

In-SHUCK-ch NATION

In-SHUCK-ch Resources Capacity Project

Project Reports

First Nations Forestry Program
No. BC0809-037

February 27, 2009





In-SHUCK-ch Development Corporation

Interim Government
Samahquam, Skatin, Douglas
41290-B Lougheed Hwy.
RR#1 Deroche BC V0M 1G0

Phone (604) 820-6873 | Fax (604) 820-6847
Email: general@inshuckch.com
Website: www.inshuckch.com

February 27, 2009

File: BC0309533-1-1

Canadian Forest Service
First Nations Forestry Program
506 West Burnside Road
Victoria, BC
V8Z 1M5

Attention: Anne Dickinson,
FNFP Program Officer

Reference: In-SHUCK-ch Resources Capacity Project

Dear Anne,

We are pleased to deliver to you today our final reports of activities for the In-SHUCK-ch Resources Capacity Project.

In supporting these activities the First Nations Forestry Program has been a key contributor to the progress of the In-SHUCK-ch People toward our goals. Completion of these projects takes us several steps forward toward our vision - a vision in which In-SHUCK-ch stewardship of our land and resources sustains our people.

We are very excited about the accomplishments we have been able to achieve through this project. We have:

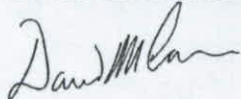
- Engaged with our youth on the opportunities for them to build a career sustaining their resources and their people (<http://www.inshuckch.com/YouthCareers.html>);
- Further developed management guidelines for resource users within the territory;
- Initiated a habitat and ecosystem restoration program;
- Developed an enhanced consultation process for important cultural areas;
- Assembled a complete and efficient spatial information storage, update, and web based delivery system (<http://maps.tnrg.ca/imf-ows/imf.jsp?site=isc>) to support our stewardship objectives.

February 27, 2009

These initiatives address key areas of institutional capacity which we must build in order to meet our objectives.

We sincerely thank you and the First Nations Forestry Program for your confidence and support. We look forward to continuing this partnership and working with you to advance the stewardship of the traditional territory of In-SHUCK-ch Nation.

On behalf of In-SHUCK-ch Development Corporation, yours truly,



David M. Carson, R.P.F.
Timberline Natural Resource Group
(Direct: 250-480-3302, Email: david.carson@timberline.ca)

Copies:

Chief Keith Smith,
Samahquam Nation

Allen Gabriel, CEO,
In-SHUCK-ch Nation

Chief Patrick Williams,
Skatin Nations

Gerard Peters, Chief Negotiator,
In-SHUCK-ch Nation

Chief Don Harris,
Douglas First Nation

Janice Parsey, CFO,
In-SHUCK-ch Nation

Shawn Gabriel,
In-SHUCK-ch Nation

Josh Alexander,
In-SHUCK-ch Nation

Table of Contents

Youth Career Development
Land Stewardship – Management Regimes
Land Stewardship – Restoration and Enhancement
Enhanced Consultation
Community Forest Initiative – Resource Information Consolidation

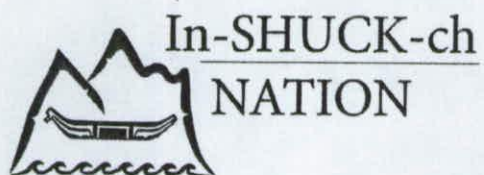
IN-SHUCK-CH NATION

RESOURCE CAPACITY

YOUTH CAREER DEVELOPMENT

Project Number BC0309524

February 2009



This project was made possible by funding from the First Nations Forestry Program of the Canadian Forest Service, Natural Resources Canada. This report was produced as a component of the *In-SHUCK-ch Resources Capacity Project*, contribution agreement BC0809-037.

Funding for this project was also provided by the Integrated Land Management Bureau of the B.C. Ministry of Agriculture and Lands.

Table of Contents

1.0	INTRODUCTION	1
2.0	PLANNING AND PROJECT SCOPE	2
3.0	PRESENTATION AND PAMPHLET MATERIALS.....	3
4.0	WEBPAGES DESIGN AND CONSTRUCTION.....	5
5.0	CAREER FAIRS AND INFORMATION SESSIONS.....	6
6.0	IDENTIFYING IN-SHUCK-CH YOUTH	10
7.0	CONCLUSION.....	11

List of Figures

FIGURE 1.1 FRONT PAGE OF PAMPHLET	4
FIGURE 2.1 SCREEN SHOT OF YOUTH CAREER HOME PAGE FROM WWW.INSHUCKCH.COM	5
FIGURE 3.1 BOOTH AT STO:LO SPONSORED CAREER FAIR	6
FIGURE 4.1 INFORMATION BOOTH AT THE MULTIPLEX IN Q'ALATKU&EM	7
FIGURE 5.1 THE SENIOR CLASS FROM HEAD OF THE LAKE SCHOOL ATTENDING THE PRESENTATION.	8
FIGURE 6.1 ROB PRESENTING THE INFORMATION TO COMMUNITY MEMBERS IN TIPELLA.....	9

List of Appendices

Appendix I - Youth Career Development Pamphlet - Planning a Career in Resource Management

Appendix II - Aboriginal Employment and Career Fair "Building a Future"

1.0 Introduction

Within the *Land Stewardship Plan* and *The Seven Generations Plan* the Nation has stated,

"In-SHUCK-ch Nation members are people of the land; we are caretakers and stewards Land, water, forests, wildlife, and fish are central to the preservation of the spiritual, ceremonial, and cultural values of In-SHUCK-ch Nation. We have a long-term commitment to the land - which is our heritage. Through the land we sustain our people."

Through these documents, the Nation affirms that economic and social well being is essential to cultural rebirth and the rebuilding of communities. Essential to building upon these goals is education and wealth creation. A long standing problem that the Nation faces along with many other First Nations in Canada is unemployment amongst the people who live in reserves and in remote communities within traditional lands. Indeed there is an underrepresentation of resource stewards.

The goal of this project is to encourage In-SHUCK-ch youth to peruse a career in natural resources management.

This report represents final delivery of the youth career development phase of the *In-SHUCK-ch Resources Capacity Project* supported by the First Nations Forestry Program of Natural Resources Canada.

2.0 PLANNING AND PROJECT SCOPE

A project initiation meeting with the project team was held at In-SHUCK-ch Nation office in Deroche. Team members were, from In-SHUCK-ch; Shawn Gabriel, Jessica Sullivan, and Rob Paterson as Project Manager from Timberline Natural Resource Group Ltd. Absent from the meeting was Kerry Giesbrecht. Topics discussed were the project scope, definition and budget and team member's tasks.

The methodology for completing the task, as was outlined in the proposal, was divided into three phases. First, an information pamphlet and presentation would be developed, targeting In-SHUCK-ch youth, to encourage them to pursue a career in managing natural resources. This would be carried further into a second phase that would see the development of a website linked to the In-SHUCK-ch Nation website, containing information on career development. The third phase was a plan to deliver the presentation material to In-SHUCK-ch youth from two different environments:

1. For those that live within the traditional territory, who are nearing graduation from high school or thinking of a career path; and
2. For those youth who live at home, or nearing graduation and might otherwise leave their traditional land in search of employment.

A further aim of this third phase is the identification of youth that may be seriously considering follow this career path. This information gathering exercise would help the Nation to encourage those youth in their pursuit of a career in natural resources.

Shawn Gabriel and Rob Paterson worked together to develop the content for the presentation material. Jessica Sullivan and Kerry Giesbrecht developed the presentation material and website. Kerry and Rob with the addition of Vern Shanoss, a community member from Samahquam Nation attended career fairs to deliver the information and talk to youth about resource related careers and maintaining a connection to the land as stewards.

3.0 PRESENTATION AND PAMPHLET MATERIALS

The project team members decided on a three-fold style pamphlet for delivery of information to youth at various outlets; career fairs, information sessions, band offices, schools, and community gatherings. The pamphlet presents a simple, yet familiar product that would be easy to carry and quick to refer to. To make the pamphlet attractive, and simple, several pictures would be used to illustrate the various resources as well to highlight people in action working outdoors in various settings. Wording is kept minimal and straightforward and there is a map depicting the location of and places in and outside the traditional territory. As a means of visual recognition, a picture of In-SHUCK-ch mountain would be used.

The title is a simple statement; '*Planning a Career In Resource Management.*' A subtitle was devised to encompass In-SHUCK-ch Nations vision of Land stewardship; '*Working the Land We Live.*'

The layout of the presentation material was structured to answer questions that interested youth may ask when they first observed the pamphlet and presentation. Those questions answered were:

- What are Natural Resources?
- What is Natural Resource Management?
- What careers are available in Natural Resources?
- How do I get started?
- Who do I contact get more information?

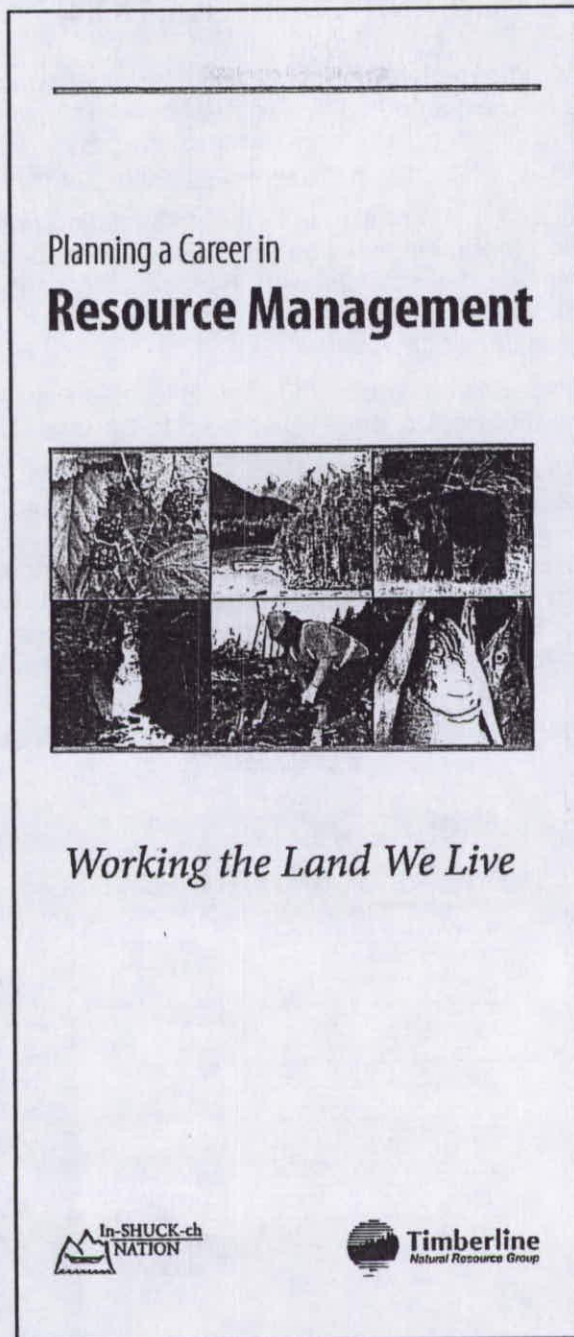


Figure 1.1 Front page of Pamphlet

To compliment the pamphlet a PowerPoint presentation was used to accompany the pamphlet. Given the limited space on the pamphlet, the presentation expanded on certain topics that were narrowed on the pamphlet. The presentation would be delivered at career fairs and community gatherings targeted at In-SHUCK-ch youth and the community in general.

4.0 WEBPAGES DESIGN AND CONSTRUCTION

A further means of passing information to curious and interested community members and to help them in taking the next step is a five page website. This website is available on In-SHUCK-ch's www.inshuckch.com. It can be directly accessed by a link on the home page or by typing the address <http://www.inshuckch.com/YouthCareers.html>.

This interactive site has all of the information from the presentation materials and more for In-SHUCK-ch youth and other members who may want to view its content. Included on this site are hyperlinks to the schools with Resource Management or similar programs as well as links to various job posting or career development websites. This is intended to make the process easier for youth.

The construction of the web pages has presented several technical issues and while the site is currently operational there are changes that need to be made as well as some new additions

Currently, there are four pages that include background information on resource career, educational avenues, and other links such as job posting hyperlinks. A fifth page is planned and will be available shortly. The job web page will be expanded as these sites become known. In addition to the information from the presentation material there are several other items to be added to the website. In the works is a page that will contain information on financial aid available to aboriginal and others to help offset the costs of education.

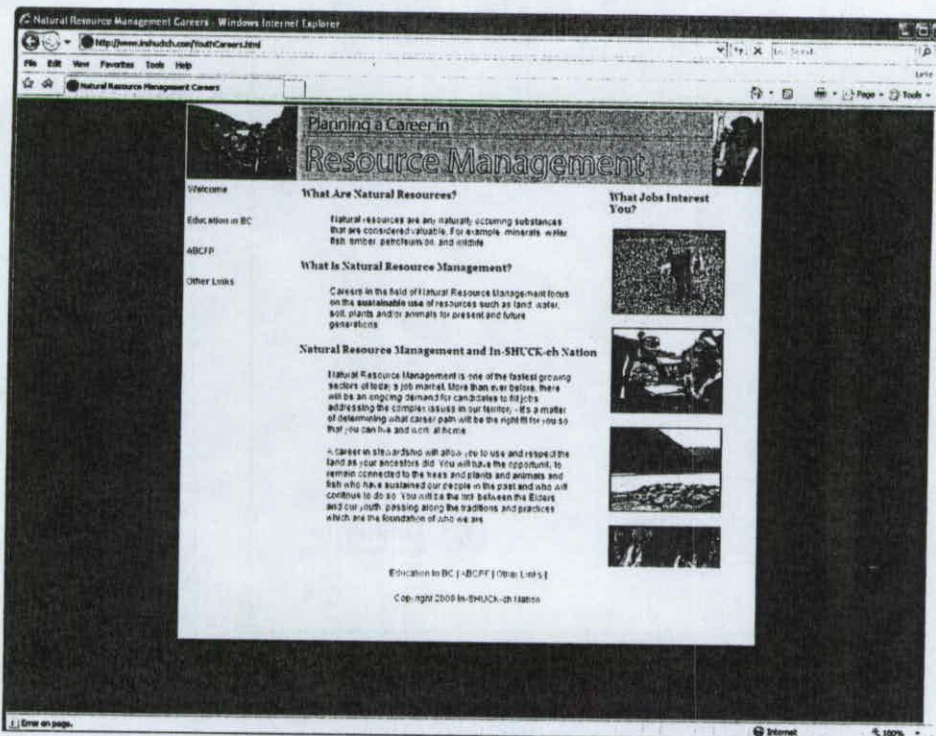


Figure 2.1 Screen shot of Youth Career home page from www.inshuckch.com

5.0 CAREER FAIRS AND INFORMATION SESSIONS

As was listed in the proposal to First Nations Forest Program, attendance at two career fairs was the final phase of this project.

The project team discussed the best possible choice for a career fair that would capture the highest possible population of In-SHUCK-ch youth. Several career fairs were identified in the lower mainland, but it was felt that the probability of no In-SHUCK-ch members attending these planned fairs was high. Kerry Giesbrecht, whom is most connected to the youth in the Mission-Chilliwack-Abbotsford area, as she attended high school in this area felt this is where we would capture the highest percentage of In-SHUCK-ch members. A career fair sponsored by Sto:Lo Nation Community Development Department – Employment Assistance Services was scheduled for February 6th, 2009, in Chilliwack, see Appendix 1. An application to attend was completed and we were assigned a booth at the fair. Kerry Giesbrecht and Rob Paterson attended the fair and spoke to attendees. The attendees were largely high school students from Chilliwack and surrounding areas. Rob and Kerry created a list to record the area which the youth were from. The results were:

- Seabird Island - 14
- Chilliwack – 30
- Sumas - 3
- Boston Bar - 2
- Chi-naleen - 2
- Chehalis – 4
- In-SHUCK-ch – 5
- Unknown – approx. 15
- Not surveyed – approx 20



Figure 3.1 Booth at Sto:Lo sponsored career fair

These numbers do not reflect the actual number of people that came to the booth, as at times there was too many to speak to and only a handful were asked the question during these times. Several people from some other places such as Seabird, Chilliwack, Sumas and Chehalis did indicate that they had connection to In-SHUCK-ch through a previous generation. Most people were eager to see the maps of the traditional territory and discuss our purpose at the fair. At the booth were additional pamphlets advertizing In-SHUCK-ch days. This also garnered a lot of discussion as many people expressed interest in attending. Overall, we felt this activity was a huge success.

Finding a second fair became a challenge as one that we had applied to was at the last minute changed the date to March, after our project end date. This fair was to be held in Mount Currie at the T'Zil Learning Centre. Challenged to find a second event to attend,

we decided to create our own fair. Kerry and Rob planned to do a traveling career fair/information session to which we would bring the presentation to each of the three main communities in the In-SHUCK-ch territory; Samahquam at Q'aLaTKu&em (formerly Baptiste Smith), Skatin, and Tipella. A poster was circulated to each band office in advance advertizing the event and the times for each, See Appendix II.

The first presentation was to be held in the Samahquam community at Q'aLaTKu&em (formerly Baptiste Smith). The booth was set up in the multiplex.

The plan was to deliver the presentation to as many people as possible in the time we were there. Several people showed up, but attendance was lower than hoped. As a means of spreading the word to as many people as possible Kerry embarked upon a mission to go door to door to every dwelling in the community to tell community members of our event. She further used this time advertize the In-SHUCK-ch days event upcoming this summer.

In a total, eleven people attended this information session. We spoke to several who community members who were there to get information to youth family members. Elders who attended were asked for youth that may be interested or are showing signs that this may be the direction they were going to follow. A few names were mentioned and logged.

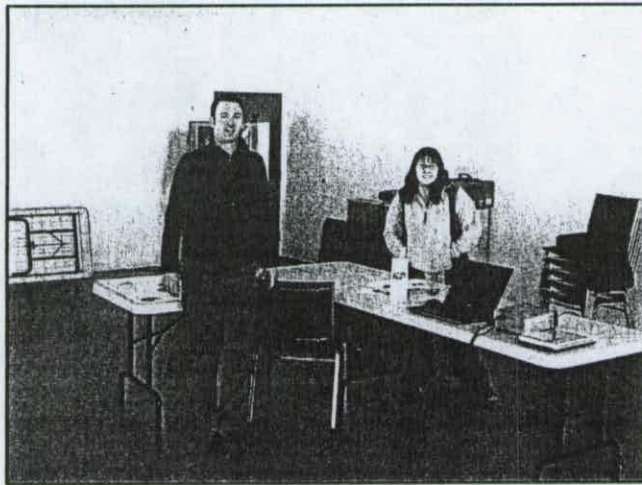


Figure 4.1 Information Booth at the multiplex in Q'aLaTKu&em

The second information session in the in-SHUCK-ch territory was held at The head of the lake school, in Skatin at the Head of the Lake School. This session was set up in a

room inside the school. The principle Abu Bai-Sheka, met with us and assured us the senior class would be attending our presentation.

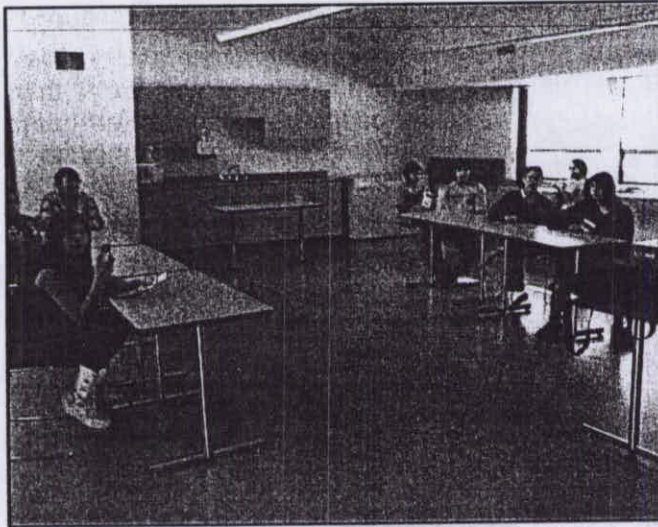


Figure 5.1 The senior class from Head of the Lake School attending the presentation

After introductions to the class, Rob began the presentation and all nine students were attentive to the information being given. Several questions were asked throughout and after the presentation three young male students stayed afterward to ask more questions. All pointed out items in the pictures from the presentation and admitted to seeing the existing resource stewardship crew working in the territory in the past and their interested in doing this type of work.

Kerry continued, as she did in the Samahquam community, to go door to door to encourage community members to attend the information session. After several hours, we packed up headed to the Douglas Nation community of Tipella.

In Tipella, a room that was previously scheduled to hold the information session was unexpectedly booked, so we were unable to hold the session as scheduled. We were however previously invited to a community meeting that began at five in the evening. At this gathering we asked if we could present our information to the attendees, Douglas community members.

Figure 6.1 shows Rob Paterson presenting the PowerPoint media to the gathering in Tipella. In the audience is Vern Shanoss (front and centre of photo). Vern attended the information session to act as the community representative talk to youth about following this career path and the maintaining the connection the land through cultural and traditional uses. Vern will have a copy of the presentation and pamphlets and will take every opportunity to promote the materials at gatherings and community meetings.

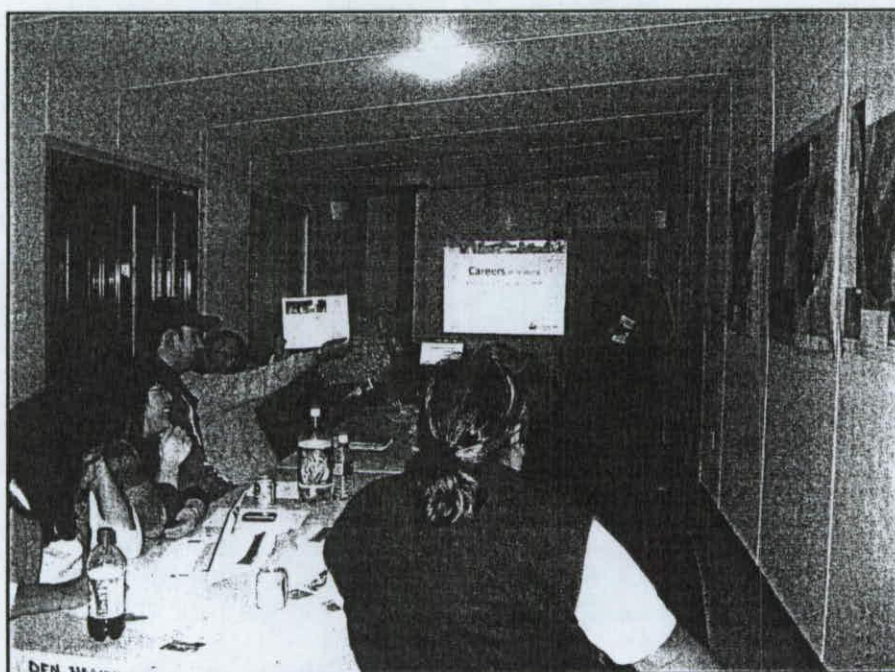


Figure 6.1 Rob presenting the information to community members in Tipella

6.0 IDENTIFYING IN-SHUCK-CH YOUTH

Our attendance at the career fairs and information sessions has been a useful step in identifying several young people that are keen to pursue this career path. Not only limiting contact to youth directly but engaging with parents of young Nation members and elders has done a lot to distribute the message. A rudimentary list is underway with several In-SHUCK-ck youth living both on reserve and outside of the traditional territory being identified.

As described in the agreement, elders and staff will be consulted to identify motivated young people who are interested in following the natural resources career path. This began and continues through discussion with Elders during various gatherings. Kerry and Shawn Gabriel have utilized their time at recent gatherings as well as through general discussions to identify young In-SHUCK-ch members that are showing interest.

7.0 CONCLUSION

Employment in the In-SHUCK-ch traditional territory is low and within a small population base, this has compounding effects. Underemployment is not the ultimate factor as to why the population is low, but it remains one of the biggest obstacles in maintaining population numbers. An estimate of 20% of registered In-SHUCK-ch Nation members live on reserves compared to approximately 57% of their neighbouring First Nations. This is well below the national average of 42%. In-SHUCK-ch wishes to re-establish its population in the traditional territory in two ways; by bringing its people home that have more away in search of employment, and by ensuring today's generation will remain at home and not move away. Both of these goals will be advanced by this project.

The printed promotional materials can be used for now and the near future to continually encourage In-SHUCK-ch youth to pursue a career in natural resources. Nation members, will take the materials to the people and continue to promote the information after this project is complete. The web pages while still evolving will also stand to support the youth in their pursuit.

Kerry Giesbrecht, as a resource in identifying and communicating with In-SHUCK-ch youth has been very valuable. As mentioned earlier, she has a close connection with youth and a working relationship with the school representatives in the Mission-Chilliwack area. It is important for In-SHUCK-ch to maintain this important dynamic to facilitate a link between the youth and In-SHUCK-ch. As a measure of solidifying this link, Kerry will act as the main contact for youth with regard to this initiative. Her name and contact information is on the new designed web pages and the print based materials. The expectation is that since youth have a connection with Kerry and she is well established within, and outside of the traditional territory, she will form the initial contact for youth to get started in pursuing their career path.

The success of this project may be realized as soon as this year as many of youth that were connected with are nearing graduation. Many expressed interest in natural resource careers as a result of the efforts of the project. This project has initiated but one first step of many that can be taken to help In-SHUCK-ch move toward its stewardship goals.

Appendix I

Youth Career Development Pamphlet

Planning a Career in Resource Management

Working the Land We Live



Natural Resource Management and In-SHUCK-ch Nation

A career in stewardship will allow you to use and respect the land as your ancestors did. You will have the opportunity to remain connected to the trees and plants and animals and fish who have sustained our people in the past and who will continue to do so. You will be the link between the Elders and our youth, passing along the traditions and practices which are the foundation of who we are..

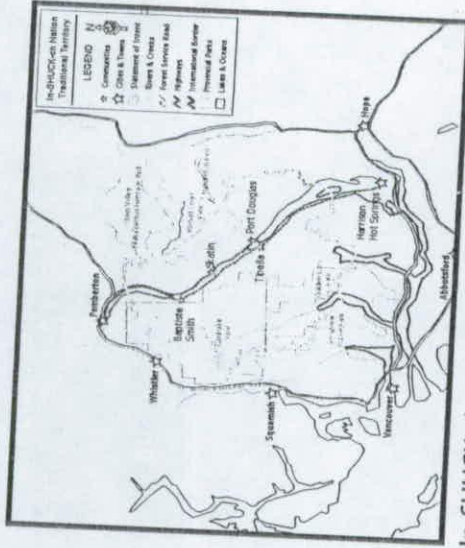


Planning a Career in

Natural Resource Management



Working the Land We Live



In-SHUCK-ch Traditional Territory

For more information:

For more information, please contact:

Kerry Giesbrecht • In-SHUCK-ch Nation

41290-B RR1 Loughheed Hwy

Deroche, BC, V0M 1G0

Ph: 604-820-6873

Email: kerry.giesbrecht@inshuckch.com

www.inshuckch.com





What is Natural Resource Management?

Natural Resource Management is one of the fastest growing sectors of today's job market. Careers in this field involve the management of land, water, soil, plants and/or animals with a significant focus on the sustainable use of these resources for both present and future generations.

In-SHUCK-ch Nation traditional territory has a diversity of energy and natural resources much like the rest of the province. This diversity is reflected by the range of programs offered to BC students interested in natural resource management. Professions in this field can range from Geologist, Agricultural Engineer to Conservation Officer. You could find yourself working in a wide range of environments.

More than ever before, there will be an ongoing demand for candidates to fill

Fields of Resource Management

- Mining
- Forestry
- Fisheries
- Water
- Engineering
- Oil and Gas
- Agriculture
- Geology
- Wildlife

jobs addressing the complex issues in our territory — it's a matter of determining what career path will be the right fit for you so that you can live and work at home.

"In-SHUCK-ch Nation traditional territory has a diversity of energy and natural resources."

Education in British Columbia

Nicola Valley Institute of Technology
Merritt/Vancouver, BC
NVIT offers 2 natural resource programs: Natural Resource Technician or Natural Resource Technology.
www.nvit.ca

BCIT
Burnaby, BC
BCIT offers a diversity of programs in the resource and energy fields such as oil and gas, forestry, and mining.
www.bcit.ca

University of the Fraser Valley,
Abbotsford, BC
www.ufv.ca

UBC
Vancouver, BC
www.ubc.ca

Simon Fraser University
Burnaby, BC
www.rem.sfu.ca/programs.htm

University Of Northern BC
Prince George, BC
www.unbc.ca

Appendix II

Aboriginal Employment and Career Fair **“Building a Future”**



Stó:lō Nation

Community Development Department - Employment Assistance Services

Bldg. #5 – 7201 Vedder Road Chilliwack, BC V2R 4G5
Telephone: 604-847-3299 Fax: 604-858-4741
Toll Free: 1-877-847-3288

Aboriginal Employment & Career Fair

“Building a Future”

Stó:lō Nation Community Development Department, Employment Assistance Services is pleased to announce that we will once again host an Aboriginal Employment & Career Fair on:

Friday, February 06, 2009
10:00 am to 2:30 pm

Landing Sports Centre (Ag-Rec Centre)
45530 Spadina Avenue
Chilliwack, BC V2P 1V4
Telephone: 604-793-2904

The Aboriginal Career Fair Committee would like to invite you to be one of our exhibitors during this event. We anticipate well over 400 attendees throughout the Fraser Valley to attend, so this would be an excellent opportunity to promote your business/company/educational institute and/or recruit future aboriginal employees or students.

There is no booth fee for employers to participate. For your convenience, we have attached a registration form and booth locations will be provided on a first-come, first-serve basis. We look forward to your participation and please note that lunch and refreshments will be provided to exhibitors. Should you have any questions please contact:

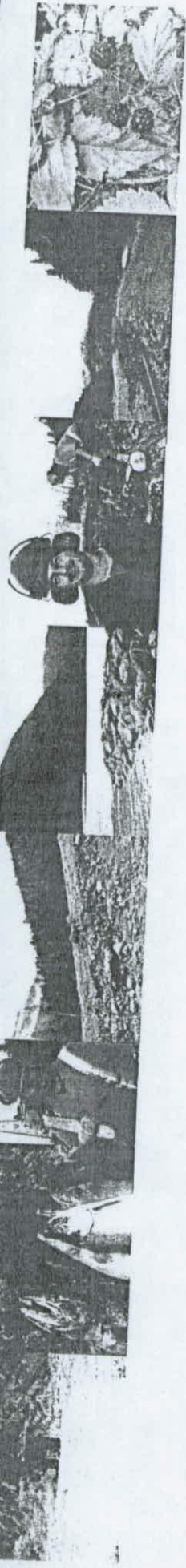
Suzanne Catto at 1-877-847-3288 (local 687) or Luwana Williams (local 672).

All our Relations,

Aboriginal Career & Employment Fair Committee

Appendix III

PowerPoint Presentation



Careers in Natural Resource Management

Working the Land We Live





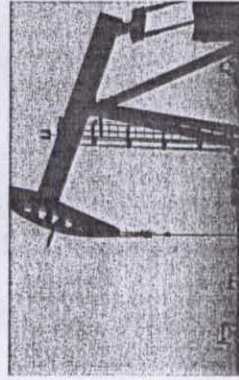
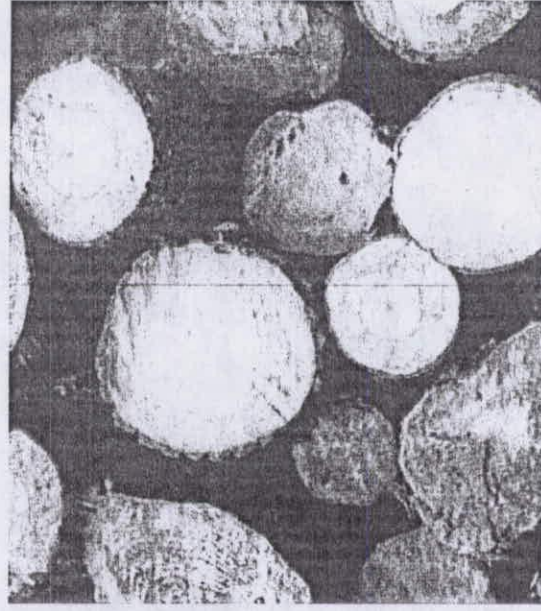
Careers in Natural Resource Management

What are Natural Resources?

Natural resources are naturally occurring substances or materials that are considered valuable.

