

# **Environmental Management Plan**

Version 2.0 September 19<sup>th</sup> 2024



# **On the Cover**

Clockwise from the top left: Lexwskw'owōwelh (Skwawolt Creek); fishing on Sto:lo at Sq'ewa:lxw; slhíts'es (dried fish) on Vasasus Island; and berm on east bank of Lexwthíthesem at Ruby Creek IR2.

# **Document Control**

Environmental Management Plan - Version 2.0	September 19 <sup>th</sup> , 2024
<ul> <li>Consolidation of the Environmental Management Framework and the Environmental Protection Plan</li> <li>Incorporating Sq'ewá:lxw suite of environmental and land use legislation, policy, and procedures</li> <li>Renewed community input</li> <li>Increased focus on climate change resilience incorporating extensive work on natural hazard risk</li> <li>Extensive update and re-write</li> <li>Compilation of the Knowledge Base to maintain institutional memory</li> </ul>	
Environmental Protection Plan - Version 1.1	March 3 <sup>rd</sup> , 2014
<ul> <li>Updates reflecting development of the Emergency Management System.</li> </ul>	
Updates to reflect local recycling options facilities.	
<ul> <li>Updates to sections and EOPs dealing with land development and to the Development Permitting Guide addressing consultation and permitting practices to better reflect Sq'ewá:lxw planning and Stó:lo and People of the River procedures.</li> </ul>	
Environmental Management Framework and Protection Plan - Version 1.0	December 30 <sup>th</sup> , 2012



# Land Forest People

Sq'ewá:lxw wishes to acknowledge the contributions made to this project by: The People of Sq'ewá:lxw The Sq'ewá:lxw Land Advisory Committee Stó:lō Research & Resource Management Centre First Nations Land Management Resource Centre Indigenous Services Canada Land Forest People Consulting Ltd.









# How to Use This Plan

In reading and using this Environmental Management Plan, please consider it as a sister within a family. A strong family works in a coordinated way, each with a focus but cognizant of the needs and gifts of the others. The other sisters are the Land Use Plan and the Emergency Management Plan. The collective power of the sisters is the foundation of a resilient family.

This Environmental Management Plan is implementation focused. The purpose is to provide those with environmental protection responsibilities the information they require at their fingertips, and the background information they may need close at hand. With regard to the latter, we have created the Knowledge Base which is a digital library of reference documents designed to be an archive of institutional knowledge.

This Plan is a reference piece, not a novel. As a reference text called upon in time of need and often in the context of a specific issue, information is organized by subject matter rather than by type of tool or elements of a process. Key information is not separated in appendices. The reader is invited to move directly to sections of interest where we hope they find what is needed. The corollary to this approach is that the reader will notice overlap and redundancy between sections. Separate from implementation and outside of crisis management, program planning happens in a less demanding environment and the user will be in a better position to interact with the document as a whole.

Notwithstanding the above paragraph, the reader is invited to review Section 1.0 Introduction in order to appreciate the why's and where's and how's of the entire environmental management program.

Section 2.0 describes the visioning process. Section 3.0 lays out the regulatory environment. Section 4.0 describes the administration processes supporting the Plan and its implementation and enforcement.

Section 5.0 details work done to address legacy environmental impacts and Section 6.0 describes solid waste reduction options.

Sections 7.0 through 21.0, topic by topic, work through the process of setting goals and objectives, identifying strategies, and providing for measurement of progress through indicators and targets.

Section 23.0 is our implementation plan, prescribing responsibilities, actions, priorities, and timeframes.



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# 1.0 INTRODUCTION

## 1.1 ENVIRONMENTAL PLANNING

An environmental management plan describes environmental values, faithfully articulates community vision and objectives, and provides guidance on how to protect those values and meet those objectives.

The purpose of our Environmental Management Plan is to ensure that the environmental vision of the Sq'ewá:lxw people is achieved. We will continue to build a strong community through various social, cultural, and economic development activities which inevitably have environmental implications. Through this Plan potential negative environmental impacts on Sq'ewá:lxw lands associated with such activities will be prevented or minimized to the extent possible and environmental considerations will be identified and fully incorporated into decision-making processes.

The authority over land and environment assumed through land code (See Section 1.7 Integrated Planning) generates potential liability that is mitigated by the development of the *Sq'ewá:lxw Environmental Management Law*, this Environmental Management Plan, and related policies and procedures.

This Plan has been prepared through consultation with our people. An extensive body of existing knowledge from across B.C. and Canada defining best practices has been reviewed and customized to our needs and locality according to the vision of our people.

The Environmental Management Plan takes a long-term vision. It leverages, and is leveraged by, the Sq'ewá:lxw Land Use Plan.

# 1.2 AFFIRMATION OF TITLE AND RIGHTS

Sq'ewá:lxw (Skawahlook First Nation) has occupied our lands and the land within our territories since time immemorial. Our authority flows from the Creator to the people and in turn to the Chief and Council according to the culture, traditions, customs, and laws of Sq'ewá:lxw.

The Téméxw (lands) of Sq'ewá:lxw were never ceded, nor was responsibility to this land ever abdicated. It is now, and has always been, the birthright and the obligation of the Sq'ewá:lxw people to care for the lands and waters of the territory.

Sq'ewá:lxw has undertaken integrated strategic planning (comprehensive community planning, strategic planning, emergency management planning, land use planning, and environmental management planning) as a component of Nation building. Such planning is both a declaration of title and rights and an exercising of those rights.

Our Plans are produced without prejudice. Our Plans do not abrogate or derogate from our rights.





Figure 1 – Multi-level Jurisdiction



## 1.3 PLAN SCOPE

This Environmental Management Plan applies directly to Sq'ewá:lxw reserve lands which have been identified as subject to the *Sq'ewá:lxw Land Code*. However, such limited application is based on an impoverished interpretation of Sq'ewá:lxw rights, and we will apply the environmental management regime described by this *Environmental Management Plan* across Sq'ewá:lxw Téméxw as aggressively as we are able on a best practices basis. Sq'ewá:lxw multi-level jurisdiction is depicted in Figure 1.

## 1.4 THE PEOPLE AND THE LAND

Belonging to the Stó:lō (people of the river), Sq'ewá:lxw people have long established ties to our tribal lands in and around the *Lexwthíthesem* watershed. Formerly considered by others to be part of the "Tait" band, the Skawahlook Band was established on June 13<sup>th</sup>, 1879. Sq'ewá:lxw First Nation is politically affiliated with the Stó:lō Nation. In the Halq'eméylem language Sq'ewá:lxw means "bend in the river".

The land is the basic resource of our people. Without prejudice to our title and rights across our entire territory, this Environmental Management Plan applies directly to Sq'ewá:lxw lands which have been designated Indian Reserve land in the context of the *Indian Act*.

The lands of Sq'ewá:lxw (Skawahlook IR #1 and Ruby Creek IR #2) cover about 81 hectares of largely flat and forested pieces of land sandwiched between the Fraser River to the south and a steep mountainside to the north. Both parcels are bisected by Provincial Highway 7, the Canadian Pacific Railroad, and two Enbridge high pressure natural gas pipelines. Sited on Fraser River bottom lands, the land is largely subject to flooding and partially to mass earth movement events.

This Environmental Management Plan specifically addresses reserve land and any future additions to reserve as well as Sq'ewá:lxw intentions for Sq'ewá:lxw Téméxw.

Sq'ewá:lxw lands are surrounded by the boundaries of the Fraser Valley Regional District (FVRD), but are not part of the Regional District. Although the FVRD has no authority on Sq'ewá:lxw lands, collaboration and alignment can have positive environmental outcomes.

With regard to the environment, we have seen the mistakes of the past and are actively restoring health to the places that have been affected. With this Environmental Management Plan we are defining how we will support ourselves as a sustainable community into the future. In developing a comprehensive environmental management system Sq'ewá:lxw is taking leadership in the stewardship of the land and resources of our ancestors.

For further information on the people and lands of Sq'ewá:lxw please see the Sq'ewá:lxw Land Use Plan.

## 1.5 POPULATION AND HOUSING

Sq'ewá:lxw First Nation has 100 members. Currently, only nine members live on reserve: seven adults and two children. Total population including non-members living on reserve is 55 on Skawahlook #1 and 19 on Ruby Creek #2.

Table 1 reports all Sq'ewá:lxw residents on Sq'ewá:lxw Reserves, members and non-members

Community	Homes	Persons
Skawahlook #1	29	55
Ruby Creek #2	12	19
Total	40	73

#### Table 1 – Sq'ewá:lxw Population



## 1.6 ECONOMICS AND LAND DEVELOPMENT

Sq'ewá:lxw is located on Provincial Highway #7, 14 kilometres west of Hope and 18 kilometres east of Agassiz.

The primary economic initiatives that have been undertaken by Sq'ewá:lxw consist of retail, service, and commercial initiatives housed in modern building facilities clustered together at 58611A Lougheed Highway. The Ruby Creek Art Gallery offers passing motorists and on-line customers a selection of Native art. A large hall and banquet facility is in operation.

Rental housing on Certificate of Possession land is a current member-driven economic initiative on Skawahlook #1.

Open to the public and providing conveniences such as washrooms and shelter is an extensive First Nation themed adventure park called Syéxw Chó:leqw (see Figure 7 - Issues Highlight - Cultural Resources).

## 1.7 INTEGRATED PLANNING

Sq'ewá:lxw is designing our future through an integrated strategic planning process. This supports Sq'ewá:lxw in effectively and efficiently putting in place the policies, plans, and procedures that we need to achieve our vision.

Figure 2- Integrated Planning Framework provides the structure of the Sq'ewá:lxw integrated planning framework.

With the preparation of the Sq'ewá:lxw Vision Plan, our Comprehensive Community Plan, we have worked together to define our future. Together we learned from the past, evaluated the present, and envisioned the future.

The Five Year Strategic Plan derives directly from the Vision Plan and is a comprehensive administrative action plan towards a sustainable future for our people.

Sq'ewá:lxw title and rights are predicated on the continuous occupation of our lands since time immemorial, and give our people the authority to govern and provide stewardship of Sq'ewá:lxw Téméxw. Through the *Skawahlook Land Code* we reclaim our authority to manage our lands and resources. The purpose of *Land Code* is to set out the principles, procedures and administrative structures that apply to our lands and by which Sq'ewá:lxw will exercise authority over those lands. The *Land Code* provides for the creation of laws respecting development, conservation, protection, management, use and possession of, and planning for Sq'ewá:lxw lands.

Land use planning is a nation building exercise. It is an exercise of Indigenous rights and an act of governance. The Sq'ewá:lxw Land Use Plan expresses the vision of the people as a spatial arrangement of land use, esthetics, facilities, and activities. Land use planning allows economic, cultural, and social development while ensuring sustainability.

This Environmental Management Plan develops policies and procedures to ensure that the environmental vision of the Sq'ewá:lxw people is achieved.

Sq'ewá:lxw laws, policies, and procedures are instituted to implement the above strategic planning initiatives.





Figure 2- Integrated Planning Framework

# 1.8 ENVIRONMENTAL EMERGENCIES

The Sq'ewá:lxw All-Hazards Emergency Management Plan addresses all emergency response, mitigation, preparedness and recovery activities, including with regard to environmental emergencies. The All-Hazards Emergency Management Plan includes an Environmental Emergencies Specific Hazard Response Plan.

Environmental emergency operations procedures used in the All-Hazards Emergency Management Plan are drawn from EOP 9 – Fuel Spills and Response (Section 13.2 of this Environmental Management Plan) and EOP 10 – Leaks Threatening Water(Section 14.3 of this Plan).



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# 2.0 VISION AND GOALS

The purpose of this Environmental Management Plan is to ensure that the environmental vision of the Sq'ewá:lxw people is achieved. Sq'ewá:lxw will continue to build a strong community through various activities and undertakings that can have negative impacts on a wide range of Sq'ewá:lxw values. Through this Plan, environmental impacts on Sq'ewá:lxw lands, water, air, and cultural values associated with these activities will be prevented or minimized to the extent possible and environmental considerations will be identified and fully incorporated into decision-making processes. This Environmental Management Plan works in tandem with the Land Use Plan.

The people of Sq'ewá:lxw have over the years worked hard and with intent to express their vision for our lands, air, and water. As discussed in Section 1.7 above, the environmental vision is a shared vision for land, water, and resilience which is a driver of the environmental program.

The overarching Sq'ewá:lxw vision is:

We, the Sq'ewá:lxw First Nation strive to achieve a healthy, proud and prosperous community for future generations and for ourselves. We will achieve the goal of building a self-sufficient community with the energy of our Council, the guidance of our community Members, and the support of external partner organizations.

In Section 2.1 the process of bringing this overarching vision to bear on environmental issues is described.

## 2.1 DEVELOPING THE ENVIRONMENTAL VISION

### LAND ADVISORY COMMITTEE

The *Sq'ewá:lxw Land Code* establishes the Land Advisory Committee, which advises Council on matters respecting the land, recommends laws, resolutions, policies and practices respecting the land to Council, convenes meetings of members to receive their input or seek their approval on certain land matters, and assists in the exchange of information regarding land matters between members and Council.

This Plan has been prepared under the direction of the Sq'ewá:lxw Land Advisory Committee.

The Sq'ewá:lxw Land Advisory Committee met monthly for the duration of the planning work to provide direction with regard to community involvement and Plan content. The Committee has worked to ensure that the Plan reflects member vision.

Table 2 below presents the community engagement accomplishments in the development of this Plan. These activities were undertaken simultaneously for this Environmental Management Plan and the Sq'ewá:lxw Land Use Plan.



Timing	Planning Step
August 2023	Shared the land use and environmental planning project at the community gathering. Gathered input using the survey, collecting 23 responses.
September 2023	Further distributed the survey by email to all members and received seven new responses.
October 2023	Community sharing of survey results by email.
November 2023	Sharing and invitation to comment on land designations via the Sq'ewá:lxw newsletter distributed to all members via Canada Post.
December 2023	Draft Land Use Plan distributed to staff and the Land Advisory Committee for internal review.
January 2024	Completion of Land Use Plan drafting with incorporation of comments.
July 2024	Staff review and finalization of the Environmental Management Plan and Land Use Plan.
To Be Determined	Council adoption.

#### Table 2 – Community Engagement Activities

#### **COMMUNITY GATHERING AUGUST 2023**

The annual community gathering held August 5<sup>th</sup>, 2023 provided an opportunity to engage with the community on the topic of the Environmental Management Plan and Land Use Plan. Important topics explored were:

- The multi-level model of title and territory;
- How community vision had been developed so far;
- Policy with regard to the greater vision of Stó:lo S'ólh Téméxw;
- Land use designations on Sq'ewá:lxw lands; and
- The land use planning being undertaken parallel to the environmental management planning work.

The gathering was also used to introduce the member survey discussed below.

The presentation made to the gathering can be found in *Focusing the Vision* (Sq'ewá:lxw, 2023) in the electronic knowledge base associated with this plan.

### LAND USE AND ENVIRONMENTAL SURVEY 2023

Throughout the planning process the Sq'ewá:lxw Land Advisory Committee made it clear that they wanted everyone involved and that community members have every opportunity to provide input. To this end they directed the preparation of a questionnaire to gather community ideas. The survey was introduced at the August community gathering and 23 submissions were received. The survey was then emailed to all membership and a further seven submissions were received. The information provided with the survey can be found within *Focusing the Vision* (Sq'ewá:lxw, 2023) in the electronic knowledge base associated with this plan.

What we found was that while recognizing some need for economic growth and business, the community most highly values the natural environment that the land offers. This is particularly true in support of cultural activities. Industrial use and further intrusion of pipelines is opposed by most members. Small scale agriculture and food security are ideas beginning to be discussed. Attention to environmental sustainability will support cultural growth and member health and wellness.



The survey results indicate strong support for use of the land by non-resident members, such as the community recreation zone and providing temporary accommodation facilities.

Concerns about environmental degradation and safety and security come together in member emphasis on flooding, wildfire, landslides, and heat and drought as high-risk hazards. Collectively these probably reflect increased awareness of climate change and the need to focus on resilience, although those terms were not used.

Community instructions to the planning team are summarized in Figure 3 – Direct Community Instructions.







A full report of the survey results was sent to all members by email in October of 2023 and the same can be found in *Focusing the Vision* (Sq'ewá:lxw, 2023) in the electronic knowledge base associated with this plan.

### THE SQ'EWÁ:LXW VISION PLAN

The Sq'ewá:lxw Vision Plan, published in 2019, is the culmination of an extensive multi-year community collaboration process. It is the highest Plan under which all Sq'ewá:lxw community activity and sub-planning takes place. Falling in the category of a comprehensive community plan, the Vision Plan is Sq'ewá:lxw's attempt to personalize the process to be more reflective of our community and culture. Beyond the Plan's name, this is evident in our planning process itself, which was centred around the concept of Sq'ép, the Halq'eméylem word for a meeting or gathering, and in the custom logo of a woven cedar hat being held up by our people that we adopted to represent the project.

The Sq'ewá:lxw Vision Plan applies to the entirety of the Sq'ewá:lxw shared interest area as defined by the Sq'ewá:lxw Land Use Plan. See Figure 1 – Multi-level Jurisdiction.



The Sq'ewá:lxw Vision Plan envisions "a healthy, proud, and prosperous community". It expresses our values of integrity, equality, accountability, and transparency.

The Plan itself is organized into the areas of education, housing, health, economic development, culture, governance, safety and security, and fishing. Environment does not feature as a stand-alone section of the Plan, but rather as a recurring thread that is interwoven throughout. While the importance of a healthy and functioning environment is understood to be implicit in all topic areas, the Plan makes explicit reference in the following:

- Housing, with respect to environmental performance, energy efficiency, and the environmental impact of housing development;
- Economic Development, with respect to the need to balance environmental concerns with economic development; and Safety and Security, with respect to Sq'ewá:lxw's contribution to global environment health, environmental protection and wellness, and the need for an up-to-date environmental management plan.



Ruby Creek April 5, 2014



### THE SQ'EWÁ:LXW STRATEGIC PLAN 2019 – 2024

The Sq'ewá:lxw Strategic Plan 2019 – 2024 is a comprehensive administrative road map to a sustainable future for our people. Hierarchically, it is positioned underneath the Sq'ewá:lxw Vision Plan, but above subject area-specific Plans, including this Environmental Management Plan. The current Plan covers the years 2019 – 2024, and was updated in 2022. The following goals are found in that Plan:

- 1. With respect to economic development, to create an economy that attracts businesses and economic and career development opportunities for our members.
- 2. With respect to administration, to deliver high-quality services to community members that meets their needs and expectations.
- 3. With respect to culture, linking the past and the future to preserve Sq'ewá:lxw's personal and community identity.
- 4. With respect to environmental stewardship and lands, protection of the natural environment through conservation and sustainable practices. We will use the following strategies to achieve this goal:
  - a. Restore and protect Sq'ewá:lxw lands from harmful practices.
  - b. Incorporate recycling, conservation, regeneration, and restoration practices into the community day-to-day life.
  - c. Update the Sq'ewá:lxw Land Use Plan.
- 5. With respect to health and safety, to create a safe and healthy environment in the community. Strategies for this include:
  - a. Provide planning, support, and training in the event of an emergency or disaster.
  - b. Address environmental health issues, such as asbestos, hazardous waste, and waste water, through subdivision, development, and permitting policy and procedures.
- 6. With respect to infrastructure and housing, to ensure the existence of reliable infrastructure that facilitates the needs of the community.
- 7. With respect to leadership and governance, to provide good governance in the best interest of all Sq'ewá:lxw members.

Table 3 below maps Vision Plan elements to Strategic Plan elements.

Vision Plan Elements	Corresponding Strategic Plan Elements
Education	Economic Development
	Leadership and Governance
Housing	Infrastructure and Housing
Health	Health and Safety
Economic Development	Economic Development
Culture	Culture
Governance	Administration
	Leadership and Governance
Safety and Security	Health and Safety
Housing, Economic Development, and Safety Security	Environmental Stewardship and Lands

Table 3 – Strategic Plan Elements



#### THE SQ'EWÁ:LXW LAND USE PLAN

The Sq'ewá:lxw Land Use Plan was first adopted in 2012 and underwent a major revision in 2016. Version 2.0 of the Land Use Plan (2024) was developed concurrently with this version 2.0 of the Environmental Management Plan.

