultural issues, consultation):

4.0 Regulatory requirements

a) Describe permits or approvals needed, and whether applications have been submitted to:

- Tsawout First Nation:

- Local or regional government:

- Federal government:

- Provincial government:

APPENDIX “B”: Generic Terms of Reference for Environmental Assessments

This guide is intended to aid the Project Proponent in preparing Terms of Reference for an environmental assessment. The level of detail to be included should be commensurate with the size, complexity, and potential impacts of a proposed Project.

Summary	Briefly describe the Project and the findings of the environmental assessment.
1. Introduction	<p>Provide contextual background information on the Project and the Proponent and Project justification.</p> <p>1.1 Proponent Information 1.2 Project Overview (including title and location) 1.3 Regulatory Framework (e.g. funding source, required permits or approvals)</p>
2. Project description	<p>Provide a detailed Project description, covering site preparation, construction, operation, and decommissioning.</p> <p><i>Note: For Projects involving cutting of timber, the description must include the RPF’s breakdown of volume and species (based upon a timber cruise) to be cut from the subject area and the proposed harvesting system.</i></p> <p>2.1 Project background and rationale (why is the Project necessary or desirable?) 2.2 Location of Project area likely to be affected (include maps) 2.3 Project facilities and associated infrastructure 2.4 Construction activities 2.5 Operational activities (including materials consumed, energy requirements and sources, emissions, traffic, numbers of employees, numbers of customers, etc.) 2.6 Decommissioning plans 2.7 Alternative means of carrying out the Project and alternatives to the Project, including the alternative of not proceeding with the Project 2.8 Relationship of the Project to First Nation Lands and community</p>

<p>3. Project Setting</p>	<p>Provide a detailed description of the existing environment in the Project area including landscape, water bodies, archaeology, natural resources, wildlife habitat, land use (traditional and contemporary uses, natural resource harvesting, residential and commercial uses, etc.). Indicate the areas affected by the Project. Outline known historical and contemporary uses by the Tsawout First Nation.</p> <p>3.1 Geophysical setting 3.2 Atmospheric setting 3.3 Aquatic setting (marine and fresh water, ground water, drainage, water quality) 3.4 Terrestrial setting (vegetation, wildlife, fisheries, species of cultural importance, species at risk) 3.5 Land use setting (past, present, and planned uses; land capability and suitability, archaeological potential) 3.6 Socio-economic setting (traditional and contemporary economy, community features and activities, visual aesthetic character) 3.7 First Nations traditional use</p>
<p>4. Agency input</p>	<p>Describe input obtained from other government departments (e.g. Department of Fisheries and Oceans, Environment Canada, Parks Canada, Health Canada, Forests, Lands and Natural Resource Operations, Heritage Conservation Branch, etc.), and provincial and local governments, as appropriate. Summarize relevant reports or studies, regulatory requirements or policies, environmental quality standards, etc. Describe relevance of local and regional land use plans to use of land, provision of services, etc. on Tsawout First Nation lands.</p>
<p>5. Engagement of interested parties</p>	<p>Describe how the following potential interested parties were engaged in the preparation of the environmental assessment:</p> <ul style="list-style-type: none"> • The Tsawout community; • Residents or certificate of possession holders adjacent to, or otherwise affected by, the proposed Project; • Lease holders; • Users of resources potentially affected by the Project;