Examples:

- Minerals
- Water
- Fish
- Timber
- Petroleum/oil
- Wildlife

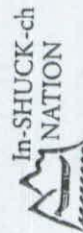
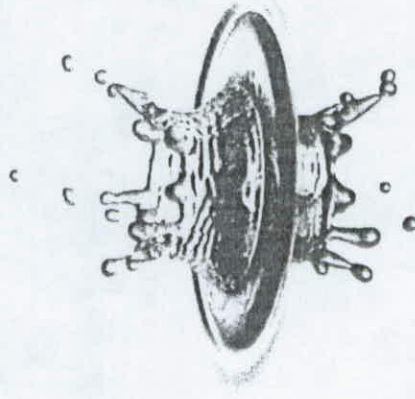
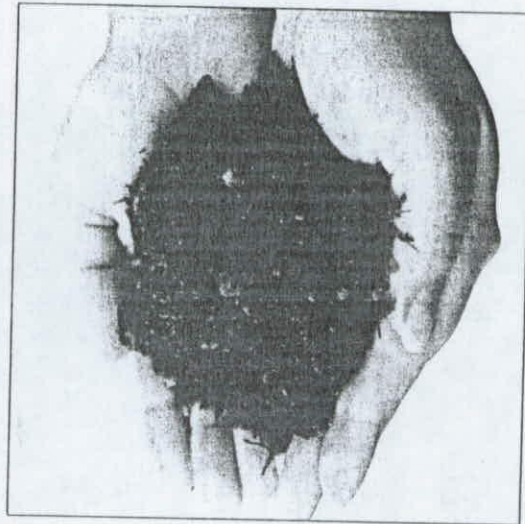




Careers in Natural Resource Management

What is Natural Resource Management?

Careers in the field of Natural Resource Management focus on the **sustainable use** of resources such as land, water, soil, plants and/or animals for present and future generations.

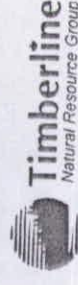
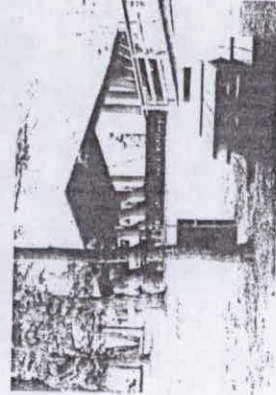


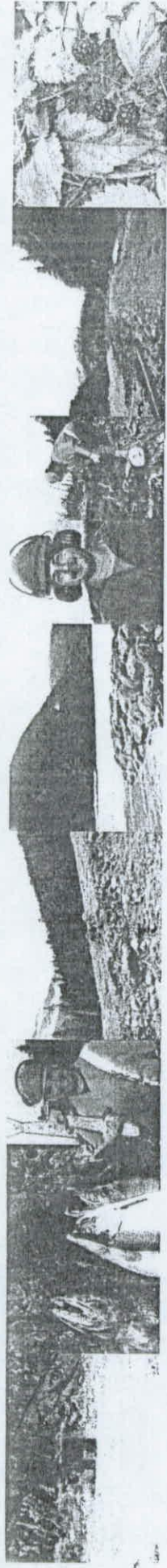
Careers in Natural Resource Management

What Careers Exist?

Or maybe a:

- Hydrogeologist
- Park Conservationist
- Plant Geneticist/Breeder
- Remediation Specialist
- Soil Conservationist/Engineer
- Watershed Technologist
- Wildlife Manager
- And many more...





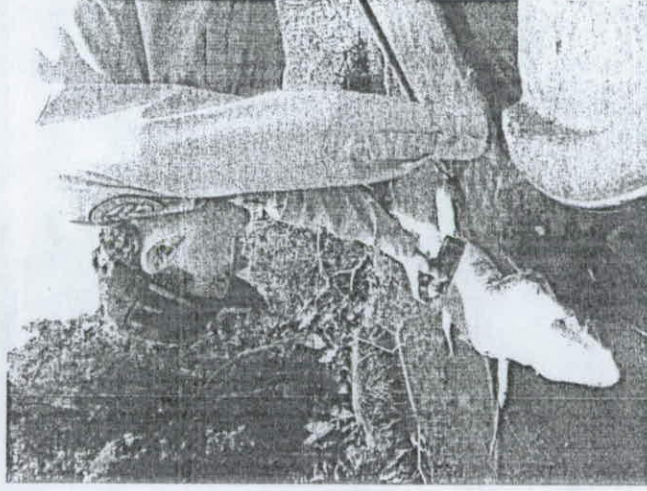
Careers in Natural Resource Management

What Careers Exist?

There are many careers involving natural resource management. Some of them are new and emerging fields others have existed for some time.

For example, you could be a:

- Biologist
- Conservationist
- Fish Hatchery Manager
- Fire Warden
- Forester
- Geographic Info. Systems Specialist



Careers in Natural Resource Management

Schools and Programs

Nicola Valley Institute of Technology, Merritt/Vancouver, BC

NVIT offers 2 Natural Resource programs: Natural Resource Technician or Natural Resource Technology. www.nvit.ca



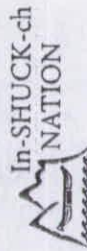
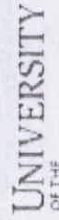
BCIT, Burnaby, BC


BCIT offers a variety of programs ranging from Forest Resources Technician to Wood Products Manufacturing. www.bcit.ca



University of the Fraser Valley, Abbotsford, BC

UFV offers 3 programs in Natural Resource Management: Horticulture Crop Production & Protection, Agriculture Technology and Business Administration for Agriculture Management. www.ufv.ca





Careers in Natural Resource Management

Schools and Programs

University of British Columbia, Vancouver, BC

UBC has a variety of undergraduate programs ranging from Environmental Engineering to Nutrition and Health. www.ubc.ca



Simon Fraser University, Burnaby, BC

SFU has variety of graduate programs relating to Natural Resource Management. www.sfu.ca



University of Northern BC, Prince George, BC

UNBC has several undergraduate programs as well as a graduate program in Natural Resources & Environmental studies. www.unbc.ca





Careers in Natural Resource Management

Natural Resource Management and In-SHUCK-ch Nation Territory

A career in stewardship will allow you to use and respect the land as your ancestors did.

You will have the opportunity to remain connected to the trees and plants and animals and fish who have sustained our people in the past and who will continue to do so.

You will be the link between the Elders and our youth, passing along the traditions and practices which are the foundation of who we are.





Careers in Natural Resource Management

Other Links

Environmental Careers Organization
www.eco.ca

Job Profiles
www.jobprofiles.org

Human Resources and Social Development Canada
www.hrsdc.gc.ca/eng/home.shtml





Careers in Natural Resource Management

For more information

In-SHUCK-ch Nation

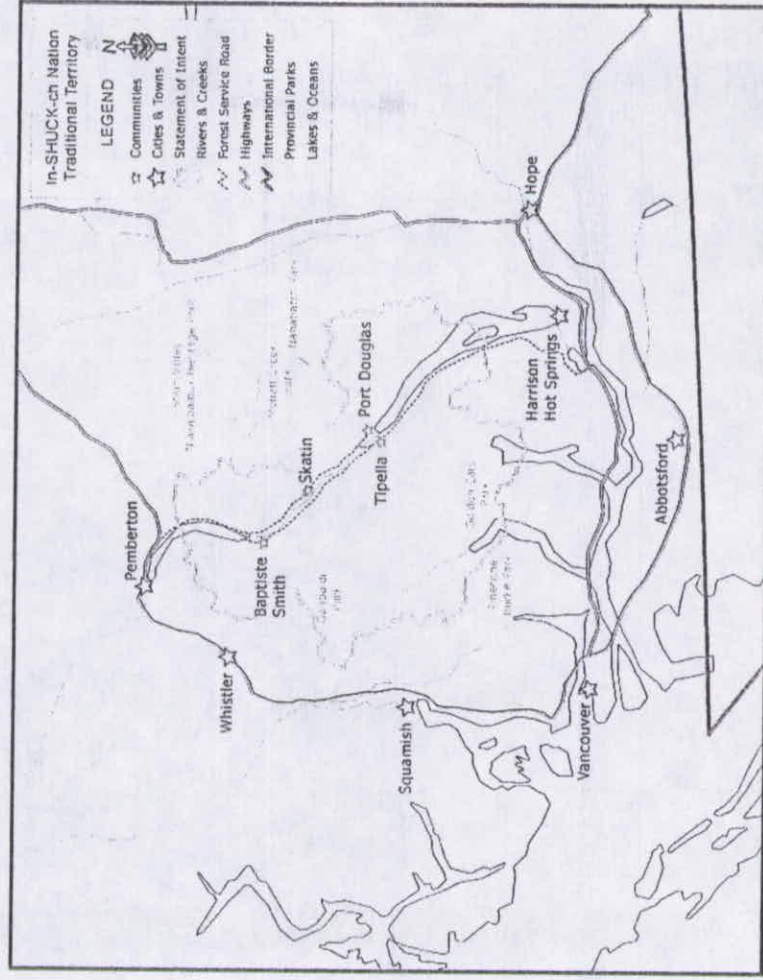
41290-B RR 1 Lougheed Hwy

Deroche, BC V0M 1G0

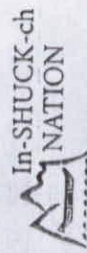
PH: 604-820-6873

Email: general@inshuckch.com

www.inshuckch.com



In-SHUCK-ch Nation Traditional Territory



Planning a Career in Resource Management

Information Sessions

Monday, February 16, 2009

10 am

Q'aLaTKú7eM

(Baptiste Smith Multiplex)

1 pm

Head of the Lake School

Skatin

3:30 pm

New Building

Tipella



For more information, please contact:

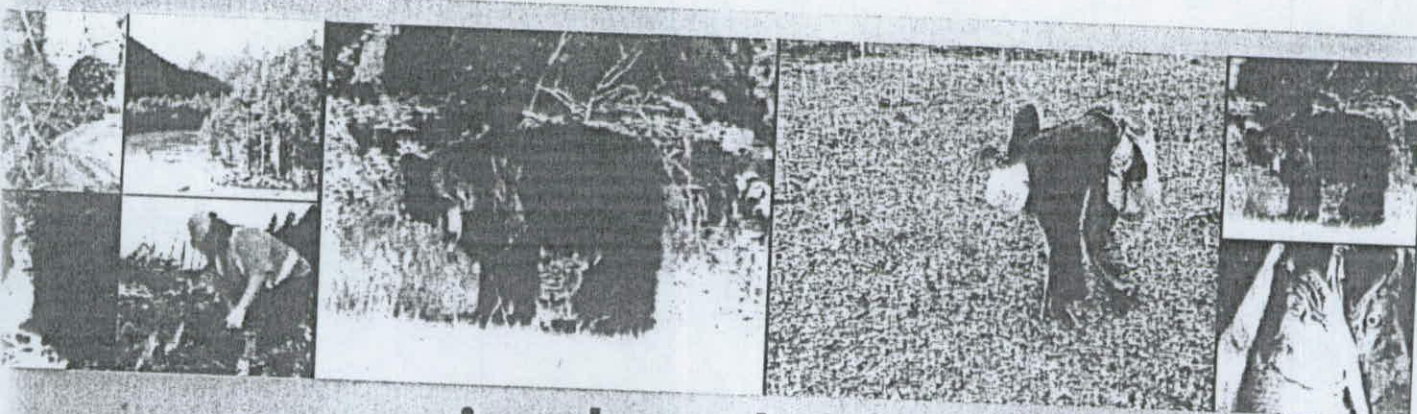
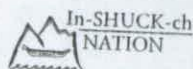
Kerry Giesbrecht • In-SHUCK-ch Nation

41290-B RR1 Lougheed Hwy

Deroche, BC, V0M 1G0

Ph: 604-820-6873

Email: kerry.giesbrecht@inshuckch.com



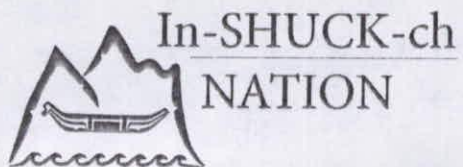
www.inshuckch.com

IN-SHUCK-CH NATION

LAND STEWARDSHIP IMPLEMENTATION OF MANAGEMENT REGIMES

Project Number BC0309525

February 2009



This project was made possible by funding from the First Nations Forestry Program of the Canadian Forest Service, Natural Resources Canada. This report was produced as a component of the *In-SHUCK-ch Resources Capacity Project*, contribution agreement BC0809-037.

Funding for this project was also provided by the Integrated Land Management Bureau of the B.C. Ministry of Agriculture and Lands.

TABLE OF CONTENTS

1.0	INTRODUCTION.....	1
2.0	METHODOLOGY.....	2
2.1	PROJECT CONSULTATION	2
3.0	MANAGEMENT REGIMES.....	3
3.1	CEDAR REGIME: RED AND YELLOW CEDAR MANAGEMENT.....	3
3.2	HERBICIDE AND PESTICIDE PROTOCOL	4
3.3	WOOD WASTE SALVAGE AND UTILIZATION	7
3.4	UNGULATE HABITAT AND WILDLIFE PROTECTION AREAS	8
4.0	CONCLUSION AND IMPLEMENTATION	11

LIST OF FIGURES

FIGURE 1	CURRENT CULTURAL MANAGEMENT AREAS MAP	6
FIGURE 2	CURRENT LRMP WILDLIFE MAP	9

LIST OF TABLES

TABLE 1	CEDAR MANAGEMENT REGIME	4
TABLE 2	CEDAR RESOURCES CHECKLIST.....	4
TABLE 3	PESTICIDE AND HERBICIDE REGIME	5
TABLE 4	WOOD WASTE AND SALVAGE RECOMMENDATIONS.....	7
TABLE 5	UNGULATE HABITAT REGIME	10

LIST OF APPENDICES

APPENDIX I – SAMAHQUAM MANAGEMENT REGIMES (2007 DOCUMENT)

1.0 INTRODUCTION

In-SHUCK-ch produced a *Land Stewardship Plan* (LSP) in 2006. Timberline Natural Resource Group (Timberline) in conjunction with In-SHUCK-ch Nation has been developing ways to implement a regime-based management vision into the LSP.

In 2008, In-SHUCK-ch submitted the first *Samahquam Management Regimes* report. This report was the first to outline the ideas and vision of Nation members pertaining to these management regimes within their territory. That original management regimes report is also the pre-cursor to this regimes document which provides further detail for the four most discussed, and most pressing regimes for the Nation. The Samahquam report can be found in the Appendix.

This report summarizes four regimes to be implemented through the Land Stewardship Plan, and sets up recommendations for further development of the In-SHUCK-ch land stewardship vision. The described regimes include:

- Cultural stewardship through cedar stand management;
- An updated herbicide and pesticide management regime;
- Ways to recover costs through waste-salvage from operations in the territory; and
- New action items for ungulate range protection.

Throughout this project's process, and the work which may follow it, it is important that we act on the Nation's vision. Community consultation is an element being strengthened, and there is much work required. This document generally describes technical issues present in our traditional territory. The findings and recommendations presented in this document represent a community view through a professional filter. It will be presented to In-SHUCK-ch communities.

2.0 METHODOLOGY

Using our initial Management Regimes document as a starting point, we consulted In-SHUCK-ch members. Timberline worked closely with Shawn Gabriel, In-SHUCK-ch's Chief Steward, and Vern Shanoss, chair of the Land and Resources Committee regarding their ideas on the four management regimes described in this document. Shawn was able to outline the Nation's goals in implementing these regimes, and the history and background surrounding them. Shawn has taken on the role of Chief Steward after being In-SHUCK-ch's forest technician for several years. Shawn continues to be an excellent resource for translating our projects' goals into direction and accommodation for In-SHUCK-ch Nation.

Vern is an excellent connection into the community and provided input regarding how to make these regimes more visible, and to ensure that we implement community consulting guidelines along with them. Those guidelines are also part of our consultation and accommodation protocol, an ongoing document.

This project's precursor, the Samahquam Management Regimes report, was initiated by In-SHUCK-ch council member Bill Schneider in 2007. We have come a long way through consultation, and continual organization of ideas, to get to this point of implementing the regimes into the *Land Stewardship Plan*.

2.1 Project Consultation

A project initiation meeting was held in Deroche at the In-SHUCK-ch head office. With that meeting we planned the input process regarding top priority regimes for the Nation, and the four main focus regimes were chosen. Also present at this meeting was Rob Paterson (Timberline) who was working on the *Youth Career Development* section of this FNFP funded project. This kept costs low and shared, and allowed Rob to keep the important management regimes in mind as he initiated his youth career development project.

The main project meeting was held at the Timberline office in Victoria. At this February 2nd meeting Shawn Gabriel, Vern Shanoss, Stephen Jimmie, David Carson (Timberline), Rob Paterson (Timberline), and Torbjorn Rive (Timberline) met to cover remaining areas in the stewardship regimes project, as well as discuss the FNFP project in its entirety.

Work with Shawn Gabriel continued throughout the project. Shawn was our primary In-SHUCK-ch contributor, and Abe Litz, a project consultant in Squamish helped us on the technical forestry side.

For the Cedar regime in particular we worked with Abe Litz, R.P.F, (Hedberg and Associates, Squamish, B.C.). Abe played an important role in creating the table for the cedar management process. He was able to provide input for this area as he is involved in the large forest operations in the territory. Hedberg and Associates carries out engineering operations in the territory, including planning and consulting for the In-SHUCK-ch / Lizzie Bay Logging partnership.

3.0 MANAGEMENT REGIMES

In the following section we introduce the concepts surrounding the regimes. We present in table form their goals, and methods for realizing the implementation of each regime.

3.1 Cedar Regime: Red and Yellow Cedar Management

Background

To introduce this regime, Shawn Gabriel, In-SHUCK-ch Chief Steward added:

The people of In-SHUCK-ch are caretakers and stewards of the land. The spiritual, ceremonial and cultural values of the red cedar and yellow cedar have been affected by the slow extraction by the ongoing forestry activities on In-SHUCK-ch Nation land.

In-SHUCK-ch Nation stewardship also recognizes that economic development and opportunities are important to the B.C. economy. Through this regime In-SHUCK-ch Nation will protect the cultural and economic values of the red cedar and yellow cedar trees.

Purpose

The purpose of this regime is to further add to existing policies and guidelines as set out by the provincial and federal government. To conserve, protect and enhance optimal sites which will provide an old growth characteristic to the red cedar and yellow cedar trees. To ensure that all age categories of the red cedar and yellow cedar tree will be available to harvest throughout In-SHUCK-ch Nation land. To continue to be supportive and work with all proponents to protect and conserve the cultural values of the red cedar and yellow cedar trees.

Objectives

1. Identify and record optimal and potential sites
 - a. Reforest with a higher percentage
2. Where there is a lesser constraint to provide an uneven aged stand
 - a. Less disturbance in riparian zones
 - b. Wider riparian management zones
3. Reduce brushing application
4. Engage with discussions

Table 1 Cedar management regime

Cedar Stand Management	
Description and Purpose:	This integrated regime begins at timber harvest layout at which time the given checklist is consulted to identify significant cedar resources.
Procedures:	<u>Trigger for notable cedar stands</u> : See <i>Table 2</i> .
Notes:	It has been suggested that this regime is implemented as a pilot in Forest License A19209, the In-SHUCK-ch/Lizzie Bay partnership.

Table 2 Cedar resources checklist

Cedar Resources Checklist	Plot 1	Plot 2
Dominant & co-dominant species:		
Density of cedar >/or = :		
Size. Monumental? :		
DBH, ø, Ht, form:		
Location relative to landscape, streams, qualities, and access:		

It is our goal that a checklist (example above) will be used by operators in the territory to indicate when stewardship consulting is required. Shawn Gabriel at In-SHUCK-ch would be the contact should these triggers be activated. This would be implemented after In-SHUCK-ch has completely adopted the new consultation protocol for their traditional territory referrals process in late 2009.

3.2 Herbicide and Pesticide Protocol

The priority of this regime concerns the health of Nation members who live in, and use extensively, their traditional territory and its resources. The application of herbicide and pesticide represents a danger to those who use plants for traditional purposes, as well as a danger to aquatic systems in the territory.

This process will be strengthened within the current In-SHUCK-ch referrals process where impact assessment and consultation occurs.

When completely mapped and updated, it will include definitive no-go areas within and without Treaty Settlement Land, and alternative management methods for the entire territory. Where there is opportunity, the In-SHUCK-ch Resource Stewardship crew will be utilized for thinning and other efforts to manage pests without chemical application methods.

Table 3 Pesticide and herbicide regime

Pesticide and Herbicide protocol	
Description and Purpose:	<p>This integrated regime is designed with three goals in mind:</p> <p>Community members' health considering pesticide application, preserving plants and herbs for cultural use, and for overall territory environmental protection.</p>
Procedures:	<p>Guidelines for area identification:</p> <p>As agencies must first consult In-SHUCK-ch through the referrals consultation process, direction will be given depending on our site-based assessment.</p> <p>Contacts: Shawn Gabriel, In-SHUCK-ch Chief Steward</p>
Notes:	<p>We hope to create new maps to work along side our existing Cultural Management Area, and Cultural Protection Area maps which would outline herb- and pesticide no-go areas.</p> <p>See Figure 1 (p.6) for current CMA and CPA maps.</p>

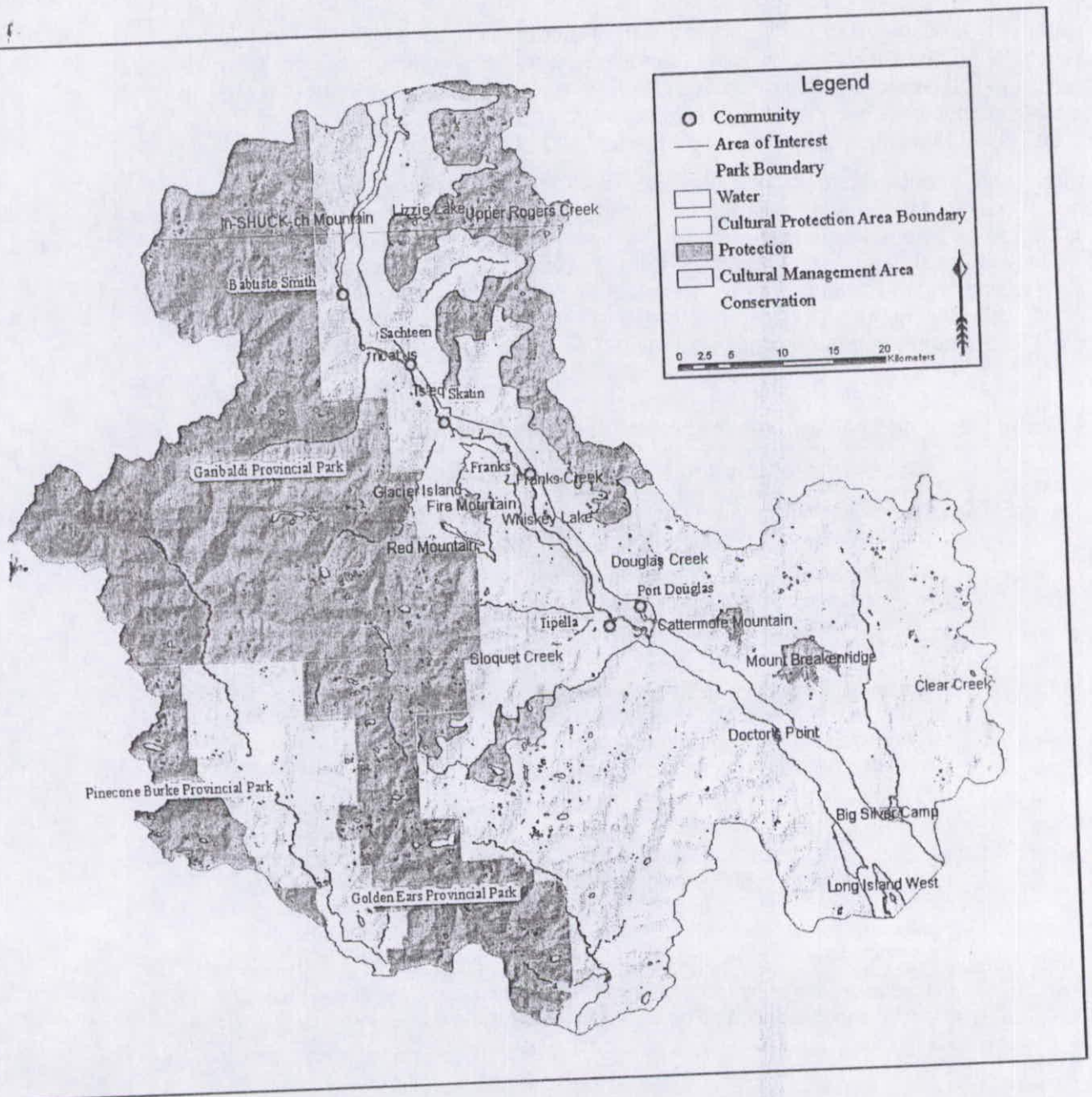


Figure 1 Current Cultural Management Areas map

3.3 Wood Waste Salvage and Utilization

There is community concern regarding the amount of resources burned or left to rot. It is also an issue of aesthetics. There are two underutilized portable sawmills in the territory. It is believed that a waste-salvage operation should run locally in the territory but there are a number of problems such as lack of investment/start-up money, a weak market for product, and lack of business initiative and partnerships for small business.

This regime recommends direction for those who wish to take advantage of waste wood from operational activity. Primarily we suggest engaging in the cedar shake business, which is a low-overhead business opportunity. Secondly, we intend to prepare a workshop to address these waste wood issues. It will provide an environment to discuss community concerns and ideas. Finally, we plan to prepare a simple guidebook to planning portable sawmill use in the territory, and starting up a cedar shake operation that can act as a starting point to business planning.

Table 4 Wood waste and salvage recommendations

Wood-waste salvage recommendations	
Description and Purpose:	<p>This regime caters to the community concern for the amount of waste that is not salvaged from logging operations in the territory.</p> <p>Its purpose is to give those interested the necessary resources and avenues to generating revenue from salvage material in the territory.</p>
Procedures:	<p>Our recommendation is to start small, and identify opportunities in the <i>cedar shake</i> business. Squamish has various businesses to assist with stumpage, and Hedberg and Associates can help with permits, stumpage, and other general inquiries.</p> <p>Contacts: Vern Shanoss, Bill Schneider</p>
Notes:	<p>The initiative to push forward a salvage and portable sawmill business must come from the In-SHUCK-ch side. Changes within operational planning cannot be made until markets, and operation and business plans are sorted out.</p> <p>A workshop for on-reserve members should be held. Operational process can be explained, and community concerns can be addressed.</p>

3.4 Ungulate Habitat and Wildlife Protection Areas

The current status of wildlife documentation in In-SHUCK-ch territory is as follows, and needs new, detailed work on behalf of the Nation. From the *Land Stewardship Plan*, version 11:

There is no comprehensive animal inventory for the territory. Wildlife habitat can be inferred from other inventories, but no work has been done on this to date. The Government of B.C. has mapped various wildlife related features across the territory such as habitat for certain species (e.g. ungulate winter range and spotted owl management areas).

Issues for stewardship focus are old growth preservation for biodiversity and the protection of rare and endangered species and ecosystems.

Furthermore;

Hunting was traditionally second only to salmon fishing in importance to the subsistence of the In-SHUCK-ch people. However, the value that we put on wildlife goes far beyond their importance for food. The presence of wildlife is a source of spiritual and physical nourishment. The sharing of wild game has ceremonial importance. Many species are protected for spiritual or conservation reasons. Sport or trophy hunting has been contrary to the philosophy of the people.

With that in mind, Table 5 outlines action items for conservation, regarding both spiritual and physical nourishment for the people of In-SHUCK-ch Nation.

As outlined in the quoted paragraph above the current mapping of deer and goat winter range in the territory is derived from Government of B.C. sources. The map below (Figure 2) displays what is currently used to track action and generally assess possible impacts on wildlife in the territory. Deer winter range is pink and shaded, and goat winter range is beige and shaded. It is important that we move on from this alone and acquire new mapping direction and detail, and set them in line with current In-SHUCK-ch goals.

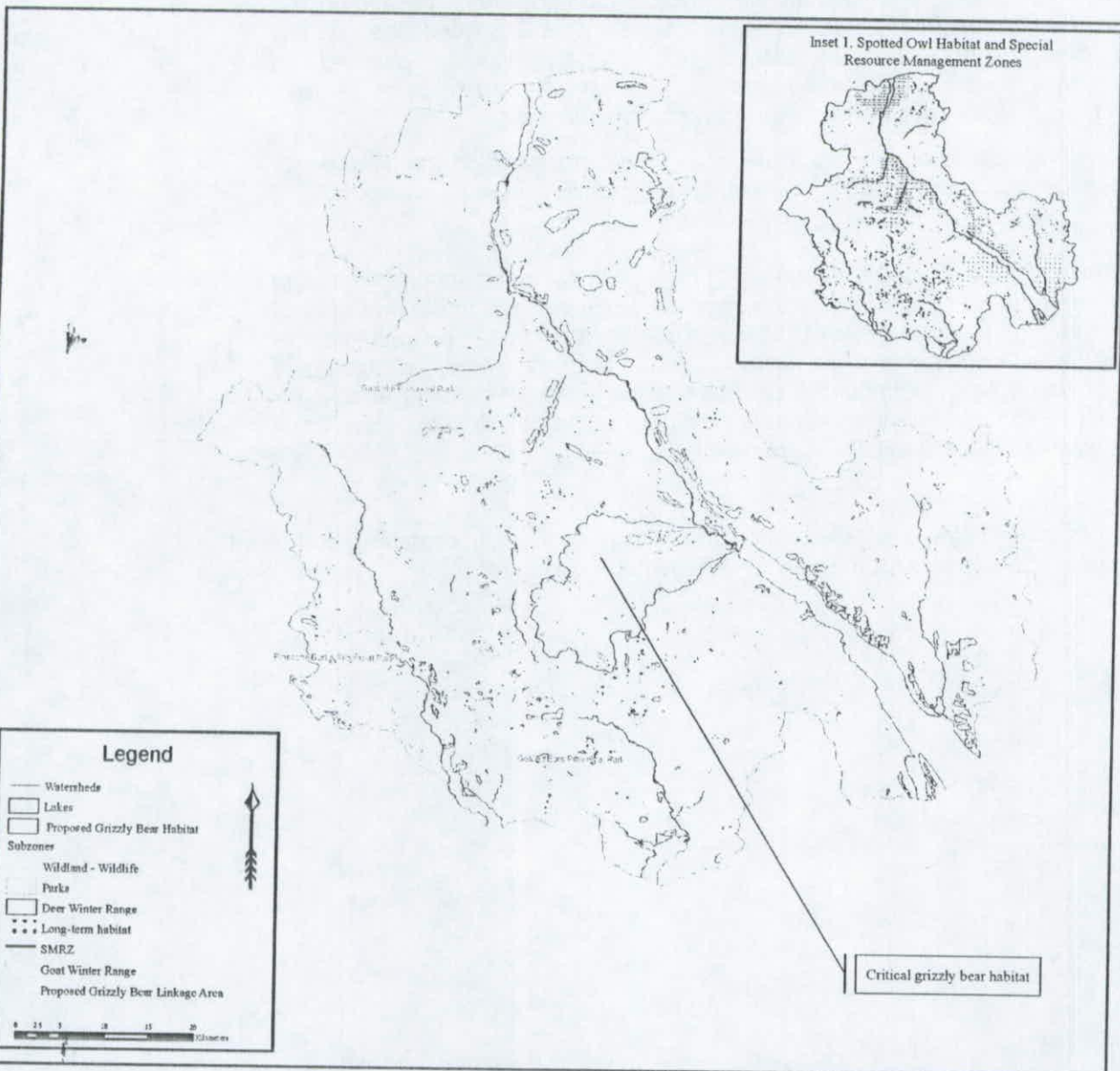


Figure 2 Current LRMP wildlife map

The table below outlines the goals and action items in planning the ungulate habitat and wildlife protection regime. This integrated regime must outline steps to be taken when operational activity has the potential to impact traditional use areas, including all facets of deer and winter range.

Table 5 Ungulate habitat regime

Ungulate Habitat and Wildlife Protection	
Description and Goals	<p>Protection guidelines will state In-SHUCK-ch goals for their traditional areas or Cultural Management Areas (CMAs), and outline how they may be affected by ongoing or planned development in the territory.</p> <p>These goals include, but are not limited to:</p> <p>Protect and preserve known ungulate travel corridors;</p> <p>Retain a variety of habitat (grasses, shrubs, and forest cover) for "activity centres"; as well as research possible calving areas;</p> <p>Retain sufficient corridors and buffers around streams and lakes as drinking areas;</p>
Next Steps:	<p>Ensure that In-SHUCK-ch has all updated B.C. habitat mapping pertinent to the goals listed above;</p> <p>Use these maps to create our own, linking them with stated goals; and</p> <p>List action items for how to enact these as retention goals with operators in the territory.</p>
Notes on goals:	<p>New and detailed maps should to be produced to demonstrate:</p> <ol style="list-style-type: none"> 1) The meaning of these ungulate protection areas, and 2) Describe which areas are culturally significant, and should be preserved or protected. <p>*In-SHUCK-ch is currently researching the possibility of Elk re-introduction to protected areas of the territory.</p>

4.0 CONCLUSION AND IMPLEMENTATION

In our original proposal we intended to develop regimes for mining and power generation activities in the territory. Mining enjoys a very small percentage of the work carried out in the territory, in which case it applies to the usual referrals process and archaeological assessments.