Environmental and land use planning are necessarily closely connected. Through the Land Use Plan, Sq'ewá:lxw asserts our collective rights to, and stewardship of, their traditional lands, waters, and natural resources. Environmental protection is a central theme throughout the Land Use Plan.

Through community discussion in relation to developing the 2012 Land Use Plan, the following statement emerged:

We envision a future with:

Productive and vibrant natural ecosystems on our land;

Clean and healthy water flowing over and under our land;

*Clean and fresh air blowing across our land;* 

A safe and secure community;

A beautiful and inspiring community fostering wellness;

A culturally vibrant community with strong links to the past and the future; and

A functional and sustainable community composed of healthy and happy individuals.

Looking to update and build upon that vision, a survey of members was undertaken in the summer and fall of 2023. The results are described immediately below.

While recognizing some need for economic growth and business, the community most highly values the natural environment that the land offers. This is particularly true in support of cultural activities. Industrial use and further intrusion of pipelines is opposed by most members. Small scale agriculture and food security are ideas beginning to be discussed. Attention to environmental sustainability will support cultural growth and member health and wellness.

The survey results indicate strong support for use of the land by non-resident members, such as the community recreation zone, and providing temporary accommodation facilities.

Concerns about environmental degradation and safety and security come together in member emphasis on flooding, wildfire, landslides, and heat and drought as high-risk hazards. Collectively these probably reflect increased awareness of climate change and the need to focus on resilience, although those terms were not used.

#### THE SQ'EWÁ:LXW ALL-HAZARDS EMERGENCY MANAGEMENT PLAN

The purpose of the Sq'ewá:lxw emergency management program is to provide a framework for the mitigation of risk, the preparation for and response to emergencies or disasters, and for recovery activities during and after an emergency or disaster. This is done in close coordination with other Sq'ewá:lxw administration functions for a holistic approach to community resilience.

The goals of the emergency program and Plan are to protect the health and safety of our community members and our critical infrastructure.



The Sq'ewá:lxw All-Hazards Emergency Management Plan Ver. 5.0 (2024) has had continuous development and updating since 2012.

### 2.2 STEWARDSHIP AND ENVIRONMENTAL ISSUES

There are many references to environmental issues throughout this Plan. Issues of concern to Sq'ewá:lxw were identified throughout the visioning process and are expressed within the planning structure of goals and objectives.

Throughout the visioning process, some environmental issues came to the fore repeatedly: stewardship of the natural environment; the protection of cultural and environmental values; invasive species; air quality and outdoor burning; surface and ground water quality, yield, and flow patterns; environmental degradation from drought, heat, wildfire, flooding, and geohazards; and cultural and environmental resilience and sustainability in the face of climate change.

The 2023 community survey, depicted in Figure 3 – Direct Community Instructions, specifically identified the following environmental issues: pollution; trespassing; invasive species; and food security.

Past and present activities at Sq'ewá:lxw address these issues and progress is being made. Please see the Issues Highlight figures (Figure 6 through Figure 9).

### 2.3 GOALS, OBJECTIVES AND PROGRESS MEASUREMENT

In order to ensure that the vision for the future defined by the people of Sq'ewá:lxw and detailed in Section 2.1 is achieved, the following system of goals, strategies, objectives, indicators, and targets has been crafted.

Each issue or topic discussed in Sections 7.0Re-use and Recycling through 21.0 uses this framework to focus activity based on vision and describe how success will be measured.

Environmental Issue or Topic		
Goals		
• (an achievable, generally broad and longer term, outcome)		
Objective	Indicator	Target
(short term tactical state or action to achieve an overall goal)	(a measurable descriptor of success)	(the numerical target)
<ul> <li>Strategies</li> <li>(a specific plan you'll use to meet goals and objectives)</li> </ul>		



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# 3.0 REGULATORY CONTEXT

This section describes the links between this Environmental Management Plan and the relevant regulatory environment. In Canada all levels of government share in the responsibility for protection of the natural environment.

# 3.1 JURISDICTION

Sq'ewá:lxw has a right to self-government which is recognized and affirmed by Section 35 of the Constitution Act, 1982.

Sq'ewá:lxw is operational under the First Nations Land Management Act with a land code in place. The Skawahlook Land Code replaces land management provisions of the Indian Act in order that we can exercise control over our lands and resources for the use and benefit of our members.

Concurrently with this updated Environmental Management Plan, Sq'ewá:lxw is updating our Land Use Plan which will drive activities to appropriate locations on our lands.

Sq'ewá:lxw legislation and policy supports, implements, and enforces the Environmental Management Plan. The Sq'ewá:lxw Environmental Management Law prohibits certain activities that have the potential to harm the environment, governs the remediation of contaminated sites, and directs the Lands Manager to prepare an environmental management plan that specifically addresses environmental contaminants.

In accordance with the law, Sq'ewá:lxw implements and enforces our vision for the environment through this Sq'ewá:lxw Environmental Management Plan. The Sq'ewá:lxw Environmental Management Policy and Procedures provide a clear and transparent process for the administration of environmental management on Sq'ewá:lxw lands.

# 3.2 SQ'EWA:LXW REGULATORY TOOLS

Table 4 lists the environmental management tools at our disposal.

Table 4 – Sq'ewá:lxw	<b>Regulatory Tools</b>
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Legislation, Regulations, Related Documents	Scope and Implications
Sq'ewá:lxw Authority	
Inherent Title and Rights	Sq'ewá:lxw authority flows from the Creator to the people and in turn to the Chief and Council according to the culture, traditions, customs, and laws of Sq'ewá:lxw.
Skawahlook Land Code	In the context of the Canada <i>First Nations Land</i> <i>Management Act</i> discussed below, the Land Code sets out the principles, procedures and administrative structures that apply to our lands and by which Sq'ewá:lxw will exercise authority over those lands. The <i>Skawahlook Land Code</i> enables Sq'ewá:lxw to make laws respecting development, conservation, protection, management, use and possession of, and planning for Sq'ewá:lxw lands.



Legislation, Regulations, Related Documents	Scope and Implications	
Sq'ewá:lxw Environmental Management and Protection		
<ul> <li>Sq'ewá:lxw Environmental Management Law, 2017</li> <li>Law Summary</li> <li>Environmental Management Procedures, 2018</li> <li>Environmental Management Plan, 2024</li> <li>All-Hazards Emergency Management Plan, 2024</li> <li>Environmental Operating Procedures</li> </ul>	The purpose of this law is to ensure Sq'ewá:lxw people's vision of a safe, prosperous, and sustainable community is achieved while caring for our land and water. The law also mandates the preparation of this Sq'ewá:lxw Environmental Management Plan, which is the policy tool for implementing environmental management and protection, and emergency management.	
Sq'ewá:Ixw First Nation Fireworks Control Law, 2018 • Law Summary	The purpose of the Fireworks Law is to promote safety and to protect Sq'ewá:lxw lands, members, occupants, buildings and resources from potentially hazardous or disruptive use of fireworks.	
Sq'ewá:lxw First Nation Outdoor Fires Law, 2018 • Law Summary	The purpose of the Outdoor Fires Law is to promote safety and to protect Sq'ewá:lxw First Nation lands, Members, occupants, buildings, and resources from potentially hazardous results of improper outdoor fire and burning practices.	
Sq'ewá:Ixw First Nation Removal of Trespassers Law, 2018 • Law Summary	The purpose of the Removal of Trespassers Law is to protect Sq'ewá:lxw residents, land, buildings and resources from persons trespassing on or frequenting Sq'ewá:lxw lands for prohibited purposes.	
Sq'ewá:lxw Cultural Protection		
S'ólh Téméxw Use Plan Policy Stó:lō Heritage Policy Manual	Adopted as Sq'ewá:lxw policy.	
Sq'ewá:lxw Land and Development		
<ul> <li>Sq'ewá:lxw Subdivision, Development, and Servicing Law, 2021</li> <li>Law Summary</li> <li>Development Permitting Guide, 2021</li> <li>Development Procedures, 2021</li> <li>Member and Internal Process, 2021</li> </ul>	Enable land development on Sq'ewá:lxw reserve lands that meets community goals, protects Sq'ewá:lxw values and the environment, and supports socio- economic objectives. A development permit process is defined to protect soils, vegetation, and water.	
<ul> <li>Sq'ewá:lxw First Nation Land Use and Zoning Law, 2017</li> <li>Law Summary</li> <li>Land Use Procedures, 2017</li> <li>Land Use Plan</li> </ul>	Promote environmentally responsible, healthy, safe, convenient, and well-planned use of Sq'ewá:lxw lands, direct the preparation of the Sq'ewá:lxw Land Use Plan, designate land use zones (designations), and regulate the permitted activities within zones.	



Legislation, Regulations, Related Documents	Scope and Implications
<ul> <li>Sq'ewá:lxw First Nation Expropriation Law, 2015</li> <li>Law Summary</li> <li>Expropriation Policy and Procedures, 2017</li> </ul>	Clarify the rights of all parties to an expropriation and to establish procedures for expropriations on Sq'ewá:lxw lands.
Skawahlook First Nation Spousal Property Law, 2011	Protects long-term community interests in land.
Law Summary	
<ul> <li>Housing Program (There is no law in place)</li> <li>Housing Policy</li> <li>Housing Strategy</li> <li>Housing Procedures</li> <li>Housing Communication Strategy</li> <li>Housing Application</li> </ul>	The Sq'ewá:lxw housing strategy addresses land use and environmental issues in the process of supporting the development of housing for members. Environmental impacts and energy efficiency are impacted by development, construction, and infrastructure planning and design decisions.
Sq'ewá:lxw Enforcement and Protection	
<ul> <li>Sq'ewá:lxw Enforcement and Ticketing Law,</li> <li>2016</li> <li>Law Summary</li> <li>Enforcement and Ticketing Regulation</li> <li>Enforcement Policy</li> </ul>	Promotes the fair, effective, and efficient enforcement of Sq'ewá:lxw laws on Sq'ewá:lxw lands. Enables and empowers Enforcement Officers.
Sq'ewá:lxw Removal of Trespassers Law, 2018 • Law Summary	The purpose of the Removal of Trespassers Law is to protect Sq'ewá:lxw residents, land, buildings and resources from persons trespassing on or frequenting Sq'ewá:lxw lands for prohibited purposes. Addresses use or removal of natural resources.
Sq'ewá:lxw Animal Control and Protection Law, 2018 • Law Summary	The Animal Control & Protection Law is intended to protect the welfare of animals residing on Sq'ewá:lxw lands and to provide measures of safety for the residents of Sq'ewá:lxw lands.
Sq'ewá:lxw Noise Control Law, 2018 • Law Summary	The Noise Control Law is intended to prevent unreasonable noise that is likely to disturb the community and to establish which certain noise levels may not be exceeded at certain times.
Sq'ewá:lxw Community Approval Law, 2022	Sets out a process by which Sq'ewá:lxw will seek community approval for matters requiring a ratification vote.
Sq'ewá:lxw Community Conduct Law, 2022 <ul> <li>Community Conduct Regulations</li> </ul>	Promotes the positive conduct of all people, including residents and visitors, on Sq'ewá:lxw lands by prohibiting certain activities, including environmental harm, and penalizing participation in prohibited activities.



Legislation, Regulations, Related Documents	Scope and Implications
Sq'ewá:lxw Community Protection Law, 2022	Promotes the safety and protection of all people on Sq'ewá:lxw lands by restricting the activities of a person who has been convicted of certain offences, poses a threat, or causes harm in the community.

### 3.3 CANADA

Canada is a signatory to the United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP). The Canadian United Nations Declaration on the Rights of Indigenous Peoples Act (S.C. 2021, c. 14) adopts various articles of UNDRIP which lift up the efforts of Sq'ewá:lxw as delivered in this Environmental Management Plan. Front and centre is Article 29:

#### Article 29

**1.** Indigenous peoples have the right to the conservation and protection of the environment and the productive capacity of their lands or territories and resources. States shall establish and implement assistance programmes for indigenous peoples for such conservation and protection, without discrimination.

**2.** States shall take effective measures to ensure that no storage or disposal of hazardous materials shall take place in the lands or territories of indigenous peoples without their free, prior and informed consent.

**3.** States shall also take effective measures to ensure, as needed, that programmes for monitoring, maintaining and restoring the health of indigenous peoples, as developed and implemented by the peoples affected by such materials, are duly implemented.

The Constitution Act 1982, the Indian Act 1985, and the Canadian Charter of Rights and Freedoms, provide the overarching regulatory context for Indian Reserves. Indian Reserve land is held by the federal Crown for the use and benefit of Indians. The Indian Act regulates Indians and Indian Reserves.

Under the Framework Agreement on First Nation Land Management, and enabled by the *First Nations Land Management Act 1999* (FNLMA), First Nations have the option of withdrawing their lands from the land management provisions of the *Indian Act* in order to exercise control over their lands and resources for the use and benefit of their members.

The Framework Agreement does not exempt Sq'ewá:lxw from complying with other federal environmental laws such as the *Fisheries Act, Species at Risk Act,* and *Migratory Birds Convention Act*.

Administered by the federal Ministries of Environment and Health, the *Canadian Environmental Protection Act, 1999* (CEPA) is the primary element of the legislative framework for protecting the Canadian environment and human health. CEPA is a tool which is applied on Indian reserves for preventing pollution and ensuring that development is sustainable. Key areas covered by the Act include control of toxic substances, control of pollution, and management of wastes. The Act gives the Federal Government the power to make regulations, establish objectives, and develop guidelines and codes of practice for protecting the environment on Indian Reserves.

The *Impact Assessment Act 2019* (IAA) ensures that the environmental effects of designated physical activities are reviewed before action is taken in order to avoid significant adverse environmental effects. Pertinent laws and regulations of Canada are summarized in Table 1Table 5.



Legislation, Regulations, Related Documents	Scope and Implications	
Federal Authority		
<i>Constitution Act 1982,</i> Section 35	Does not create any rights, but recognizes and affirms existing Aboriginal and Treaty rights, or those that may be acquired. Defines "Aboriginal" to mean the Indian, Inuit, and Métis peopl of Canada.	
The Canadian Charter of Rights and Freedoms, Section 25 ( <i>Constitution Act</i> , Part I)	The Charter forms part of the Canadian Constitution, and guarantees the fundamental rights and freedoms and equality for all Canadians before and under the law, and that those rights do not abrogate or derogate from Aboriginal and Treaty Rights, or other rights of Aboriginal people.	
United Nations Declaration on the Rights of Indigenous Peoples (UNDRIP)	While itself not legally binding on Canada, UNDRIP contains a set of principles to which Canada is a signatory, and with which all legislation must align under subsequent federal and provincial legislation. Sets out the individual and collective rights of Indigenous peoples, as well as their rights regarding their culture, identity, language, employment, health, education, and other issues. It emphasizes the rights of Indigenous peoples to maintain and strengthen their own institutions, cultures and traditions, and to pursue development in keeping with their own needs and aspirations. It prohibits discrimination against Indigenous peoples, promotes their full and effective participation in all matters concerning them, affirms their right to remain distinct and to pursue their own visions of economic and social development.	
Canadian United Nations Declaration on the Rights of Indigenous Peoples Act, 2021	Federal act that sets out a process for updating all federal laws to be consistent with the United Nations Declaration on the Rights of Indigenous Peoples.	
Indian Act, 1985	Regulates Indians and Indian Reserves. This legislation is largely outdated and mostly silent on environmental issues, but does provide for Band Councils to make laws regarding some health and environmental issues.	

#### Table 5 - Federal Regulatory Tools



Legislation, Regulations, Related Documents	Scope and Implications	
First Nations Land Management Act, 1999 (FNLMA)	Brings into effect the Framework Agreement on First Nation Land Management ("Framework Agreement") that enables land codes and associated land management regimes by First Nations. Enables the enactment and enforcement of laws in accordance with a land code replacing <i>Indian Act</i> provisions respecting environmental assessment and protection, development, conservation, protection, management, use and possession of First Nation land and interests, land rights, and licenses.	
	Signatory First Nations to the Framework Agreement may withdraw their reserve lands from the land management provisions of the <i>Indian Act</i> in order to exercise control over their lands and resources for the use and benefit of their members in accordance with their own land management legislative regime.	
Framework Agreement on First Nation Land Management	Signatory First Nations may withdraw reserve lands from the land management provisions of the <i>Indian Act</i> in order to exercise control over their lands and resources for the use and benefit of their members. Implementation is through an environmental management plan which is used to develop policy regarding environmental protection laws.	
Environmental Emergencies – Federal Authority		
Emergencies Act, 1985	The <i>Emergencies Act</i> is to ensure that Canada can invoke exceptional yet incident-specific powers to deal with emergencies. It defines four categories of emergencies in which the federal government may be required to act: public welfare emergencies (i.e., natural or human disasters); public order emergencies (i.e., threats to internal security); international emergencies (i.e., external threats to Canada or its allies); and war.	
Emergency Management Act, 2007	Sets out clear roles and responsibilities of all federal ministers for the full spectrum of emergency management applicable to their area of responsibility. This includes prevention/mitigation, preparedness, response and recovery, and critical infrastructure protection.	



Legislation, Regulations, Related Documents	Scope and Implications		
Environmental Management and Protection - Federal Authority			
Canadian Environmental Protection Act, 1999	An Act respecting pollution prevention and the protection of the environment and human health in order to contribute to sustainable development, the control of toxic substances, and the management of wastes. Administered by Environment Canada and Health Canada, the act includes recognition of the role of traditional aboriginal knowledge. Part 4 addresses Fuels, Part 7 addresses pollution and waste management, and Part 9 addresses the regulatory gap on Indian Reserves.		
Impact Assessment Act, 2019	Outlines a process for evaluating the environmental, economic, social, and health effects—both positive and negative—of a proposed project on federal land, including the impacts to Indigenous groups and their rights. Designated projects are determined either by regulation or by Ministerial discretion. Indigenous involvement includes the ability to run a parallel environmental review and impact assessment, dedicated committee representation, and specific consideration of Indigenous rights and interests final decisions.		
Indian Act Indian Reserve Waste Disposal Regulations	In the absence of a land code and related laws, the Indian Reserve Waste Disposal Regulations regulate waste disposal and storage on Indian Reserves.		
<i>Transportation of Dangerous</i> <i>Goods Act</i> and associated Transportation of Dangerous Goods Regulations	Contain provision to ensure environmentally responsible actions in the safe transportation of dangerous goods on land and water, including those related to marks, emergency planning, means of containment, and enforcement.		
Canada Water Act, 1985	Provides a framework for federal-provincial/territorial cooperation to protect and manage water resources and water quality		
Canadian Navigable Waters Act, 1985	Protects waters on which the public has the right of travel (navigable waters)		
Species Protection - Federal Authority			
<i>Fisheries Act, 1985</i> and associated regulations	Manages and protects fisheries resources under federal jurisdiction. Includes provisions to prevent pollution of waters inhabited by fish or disrupt fish habitat. Several associated regulations contain measures to avoid harmful disruptions and pollution that may affect fish and fish habitat.		



Legislation, Regulations, Related Documents	Scope and Implications
Canada Wildlife Act, 1985 Species at Risk Act, 2002 Migratory Birds Convention Act, 1994	Suite of legislation by which the federal government manages, conserves, and protects fish and wildlife species and their habitats.
International and Interprovincial Trade Act, 1992 and associated regulations	
Plant Protection Act, 1990	Protects plant life and the agricultural and forestry sectors, primarily though the control and eradication of pests.

## 3.4 BRITISH COLUMBIA

The *Canadian Constitution Act* (The *Constitution Acts 1867* to *1982*) allocates many environment, land, and resource responsibilities to the provinces which leaves a regulatory gap on federal land.

In British Columbia, the primary environmental legislation is the *Environmental Management Act, 2003* (EMA), which regulates industrial and municipal waste discharge, pollution, hazardous waste, and contaminated site remediation. This legislation provides the framework for the creation of regulations and codes of practice for waste management activities.

The Contaminated Sites Regulation (CSR) under and along with the EMA specifies the requirements for all stages of management of contaminated sites from site identification, through evaluation of remediation options (including the requirement that substances be remediated to numerical and risk-based standards), to the confirmation and monitoring of remediation performance.

The Hazardous Waste Regulation under the EMA describes requirements for storing, handling, transporting, and registering particularly harmful wastes known as hazardous wastes and hazardous waste sites. The regulation also provides requirements for registering with the Ministry of Environment and Climate Change Strategy for dealing with hazardous waste.