	<ul style="list-style-type: none"> • Owners or users of adjacent non-reserve properties that might be affected; and • Tsawout staff. <p>Identify issues and concerns raised by the foregoing groups and explain how the concerns were addressed in the environmental assessment.</p>
<p>6. Project effects</p>	<p>For each of the headings in Section 3, identify specific potential Project effects. Ensure that potential Project effects identified by interested parties are included in the environmental assessment. Describe the methods used to assess Project impacts, including data sources, field investigations, sampling, and analysis.¹</p> <p>For each potential Project effect, describe:</p> <ul style="list-style-type: none"> • The nature of the impact (narrative description); • Spatial extent (footprint, local, regional); • Temporal extent (short term, medium term, long term); • Reversibility (full, partial, irreversible); • Ecological implications (description); • Magnitude (low, moderate, high); and • Significance (significant or less than significant). <p>Identify Mitigation measures that could avoid, reduce, or compensate for identified impacts, and identify the effect of the Mitigation measures on the impact. Describe residual impacts after Mitigation.</p> <p>Where a Project causes interactions with species at risk, specific Mitigation measures must be identified. Mitigation strategies for species at risk are hierarchical with avoidance being preferred (e.g. timing, design/location change), followed by minimization through Project modification or implementation under special conditions, and lastly, compensatory Mitigation (e.g. replacement of lost habitat).</p>

¹ It is the Proponent's responsibility to obtain permission for access to, or egress from, the Reserve for all phases of the Project including access to Certificate of Possession or Permanent Interest Holders' lands.

	<p>Identify Cumulative Effects of the proposed Project in combination with past and foreseeable future Projects or human activities. Excessively large study areas for Cumulative Effects assessment (e.g., the Capital Regional District, entire Saanich Peninsula) should be avoided unless necessary to characterize a specific impact.</p> <p>6.1 Impact Assessment Methodology 6.2 Construction Phase – Effects Assessment 6.3 Operations and Maintenance Phase – Effects Assessment 6.4 Decommissioning – Effects Assessment 6.5 Accidents and Malfunctions 6.6 Effects of the Environment on the Project 6.7 Cumulative Effects</p>
7. Commitment to Mitigation	<p>Summarize the Mitigation measures developed in Section 6, and provide a clear and unequivocal commitment by the Proponent to fully implement the specified Mitigation measures. The Mitigation measures may also be used as conditions of a lease, permit, or funding agreement.</p> <p>7.1 Summary of Mitigation measures 7.2 Proponent’s commitment to implement Mitigation measures</p>
8. Conclusion	<p>Provide a narrative summary of the Environmental Effects associated with the proposed Project. Identify significance and proposed Mitigation strategies. Discuss planned monitoring activities.</p> <p>Provide a brief text or table summary of Project effects and significance, and a conclusion about the potential environmental, socioeconomic, and cultural effects of the proposed Project.</p> <p>8.1 Summary and table 8.2 Conclusion</p>
9. References	<p>Provide full references of reports reviewed, websites accessed, and personal communications.</p>
10. Appendices	<p>Append relevant studies conducted, laboratory results, summaries of community comments, etc.</p>

APPENDIX “C”: Potential topics for inclusion in environmental assessments

1. Soils and Geology
 - a. Stability and earth conditions
 - b. Major changes in topography or modification of significant geological features
 - c. Soil erosion, compaction, degradation, or contamination
 - d. Changes in erosion or deposition rates that affect aquatic process, form, and function
 - e. Import and deposit of soil or fill
2. Air Quality
 - a. Substantial air emissions or deterioration of ambient air quality
 - b. The creation of objectionable odours
3. Aquatic Ecosystems
 - a. Physical alterations to natural stream channels or riparian zones
 - b. Changes in flow regime, drainage patterns, infiltration rates, or surface water runoff (including increases in effective impervious cover)
 - c. Alterations to the level or frequency of flooding
 - d. Discharges into surface waters that affect surface water quality (e.g., sediment load, temperature, dissolved oxygen, turbidity)
 - e. Changes in aquatic biota (e.g., invertebrate biodiversity, or plant or algae growth)
 - f. Changes in the quality or quantity of groundwater
4. Vegetation
 - a. Destruction or degradation of native plant habitat (including terrestrial, riparian, or aquatic vegetation communities)
 - b. Destruction or damage to any valued, sensitive, or culturally important trees or other plants (e.g. cedar, fir, arbutus, dogwood), including plants of community, landscape, or heritage importance
 - c. Reduction of the numbers or distribution of rare, threatened, or endangered plant species or plant communities
5. Animal life
 - a. Significant changes to the population numbers or distribution of native animal species (including birds, mammals, reptiles, fish, benthic organisms, or insects)
 - b. Any change to the numbers or distribution of rare, threatened or endangered animal species
 - c. Degradation of existing or potential fish habitat, or wildlife habitat or corridors (including the effects of light, noise, or human activity)
 - d. Interference in the life cycle of fish or birds (including nests or breeding behaviours)