Energy production, on the other hand, is a growing area in the territory and needs to be handled separately and at a larger scale. At this time *run-of-river* (the predominant development in the territory) referrals are integrated into our current referrals system and are given positive direction quickly because of Douglas Nation's partnership with Cloudworks Energy Inc. Enacting guidelines that may change this dynamic would be a political issue. Guidelines that would serve to protect the ecological and habitat integrity of In-SHUCK-ch territory will have to be developed separately and with larger-scale consulting.

Building on the previous regimes project, we have developed guidelines which pertain largely to forest operations and their issues related to the community:

- Cultural stewardship through cedar stand management;
- An updated herb- and pesticide management regime;
- Recommendations for waste-salvage from operations in the territory; and
- New action items for ungulate range protection areas and protection methods.

The regimes listed above are being integrated into the current version of In-SHUCK-ch's *Land Stewardship Plan*. This plan is separate from, but works alongside individual forest stewardship plans of forest operators. Ultimately, we would like to have these LSP integrated regimes included for use at the operational planning stage.

APPENDIX

SAMAHQUAM MANAGEMENT REGIMES DOCUMENT (2008)

DEVELOPMENT OF IN-SHUCK-CH MANAGEMENT REGIMES

Prepared for:
Samahquam Nation
Baptiste Smith, B.C.

Prepared by:
Timberline Natural Resource Group Ltd.
Victoria, B.C.

February 2008
Project #: BC0307505



Timberline
Natural Resource Group



EXECUTIVE SUMMARY

Samahquam Nation is one of three member communities of In-SHUCK-ch Nation. With our neighbours and relations in Skatin First Nations and Douglas First Nation we undertake resource stewardship collectively through In-SHUCK-ch. Working together provides strength and opportunity beyond what we would have individually.

The people and communities who comprise the In-SHUCK-ch Nation share a philosophy of conservation. We define conservation as the wise use of natural resources in the context of environmental and cultural protection. The generation of wealth to support the current generation of people, while not limiting the opportunities available to future generations, is the essence of sustainable development.

As a major contribution to resource stewardship, Samahquam is developing and implementing a set of forest management regimes for use in the sustainable management of the resources of In-SHUCK-ch Nation territory. These are developed within the framework of the In-SHUCK-ch *Land Stewardship Plan*. The In-SHUCK-ch people, through the *Land Stewardship Plan*, state our intentions with regard to land stewardship, environmental protection, resource use, and economic development within our traditional territory. Our strategy is to develop In-SHUCK-ch forest management regimes that will ensure that all activities within the territory advance the vision of the In-SHUCK-ch people.

The majority of project resources were directed at establishing conversation with In-SHUCK-ch people in order to capture their desires and vision.

The majority of vocal Nation members accept the benefits, and to a large extent the environmental protection elements, of modern forest management practices. That is not to say that those currently undertaking to "manage" the resources of the territory have the trust or approval of the people. There is frustration within the communities in the territory that they have no role and no say as to what is happening. They are marginalized and sometimes distrustful and skeptical.

In-SHUCK-ch Nation has insufficient resources to build a new and custom code of resource management for the territory. The Nation also has an urgent need to move forward with resource use to fund social and economic development. For these reasons, the strategy recommended here is to utilize that which is good of the existing forest and resource management regime and build upon it and enhance it as required to advance the agenda of the In-SHUCK-ch People. The existing laws, regulations, and policies of Canada and British Columbia will be honoured. We will work within that framework, add to it, and make changes where necessary.

In a holistic approach to stewardship In-SHUCK-ch has defined units by watersheds. Intersecting those are three major management zones with specific management direction:

- Conservation;
- Cultural management; and
- Preservation.

In describing regimes we have identified three major areas of interest which will include most types of possibly damaging activity:

- Forest harvesting (silviculture systems);
- Energy production; and



- Mining and aggregate extraction.

Ecosystem restoration and habitat enhancement is not sufficiently addressed by current B.C. government policy. Restoration activities will be important in maintaining the health and integrity of the territory.

There will be opportunities to undertake such activities in the following cases:

- Streams and rivers affected by independent power producers;
- Results of legacy harvesting practices;
- Culturally important areas, and landscapes used for recreational purposes;
- Riparian areas, at both lakes and streams;
- Right-of-ways to be decommissioned; and
- Important or damaged community landscapes.

We intend to complete new watershed level tactical planning to ensure good stewardship and specifically to develop new old growth management areas and identify restoration requirements.

We will continue to develop these regimes into guides that can be implemented by involving the various tenure holders and licencees within the territory.



TABLE OF CONTENTS

1.0	INTRODUCTION.....	1
2.0	VISION.....	2
3.0	METHODOLOGY.....	4
3.1	OUTLINE AND INPUT FROM INITIAL MEETINGS	4
3.2	MEETING WITH SILVICULTURE FORESTER	5
3.3	CREATING A NEW SILVICULTURE GUIDELINE SYSTEM.....	5
4.0	STRATEGY.....	6
5.0	WATERSHED LEVEL PLANNING	8
6.0	ZONATION	9
6.1	CULTURAL MANAGEMENT AREAS.....	10
7.0	SILVICULTURE SYSTEMS.....	12
7.1	PROTECTING SOIL AND PREVENTING EROSION.....	12
7.2	VISUAL QUALITY OF THE LANDSCAPE.....	13
7.3	MINIMIZING WOOD FIBRE WASTE.....	13
7.4	REGENERATING CEDAR AND MONUMENTAL CEDAR TREES	13
7.5	PROTECTING OR ENHANCING NON-TIMBER FOREST PRODUCTS	14
7.6	PROTECTING OLD GROWTH FORESTS	14
7.7	PROTECTING WATERWAYS AND FISH HABITAT	15
7.8	MAINTAINING OR ENHANCING DEER AND OTHER WILDLIFE HABITAT	15
7.9	PROMOTING HARDWOOD PRODUCTION AND MANAGEMENT	16
7.10	PROTECTING SPIRITUAL, HERITAGE, AND CULTURAL RESOURCES.....	16
8.0	ENERGY PRODUCTION.....	18
8.1	PROTECTING ENVIRONMENTAL, SPIRITUAL, HERITAGE, AND CULTURAL RESOURCES	18
9.0	EXTRACTION OF AGGREGATES AND MINERALS	19
10.0	RESTORATION AND ENHANCEMENT	20
11.0	RECOMMENDATIONS	21
12.0	REFERENCES	22



LIST OF FIGURES

FIGURE 2.1 IN-SHUCK-CH TERRITORY..... 3

FIGURE 4.1 WATERSHED BASED STEWARDSHIP..... 7

FIGURE 6.1 STEWARDSHIP ZONATION..... 9

LIST OF APPENDICES

Appendix I - Workshop Report



1.0 INTRODUCTION

Samahquam Nation is one of three member communities of In-SHUCK-ch Nation. With our neighbours and relations in Skatin First Nations and Douglas First Nation we undertake resource stewardship collectively through In-SHUCK-ch. Working together provides strength and opportunity beyond what we would have individually.

The people of the Samahquam Nation desire to improve our standard of living, and establish viable and sustainable communities within our traditional territory. Living with the land ensures the survival of our people and culture. These objectives can only be achieved through full participation in the modern economy that surrounds us. The land and forest resources of our territory are the key to our success.

As a major contribution to resource stewardship, Samahquam is developing and implementing a set of forest management regimes for use in the sustainable management of the resources of In-SHUCK-ch Nation territory. These are developed within the framework of the In-SHUCK-ch *Land Stewardship Plan*. The In-SHUCK-ch people, through the *Land Stewardship Plan*, state our intentions with regard to land stewardship, environmental protection, resource use, and economic development within our traditional territory.

Funded by the Canadian Forest Service First Nations Forestry Program (FNFP), this project used individual and group meetings to gather concerns and recommendations from both community members and professionals. Through this dialogue we have begun to develop clearly defined management strategies that will reflect our vision in regards to the stewardship of the In-SHUCK-ch territory. We also report on ecosystem restoration and habitat enhancement strategies that will play an important role in the management of our forest resource for the future.



Timberline
Natural Resource Group

2.0 VISION

The people and communities who comprise the In-SHUCK-ch Nation share a philosophy of conservation. We define conservation as the wise use of natural resources in the context of environmental and cultural protection. The generation of wealth to support the current generation of people, while not limiting the opportunities available to future generations, is the essence of sustainable development.

Access to healthy forests and streams in our traditional territory is needed to carry out traditional activities, generate wealth to support our people, and to maintain the fundamental connection to the land which is the basis of our culture. However, the land has been drastically altered by the intensive logging that has taken place within the past fifty years in the Lower Lillooet River Valley. In-SHUCK-ch Nation intends to take leadership in the stewardship of land and forest resources within the traditional territory: to re-establish an In-SHUCK-ch face on the land.

The following goals are taken directly from the *Land Stewardship Plan*.

Community

- We will rebuild our communities;
- We will fully occupy our land in increasing numbers;
- We will break the bonds of dependency;
- We will provide for sustainable communities of people living in the cultural context of the land. Sustainable communities have a high standard of living, persist through time, are adaptive, and exist in harmony with the environment around them; and
- We will adopt a first world standard of living without the attendant environmental impact.

Natural Resources

- Our land will be treated with respect and care;
- The resources of our land will sustain our people;
- The renewable resources of our territory will be sustained or enhanced for the benefit of future generations;
- Our people have always defined the land in terms of watersheds, and a holistic approach to stewardship requires consideration of resources on a full watershed or landscape scale;
- The fish, a critical element of our culture, will be for sharing. They are dedicated to the spiritual and physical well-being of the In-SHUCK-ch people; and
- Forest harvesting will always be undertaken with attention to the impact on non-timber resources and values.

Our strategy is to develop In-SHUCK-ch forest management regimes that will ensure that all activities within the territory advance the vision expressed above.



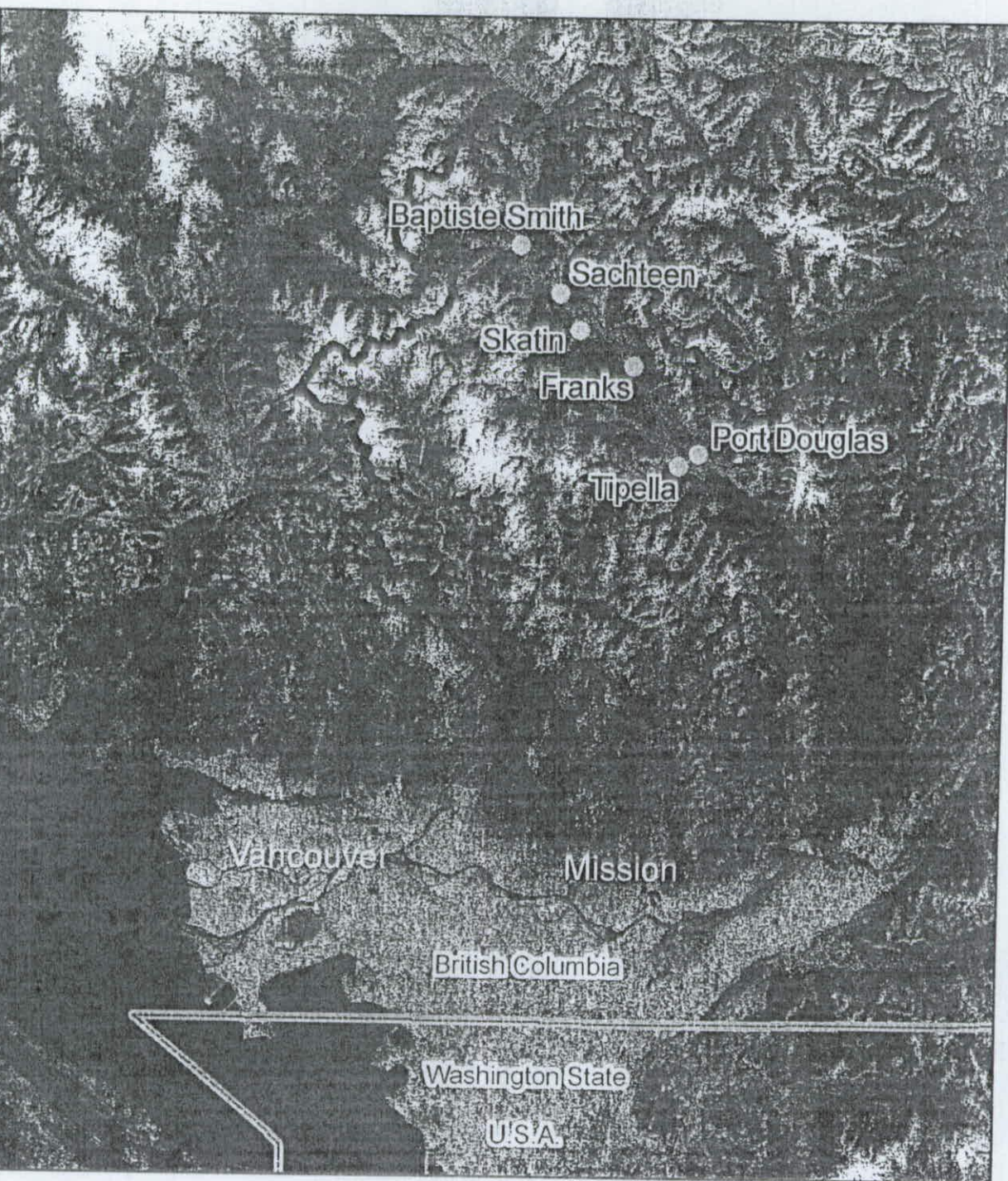


Figure 2.1 In-SHUCK-ch territory



3.0 METHODOLOGY

Wim Tewinkel, R.P.F. held a series of 'kitchen table chats' with community members and meetings with Chief and Council of Skatin and Douglas in order to begin the process of understanding the range of opinions and recording desires and suggestions. This was to ensure that information was also gathered from outside of Samahquam.

A community workshop was held with Samahquam and other In-SHUCK-ch community members in Baptiste Smith (see Appendix I, Workshop Report). Timberline staff collected and documented the community members' land and resource concerns relevant to the future of the territory.

The methodology for the completion of this project was as follows:

- Outline intentions and gather input from community members;
- Hold a workshop at Baptiste Smith for data and information collection;
- Incorporate technical information;
- Create a guidelines system; and
- Complete the recommendations and report.

3.1 Outline and Input From Initial Meetings

The following was used to initiate discussion on an In-SHUCK-ch vision of a management strategy. It is a plan of sustainability in the region, and shared care of the land.

The In-SHUCK-ch territory as a cultural, and community oriented land base. The people should be able to benefit from all activities within the territory, including ecological management and those that should benefit the communities economically.

- *The valley bottom is heavily logged – we need a variety of silvicultural management themes for the whole valley*
- *Standards are to protect, and make sure that the economies of the communities are considered*
- *Work with better retention and management, and lead as an example for the entire valley*
- *Think of a form of land ownership where they live and manage the land. Hunting and tourism should pay into the land management, and to the people*
- *This whole area depends on the natural environment*
- *Talked about the need, yet difficulty, of economic development due to lack of infrastructure*
- *Renewed connection to the land – and pride in its management.*

To ensure that community input and concerns came first, Mr. Tewinkel held a series of meetings with several people in the communities in the territory. Their most pertinent input is outlined here:



- **Detailed map of the valley bottom** to identify areas that need to be protected and/or have other values. Could also identify area that need modified forest treatments, e.g. create old growth parameters in a young forests, enhance deer habitat.
- **Building Log Homes** – In-SHUCK-ch has now a supply of logs, can somebody be persuaded to start a company out here, e.g. an employee of an existing company who wants to strike out on his own (together with Bands or local people).
- **Somebody has to be in charge** – Hire a planner or set up a committee to organize things, to find out things (community consultation), to keep things moving and to encourage people to start and to stay with business.

3.2 Meeting with Silviculture Forester

We gained a wealth of insight and knowledge through consultation with Mr. Abe Litz, not all of which is represented in our Silvicultural Systems tables, for example:

- Abe mentioned that as discrete protection areas overlap, operators use this to their advantage. Generally, protected polygons are traded for technical management. In which case;
- Operators are requesting an updated map system, and faster communication to work more effectively; also
- Mr. Litz suggested we carry on with current, aggressive stream classification methods. This would include continued riparian reserves for streams.

3.3 Creating a New Silviculture Guideline System

Jointly with Mr. Litz, we designed a summary table system which would outline new and ongoing issues. This table is used in Section 7.0.



4.0 STRATEGY

As with any constituency, there is within Samahquam and In-SHUCK-ch a variety of views on the appropriate use of resources. This is true with regard to forest harvesting in particular. Discussions involving many community members, in many locales, and over a period of years, have made it clear to In-SHUCK-ch planning staff that a fine balance between resource protection and economic development will have to be found and implemented in the territory.

The In-SHUCK-ch people are actively working to re-connect to a land and a culture almost lost through the intervention of others. There still exists a deep appreciation for the land as a gift of the creator and traditional knowledge of the land and how to care for it.

It is quite safe to say that the majority of vocal Nation members accept the benefits, and to a large extent the environmental protection elements, of modern forest management practices. That is not to say that those currently undertaking to "manage" the resources of the territory have the trust or approval of the people. There is frustration within the communities in the territory that they have no role and no say as to what is happening. Marginalized as they are, they are distrustful and skeptical.

In-SHUCK-ch Nation has insufficient resources to build a new and custom code of resource management for the territory. The Nation also has an urgent need to move forward with resource use to fund social and economic development. For these reasons, the strategy recommended here is to utilize that which is good of the existing forest and resource management regime and build upon it and enhance it as required to advance the agenda of the In-SHUCK-ch People.

The existing laws, regulations, and policies of Canada and British Columbia will be honoured. We will work within that framework, add to it, and work to change it where necessary. The In-SHUCK-ch approach will consist of the following:

- We will undertake stewardship of the territory as an ecological whole, independent of existing ownership or tenure;
- We will undertake watershed level planning encompassing all resource uses;
- Zonation will direct activities to appropriate places;
- For forest management, silviculture, and all resource extraction regimes we will implement enhancements as necessary to meet specific goals;
- In the face of past degradation we will actively restore watersheds and ecosystems; and
- We will actively promote healthy fish and wildlife populations through habitat enhancement. As they directly sustain our people, salmon and deer will be the priority.

Figure 4.1 presents the basic watershed and biogeoclimatic ecosystem classification based division of the territory into stewardship units.



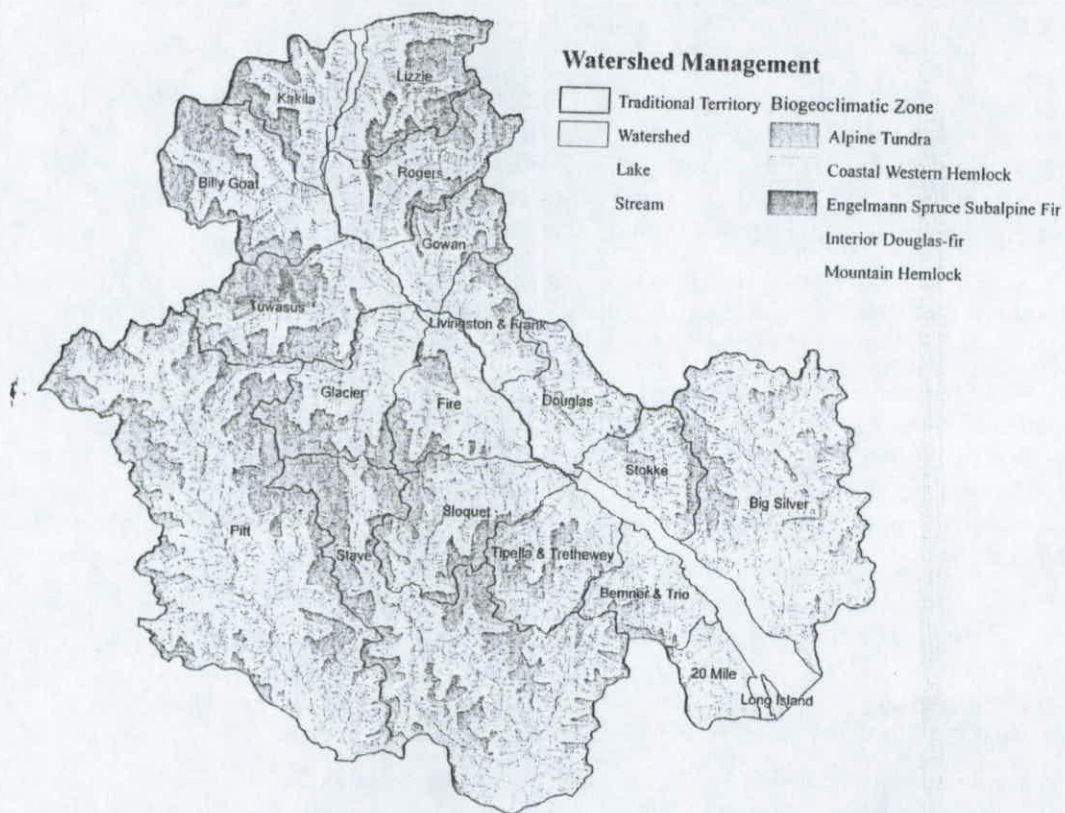


Figure 4.1 Watershed based stewardship



5.0 WATERSHED LEVEL PLANNING

In-SHUCK-ch territory is defined by watersheds. Breaking down the region into watershed-level planning allows for each specific zone, and at some level discrete ecosystems, to be cared for according to its specific needs and attributes. Indeed, within these watersheds there will be further management planning needs, but as an example, some watersheds will be more sensitive to active management than others.

Figure 4.1 illustrates the watershed level planning zones within the territory. Each will be dealt with individually with time.



6.0 ZONATION

Zonation involves *directing activities to appropriate places*, and is discussed throughout this document. Generally, through zonation we prescribe management regimes designed to protect or conserve particular resources, visual areas, cultural protection areas (for example In-SHUCK-ch Mountain), cultural management areas, and parks. We will utilize various management tools, as well as reserves, connectivity, restoration, and enhancement as part of our territory strategy to ensure minimal ecological stress on our land and watersheds.

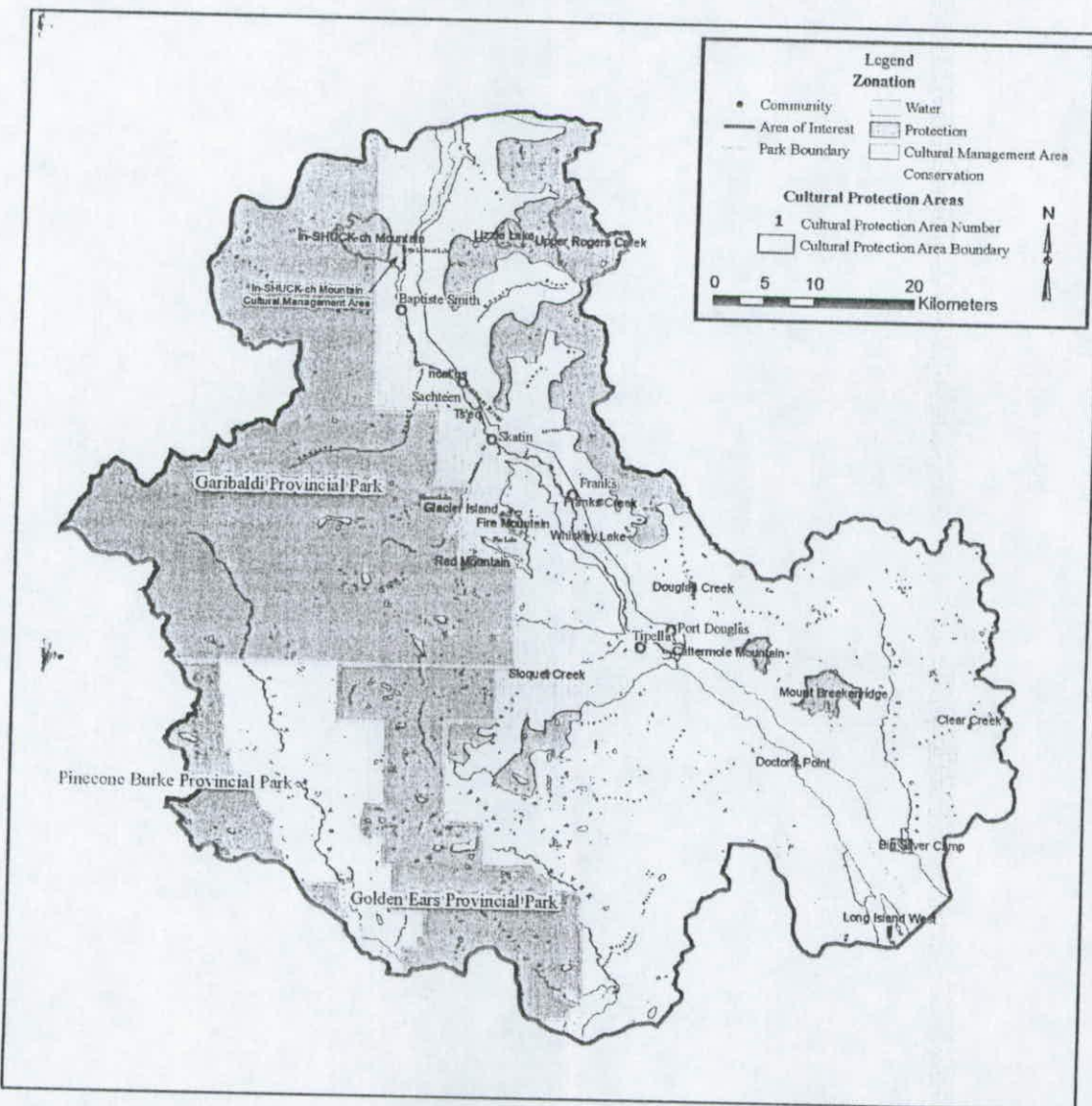


Figure 6.1 Stewardship zonation

The above figure captures the main elements in our Zonation strategy.



- The area marked for **Conservation** (beige) is actively managed. We define conservation as the wise use of natural and cultural resources. Permitted activities include forest operations, or 'invasive development' as described in Section 7.0.
- **Cultural Management Areas** (pink) include zones that have historic or contemporary significance to In-SHUCK-ch people. Operations require careful planning, and possibly community and council consultation prior to development. Forest harvesting will consider impacts on non-timber forest products, non-timber values and key community watersheds first.
- **Protection Areas** (green) are fixed areas for permanent protection of identified environmental or cultural resources. They have been identified through various processes: existing Provincial parks; Sea-to-Sky Land and Resource Management Plan (LRMP); and the B.C and In-SHUCK-ch Strategic Land Use Planning Agreement (SLUPA).
- **In-SHUCK-ch Mountain** (north end of map, 'area of interest') holds significant historic, cultural and spiritual importance to the Lillooet peoples. The area is managed as a cultural site for the conservation of cultural and heritage resources, and overlaps with a provincial park and the Cultural Management Area. The mountain also holds 4 discrete zones within its management boundary.
- **Wildland Zone – Cultural Emphasis Sub-zone** (not highlighted on map): In addition to their high wildlife habitat values, remote wilderness characteristics and resulting high potential for backcountry recreation and tourism, the cultural emphasis sub-zone is identified for its First Nation cultural and heritage resources. Subject to the LRMP (Sea-to-sky LRMP) management direction for Wildland zones, this zone is managed for; cultural and heritage resources; wildlife and ecological conservation; the maintenance of wildlife and native species population; and recreation and tourism values. Subsurface resource development is permitted, but consideration must be given to First Nation resources.

6.1 Cultural Management Areas

Management direction for cultural management areas is to be found in the *Strategic Land Use Planning Agreement* (June 2007). The management intent, objectives, and implementation direction is paraphrased here.

Management Intent

Cultural management areas are zones of integrated resource management which have historic and contemporary significance to In-SHUCK-ch. We wish to enhance the quality of these areas through the conservation of cultural and heritage resources. It is our intent to complete a consultation protocol directly related to these areas. Resource and economic development, including subsurface resource development is permitted but requires full consideration to be given to cultural and heritage resources. Forest harvesting will consider impacts on non-timber forest products, non-timber values and key community viewsheds.

Objectives

- Conserve and or maintain the integrity of cultural and heritage resources;
- Maintain opportunities for In-SHUCK-ch people to practice traditional harvesting for cultural purposes;
- Maintain opportunities for commercial timber harvesting;



- Maintain opportunities to access economic, recreation and conservation values; and
- Prevent or mitigate ecological impacts of roads.

Implementation Direction

- 1) Forest development is permitted and will operate under the relevant Provincial forestry legislation, regulations, and standards as well as wildlife and flood plain management plans.
- 2) Forest development will be guided by visual quality objectives arising from a new visual landscape inventory completed by In-SHUCK-ch in 2007.
- 3) Traditional use studies will be considered when undertaking development activities;
- 4) Economic development is permitted, but requires consideration of cultural and heritage resources;
- 5) Subsurface mineral exploration and development is permitted as under Provincial policies designed to minimize and mitigate impacts;
- 6) Backcountry recreation activities are allowed including motorized and non-motorized recreation;
- 7) Hunting and angling are permitted as per Provincial and Federal policies.



7.0 SILVICULTURE SYSTEMS

Silviculture has been described as the art and science of growing trees. It is an integral part of forest management, ensuring that healthy crops of trees replace those harvested. Here we will use the term silviculture system to encompass the entire cycle of planning, harvesting, and regenerating stands while meeting a range of stewardship goals. As timber harvesting operations are the dominant management concern, this report will focus primarily on this area.

Particular issues with silviculture systems, including road building, include:

- Protecting soil and preventing erosion;
- Visual quality of the landscape;
- Minimizing wood fibre waste;
- Regenerating Cedar and Monumental Cedar Trees;
- Protecting or enhancing non-timber forest products;
- Protecting old growth forests;
- Protecting waterways and fish habitat;
- Maintaining or enhancing deer and other wildlife habitat;
- Promoting hardwood production and management; and
- Protecting spiritual, heritage and cultural resources.

7.1 Protecting Soil and Preventing Erosion

For the benefit of generations to come, ensure that terrestrial ecosystems and soil quality is not degraded, and that where there has been degradation ensure that restoration is undertaken.

Status Quo: Section 5 of the Forest Practices and Planning Regulations (FPPR)

“The objective set by the government for soils is, without unduly reducing the supply of timber from British Columbia’s forests, to conserve the productivity and the hydrologic function of soils.”

Management Regime Enhancements

Conservation: Continue with current policy. Maximum 5, 10 or 25% disturbance based on situation and 7% in access structures.

Cultural Management: Current policy and practices with enhanced consultation and environmental and cultural impact assessment as directed by the community. Impact assessments include non-timber forest products, non-timber values such as fish, wildlife, and recreation, and visual quality objectives.

Protection: No soil disturbance without environmental and cultural impact assessment including planning for mitigation and remediation.



7.2 Visual Quality of the Landscape

In-SHUCK-ch's visual quality goals are laid out in the *Land Stewardship Plan*. Community gatherings consistently produce statements of the importance of the visual quality of the landscape to personal and community well-being. A new visual landscape inventory for the territory has been developed. In-SHUCK-ch will participate in the design of visual quality objectives for the territory. The objective is to ensure that the visual quality of the landscape, particularly views of importance to In-SHUCK-ch people, is protected.

Status Quo:

There exists for the territory a legacy visual landscape inventory and set of recommended visual quality objectives that may or may not have been followed in the past during harvest operations.

Management Regime Enhancements

Conservation: The application of visual quality objectives associated with the new (2007) visual landscape inventory as determined jointly by In-SHUCK-ch and the B.C. Ministry of Forests and range.

Cultural Management: As per conservation with intensive community based consultation.

Protection: No harvesting permitted.

7.3 Minimizing Wood Fibre Waste

This issue is of high importance to In-SHUCK-ch members. They see waste in the surrounding harvest areas, waste of wood that they could put to use.

Status Quo

Significant volumes of wood fibre are being left behind in current logging operations.

Management Regime Enhancements

A strategy for the utilization of waste fibre must be developed.