While provincial legislation does not apply on Indian lands, there are opportunities for Sq'ewá:lxw to create efficiencies by aligning Sq'ewá:lxw laws with provincial legislation.

Pertinent laws and regulations of, British Columbia are summarized in Table 6.



Provincial Authority			
Declaration on the Rights of Indigenous Peoples Act, 2019	Provincial act that sets out a process for updating all provincial laws to be consistent with the United Nations Declaration on the Rights of Indigenous Peoples.		
Environmental Emergencies - Provin	Environmental Emergencies - Provincial Authority		
Emergency and Disaster Management Act, 2023 Regulations are not yet implemented and elements of the Emergency Program Act remain during transition.	<ul> <li>Establishes and defines the provincial emergency program in British Columbia, including the responsibilities of local authorities with respect to emergency response.</li> <li>Implementation on Indian Reserves is through multilateral service agreements: <ul> <li>Bilateral agreement between Indigenous Services Canada (ISC) and the Ministry of Emergency Management and Climate Readiness (EMCR) for EMCR to provide emergency management services on Indian Reserves comparable to what other local authorities receive; and</li> <li>Tripartite MOU between ISC, the First Nations Leadership Council and the Province of BC to ensure First Nation participation in the governance and operations of EMCR.</li> </ul> </li> </ul>		
Environmental Management and Pro	otection - Provincial Authority		
<i>Environmental Management Act, 2003</i> , Hazardous Waste Regulation, and other associated regulations	Protects human health and water, land, and air quality in British Columbia by prohibiting and authorizing waste and waste disposal, hazardous waste, municipal waste management, contaminated sites and their remediation, mine site remediation, air contaminants and fuel emissions, greenhouse gas emissions, pollution, spills, and the Conservation Officer Service. The Hazardous Waste Regulation specifically addresses the requirements for storing, handling, transporting, and registering hazardous wastes and hazardous waste sites.		
Water Protection Act, 1996 Drinking Water Protection Act, 2001 and Drinking Water Protection Regulation Water Sustainability Act, 2014	The protection of water and drinking water in BC is complex and subject to ongoing change in the face of increasing development and climate change. The three acts work together to confirm the province's ownership of surface and groundwater, manage and limit the amount of removal or diversion of water, license groundwater use, protect fresh water ecosystems, fish, and riparian areas, and regulate dam safety. A Watershed Security Strategy, a policy intended to increase First Nation involvement in the protection of BC's water resources, is in development as of 2023.		

### Table 6 – Provincial Regulatory Tools



Cultural Protection - Provincial Authority		
Heritage Conservation Act, 1996	Encourages and facilitates the protection of conservation of sites of archaeological or historical value on public and private land in British Columbia	
Species Protection - Provincial Authority		
Wildlife Act, 1996	Provincial act for the conservation and protection of wildlife and wildlife populations and their habitat. Means of protection include the designation of wildlife management areas, and the issuance of licenses and permits for fishing, hunting, and trapping, and guidelines for safe angling, trapping, and guide outfitting.	
Riparian Areas Protection Act, 1997	Formerly the <i>Fish Protection Act</i> until changed by the <i>Water Sustainability Act</i> , this act requires local governments to protect and enhance riparian areas subject to development.	
Forest and Range Practices Act, 2002 Plant Protection Act, 1996 Wood Control Act, 1006	Suite of legislation by which the provincial government manages and protects plants and forest resources in BC.	
Weed Control Act, 1996		

## 3.5 REGIONAL GOVERNMENT

Sq'ewá:lxw lands are surrounded by the administrative boundaries of, but are excluded from, the Fraser Valley Regional District which operates under Provincial law and regulation. The Regional District has no jurisdiction on Indian Reserves but is a potential partner in various programs.



# 4.0 PROGRAM ADMINISTRATION

This section outlines the actions and reporting processes required to implement this Environmental Management Plan. It further identifies organizational and administrative procedures and requirements (including roles, resources, training, and information management) for implementing environmental practices and procedures outlined in the Plan.

Recommendations are highlighted.

## 4.1 ADOPTION OF THE PLAN BY CHIEF AND COUNCIL

Implementation of the Environmental Management Plan is empowered by endorsement by Chief and Council. Staff and community members can advance the environmental program in full knowledge of the legitimacy of the Environmental Management Plan.

### 4.2 ADMINISTRATION

Implementation of this Environmental Management Plan takes place in a feedback loop with Sq'ewá:lxw strategic planning and staff annual work planning.

### 4.3 ENFORCEMENT

Enforcement and adjudication of laws created under the authority of a land code is a topic of great debate and development at this time.

Sq'ewá:lxw has developed the following legislation towards a fulsome enforcement regime including:

- *Environmental Management Law* (prohibitions, permits, orders, offences, penalties, and enforcement);
- Community Protection Law;
- Enforcement and Ticketing Law;
- Removal of Trespassers Law; and
- Community Conduct Law.

### 4.4 INFORMATION

Good information supports great decisions. Building a robust information and spatial data set will support:

- Strategic and operational planning;
- Communication and community engagement;
- Control of operational costs;
- Environmental stewardship;
- Fish and wildlife management;
- Cultural resource and habitat protection;
- Permitting and environmental assessment;
- Emergency response; and
- Economic development and land use and development.



Spatial data supports the permitting and project consultation processes which ensures that Sq'ewá:lxw goals are met. The referral process links resources to business opportunities.

Spatial information of great interest includes:

- Natural values such as land, water, ecosystems, vegetation, animals, fish, and habitats;
- Environmentally sensitive areas and rare and endangered species and ecosystems;
- Historical and cultural values;
- Infrastructure such as roads, bridges, and culverts, drainage structures, fuel storage and distribution systems, wells, and septic systems;
- Operational data such as waste stream studies, air and water quality monitoring, drinking water testing results, and fuel and septic system inspection logs;
- Population; and
- Land use and development.

Sq'ewá:lxw should emphasize natural and cultural resource information and mapping as a key function of the Nation including web-based mapping to ensure that the information accumulated to date is used to best advantage and that the Nation has a process for incorporating new information.

**Recommendation:** Create an information management system capable of tracking all tabular and spatial information that would support the achievement of Sq'ewá:lxw environmental goals.

### 4.5 STAFFING REQUIREMENTS

Assignment of responsibility and provision of sufficient funding for the environmental program to specific staff will be required to ensure the success of the environmental management program.

#### LANDS MANAGER

The Lands Manager will be responsible for coordination of environmentally related issues within the Nation.

In addition to other duties, the Lands Manager duties would include:

- Primary responsibility for:
  - The environmental program including policy and regulation development;
  - The permitting and environmental impact assessment processes;
  - Air and water quality monitoring;
  - Waste stream measurement, program monitoring, and continuous improvement;
  - Emergency response management (or the Band Administrator); and
  - Environmental program enforcement.
- Annual work planning, budgeting, and performance reporting;
- Ensuring the full implementation of environmental policy and the success of established programs;
- Lead and manage all communication initiatives;
- Provide advice to industrial operators with regard to compliance with Sq'ewa:lxw requirements; and
- Depending on the business model that is established, manage the contracted waste disposal services.

The Lands Manager shall review waste management efforts on an annual basis and report to the appropriate management body.



#### ENVIRONMENTAL CULTURAL COORDINATOR

The Environmental Cultural Coordinator has responsibility for planning and implementing cultural resources and ecosystem health elements of the environmental management program.

#### EMERGENCY PROGRAM COORDINATOR

The Emergency Program Coordinator is a key position in the Nation emergency program. The coordinator is responsible for the management and coordination of emergency preparedness, response and recovery and for developing and maintaining an emergency program for the community. The EPC receives policy direction and support from the Emergency Management Committee.

The duties of the Emergency Program Coordinator include, but are not limited to, the following:

- Prepare an annual budget, based on input from the Emergency Management Committee;
- Manage contracts on behalf of the Emergency Management Program, such as specialists to provide training, exercises or planning;
- Coordinate annual assessment of local risks, evaluation of mitigation projects, preparing evacuation plans, and other responsibilities;
- Coordinate implementation of strategies selected by the Emergency Management Committee, for example hold public awareness sessions, organize training, and establishing emergency operation centre facilities;
- Provide a single point of contact for the overall emergency management program. This position is also responsible for giving presentations on the program to community members and other groups who may request such a presentation;
- Continuous update of the Emergency Plan and associated documents;
- Coordinate the purchase and tracking of all equipment, materials and supplies on behalf of the program;
- Coordinate training programs and exercises;
- Liaise with regional and provincial government authorities, businesses, and industry in the area on concerns of mutual interest;
- Produce appropriate agenda, arrange and chair meetings of the Emergency Management Committee;
- Implement, monitor and evaluate a training and exercise program;
- Initiate, maintain and support volunteer programs;
- Report on the effectiveness of the emergency management program to Chief and Council; and
- Research, apply for and acquire alternative funding to support programs.

### 4.6 TRAINING AND CONTINUING EDUCATION

Education and training support for the Lands Manager, the Environmental Lead, and the Emergency Program Coordinator will be critical to program success. There should be appropriate and specialized technical training as well as opportunities for growth in business, communication, personal development, and other soft skill sets and competencies.



Technical	Administrative	Personal Development
<ul> <li>Title and rights issues</li> <li>Beahr training programs:         <ul> <li>Local Environmental Coordinator</li> <li>Land Use Planning Coordinator</li> <li>Solid Waste Coordinator</li> <li>Environmental Monitor Program</li> </ul> </li> <li>GIS and information technology</li> <li>Water and wastewater systems</li> <li>Fuel handling</li> <li>Emergency response coordination</li> </ul>	<ul> <li>Computer, email, and administrative systems</li> <li>MSWord and Excel</li> <li>Web and social media</li> <li>Industrial first aid</li> <li>Driving and road safety</li> <li>WHIMIS</li> <li>Transportation of dangerous goods</li> </ul>	<ul> <li>Personal financial management</li> <li>Effective technical writing</li> <li>Conflict resolution</li> <li>Facilitation</li> </ul>

A training plan will be developed with each employee. It may include the following:

## 4.7 RISK AND MITIGATION

As a component of annual planning, staff will conduct a re-assessment of risk due to any changes and developments over the past year. Changes to the plans, budgets, or programs will be approved by Chief and Council.

The environmental program will be protected through the following policies:

- Redundancy in staff responsibility and training;
- Capture of institutional knowledge in an electronic knowledgebase; and
- Data and information backups and archives.

**Recommendation:** Implement risk management and mitigation as a normal business practice. Implementation requirements:

• Leadership support for culture of risk management.

## 4.8 CONTINUOUS IMPROVEMENT

This section describes requirements for record keeping, reporting, review, auditing and updating of the Environmental Management Plan. An effective monitoring, reviewing, and evaluating process will ensure that the Plan remains relevant over time. Monitoring the Plan includes determining if targets are met and identifying areas for improvement.

The Lands Manager will lead the monitoring effort.


### MONITORING

The monitoring program includes methods and measurables required to determine the success of plan implementation. Monitoring will assess the indicators defined in the Environmental Management Plan. It may involve both techniques of western science and traditional ways of watching the land. Monitoring is an iterative process of improvement. Monitoring may include experimentation of different approaches which would constitute adaptive management.

Monitoring will include water and air quality monitoring as may be established.

Monitoring will include community feedback on program progress.

### ANNUAL WORK PLAN

The work plan is concise but provides guidance on the actions needed on a day-to-day basis to put this Environmental Management Plan into action. It defines actions, assigns responsibilities, sets timelines, and defines deliverables. It also clearly links goals to outcomes.

#### **ANNUAL REPORT**

The annual report provides specific results in terms of goals set. It reports on successes and failures with regard to planned actions, timelines, and deliverables. It sets the direction for the new work plan.

**Recommendation:** Establish as a primary responsibility of an appropriate staff member the annual planning, monitoring, and reporting functions required for continuous improvement.

**Recommendation:** Implement as part of the outreach program, an annual membership feedback mechanism on environmental issues.

Implementation requirements:

• Funding annual community feedback mechanism.



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# 5.0 LEGACY ENVIRONMENTAL IMPACTS

Sq'ewá:lxw is working to overcome the environmental legacy of *Indian Act* administration of our lands. Sq'ewá:lxw moved to our own administration of land and resources through our *Land Code* and land use and environmental planning. Through these processes, and the implementation of our environmental management system, we will ensure proper stewardship of our land for our future generations.

# 5.1 ASSESSMENT AND REMEDIATION

Environmental site assessment and environmental remediation works have been undertaken on the reserve land of Sq'ewá:lxw First Nation in order to remedy the legacies of the past. Site assessment is a multi-phase undertaking.

### PHASE 1 ENVIRONMENTAL SITE ASSESSMENT

Phase 1 Environmental Site Assessment (ESA) is undertaken in order to establish the environmental condition of reserve lands and areas adjacent to lands. This is accomplished through the identification of environmental concerns and the presence of potential or known contamination on or immediately adjacent to reserve land that may represent a risk or future liability to Sq'ewá:lxw.

The Phase 1 ESA was completed by Teranis Consulting Ltd. Fourteen areas of potential environmental concern (APEC) were identified. Ten APECs were identified on reserve land, and four APECs were identified off reserve on immediately adjacent properties.

### PHASE 2 ENVIRONMENTAL SITE ASSESSMENT

Phase 2 Environmental Site Assessment is undertaken to confirm the presence or absence of contamination in the APECs identified during the Phase 1 ESA.

A Phase 2 ESA was completed by Teranis Consulting Ltd. and the draft final report is dated February 2011. The Phase 2 was undertaken to confirm the presence or absence of contamination in eleven APECs previously identified.

A supplemental Phase 2 study was undertaken in March of 2012. Additional sampling was undertaken at nine APECs.

### PHASE 3 ENVIRONMENTAL SITE ASSESSMENT

Phase 3 Environmental Site Assessment aims at fully delineating the aerial and vertical extent of contamination on each site, provide estimates of contaminated soil and/or groundwater volumes, and provide recommendations for remedial options. Work typically performed during a Phase 3 ESA includes borehole drilling and groundwater monitoring well installation, test pit excavation, soil sampling/analysis, groundwater sampling/analysis, soil vapour sampling/analysis, and ambient air sampling/analysis.

A Phase 3 assessment was completed by Teranis in March of 2014.

### REMEDIATION

The goal of remediation work is to remove or manage all materials containing contaminants of concern at concentrations that exceed federal guidelines and/or provincial standards. Typically, remediation is achieved through the excavation, removal, and proper disposal of contaminated soil and the treatment



of contaminated groundwater. Soil and water samples are collected and analyzed to confirm treatment success. Where remediation by contaminant removal is not possible due to physical, technological or financial constraints, contaminants must be managed in place to ensure they do not pose a risk to human health or environmental quality. A risk assessment must be conducted in order to estimate this risk and the results of the risk assessment are used to produce specifications for managing the contamination left onsite.

In March of 2011, Sq'ewá:lxw conducted a waste cleanup of the former dump site on IR No. 2 (APEC 6) removing general household garbage, white goods, tires, plastics, rail ties, empty hydraulic and lubricating oil pails, miscellaneous metal debris, and an abandoned vehicle. All waste materials were transported off-reserve for disposal or recycling at approved facilities. Two small areas containing partially burned domestic waste and metal were excavated. Post cleanup water samples remained problematic. Metals and hydrocarbon impacts were delineated in subsequent investigations done as part of Phase 2 and Phase 3 ESAs in 2012 and 2013.

Remediation continued at AEC 6 in 2014/2015 (Teranis, 2015b) with the remedial objective to excavate and dispose of impacted soil at an appropriate off-site facility where contaminant concentrations exceed standards for residential use. In total 656.85 metric tonnes of metals and hydrocarbon impacted soil was removed from the site. Confirmatory soil sample results indicated that metals impacts remained at four of the five remedial areas with concentrations greater than applicable guidelines for residential land use.

Remediation at AEC 6 was completed late in 2015 (Teranis, 2015a). The project objectives were to delineate the extent of residual contaminated soil and remove residual contaminated soil. These objectives were accomplished with the removal of an additional 242.49 metric tonnes of soil.

## AREAS OF POTENTIAL ENVIRONMENTAL CONCERN

Areas of potential environmental concern (APECs) identified during the ESAs and requiring further investigation are listed in Table 7 below. Those not listed required no further work.

APEC (AEC) 1 - Former logging camp	Phase 2: Contamination identified below surface may pose a potential risk to aquatic life in the adjacent Ruby Creek. Phase 2 Supplemental: No adverse impacts have happened or are likely to happen. Recommends some further investigation. Phase 3: No further action is required.
APEC (AEC) 4 - CPR Right-of-Way and former rail yard	<ul> <li>Phase 2: Contamination identified below surface may pose a potential risk to aquatic life in adjacent surface water bodies (Fraser River).</li> <li>Phase 2 Supplemental: Marginally elevated levels of contaminants, some further water sampling recommended.</li> <li>Phase 3: Remediation through risk assessment and/or physical soil removal is recommended for impacted areas on AEC 4.</li> </ul>
APEC (AEC) 6 - Former dumpsite	<ul> <li>Phase 2: Soil may pose a potential risk to children or adults who may inadvertently come into contact with the contaminated soil. Metals concentrations may pose a potential risk to human health based on accidental ingestion.</li> <li>Phase 2 Supplemental: Recommends further investigation and five (5) areas have been identified for remediation.</li> <li>Phase 3: A soil vapour assessment should be completed prior to any future development on the site which may include the construction of a residential building. Remediation is recommended for AEC 6 through risk assessment and/or physical soil removal.</li> </ul>

### Table 7 - Areas of Environmental Concern



	Remediation: Contaminated soil was removed. No soil vapour investigation for hydrocarbons is now required. No further soil remedial excavation is required.
APEC (AEC) 9 – BC Hydro drum storage	<ul> <li>Phase 2: Copper contamination identified.</li> <li>Phase 2 Supplemental: Further surface soil sampling is required to identify remedial limits.</li> <li>Phase 3: Remediation through risk assessment and/or physical soil removal is recommended. Further site investigation may be required in order to complete a risk assessment of the area.</li> </ul>
APEC 10 – Former booming ground	Phase 2: Contaminants may be within acceptable limits. Phase 2 Supplemental: No further investigation required.
APEC 11 – Unofficial camp and dumpsite (off-reserve)	Phase 2: Continued investigation to evaluate risk of contamination migrating onto Ruby Creek I.R. No. 2. Phase 2 Supplemental: No further investigation is recommended.
APEC 12 – Former Ministry of Transport Works Yard and suspected fill site (off-reserve)	Phase 2: Continued investigation for any potential impacts from the storage of highway maintenance materials to Sq'ewá:lxw lands. Phase 2 Supplemental: No further investigation is recommended.

The locations of the APECs are provided in Figure 4.



Figure 4 – APEC Locations



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# 6.0 WASTE REDUCTION

The most direct way to manage waste removal and prevent negative environmental impacts is to provide people with a convenient way to properly dispose of all wastes, including hazardous wastes. This also reduces the volume and cost of residual waste removal with less pressure on landfill sites.

Sq'ewá:lxw provides central garbage and recycling removal and disposal services to members and other residents on Ruby Creek #2 through a service agreement with GFL Environmental. There are two sixyard capacity bins with metal lids stationed near the community entrance, one each for garbage and comingled recycling. Recycling is the standard FVRD range of materials. Recycling bins are same colour as the garbage bins. No hazardous materials are permitted in the waste stream. There is no communal composting system offered.

Waste removal for housing developments for non-members on allotted/Certificate of Possession (CP) lands is the responsibility of the CP holder. Sq'ewá:lxw would prefer that the benefits of improved waste management flow equally to lands under CP control.

Opportunities for disposal of many but not all other wastes are available within a manageable distance, but inconveniently distributed among several locations.

Sq'ewá:lxw has chosen to manage limited resources by not duplicating services already available to members in the surrounding area. We may however consider the establishment of certain facilities that would significantly reduce health and environmental risk where existing processes are lacking or inconvenient. Community input has emphasized the importance of proper handling of hazardous materials, yet these substances pose the most difficulty in proper disposal.

Strategies outlined in this section will contribute to reduced waste production, increased diversion from the waste stream, and efficient handling of residual waste. Strategies include specific actions and measurable targets in order that implementation can be properly monitored. Also in this section, we discuss options for improving Sq'ewá:lxw waste management practices in the context of our size and locale.