6. Land use and population
 - a. Change to the present or planned land use in an area
 - b. Alteration of the supply of commercial or industrial space
 - c. Changes to population demographics, distribution, and density
7. Mobility, transportation, and circulation
 - a. Effects on transportation systems or potential increases in vehicular volumes or movements
 - b. Impacts on parking facilities, or creation of demand for new parking
 - c. Increases in traffic hazards to motor vehicles, bicyclists, or pedestrians
 - d. Alteration of access to or change in pedestrian, bicycle, and transit mobility including provision and continuity of service
 - e. Potential to increase need for, or provision of, special needs transportation
8. Public services and utilities
 - a. Increased demand on fire, police, or other emergency services
 - b. Increased school enrolment, or demand for parks or other recreational facilities for all age groups
 - c. Need for new or expanded public utilities including sanitary sewers, water mains, storm drains, or garbage collection
 - d. Potential to increase maintenance demands for existing facilities that are required to accommodate the proposed land use, including social services
9. Aesthetics and built environment
 - a. Obstructs a scenic vista or view open to the public
 - b. Potential to create an aesthetically offensive site open to public view
 - c. Destruction or modification of a significant landscape feature or viewpoint
 - d. Suitability and quality of urban design and impact on surrounding built environment
 - e. Consistency with “smart growth” principles of complete, compact, liveable, and efficient communities
10. Employment and economy
 - a. Potential to affect existing employment or creation of new employment (permanent or temporary, full-time or part-time)
 - b. Effect on existing commercial or industrial business
 - c. Potential effect on planned economic development Projects or activities
 - d. Cost or benefit to community (i.e. change tax base and service level)
11. Nuisance (noise, light, glare, odour) and hazards
 - a. Increase in existing noise levels (other than normal residential noise)
 - b. Creation of new, different, or unusual noise or noise production at inappropriate times (e.g., late at night)
 - c. Production of new light or glare
 - d. Creation of shading or reduced access to sunlight
 - e. Production of offensive odours and airborne particles

- f. Production of potentially dangerous transmission waves (i.e., magnetic or microwave)
- g. Creation of potential human health hazards

12. Navigable waters

- a. Obstruction or reduction of navigability of marine or fresh water courses
- b. Requirement for federal navigable waters approvals

13. Cultural resources (Proponent should reference data collected to comply with the General Requirements for Heritage Assessments)

- a. Potential to alter or destroy an archaeological site
- b. Effects on areas of cultural importance (for spiritual, traditional use, ceremonial, resource, or other purposes)
- c. Effects on historic buildings, structures, objects, or landscapes

14. Cumulative Effects

- a. Other past or potential future Projects or human activities in the study area
- b. Identification of potential Cumulative Effects of the proposed Project with other past or potential future Projects or human activities in the study area
- c. Potential actions to mitigate identified Cumulative Effects
- d. Assessment of residual Cumulative Effects