7.4 Regenerating Cedar and Monumental Cedar Trees

Cedar trees have great cultural importance to In-SHUCK-ch members. A supply of large trees suitable for monumental use as well as trees supplying more minor products as blanks for carving, and bark and roots for craft work.

Status Quo:



Regeneration prescriptions call for cedar components where biologically appropriate.
Management Regime Enhancements
Every effort must be taken to increase the planting of stands with cedar where ecologically appropriate. Cedar replanting will be site-oriented. Silviculture technicians and foresters should be made aware of the cultural importance of cedar.
Furthermore, before starting work in cedar or stands containing monumental trees, consultation with regard to location and presence is required and a mitigation or accommodation process defined.

7.5 Protecting or Enhancing Non-timber Forest Products
Non-timber forest products promise a culturally natural economic development opportunity for In-SHUCK-ch people.
Status Quo
Not addressed.
Management Regime Enhancements
Conservation: Traditional use studies will be used to identify gathering areas to be protected or accommodated for.
Cultural Management: Current policy and practices with enhanced consultation and environmental and cultural impact assessment as directed by the community. Impact assessments include non-timber forest products such as medicinals, florals, and mushrooms.
Protection: No activity will limit the availability of these products.

7.6 Protecting Old Growth Forests
Old growth forests provide ecological and spiritual benefits.
Status Quo: Forests and Range Practices Act basics (p.13 FSP)
Protection of old growth is managed within landscape units through landscape unit plans. Some units have specific old growth management areas established. Others do not and non-spatial targets are managed for (Lizzie, Sloquet).
In landscape units with old growth management areas established there is allowance for moving of OGMA's to facilitate harvest without diminishing old growth protection.
Management Regime Enhancements



Spatial old growth refuges will be established throughout the territory to replace current OGMA's and non-spatial systems.

7.7 Protecting Waterways and Fish Habitat

Waterways and the fish habitat they provide are critical to the survival of In-SHUCK-ch as a people.

Status Quo: Section 8.0 of the FPPR

The objective set by government for water, fish, wildlife and biodiversity within riparian areas is, without unduly reducing the supply of timber from BC's forests, to conserve, at the landscape level, the water quality, fish habitat, wildlife habitat and biodiversity associated with those riparian areas. Retention levels for riparian management zones are based on stream classifications.

Management Regime Enhancements

Conservation: Current policy.

Cultural management: As a priority, a detailed and complete stream classification including habitat mapping, and fish population studies, of waterways within the cultural management area will be developed and used to enforce the current policy. This process will be used to define specific fisheries sensitive watersheds and identify specific areas of greater than usual importance for protection.

7.8 Maintaining or Enhancing Deer and other Wildlife Habitat

In-SHUCK-ch people demand more visible wildlife in the territory, especially deer, for aesthetics, culture, and hunting. This topic is addressed in the silviculture regime through low-level thinning and other management methods.

Status Quo: Government Actions Regulation Sections 9 and 12.0, and FPPR Section 7.0

GAR section 9 relates to general wildlife measures.

Gar section 12 relates to ungulate winter ranges and objectives.

Goat and deer (ungulate) winter ranges are currently managed under the FPPR regulations.

Management Regime Enhancements

Lower elevation thinning to allow for more deer at community level.

Have modified regulations, based on the above FPPR, drafted and approved for the use in the new silviculture regimes.



Operators are requesting better site-level detail on wildlife, and indicators of the amount and distribution required for their survival in the given TSA. At the moment they are vaguely mapped, and operators give minimal attention to mapped wildlife ranges (e.g. Sloquet Watershed).

7.9 Promoting Hardwood Production and Management

Addressing biodiversity, wildlife habitat, and the variety of various forest products.

Status Quo: Outside current policy and regulation

Current silviculture systems do not promote the planting or natural regeneration of hardwoods alongside the planting of conifers. Deciduous trees are brushed and/or treated as non-productive growth.

Management Regime Enhancements

Exploration of mixed wood management in the territory is recommended. We are looking into the possibility of testing this mixed-wood approach with an operator in the territory. Management would benefit not only biodiversity and product diversity, but also the healthy growth of harvestable wood. Paper birch aids conifer growth and survival by transferring its nutrients to seedlings and subduing a lethal root rot fungus. The resulting landscape would be a mixture of deciduous and coniferous trees, similar to natural stands, and could be harvested selectively to always maintain some tree cover. We believe this could promote ecosystem health and diversity in the territory.

7.10 Protecting Spiritual, Heritage, and Cultural Resources

In-SHUCK-ch people will thrive only through the cultivation and resurgence of cultural practices. Cultural values and traditions are attached to stories, travel, and life – and can replenish pride and interest in the land.

Status Quo:

Culture Heritage Act, In-SHUCK-ch Heritage Policy, and Section 10 of the Forest Planning and Practices Regulation (FPPR)

The *Heritage Act* protects specific identified sites of limited area.

FPPR: “The objective set by for government for cultural heritage resources is to conserve, or, if necessary, protect cultural heritage resources that are (a) the focus of a traditional use by an aboriginal people that is of continuing importance to that people, and (b) not regulated under the *Cultural Heritage Act*.”

The In-SHUCK-ch Nation has identified a network of Cultural Protection Areas which require protection for cultural, spiritual, or traditional use reasons. The goal is for these areas to maintain a pristine natural environment, which precludes logging or any other invasive



development.
Management Regime Enhancements Negotiations continue
Conservation Zone: No modification to current policy. Cultural Management Zone: No activity without community consultation and strict adherence to In-SHUCK-ch Nation heritage policy. Protection Zone: No activity without full technical and community consultation.



8.0 ENERGY PRODUCTION

Independent power production has been identified as an important component of economic and social development in the In-SHUCK-ch territory. Indeed significant projects using run-of-river technology are already under construction. These projects are seen as "green energy" solutions to the provision of power locally and provincially. Replacing the existing diesel generation of power will have great environmental and quality of life benefits. The plan needs to look at ecological management, economic development opportunities, as well as ensuring consultation on all levels.

Through the referral process, In-SHUCK-ch is currently building a complete data set of proposed and approved independent power projects with the territory. Understanding the cumulative impact of these projects is an important step in the protection of resources which they impact. This will be critical as the full range of opportunities is brought forward to the proposal stage.

Water has always been an important resource for the In-SHUCK-ch, and continues to be a focus of concern in the territory. It is integral to the people as a source of food (salmon, fishing), as well as culturally important activities (traplines, and recreation). The fact that streams and rivers are engineered near their source is a cause for concern.

8.1 Protecting Environmental, Spiritual, Heritage, and Cultural Resources
Any use of water or development in riparian areas has a potential to have negative implications for a wide range of environmental and cultural resources.
Status Quo
Every power project must navigate an extensive permitting and consultation process, and undergo an environmental assessment.
Management Regime Enhancements
In-SHUCK-ch Nation is undertaking to take a lead role in the



9.0 EXTRACTION OF AGGREGATES AND MINERALS

The extraction of minerals and aggregates is seen to be a less important economic driver for the In-SHUCK-ch Nation.

Typically mineral extraction involves a relatively small foot print on the landscape but with a more intensive impact when compared to other activities such as timber production.

As stated in **Schedule B: Land Use Zones & Conservancies**, Sea to Sky LRMP:

e) "Subsurface mineral exploration and development is permitted. As per existing provincial government mining policy: Exploration and mining are considered temporary land uses with sites returned to a natural state afterwards. Advanced planning for decommissioning and the full environmental cycle must be made clear ahead of time. Funding must be in place ahead of time to cover decommissioning in case of business failure. Advanced exploration and mining activities will seek to minimize cumulative impacts and mitigate or reduce disturbance to First Nation cultural sites by maximizing the use of existing infrastructure". Advanced exploration is defined as those activities requiring a Notice of Work, and development of a Reclamation Program before a permit can be issued

These guidelines remain unchanged, and the process is built into our standard In-SHUCK-ch referrals system where other situational guidelines may apply if necessary. Mining and exploration is not a large issue in the territory.



10.0 RESTORATION AND ENHANCEMENT

Ecosystem restoration and habitat enhancement is not sufficiently addressed by current B.C. government policy. As mentioned in Section 8.0, restoration activities will be important in maintaining the health and integrity of the engineered land in the territory.

We assume that there will be opportunities (and the need) to undertake such activities in the following cases:

- Streams and rivers affected by independent power producers;
- Results of legacy harvesting practices;
- Culturally important areas, and landscapes used for recreational purposes;
- Riparian areas, at both lakes and streams;
- Right-of-ways to be decommissioned; and
- Important or damaged community landscapes.

Specific projects will be identified in a manner described in the table below.

Ecosystem Restoration and Habitat Enhancement
Fundamental to restoring the territory to the In-SHUCK-ch vision.
Status Quo:
No prescribed activities or standard policy.
Management Regime Enhancements
Conservation: <i>Ad hoc</i> identification of remedial action and application of In-SHUCK-ch regimes to avoid new deleterious impacts.
Cultural Management: For all activities, past deterioration will be assessed and remediation built into new activities.
Protection: <i>Ad hoc</i> identification of remedial action and application of In-SHUCK-ch regimes to avoid new deleterious impacts.



11.0 RECOMMENDATIONS

The people of the In-SHUCK-ch Nation are reasserting ourselves as stewards of our territory. In order to do this we must create guidelines that are strict yet easy to follow, so that we may continue to allow and benefit from operations in the territory.

Our first recommendation is that the enhanced regimes defined in Sections 7.0, 8.0 and 9.0 be recognized as working documents. They may be prepared as checklists and memos to be distributed to operators applying to work in the territory. Where work is already underway, operators should compare recommended and current practices, and adjust to In-SHUCK-ch needs. Enhancements include such things as:

- In-depth community consultation;
- Cultural and environmental impact assessments;
- Application of visual quality objectives in In-SHUCK-ch designed scenic areas;
- Reduced wood waste (methods to be identified);
- Increasing emphasis on growing cedar;
- Consideration of non-timber forest products;
- Improved identification of old growth management areas;
- Greater emphasis on deer habitat; and
- Promotion of mixedwood silviculture.

Our second recommendation is to complete new watershed level tactical planning to ensure good stewardship. Specifically we wish to develop new old growth management areas and identify restoration requirements.

Thirdly, we will continue to develop these regimes for implementation by the various tenure holders and licencees within the territory.



12.0 REFERENCES

In-SHUCK-ch Nation. 2006. *Seven Generations Plan*

In-SHUCK-ch Nation. 2006. *Land Stewardship Plan*

Lil'wat Nation. 2006. *Lil'wat Land Use Plan: Phase 1.*

In-SHUCK-ch Nation Interim Government and the B.C. Minister of Agriculture and Lands. 2007. *Strategic Land Use Planning Agreement between In-SHUCK-ch Nation and the Province of British Columbia.*



APPENDIX I
WORKSHOP REPORT





Management Regimes Workshop – Compilation and Review of Notes

The In-SHUCK-ch Management Regimes workshop was held at Baptiste Smith on November 14th, 2007. The goal was to collect community as well as professional input to the Management Regimes and mountain pine beetle mitigation projects. In combining these two projects into a single workshop, and helicopter reconnaissance trip, we managed to meet with interested and involved community members and achieve significant efficiency. The input we received was helpful, and approached the problems and initiatives from several perspectives.

William Tewinkel, PPF described to us the vision he had when he first initiated the Management Regimes project, and what his goals were upon first consultation for community needs:

The In-SHUCK-ch territory as a cultural, and community oriented land base. The people should be able to benefit from all activities within the territory, including ecological management and those that should benefit the communities economically.

- *The valley bottom is heavily logged – we need a variety of silvicultural management themes for the whole valley*
- *Standards are to protect, and make sure that the economies of the communities are considered*
- *Work with better retention and management, and lead as an example for the entire valley*
- *Think of a form of land ownership where they live and manage the land. Hunting and tourism should pay into the land management, and to the people*
- *This whole area depends on the natural environment*
- *Talked about the need, yet difficulty, of economic development due to lack of infrastructure*
- *Renewed connection to the land – and pride in its management.*

David Carson, project manager, and Mr. Tewinkel have together listed issues (among many others): recreation and tourism, heritage, traplines, culture (Cultural Management Areas), fisheries, forestry, agriculture, landslides, water quality and yield, visuals (visual inventory), cedar, culverts and bridges, road management and development, riparian areas, disease, insects and herbicides.

The issues listed will always be issues, and as Dave Carson noted, In-SHUCK-ch Stewardship will continue to evolve. This is a short report on our progress thus far.

The easiest and most obvious place to start when considering territory management was the management of silvicultural systems. It is seen as important that there exists a structure of management strategies which take into account the communities' concerns and needs. What we have must reflect the In-SHUCK-ch vision of the territory¹ most importantly, as there is a wide array of management strategies between traditional clearcut logging, and *not* logging. Working within Fee Simple or Treaty Settlement Land is the simplest way – as opposed to Crown land – so work must continue in designing protocols.

Still, the question remains – what are these systems, and their management structures, going to look like? They could include: revenue sharing; business partnerships; while providing the opportunity for the community to participate in newer and more inclusive ways.

¹ As documented in the *Land Stewardship Plan*



Victor Smith of Samahquam was a core contributor to the workshop, adding input of cultural, political, as well as historical nature. He mentioned that there is surely a certain disconnect between the main players in In-SHUCK-ch Nation and the community, and that policies must come from a community level. Furthermore, what they have in place so far in terms of logging and protection is okay, but community consultation and input must continue - and even increase.

Mike Hedberg, Forestry Consultant, mentioned that the *Land Stewardship Plan* now reflects the Provincial LRMP, so there is a model for what is already occurring in the territory. Wim added that it would then help that if people on the ground, in the communities, had more of an opportunity to look at zonation plans. The danger of course with making the plan too *prescriptive* is then the politics to policy change; it's wise to start with the restriction, then move into how to operate in the areas - not top-down management until one encounters the restrictions and has to work against them.

In terms of management and protection zonation, *Cedar Stands* can be used to our advantage, as they are often recognized already in protection policy. The same goes for Old Growth Management Areas (OGMAs) and Ungulate winter range, in that they are a recognized status to begin with. Basically, these areas are marked in the Forest Stewardship Plan, and should be further drawn upon to work within Management Regimes.

It was discussed that a good way to replenish the communities' interest in their land management was to help re-introduce practices such as traplines. Traplines are a cultural phenomenon, and can help to replenish pride and interest in the land and the resources. They are culturally attached to stories, travel and life. Keeping things within a traditional *regime*, and even marketing services (tourism included) as traditional, will be beneficial.

A final and important regime discussed was the management of riparian zones. Looking at current territory management, this is already an issue, but the Lil'wat Nation are an example of having driven this management and protection forward in using special zonation for beaches and riparian areas on Lillooet Lake. In-SHUCK-ch may want to review this as input to management, as work in the territory is large, and growing. In this case, there would be protocols for road management, 'business' use of beaches, and protection measures categorized.

In closing, our goal is to have the In-SHUCK-ch continue to define the way in which their land is managed.

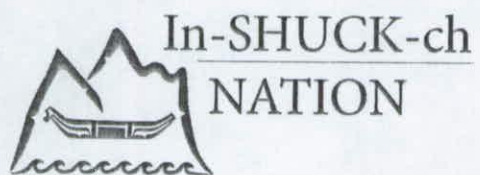
- There is work that has been done that we can take advantage of, and new regimes must be introduced.
- Overall, we can realistically follow existing (and external) guidelines, as long as the people can maintain knowledge or control.
- There are people involved internally with cultural management (Maurice Depaoli, Heritage Advisor), so current and future work should be funneled through Heritage Advisors when development is in question.

We thank the Samahquam Council for hosting this workshop, and for their continuing support.







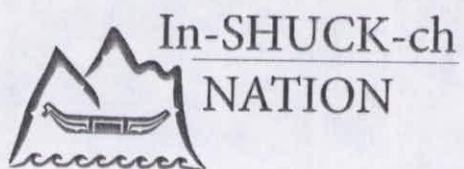


IN-SHUCK-CH NATION

**LAND STEWARDSHIP
RESTORATION AND ENHANCEMENT**

Project Number BC0309532

February 2009



This project was made possible by funding from the First Nations Forestry Program of the Canadian Forest Service, Natural Resources Canada. This report was produced as a component of the *In-SHUCK-ch Resources Capacity Project*, contribution agreement BC0809-037.

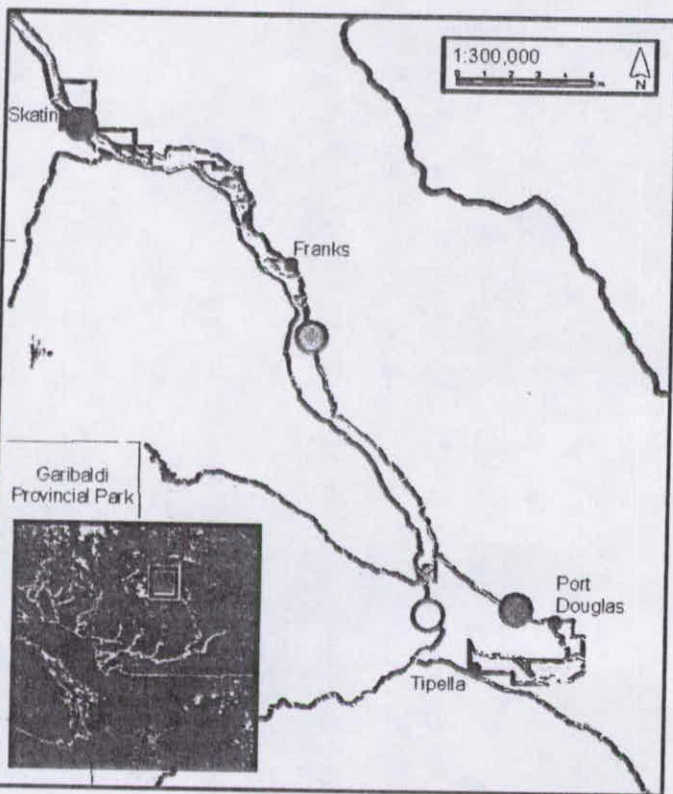
Funding for this project was also provided by the Integrated Land Management Bureau of the B.C. Ministry of Agriculture and Lands.

EXECUTIVE SUMMARY

For the past 30 years, In-SHUCK-ch traditional territory has been impacted by industrial activity such as logging, mining, and power production. Furthermore, as a result of the remote nature of In-SHUCK-ch communities there is a lot of restoration work to be done in and around reserve land including dump site cleanup and ecosystem restoration, metals removal, and restoration along the banks of the Lillooet River.

This report, a component of the In-SHUCK-ch Resources Capacity Project, summarizes the research, investigation and work undertaken in ecosystem restoration planning.

Based on consultation and discussion with Nation members we identified four sites within the territory which are ideal for restoration work. Findings and recommendations for these sites can be found in detail in Section 3.



● Skatin river bank dump site, slope instability **general plan.**

● 7.5k Douglas Road roadside site **prescription.**

● 66.5k East Lake Road. Up-slope erosion, road protection **general plan.**

○ 74k West Lake Road. Stream site **habitat restoration introduction**

Within the envelope of the Resources Capacity Project we intended to implement a restoration project with Forest Investment Account (FIA) funding. Due to the arrival of winter, and issues of tenure and responsibility at our planned site, we were forced to change plans. We focused on pruning and block productivity using the

In-SHUCK-ch Resource Stewardship crew. The pruning work will begin in early March, 2009. The work application form and maps are attached in Appendix II.

TABLE OF CONTENTS

1.0	FUTURE RESTORATION IN THE TERRITORY	1
1.1	STEWARDSHIP AND RESTORATION	1
2.0	METHODOLOGY	2
2.1	RESTORATION RESEARCH	2
2.2	CANDIDATE WORK SITES	2
3.0	RESULTS AND RECOMMENDATIONS	3
3.1	SKATIN INDIAN RESERVE – RIVER BANK SITE	3
3.2	DOUGLAS ROAD 7.5K – ROADSIDE RIPARIAN SITE	6
3.3	66.5K EAST LAKE ROAD SITE	8
3.4	74K – WEST LAKE ROAD	10
4.0	CONCLUSION	12

LIST OF FIGURES

FIGURE 1	SKATIN RIVER BANK SITE (INCLUDING NEXT PAGE)	3
FIGURE 2	POWER POLE INSTALLATION	6
FIGURE 3	EAST LAKE ROAD. UP-SLOPE SITE	8
FIGURE 4	WEST LAKE ROAD STREAM SITE	11

LIST OF TABLES

TABLE 1	SKATIN SITE	5
TABLE 2	CLOUDWORKS TENURE SITE	6
TABLE 3	EAST LAKE ROAD SITE	9

LIST OF APPENDICES

- APPENDIX I – ROADSIDE POWER POLE SITE (PRESCRIPTION)
APPENDIX II – FIA FUNDED PRUNING PROJECT (MAP AND DESCRIPTION)

1.0 FUTURE RESTORATION IN THE TERRITORY

With increasing natural area disturbance in the territory there needs to be a strong focus on ecological restoration and habitat enhancement initiatives.

The key element in restoration, rather than simply revegetation or reclamation, is the focus on the broader ecosystem, and working with its natural functions to assist its 'trajectory' of recovery. Restoration looks at key landscape components as well as the site at hand. Furthermore, restoration considers upstream and downstream factors, and connectivity to bring about results.

Once several projects are in place we can begin to focus on the connectivity between the projects – leading toward a focus on landscape health over site specific health.

1.1 Stewardship and Restoration

The people of In-SHUCK-ch Nation, and especially those who reside in their traditional territory are the natural, and cultural stewards of the land. Restoration activity is an activity of choice for many of them as cultural values are integrated into restoration plans and activities. The integration of ecology and culture in restoration is called eco-cultural restoration, and is a practice on the rise due to generally increased exposure for Aboriginal asserted land claims.

During this project we hired In-SHUCK-ch Resource Stewardship crew member Pasit Wells from the village of Skatin within the territory. Pasit has an educational background in stream restoration and was keen to put it to use and learn more. This provided Pasit with three days of employment, as well as a continued exposure to restoration planning and research close to her home.

2.0 METHODOLOGY

2.1 Restoration Research

Our restoration research constituted two separate trips into In-SHUCK-ch territory. The first trip was reserved for scoping out of sites for implementation (FIA) candidates, and general site reconnaissance. On our second trip, accompanied by Mr. Munson of Westland Resource Consultants, we assessed our planned implementation site (Cloudworks tenure site described on p.6) for a site prescription. With the help of Mr. Munson we also made our general area plans for the remaining restoration candidate sites.

Furthermore, through both trips into the territory – including research to complete the prescription for the implementation site – we worked with Skatin Nation community member Pasit Wells. Pasit was able to give us direction for planning and reconnaissance, as well as important cultural background information for some of the sites we assessed.

In this report we describe four sites, and we are hoping to collect more candidates as we continue to work with In-SHUCK-ch in managing their traditional territory.

2.2 Candidate Work Sites

For this project our restoration implementation section was externally funded by the Forest Investment Account (FIA). FIA money may only be used on Crown Land sites. We assessed three sites on Crown Land and chose the best candidate based on the amount of money available and the size of the project. Time constraints also played an important part in choosing an implementation site as approaching winter would narrow our window for on-the-ground-work.

The other three sites are reserved for general assessment for future restoration activity. Funding sources have been identified, but more work needs to be done regarding which sources could be applied to which sites. There are several sites within IR which should be restored soon as there is chemical and river/riparian danger. For these sites we are putting together general area plans based on our observations, and will outline goals for slope stability, and ecological integrity.

Our plans for the FIA funded work changed several times. After planning to implement restoration within energy company tenure we also assessed a slope above a Forest Service Road which would not be covered by FIA funds.

In order to keep the funds beneficial to In-SHUCK-ch community employment, we switched funding direction to a block productivity pruning project, a more standard implementation of FIA funds. That work is being carried out with the help of Hedberg and Associates of Squamish, BC.

3.0 RESULTS AND RECOMMENDATIONS

The following are our general area plans for our assessed sites, individually outlined in table format.

A detailed work plan and prescription for Site 2, Douglas Road, can be found in Appendix I. The document is a prescription document prepared by Westland Resource Consultants.

3.1 Skatin Indian Reserve – River Bank Site



Figure 1 Skatin river bank site (including next page)

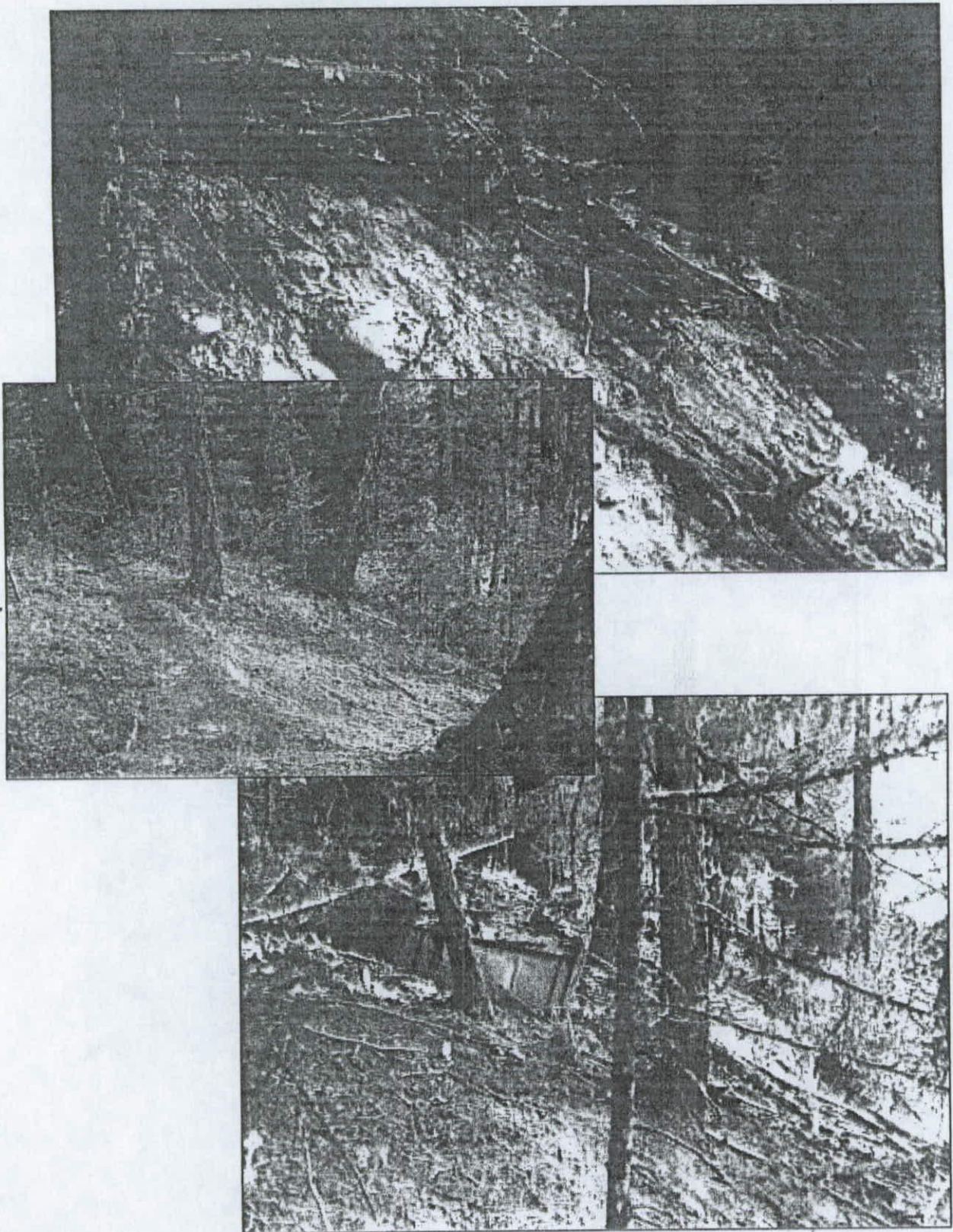


Table 1 Skatin site

Site:	Skatin IR – river bank dump site
Description of area and problem:	<p>At approximately 20m upslope from Lillooet River there is what can be described as a household materials dump site on a steep slope. Slope failure, and slumping is evident and slope continues to degrade. Substrate is mineral soils. Slippage may be caused by both water, as well as chemical from metals and rust.</p> <p>Area is Douglas fir (<i>Pseudotsuga menziesii</i>) and Grand fir (<i>Abies grandis</i>) dominated. Rich in moss, and lacks stabilizing shrubs. Some Pines (<i>Pinus contorta</i>) on site indicating fast draining soils.</p>
Recommendations:	<p>An initial site cleanup is necessary. Remove all garbage and metals from slope. Stabilize mineral soil with bioengineering – gullies to control runoff. Apply ryegrass seeding with erosion control cloth.</p> <p>Plant native shrubs that can begin to hold the soils. Continue with removal of invasive species to ensure health of native species.</p>
Goals:	<p>Clean up area. Stabilize slope. Reduce human disturbance. Create alternatives to dumping in natural areas.</p> <p>Return it to a natural state that allows for natural succession.</p>

These pictures (Figure 1) display the need for riverbank restoration at this site. The steepness of the site makes it all the more critical. Furthermore, as the metals on this slope continue to rust it will add to the slope instability.

Note the middle picture showing a path. This path runs north-south across the top of the slope, and is a path that is used to get to common downstream fishing sites. Along with the use of this path, it is important that culturally significant shrubs be considered for restoration in this area as long as they satisfy the goals for restoration and stability as well.

3.2 Douglas Road 7.5k – Roadside Riparian Site



Figure 2 Power pole Installation

See Appendix I for our site prescription, including more photographs.

Table 2 Cloudworks tenure site

Site:	Douglas Rd 7.5k – Power pole, roadside riparian site
Description of area and problem:	<p>On the east side of the Douglas Rd there are two transmission poles within Cloudworks tenure. Disturbance is caused by installation of poles on steep slope. Mineral soil is exposed, erosion is likely constant. Invasive species making an entrance.</p> <p>Approximately 20m from toe of slope is a stream/riparian area. There is a vegetative boundary, but exposed debris may be reaching the stream at north site.</p>
Recommendations:	First recommendation is bioengineering to stabilize slopes. Mix

	<p>of erosion control cloth, digging of drainage lines backed with wood debris, hay coverage, and seeding for stability over time. Spring plant of shrubs that can be easily controlled (under power line).</p> <p>Opposite side of road: we recommend the installation of extra culvert. Water pools and stream may soon undercut road.</p>
Goals:	Stabilize slope. Minimize mineral soil runoff. Protect stream and riparian area. Minimize future disturbance in tenure area with continual vegetation management.
Possible Funding Sources:	Option: Cloudworks Energy Inc. as in-kind support.

3.3 66.5k East Lake Road Site



Figure 3 East lake road. Up-slope site

Table 3 East lake road site

Site:	66.5 E.Lake Rd – Up-slope and road protection
Description of area and problem:	Ongoing and possibly dangerous slope failure upslope from road, east side. Several slumps at top, and slow slippage of mineral substrates. Lack of vegetation shows constant erosion. Further failure of slope could be a risk to road conditions and community access.
Recommendations:	We recommend action to stabilize slope and ensure grass coverage of mineral soils. Trees at very top are looking unstable. Bioengineering to control direction of water flow with use of drainage gutters. Erosion control cloth and seeding is an option. When material is stabilized, native shrubs can be planted on the site.
Goals:	Stabilize slope. Control water runoff. Ensure access road is not jeopardized.
Possible Funding Sources:	In-kind contributions from both In-SHUCK-ch and Lizzie Bay Logging Co. for an In-SHUCK-ch crew based project.

Looking at the pictures provided in Figure 4, most of this site is not at risk of sudden and massive slippage; the risk lies in the top overhanging area where two large trees are at risk, as well as slow, constant erosion that will affect the road over time.

As outlined in the table above our goals are to assess those trees for danger to the FSR, and removal if necessary, and use bioengineering techniques to stabilize the slope. In this instance ecosystem-based restoration should be favoured over costly, basic engineering solutions.

3.4 74k – West Lake Road

This site has potential for future restoration. It is a disturbed stream site which was once a spawning site, and it is believed that it has been disturbed up-stream by industry activity. We plan to visit and assess the area further when time and funding permits.

A site such as this is important for future consideration as it comes by request of a community elder. There is memory of salmon spawning grounds, and a fishing site which is no longer active.

The pictures provided below (Figure 4), show a healthy looking stream ecosystem where the habitat element should be assessed. There is evidence of large woody debris that can act as salmon habitat space, as well as a gravel-bottom stream that is beneficial to spawning activity. Again, this area needs separate and in-depth assessment for likely upstream issues affecting habitat suitability.