With each particular situation having its own history and context, there is no single preferred strategy for management of hazardous and solid waste. The most appropriate strategy for each community is dictated by many factors such as:

- Volumes of waste and composition of that waste;
- Community needs and vision;
- Geography and infrastructure;
- Available markets for recyclables and wastes;
- Environmental suitability to construct an onsite waste management system;
- Financial resources; and
- The most cost-effective implementation process.

In selecting options for waste management, the advantages and disadvantages of environmental, health and economic aspects of each option need to be reviewed. Thinking long-term is also essential - what will be required to manage the community's future waste production? We have adopted a "best fit best practices" approach.

Capacity development and the capture of economic benefits to the community is also an important factor in designing strategy. These goals can be achieved through public education, training, and the establishment of new employment positions or businesses.



# 6.1 REGIONAL SERVICES

The surrounding FVRD, consisting of six member municipalities and seven electoral areas, operates in accordance with its Solid Waste Management Plan 2016-2026, as required under the *Environmental Management Act*. The purpose of that Plan is to coordinate local efforts to reduce the amount of municipal waste requiring disposal. While the Plan does not include or apply to local First Nations, it does recognize the existence of mutual shared interests and the opportunity for the FVRD to partner with First Nations in managing solid waste.

In 2020, the FVRD adopted a new waste sorting bylaw requiring everyone in the region to separate all compostable organic and recyclable materials from the residual waste stream and to dispose of them at the proper facilities.

# 6.2 THE SIX R'S

We normally think of *The Three R's*, but the current FVRD waste management practice emphasizes a hierarchy consisting of six R's as being important for reducing waste.

## 1 - RETHINK

We have an opportunity to rethink our approach to all materials that we buy and use and subsequently dispose of. For example, we can avoid purchases with unnecessary packaging.

# 2 - REDUCE

We can use less. Offices, businesses, and homes can undertake to not use disposable items where there are reusable options.

## 3 - REUSE

Reusing items and materials reduces the need for new manufacturing and resource use. If you don't need it, don't throw it out. Give it away.

## 4 - RECYCLE

If it can't be reused it can probably be recycled. This includes composting, returning materials to product stewardship programs, and recycling of other materials such as paper, glass, and aluminum.

## 5 – RECOVER

Recovery is the practice of capturing waste, such as organic matter or recyclable material, from the residual stream, and disposing of it appropriately. This may necessitate the use of different technologies.

### 6 – RESIDUAL MANAGEMENT

Residual management refers to the safe and effective residual management of the remaining solid waste stream once the preceding "R's" have been applied.



# 6.3 SEGREGATION

In order to meet our waste management goals we must address all elements of the waste stream. Central to the success of our waste management system will be segregating wastes in order to maximize value, minimize costs, protect the environment, and minimize residual waste. Figure 5 – Segregation defines current disposal options for the optimum segregation of the waste stream. The five categories of recyclable materials reflect the packaging and paper product (PPP) Extended Producer Responsibility Plan operated by Recycle BC and mandated by provincial regulation since May 2014.

For more detail, please see the list of returnable materials in EOP No.1 or use the online tools operated by the Recycling Council of BC at <a href="https://rcbc.ca/recyclepedia/">https://rcbc.ca/recyclepedia/</a> or by Recycle BC at <a href="https://recyclebc.ca/what-can-i-recycle-2/">https://rcbc.ca/recyclepedia/</a> or by Recycle BC at <a href="https://recyclebc.ca/what-can-i-recycle-2/">https://recyclebc.ca/what-can-i-recycle-2/</a>. These tools provide more information with respect to what can be recycled, and disposal facility locations in communities across BC.



Recyclepedia



What Can I Recycle?





Figure 5 – Segregation



### **ORGANIC WASTES**

Currently, organic wastes are entering the residual (garbage) waste stream or are being composted by individual members, particularly garden materials. Yard waste may be taken to the District of Hope Transfer Station at 22970 Trans-Canada Highway or the Parr Road Green Depot at 45175 Parr Road in Chilliwack. Hope accepts trees, stumps, branches, and brush only, and Chilliwack accepts all yard waste including grass clippings, leaves, and invasive plants.

The collection of organics, including kitchen scraps, is not available to the community through a commercial composting service. Until such time as a service is offered, on-site composting of kitchen and garden wastes is the only choice.

### RECYCLING

Although disposal of recycling materials to current standards is provided to members, improvement in the proportion of recyclables diverted is possible.

Product stewardship programs drive hazardous waste disposal to multiple locations throughout the region. Sq'ewá:lxw is in no position to provide for the collection or storage of hazardous wastes on reserve. Improvement of environmental performance with regard to hazardous wastes will depend on:

- Member and resident education and promotion;
- Use of appropriate laws and enforcement; and
- Identification and development over time of more convenient options.

### **REUSABLE AND REFUNDABLE MATERIALS**

Sq'ewá:lxw lacks the population and resources to operate a successful recycling depot and free store. In any case it is unlikely that a significant volume of refundable materials is entering the waste stream. Sq'ewá:lxw can continue to promote best practices with regard to reusable and refundable materials. Refundable materials collected within Sq'ewá:lxw facilities can be used to generate a small amount of revenue, perhaps earmarked for a favourite cause.

### **RESIDUAL GARBAGE**

The Sq'ewá:lxw reserve is beautifully maintained with no issues of unsightly refuse. The major goal of waste management should be the reduction in the volume of residual garbage and the attendant reduction in operating costs.

# 6.4 PRODUCT STEWARDSHIP PROGRAMS

We advocate maximum participation in extended producer responsibility (EPR) programs, also known as product stewardship programs. Product stewardship takes a significant step in waste reduction. Stewardship is an environmental policy approach in which a producer's responsibility for a product extends to the post-consumer stage of a product's life cycle. This policy is intended to provide incentive to producers to take environmental considerations into account when designing their products and to shift the cost and physical responsibility for the product away from local governments and general taxpayers to producers and consumers.

Resources and information for a range of products are summarized in Table 8. More information on the full range of product stewardship programs can be found online at BC Recycles <a href="https://www.bcrecycles.ca/">https://www.bcrecycles.ca/</a> and the Recycling Council of BC <a href="https://rcbc.ca/">https://rcbc.ca/</a>.



Description	Further Information
Automotive antifreeze and empty	The BC Used Oil Recycling program, managed by
containers.	Interchange Recycling
	https://interchangerecycling.com/
Used household batteries under 5 kg.	Call2Recycle is BC's battery stewardship program https://www.call2recycle.ca/british-columbia/
All lead-acid batteries.	Canadian Battery Association
	https://canadianbatteryassociation.ca/
	Interstate Batteries
	https://www.interstatebatteries.com/
,	Encorp Pacific (Canada) <u>www.return-it.ca</u>
	Brewers' Recycled Container Collection Council
	(BRCCC)
	https://envirobeerbc.ca/
	There is no province-wide EPR program, but many
	locations and service providers offer options to recycle.
	Visit <u>https://www.return-it.ca/electronics/</u> for a list of
	locations
Deskton and portable computers including	www.return-it.ca/electronics
	https://recyclemyelectronics.ca/bc
printers, fax machines, multi-function	
print/scan machines, desktop and laptop	
computers and computer peripherals	
Light bulbs, fluorescent tubes, light fixtures,	Product Care Association
ballasts, string lights.	www.productcare.org
Prescription drugs, non-prescription	Health Products Stewardship Association
	https://healthsteward.ca/consumers/returning-
supplements, throat lozenges.	medications/#collection-location
Paints, varnishes, urethane, primers,	www.productcare.org
sealers, marine enamels (except anti-	
fouling paint), wood oils and stains, rust	
Portable electrical appliances designed for	https://www.electrorecycle.ca/
use in homes.	
Commercial and residential smoke and	www.productcare.org
Commercial and residential smoke and carbon monoxide alarms	www.productcare.org
	Automotive antifreeze and empty containers.         Used household batteries under 5 kg.         All lead-acid batteries.         Virtually all beverage containers: mild and plant-based milk containers, plastic bottles jugs, cups; aluminum cans; drink boxes and gable top drink cartons; bag-in-a-box wine boxes; clear and tinted glass bottles; any non-aluminum beverage tin.         Cell phones, smart phones, wireless PDAs, external air cards, pagers and accessories (chargers etc.).         Desktop and portable computers including cables, non-cellular telephones, home and personal audio/video equipment and accessories, televisions and display devices including flat panel and tube displays, printers, fax machines, desktop and laptop computers and computer peripherals (monitors, mice, keyboards etc.), vehicle audio/video systems, IT and telecom equipment, electronic musical instruments, electronic toys and gaming equipment, medical and monitoring equipment, e-bikes and e-scooters.         Light bulbs, fluorescent tubes, light fixtures, ballasts, string lights.         Prescription drugs, non-prescription medicine, mineral and vitamin supplements, throat lozenges.         Paints, varnishes, urethane, primers, sealers, marine enamels (except anti- fouling paint), wood oils and stains, rust pain, metal paint, aerosol paints, pesticides, flammable liquids including paint thinners, liquid adhesives, solvents, and gasoline.



Product	Description	Further Information
Thermostats	All electromechanical (mercury containing) and electronic thermostats.	Thermostat Recovery Program delivered by the Heating, Refrigeration and Air Conditioning Institute of Canada. <u>https://www.hrai.ca/public-drop-off-locations</u>
Tires	Car, truck and some agricultural or forestry application tires.	Tire Stewardship BC https://tsbc.ca/



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# 7.0 RE-USE AND RECYCLING

For reasons of cost minimization and environmental protection, Sq'ewá:lxw will reduce the volume of our waste stream by maximizing the re-use and recycling of all manner of materials and items.

Many good usable items which are no longer wanted by their owner needlessly end up in the garbage. "Free Stores" have been successfully implemented in many places and can be used to redirect all unwanted items that may be of use to others.

Recycling can be defined as processing used materials (waste) into new products to prevent waste of potentially useful materials, reduce the consumption of fresh raw materials, reduce energy usage, reduce air pollution from incineration, and water pollution from landfills (Wikipedia).

## GOALS

- High institutional and public awareness and participation in recycling and other waste diversion opportunities.
- A minimum volume of wastes being transported and disposed of in order to reduce greenhouse gas emissions and landfill volumes by diversion.
- Leadership, staff, Members, and residents fully aware of the benefits of, and best options for, waste reduction including product stewardship programs.

### OBJECTIVES

Objective	Indicator	Target
Divert 50% of reusable items	Reusable items disposed of in the solid	Subjective
	waste stream	evaluation only
Divert 80% of recyclable materials	Recyclable materials disposed of in the	Subjective
	solid waste stream	evaluation only

Although targets throughout this Plan require waste study information in order to be measurable, the volume of waste generated by members does not warrant a formal study using limited financial resources.

### STRATEGIES

- Promote the full segregation of waste materials in homes, offices, and businesses.
- Educate our members and other residents with respect to the benefits of waste reduction including reuse, composting, and recycling, including use of the full range of product stewardship programs available to us.
- As the community grows, identify and measure the volumes and types of recycling materials being produced within our community.
- Provide convenient means for appropriate storage collection, transport, and disposal of as full a range of elements of the waste stream as is economically feasible given our small population.
- Provide assistance to Elders and others unable to manage their own recycling.
- Advertise and promote the location and use of depots and other disposal processes in the area to ensure the proper disposal of all elements of the waste stream.



# 7.1 EOP 1 – RECYCLING

Environmental Operating Procedure No. 1	EOP Revision: 03
Recycling	Revision Date: August 31, 2024
Responsibility: All households, businesses	EOP Page 1 of 2

### SCOPE

This procedure covers all recyclable and returnable materials produced from various businesses and homes within our community.

## SQ'EWA:LXW RECYCLING PROGRAM

All homes and offices will collect, segregate and sort their trash. Recyclable items will be cleaned and placed in the central recycling bin.





Environmental Operating Procedure No. 1	EOP Revision: 03
Recycling	Revision Date: August 31, 2024
Responsibility: All households, businesses	EOP Page 2 of 2

#### REUSE

• All reusable items should be sold or gifted - someone needs it. Sharing options include Facebook Marketplace. Donations are accepted by charitable organizations.

### **RETURNABLE FOR DEPOSIT**

• Beverage containers can be returned at the Hope or Agassiz Return-It depots: aluminum cans; plastic bottles; plastic cups; drink boxes; gable tops; glass bottles; bi-metal cans; drink pouches; bag-in-a-box; milk and plant-based aluminum, plastic, gable top, drink box, glass, bi-metal, plastic; and liquor plastic, glass, bag-in-a box, glass non-refillable beer. For more information: <a href="http://www.return-it.ca/beverage/products/">http://www.return-it.ca/beverage/products/</a>.

### RECYCLING

- **Packaging and paper** (printed paper and cardboard; glass bottles and jars; paper, plastic, and metal containers; non-deposit glass bottles and jars; plastic bags and overwrap; plastic foam packaging) can be taken to the **Agassiz Return-it Bottle Depot**.
- A wide variety of **electronics products** can be returned at the **Hope or Agassiz Return-It depots**: computers, monitors, medical and monitoring devices, fax machines, audio, video, gaming devices, portable music, non-cellular telephones, after-market vehicle electronics, home theatre. For more information: <u>http://www.return-it.ca/electronics/products/</u>.
- Small home appliances can be returned at the Hope or Agassiz Return-It depots: Kitchen countertop appliances, weight and time measurement, power tools, sewing, exercise machines, irons, personal care appliances, and vacuums. For more information: <a href="http://www.electrorecycle.ca/">http://www.electrorecycle.ca/</a>.
- **Tires** can be recycled at most tire retailers including Big-O tires in Agassiz and Chilliwack and Pioneer Motors or Gardner Chevrolet in Hope.
- Motor oil, oil filters, oil containers, and anti-freeze can be taken to the Chilliwack Bottle Depot or to a number of auto service centres in Chilliwack such as the Great Canadian Oil Change, or Jiffy Lube. See <u>https://interchangerecycling.com/find-a-recycling-centre</u>.
- Other **hazardous wastes** such as cell phones, paint, lamps and lighting, and lead acid batteries can be taken to the **Chilliwack Bottle Depot**. Please see Section 9.0 for more detail on hazardous wastes.

To be sure of your options use the Recycling Council of B.C.'s Recyclepedia at <a href="https://rcbc.ca/recyclepedia/">https://rcbc.ca/recyclepedia/</a>.



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# 8.0 COMPOSTING

Compostable material can be a large proportion of household waste. For reasons of soil improvement, food security, and program cost minimization, Sq'ewá:lxw could greatly reduce the volume of our waste stream by maximizing composting as a component of waste diversion.

Unfortunately, solid waste disposal firms servicing the area do not offer composting service.

Given the small scale of the waste stream from our community, there are two practical options for residents:

- Household or backyard composting; or
- Community garden composting.

The utility of backyard and community garden composting for developing a community garden and a conservation ethic suggest that composting should be a high priority for Sq'ewá:lxw. It is noted that a community garden has been attempted in the past.

Composting, if improperly managed, presents a risk of bear-human conflict. All composting systems will be made safe from bears and other animals. Useful information can be found at: <a href="https://www.bearsmart.com/live/managing-attractants/">https://www.bearsmart.com/live/managing-attractants/</a>.

### GOALS

- To reduce the amount of residual waste that must ultimately be transported and disposed of.
- To provide mechanisms to operate personal composters in the community.
- To recycle natural nutrients.
- To support local food production.

### OBJECTIVES

Objective	Indicator	Target
Divert 80% of compostable	Compostable materials disposed of in	Subjective evaluation
materials	the solid waste stream	only

### STRATEGIES

- Support personal household composting.
- Consider looking to partnerships in composting with First Nation neighbours.
- Support and encourage all offices, businesses, and households to segregate compostable materials from their garbage stream and either undertake their own composting or contribute their material to a community member.
- Provide assistance to Elders and others unable to manage their own composting.
- Encouraging community and individual home gardens wherever possible to allow for the membership to grow, prepare, and store quality and wholesome food.
- Have an ongoing public communication program that will encourage all offices, businesses, and households to participate in composting including the provision of composting kits to households or businesses requesting them.



# 8.1 EOP 2 – COMPOSTING

Environmental Operating Procedure No. 2	EOP Revision: 03
Composting	Revision Date: August 31, 2024
Responsibility: All households, businesses	EOP Page 1 of 1

### SCOPE

This procedure covers all composting materials produced from the various businesses and homes on Sq'ewá:lxw lands.

### MATERIALS

The main composting materials produced within our community are:

- Kitchen scraps including fruits and vegetables, eggshells, tea bags, and coffee grounds;
- Leaves, grass clipping, and other organic garden waste including woody material of a small size;
- Sawdust and wood chips; and
- Paper towels and other clean, unprinted, uncoated white paper.

### OUTDOOR COMPOSTING

- Compost all appropriate material and use for community beautification and food production.
- For convenience collect kitchen compost materials in a small container. Empty it often in the outdoor compost and keep the kitchen container clean to minimize odour and fruit flies.
- Set up the outdoor composter on a level, well drained, accessible area.
- In order to minimize the likelihood of attracting animals to your compost do not add meat, fish, oil, grease, or dairy to your compost.
- Add lime to aid in decomposition and reduce odour.
- The key to high-quality compost are EQUAL proportions of "green" and "brown" materials and regular aeration in order to eliminate odours and therefore bears.
- "Brown" materials provide carbon which is the energy source for composting bacteria to get the job done, and keep excess moisture and smell away. Brown materials include yard waste such as leaves, twigs, and low-quality household papers such as newspaper, paper egg cartons, paper bags, cardboard rolls and tissue paper. Browns should be added with EVERY ADDITION of "Green" (food scraps) material, covering the scraps completely in layers of about 10cm thick.
- Equally important as enough carbon is ensuring your compost is rich in oxygen. Use a strong stick (an old ski pole works well) to turn compost AFTER each addition of "greens" and BEFORE covering with "browns". This will aerate the pile and keep odours away. Be sure to aerate your compost AT LEAST every two weeks.
- With the proper balance of "Brown" and "Green" material, regular aeration, and a secured lid you will be enjoying the benefits of composting all year long.

### INDOOR COMPOSTING

An indoor composting system is also an option.



# 9.0 HAZARDOUS WASTE

# 9.1 CURRENT SITUATION

This section summarizes the current status of hazardous waste management in our community. It presents the management issues identified by past environmental site assessments and community consultation.

Sq'ewá:lxw has no facilities for hazardous waste disposal. Unauthorized dumping or reserve land is an issue, and an interest in expanded recycling has been expressed.

## WASTE STUDY

Discussions at the Skawahlook Land Management Committee have led to the decision that the volume of waste generated by members does not warrant a formal study.

### **ELDERS AND SPECIAL NEEDS SERVICES**

There is no need for special waste management services at this time.

For reasons of environmental and health protection, Sq'ewá:lxw will encourage the separation of all hazardous wastes from the waste stream for disposal in an appropriate manner.

# 9.2 POLICY DEVELOPMENT

A hazardous material is any solid, liquid, or gas that can harm people, other living organisms, property or the environment. Hazardous wastes may be flammable, oxidizing, corrosive, toxic, or radioactive. Hazardous wastes, if disposed of improperly, pose a risk of personal injury and damage to environmental resources.

Education is a key component of the management of hazardous waste as it raises awareness of the associated health, safety, and environmental issues. The reduction and safe handling of hazardous waste should be actively promoted to limit exposure to people and the environment.

An effective program will provide community residents with a convenient and safe disposal for these materials. The waste management program would then safely store the materials and arrange for disposal.

The Workplace Hazardous Materials Information System (WHMIS) is Canada's national hazard communication standard, and deals specifically with the labelling of controlled products, Material Safety Data Sheets (MSDS), and worker education and training programs. B.C.'s Worker's Compensation Act requires that employers provide general education to their employees regarding hazardous or potentially hazardous products with which they may come into contact.

## GOALS

- Protect public safety, health, and property, and minimize damage to the environment from the adverse effects resulting from improper handling and disposal of hazardous and bio-hazardous wastes.
- Educate all residents of the nature and dangers associate with hazardous and bio-hazardous materials.



- Ensure that members and residents are aware of the proper mechanisms available to collect, handle, store and dispose of hazardous wastes and bio-hazardous and medical wastes thus preventing environmental and human emergencies.
- Reduce the volume of all hazardous wastes being used and needing disposal.