SCHEDULE 1: Definitions

CEAA	The Canadian Environmental Assessment Act
Cumulative Effect	The combined environmental, cultural or socio-economic impacts that accumulate from a series of actions, contaminants, or Projects. Although each action may seem to have a small impact, the combined effect can be significant.
Environmental Effect	Any change a Project may cause in the physical environment, biota, or human communities, including archaeological features, heritage resources, traditional use areas, or economic activities or potential, health and socio-economic conditions, and includes Cumulative Effects.
Mitigation	The avoidance, elimination, reduction, or control of the adverse Environmental Effects of a Project, including restitution for damage to the environment caused by such effects through replacement, restoration, compensation or other means.
Project	“Project” is an initiative that has the potential to affect Tsawout First Nation environment (land, air, water, biota, or cultural features) and to affect Tsawout First Nation society, culture, or economic well-being. A Project includes a development, a subdivision, or a grant or disposition of a lease, licence or permit in First Nation Land that must be approved by Council under the Land Code or a Law under the Land Code.
Proponent	With respect to a Project, the person, business, other body, government (including the First Nation government) or government agency that proposes a Project. Proponents can be developers, proposed lessees, licence or permit holders, a First Nation member, or Council.
Scoping	The part of the EA process that determines the topics to be examined, the level of detail, spatial extent or “boundaries” of the EA investigation, and groups or agencies to be involved.
SARA	<i>The Species at Risk Act</i> . Federal legislation to protect rare, threatened, or endangered species. A Proponent through an EA must ensure that the potential for Environmental Effects on a species at risk and its habitat, as defined by SARA, have been adequately assessed.
Pre-Construction Phase	Involves the design, feasibility study, geotechnical investigations, etc., associated with the Project, and precedes land-disturbing activities.
RPF	Registered Professional Forester
Construction Phase	Involves site preparation, grading, excavation, material delivery and storage, utility installation, construction, and finishing of a Project.
Post-Construction Phase	Site restoration, remediation, monitoring, and similar activities occurring after completion of Project construction.

**STÁUTW (Tsawout) First Nation
General Requirements for Heritage
Assessments on First Nation Land**

SCHEDULE “C”

**TSAWOUT FIRST NATION SUBDIVISION, DEVELOPMENT AND SERVICING LAW, 02-2012 PARAGRAPH
7.1(c)**

To be approved by Tsawout First Nation Council

[Date, 2012]



**STÁUTW (TSAWOUT) FIRST NATION
GENERAL REQUIREMENTS FOR HERITAGE ASSESSMENT
ON FIRST NATION LAND**

TABLE OF CONTENTS

1.	APPLICATION OF THESE REQUIREMENTS.....	53
2.	PURPOSE.....	53
3.	ASSESSMENT REQUIREMENTS.....	53
4.	RESEARCH	55
5.	ACCESS TO LAND.....	55
6.	INCORPORATION OF RESULTS INTO DEVELOPMENT PERMIT / COUNCIL APPROVAL CONDITIONS	55
7.	COMPLIANCE	55

STÁUTW (TSAWOUT) FIRST NATION GENERAL REQUIREMENTS FOR HERITAGE ASSESSMENTS ON FIRST NATION LAND

1. APPLICATION OF THESE REQUIREMENTS

- 1.1 These Requirements apply to:
- (a) all projects on First Nation Land which require a Development Permit under the *Tsawout Subdivision, Development and Servicing Law*;
 - (b) any grant or disposition of a lease, license or permit in First Nation Land which must be approved by Council under section 26.6 of the Land Code;
 - (c) any grant by Council of an interest, licence or permit in Band Land under section 28.1 of the Land Code;
 - (d) archaeological studies, cultural heritage studies, and/or STÁUTW Heritage Resource Management-Related investigations carried out on First Nation Land; and
 - (e) other ground-altering activities not exempted from these Requirements by the *Tsawout Subdivision, Development and Servicing Law*.
- 1.2 For the purposes of these Requirements, First Nation Land means a First Nation reserve or any portion thereof that is subject to the *Tsawout First Nation Land Code*, which came into force and effect on May 29, 2007.

2. PURPOSE

- 2.1 The purpose of this Policy is to maintain the integrity of STÁUTW history and heritage through the respectful treatment, protection, preservation, and management of STÁUTW heritage objects and sites on First Nation Land.