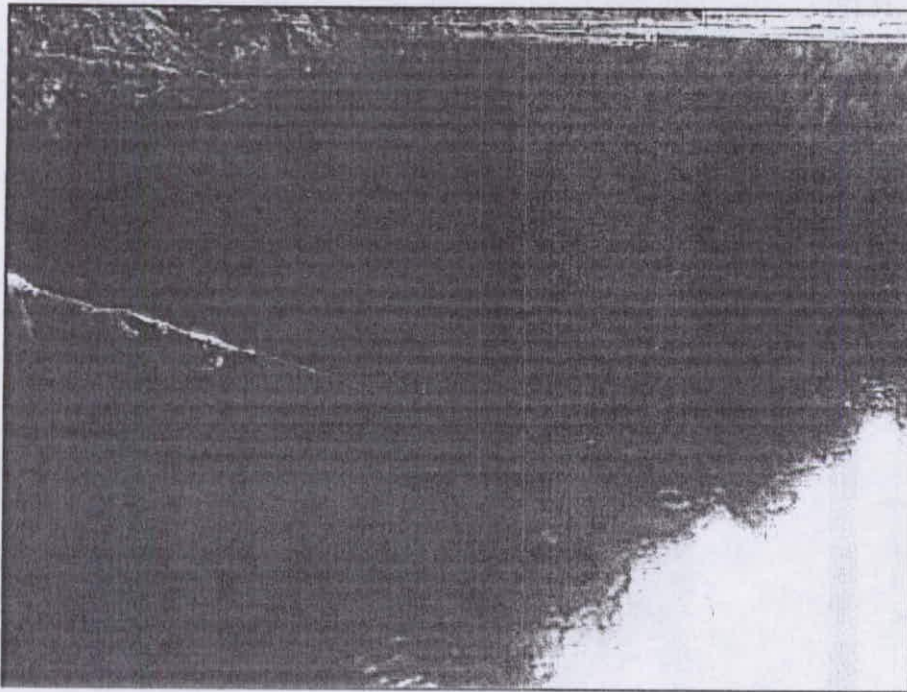
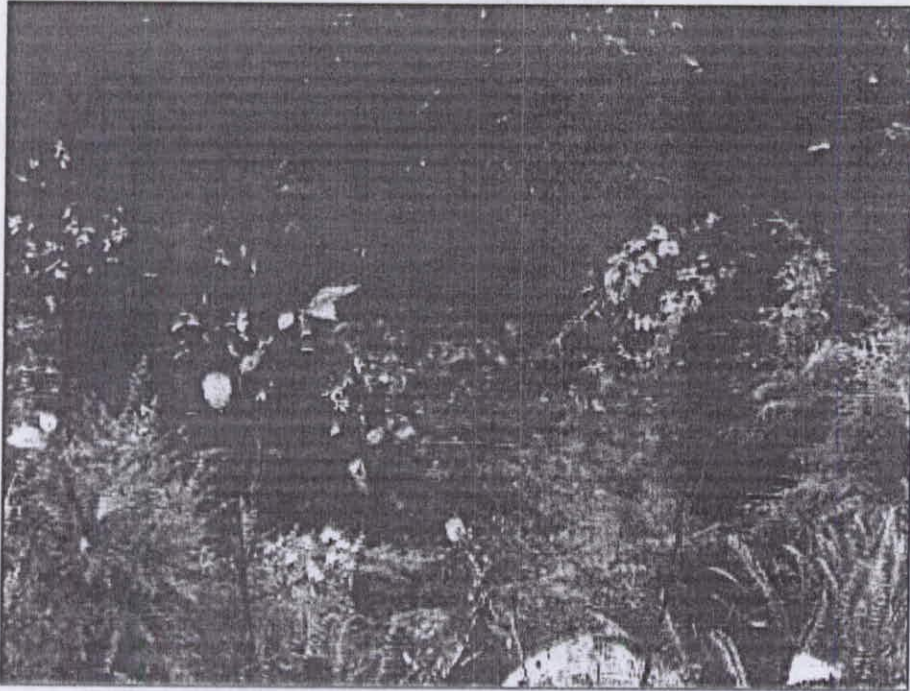


Figure 4 West lake road stream site

4.0 CONCLUSION

Through this project we achieved the following goals that were laid out in the agreement with FNFP upon the acceptance of our proposal:

- Identified degraded riparian and terrestrial habitats and ecosystems;
- Visited candidate sites and selected the best candidates for restoration; and
- Developed a field-confirmed, site-specific prescription for restoration of the highest priority site.

Regarding our second goal (best candidates); we managed to identify four candidate sites for restoration and summarize general work plans for three of them.

Regarding our final goal (field confirmed prescriptions) we accomplished a prescription for one best candidate site, and one which can still be accomplished in the future when timing and support permits. We feel that not only were our goals for FNFP fulfilled, but we were able to identify and plan for restoration on more sites that originally agreed upon. This looks promising for restoration work in the territory, and future employment for Nation members who appreciate and look forward to this type of work in the future.

As mentioned earlier in the report, we were unable to use FIA funding as planned for restoration purposes in the territory. That money is now being used by our In-SHUCK-ch Nation Resource Stewardship crew for block productivity work.

For future project opportunities we are researching the use of the Community Development Trust *First Nations Job Opportunities* initiative, which is also administered by Pricewaterhouse Coopers LLP.

<http://www.cd.gov.bc.ca/cdt/index.htm>.

This funding can be used along side in-kind contribution (as noted in tables), as well as Eco Action project funding:

http://www.ec.gc.ca/ecoaction/what_is_e.html

...and Community Futures British Columbia:

<http://www.communityfutures.ca/provincial/bc/programs/> .

APPENDIX I

Douglas Road Site (Prescription)

**Site Restoration Prescription
Douglas Forest Service Road Sites**

**For
Timberline Natural Resource Group
In-SHUCK-ch First Nation**



Prepared by:



November 2008

Site Description

Westland Resource Group was requested to assist Timberline Natural Resource Group and the In-SHUCK-ch First Nation in assessing two roadside sites for restoration of ground cover and protection of slopes from erosion and sedimentation. The sites are located in the traditional territory of the In-SHUCK-ch First Nation, north of Little Harrison Lake (**Figure 1, Site INSH1**). The sites are found at km. 7.5 of the Douglas Forest Service Road (FSR), and 1.5 km. north of the community of Port Douglas.

The project area is part of the Coastal Western Hemlock (CWH) Biogeoclimatic Zone (Meidinger and Pojar 1991). At the site level, the project area is classified as **CWHds1** – Southern Dry Submaritime Coastal Western Hemlock Subvariant. The CWHds1 occurs at low elevations in drainages of the upper Fraser River east and north of Chilliwack, and in the eastern portion of the Coast Mountains from upper Harrison Lake (project area) to the Homathko River. Elevation at the sites is approximately 140m asl. Annual precipitation at the nearest weather station, in Whistler, BC, is approximately 1,270mm, with the November to April period being the wettest months.

The CWHds1 has a climate transitional between the coast and interior, characterized by warm, dry summers and moist, cool winters, with moderate snowfall. Vegetation on zonal sites in the CWHds1 are dominated by Douglas-fir, western hemlock and western red cedar (Green and Klinka 1984).

The sites are located mid-slope on a hill leading down to the community of Port Douglas. Overstory vegetation adjacent to the sites contains the typical species for the BEC zone – Douglas-fir, western hemlock, western red cedar and alder. Understory vegetation on adjacent slopes includes thimbleberry, sword fern, trailing blackberry, big leaf maple seedlings, and a cover of various mosses. Soil on the sites is a combination of sand, gravel and cobble fill, in an unconsolidated mix, distributed down the east bank off the road. Aspect is east-facing for both sites.

Restoration Challenges

The first of two adjacent restoration sites is located upslope, on the east side of the Douglas FSR (**Figures 2 and 3**). A hydro line right of way was cleared of overstory trees in 2007, and new hydro poles installed in the summer of 2008. The slope was disturbed to install the hydro pole and not re-vegetated. Sand and gravel fill was deposited at the pole installation location. This site has three smaller work areas: an upper slope of 7.5m, at an angle of 25°, falling from the road to a terrace leading to the hydro pole; a central tote-road on a level terrace varying between 3-4m in width, leading from the Douglas

FSR to the hydro pole, and a longer lower slope of 11m, at an angle of 28°, dropping to the slope toe. The lower slope has large cobbles, boulders and roots strewn across the surface. The lower toe of exposed ground is approximately 30-35m from a small creek. The exposed site has a width of 21m at the roadside, to a width of 11-12m at the slope toe.

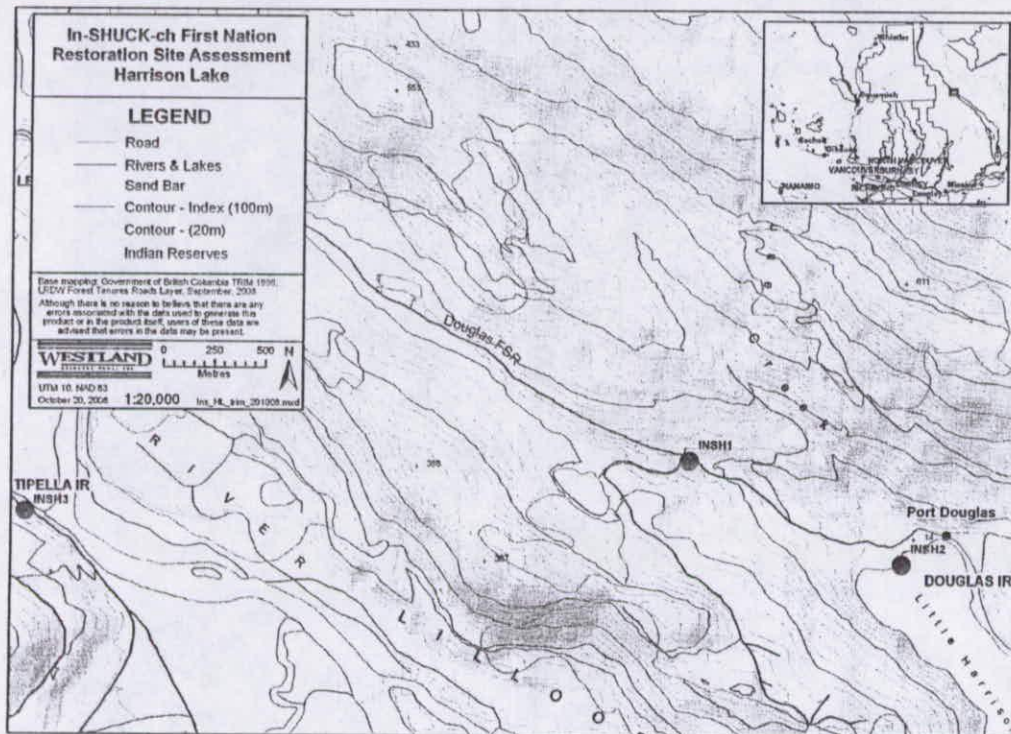


Figure 1: Restoration Site Location – (INSH 1)

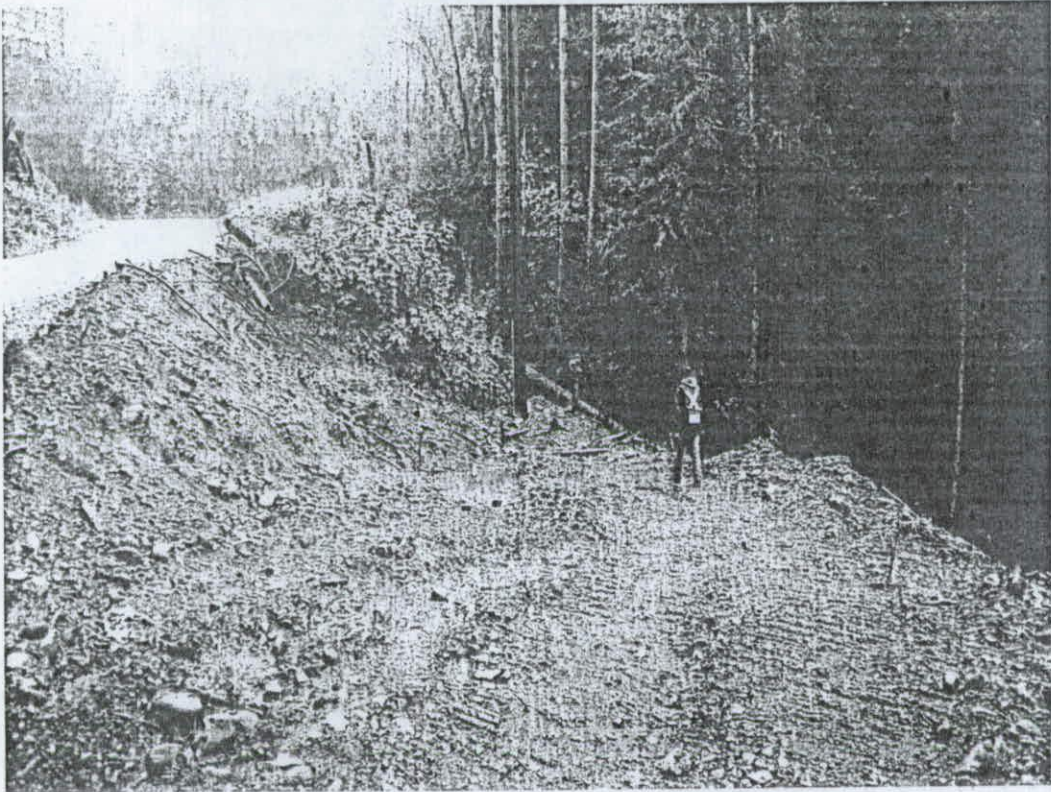


Figure 2: Restoration Site 1 – Upper Section, looking north

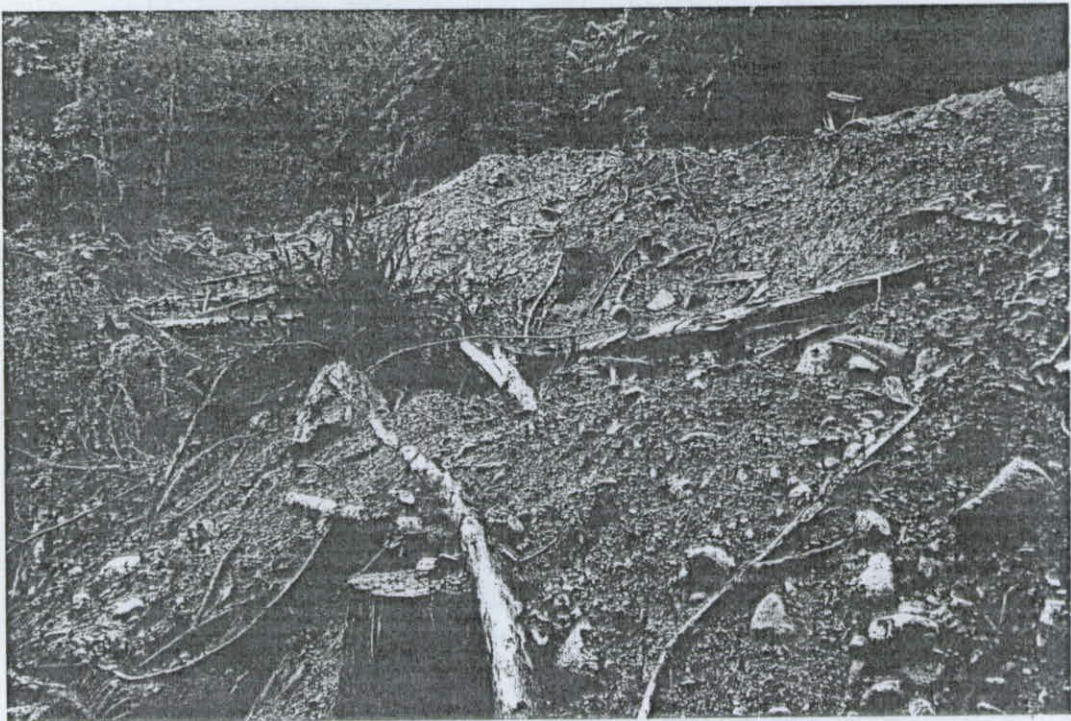


Figure 3: Restoration Site 1 – Lower Section, looking south

To the north of the exposed slope (uphill), a tributary of the lower creek runs downslope. The tributary water flow consists of seepage water from the road above, which has not been put in a culvert. The riparian area of the tributary has the understory shrub layer intact, but the overstory tree layer has been removed on the right-of-way.

The second restoration site is located approximately 100-110m downslope of the first site. An unbroken sand-gravel slope of 17-20m falls from the roadside down past an installed hydro pole to the slope toe (**Figure 4**). Sand and gravel fill was deposited at the pole installation location. The lower slope also has cobbles, logs and tree stumps breaking up the slope surface. An additional lobe or fan of eroding sand-gravel extends below the main exposed area for another 7m, and ends approximately 20m from the small creek at the bottom of the slope (**Figures 5 and 6**). The creek water was clear during the site reconnaissance, and not showing any impacts of sedimentation from the upper slope.

Restoration Objectives

The objectives of the site restoration work are:

- to protect the exposed soil surfaces from erosion prior to the early winter high rainfall period,
- to prevent sediment from the slopes from entering the riparian area below, and
- to revegetate the exposed sites.



Figure 4: Restoration Site 2 – Upper Section, looking north

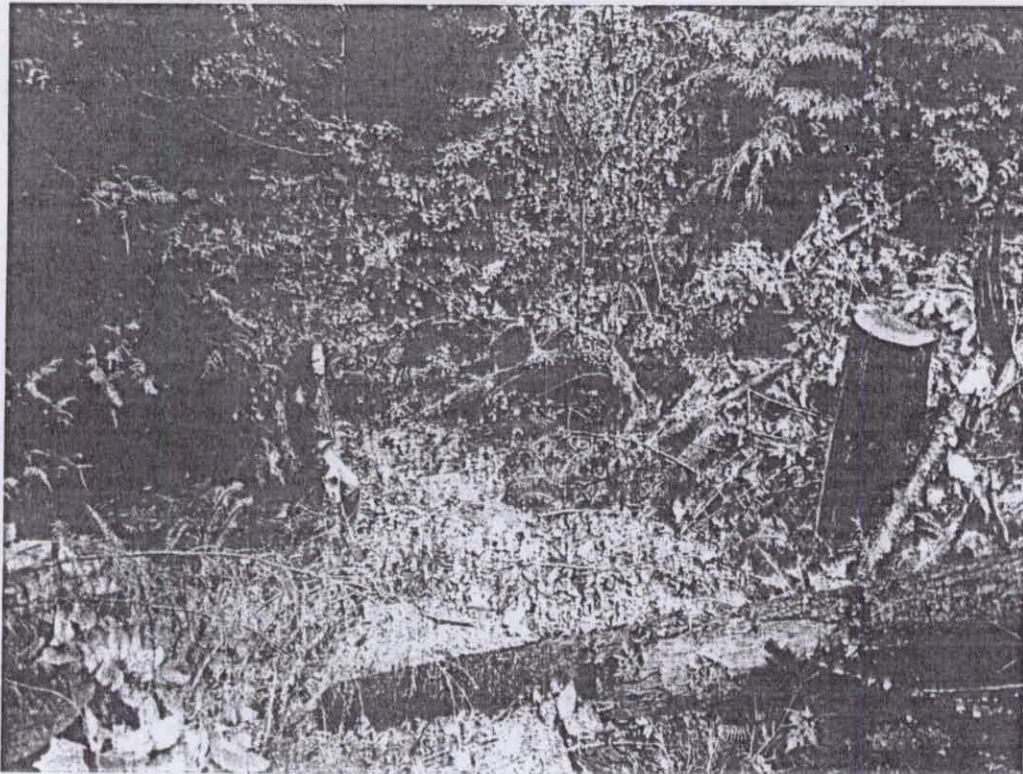


Figure 5: Restoration Site 2 – Lower Section, sand and gravel fan



Figure 6 – Restoration Site 2 – Riparian Zone

Work Sequence:

1. Site Preparation

Restoration Site 1:

To reduce the amount of surface water moving downslope, the following work should be done at the edge of the roadside at the top of the site:

- Excavate a shallow trench (7-10cm deep) by hand parallel to the road, to direct water from the road along the road edge and away from the exposed slope.
- Between the trench and the slope break, silt fence will be installed to prevent surface material from moving off the road and downslope.

The short slope in the upper work area does not require any preparation prior to seeding.

For the flat middle terrace:

- Excavate a shallow trench at the toe of the upper slope, along the top edge of the flat terrace, to carry water off site.
- Excavate 2 or 3 water bars or trenches (7-10cm deep) by hand to carry water off the terrace and away from the tributary creek riparian area to the north of the exposed slope.
- Excavate a shallow trench (7-10cm deep) at the bottom edge of the terrace, at the crest of the lower slope, to carry water off site.
- Install silt fence across the crest of the lower slope behind the lower trench on the flat terrace.

For the lower slope:

- Excavate a shallow trench (25-35cm deep) diagonally across slope, from upper north to bottom south corner, on a shallow angle. Pile the trench material to form a low berm along the backside of the trench.
- Cut saplings (20-25cm diameter) from downed timber adjacent to the site, and lay in the trench,
- Pound wooden stakes into the ground on the downslope side of the saplings to hold them in place.
- Backfill the saplings with material from the berm.
- These saplings will catch seed and sediment from upslope, and the trench will direct surface water off the exposed site.

Between the upper and lower restoration sites, water from the road surface should be directed in small trenches off the road surface and over the bank into the vegetated

median strip between the two sites. This will reduce the amount of water reaching the lower restoration site.

Restoration Site 2:

to reduce the amount of surface water moving downslope, the following work should be done at the edge of the roadside at the crest of the slope:

- Excavate a shallow trench (7-10cm deep) by hand parallel to the road, to direct water from the road along the road edge and away from the exposed slope.
- Between the trench and the slope break, silt fence will be installed to prevent surface material from moving off the road and downslope.
- Additional silt fence will be installed at the toe of the sand-gravel fan at the slope bottom, to prevent sediment from entering the riparian area of the creek.

on the main slope of the site:

- Excavate a number of shallow trenches (25-35cm deep) diagonally across the face of the slope, to carry surface water off the exposed site. Pile the trench material to form a low berm along the backside of the trenches.
- Cut saplings (20-25cm diameter) from downed timber adjacent to the site, and lay on the berm behind the trenches.
- Pound wooden stakes into the ground on the downslope side of the saplings to hold them in place.
- Backfill the saplings with material from the berm.

2. Site Seeding

Seed by hand all exposed surfaces of the two restoration sites with an agronomic mixture:
Seed mixture composition suitable for use in CWHds1 zone:

CorePro Econo (Pickseed)

Seed mixture (by weight):	50%	Fall Rye
	17%	Annual Ryegrass
	10%	Creeping Red Fescue
	8%	Timothy
	7%	Tall Fescue
	7%	S.C. Red Clover
	1%	Alsike Clover

Application rate: 10-17kg/1000 sq.m.

Site 1: Approximately 594 sq.m.
10 kg. of seed mix at 17kg/1000 sq.m.

Site 2: Approximately 696 sq. m.
12 kg. of seed mix at 17kg/1000 sq.m.

Total seed mix required: 22 kg.

Application method: Belly grinder or by hand

3. Site Fertilizing

Apply slow-release Nitrogen fertilizer to both sites: **50% PCSCU 18-18-18 Type**

Application rate: 25kg per site

4. Site Mulching

For Restoration Site 1, after seeding the site:

- Apply straw mulch to the slopes to prevent rainfall splash and surface runoff from carrying the seeds downslope. Straw should be spread by hand to a thickness of 2-5cm on the exposed surfaces. One small straw bale will cover approximately 20 sq.m. of area.

Size of exposed area: Approximately 600 sq. m.

Number of bales required: Recommend 30-40

For Restoration Site 2, for the main slope of the site, use Rolled Erosion Control Cloth:

- Excavate an anchor trench 30cm deep and 20cm wide approximately 1m back from the crest of the exposed slope to be protected
- Insert the leading edge of the RECC roll into the trench and backfill and compact the soil. Insert RECC anchors at 30cm intervals along the edge of the trench
- Roll RECC downhill to the bottom of the main exposed slope, eliminating any spots with tension and keeping RECC loose.
- Cut the RECC and staple above any berms and trenches, and restaple and re-roll below the berms and trenches (i.e., don't put RECC material in trenches).
- Overlap edges of parallel RECC rolls about 5-7cm, and staple every 90cm
- Staple RECC blanket sufficiently to maintain contact with soil surface

- Excavate a trench (7-10cm deep) at base of main exposed slope, to divert runoff away from the treated slope.

Expected Timeframe for Completion of Work:

Restoration Site 1: 1 day (including transportation)

Restoration Site 2: 2.0 days (including transportation)

WCB Practices

- Chainsaw operators should wear protective safety gear
- Persons moving saplings and applying seed mix should have safety footwear with good traction for slopes
- Level 1 First Aid recommended for crew.

Special Concerns

- Seed application could be done in wet, inclement weather, making conditions on the exposed slopes slippery.
- Care should be taken to not introduce sediment or garbage of any sort into the creek at the base of the slope.
- Invasive species that have established on the exposed surfaces, i.e. thistle, should be dug up and removed.

Labour and Material Requirements

1. Labour

- Project Manager – Torbjorn Rive
- Project Consultant – Thomas Munson
- In-SHUCK-ch First Nations Technicians – (3)

2. Material Requirements

- Pickup truck for materials
- Chainsaws (2)
- Gasoline and chain oil
- Axes (2)
- Sledge hammers (short handle) (2)
- Shovels (4)

- Machete
- Mattock or Pulaski (2)
- Loopers
- Pre-staked silt fence –100m
- Seed mix – 22 kg. (2 bags)
- Rotary belly seed spreader
- Straw bales – 40
- Rolled Erosion Control Blanket (coconut mat)
- Staples
- Bundle of 18” wooden stakes
- Plastic totes (for seed)

Estimated Costs

Material	Unit Cost	Units needed	Total
Chainsaws		2	In-kind?
Gasoline	\$1.20/l	20	\$ 24.00
Chain oil	\$3.00/l	2	\$ 6.00
Axes		2	In-kind?
Sledge hammers	\$ 38.18	2	\$ 76.36
Shovels	\$ 28.77	3	\$ 86.31
Machete @ case	\$ 43.90	1	\$ 43.90
Mattock or Pulaski	\$ 31.56	2	\$ 63.12
Silt fence	\$45.00 x 33m	3	\$ 135.00
Seed mix	\$46.21 x 20kg	2	\$ 92.42
Fertilizer	\$37.71 x 25kg	2	\$ 75.42
Seed belly spreader			In-kind?
Straw bales	\$ 7.00	40	\$ 280.00
Erosion control cloth	\$ 105.35 x 33m	8	\$ 842.80
Staples (for cloth)	\$ 55.00/box	2	\$ 110.00
Wooden stakes	\$ 9.98	2	\$ 19.96
Plastic totes (for seed)	\$ 12.00	2	\$ 24.00
Total			\$1,878.49

Expected Benefits

- Protection of exposed slopes from seasonal rainfall and erosion
- Prevention of transport of sediment to riparian area
- Employment of local In-SHUCK-ch First Nation members
- Training in proper ecological restoration techniques

Post-Work Monitoring

After one week:

- Inspect treatment sites to determine if straw mulch (or Rolled Erosion Control Cloth) is still in place. If surfaces and seeds have become exposed, replace straw to thickness of 2-5cm. (If cloth has been displaced, re-staple)

After heavy rainfall events:

- Check on drainage of surface water off site, and on stability of drainage channels and saplings. Re-position stakes if necessary. Check for evidence of silt or sediment extending below lower silt fence on Site 2.
- Check on conditions of trenches at roadside to determine if water is being carried away from the slopes. Check on stability of silt fences and re-position stakes if necessary.

Follow-up:

- Check on germination success of seed and performance of erosion control measures. Re-seed bare spots and fix erosion control problems the following spring as required.

References:

- Green, R. and K. Klinka. 1984. *A Field Guide to Site Identification and Interpretation for the Vancouver Forest Region*. Ministry of Forests, Research Program. Victoria, BC.
- Reidinger, D. and J. Pojar. 1991. *Ecosystems of British Columbia*. Ministry of Forests, Research Branch. Victoria, BC.

Suppliers of Materials

1. Seed

Pickseed

1338 Riverside Road

Abbotsford, BC

Toll free: 1-877-504-7964

Contact: Don Biggin

Pickseed Warehouse (material pickup)

Evergro Canada

7430 Hopcott Road

Delta, BC

Phone: 604-940-0290

2. Erosion Control Supplies

Nilex Limited

3963 Phillips Avenue

Burnaby, BC

Toll free: 1-800-663-0478

Contact: Chris Clark

3. Field Tools

Acklands-Grainger

2015 Government Road

Victoria, BC

Phone: 250-384-1111

APPENDIX II

FIA Funded Pruning Project (Map and Description)



Scale: 1: 20,000

Copyright © Disclaimers

The material contained in this web site is owned by the Government of British Columbia and protected by the Copyright Act. It may not be reproduced or multi-media transmission in any form without the prior written permission of the Government of British Columbia. It is made available on this web site as a representative sample of the material owned by the Government of British Columbia. The Copyright Protection System from which this material was extracted through the Copyright Administration Page.

New Men of British Columbia

Fort St. John
Terrace
Quebec
Beverly Lake
Courtenay Trail
Victoria

Treatment Map Tuwasus Creek Pruning



Legend

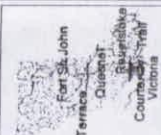
- Major Cities
- Active Treaty Reserves
- Forest Service Road
- Watercourse
- Wild Area
- Active Strategic Forest
- Openland
- Protected Areas
- Parks
- Industrial Areas
- Urban Areas
- CHS Industrial Watercourses
- CHS Rivers
- CHS Lakes
- CHS Stream Networks

Scale: 1:5,000

Copyright/Disclaimer

This map is a reproduction of the original map created by the British Columbia Ministry of Forests, Land and Natural Resources. The map is for informational purposes only and does not constitute a legal document. The map is not to be used for any purpose other than the one for which it was created. The map is not to be used for any purpose other than the one for which it was created.

Key Map of British Columbia





PRE-STAND TENDING SITE DESCRIPTION / PRESCRIPTION

USE TO SUMMARIZE, PREFERABLY IN THE FIELD, FROM THE UNIT INFORMATION FOR SILVICULTURE TREATMENT (FS 747) AND THE PRE-STAND TENDING SURVEY (FS 748).