### OBJECTIVES

Objectives	Indicator	Target
Divert 100% of hazardous wastes to	Hazardous waste disposed of in the	Zero
appropriate procedures	solid waste stream	

#### STRATEGIES

- Educate all residents of our lands of the nature and dangers associate with hazardous and biohazardous materials.
- Encourage all homes and businesses to separate all hazardous wastes from the waste stream and dispose of them in an appropriate manner.
- Require all appropriate WHIMIS training and systems in all administration offices and businesses operating on reserve.
- Provide assistance to Elders and others unable to properly dispose of their hazardous wastes.
- Have an ongoing public communication program that will provide community members with technical information and assistance on hazardous waste management and encourage the reduction of hazardous material use.



# 9.3 EOP 3 – HAZARDOUS WASTE

Environmental Operating Procedure No. 3	EOP Revision: 03
Disposal of Hazardous Wastes	Revision Date: August 31, 2024
Responsibility: All households, businesses	EOP Page 1 of 4

### SCOPE

This procedure provides information and practices to address safe handling of all household hazardous wastes including asbestos and mercury on Sq'ewá:lxw land. Industrial operations are responsible for their own waste stream.

### HAZARDOUS MATERIALS

Cleaning Products:	Indoor Pesticides:
Oven cleaners	Ant sprays and baits
Drain cleaners	Cockroach sprays and baits
<ul> <li>Wood and metal cleaners and polishes</li> </ul>	Flea repellents and shampoos
Toilet cleaners	Bug sprays
Tub, tile, shower cleaners	Household insecticides
Laundry bleach	Moth repellents
Pool chemicals	<ul> <li>Mouse and rat poisons and baits</li> </ul>
Automotive Products:	Workshop and Painting Supplies:
Motor oil	Adhesives and glues
Fuel additives	Furniture strippers
<ul> <li>Carburetor and fuel injection cleaners</li> </ul>	Oil or enamel-based paint
<ul> <li>Air conditioning refrigerants</li> </ul>	Stains and finishes
Starter fluids	Paint thinners and turpentine
Automotive batteries	Photographic chemicals
<ul> <li>Transmission and brake fluid</li> </ul>	Fixatives and other solvents
Antifreeze	
Garden Products:	Miscellaneous:
Pesticides	Batteries
Herbicides	Mercury or mercury thermometers
Insecticides	Light bulbs of all kinds
<ul> <li>Fungicides and wood preservatives</li> </ul>	Driveway sealers
	Asbestos
	Propane tanks

### **BEST PRACTICES**

Do:	Do not:
<ul> <li>Avoid buying hazardous products;</li> </ul>	• Throw it in the garbage;
<ul> <li>Use up any supply you have;</li> </ul>	• Pour it in the drain or flush it down the
• Give the product to someone who wants	toilet;
to use it; or	• Burn it; or
• Dispose of the material as directed.	Dump or bury it.



Environmental Operating Procedure No. 3	EOP Revision: 03
Disposal of Hazardous Wastes	Revision Date: August 31, 2024
Responsibility: All households, businesses	EOP Page 2 of 4

#### HAZARDOUS WASTES

Waste oils, anti-freeze, paints, solvents and cleaners produced from servicing domestic, agricultural, and commercial vehicles, and day-to-day household and business use require appropriate handling, storage, transport, and disposal. For details on where to dispose of a wide range of hazardous wastes please see: <a href="https://www.chilliwack.com/main/page.cfm?id=195">https://www.chilliwack.com/main/page.cfm?id=195</a>.



All work to be performed in accordance with the WCB occupational Health and Safety Regulation, BC Waste Management Act, and Hazardous Waste Regulation, or as deemed appropriate.

Sq'ewá:lxw will receive the appropriate documentation following work, including documentation confirming proper disposal.

Report to be filed with the Lands Manager.



Environmental Operating Procedure No. 3	EOP Revision: 03
Disposal of Hazardous Wastes	Revision Date: August 31, 2024
Responsibility: All households, businesses	EOP Page 3 of 4

### ASBESTOS

If a person suspects that asbestos material exists in their home or place of work the following procedure will be followed. Financial liability rests with the building owner.





Environmental Operating Procedure No. 3	EOP Revision: 03
Disposal of Hazardous Wastes	Revision Date: August 31, 2024
Responsibility: All households, businesses	EOP Page 4 of 4

#### **MERCURY WASTE**

Mercury waste can be found in fluorescent lights, barometers, vacuum gauges, batteries, flame sensors, and thermometers in households and businesses. Mercury-containing waste materials require appropriate handling, storage, transport and disposal.



All work to be performed in accordance with the WCB occupational Health and Safety Regulation, BC Waste Management Act, and Hazardous Waste Regulation, or as deemed appropriate.

Sq'ewá:lxw will receive the appropriate documentation following work, including documentation confirming proper disposal.

Report to be filed with the Lands Manager.



# 9.4 EOP 4 – BIO-HAZARDOUS WASTE

Environmental Operating Procedure No. 4	EOP Revision: 03
Disposal of Bio-hazardous Waste	Revision Date: August 31, 2024
Responsibility: All households, businesses	EOP Page 1 of 2

### SCOPE

This EOP applies to all bio-hazardous wastes produced within our community.

### MATERIALS

- Loose razors.
- Human blood or other bodily fluids.
- Medical needles and syringes.
- Animal carcasses.

### **BEST PRACTICES**

- Waste produced that may be classed as bio-hazardous (e.g., diabetic needles or blood swabs) must be disposed of appropriately.
- Drop boxes or sharps containers to be installed in public washrooms in Nation premises or as determined by Council to minimize risk. Sharps containers can be purchased at a pharmacy and returned there for safe disposal when full.
- Bio-hazardous materials unsuitable for disposal in the sharps containers are to be taken to an approved disposal location.

Pet cremation services are available at <u>https://www.untilwemeetagain.ca/</u> (Surrey).



Environmental Operating Procedure No. 4	EOP Revision: 03
Disposal of Bio-hazardous Waste	Revision Date: August 31, 2024
Responsibility: All households, businesses	EOP Page 2 of 2

#### **BIO-HAZARDOUS WASTE**





# 10.0 RESIDUAL WASTE

For reasons of environmental protection Sq'ewá:lxw will provide the means for appropriate collection of residual waste and its removal to approved disposal facilities.

Residual waste is removed from Sq'ewá:lxw member homes and offices under contract. Third parties living or operating businesses on reserve contract individually for the same service.

Large bins for residual waste and recycling are placed for community use at: the administration offices; in the Rockface neighbourhood on Ruby Creek #2; and at Grace Estates Skawahlook #1.

### GOALS

- To minimize the impacts on the environment from the production, storage, transport, and disposal of residual waste.
- To provide mechanisms to collect, store and dispose of all residual waste items in the community while protecting human health and the environment.

### OBJECTIVES

Objective	Indicator	Target
Capture all waste into approved	Hazardous or solid waste disposed of	Zero
processes	improperly on reserve	
Reduce by 75% material going to	Total volume of waste going to the	Subjective
landfill	landfill	evaluation only

## STRATEGIES

- Provide to all members and Nation homes and businesses residual waste collection services.
- Promote and assist in organizing periodic community environmental events including community cleanups.
- Enforce the provisions of the Sq'ewá:lxw Environmental Management Law which prohibit the burning, burying, or dumping of waste or hazardous wastes on reserve in order to prevent air pollution and water and soil contamination.
- Have an ongoing public communication program that will provide community members with technical information and assistance on waste reduction, segregation of materials, reusing and recycling, composting, and encourage the reduction of hazardous material use within the territory.



# 10.1 EOP 5 – RESIDUAL WASTE DISPOSAL

Environmental Operating Procedure No. 5	EOP Revision: 03
Residual Waste Disposal	Revision Date: August 31, 2024
Responsibility: All households, businesses	EOP Page 1 of 2

### SCOPE

This EOP addresses the handling and disposal of all residual materials after segregation for reusing, composting, and recycling as per environmental operating procedures No. 1 through No. 4.

### **EXCLUDED MATERIALS**

For clarity and ease of review, the following are not permitted in the residual waste stream:

RECYCLABLE ITEMS

Lead-acid batteries	Scrap tires
Metal containers	Telephone directories
Mixed waste paper	Used antifreeze
Newspaper	Used lubricating oil
Non-refillable propane tanks	Used oil containers
Old corrugated cardboard	Used oil filters
Rechargeable batteries	White goods
Refillable propane tanks	Yard and garden material
Scrap metal	
	Metal containers Mixed waste paper Newspaper Non-refillable propane tanks Old corrugated cardboard Rechargeable batteries Refillable propane tanks

PROHIBITED MATERIALS		CONTROLLED WASTE
Aggregate	Concrete	CFC appliances
Asbestos cement	Contaminated soil	Dusty material
Asbestos insulation	Dead animals and parts	Fibreglass insulation
Asphalt	Explosives	Non-refillable propane tanks
Beverage containers	Gas cylinders	Refillable propane tanks
Biomedical waste	Hazardous or reactive chemicals	Sewage screenings
Clean soil	Hazardous waste	Used anti-freeze
Commercial clean wood waste	Hospital sharps and body tissue or fluids	Used oil filters
Land clearing debris	Household hazardous waste	Used lubricating oil
Organic waste	Industrial waste	Used oil containers
Demolition waste		Passenger vehicle lead-acid batteries
		Used passenger vehicle scrap tires

#### **BEST PRACTICES**

• After full segregation, bring all residual waste to the central bins supplied by Sq'ewá:lxw.



Environmental Operating Procedure No. 5	EOP Revision: 03
Residual Waste Disposal	Revision Date: August 31, 2024
Responsibility: All households, businesses	EOP Page 2 of 2

### **RESIDUAL WASTE**

Segregate materials to minimize residual waste.

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Residual waste, that is garbage that has not been diverted into reuse, composting, or recycling must be brought to bins situated in the community.

This collection service must be carried out by an authorized waste disposal contractor and waste must be disposed of at a licensed waste disposal facility.

The contractor will track the composition of the waste stream and provide information reports.



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# 11.0 INDUSTRIAL WASTE

This section addresses all industrial waste, including land clearing and construction and deconstruction waste. Such waste is handled outside of the community waste system and is the responsibility of the business, project proponent, or contractor.

All project and development proponents, through the permitting process, must submit a waste management plan as part of their application. The requirements for the development of a waste management plan will be specified in correspondence with the proponent.

All industrial waste is handled outside of the community waste system and is the responsibility of the owner, project proponent, or contractor.

### GOALS

- No industrial or project waste products left within Sq'ewá:lxw lands.
- Minimal environmental impact of industrial and commercial activity.

### OBJECTIVES

Goal	Indicator	Target
Capture all waste into approved	Hazardous or solid waste disposed of	Zero
processes	improperly	
Eliminate environmental impacts	Incidences of industrial pollution	Zero
from commercial operations		

## STRATEGIES

- All industrial waste including land clearing and construction and deconstruction waste will be disposed of appropriately including the transport from reserve of all materials with the exception of timber and clean wood. All such waste is handled outside of the community waste system and is the responsibility of the project proponent or contractor.
- No burning or burying of garbage will take place.
- All demolition will maximize deconstruction and salvage.
- All land clearing will maximize wood salvage and consider the transplanting of plant materials where feasible.
- All project and development proponents, through the resource referral process, must submit a waste management plan as part of their application. The requirements for the development of a waste management plan will be specified in correspondence with the proponent.



# 11.1 EOP 6 – INDUSTRIAL WASTE

Environmental Operating Procedure No. 6	EOP Revision: 03
Industrial Waste	Revision Date: August 31, 2024
Responsibility: Industry and commercial	EOP Page 1 of 2

### SCOPE

This EOP applies to all hazardous, solid, and liquid wastes produced by commercial or industrial operations on Sq'ewá:lxw lands.

### MATERIALS

- The full solid waste stream including recyclable products.
- Hazardous wastes of all kinds.
- Sewage or other toxic or non-toxic liquids.
- Smoke, dust, or other air emissions.

### **BEST PRACTICES**

All industrial and commercial operators on Sq'ewá:lxw lands must develop a waste management plan. A waste management plan is a document that outlines the activities and methods of waste management from generation to final disposal. It is the responsibility of the proponent to sufficiently detail all components of waste management planning within their waste management plan, and that these activities are completed according to industry best-practices. It is the responsibility of the proponent to be aware of and follow other Sq'ewá:lxw environmental operating procedures, such as for hazardous wastes and fuel handling.

Development, demolition, land clearing, and construction waste must be disposed of properly outside of reserve. Any contracts or agreements for demolition, land clearing or construction services shall include requirements for compliance to this environmental operating procedure. It is the responsibility of the proponent to be aware of, and comply with, all applicable legislative requirements within their jurisdiction of activities.

Waste management is an activity that is practiced by most proponents regardless of the project. Common waste management activities include:

- Reduction and substitution;
- Waste collection, handling, separation, and storage;
- Recycling and reuse;
- Waste transfer and transport;
- Waste disposal; and
- Remediation.



Environmental Operating Procedure No. 6	EOP Revision: 03
Industrial Waste	Revision Date: August 31, 2024
Responsibility: Industry and commercial	EOP Page 2 of 2

Source reduction is the elimination or decrease, to the extent practical, of the volume or toxicity of waste generated by using alternative materials or processes. This may be the most effective, proactive, and potentially cost-reducing method of waste management as it reduces the amount of waste that has to be managed. Reuse is the use of a product more than once for the same or different purpose, either on-site or off-site. Recycling or recovery is the process by which materials otherwise destined for treatment or disposal are collected, processed, and/or remanufactured into the same or different product either on-site or off-site.

### WASTE MANAGEMENT PLAN

A waste management plan will contain the following information:

- Company name, site name and site location;
- Effective date and expiration date of the plan;
- Environmental policy of the proponent and how it relates to waste management;
- Purpose and scope of the plan including detailed waste management goals and objectives;
- Description of the project;
- Proposed location for all waste management activities, on a map to an appropriate scale with GPS coordinates;
- If applicable description of site physical, surface and subsurface characteristics, site water management, and geotechnical characteristics;
- The identification of waste types and description of its characteristics;
- Estimation of the volume or weight to be produced;
- Potential environmental effects;
- Description of the activities involved in the management from generation to disposal;
- A rationale for the method(s) that will be employed to manage each waste type;
- Infrastructure required for waste management; and
- Waste management as it relates to project closure and reclamation.

### WOOD WASTE

Wood waste shall be disposed of properly. The following general guidelines for managing wood waste on reserve shall be followed.

Waste, including wood waste, should not be burned. Other options for clean wood waste include:

- Chipping the wood and composting with other organic matter such as yard waste (grass, brush, etc.);
- Produce fire wood for sale;
- Disposal at a regulated facility; or
- Wood waste that has been treated with creosote, paint, or stain, should be treated as residual waste and disposed of appropriately.



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# 12.0 LAND FILLING AND SOIL CONSERVATION

Land filling and the deposition of waste materials are not permitted on reserve. However, deposition of clean soil or fill is allowed with appropriate and approved permits from the land management department.

### GOALS

- Minimize negative environmental impacts associated with human activity on Sq'ewá:lxw lands.
- Restore and protect clean soil across Sq'ewá:lxw lands.

### OBJECTIVES

Objective	Indicator	Target
Only clean fill with no pollutants	Instances of fill containing environmental	Zero
used on Sq'ewá:lxw land	pollutants not meeting acceptable standards	

### STRATEGIES

- Support the process of community cleanup and remediation of contaminated sites throughout our lands which are a legacy of the past.
- Enforce the Land Filling and Soil Conservation sections of the Sq'ewá:lxw Environmental Management Law:
  - By controlling the quality of land fill used, allow for the use of fill on Reserve lands while avoiding environmental and health impacts.
  - Prohibit the movement of contaminated soil onto Sq'ewá:lxw lands.
  - Prohibit the export of clean soil from reserve.
  - Regulate the movement of soil and other land fill on and off of reserve through permitting.
- Enforce the Contaminated Site Remediation and Environmental Assessment sections of the Sq'ewá:lxw Environmental Management Law.
- Enforce sections of the *Sq'ewá:lxw Subdivision, Development and Servicing Law* which address disturbance and deposit or removal of soil.
- Apply and utilize Sq'ewá:lxw policy and procedures supporting the above mentioned laws including permitting processes.
- Comply with all applicable Federal and Provincial legislation, policies, and best management
- Undertake monitoring of land filling operations to meet planning commitments, applicable environmental regulations, and Sq'ewá:lxw law.
- Make members aware of the full range of Sq'ewá:lxw legislation and policy with regard to soil conservation.



## 12.1 EOP 7 – LAND FILLING AND SOIL CONSERVATION

Environmental Operating Procedure No. 7	EOP Revision: 03
Landfill and Soil Conservation	Revision Date: August 31, 2024
Responsibility: Lands Manager	EOP Page 1 of 2

### SCOPE

The procedures outlined in this EOP address all land fill activities and movement of soil that has the potential to negatively impact the local environment on Sq'ewá:lxw lands.

### MATERIALS

This EOP addresses all materials from within or without reserve land deposited on reserve land including aggregates and soil. No demolition waste, products of excavation, stumps from land clearing, or waste of any kind, is permitted to be deposited on reserve unless authorized.

### **BEST PRACTICES**

- Prior to depositing soil or other land fill or moving soil of a volume equal to or greater than 6 m<sup>3</sup> within the bounds of Sq'ewá:lxw lands a permit must be obtained from the Sq'ewá:lxw Lands Department. This permit will require documentation of the source material, assurance of it being free of contaminants and an analysis of environmental impacts at the site of deposition.
- Top soil, as a valuable resource for our community, is not to be exported from reserve land.
- Permitted movement of soil on reserve will be subject to inspection and monitoring



Environmental Operating Procedure No. 7	EOP Revision: 02
Land Filling and Soil Conservation	Revision Date: August 31, 2024
Responsibility: Lands Manager	EOP Page 2 of 2





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# 13.0 SAFE FUEL HANDLING AND STORAGE

At present there are no fuel distribution facilities on Sq'ewá:lxw lands.

To the extent that fuel is stored for use on the reserve, individuals and industry have been independently responsible for safe fuel handling and storage in accordance with Provincial law.

Improper fuel handling can result in serious injury or death caused by fire, explosion, or asphyxiation. Fuel released into the environment can contaminate soil and groundwater resulting in costly cleanups and serious environmental damage. Contaminated groundwater supplies may sicken people and animals who unknowingly drink the polluted water. Additionally, gasoline vapours are harmful to human health even at low concentrations and are potentially dangerous at high concentrations.

This section addresses the reduction and mitigation of risk associated with fuel handling and storage to soil and ground water on our lands.

For reasons of environmental protection and the prevention of injury, Sq'ewá:lxw will provide leadership on the safe storage, handling, and transportation of all fuels on reserve.

Federal and provincial regulation of proper fuel handling and storage provides all of the tools necessary to protect the residents and lands and resources of Sq'ewá:lxw. Our laws and processes need merely provide vigilance that those regulations and processes are respected and upheld on reserve.

### GOALS

- Identify and predict risks, and prevent, minimize, and mitigate environmental impacts from improper storage and handling of fuel.
- To provide community members and businesses operating within reserve with the information necessary to carry out safe fuel handling, storage, and disposal.

### OBJECTIVES

Goal	Indicator	Target
Eliminate fuel leaks and spills on reserve	Incidents of human exposure and soil contamination from spilled or leaked fuel over 10 litres	Zero
Full compliance with storage and handling practices	Incidents of non-conforming fuel storage and fuel handling systems	Zero

### STRATEGIES

- Enforce the Safe Fuel Handling sections of the Sq'ewá:lxw Environmental Management Law:
  - Spill prevention and response planning.
  - Response and remediation requirements.
- Ensure that requirements of all applicable environmental regulatory regimes and best management practices are met for all activities.
- Have an ongoing public communication program that will provide community members with technical information and assistance on the safe handling and storage of fuels.



## 13.1 EOP 8 - FUEL HANDLING AND STORAGE

Environmental Operating Procedure No. 8	EOP Revision: 03
Fuel Handling and Storage	Revision Date: August 31, 2024
Responsibility: All persons or handling agency	EOP Page 1 of 4

### SCOPE

The procedures outlined in this EOP address:

- The prevention and mitigation of environmental impacts from spills and leaks from above ground storage tanks, underground storage tanks (no longer permitted), truck box (tidy) tanks, and small fuel cans;
- The transportation and dispensing of fuel; and
- Environmental procedures for fuel tank inspections.

### MATERIALS

- Gasoline, jet fuel, diesel fuel, heating oil.
- Propane and natural gas.
- Kerosene, white gas, camping fuel, and butane.