3. ASSESSMENT REQUIREMENTS

- 3.1 All potential ground-altering activities, including development-related disturbances and impacts to STÁUTW Heritage Sites and Objects must be considered, assessed, and mitigated through the application of these Requirements. All Heritage Resource assessments and investigations must be conducted by a professional archaeologist who has been approved by Council to carry out assessments and investigations on Tsawout First Nation land.
- 3.2 Proponents of all projects to which these Requirements apply are required to follow, in substantially all respects, the processes, guidelines and procedures required by the BC Archaeology Branch, as outlined in the *British Columbia Archaeological Resource Management Handbook*, as amended or replaced from time to time.
- 3.3 The BC Archaeology Branch takes the position that it has no jurisdiction over archaeological resources on First Nation Land, and as such, all reports and

forms must be provided to the Tsawout Lands Department, with a copy to the Douglas Treaty Office, at the following addresses:

Attention: Lands Manager
Tsawout First Nation
7728 Tetayut Road
Saanichton B.C. V8M 2C3
Phone: 250-652-9101
Fax: 250-652-9114
Email: _____

Copy to: Douglas Treaty Office
Tsawout First Nation
7728 Tetayut Road
Saanichton B.C. V8M 2C3
Phone: 250-652-9101
Fax: 250-652-9114
Email: _____

- 3.4 The exception is site inventory forms, which shall be provided to the BC Archaeology Branch, with a copy to Tsawout First Nation Lands Department and Douglas Treaty Office.
- 3.5 An Archaeological Overview Assessment (as that term is defined and understood by the BC Archaeology Branch) is required for each of the following:
 - (a) Projects requiring a Development Permit under the *Tsawout Subdivision, Development and Servicing Law*, unless exempted from this requirement under the *Law*;
 - (b) any grant, or disposition of a lease, license or permit in First Nation Land which must be approved by Council under section 26.6 of the Land Code;
 - (c) any grant by Council of an interest, licence or permit in Band Land under section 28.1 of the Land Code;
- 3.6 Other ground-altering activities not exempted from these Requirements by the *Subdivision, Development and Servicing Law*.
- 3.7 An exemption to the requirement for an Archaeological Overview Assessment may be granted on application where:
 - (a) the site of the proposed application has been previously developed; and
 - (b) the Land Management Committee is satisfied that the type and character of the proposed development is such that its potential to disturb or otherwise negatively affect STÁUTW Heritage Sites or Objects is minimal.

4. RESEARCH

- 4.1 Archaeological studies and/or STÁUTW Heritage Resource Management-Related investigations must be conducted by qualified researchers with an appropriate level of experience and training who have been approved by Council to conduct such research on Tsawout First Nation land. All such research on First Nation Land must be carried out in accordance with the processes, guidelines and procedures required by the BC Archaeology Branch, as outlined in the *British Columbia Archaeological Resource Management Handbook*. Reports and forms must be provided to the Tsawout Lands Department. As noted above, site inventory forms should be provided to the BC Archaeology Branch.

5. ACCESS TO LAND

- 5.1 Nothing in these Requirements authorizes entry onto land held individually under a Certificate of Possession or Permanent Interest without permission of the CP/Permanent Interest Holder.

6. INCORPORATION OF RESULTS INTO DEVELOPMENT PERMIT / COUNCIL APPROVAL CONDITIONS

- 6.1 Council will take into account the results of assessments and investigations conducted pursuant to these Requirements, including any mitigation measures identified, in deciding whether the project should proceed (i.e., whether or not a development permit should be issued under the *Tsawout Subdivision, Development and Servicing Law*, or whether Council should consent to the grant/disposition, as the case may be). The development permit/ consent may be granted with conditions as Council deems necessary to implement the mitigation measures.
- 6.2 Where required or appropriate, Council may required a follow-up program to be designed and implemented to verify that the assessment was accurate and the mitigation measures were effective.

7. COMPLIANCE

- 7.1 Failure to comply with these Requirements when conducting archaeological work or a STÁUTW Heritage resource investigation may result in the researcher being disqualified from conducting research or investigations on Tsawout First Nation lands in the future.
- 7.2 Failure to complete the required assessments, including reporting requirements, may result in denial or delays in processing of the proponent's development permit application, or any other application, for Council's consent.