AREA IDENTIFICATION										
TSB		DATE OF SURVEY		Y M D		LOCATION				
500		2009		2 12		Tuwasus Creek				
Squamish		AREA NAME		UNIT		OPENING: Map Sheet		Opening		
		Tuwasus		37		92J008		37		
O NUMBERS		U.T.M. GRID REFERENCE				HISTORY RECORD KEY				
F.S. Number		Licensee Name								
		OR								
ADMINISTRATION NUMBER		F.S. PROJECT NUMBER		SECTION 88 REFERENCE NUMBER		LICENCE / AGREEMENT NUMBER				
AREA DESCRIPTION *										
8.5 (A.1)		ECOSYSTEM SUB-ZONE AND ASSOCIATION				SOILS				
9.0 ha		CWH131 01/03								
Well Drained		AVERAGE SLOPE PERCENT		SLOPE POSITION		SLASH CLASS		BRUSH CLASS		
		30		Mid		NA		NA		
ELEVATION RANGE		TOPOGRAPHY		MACHINE TRAFFICABILITY						
280 - 380m		Rolling		NA						
STAND DESCRIPTION *										
SY COMPONENT		SILVICULTURE COMPONENT				DOMINANCE PATTERN				
Fa, Py, Mb, Cw, Hw		Fa, Cw, Py, Hw				<input type="checkbox"/> Unexpressed <input checked="" type="checkbox"/> Emerging <input type="checkbox"/> Established				
P.L.		HISTORY		WELL-SPACED S.P.H.		FREE-GROWING S.P.H.		ESTIMATED SNAGS PER HECTARE		
I Fa = 32		L86 P38		1000 (No M)		1000				
TALLIES AND INFORMATION										
TREE LAYER TALLY - DENSITY							COMPETITOR SPECIES TALLY			
DIAMETER (CLASS OR AVERAGE AND RANGE)					TOTAL	WS	SPP	PERCENT COVER	HEIGHT (m)	
0-5	5-10	10-15	15-20	20+					Current	Est. 19__
5	15	20	27	3	70	43				
3	8	5	3	1	20	2				
3	4	6	1	-	14	4				
-	1	-	-	-	1	1				
3	3	-	2	1	9	-				
14/280	31/620	31/620	32/640	5/100	114/2280	50/1000				
SAMPLE TREE INFORMATION										
DBH (cm)		HEIGHT (m)		AGE		PERCENT LIVE CROWN				
Average	Range	Average	Range	Average	Range					
15	5-20	13	12-14	20	18-22	90-100				
10	5-15	11	10-12	20	18-22	100				

ACCESS *

DISTANCE 5 km FROM Baptiste BY 4x2 Summer/Winter
TRAVEL TIME 0.2 hrs. ROAD IMPROVEMENTS REQUIRED Snow Removal May be necessary

PRESCRIPTION

PLANNED CROP AND FUTURE REGIME

High Quality Fd/Ew7 sawlogs at Final Rotation of approximately 70-80 years. Possible commercial thin at age 50-60

OBJECTIVE OF TREATMENT

Current Stand is uniform spacing open grown Fd/Ay. IF left will likely produce lower quality (limby Fd) with low percentage of clear wood. The intent of the treatment is to improve future quality and value of the stand

RECOMMENDED TREATMENT AND ALTERNATIVES

Single lift prune (3m) of the "best" 300 Fd/ha

PROTECTION CONSIDERATIONS

NA

DAMAGING AGENTS

Suspect Root Rot noted in isolated patches - Do not prune w/in 5m of dead/dying trees

IMPACT ON OTHER LAND RESOURCE USERS (e.g., Fish and Wildlife, Recreation, Range)

N/A

COST SUMMARY (Estimate)

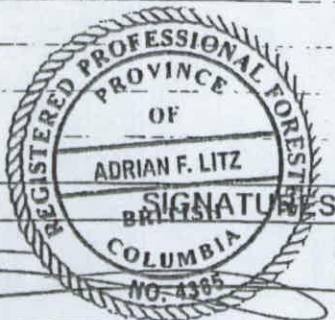
	PROJECT COST	COST PER HECTARE
ON-SITE - DIRECT	\$	\$
- SUPERVISION	\$	\$
OVERHEAD	\$	\$
TOTAL	\$	\$

PRIORITY

RELATIVE DISTRICT / TSA PRIORITY

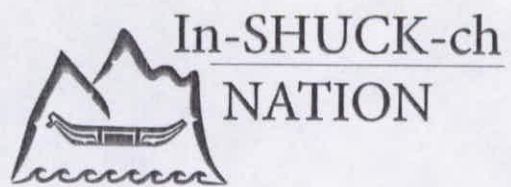
- ☐ LOW
☐ MEDIUM
☐ HIGH

COMMENTS



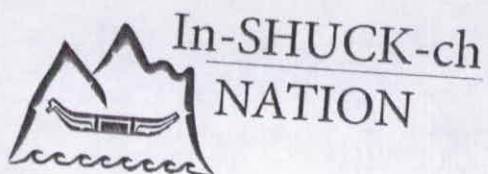
DATE PREPARED 9/02/20 PREPARED BY [Signature] APPROVED BY (RESOURCE OFFICER, SILVICULTURE)

4365



IN-SHUCK-CH NATION
ENHANCED CONSULTATION
IN CULTURAL MANAGEMENT AREAS

Project Number BC0308931
February 2009



This project was made possible by funding from the First Nations Forestry Program of the Canadian Forest Service, Natural Resources Canada. This report was produced as a component of the *In-SHUCK-ch Resources Capacity Project*, contribution agreement BC0809-037.

Funding for this project was also provided by the Integrated Land Management Bureau of the B.C. Ministry of Agriculture and Lands.

Table of Contents

1.0	BACKGROUND	1
2.0	CULTURAL MANAGEMENT AREAS	2
3.0	CONSULTATION AND ACCOMODATION	5
3.1	CONSULTATION POLICY	5
3.2	CONSULTATION PROTOCOL.....	5
3.3	CONSULTATION PROTOCOL AGREEMENT	6
4.0	PROJECT EXECUTION.....	7
4.1	METHODOLOGY	7
4.2	WEBSITE UPGRADE	7
5.0	IMPLEMENTATION	10
5.1	TRADITIONAL USE STUDY.....	10
5.2	VISUAL MANAGEMENT STRATEGY.....	10
6.0	REFERENCES	11

List of Tables

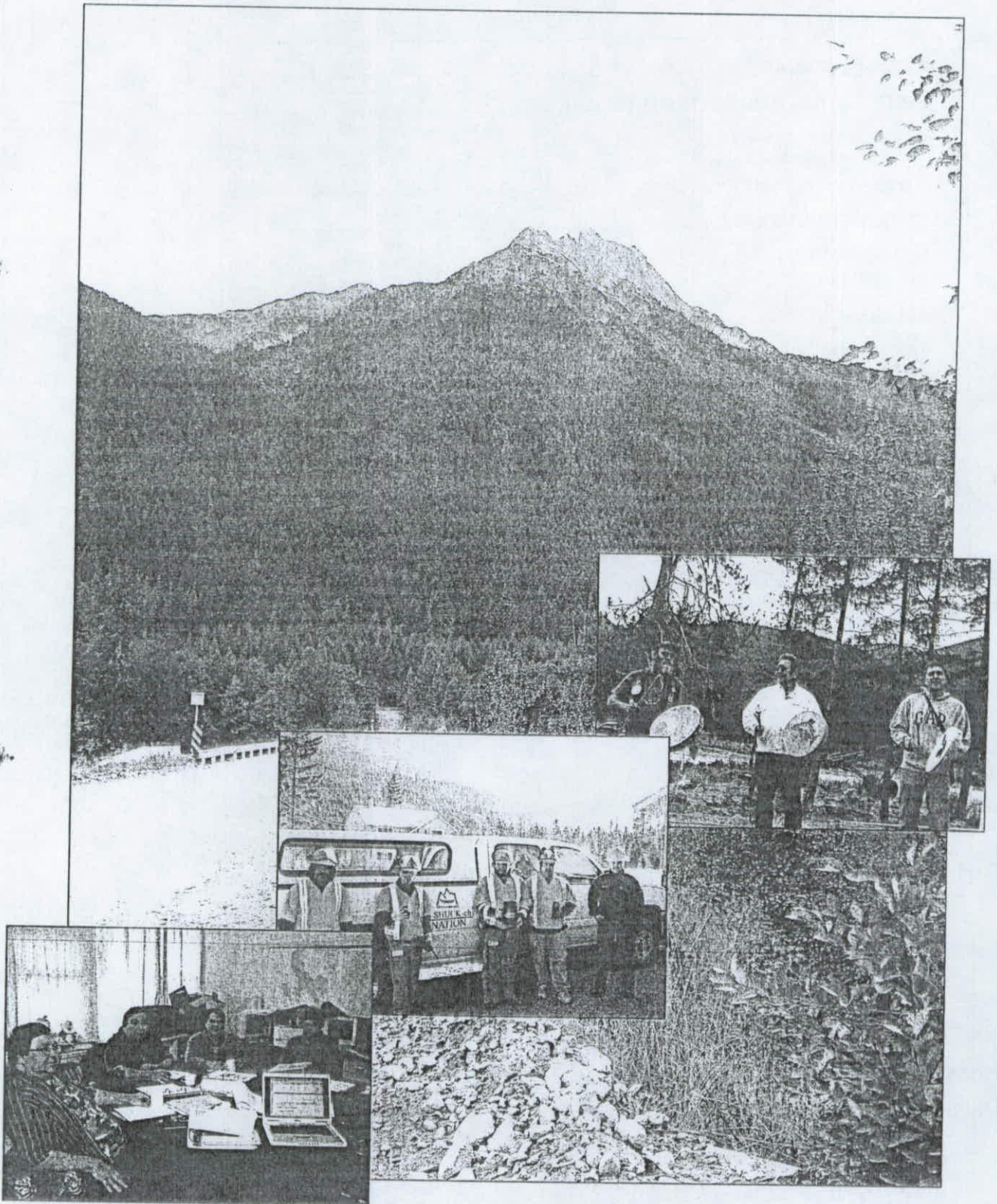
TABLE 1	CMA MANAGEMENT DIRECTION	3
---------	--------------------------------	---

List of Figures

FIGURE 1	LAND USE ZONATION	2
FIGURE 2	CONSULTATION HOME PAGE	8
FIGURE 3	ENHANCED CONSULTATION PAGE.....	9

List of Appendices

Appendix I	– In-SHUCK-ch Nation Consultation and Accommodation Policy
Appendix II	– Enhanced Consultation Protocol
Appendix III	– Consultation Protocol Agreement Template



0 Background

In-SHUCK-ch Nation is comprised of three communities: Douglas First Nation, Skatinations and Samahquam Nation. Collectively we have defined our vision in a *Seven generations Plan* (2006) and detailed a strategy for natural resources stewardship within our traditional territory in a *Land Stewardship Plan* (2006).

In-SHUCK-ch Nation has developed a consultation and accommodation policy as a public document. The policy can be found in Appendix I.

The *Land Stewardship Plan* establishes cultural management areas (CMAs) throughout the In-SHUCK-ch traditional territory. These CMAs have been adopted into provincial land use planning through the *Sea-to-Sky Land and Resource Management Plan* (RMP). A strategic land-use agreement between British Columbia and In-SHUCK-ch Nation commits the parties to harmonizing their policies in order to develop a mutually acceptable consultation protocol specific to the cultural management areas.

The goal of this project was to develop an enhanced consultation policy for cultural management areas that will meet the needs of In-SHUCK-ch people and meet the terms of our agreement with the Province of B.C. with respect to the *Sea-to-Sky Land and Resource Management Plan*.

This report represents the completion and final delivery of the consultation process component of the *In-SHUCK-ch Resources Capacity Project* supported by the First Nations Forestry Program of Natural Resources Canada.

2.0 Cultural Management Areas

Cultural Management Areas are zones of integrated resource management where economic development is permitted, but is only undertaken after meaningful consultation and accommodation, and in a sensitive manner consistent with cultural values in the area.

Figure 1 presents the cultural management areas of In-SHUCK-ch (indicated in pink).

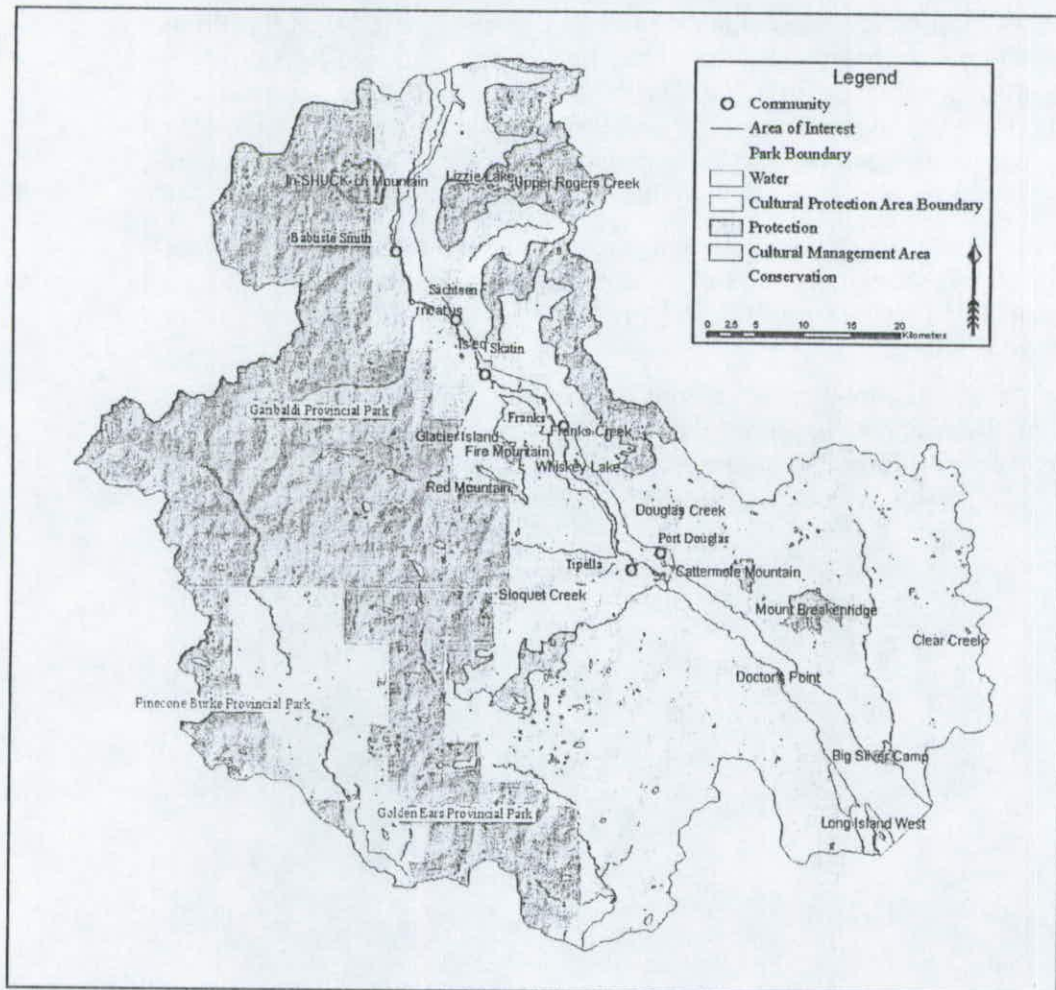


Figure 1 Land use zonation

Table 1 provides management direction for cultural management areas as per the strategic land use agreement between In-SHUCK-ch and British Columbia.

Table 1 CMA management direction

Management Intent
<p>Cultural Management Areas are zones of integrated resource management which have historic and contemporary significance to First Nations. First Nations wish to enhance the quality of these areas through the conservation of cultural and heritage resources. In order to give adequate consideration to these resources, the intent is to complete a consultation protocol for this zone which will facilitate improved information sharing. Resource and economic development, including surface resource development is permitted, but requires that full consideration be given to First Nation cultural and heritage resources. Forest harvesting will consider impacts on non-timber forest products, non-timber values and key community viewsheds.</p>
Objectives
<p>Conserve and/or maintain the integrity of First Nation cultural and heritage resources.</p> <p>Maintain opportunities for First Nations to practice traditional harvesting for cultural purposes.</p> <p>Maintain opportunities for commercial timber harvesting.</p> <p>Maintain opportunities to access economic, recreation and conservation values.</p> <p>Prevent or mitigate ecological impacts of roads.</p>
Implementation Direction
<p>Forest development is permitted in this zone and will operate under the relevant Provincial forestry legislation, regulations, and standards as well as wildlife and floodplain management plans.</p> <p>A visual management strategy for the Lillooet River corridor will be completed in order to guide forest development in the key viewsheds.</p> <p>First Nation Traditional Use Studies or other sources of ethnographic information will be considered when undertaking development activities.</p> <p>Economic development is permitted, but requires consideration of First Nation cultural and heritage resources in areas identified as cultural sites or as identified in a Traditional Use Study.</p> <p>Subsurface mineral exploration and development is permitted. As per existing provincial government mining policy: Exploration and mining are considered temporary land uses with sites returned to a natural state afterwards. Advanced planning for decommissioning and the full environmental cycle must be made clear ahead of time. Funding must be in place ahead of time to cover decommissioning in case of business failure. Advanced exploration and</p>

mining activities will seek to minimize cumulative impacts and mitigate or reduce disturbance to First Nation cultural sites by maximizing the use of existing infrastructure.¹

- f) Backcountry recreation activities (commercial and non-commercial) are permitted throughout Cultural Management Areas.
- g) Motorized and non-motorized recreational access is permitted within these zones.
- h) Hunting and angling are permitted throughout these zones except where prohibited under the Wildlife Act and other relevant legislation.

¹ Advanced exploration is defined as those activities requiring a Notice of Work, and development of a Reclamation Program before a permit can be issued. The activities include the following: disturbance of the ground by mechanical means such as drilling, trenching and excavating; blasting; construction, modification, deactivation and reclamation of an exploration access and camps; induced polarization surveys using exposed electrodes; and site reclamation.

0 Consultation and Accommodation

Through our *Seven Generations Plan* and our *Land Stewardship Plan* In-SHUCK-ch Nation has developed a vision of stewardship for our traditional territory. Implementation of this vision requires that all resource development within the territory proceed in a way that is compatible with the wishes and needs of the In-SHUCK-ch people. The activities of others can have serious impacts on resources that are critical to the In-SHUCK-ch Nation. It is therefore important to have influence on all activities and practices undertaken within the territory. In answer to this need, In-SHUCK-ch Nation has developed policies and protocols with regard to consultation and accommodation.

Consultation Policy

In-SHUCK-ch Nation has prepared a *Consultation and Accommodation Policy* which defines for proponents the process the Nation will use to entertain referrals and requests for consultation. The policy can be found in Appendix I.

In the process of defining enhanced consultation for In-SHUCK-ch cultural management areas, the following text was added to the *Consultation and Accommodation Policy* (page 1 of the policy).

In-SHUCK-ch Cultural Management Areas have been defined in the Land Stewardship Plan and integrated into the Sea-to-Sky Land and Resource Management Plan. A Strategic Land Use Planning Agreement between In-SHUCK-ch and British Columbia requires that any decision or activity which might possibly infringe In-SHUCK-ch title or rights within the cultural management areas will be subject to enhanced consultation.

Consultation Protocol

In-SHUCK-ch Nation has prepared a *Consultation and Accommodation Protocol* which is an internal document describing the process the Nation will use to process referrals and requests for consultation.

The protocol has been expanded to include the definition of the enhanced consultation process described here. The enhanced protocol can be found in Appendix II.

The specific elements of the enhanced protocol are:

- Attendance by the Crown or a proponent at an In-SHUCK-ch Land and Resources Committee meeting if requested by the committee;
- Attendance by the Crown or a proponent at a duly convened meeting of In-SHUCK-ch Nation Interim Government or meetings of Chief and Council of Samahquam, Skatin, or Douglas as requested by those bodies;
- Completion of a consultation protocol agreement between the Crown or a proponent and In-SHUCK-ch Nation or Samahquam, Skatin, or Douglas as appropriate;
- Open and cooperative sharing by all parties of data pertinent to the land and the activity;
- Clear description of the impacts of the decision or activity on historic or cultural values, cultural activities, non-timber forest products, other non-timber values, and key community viewsheds;
- Communication and clear and complete documentation of decision making by

Canada or British Columbia on all issues impacting the cultural management areas;

- Certain location-specific restriction of uses as defined by In-SHUCK-ch to protect specific cultural resources;
- Strict application of In-SHUCK-ch stewardship regimes as defined in the *Land Stewardship Plan*;
- No activity without explicit approval from In-SHUCK-ch and accommodation as is agreeable to In-SHUCK-ch Nation; and
- Explicit notice of commencement and completion of works, including commencement and completion of intermediate steps, and applying to temporary interruptions in activities.

Meaningful implementation of the enhanced consultation protocol will benefit greatly from:

- Enhancement of the In-SHUCK-ch traditional use study across the full range of the cultural management areas; and
- Completion of a visual management strategy for the Lillooet River corridor based on the visual landscape inventory compiled by In-SHUCK-ch which will guide forest development in the key viewsheds.

3.3 Consultation Protocol Agreement

A consultation protocol agreement will be put in place early in the consultation process. The agreement will:

- Acknowledge the Aboriginal title and rights as asserted by the In-SHUCK-ch people;
- Acknowledge the role of In-SHUCK-ch people as stewards of the land;
- Define the consultation process to be undertaken;
- Clarify the roles and responsibilities of the parties;
- Include reference to accommodation requirements and methods contemplated, including the approach to development of a participation and accommodation agreement as a product of the consultation process;
- Include the time table under which consultation will occur; and
- Specify the contribution of the parties with regard to financial support of the consultation process.

A template agreement can be found in Appendix III.

0 Project Execution

This project was undertaken as a consultation process in itself. The sections below describe the process used to gather input to design of the enhanced consultation process.

1 Methodology

This report is the product of background research and the opinions of the several people involved in the process described below.

The concept of enhanced consultation in cultural management areas arose in negotiation with the Integrated Land Management Bureau of the B.C. Ministry of Agriculture and Lands of a *Strategic Land Use Planning Agreement* with In-SHUCK-ch Nation. Such an enhanced consultation protocol would be based on the current but evolving consultation protocol instituted by In-SHUCK-ch for application to the entire traditional territory.

The consultation and accommodation process for In-SHUCK-ch Nation is currently administered by Timberline Natural Resource Group (Timberline). In-SHUCK-ch staff members, along with Timberline staff, were assigned the task of developing the enhanced protocol. Funding to do so was obtained through the First Nations Forestry Program of Natural Resources Canada.

Staff undertook various discussions to gather input on design of the enhanced protocol described below.

Though initial design of the enhanced consultation began as early as November 2008, significant effort was delayed while fundamental changes were being made to the basic consultation protocol. Design of enhancements required a stable basic protocol.

Timberline staff met with In-SHUCK-ch staff to review the preliminary designs for the enhanced consultation process (January 28th, 2009).

In-SHUCK-ch stewardship and economic development staff met with Timberline staff in Victoria to review functional workings of the existing protocol, consider design of the enhanced protocol, and discuss capacity building required to transfer administration of the referral process to Nation staff (February 3rd, 2009).

In-SHUCK-ch and Timberline staff met with the Integrated Land Management Bureau to review the proposed enhanced consultation process and obtain input to ensure that the process will meet the needs of ILMB with regard to the strategic agreement and land use planning going forward (February 9th, 2009).

In-SHUCK-ch staff and Timberline staff met with the In-SHUCK-ch Land and Resources Committee to gain input on the proposed enhanced consultation process and ensure that the direction being taken was appropriate from the point of view of In-SHUCK-ch people and the individual communities (February 10th, 2009).

Preparation of this report was completed by February 27th 2009.

2 Website Upgrade

In-SHUCK-ch Nation uses a website to document our consultation process for outside agencies. In the course of this project, and in order to maintain one clear and complete

source of information, the website was updated to reflect the enhanced consultation process.

The home page of the website is presented below. This website will go live at a point in the near future when the Nation is ready to deliver publicly with the revised system.

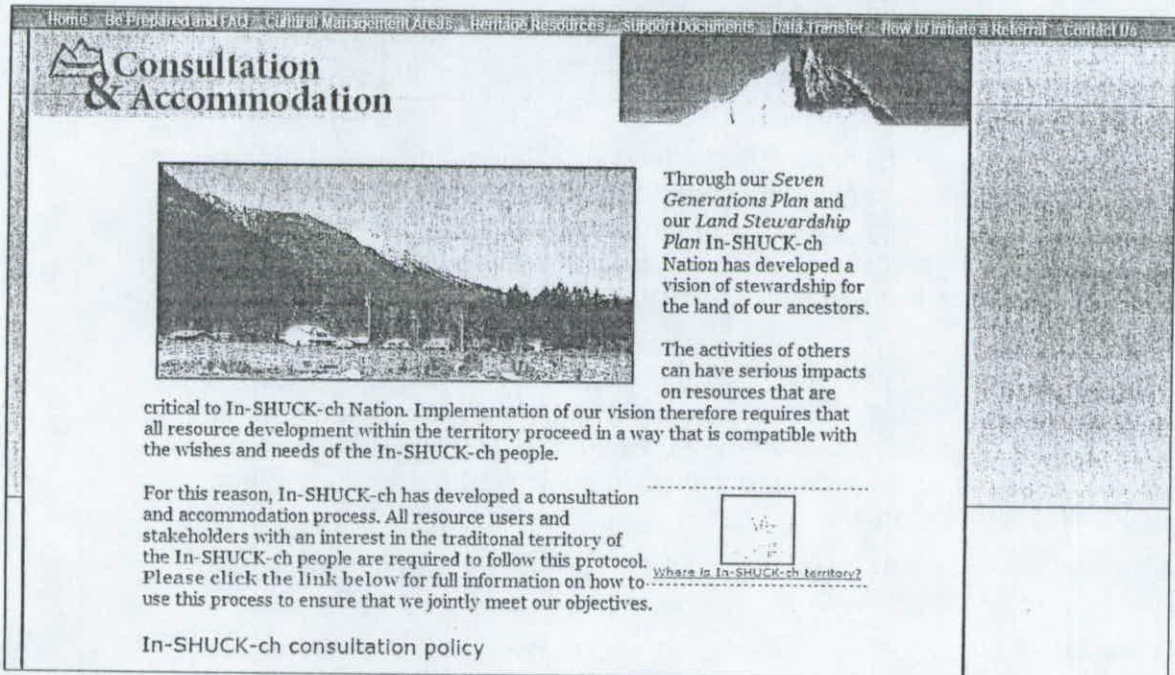


Figure 2 Consultation home page

At the top of Figure 2 you can see the Cultural Management Areas tab. This tab brings you to the page which describes enhanced consultation for cultural management areas. That web page is presented on the following page.

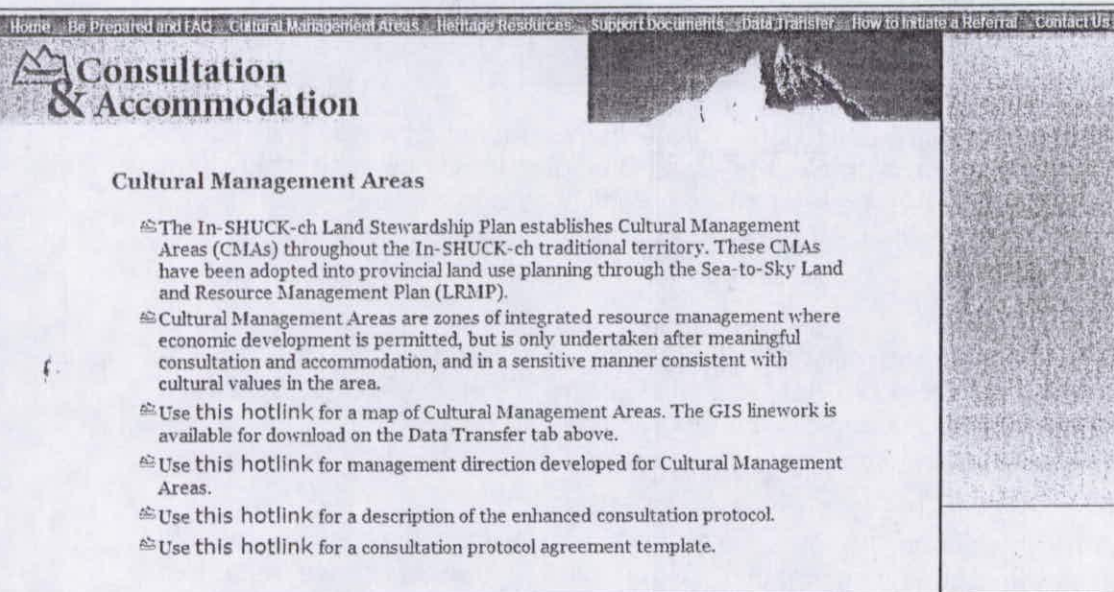


Figure 3 Enhanced consultation page

The web page provides information on the location of cultural management areas, the management direction for those areas, the nature of the enhanced consultation protocol, a template for a consultation agreement. In sum, all necessary information to implement enhanced consultation is provided.

The website modifications described above were completed by February 27th, 2009.

5.0 Implementation

Implementation of the enhanced consultation protocol in a meaningful way will require the enhancement of the current In-SHUCK-ch N'Quat'qua traditional use study and implementation of a visual management strategy which recognizes the recent visual landscape inventory performed by the Nation.

5.1 Traditional Use Study

The *In-SHUCK-ch N'Quat'qua Traditional Use Study* was produced in 2002 by Dr. Douglas Hudson, Ph.D., Maurice DePaoli, BA, and Pauline J. Peters. That study did not undertake field studies of the extensive nature required to ensure that all important resources and sites within the cultural management areas are identified for consideration and protection.

In partnership with Dr. Hudson, we propose to undertake a field exercise that would allow significant on-the-ground confirmation of the existing traditional use data and current use models, and the exploration and identification of archaeological sites on a comprehensive basis.

5.2 Visual Management Strategy

On behalf of In-SHUCK-ch Nation, Timberline prepared in 2007 a *Report on the Visual Landscape Inventory for the In-SHUCK-ch Territory*. This initiative was designed to evaluate, for the first time, the visual landscape from the point of view of the people who live in the lower Lillooet River valley.

The next step in the process of ensuring that development in the valley is compatible with the new landscape inventory is completion of a revised visual management strategy for the Lillooet River corridor. This will allow proper evaluation of proposed operations within the cultural management areas. We propose to engage with the B.C. Ministry of Forests and Range to develop the strategy.

10 References

- Hudson, D., M. DePaoli, and P. J. Peters. 2002. *In-SHUCK-ch N'Quat'qua Traditional Use Study*
- In-SHUCK-ch Nation. 2006. *Seven Generations Plan*
- In-SHUCK-ch Nation. 2006. *Land Stewardship Plan*
- In-SHUCK-ch Nation, Province of British Columbia. 2007. *Strategic Land Use Planning Agreement*.
- Malcolm, Arlette. 2009. Personal Communication.
- Province of British Columbia. 2008. *Sea-to-Sky Land and Resource Management Plan*
- Timberline Natural Resource Group. 2007. *Report on the Visual Landscape Inventory for the In-SHUCK-ch Territory*.

Appendix I

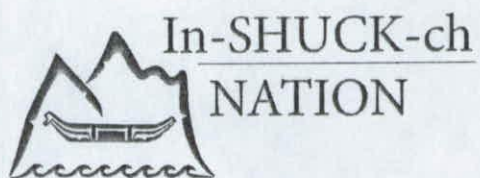
In-SHUCK-ch Nation Consultation and Accommodation Policy

Appendix II

In-SHUCK-ch Nation Enhanced Consultation Protocol

Appendix III

In-SHUCK-ch Nation Consultation Protocol Agreement Template



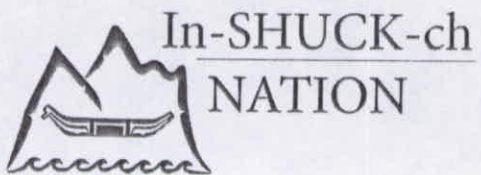
IN-SHUCK-CH NATION

COMMUNITY FOREST INITIATIVE

RESOURCE INFORMATION CONSOLIDATION

Project Number BC0309526

February 2009



1.0 Background

In-SHUCK-ch Nation is comprised of three communities: Douglas First Nation, Skatin Nations and Samahquam Nation. Collectively, we have accumulated resource data from a variety of sources concerning our traditional territory. As we progress towards a more self-sustaining future, we have pursued capacity building projects that provide In-SHUCK-ch Nation with opportunities to more effectively manage the resources in our traditional territory.

This report documents a capacity building project designed to consolidate all existing In-SHUCK-ch Nation resource data while enabling a web-based mapping application to host and provide tools for more effective resource management.

Funded through the First Nations Forestry Program (FNFP) of Natural Resources Canada, this Community Forest Initiative - Resource Information Consolidation project is a crucial component within the broader Resource Capacity Initiative.

In-SHUCK-ch Nation has both internally, and through external agencies, built an extensive library of information related to the management of resources within the territory. This information has been gathered through many different initiatives and the data exists in various locations, formats, and states of update. In order to support internal capacity building, this information has been reviewed, revised, and consolidated into a single data model.

A web-based mapping application was also developed to simplify the resource management planning process. This mapping application includes a set of template maps identifying current values and existing resources within our territory.

This report will illustrate the tools that have been created to enhance and support a community forest initiative.

This report represents complete and final delivery of the 'Community Forest Initiative - Resource Information Consolidation' component of the *In-SHUCK-ch Resource Capacity Project* supported by the First Nations Forestry Program of Natural Resources Canada.

2.0 Geodatabase

The development of a geodatabase specific to all resource information pertaining to the In-SHUCK-ch traditional territory was an essential step to achieving a level of control over the resource management and planning process. In this section of the report, we will discuss the three phases that lead to the development of a new geodatabase.

2.1 Data Collection

The first step in achieving the project's objective of resource information consolidation was to identify and compile a list of existing datasets and consult with In-SHUCK-ch Nation staff members regarding all existing and archived digital and hard copy resource information.

Once we identified a list of existing datasets and all possible sources of information, the data was gathered and consolidated into one single data structure. This data was temporarily stored in a new data warehouse.

Collected from multiple sources, the data gathered existed in various formats and states of update. The high volume of data acquired was then transformed into a new geodatabase. Please refer to Appendix I for a complete list of datasets that currently exist in this geodatabase.

2.2 Geodatabase Design

Within the newly created data warehouse, we were able to organize and categorize the data. This was an important step as it gave us an opportunity to cross reference existing data with new data. As a result, we retained for use only the most relevant and up-to-date information. This helped distinguish data appropriate to the project's objectives and relevant to the area of interest (In-SHUCK-ch traditional territory).

Some of the existing layers within particular datasets were updated to reflect current resource use agreements within the In-SHUCK-ch traditional territory. This is predominantly true for new park and cultural protection and management area data. The new Upper Rogers kólji7 Conservancy was established in 2008 (in the north eastern corner of In-SHUCK-ch traditional territory) and is an example of how relevant this new data is to the resource management planning process.