### **BEST PRACTICES**

- Containers shall be appropriate for the type of fuel, meet standards of Underwriters Lab of Canada (ULC) or Canadian Standards Association (CSA), be filled to a safe level, and capped;
- Tanks shall be well maintained and free of rust, severe dents, and leaks.
- Caution and due diligence shall be used to prevent spills, check weekly for spills and leaks.
- Tanks shall be clearly labeled with contents and hazards.
- Material safety data sheets (MSDS) for all products shall be available to all involved in storage, handling, and dispensing.
- Storage buildings must be vented and have one 20-BC fire extinguisher or two 10-BC fire extinguishers, properly maintained and tagged.
- Dispensing sites shall be posted as no smoking and have one extinguisher available for use.
- Fuel tanks shall be located a minimum of 30.5 m (100 ft) away from groundwater wells or surface water.
- Containers shall be stored at least three metres away from any building or in a building designed for storage.
- Drums and containers shall be stored upright and dispensed upright using an approved pump.
- All small containers <230L (50 gallons), (jerry cans, pails, and drums) that are stored at or near homes must be kept a minimum of 25m from roadways and pedestrians and out of direct sunlight. They are to be protected from potential impact and in a ventilated shed under lock and key.
- No fuel shall escape during normal transport and handling.
- A spill kit, appropriate to the type of fuel and volume contained, shall be kept easily accessible.



Environmental Operating Procedure No. 8	EOP Revision: 03
Fuel Handling and Storage	Revision Date: August 31, 2024
Responsibility: Fuel handling agency	EOP Page 2 of 4

### FUEL STORAGE TANK GENERAL REQUIREMENTS

Applicable to above ground and underground storage tanks and truck box fuel tanks.

- Corrosion proof and appropriately designed single or double walled steel or fibreglass tanks.
- Secondary containment (110% capacity of storage tank) is required for above ground tanks so as to capture leaks and spills from the tank.
- A dispenser sump must be in place to collect leaks and drips from fueling nozzles.
- Overfill protection device required to avoid overfilling of tanks and subsequent leakage of fuel.
- Weekly checks must be completed on tanks to ensure that product has not been lost.
- Emergency spill kit available and close to the tank location.

### Truck Box Fuel Tanks

- Shall be kept a minimum of 12 m from buildings and be labeled with product name and a "Flammable – Keep Fire and Flame Away" warning.
- If a fuel tank is being stored in an enclosed truck box, labels shall be posed in a visible place on the exterior of the vehicle and one 20-BC fire extinguisher must be kept in the enclosed unit.
- A protective mat or sheet of plywood shall be placed under the tank to protect it from wear and damage.
- If the tank is larger than 230 L (50 gallons), a secondary containment for the truck box is required, as well as a spill cleanup kit.
- Proper connection between the tank and truck box is needed to prevent static charges during dispensing.
- Secure nozzles in the back of pickups with some means of drip containment.
- Tanks shall have a pressure cap relief that meets manufacturer specifications.

#### Fuel Trucks and Large Fuel Containers

- Shall be kept a minimum of 12 m from buildings and be labeled with product name and a "Flammable – keep Fire and Flame Away" warning.
- Shall be kept a minimum of 12 m from ground wells and surface water.
- Tanks shall have separate fill and vent openings.
- One 20-BC fire extinguisher or two 10-BC fire extinguishers, properly maintained and tagged and kept with the tank.
- All above ground storage tanks must be installed on firm foundations designed to minimize uneven settling and corrosion, and to prevent the design stress of the tank from being exceeded.
- No gravity-feed systems will be used.



Environmental Operating Procedure No. 8	EOP Revision: 03
Fuel Handling and Storage	Revision Date: August 31, 2024
Responsibility: Fuel handling agency	EOP Page 3 of 4

### TRANSPORTATION

- Fuel trucks and trailers used to transport fuel tanks on public roads meet basic motor vehicle requirements, such as being in good operating condition including brakes and lights, and not exceeding maximum load limitations.
- Fuel trucks must meet commercial vehicle inspection standards.
- Containers that hold more than 30 L (6.5 gallons) of fuel must abide by transportation of dangerous goods (TDG) requirements.
- If the combined fuel load is more than 2,000 L (440 gallons) a shipping document must be filled out for the cargo, the driver of the vehicle must have proof of transportation of dangerous goods (TDG) training, and the load must have a TDG placard.
- Depending on the type of fuel being transported, a B.C. Ministry of Environment manifest may be required.
- Fuel drums must be stacked end on end and separated by dunnage and transported in vehicles with sides or sideboards.
- All loads shall be securely tied down or contained to prevent them from tipping or falling out of the vehicle.
- Stationary tanks and tanks on trailers shall be mounted to a skid or securely mounted in a cradle on a fire-resistant foundation.
- All vehicles transporting fuel must have and maintain a spill response kit, response procedures, and a spill response plan.

### DISPENSING

- Ensure dispensing procedures are clearly written and posted for all operators to see.
- Signs indicating that ignition must be turned off and smoking is not permitted while refueling vehicle must be visible to every operator approaching the dispenser.
- Always use a pump, preferably an electric one, when dispensing from a drum.
- Hoses and nozzles used for dispensing shall be in good repair and conform to regulation.
- Always use a nozzle which requires continuous application of manual pressure, or an automatic shut-off nozzle.
- Continually supervise filling operations to avoid overfilling.
- Always store and secure the fuel hose above the pump to prevent siphoning.
- Keep drums upright and avoid dispensing from a horizontal drum.
- Do not fuel or service equipment within the riparian management area of a stream or wetland or within 30m of a lakeshore unless equipment is handheld or operation is required for firefighting or to move broken down equipment.



Environmental Operating Procedure No. 8	EOP Revision: 03
Fuel Handling and Storage	Revision Date: August 31, 2024
Responsibility: Fuel handling agency	EOP Page 4 of 4

### ENVIRONMENTAL PROCEDURES FOR FUEL TANK INSPECTIONS

Tanks must be manually dipped and inspected on a weekly basis, by the owner, to determine the volume of fuel in the tank and detect any leaks or damage to the tank or pipes.





### 13.2 EOP 9 – FUEL SPILLS AND RESPONSE

Environmental Operating Procedure No. 9	EOP Revision: 03
Fuel Spills and Response	Revision Date: August 31, 2024
Responsibility: Causal Agent	EOP Page 1 of 2

#### FUEL SPILL PREPARATION

Anyone handling fuel is responsible for the effective cleanup of any spills or leaks.

Anyone transporting, handling, or storing fuel of volumes more than 100L (or 22 gallons) will:

- Prepare a spill prevention and response plan; and
- Once designed and implemented the spill prevention and response plan shall be posted and people be trained in how to use it.

### IN THE CASE OF A SPILL

Assess the situation. Identify what spilled, what its hazards are and what you can do with the equipment and protective equipment you have. If the spill threatens surface water, please also see EOP 10 (Leaks Threatening Water).

In the event of any spill over 10 L contact the Lands Manager at any time of the day;

In the event of a reportable spill (more than 100 L (22 gallons) or into fresh water) call the Provincial Emergency Program (PEP) at 1-800-663-3456 at any hour of the day with information identifying the owner or operator, fuel type, and location of spill *etc*. Contact the Lands Manager.

Do not use radios or cell phones in an area where you can smell fuel vapours.

Advise community members to leave the area.

Eliminate potential sources of ignition and have a fire extinguisher ready.

If safe to do so, stop the flow at the source and try to prevent further spillage (e.g., turn off a valve, plug the leak, roll the drum/container so the opening is at the top, *etc*. if it can be done safely).

Contain product where possible and/or set up a method of capturing the spill until help arrives without putting yourself in jeopardy. If a fuel or oil product is approaching the water, set a hydrocarbon boom in the water, along the shoreline. If the product is on land, boom just beyond the perimeter of the spill.

Plug all drains and manholes that could receive the product, including those a bit distant as weather or cleanup activities could result in an unexpected spread of the product to these openings.

Divert flow from water or other sensitive areas with non-reactive materials such as boom, gravel, sand bags, digging a trench, etc.

Secure the area. Place cones, erect barricades, rope lines, caution tape or other means to prevent unintentional access into spill area. Be aware of the possibility that the spilled product may produce flammable vapours.

Pump out remaining product.

File reports with the Sq'ewá:lxw Lands Manager.



Environmental Operating Procedure No. 9	EOP Revision: 03
Fuel Spills and Response	Revision Date: August 31, 2024
Responsibility: Causal Agent	EOP Page 2 of 2

### SPILL CLEAN UP

- Ensure that spills are recovered and all contaminated soil is removed under the direction of a qualified contractor.
- The B.C. Ministry of Environment has compiled a comprehensive document entitled BC Inland Oil Spill Response Plan (2013) which outlines the cleanup procedures for a major inland spill. This report can be obtained at: <u>https://www2.gov.bc.ca/assets/gov/environment/air-land-water/spills-and-environmental-emergencies/docs/inland\_oil\_response\_plan.pdf</u>
- When containment and control have been achieved, hire a professional to clean up the spill by removing absorbents, contaminated soil, contaminated water or other contaminated materials.
- Also clean any facilities or equipment that has been contaminated by the spill, and dispose of in an approved manner any contaminated materials.
- The specific procedures and methods for cleaning up spills shall be established on a case-by-case basis. A qualified environmental consultant should be consulted when determining appropriate cleanup procedures. Please also see EOP No. 10 (Leaks Threatening Water).
- Any used spill abatement and clean-up materials must be immediately replaced to ensure that sufficient inventory is maintained at all times.
- In addition to reporting a "reportable" spill to the B.C. Ministry of Emergency Management and Climate Readiness, the spills shall also be assessed by the Lands Manager for cause and likely environmental impact. The investigation should be completed within two weeks of the spill and shall also include prevention options, and an assessment of whether or not the existing procedures need to be changed.
- A full report on the investigation shall be delivered to the Lands Manager.

Under the Canada *Emergency Management Act*, the following individuals may be considered responsible for cleaning up a contaminated site or an adjacent site, with some exemptions: the current owner or operator of the site; the previous owner(s) or operator(s) of the site; and the producer or transporter of a substance that caused the contamination.



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# 14.0 WATER MANAGEMENT

## 14.1 DRINKING WATER

A community well water system supplies all homes and businesses in the north portion of Ruby Creek IR #2. The water is UV light treated. There is also a well servicing the fire pump building. In other areas of the lands all water is supplied by individual wells, one well at Syéxw Chó:leqw, one for Grace Estates and one at IR # 2 South.

All water tests are done by Sq'ewá:lxw.

### 14.2 WASTE WATER

Sq'ewá:lxw lands are serviced by individual sanitary (septic) sewer systems. Each home and the administration building on Ruby Creek #2 have separate and individual septic systems and fields. The trailer park on Ruby Creek #2 shares one system. Grace Estates on Skawahlook #1 also shares one system. There is a septic system servicing Syéxw Chó:leqw.

There is no indication that the existing septic systems are not functioning properly.

Among key environmental issues that the community considers essential to address are wastewater management and water quality. Wastewater can be a serious threat to our watercourses, our subsurface water, and in turn to our drinking water. Wastewater comes in several forms: storm water; septic system sewage; and other water runoff referred to as non-point source water that travels across the landscape above and below ground. While moving, runoff water will pick up dirt, residue, and other contaminants in its path, depositing them into the waterways. The possible threats to water quality are:

- Fuel spills;
- Septic systems;
- Existing and future industrial and residential developments;
- Upstream spills; and
- Non-point sources such as agricultural run-off.

In addition to procedures presented in this section, fuel spills and associated environmental impacts will be minimized using procedures described in Section 13.1 of this document, EOP No. 8 – Fuel Handling and Storage, and EOP No. 9 – Fuel Spills and Response (Section 13.2). Water resources are also protected through procedures regarding landfill and soil conservation (EOP No. 7).

Legacy environmental issues associated with contaminated soil have been addressed through site assessment and remediation. Please see Section 5.1 of this Plan.

## 14.1 OVERLAND FLOODING GEOFLUVIAL HAZARDS

Flooding, particularly in the face of climate change, is a prominent concern. Our lands are vulnerable and subject to flooding and mass movement from the Stó:lō (Fraser River), Lexwthíthesem (Ruby Creek), Lexwskw'owōwelh (slough and Skwawolt Creek), and small water coursed coming down the hillsides to the north. Some areas outside of the flood plain experience annual flooding from elevated ground water levels.

Driven by community safety, land use, and environmental concerns, Sq'ewá:lxw has proactively undertaken an assessment of overland flooding and geohazards directly impacting our reserves (Urban



Systems, 2023). The reader is encouraged to see Section 5.0 Hazards and Resilience in the Sq'ewá:lxw Land Use Plan (2024) for more information.

### 14.2 WATER MANAGEMENT STRATEGIES

### GOALS

- Protect ground and surface water on Sq'ewá:lxw lands.
- Provide clean drinking water and effective waste water management.
- Minimize the impacts on the environment from poor storage and treatment of wastewater.
- Mitigate risk to a full range of values across Sq'ewá:lxw lands associated with overland flooding and geo-fluvial hazards (see Section 18.0 of this Plan).

### OBJECTIVES

Objective	Indicator	Target
Clean and safe drinking water for all residents	Incidents of contaminated drinking water	Zero
Compliance with waste water practices	Incidents of non-conforming septic systems	Zero

### STRATEGIES

- Establish community and public communication and education programs to raise awareness of clean water issues, drinking water systems, and importance of proper use and care of septic systems.
- Continue to operate a consistent and reliable drinking water quality assurance program for all residents.
- Ensure full compliance with the Protocol for Centralized Drinking Water Systems in First Nations Communities (2010) (<u>https://www.sac-isc.gc.ca/eng/1100100034998/1533666593873</u>)and regularly update water system protection and emergency response plans.
- Provide for sampling and analysis of surface and groundwater to assess quality.
- Regularly review and update as necessary the Sq'ewá:lxw All-Hazards Emergency Plan, including maintaining consistent collaboration with appropriate third parties and maintenance of the Environmental Emergencies Specific Hazard Response Plan.
- Undertake periodic update of the Sq'ewá:lxw Land Use Plan.
- Utilize and enforce, and regularly review and update as necessary, environmental operating procedures (EOP's) contained in this Plan.
- Ensure that environmental considerations are incorporated into decisions regarding activities and projects that may affect the lands and resources of our people.
- Ensure that requirements of all applicable environmental regulatory regimes and best management practices are met for all activities.
- Create and update regularly an information and monitoring system in order to protect surface and ground water including all environmental issues and risks. This would include waterways and drinking water sources, and an inventory of known contaminated sites (both remediated or not), waste and hazardous waste transfer stations, fuel storage and dispensing facilities, septic systems, storm water drainage systems, flood control infrastructure, and non-point pollution sources.



- Identify and correct any sub-standard septic systems, and maintenance issues with regard to those systems.
- Through the *Sq'ewá:lxw Subdivision, Development, and Servicing Law* and related policies and protocols, require all industry or development projects to document conformance with Sq'ewá:lxw water protection policies.
- Through the *Sq'ewá:lxw Land Use and Zoning Law* and related policies and protocols, protect riparian areas within our lands.



## 14.3 EOP 10 – LEAKS THREATENING WATER

Environmental Operating Procedure No. 10	EOP Revision: 03
Leaks Threatening Water	Revision Date: August 31, 2023
Responsibility: Causal Agency	EOP Page 1 of 1

Release of contaminants from leaks, spills and other accidents can have a major impact on surface water quality in open ditches, streams, creeks, and rivers. Impacts on groundwater can affect drinking water in the local aquifer and wells and may result in the water being unfit for consumption. This EOP outlines a number of procedures to ensure that surface and groundwater are as protected as possible from accidental spills and leaks during current activities, and from all future development on reserve.





### 14.4 FOP 11 – WATER AND WASTEWATER

Environmental Operating Procedure No. 11	EOP Revision: 03
Water and Wastewater Management	Revision Date: August 31, 2024
Responsibility: Lands Manager	EOP Page 1 of 6

#### SEPTIC SYSTEMS

If septic systems are not operating at the appropriate level the result can be contamination of soils and groundwater. To implement a system for management of septic systems on Sq'ewá:lxw lands the following EOP outlines procedures to ensure efficient operation and environmental protection.

### **BEST PRACTICES**

The owner is ultimately responsibility for maintaining their septic system as follows:

- Ensure that the septic tank is emptied as required and properly recovered with soil.
- Community members are responsible for ensuring that the waste they discharge into the septic system is appropriate.
- Not discharging any materials that could cause a failure in the system and/or compromise the operation of the wastewater treatment plant or pass through into the environment and potentially cause environmental damage to fish, wildlife, or plant life.
- Bulky or hard-to-break down wastes called 'cloggers' must never be flushed down the toilet or poured down the drain. Cloggers clog pipes and potentially damage septic system components if they become trapped. Cloggers may also quickly fill septic tanks and decrease the overall effectiveness of the system, which may shorten the life of the septic system or result in the need for more frequent pumping or increase the potential for ground water contamination. The following are some examples of cloggers that must never be flushed down the toilet, or poured down the drain:
  - Diapers
- Dental floss
- Feminine hygiene products
  - Kitty litter Facial tissues
- Cooking fats

Grease

Cigarette butts

- Cooking oils Coffee grounds
- Paper towels
  - Plastics •

- Condoms
- Cotton swabs
- Egg shells
- Other kitchen wastes
- Harmful chemicals called 'killers' must never be flushed down the toilet or poured down the drain. Killers kill the beneficial bacteria ('good' bugs) in the septic system that help to treat the wastewater. Chemicals can also flow untreated through the system and be released into the environment where they may contaminate local groundwater or surface water, including drinking water sources, and cause environmental damage to fish, wildlife, and plant life. The following are some examples of killers, that must never be flushed down the toilet or poured down the drain: Inks
  - Engine oil
  - Gasoline
  - Paint
  - Paint thinner
  - Pesticides Fertilizers
- Antifreeze •
  - Large volumes of toxic cleaners

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- Medications Disinfectants
- Poisons

- Photographic solutions
- Bleach
  - Nail polish remover
  - Varnishes
  - Other household chemicals

Environmental Operating Procedure No. 11	EOP Revision: 03
Water and Wastewater Management	Revision Date: August 31, 2024
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### SEPTIC SYSTEM FAILURE SYMPTOMS

Clues to a failure with the septic tank system could include:

- The ground around the septic tank is soggy, muddy, or spongy to walk on;
- Areas of soil may be collapsing over the septic system;
- Toilets, showers and sinks may be backing up or taking longer than usual to drain;
- Occasional sewage odours become noticeable around the house or septic system, particularly after a rainfall;
- Gray or black liquids begin to surface around the system yard or back up through fixtures in your house;
- E. coli or fecal coliform indicator bacteria start to be identified in nearby well water or in surface waters close to septic system;
- Significant algae growth in or around nearby water bodies; or
- Surface breakout of wastewater on the ground or liquid seeping out of the ground along sloping terrain near the system.

If any of these system failure symptoms occur, or you are concerned about the functioning of the system or suspect that there's a failure please report your concerns to the Land Manager or check with a septic system professional or the local health department.





Environmental Operating Procedure No. 11	EOP Revision: 03
Water and Wastewater Management	Revision Date: August 31, 2024
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#### **STORM WATER**

Storm water is produced from rainfall and snow melt on the ground surface. The resulting water drains to the installed drainage ditches or storm sewer system and ultimately into the natural environment.

To ensure that the storm water system is in proper working order, and that water from the drainage system does not have a negative impact on the receiving creek or river, this EOP has outlined a number of procedures to be implemented.





Environmental Operating Procedure No. 11	EOP Revision: 03
Water and Wastewater Management	Revision Date: August 31, 2024
Responsibility: Lands Manager	EOP Page 4 of 6

### CONSTRUCTION AND INDUSTRIAL/RESIDENTIAL DEVELOPMENTS

Any industrial, commercial or residential developments that may be constructed on reserve will require controls on storm water quality, volume and flow rate. Appropriate design and management are necessary to implement a system for ensuring that future developments do not negatively impact local surface water bodies on reserve lands. The following EOP outlines procedures to ensure efficient control and environmental protection.





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Water and Wastewater Management	Revision Date: August 31, 2024
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#### **NON-POINT SOURCES**

A non-point water source is one that has no obvious or visible location where the waste water enters a local surface water body (river or creek) or directly into the ground. The non-point runoff comes from rain and other water washing over land surface and picking up any contaminants that may exist on the land surface. To implement a system for ensuring that non-point sources on or around reserve are managed, the following EOP outlines procedures to ensure efficient control and environmental protection.