**STÁUTW (Tsawout) First Nation
General Requirements for Timber Harvesting
on First Nation Land**

SCHEDULE “D”

TSAWOUT FIRST NATION SUBDIVISION, DEVELOPMENT AND SERVICING LAW, 02-2012

PARAGRAPH 7.1(D)

To be approved by Tsawout First Nation Council

[Date, 2012]



**STÁUTW (TSAWOUT) FIRST NATION
GENERAL REQUIREMENTS FOR TIMBER HARVESTING ON FIRST NATION LAND**

TABLE OF CONTENTS

PREAMBLE.....	58
1. APPLICATION OF THESE REQUIREMENTS	58
2. PURPOSE	58
3. INTERPRETATION	58
4. PRELIMINARY PROPOSED HARVEST PLAN.....	59
5. RESPONSE TO PRELIMINARY PROPOSAL.....	59
6. APPLICATION REQUIREMENTS	60
7. EXEMPTIONS FROM CERTAIN REQUIREMENTS.....	60
8. PERMITTING	61
9. ACCESS TO LAND	62
10. STUMPAGE AND SCALING	62
11. INCORPORATION OF RESULTS INTO DEVELOPMENT PERMIT / COUNCIL APPROVAL CONDITIONS	62
12. COMPLIANCE.....	63

**STAUTW (Tsawout) FIRST NATION GENERAL REQUIREMENTS FOR TIMBER
HARVESTING ON FIRST NATION LANDS**

SCHEDULE "D"

**TSAWOUT FIRST NATION SUBDIVISION, DEVELOPMENT AND SERVICING LAW, 02-2012
PARAGRAPH 7.1(D)**

PREAMBLE

We the Council of STÁUTW (Tsawout) First Nation make these Requirements in recognition that the long-term health of Tsawout First Nation Land must be maintained and protected for the benefit of current and future generations and that the use and maintenance of forest resources plays an important role in the economic, social, cultural, physical and spiritual well-being of Tsawout First Nation citizens.

1. APPLICATION OF THESE REQUIREMENTS

1.1 These requirements apply to:

- (a) all timber harvesting activities on First Nation Land which require a Development Permit under the *Tsawout Subdivision, Development and Servicing Law, 02-2012*;
- (b) any grant or disposition of a lease, licence or permit in or on First Nation Land which must be approved by Council under section 26.6 of the Land Code; and
- (c) any grant or approval by Council of an interest, lease, licence or permit relating to or including timber harvesting activities in or on Band Land under section 28.1 of the Land Code.

1.2 For the purposes of these Requirements, First Nation Land means a First Nation reserve or any portion thereof that is subject to the *Tsawout First Nation Land Code*.

2. PURPOSE

2.1 The purpose of this Policy is to maintain the integrity of the Tsawout First Nation local environment, land values, visual integrity, traditional uses and cultural heritage through the respectful treatment, protection, preservation, and management of Tsawout First Nation timber and forest resources.

3. INTERPRETATION

3.1 Unless otherwise defined in Schedule A to these Requirements, the words in these Requirements have the same definitions as those in the *Tsawout First*

Nation Land Code and the Tsawout First Nation Subdivision, Development and Servicing Law.

- 3.2 In these Requirements, “Registered Professional” means a person who is certified as a professional arboricultural consultant, is a landscape architect registered with the British Columbia Society of Landscape Architects, or is a Registered Professional Forester.

4. PRELIMINARY PROPOSED HARVEST PLAN

- 4.1 In addition to these Requirements, applicants for a Development Permit for Timber Harvesting on Tsawout First Nation Land must also meet all relevant requirements set out in the *Tsawout First Nation Subdivision, Development and Servicing Law*.
- 4.2 Applicants must submit to the Tsawout Lands Department a preliminary proposed harvest plan which includes the following information:
- (a) the area of land proposed for harvesting;
 - (b) the species and volume of timber proposed to be harvested;
 - (c) the location of scaling;
 - (d) who will be the parties to the Development Permit for timber harvesting;
 - (e) who will be the designated purchaser of the timber;
 - (f) whether the timber will be exported from First Nation Land or not;
 - (g) who will obtain a timber mark;
 - (h) where the timber is in whole or in part on Band Land, the proposed benefits to be provided to Tsawout First Nation; and
 - (i) where the timber is in whole or in part on Certificate of Possession or Permanent Interest land, a written authorization in the prescribed form from the holder of that interest permitting the harvesting to occur and supporting the proposal.