Significant effort was required to preserve and organize remotely sensed data into one single data structure. The end result was a comprehensive geodatabase used to update a series of resource atlas maps (In-SHUCK-ch stewardship atlas maps).

The geodatabase was organized for simplicity and its effectiveness proved beneficial as it is easy to use with quick access to information through these In-SHUCK-ch Nation stewardship atlas maps.

2.3 Stewardship Atlas Maps

The ability to access information quickly with up-to-date, relevant, and easy to understand data is essential to effective resource management and planning. Our previous stewardship atlas maps were a result of the In-SHUCK-ch Land Stewardship Plan, however, the maps were outdated and did not reflect our current resource use values.

Updating these maps with information from the new geodatabase has resulted in our Stewardship Atlas Maps identifying particular sets of data relevant to the current variety of resource uses within In-SHUCK-ch Nation traditional territory. These maps enable the In-SHUCK-ch Nation Interim Government, community members, and private sector stakeholders to be involved in the management and planning of In-SHUCK-ch Nation resources in a more controlled and proactive manner.

A total of thirteen (13) stewardship atlas maps have been created and updated to reflect and identify the following resource values:

- Tákem ti tmícwa (In-SHUCK-ch Traditional Territory)
- Ownership and Tenure
- Stewardship Zonation and Cultural Protection Areas
- Access and Recreation
- Visual Landscape Inventory
- Traditional Use and Occupancy
- Important Fish Streams
- Wildlife
- Old Growth Management Areas
- Potential Independent Power Production Projects
- Sea-To-Sky Land and Resource Management Plan (Sea-To-Sky LRMP)
- Timber Interests
- Power Interests

All of the above mentioned stewardship atlas maps have been made available in digital format only. (Acrobat PDF). Please refer to the cd included in this report for further details.

3.0 Web-Based Mapping Application

The web-based mapping application was developed to enhance In-SHUCK-ch Nation's ability to manage the resources in our territory. This web-based mapping application will be used by In-SHUCK-ch Nation as well as the public and private sector as a means of simplifying the consultation process. All application users independent of In-SHUCK-ch Nation can view all thirteen (13) stewardship atlas maps with the exemption of the 'Traditional Use and Occupancy' map which has been modified to protect culturally sensitive information.

Due to the objectives and purpose for creating this mapping application, these maps are now referred to as template maps. Within this application only, modifications can be made by the applications user and therefore would no longer hold the title of stewardship atlas maps.

3.1 Web-Based Mapping Application

As you can see in Figure 1 below, the application's home page is simple and easy to navigate. The twelve template maps are listed on the right hand side of the screen and a list of optional tools is available along the top of the screen.

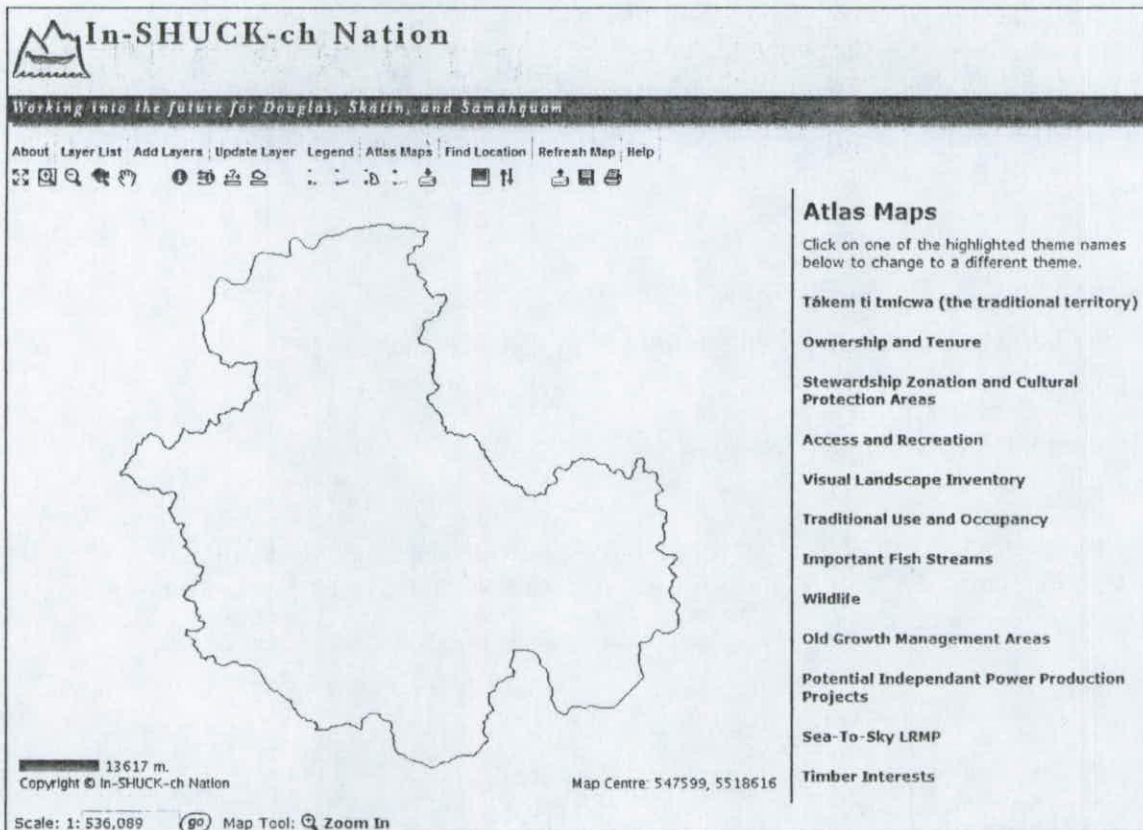


Figure 1 Web-based mapping application home page

3.2 Automated Toolset

Further to viewing these maps, tools have been created within this application that allow the user to modify the existing template maps. The user has the ability to use the template maps as base line maps to create shapefiles or to produce customized maps.

The template maps already include all relevant layers to appropriately reflect the values which they represent, however, the user does have the option of selecting only those layers which are of interest to them.

This can be accomplished by selecting the 'Layers List' tab in the top left side of the screen. You will then be able to view a list of all layers within that particular template map and have the option to select or de-select individual layers. This is shown on the right side of your screen as indicated in Figure 2 below.

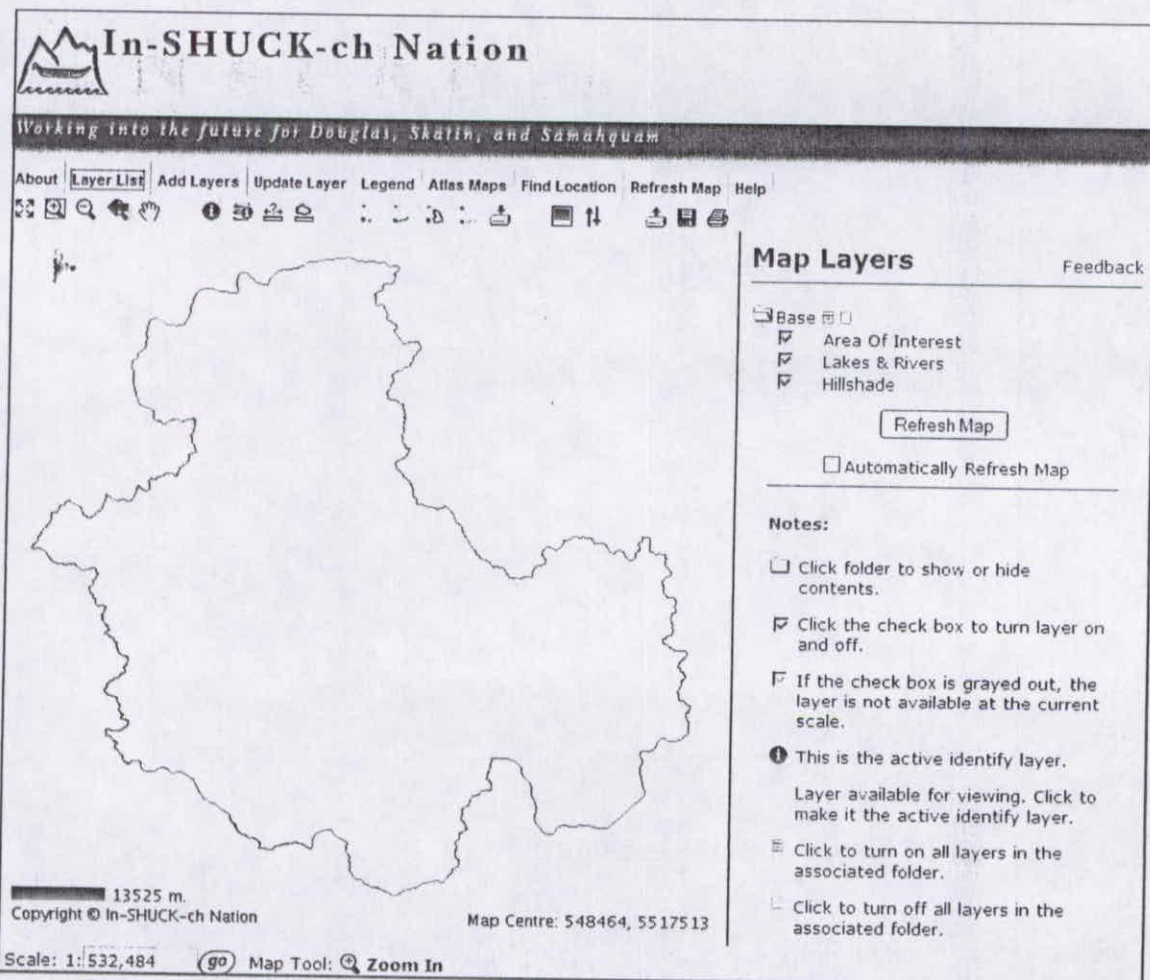


Figure 2 Layers list tool

Having the ability to manipulate the existing template maps will allow all application users to become familiar with up-to-date In-SHUCK-ch resource values.

The application also has a tool that allows the user to add their own layers or shapefiles using the 'Add Layers' tab. Being able to add a shapefile to the layers list will also benefit the consultation process as it will generate an immediate awareness of any values overlapping with current In-SHUCK-ch Nation stewardship interests. The 'Add Layers' tab is illustrated in Figure 3 below.

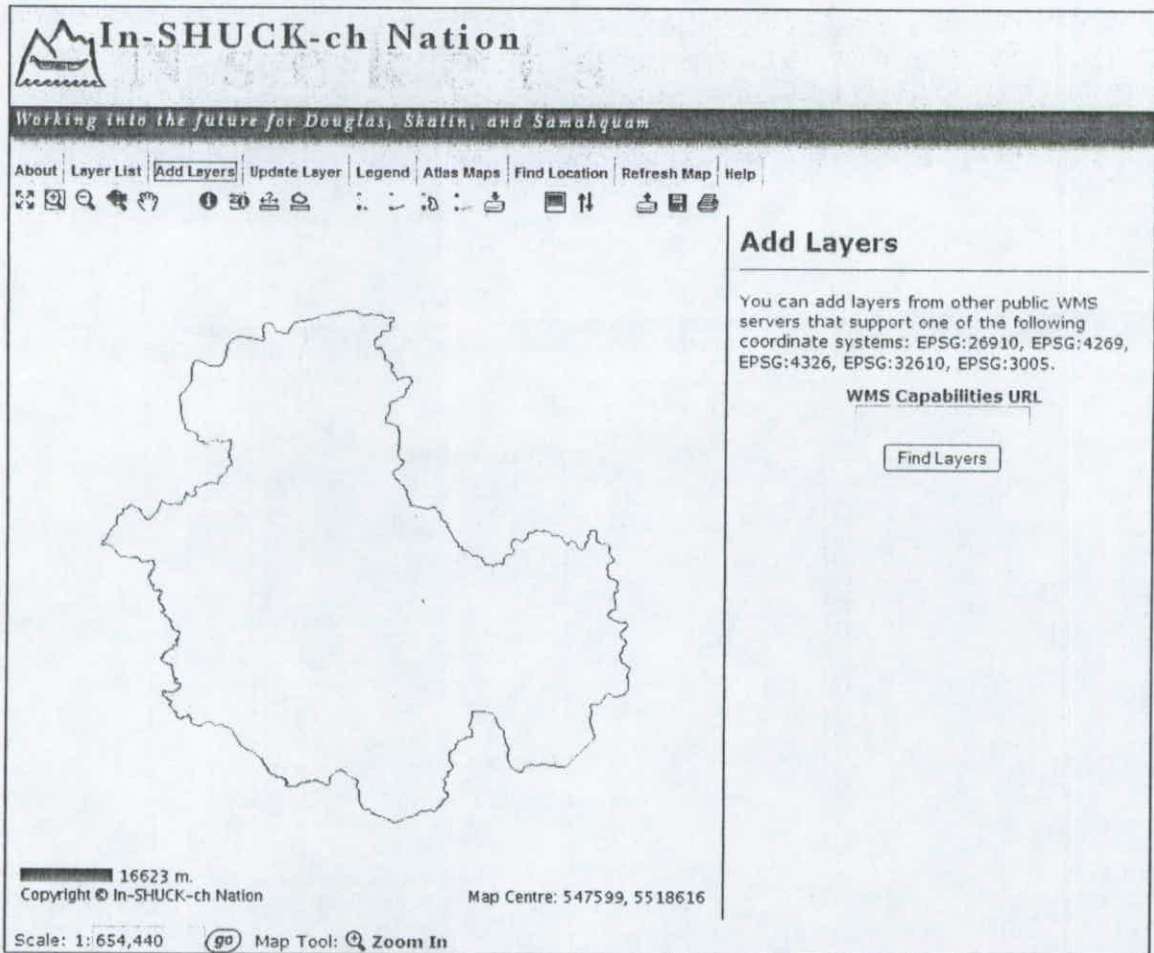


Figure 3 Add layers tool

In addition to the tools already identified within this mapping application, it is important to remember that the data currently available is up-to-date. Over time, however, some data may change and may require updating. A tool has been created for automatic updates. By selecting the 'Update Layer' tab, the user will be prompted for a username and password.

Once a new layer is created, it can be updated using this feature. As soon as this is completed, an email notification will be automatically sent to Timberline Natural Resource Group Ltd. (Timberline) who is currently hosting the site. The email

notification will include the updated version of the layer and a Timberline administrator will then proceed to load the updated version of that particular layer.

Although the layer will be manually replaced within the online geodatabase, it will be a relatively automatic process for the In-SHUCK-ch Nation users. As newly created layers may not be compatible with the existing symbology, it is essential that this update/transfer of new layers be manually adjusted to ensure continuity within the application and the layers it supports.

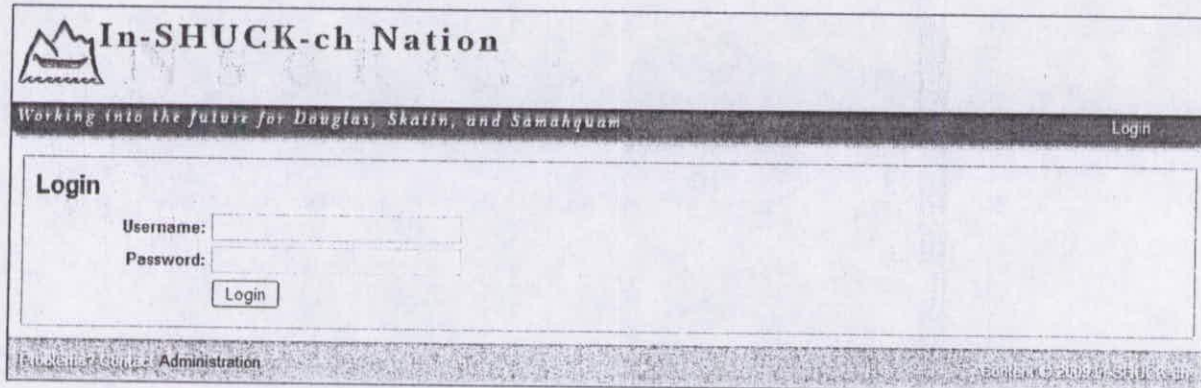


Figure 4 Update layer tool

An additional tab was created to help users find a specific location within In-SHUCK-ch traditional territory. If a user has accurate latitude and longitude coordinates for a desired location, they can be entered through the 'Find Location' tab.

Any user of the web-based mapping application will also have an opportunity to save a variety of desired locations through 'Personal Bookmarks'. These bookmarks will be stored for that user and will be available any time. Please refer to Figure 5 for more details.

In-SHUCK-ch Nation
Working into the future for Douglas, Skatin, and Samahquam

About Layer List Add Layers Update Layer Legend Atlas Maps **Find Location** Refresh Map Help

16623 m.
 Copyright © In-SHUCK-ch Nation
 Map Centre: 547599, 5518616
 Scale: 1:654,440 Map Tool: **Zoom In**

Find Location

Zoom To:

- Latitude / Longitude
- Personal Bookmark

This menu is used to set the extent of the map using query tools. Select one of the above options, and the map extent will change to show the area that you have selected.

Zoom To Bookmark

You do not have any personal bookmarks defined.

[add current extent]

Zoom To Geographic

Enter the geographic position where you wish to centre the map and the width of the map that you wish to show, then press the OK button. The map will zoom to the extent that you entered. The position shown is the current map centre.

Longitude (DMS):

-122 20 17.00

Latitude (DMS):

49 49 5.00

Select the zoom map width:

10 kilometres ▼

OK

Figure 5 Find location tool

3.3 Template Maps

We were able to use the stewardship atlas maps from the new geodatabase to create a set of template maps for the web-based mapping application. These template maps have been included in Appendix I of this report. All thirteen (13) template map are illustrated including the modified 'Traditional Use and Occupancy'.

4.0 Implementation

Implementing the geodatabase into a web-based information tool was a process completed through the development of the web-based mapping application. Integrating this online application into a fully functioning In-SHUCK-ch Nation resource management tool will occur effortlessly due to the simplicity in its design and the significance to its intentions.

The framework established for uploading and updating data supports multiple applications and is the start of a completely automated system. There are some minor delays when updating this information as it is not a fully automatic process at this time and does prevent immediate changes from taking place.

The overall success of this project, however, has ensured our ability to integrate our values into a resource management and planning process that is more effective. Increased access, communication, delivery and availability of current resource use information are the results of this project and we are more capable and more prepared for consultation processes.

5.0 References

In-SHUCK-ch Nation. 2006. *Land Stewardship Plan*

Appendix I

Geodatabase Datasets

Datasets	Description	Source	Currency	Updated
agricultural_land_reserve		In-SHUCK-ch Nation	2002	Feb-09
aoi	SOI - Statement of Intent	In-SHUCK-ch Nation	2002	Feb-09
background	Area of Interest - Boundary of In-SHUCK-ch Traditional Territory	In-SHUCK-ch Nation	2002	Feb-09
bc_hydro_line	BC Hydro Transmission Line Corridor	TRIM from the Land and Resource Data Warehouse	2007	Feb-09
bcts_fdu	BC Timber Sales Forest Development Unit	Received from BCTS forest stewardship plan	2006	Feb-09
chill_deer_winter	Deer winter range in the Chilliwack forest district of the deer habitat management plan	Habitat Management Plan	2007	Feb-09
community	All IR communities within In-SHUCK-ch Traditional Territory	In-SHUCK-ch Nation	2002	Feb-09
conservation	Boundary of areas defined as "wise use of resource area"	Land Stewardship Plan	2006	Feb-09
contour	Contour lines at 100m intervals	TRIM from the Land and Resource Data Warehouse	2009	Feb-09
cpa	Cultural Protection Areas	Land Stewardship Plan	2006	Feb-09
cultural_management_area	Identified Cultural Mangement Area, areas requiring enhanced consultation before resource development	Land Stewardship Plan	2006	Feb-09
deer_winter_range	Identified Deer Winter Range	Habitat Management Plan	2007	Feb-09
fdu_chawathil	Chawathil forest development unit	Received from Chawathil	2007	Feb-09

Datasets	Description	Source	Currency	Updated
fdu_creekside_resources	Creekside Resources forest development unit	Received from Creekside Resources	2006	Feb-09
fdu_lakeside	Lakeside forest development unit	Received from Lakeside Pacific	2007	Feb-09
fdu_squamish_mills	Squamish Mills forest development unit	Received from Squamish Mills	2006	Feb-09
fdu_teal_cedar	Teal Cedar forest development unit	Received from Teal Cedar	2007	Feb-09
fdu_wfp5	Western Forest Products forest development unit	Received from Western Forest Products	2007	Feb-09
fee_simple_land	Private lots, DL 1747 and DL 1749	Land and Resource Data Warehouse	2009	Feb-09
fish_survey_results	Identified Results of Fish Survey	Fisheries Information Summaries System (FISS)	2007	Feb-09
forest_250plus	Identified Forest 250 years old and more.	Old Growth Management Area, Ministry of Sustainable Resource Management	2005	Feb-09
forested	Areas in AOI that are completely forested.	Old Growth Management Area, Ministry of Sustainable Resource Management	2005	Feb-09
goat_winter_range	Identified Winter Goat Range	Ministry of Water, Land and Air	2006	Feb-09
grizzly_habitat_proposed	Proposed Grizzly Habitat	Ministry of Sustainable Resource Management	2005	Feb-09
grizzly_proposed_linkage_area	Proposed Grizzly Linkage Area	Ministry of Sustainable Resource Management	2005	Feb-09
in_mtn_cma	In-SHUCK-ch Mountain Cultural Management Area, area requiring enhanced consultation before resource Dev.	In-SHUCK-ch Nation	2008	Feb-09

Datasets	Description	Source	Currency	Updated
in_mtn_zones	In-SHUCK-ch Mountain Cultural Management Zones	In-SHUCK-ch Nation	2008	Feb-09
intake				Feb-09
ir	Indian Reserve	Land and Resource Data Warehouse	2008	Feb-09
lakes	Boundary of all lakes within AOI	EBM, Land and Resource Data Warehouse	2008	Feb-09
lrmp_wildland	The Wildland Component of the Land and Resource Management Plan	Land and Resource Management Plan, Ministry of Sustainable Resource Management	2005	Feb-09
mapsheets	NTS 50k Grid	NTS	2009	Feb-09
marbled_murrelet	Marbled Murrelet Habitat Area	Ministry of Sustainable Resource Management	2005	Feb-09
mask	masking layer	Timberline	2009	Feb-09
non_motorized_winter_rec_zone	Identified Non-Motorized Winter Recreation Zone	Sea-to-Sky Land and Resource Management Plan	2005	Feb-09
non_productive	Non productive land base	Old Growth Management Area, Ministry of Sustainable Resource Management	2005	Feb-09
ogma_approved	Approved Old Growth Management Area	Old Growth Management Area, Ministry of Sustainable Resource Management	2005	Feb-09
ogma_proposed	Proposed Old Growth Management Area	Old Growth Management Area, Ministry of Sustainable Resource Management	2005	Feb-09

Datasets	Description	Source	Currency	Updated
old_growth	Identified Old Growth Forest	Old Growth Management Area, Ministry of Sustainable Resource Management	2005	Feb-09
old_growth_management_area	Identified Old Growth Management Area	Old Growth Management Area, Ministry of Sustainable Resource Management	2005	Feb-09
old_growth_no_harv	Identified Old Growth Area where no harvesting is allowed.	Old Growth Management Area, Ministry of Sustainable Resource Management	2005	Feb-09
parks	A list of Parks within AOI	WHSE Parks and Protected Areas	2008	Feb-09
parks_line	Boundary of all Parks within AOI	WHSE Parks and Protected Areas	2008	Feb-09
powerhouses	Power Houses	Integrated Land Management Bureau	2007	Feb-09
powerlines_and_penstock	Power Lines and Pen Stock	Integrated Land Management Bureau	2007	Feb-09
Powerlines_and_Penstock_Anno	Annotation describing powerlines	Integrated Land Management Bureau	2007	Feb-09
proposed_non_motorized_summer_rec_zone	Proposed Non-Motorized Summer Recreation Zone	Sea to Sky LRMP	2005	Feb-09
protection	A list of all protection areas within AOI	Land Stewardship Plan	2006	Feb-09
recreation_feature	Identified Recreation Feature			Feb-09
recreation_feature_other	Unidentified Recreational Feature			Feb-09
ref_by_hydro	BC Hydro Referrals within AOI			Feb-09
ref_cloudworks	Cloudworks Referrals within AOI	Cloudworks Energy	2008	Feb-09

Datasets	Description	Source	Currency	Updated
ref_cloudworks_pts	Points indicating Cloudworks Referrals within AOI	Cloudworks Energy	2008	Feb-09
ref_pacific_greenen	Pacific Greenen Power Referrals within AOI	Pacific Greenen Power	2008	Feb-09
road	Roads within AOI	TRIM from the Land and Resource Data Warehouse	2008	Feb-09
s2s_lrm	Sea to Sky Land and Resource Management Plan	Sea to Sky LRMP	2002	Feb-09
sasquatch_trail	Outline of Sasquatch Trail within AOI	Sea to Sky LRMP	2005	Feb-09
sp_areas_labels	In-SHUCK-ch Spiritual Area points/labels	In-SHUCK-ch Nation	2007	Feb-09
special_resource_management_zones	Identified Special Resource Management Zones	Land and Resource Management Plan, Ministry of Sustainable Resource Management	2005	Feb-09
spotted_owl_future	Endangered Spotted Owl Proposed Habitat	Land and Resource Management Plan, Ministry of Sustainable Resource Management	2005	Feb-09
spotted_owl_longterm_habitat	Endangered Spotted Owl Habitat	Land and Resource Management Plan, Ministry of Sustainable Resource Management	2005	Feb-09
streams	A list of Streams within AOI	TRIM from the Land and Resource Data Warehouse	2008	Feb-09
tmicw	Traditional Places, Points of Interest	In-SHUCK-ch Nation	2007	Feb-09
tmicw_names	In-SHUCK-ch Traditional Language Names	In-SHUCK-ch Nation	2007	Feb-09

Datasets	Description	Source	Currency	Updated
tsl	Treaty Settlement Land	In-SHUCK-ch Nation	2002	Feb-09
tus_archaeology	Traditional Use Study - Archaeology Information within AOI	In-SHUCK-ch Nation	2002	Feb-09
tus_fishing_area	Traditional Use Study - Fishing Area Information within AOI	In-SHUCK-ch Nation	2002	Feb-09
tus_fishing_line	Traditional Use Study - Fishing Line Information within AOI	In-SHUCK-ch Nation	2002	Feb-09
tus_fishing_site	Traditional Use Study - Fishing Site Information within AOI	In-SHUCK-ch Nation	2002	Feb-09
tus_gathering_area	Traditional Use Study - Gathering Area Information within AOI	In-SHUCK-ch Nation	2002	Feb-09
tus_general	Traditional Use Study - General Information within AOI	In-SHUCK-ch Nation	2002	Feb-09
tus_graveyard	Traditional Use Study - A list of Graveyards Information within AOI	In-SHUCK-ch Nation	2002	Feb-09
tus_habitation_site	Traditional Use Study - Habitation Site Information within AOI	In-SHUCK-ch Nation	2002	Feb-09
tus_hunting_area	Traditional Use Study - Hunting Area Information within AOI	In-SHUCK-ch Nation	2002	Feb-09
tus_spiritual_area	Traditional Use Study - Spiritual Area Information within AOI	In-SHUCK-ch Nation	2002	Feb-09
tus_spiritual_site	Traditional Use Study - Spiritual Site Information within AOI	In-SHUCK-ch Nation	2002	Feb-09

Datasets	Description	Source	Currency	Updated
tus_trapline	Traditional Use Study - Trapline Information within AOI	In-SHUCK-ch Nation	2002	Feb-09
tus_trapping_cabins	Traditional Use Study - Trapping Cabin Information within AOI	In-SHUCK-ch Nation	2002	Feb-09
tus_travel_corridor	Traditional Use Study - Travel Corridor Information within AOI	In-SHUCK-ch Nation	2002	Feb-09
viewpoints_s2s	Sea to Sky Viewpoints	Sea-to-Sky Land and Resource Management Plan	2005	Feb-09
viewshed2_s2s	Sea to Sky Viewshed	Sea-to-Sky Land and Resource Management Plan	2005	Feb-09
vli_poly	Visual Landscape Inventory (Polygons)	Land Resource Data Warehouse	2007	Feb-09
vli_viewarrows	Visual Landscape Inventory (Arrows)	Land Resource Data Warehouse	2007	Feb-09
vli_viewpoints	Visual Landscape Inventory (Viewpoints)	Land Resource Data Warehouse	2007	Feb-09
vqc_recommended	Visual Quality Objectives (Recommended)	Land Resource Data Warehouse	2007	Feb-09
vqo	Visual Quality Objectives	Land Resource Data Warehouse	2007	Feb-09
vqo_new	Visual Quality Objectives (New)	Land Resource Data Warehouse	2007	Feb-09
water_features	Water Features Annotation (Lakes and Rivers)	Land Resource Data Warehouse	2006	Feb-09
water_license	Water License			Feb-09
watersheds	Watershed Boundaries within AOI	Land and Resource Data Warehouse	2007	Feb-09

Datasets	Description	Source	Currency	Updated
wildlife_tree_patch	Identified Wildlife Tree Patch Area	Land and Resource Managemnt Plan, Ministry of Sustainable Resource Management	2005	Feb-09
wildlife_tree_patch_pt	Point Identifying Wildlife Tree Patch Area	Land and Resource Managemnt Plan, Ministry of Sustainable Resource Management	2005	Feb-09
woodlot1786	Woodlot 1786			Feb-09

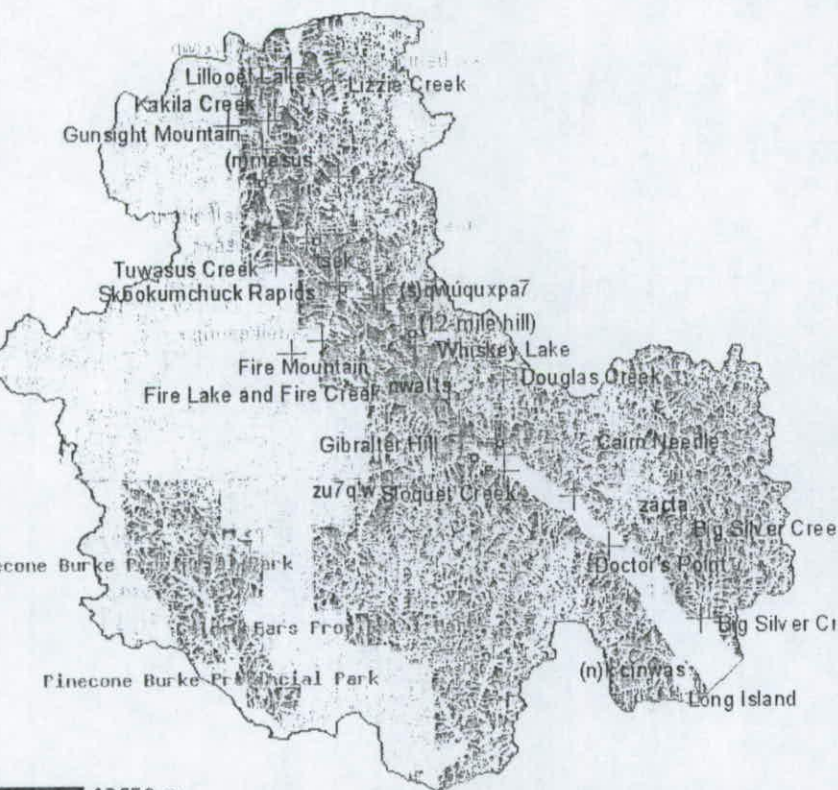
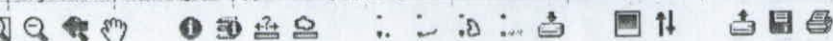
Appendix II

Template Maps from Web-Based Mapping Application

In-SHUCK-ch Nation

ing into the future for Douglas, Skatin, and Samahquam

Layer List Add Layers Update Layer Legend Atlas Maps Find Location Refresh Map Help



13650 m.
Copyright © In-SHUCK-ch Nation

Map Centre: 548522, 5518386

le: 1: 537,405 (go) Map Tool: Zoom In

Atlas Maps

Click on one of the highlighted theme name below to change to a different theme.