Environmental Operating Procedure No. 11	EOP Revision: 03
Water and Wastewater Management	Revision Date: August 31, 2024
Responsibility: Lands Manager	EOP Page 6 of 6

### DRINKING WATER PROTECTION BEST PRACTICES

- Only qualified individuals are to install wells or other water supply systems.
- Perform regular maintenance on water distribution systems.
- Qualified professionals monitor water quality delivered by distribution systems.
- Maintain safe and functional sewage systems.
- Prevent contamination of wells through proper handling of fuels, waste, and hazardous wastes.
- Ensure development is conducted in such a way as to not impact water sources.
- Develop and implement a monitoring plan for all waterways.
- Protect riparian areas through planning and operations control.



## 15.0 AIR QUALITY

This Plan addresses the quality of outdoor air in our community. The quality of the air we breathe is impacted by pollutants such as chemicals, dust, and other particulate matter. Fresh clean air is an important contributor to a good quality of life.

Sq'ewá:lxw has no policy or regulations with regard to air quality. The Canadian constitution defines air quality as a Provincial responsibility.

Sq'ewá:lxw shares our air with others in the Lower Fraser Valley airshed, Metropolitan Vancouver, the FVRD, and Whatcom County in the USA.

The FVRD addresses air quality through its Air Quality Management Plan (2021). That Plan addresses the Lower Fraser Valley Airshed (roughly from Abbotsford to Hope) which is bounded to the north by the Coast Mountains and to the South by the Cascade Mountains which converge at Hope. An airshed is a region sharing common airflow patterns hindered by local features, such as mountains and weather, and often exposed to similar levels of air pollution.

This Lower Fraser Valley (LFV) Airshed is funnel-shaped and confined, has complex meteorology with frequent temperature inversions, and is characterized by restricted airflow and limited vertical air mixing. This sub-basin is often marred by a visibility-obscuring haze, and its habitability and agricultural productivity can be compromised by elevated levels of air pollutants, primarily originating from sources to the west and carried from there by prevailing westerly sea breezes.

Poor air quality can be linked to asthma and breathlessness. Our Elders and other at-risk members can and do experience a reduced quality of life due to air quality issues.

We cannot independently assure good air quality, and we cannot single handedly reverse global climate change, but we can work with our neighbours and we can do our part. The Fraser Valley Regional District Air Quality Management Plan states their intention to work with First Nations to improve the air we all breathe.

The main local source of poor air quality is particulates in the form of wood smoke and to a lesser degree road dust. Particulates are tiny dust particles that come in many shapes and sizes and from both natural and man-made sources. Particulates are often described as follows:

- Total suspended particulate ranging from large to small dust particles;
- PM10 particulate matter 10 micrometers or less in diameter e.g. road dust; and
- PM2.5 particulate matter 2.5 micrometers or less in diameter e.g. smoke.

The Sq'ewá: Ixw Outdoor Fires Law (2011) addresses the control of smoke within reserve lands.

### GOALS

• Minimize negative health impacts within our community due to outdoor airborne pollutants including smoke and dust.



### OBJECTIVES

Objective	Indicator	Target
Safe and breathable air in our	Local incidents of unacceptable air quality	Zero
community		

### STRATEGIES

- Establish community and public communication and education programs to raise awareness of risks to human health from poor air quality and the actions required to eliminate the risk.
- Utilize and enforce the Sq'ewá:lxw Environmental Management Plan and related policies and protocols, including the permitting process, to control the discharge of airborne contaminants including smoke and dust. Specifically, a Person must not dispose of any Waste by burning, burying, or dumping of that Waste on Sq'ewá:lxw Lands unless permitted to do so.
- Commercial or industrial operators must provide a containment and burn control plan with any application to burn.
- Utilize and enforce the *Sq'ewá:lxw Outdoor Fires Law* (2018), including the use of permits, as a tool to control the emission of smoke as may be necessary.
- Provide appropriate disposal options for all materials in order to discourage the burning of any material other than clean wood in woodstoves and outdoor fires.
- All industrial, commercial, or residential developments that are constructed on Sq'ewá:lxw lands are subject to controls on air emissions.

We note that Sq'ewá:lxw laws, policies, and protocols allow for the exemption of ceremonial or traditional fires from open burning regulations.



## 15.1 EOP 12 - AIR QUALITY

Environmental Operating Procedure No. 12	EOP Revision: 03
Air Quality	Revision Date: August 31, 2024
Responsibility: Lands Manager	EOP Page 1 of 3

### BACKYARD AND INDUSTRIAL DEBRIS BURNING

The EOP recognizes the need to eliminate or limit the practice of backyard and debris burning on reserve which can be a significant source air pollution. High concentrations of fine dusts and chemicals are produced when garbage and other non-clean wood products are burned.

Community member or third party applies to Lands Manager to burn debris. Containment plan and burn control plan included.

Imposed controls on air emissions and fire management:

- Containment plan and burn control plan approved by Lands Manager (submission one month prior to burning).
- Limited or no burning during poor air quality advisories or if wind direction is towards the community.
- Strategies implemented to control burn to targeted areas.
- Public notice required and educational material distributed relating health issues related to air quality.





Environmental Operating Procedure No. 12	EOP Revision: 03
Air Quality	Revision Date: August 31, 2024
Responsibility: Lands Manager	EOP Page 2 of 3

### AIRBORNE DUST

This EOP addresses the control and prevention of high concentrations of dust in the air.





Environmental Operating Procedure No. 12	EOP Revision: 03
Air Quality	Revision Date: August 31, 2024
Responsibility: Lands Manager	EOP Page 3 of 3

### CONSTRUCTION AND LAND DEVELOPMENTS

To ensure that future developments do not negatively impact local air quality, all industrial, commercial, or residential developments that are constructed on reserve are subject to controls on air emissions. This will necessitate appropriate design and management by the proponent. The following EOP outlines procedures to ensure efficient control and environmental protection.







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# 16.0 LAND DEVELOPMENT – ON RESERVE

Land development, either for commercial or residential use, is a potential economic development vehicle on reserve. Development has been undertaken by CP holders and by the Nation. Moving to our own land management regime through adoption of the *Sq'ewá:lxw Land Code* has reduced the bureaucratic burden on both the Nation and developers, and afforded internal control of decision making.

Sq'ewá:lxw has developed a Land Use Plan simultaneously with this Environmental Management Plan in order to provide for orderly development of land so as to meet community needs.

Sq'ewá:lxw has adopted the Stó:lō Heritage Policy Manual (Stó:lō 2003) and the S'ólh Téméxw Use Plan Policy (PRRO, 2018) as primary tools in the protection of cultural resources on our lands. Policies found in these documents will be applied by Sq'ewá:lxw on lands we share with our Stó:lō and other neighbours, on our core interest areas, and on our reserve land.

A clearly communicated process for project development is the best tool for successful development, that is, success in meeting Sq'ewá:lxw objectives and success for the developer. Any development application on Sq'ewá:lxw land will be administered by Sq'ewá:lxw in a similar manner to the Strategic Engagement Agreement level three process. For further information, please see EOP No. 13 below and Sq'ewá:lxw Development Permitting Guide.

Project developers must have legal access to land and Sq'ewá:lxw provides a Lands Register process to ensure that this is the case.

Land development by its nature encompasses many environmental issues. Desired environmental outcomes will only be achieved through coordinated land use planning, subdivision and land development processes, and environmental planning.

Laws controlling subdivision, installation of infrastructure such as roads, driveways, and storm drainage structures, or construction and demolition, along with appropriate requirements and evaluation criteria, have a positive impact on environmental outcomes.

### GOALS

- Ensure that Membership is aware of the full range of Sq'ewá:lxw legislation and policy with regard to land development for the protection of environmental values.
- Minimize negative environmental impacts associated with human activity on Sq'ewá:lxw lands.
- Experience land development which advances the economic, social, and cultural goals of Sq'ewá:lxw First Nation.
- Restore and protect all Sq'ewá:lxw lands from harmful practices.

### OBJECTIVES

Objective	Indicator	Target
Developments which are compatible	Non-compatible developments	Zero
with Sq'ewá:lxw laws and ways		



### STRATEGIES

- Promote the principle of sustainable development for our lands, ensuring that development takes place in a manner that plans for and protects ecologically and culturally significant areas.
- Undertake complete, effective, and judicious application of the Sq'ewá:Ixw Land Code.
- Any development application on Sq'ewá:lxw land will be administered by Sq'ewá:lxw in a similar manner to the Strategic Engagement Agreement level three process.
- Utilize and enforce the provisions of the *Sq'ewá:lxw Environmental Management Law*, including its policy and protocols.
- Utilize and enforce the Sq'ewá:Ixw Land Use and Zoning Law and its policies and protocols.
- Ratify and implement the newly updated Sq'ewá:lxw Land Use Plan.
- Utilize and enforce the *Sq'ewá:lxw Subdivision, Development, and Servicing Law* and its policies and protocols.
- Consider the use of a green building incentive in order to attract investment in ecologically progressive buildings.



### 16.1 EOP 13 – LAND DEVELOPMENT

Environmental Operating Procedure No. 13	EOP Revision: 03
Land Development	Revision Date: August 31, 2024
Responsibility: Lands Manager	EOP Page 1 of 3

### SCOPE

The procedures outlined in this EOP address development of land for residential, commercial, or light industrial development anywhere on Sq'ewá:lxw reserves.

### **BEST PRACTICES**

- Project developers will have clear legal access to the land.
- Projects will comply with the Sq'ewá:lxw Land Use Plan, and the S'ólh Téméxw Use Plan.
- Project developers will be required to demonstrate that the proposed development or land and resource use will not pose a threat of irreparable environmental, cultural or resource damage, and will contain an element that can contribute to the restoration of the natural and/or cultural health of the land.
- Project developers will be required to demonstrate adherence to all Sq'ewá:lxw environmental policy.
- Project developers will be required to demonstrate that the proposed project will provide more
  positive than negative social impacts for Sq'ewá:lxw people, will include economic participation
  by the Nation, and will maximize business opportunities and direct employment-related training
  for Sq'ewá:lxw people.
- Permitting will require consideration, mitigation, and possibly compensation for negative impacts associated with:
  - Soils and slope stability
  - Ground and surface water
  - Air quality and dust control
  - Solid and liquid wastes
  - Hazardous materials storage
  - Climate change
  - Noise and vibration
  - Fisheries
  - Species at risk
  - Traffic

- Vegetation and wildlife habitat
- Health and safety
- Contaminated sites
- Storm water management
- Site restoration
- Socio-economics
- Public and community concerns
- Cultural resources
- Erosion and sediment control
- Tree cutting
- Consideration of development applications follows a prescribed described below. Merits of the development proposal are considered against many criteria including:
  - The promotion of health, safety, convenience, and welfare of Sq'ewá:lxw members and residents; and
  - The development of the particular planning zone and the whole reserve in a manner that contributes to the economic, environmental, cultural, and community health of Sq'ewá:lxw and its Members and occupants.



Environmental Operating Procedure No. 13	EOP Revision: 03
Land Development	Revision Date: August 31, 2024
Responsibility: Lands Manager	EOP Page 2 of 3

### LAND USE OR DEVELOPMENT PROCESS

A utility, developer, contractor, CP holder, member, resident, or Sq'ewá:lxw wishes to propose rezoning or a land use amendment, undertake any land or resource development, building project, temporary use of land, or to conduct any works involving the disturbance, importation or exportation of soil on reserve or the cutting of trees.





Environmental Operating Procedure No. 13	EOP Revision: 03
Land Development	Revision Date: August 31, 2024
Responsibility: Lands Manager	EOP Page 3 of 3

Lands Manager registers the permit, amendment, or subdivision and advises the applicant.		
<u>↓</u>		
The applicant supplies any additional information requested by the Lands Manager including plans and engineering drawings.		
↓		
Recommendation to Sq'ewá:lxw Council for Decision - Approval in Principle.		
··		
Lands Manager registers the approval in principle and confirms with applicant.		
<u>└</u>		
Applicant may begin laying out subdivision but cannot initiate construction.		
The Applicant supplies any additional information requested by the Lands Manager including plans and engineering drawings.		
Recommendation to Sq'ewá:lxw Council for decision – No Application Rejected.		
Applicant submits an Owner's Undertaking.		
<u></u>		
Applicant posts any required bonds and the Lands Manager registers the development permit and confirms with applicant.		
 ▼		
Applicant supplies as-built plans, the Lands Manager registers notice of <b>Substantial Completion</b> and releases 90% of bonds.		
▼		
Applicant supplies any outstanding information, and if all is in order the Lands Manager registers the <b>Notice of Completion</b> and confirms with Applicant and issues an Occupancy Permit. In the absence of defaults, the Lands Manager releases the remaining bond funds within one year.		



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# 17.0 ENVIRONMENTAL ASSESSMENT

Sq'ewá:lxw has in place a *Subdivision, Development and Servicing Law* (2021). This law sets requirements for environmental assessment in preparation for land development or infrastructure construction. These requirements reflect:

- Sq'ewá:lxw environmental policies and operating procedures;
- The Stó:lo Heritage Policy Manual;
- The Sq'ewá:lxw Development Permitting Guide (2021); and
- The National Building Code.

Any new industrial, commercial, or large-scale residential developments on Reserve, including those initiated by Certificate of Possession holders or Sq'ewá:lxw First Nation, must be assessed to determine if an environmental impact assessment is required to ensure appropriate consideration is taken to protect the natural environment.

Consideration of development applications follows a prescribed process including referral to the Land Advisory Committee, staff review, community referral, and in some cases referral to Chief and Council. Merits of the development proposal are considered against many criteria including the following related to this Environmental Management Plan:

- The promotion of health, safety, convenience, and welfare of Sq'ewá:lxw members and residents;
- Preservation of amenities and special features of Sq'ewá:lxw lands;
- Environmental protection and enhancement;
- Protection and enhancement of cultural and heritage sites;
- Compatibility with Sq'ewá:lxw and Stó:lō culture;
- Viewscapes, aesthetics, and visual qualities; and
- The development of the reserve in a manner that contributes to the economic, environmental, cultural, and community health of Sq'ewá:lxw and its Members and occupants.

Environmental assessment is a decision-making process designed to reduce environmental impacts resulting from human activities. Environmental assessments are carried out to help answer questions such as:

- Does the proposed project plan include the best suited practices?
- Is there a risk that the project will have an adverse environmental impact?
- Will nearby communities be impacted, and if so, how?
- Can potential impacts be avoided?
- Are potential impacts significant, even with mitigation?
- Are the predicted effects or risks so high that the project should not go ahead?

Environmental assessments will evaluate proposed major projects as well as minor projects that are deemed to have a potential impact on Sq'ewá:lxw lands and resources. These assessments will meet or exceed federal and provincial regulatory frameworks and technical expectations so that an informed decision can be made on the overall impact of the project. The results of these assessments will lead to a decision on whether to proceed with the project, proceed with the project as long as certain environmental protection measures are complied with, or to oppose the project.



### FEDERAL ENVIRONMENTAL ASSESSMENT

The *Impact Assessment Act* (2019) outlines a process for how the Government of Canada assesses the environmental, health, social and economic impacts and impacts on Indigenous peoples and their rights associated with designated projects and projects carried out on federal lands or outside of Canada. Designated projects are identified in the Physical Activities Regulations or as designated by the Federal Minister.

This process will be administered externally and address large projects generally initiated external to the community.

### PROVINCIAL ENVIRONMENTAL ASSESSMENT

The B.C. *Environmental Assessment Act* (2018) provides a mechanism for reviewing major projects to ensure they meet the goals of environmental, economic and social sustainability. The stated intent is also to ensure that the issues and concerns of the public, First Nations, communities, and government agencies are considered. British Columbia's Environmental Assessment Office manages the assessment.

The province does not have jurisdiction on federal land; however, the provincial assessment process may be implemented in place of a federal assessment review or portions of it may be adopted and implemented by Sq'ewá:lxw as defined in this Environmental Management Plan.

It is recognized that the area of environmental assessment is complex and each submission will vary with each proposed development, however the main Sq'ewá:lxw environmental assessment requirements for Nation and certificate of possession land are outlined below:

- Full and detailed project history and description;
- Project alternatives;
- Scoping document for assessment of need for EA;
- Joint definition of assessment process and preparation of EA terms-of-reference;
- Full consideration of Aboriginal title, rights, and Sq'ewá:lxw members' values;
- Environmental description;
- Perceived environmental impacts;
- Perceived social impacts;
- Cumulative effects assessment;
- All costs of the assessment process are born by the CP holder, proponent, or outside government;
- Provisions for environmental monitoring; and
- Provision, including financial, for project closure and remediation.

Environmental assessments must evaluate impacts on all elements of the environment including the biological, chemical, physical, social, heritage, cultural, spiritual, economic, and health environments and address cumulative impacts.

Sq'ewá:lxw has developed protocols and requirements for environmental assessment which can be found in Section 9.2 of the Sq'ewá:lxw Development Permitting Guide (Sq'ewa:lxw, 2021).

### GOALS

- Reduce environmental impacts resulting from human activities.
- Support the goals of environmental resource protection and sustainable development.
- Integrate environmental and cultural resource values into economic decisions with regard to resource development.


- Integrate environmental and cultural resources protection and economic decisions at the earliest stages of planning an activity.
- Predict environmental, social, economic, and cultural consequences of a proposed activity, and to assess plans to mitigate any adverse impacts resulting from the proposed activity.
- Provide for the involvement of Nation members in the review of the proposed activities

#### OBJECTIVES

Goal	Indicator	Target
Projects respect Sq'ewá:lxw	Number of projects proceeding in an	Zero
environmental values	unacceptable manner	

#### STRATEGIES

- No project will proceed on Skawahlook IR #1 or Ruby Creek IR #2 without Sq'ewá:lxw approval through the permitting process set out in our laws.
- Apply protocols and requirements for environmental assessment contained in the Sq'ewá:lxw Development Permitting Guide.
- Any new industrial, commercial, or residential developments on reserve, including those initiated by Sq'ewá:lxw, must be assessed to determine if an environmental impact assessment is required to ensure appropriate consideration is taken to protect the natural environment.
- No project will proceed on Sq'ewá:lxw Core Interests Area without Sq'ewá:lxw approval through a referral process administered by the Stó:lō Research and Resource Management Centre and People of the River Referrals Office.
- Insist on full application of the Stó:lo Heritage Policy Manual.
- Create a robust natural resource and cultural resource information system to support referral processing, environmental assessment, and economic development. The environmental inventory would include natural habitats, environmentally sensitive areas, and rare and endangered species and ecosystems.
- Establish community and public communication and education programs to raise awareness of the importance of our natural and cultural resources, the methods employed to protect them, and the process in place to direct wise and sustainable use of them.

See also Section 19.0 Cultural Resource Protection and Section 20.0 Wildlife and Habitat Protection of this Plan.

For more information on the role of First Nations in environmental assessment, see the <u>First Nations</u> <u>Environmental Assessment Toolkit</u> (First Nations Environmental Assessment Technical Working Group, 2004).



#### 17.1 EOP 14 - ENVIRONMENTAL ASSESSMENT

Environmental Operating Procedure No. 14	EOP Revision: 03
Environmental Assessment	Revision Date: August 31, 2024
Responsibility: Lands Manager	EOP Page 1 of 2

#### OBJECTIVES

- Identify, predict, prevent, mitigate, and minimize environmental impacts from all activities on Sq'ewá:lxw lands.
- Ensure that all environmental impact assessments reflect the needs of Sq'ewá:lxw people.
- All developments must be planned with consideration to the environment, cultural heritage, and human health impacts.

#### SCOPE

• All resource development proposals or other activities deemed to potentially impact environmental or cultural resources on reserve and core interest lands.

#### **BEST PRACTICES**

Sq'ewá:lxw is in a position, through the *First Nations Land Management Act*, to custom design best practices for environmental assessment. Sq'ewá:lxw best practices must meet or exceed federal and provincial provisions but can draw from both as best suits our needs. Opportunities exist for Sq'ewá:lxw to undertake joint environmental assessment on reserve, both federal and provincial, and Sq'ewá:lxw and Canada, joint EA processes.

Proponents must provide to the responsible Federal agency a description of their proposed project if it is captured by regulations outlining projects likely to require federal environmental assessment.