5. RESPONSE TO PRELIMINARY PROPOSAL

- 5.1 The Lands Manager will review the preliminary proposed harvest plan and will inform the applicant in writing within 10 working days of receipt whether the preliminary harvest plan was approved, rejected, or requires modification prior to approval. If approved, the applicant may proceed with preparing an application.
- 5.2 By approving the preliminary harvest plan, the Lands Manager makes no representation to the applicant that the application will ultimately be approved by Council.

6. APPLICATION REQUIREMENTS

- 6.1 The applicant will be responsible for the costs of the review of the application by the Lands Manager. The applicant may request a meeting to discuss those costs in advance of the review.
- 6.2 The applicant must prepare and submit the following:
- (a) an environmental assessment and species at risk assessment conducted in accordance with the Tsawout First Nation General Requirements for Environmental Assessments;
 - (b) an Archeological Overview Assessment conducted in accordance with the Tsawout First Nation General Requirements for Heritage Assessments;
 - (c) a comprehensive logging plan which includes the description of the areas, volumes and species to be logged, the methods and equipment to be used, the season of the logging, a complete 1:5,000 scale logging plan map; a 1:20,000 scale overview map, and any potential problems or environmental concerns and their appropriate mediations;
 - (d) an encumbrance check carried out on the First Nations Land Registry and a GPS survey with accuracy to within 1 metre;
 - (e) other relevant information, including any input provided by the Department of Fisheries and Oceans, Parks Canada, Environment Canada, the BC Ministry of Forests, Lands and Natural Resources or their successors and any other bodies where there is a potential for impact on their areas of concern, expertise or existing encumbrances;
 - (f) a silviculture prescription or site plan in the provincial format prepared by a registered professional forester where it is intended that the lands be returned to a forested state; and
 - (g) a copy of the environmental assessment of the proposal and Council's decision respecting any significant environmental, economic or cultural concerns and the mitigation measures to be used.

7. EXEMPTIONS FROM CERTAIN REQUIREMENTS

- 7.1 Where the proposed harvesting is to take place on Band Land, the Lands Manager may exempt the applicant from certain of the measures set out in section 6 where the proposed harvesting activity:
- (a) is for timber for non-commercial use such as firewood for personal, longhouse, or Elder use; and
 - (b) would result in the cutting of not more than 4 Trees of 50 centimetres diameter or less at 1.4 metres height or not more than 2 Trees of 50 centimeters diameter or greater at 1.4 meters height; and
 - (c) would not result in clearing more than 5% of the Trees from the individual lot;
 - (d) does not include Arbutus; and
 - (e) has been reviewed by a Registered Professional for any concerns or issues and any concerns have been provided in writing to the Lands Manager.