In-SHUCK-ch Nation (the traditional territory)

Ownership and Tenure

Stewardship Zonation and Cultural Protection Areas

Access and Recreation

Visual Landscape Inventory

Traditional Use and Occupancy

Important Fish Streams

Wildlife

Old Growth Management Areas

Potential Independent Power Production Projects

Sea-To-Sky LRMP

Timber Interests

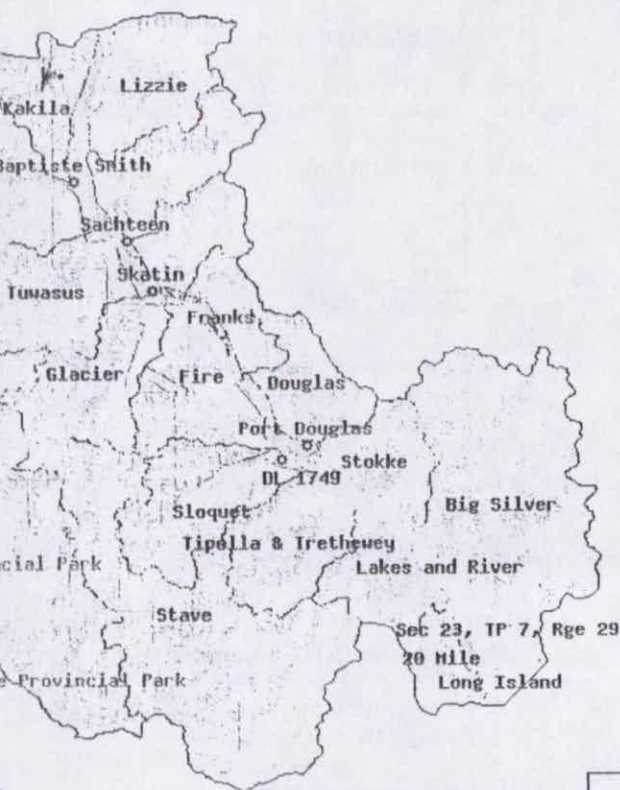
Legend

- ☐ Parks
- ☐ Indian Reserves
- ☐ Lakes & Rivers
- ☐ Streams
- ☐ Tnicu
- ☐ Community
- ☒ Traditional Area

HUCK-ch Nation

future for Douglas, Skatin, and Samahquam

Layers Update Layer Legend Atlas Maps Find Location Refresh Map Help



HUCK-ch Nation

Map Centre: 550947, 55

Map Tool: Zoom In

Atlas Maps

Click on one of the highlighted theme names below to change to a different theme.

Tákem ti tmicwa (the traditional territory)

Ownership and Tenure

Stewardship Zonation and Cultural Protection Areas

Access and Recreation

Visual Landscape Inventory

Traditional Use and Occupancy

Important Fish Streams

Wildlife

Old Growth Management Areas

Potential Independent Power Production Projects

Sea-To-Sky LRMP

Legend

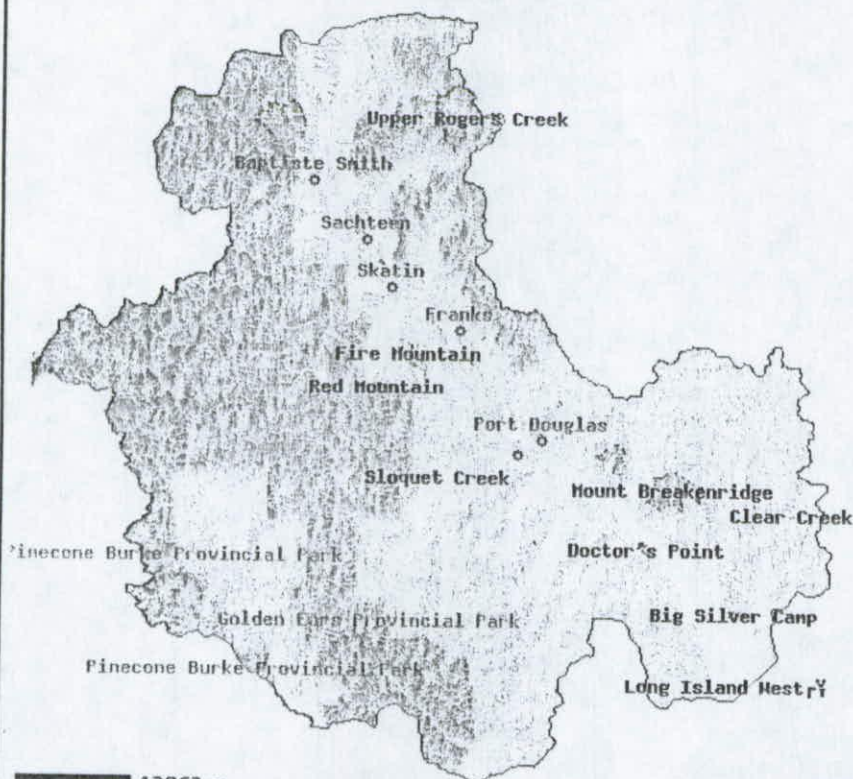
- ☐ Parks
- ☐ Treaty Settlement Land
- ☐ Indian Reserves
- ☐ Fee Simple Land
- ☒ Woodlot 1786
- ☐ Agricultural Land Reserve
- ☐ Lakes & Rivers
- ☒ Watersheds
- ☐ Streams
- ☒ Community
- ☒ Traditional Area



In-SHUCK-ch Nation

Working into the future for Douglas, Skatin, and Samahquam

About Layer List Add Layers Update Layer Legend Atlas Maps Find Location Refresh Map Help



13862 m.
Copyright © In-SHUCK-ch Nation

Map Centre: 549792, 5

Scale: 1:545,765 (go) Map Tool: Zoom In

Atlas Maps

Click on one of the highlighted theme na below to change to a different theme.

Tákem ti tmícwa (the traditional terri

Ownership and Tenure

Stewardship Zonation and Cultural Protection Areas

Access and Recreation

Visual Landscape Inventory

Traditional Use and Occupancy

Important Fish Streams

Wildlife

Old Growth Management Areas

Potential Independant Power Producti Projects

Sea-To-Sky LRMP

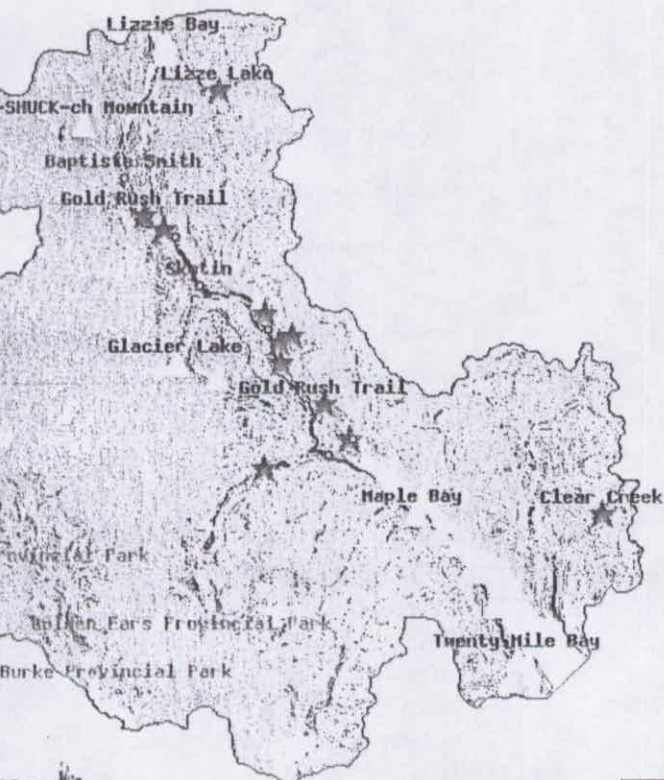
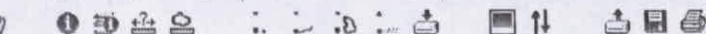
Legend

- ☐ Parks
- ☐ Protection
- ☐ Conservation
- ☐ Cultural Managment Area
- ☒ In-SHUCK-ch Mountain Cultural Managment Ar
- ☐ Cultural Protection Area
- ☐ Lakes & Rivers
- ☐ Streams
- ☒ Community
- ☒ Traditional Area

SHUCK-ch Nation

the future for Douglas, Skatin, and Samahquam

Add Layers | Update Layer | Legend | Atlas Maps | Find Location | Refresh Map | Help



0.2 m.

SHUCK-ch Nation

Map Centre: 550254, 5

6 (go) Map Tool: Zoom In

Atlas Maps

Click on one of the highlighted theme names below to change to a different theme.

Tákem ti tmicwa (the traditional territory)

Ownership and Tenure

Stewardship Zonation and Cultural Protection Areas

Access and Recreation

Visual Landscape Inventory

Traditional Use and Occupancy

Important Fish Streams

Wildlife

Old Growth Management Areas

Potential Independant Power Production Projects

Sea-To-Sky LRMP

Legend

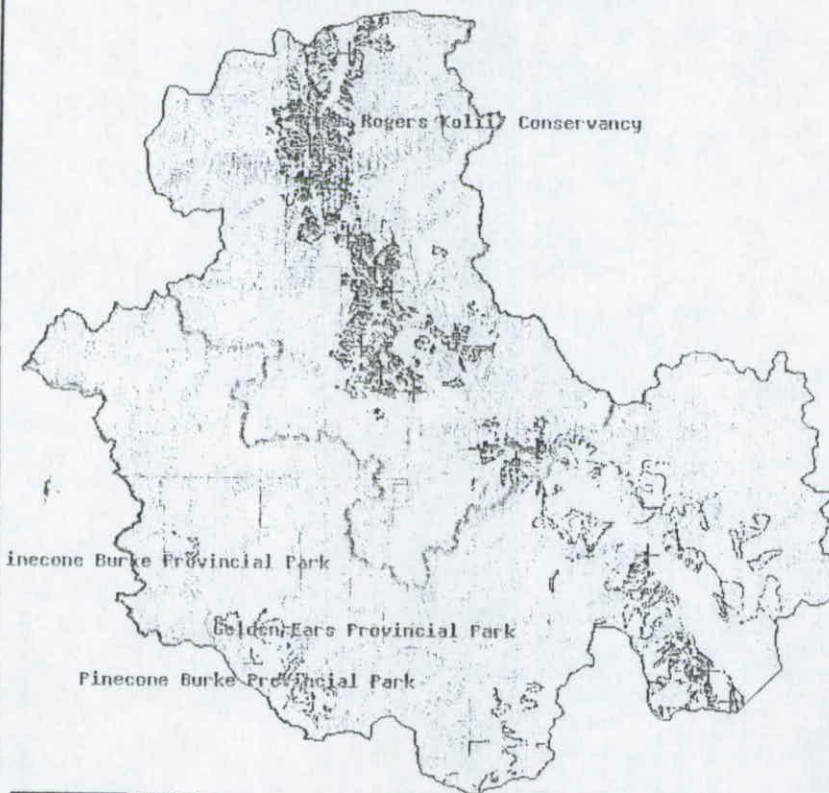
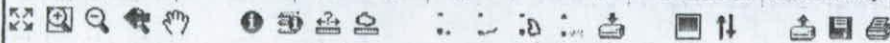
- ☐ Parks
- ☐ Lakes & Rivers
- ☒ Major Road
- ☒ Secondary or Seasonal Road
- ☐ Contour Lines
- ☒ Recreation Feature
- ☐ Community
- ☐ Other Recreation Site
- ☒ Traditional Area



In-SHUCK-ch Nation

Working into the future for Douglas, Skatin, and Samahquam

About Layer List Add Layers Update Layer Legend Atlas Maps Find Location Refresh Map Help



13559 m.
Copyright © In-SHUCK-ch Nation

Map Centre: 549561, 551700

Scale: 1:533,822 (go) Map Tool: Zoom In

Atlas Maps

Click on one of the highlighted theme na below to change to a different theme.

Tákem ti tmícwa (the traditional terri

Ownership and Tenure

Stewardship Zonation and Cultural Protection Areas

Access and Recreation

Visual Landscape Inventory

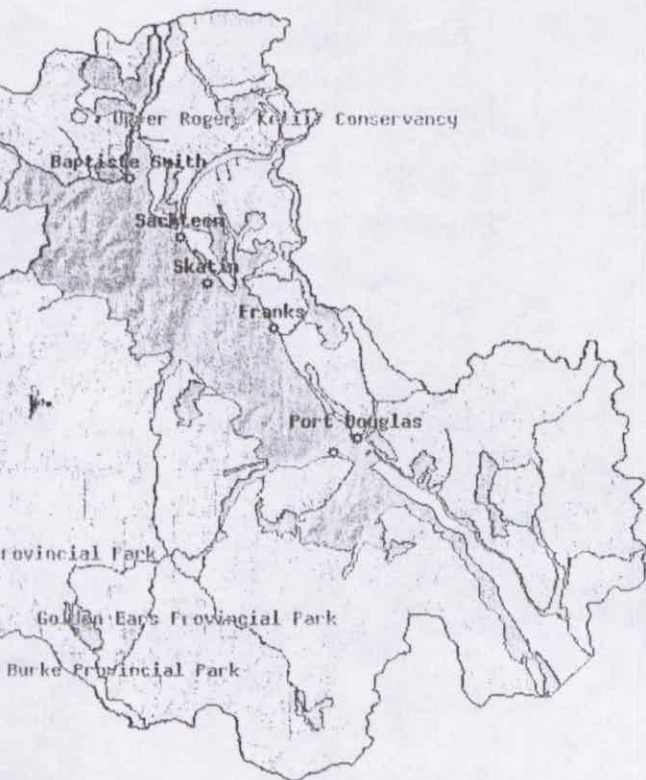
Legend

- ☐ Parks
- ☐ Maximum Modification
- ☐ Modification
- ☐ Partial Retention
- ☐ Retention
- ☐ Preservation
- ☐ Maximum Modification
- ☒ Modification
- ☐ Partial Retention
- ☐ Retention
- ☒ Preservation
- ☐ Maximum Modification
- ☐ Modification
- ☐ Partial Retention
- ☐ Retention
- ☐ Preservation
- ☒ View from Community
- ☒ Viewshed A
- ☒ Viewshed B
- ☐ Lakes & Rivers
- ☐ Streams
- ☒ Sea to Sky LRMP
- ☒ Community
- ☒ Community Viewpoint
- ☒ Viewpoint A
- ☒ Viewpoint B
- ☒ Traditional Area

SHUCK-ch Nation

The future for Douglas, Skatin, and Samahquam

Add Layers | Update Layer | Legend | Atlas Maps | Find Location | Refresh Map | Help



2 m.
SHUCK-ch Nation

Map Centre: 548292, 5517231

go Map Tool: Zoom In

Atlas Maps

Click on one of the highlighted theme names below to change to a different theme.

Tákem ti tnicwa (the traditional territory)

Ownership and Tenure

Stewardship Zonation and Cultural Protection Areas

Access and Recreation

Visual Landscape Inventory

Traditional Use and Occupancy

Important Fish Streams

Wildlife

Old Growth Management Areas

Potential Independent Power Production Projects

Sea-To-Sky LRMP

Timber Interests

Legend

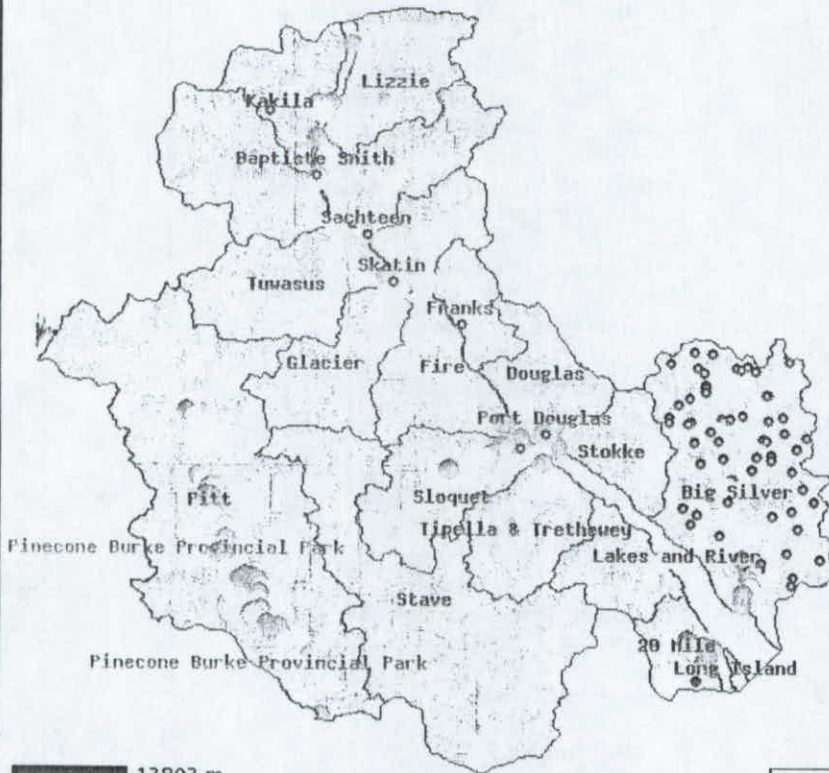
- ☐ Parks
- ☐ Lakes & Rivers
- ☐ Streams
- ☐ Traditional Use
- ☒ Community
- ☒ Traditional Area



In-SHUCK-ch Nation

Working into the future for Douglas, Skatin, and Samuhquam

[About](#) [Layer List](#) [Add Layers](#) [Update Layer](#) [Legend](#) [Atlas Maps](#) [Find Location](#) [Refresh Map](#) [Help](#)



Copyright © In-SHUCK-ch Nation

Map Centre: 548753

Scale: 1:546,959 [go](#) Map Tool: [Zoom In](#)

Atlas Maps

Click on one of the highlighted theme names below to change to a different theme.

Tákem ti tnicwa (the traditional territories)

Ownership and Tenure

Stewardship Zonation and Cultural Protection Areas

Access and Recreation

Visual Landscape Inventory

Traditional Use and Occupancy

Important Fish Streams

Wildlife

Old Growth Management Areas

Potential Independent Power Production Projects

Sea-To-Sky LRMP

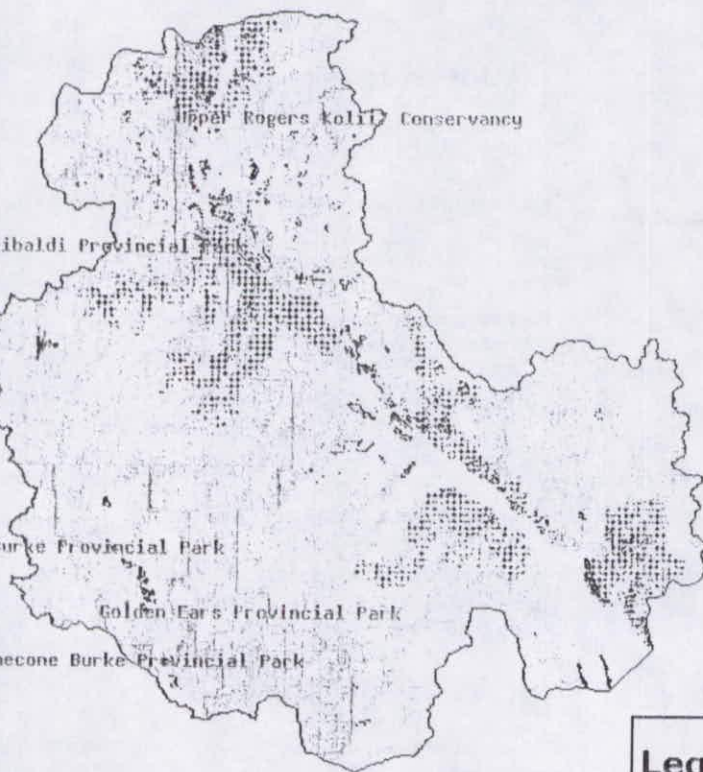
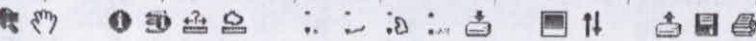
Legend

- ☐ Parks
- ☐ Lakes & Rivers
- ☐ Indian Reserves
- ☐ Streams
- ☒ Watersheds
- ☒ Salmon
- ☐ Sport/Protected*
- ☐ Not Protected*
- ☒ No Fish Captured
- ☒ No Fish Present
- ☒ Community
- ☒ Traditional Area

n-SHUCK-ch Nation

into the future for Douglas, Skatin, and Samahquam

List Add Layers Update Layer Legend Atlas Maps Find Location Refresh Map Help



14014 m.
n-SHUCK-ch Nation

Map Centre: 547599

1,736 (go) Map Tool: Zoom In

Atlas Maps

Click on one of the highlighted theme names below to change to a different theme.

Tákem ti tmícwa (the traditional territory)

Ownership and Tenure

Stewardship Zonation and Cultural Protection Areas

Access and Recreation

Visual Landscape Inventory

Traditional Use and Occupancy

Important Fish Streams

Wildlife

Old Growth Management Areas

Potential Independant Power Production Projects

Legend

- ☐ Parks
- ☒ Wildlife Tree Patch
- ☐ Grizzly Linkage Area (Proposed)
- ☐ Deer Winter Range (Chill)
- ☐ Deer Winter Range
- ☐ Marbled Murrelet
- ☐ Goat Winter Range
- ☒ Old Growth Management Area
- ☐ Special Resource Managenent Zone
- ☐ Spotted Owl Future
- ☒ Spotted Owl Longtern Habitat
- ☐ Lakes & Rivers
- ☐ Streams
- ☐ Parks Line
- ☒ Traditional Area

In-SHUCK-ch Nation

Working into the future for Douglas, Skatin, and Samahquam

Home | Layer List | Add Layers | Update Layer | Legend | Atlas Maps | Find Location | Refresh Map | Help



13862 m.

Copyright © In-SHUCK-ch Nation

Map Centre: 548869,

Scale: 1:545,765

(go) Map Tool: Zoom In

Atlas Maps

Click on one of the highlighted theme names below to change to a different theme.

Tákem ti tmicwa (the traditional territory)

Ownership and Tenure

Stewardship Zonation and Cultural Protection Areas

Access and Recreation

Visual Landscape Inventory

Traditional Use and Occupancy

Important Fish Streams

Wildlife

Old Growth Management Areas

Potential Independant Power Production Projects

Legend

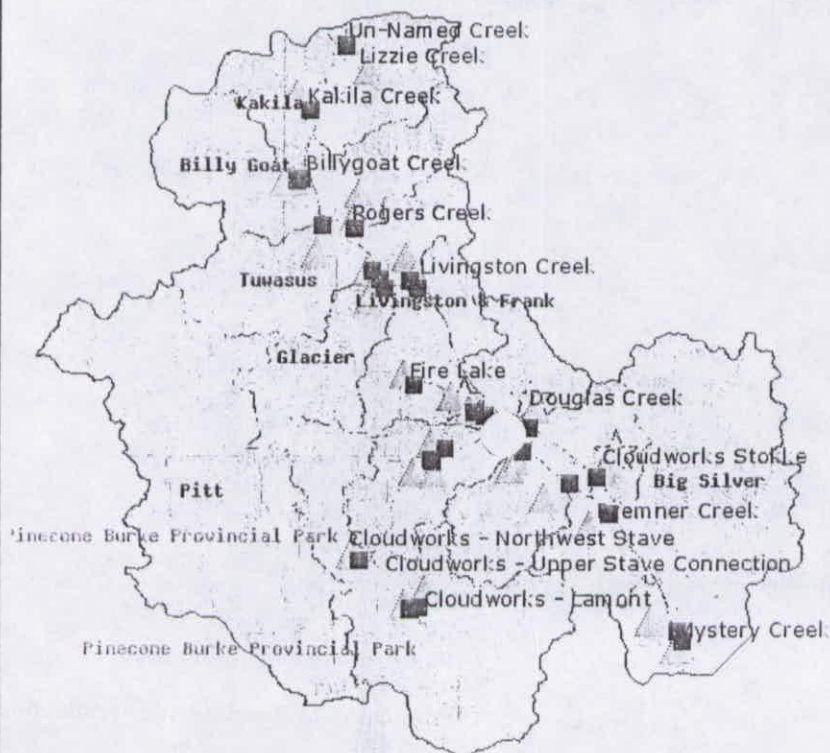
- ☐ Forest < 250 years
- ☐ Non-Productive
- ☒ Old Growth
- ☐ Old Growth (No Harvest)
- ☒ Approved OGMA
- ☒ Proposed OGMA
- ☐ Parks
- ☐ Lakes & Rivers
- ☐ Streams
- ☒ Watersheds
- ☒ Community
- ☒ Traditional Area



In-SHUCK-ch Nation

Working into the future for Douglas, Skatin, and Samahquam

[About](#) | [Layer List](#) | [Add Layers](#) | [Update Layer](#) | [Legend](#) | [Atlas Maps](#) | [Find Location](#) | [Refresh Map](#) | [Help](#)



14317 m.

Copyright © In-SHUCK-ch Nation

Map Centre: 550831, 5516885

Scale: 1: 563,678



Map Tool: Zoom In

Atlas Maps

Click on one of the highlighted theme names below to change to a different theme.

Tákem ti tmícwa (the traditional territory)

Ownership and Tenure

Stewardship Zonation and Cultural Protection Areas

Access and Recreation

Visual Landscape Inventory

Traditional Use and Occupancy

Important Fish Streams

Wildlife

Old Growth Management Areas

Potential Independent Power Production Projects

Sea-To-Sky LRMP

Timber Interests

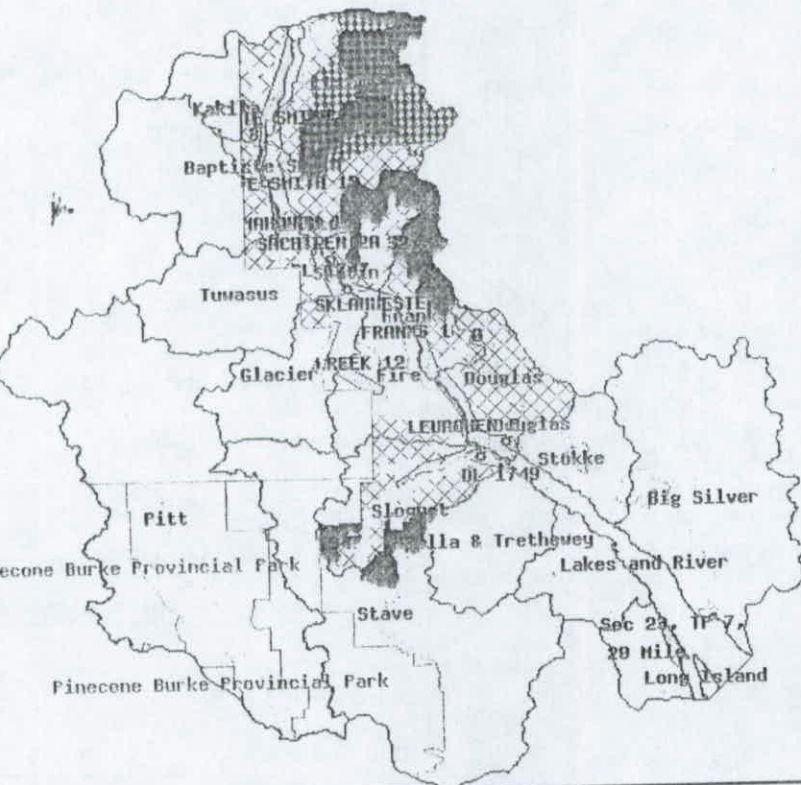
Legend

- ☐ Parks
- ☐ Lakes & Rivers
- ☒ Watersheds
- ☒ BC Hydro
- ☐ Penstock
- ☒ Powerline
- ☐ Water License
- ☐ Streams
- ☐ Intake
- ☐ Douglas/Cloudworks Substation
- ☒ Power House
- ☒ Traditional Area

In-SHUCK-ch Nation

ing into the future for Douglas, Skatin, and Samahquam

Layer List Add Layers Update Layer Legend Atlas Maps Find Location Refresh Map Help



13589 m.
Copyright © In-SHUCK-ch Nation

le: 1: 535,016



Legend

- ☐ Cultural Management Area
- ☐ Treaty Settlement Land
- ☐ Lakes & Rivers
- ☐ Indian Reserves
- ☐ Fee Simple Land
- ☒ Recreation
- ☒ Tourism
- ☐ Wildlife
- ☐ Parks
- ☒ Proposed Non-Motor, Summer Rec. Zones
- ☒ Non-Motorized Winter Recreation
- ☒ In-SHUCK-ch Mountain Zones
- ☒ Watersheds
- ☒ Community
- ☒ Traditional Area

Atlas Maps

Click on one of the highlighted theme names below to change to a different theme.

Tákem ti tmícwa (the traditional territory)

Ownership and Tenure

Stewardship Zonation and Cultural Protection Areas

Access and Recreation

Visual Landscape Inventory

Traditional Use and Occupancy

Important Fish Streams

Wildlife

Old Growth Management Areas

Potential Independent Power Production Projects

Sea-to-Sky LRMP

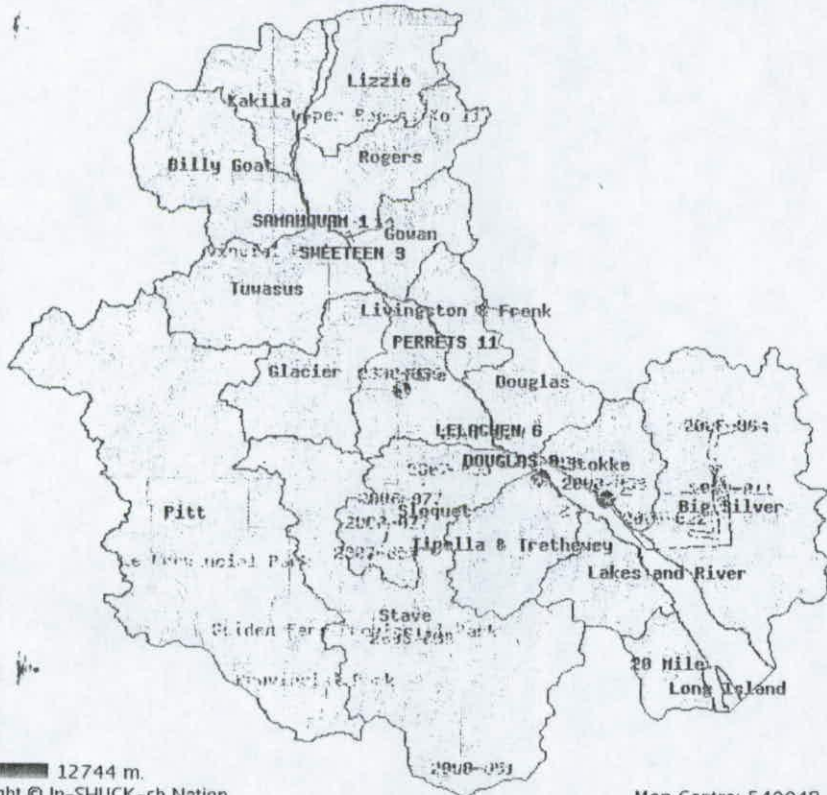
Timber Interests

In-SHUCK-ch Nation

Working into the future for Douglas, Skatin, and Samahquam

Layer List | Add Layers | Update Layer | Legend | Atlas Maps | Find Location | Refresh Map | Help

Map navigation icons: Home, Previous, Next, Full Screen, Print, etc.



Click on one of the high below to change to a d

Tákem ti tnicwa (the

Ownership and Tenure

Stewardship Zonation
Protection Areas

Access and Recreation

Visual Landscape Inver

Traditional Use and Occ

Important Fish Streams

Wildlife

Old Growth Management

Potential Independant P
Projects

Sea-To-Sky LRMP

Timber Interests

Power Interests

12744 m.
copyright © In-SHUCK-ch Nation

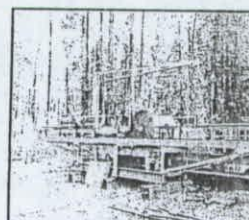
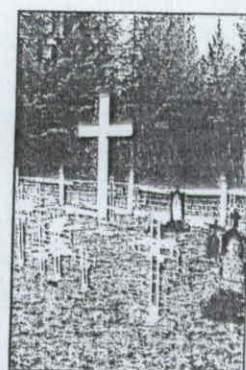
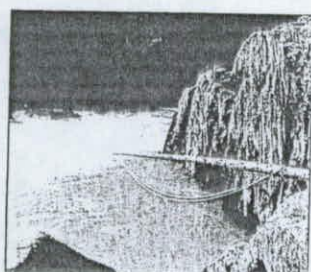
Map Centre: 549048, 5518134

Scale: 1:501,734 Map Tool: Zoom In


Legend

- ☐ Parks
- ☐ Lakes & Rivers
- ☐ Pacific Greengreen Power
- ☒ BC Hydro and Power Authority
- ☒ Cloudworks Energy Inc.
- ☒ Cloudworks Energy Inc. pts
- ☐ Streams
- ☐ Indian Reserves
- ☒ Watersheds
- ☒ Traditional Area

K'ukwstum'ckacw



Thank You

 In-SHUCK-ch
NATION