- 7.2 Where the proposed harvesting is to take place on Permanent Interest lands, the Lands Manager may exempt the applicant from certain of the measures set out in section 6 where the proposed harvesting activity:
- (a) is for timber for non-commercial use; and
 - (b) would result in the cutting of not more than 7 Trees of 50 cm diameter or less at 1.4 metres height or not more than 4 Trees of 50 cm diameter or greater at 1.4 meters height; and
 - (c) would not result in clearing more than 10% of the Trees from the individual lot;
 - (d) does not include Arbutus; and
 - (e) has been reviewed by a Registered Professional for any concerns or issues and any concerns have been provided in writing to the Lands Manager.
- 7.3 Where a Development Permit is issued under 7.1 and 7.2, the Lands Manager may provide in the permit that a minimum of 2 tree seedlings of the same or similar species will be planted for each Tree to be cut, such seedlings to be of species native to Vancouver Island and maintained for a period of not less than two years, or, in lieu of such planting, providing payment to the Tsawout First Nation of fifty dollars per Tree to be cut, such payment to be made before a permit is issued.
- 7.4 The Lands Manager may issue a Development Permit forthwith for the removal of a tree where the tree is dead, dying, severely damaged, unstable or severely leaning and in danger of falling.
- 7.5 The Lands Manager will provide notice to the Lands Management Committee of any determinations made under this Part and the Lands Management Committee may request an opportunity to reconsider the application and render their own determination in place of the Land Manager's.
- 7.6 For Development Permits issued under this Part, the Lands Manager will inform the applicant within 3 working days of submission of all of the required information whether a Development Permit will be granted and will notify the applicant within that time of any terms and conditions the Land Manager deems necessary to fulfill the purpose of these Requirements. If the Land Management Committee requires a re-determination, that time will be extended by 7 days.

8. PERMITTING

- 8.1 The Lands Manager will review the application and will make a recommendation to the Lands Management Committee as to whether it should be approved. If the Land Management Committee supports approval, they will instruct the Lands Manager to prepare and forward to Council a draft Development Permit which will incorporate at least the following:
- (a) the parties to the Development Permit;

- (b) the volume and species of timber to be harvested and sold;
- (c) the location of the timber to be harvested detailed on 1:5,000 scale map(s);
- (d) the date the permit will expire;
- (e) the party responsible for the harvesting;
- (f) stumpage for species and grades of timber;
- (g) the location of scaling;
- (h) the contingency plan for any fuel or waste spillage;
- (i) the details of any performance bonds or security deposits required;
- (j) utilization standards and harvesting practices;
- (k) actions to be taken for environment and non-timber values protection;
- (l) environmental assessment and SARA reports;
- (m) evidence of appropriate insurance coverage and WCB clearance letter; and
- (n) scaling and timber mark requirements.

8.2 The Lands Management Committee may review the draft Development Permit prior to submission to Council where the Permit is in relation to Band Land.

9. ACCESS TO LAND

9.1 Nothing in these Requirements authorizes entry onto land held individually under a Certificate of Possession or Permanent Interest without permission of the Certificate of Possession/Permanent Interest Holder.

10. STUMPAGE AND SCALING

10.1 All scaling will be done by a licensed scaler at the applicant or permittee's cost at the place of cutting or on First Nation Land or at a designated scaling site. Stumpage to be paid to the First Nation, as set out in the Development Permit, will be based on species and grade determined in consultation with a registered professional forester.

11. INCORPORATION OF RESULTS INTO DEVELOPMENT PERMIT / COUNCIL APPROVAL CONDITIONS

11.1 Council will take into account the results of assessments, investigations and reports conducted pursuant to these Requirements and pursuant to the *Subdivision, Development and Servicing Law*, including any mitigation measures or contingency plans identified, in deciding whether the harvesting should proceed (i.e., whether or not a Development Permit should be issued under the *Tsawout Subdivision, Development and Servicing Law*, or whether Council should consent to the grant/disposition, as the case may be). The development permit/ consent may be granted with such conditions as Council deems necessary to implement appropriate mitigation measures and to ensure that sufficient and fair benefits are enjoyed by the First Nation.

- 11.2 Where required or appropriate, Council may require a follow-up program to be designed and implemented to verify that the assessment was accurate and the mitigation measures were effective. For example, the land is reforested in accordance with a silvaculture or site plan and the trees have reached a free-to-grow status.

12. COMPLIANCE

- 12.1 Failure to comply with these Requirements, the *Subdivision, Development and Servicing Law 02-2012* as amended from time to time, and/or the terms of any issued Development Permit for Timber Harvesting may result in fine, seizure of timber or equipment, civil action or criminal proceedings under section XXVII of the *Criminal Code of Canada*.