For more information, please see Section 9.0 Environment in the Sq'ewá:lxw Development Permitting Guide (Sq'ewa:lxw 2021).



Environmental Operating Procedure No. 14	EOP Revision: 03
Environmental Impact Assessment	Revision Date: August 31, 2024
Responsibility: Lands Manager	EOP Page 2 of 2

#### **ENVIRONMENTAL ASSESSMENT PROCESS**





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### 18.0 CLIMATE CHANGE RESILIENCE

Worldwide climate change is a reality and our people are already living with the consequences. Everyone has a global responsibility to reduce their greenhouse gas emissions, thereby minimizing their contribution to global climate change.

What can we expect from climate change? (Metro Vancouver, 2012c)

- Average annual temperatures will be two to three degrees warmer by 2050.
- We will experience more extreme conditions, such as more days over 30°C, which could increase the number of cases of heat-related deaths and the frequency and severity of poor air quality events.
- The risk of forest fires will also increase, threatening homes and neighbourhoods near the forest edges.
- Invasive species of insects and plants will move further north. Defoliating pests such as the gypsy moth and the pine beetle and disease-carrying insects will be more common.
- Sea level could rise by 0.4 to 1.3 metres over the next century.
- We will see five to 10% more rain annually meaning wetter conditions, more frequent storms and more intense heavy rain events. There will be a higher chance of localized flooding.
- The increased frequency of extreme wind events is likely to result in more storm surges that can cause flooding in coastal areas and downed trees and damaged homes and buildings.
- Less snow in the mountains, less rain in the summers, and increased irrigation demands because of hot, dry summers mean drinking water shortages.

Specific to our location, Sq'ewá:lxw is highly exposed to health and safety risks associated with climate change:

- We expect more and more severe Fraser River flood incidents. The Fraser will both overflow its banks and back up Ruby Creek causing the creek to overflow its banks.
- We fear increased storm events causing flooding above us in the Ruby Creek watershed. Resource extraction within the watershed has contributed to natural processes of soil movement and we fear the increased risks associated with blocked streams and the sudden release of flash floods and debris torrents down Ruby Creek.
- We are concerned by the impact of rising water and rising water tables on functioning of our septic systems and on the quality of our drinking water.
- We are exposed to landslides immediately above us.
- Less predictable weather, including more extreme heat and precipitation events, increase the risk of interface wildfires to our homes, property, and safety.

Sq'ewá:lxw lands are particularly vulnerable to the effects of climate change. The Sq'ewá:lxw Land Use Plan has identified biophysical limitations to community and economic development. The Fraser River flood plain covers the majority of our lands. Ruby Creek Reserve #2, where almost all of our on-reserve residents live, falls completely within the alluvial fan of Ruby Creek, a major tributary to the Fraser River. We have within our land areas of highwater table which flood in association with high Fraser River levels. Sq'ewá:lxw lands are small areas fully embedded in the forest. Our community sits at the base of a large mountain.

#### GOALS

• A beautiful and inspiring community fostering wellness with a safe and healthy environment.



- A functional and sustainable community composed of healthy and happy individuals.
- Further develop community awareness of climate change and the need to focus on resilience.
- Mitigate risk to a full range of values across Sq'ewá:lxw lands associated with overland flooding and geo-fluvial hazards, wildfire, landslides, heat and drought and other high risk hazards associated with climate change.
- Strive for high environmental performance, energy efficiency, and the minimization of environmental impacts in our housing stock.
- Establish community and public communication and education programs to ensure the success of our emergency management program including raising awareness of the need to create a resilient community.
- Protect the environment, lives, and property from the increasing risks associated with climate change.
- Minimize the production of greenhouse gases within our community.

#### OBJECTIVES

Objectives	Indicators	Targets
Minimize environmental damage	Significant preventable environmental	Zero
from environmental disasters	impacts caused by incidents of	
	environmental disaster	
Eliminate fatalities, injuries, and	Incidents of negative health impacts from	Zero
negative personal health impacts	environmental disasters	
from environmental disasters		
A safe and secure community in the	Incidents of environmental damage or loss of	Zero
face of environmental impacts of	life or property associated with the effects of	
climate change	climate change	
Leadership in mitigation of climate	Reduction of green-house gas emissions	To be determined
change		

#### **STRATEGIES**

- Draw upon and reinforce the culture, traditions, and knowledge of Sq'ewá:lxw to recreate a healthy environment and assist in adaptation to a changing climate.
- Establish community communication and education programs to raise awareness of climate change and its impacts and the actions required to mitigate the risks on our people and the environment. Involve youth and Elders. Focus on resilience.
- Protect the health and safety of our community members and our critical infrastructure.
- Further develop and maintain the Sq'ewá:lxw All-Hazards Emergency Management Plan and provide planning, support, and training in the response to and recovery from emergency or disaster.
- Enforce and utilize the *Sq'ewá:lxw Subdivision, Development, and Servicing Law* and its polices and protocols to promote or require fuel efficiency and minimization of green-house gas emissions in all residential, commercial, and administrative developments.
- Look into the establishment of an electric vehicle charger at Syéxw Chó:leqw Adventure Park to address environmental issues and advance cultural understanding in the greater community.

Climate change will have profound and direct impacts on plant and wildlife communities. Please see Section 20.0 Wildlife and Habitat Protection of this Environmental Management Plan including invasive species and species at risk.



Please see also Section 5.0 Hazards and Resilience in the Sq'ewá:lxw Land Use Plan (2024). Recent Sq'ewá:lxw initiatives in overland flood hazard and geo- and geo-fluvial hazards are described in Sections 5.2 and 5.3.

Please also see Section 9.4 Climate Change in the Sq'ewá:lxw All-Hazards Emergency Management Plan (2024).





Figure 6 - Issues Highlight - Resilience



# 19.0 CULTURAL RESOURCE PROTECTION

Cultural resource protection in British Columbia is regulated by the *Heritage Conservation Act, 1996*. "The current legislative management regime is premised on the provincial government as the sole steward of cultural heritage resources and is not reflective of a government-to-government relationship between First Nations and the Province of BC" (First Nations Leadership Council, 2011).

Sq'ewá:lxw cultural resource protection policies apply to our shared and core interest areas and Reserve land. For more information on these multi-level jurisdictions please see the Sq'ewá:lxw Land Use Plan (2024).

The *Sq'ewá:lxw Land Code* sets out how we will protect our land and resources and is to be interpreted in accordance with the culture, traditions, and customs of Sq'ewá:lxw. It addresses all aspects of land management, including the protection of cultural resources through the setting aside and regulation of heritage lands and sacred sites.

Sq'ewá:lxw is a member of Stó:lō Nation. We work closely with the Stó:lō Research and Resource Management Centre (SRRMC) which provides professional services to member Nations in the fields of natural and cultural resource management, research, facilitation and collections management. Services offered by the SRRMC are provided with an understanding of, and respect for, Stó:lō protocols.

Sq'ewá:lxw has adopted the Stó:lō Heritage Policy Manual and the S'ólh Téméxw Use Plan (SRRMC 2012) as primary tools in the protection of cultural resources on our lands. Policies found in these documents will be applied by Sq'ewá:lxw on Reserve and Core Interest Area lands.

The Stó:lō Heritage Policy Manual (Stó:lō 2003) is a comprehensive and carefully drafted document reflecting the collectivity of Stó:lō. Sq'ewá:lxw shares in the vision and purpose of the Stó:lō Heritage Policy Manual, particularly to "protect and preserve Stó:lō religious freedom in all its expressions".

Sq'ewá:lxw participates with other Stó:lō First Nations and British Columbia in a Strategic Engagement Agreement (SEA). Within this agreement and the processes it establishes, Stó:lō and Sq'ewá:lxw are implementing the Stó:lō Heritage Policy Manual.

Key elements of the referral process adopted by Sq'ewá:lxw are:

- The People of the River Referrals Office (PRRO) may act as a single referral contact point;
- The engagement matrix; and
- Stó:lō Connect as a tool of implementation and information sharing.

The People of the River Referrals Office engages with outside government and industry addressing title and rights, cultural heritage, traditional use, archaeological, environmental, and other issues.

All Stó:lō cultural values are defined by Stó:lō people and belong to those who created them. With regard to these values, therefore, decision making power rests with the current caretaker. Value as defined by the caretaker influences the definition of respectful treatment. Thus no one procedure can be advanced for use in protecting Stó:lō cultural values and the appropriate caretakers can only be defined by Stó:lō and our community and families.

It is required that impacts to Stó:lō heritage resources, including Sq'ewá:lxw resources, be considered, assessed, and mitigated from all development-related disturbances and impacts. Heritage resource studies should be undertaken as either overview assessments or impact assessments. All such heritage related studies must be conducted by researchers with an appropriate level of experience and training and under the conditions of a Stó:lō Heritage Investigation Permit. Within the bounds of our lands the Sq'ewá:lxw permitting process has ultimate authority.



Heritage Resource Overview Assessments, as defined in the *Stó:lō Heritage Policy Manual* (2003), are used to identify known or potential heritage sites within a given area or project area. The objective is to determine impact assessment requirements based on the known and/or projected risk of encountering and impacting heritage sites.

Heritage Resource Impact Assessments (*Stó:lō Heritage Policy Manual,* 2003) serve the purpose of inventorying and identifying all potential conflicts between heritage resources and proposed development plans. The objective is to develop management measures and options that serve to avoid or mitigate impacts to heritage resources. Management recommendations may include additional phases of inventory and/or data collection required in the process of developing a sound management plan.

Recognized sites, objects, activities, and knowledge as per Stó:lo heritage policy include:

- Sxwôxwiyám sites sites from the beginning of time including transformer sites;
- Xá:<u>x</u>a sites spiritually potent (taboo) sites;
- Ceremonial regalia sites;
- Traditional activities sites;
- Material culture sites and/or objects;
- Stó:lo ancestral human remains; and
- Stó:lō intellectual property.

For application on the Core Interests Area and Sq'ewá:lxw lands, Sq'ewá:lxw has adopted the Stó:lō Heritage Policy Manual.

#### GOALS

The protection of cultural resources is critical to the continued existence of our people as people of Sq'ewá:lxw and Stó:lō. We advance these Goals:

- A culturally vibrant community with strong links to the past and the future.
- Develop further awareness amongst our people and all users and visitors to our lands of the need to honour and respect our culture and traditions.
- Protect, preserve and manage Stó:lō heritage including Sq'ewá:lxw heritage in all its forms in a manner consistent with Stó:lō values, beliefs and traditions.
- Maintain continuity in Stó:lo heritage and the practice of cultural traditions in forms both old and new.
- Protect and preserve Stó:lo and Sq'ewá:lxw religious freedom in all its expressions.
- Maintain the integrity of the Stó:lō spiritual world; maintain healthy relations between the contemporary Stó:lō community and Stó:lō ancestors including Sq'ewá:lxw heritage past, present and future.
- Maintain the integrity of Stó:lō history and heritage including Sq'ewá:lxw heritage through the respectful treatment of Stó:lō knowledge, heritage objects and sites.



#### OBJECTIVES

Objective	Indicator	Target
Secure cultural resource base	Incidents of culturally resources	Zero
	compromised in an unacceptable manner	

#### STRATEGIES

- Actively and consistently declare and practice our inherent title and rights over the lands of our ancestors.
- Apply our Sq'ewá:lxw consultation, referral, and development permit process across our multilevel jurisdiction and interests as defined in the Land Use Plan:
  - Stó:lō S'ólh Téméxw
  - Shared Interests
  - o Core Interests
  - Reserve land.
- Identify, predict, prevent, mitigate, and minimize any impacts on cultural resources from any and all activities on Sq'ewá:lxw lands and within our Core Interest area.
- Protect all culturally significant sites and areas.
- Continuously develop and strengthen our relationships with and our neighbours both Stó:lō and non-Stó:lō and external organizations which assert responsibility for the cultural values of the lands within Canada and British Columbia, advancing with those agencies our agenda of comanagement and stewardship with regard to all cultural resources.
- Full application of the Stó:lō Heritage Policy and the S'ólh Téméxw Use Plan to Sq'ewá:lxw lands and interests.
- Through the Stó:lō Strategic Engagement Agreement and the People of the River Referrals Office, and the Sq'ewá:lxw development permit system, take every opportunity to imprint upon the land the vision of Sq'ewá:lxw people.
- Define the scope of Sq'ewá:lxw interests for engagement through the People of the River Referrals Office including how Sq'ewá:lxw is to be defined as an interested First Nation and in what circumstances Sq'ewá:lxw will participate in a response.
- Establish community and public communication and education programs emphasizing the importance of cultural resources to the sustainability of our community and the actions required to preserve those resources.
- Ensure that members are fully aware of the full range of Sq'ewá:lxw initiatives to protect cultural values.





Figure 7 - Issues Highlight - Cultural Resources

# Syéxw Chó:leqw Adventure Park

The Syéxw Chó:leqw Adventure Park area has significant cultural, spiritual, recreational, and environmental value to Sq'ewá:lxw people. Community members have hunted, fished, and harvested cedar bark within the park. Syéxw Chó:leqw also reaches out to all people - as an invitation to get to know Sq'ewá:lxw and join us on our reconciliation path. Available to the visitor are 4,000 metres of walking and cycling trails, a bike skills park, viewing platforms, and a 90,000 square foot playground. Visitors can also enjoy the many art installations throughout the park in the form of mural paintings and wood sculptures.



Scan for more information.



#### 19.1 EOP 15 - CULTURAL RESOURCE PROTECTION

Environmental Operating Procedure No. 15	EOP Revision: 03
Cultural Resource Protection	Revision Date: August 31, 2024
Responsibility: Lands Manager	EOP Page 1 of 2

#### SCOPE

All resource development proposals or other activities deemed to potentially impact cultural resources on Sq'ewá:lxw reserve land or the Core Interests Area fall into the scope of this EOP including:

- Heritage and archaeological sites and objects;
- Culturally significant sites and areas; and
- Habitats and the fish, birds, and animals with whom we share the land and water.

#### **BEST PRACTICES**

Sq'ewá:lxw acknowledges the role of Stó:lō in protecting the common heritage of all Stó:lō people. Assessments of impacts on cultural resources on reserve, or in the surrounding territory of Sq'ewá:lxw and Stó:lō people, are best undertaken in the context of the Stó:lō territory as a whole.

- Participate in the People of the River Referrals Office process.
- Observe all environmental operating procedures of Sq'ewá:lxw First Nation.
- Enforce engagement by all project proponents in the Stó:lō Heritage Policy Manual and process;
- Undertake detailed mapping and inventory of culturally and spiritually significant locations and areas.
- Consult with community members, especially Elders, when developing policy or plans.
- Monitoring of identified culturally or environmentally significant areas for water, soil, and plan quality.
- Within the Sq'ewá:lxw Core Interests Area, the use of heritage overview assessments, heritage
  impact assessments, and heritage related research will be required for all projects and decisionmaking processes as per the Stó:lō Heritage Policy Manual and within a referral process defined
  by the People of the River Referrals Office.
- Within Sq'ewá:lxw lands, the use of heritage impact assessments and heritage related research will be required for all projects and decision-making processes as per the Stó:lō Heritage Policy Manual and within a development permitting process defined by Sq'ewá:lxw.



Environmental Operating Procedure No. 15	EOP Revision: 03
Cultural Resource Protection	Revision Date: August 31, 2024
Responsibility: Proponent and Lands Manager	EOP Page 2 of 2

#### CULTURAL RESOURCE PROTECTION

For further information with regard to this process please see the Stó:lō Heritage Policy Manual (Stó:lō 2003) in in the knowledge base.

Any resource development project, administrative or land use decision, or other activity initiated by any party within the Sq'ewá:lxw Core Interests Area or Sq'ewá:lxw lands. Is it possible that there may be impacts on cultural or heritage No Proceed in referrals or resources? development permit process. Yes Follow the Stó: lo Heritage investigation permit process, and submit an investigation permit application and fee. ╈ People of the River Referrals review and possible iterative submission as required. Sq'ewá: lxw and the greater Stó: lo community will give consideration to possible resource ownership and caretaking responsibility. ¥ Permit number assigned and permit issued. The researcher or investigator is responsible for obtaining all other required permits from other agencies as required before commencing work. This includes the Provincial Heritage Investigation Permit. Investigations are carried out with all due respect. Management measures must conform with the Framework of Management Measures and Options contained in the Stó:lo Heritage Policy Manual. In contemplating management of heritage sites, investigators must ensure that proposals reflect ancestral Stó:lō values and result in as little conflict as possible with interests. Final say on cultural value rests with the current caretaker as defined by Sq'ewá:lxw (see above). Submit final report, heritage site forms, and the completed Heritage Investigation Project Summary Form to Sq'ewá:lxw and SRRMC.

Proceed in the referrals or development permit process.



# 20.0 ECOSYSTEM HEALTH

Sq'ewá:lxw is re-asserting our title and rights across our lands and acting on our stewardship obligations. To do so requires that we improve our knowledge of the land, water, and cultural and ecological values across the land.

#### GOALS

- Productive and vibrant natural ecosystems on our land.
- Clean and healthy water flowing over and under our land.
- Clean and fresh air blowing across our land.
- Full community awareness and appropriate action for the protection of our air, land, and water and our global environment.
- Our streams in a natural, healthy, and resilient state with attention to water quality, yield, and flow.
- Promote wellness, and ensure the health and safety of our members and all residents and guests on our land.

#### **OBJECTIVES**

Objective	Indicator	Target
High levels of ecological function for the whole of the Ruby Creek watershed.	Progress on returning the Ruby Creek watershed to a natural distribution of ecosystem and hydrological conditions.	Reasonable year-over-year improvements using framework yet to be identified.
Restore our streams to a natural and healthy state with particular attention to salmon habitat and population.	<ul> <li>Healthy salmon habitat and populations in our streams:</li> <li>Restoration of watercourses and riparian areas</li> <li>Removal of invasive species</li> <li>Stewardship of unique ecosystems such as our Cedar Swamp areas</li> </ul>	Reasonable year-over-year improvements in fish migrations and populations.

#### STRATEGIES

- Further develop community awareness and responsibility for the protection of our global environment.
- Operate an ongoing public education and engagement program to first introduce, and then continuously promote, the Sq'ewá:Ixw Environmental Management Plan and all of its components.
- Inventory values, assess status, and act to remediate environmental and cultural values across the Ruby Creek watershed.
- Establish a monitoring, projection, and reporting system on forest structure, clear-cut equivalency, and water quality, flow, and yield across the watershed. After completion of detailed land classification and soil, vegetation, animal, ecosystem and watercourse inventories across the watershed design of a monitoring strategy is required.



# Lexwthíthesem (Ruby Creek Watershed)

Lexwthithesem is under high risk to water quality. Sq'ewa:lxw is undertaking watershed analysis to explore the impacts of forest harvesting on water quality. Work has begun on terrestrial ecosystem mapping, ungulate winter range studies, stream assessments, and water quality testing.







# 21.0 WILDLIFE AND HABITAT PROTECTION

Responsibility for wildlife management has been asserted by British Columbia.

Responsibility for fisheries management and the protection of species at risk has been asserted by Canada.

The protection of plant and animal habitat is essential to the health of communities and the cultural dimension of who we are as Sq'ewá:lxw people. Animal, plants, medicines, food, spirituality, these all depend on habitat protection. It is of significant importance in maintaining environmental integrity and sustaining hunting and fishing activities. Through the various community engagement processes undertaken, members have made it clear that the protection of the natural environment of the reserve is a high priority.

The *Sq'ewá:lxw Land Code* sets out how we will protect our land and resources and is to be interpreted in accordance with the culture, traditions, and customs of Sq'ewá:lxw. Wildlife and wildlife habitat, in our view, is an integral part of land management. Our *Land Code* enables law making with regard to environmental assessment and protection.

Hunting is both an important cultural activity in that it not only provides food, but maintains a connection to land and the direct provision of sustenance by the creator. Sq'ewá:lxw puts heavy emphasis on clean air and water and one reason for this is that our air and water support our wildlife and in turn, our people.

Sq'ewá:lxw works with Stó:lō Nation on wildlife and habitat protection from a cultural perspective within our traditional territory, and we apply our development permitting processes on Sq'ewá:lxw land.

Habitat is the set of natural conditions within which an animal or plant lives and thrives. There are a number of animals and plants that are particularly important to Stó:lō people. A full list can be found in the Stó:lō Heritage Policy Manual (Stó:lō 2003) in the knowledge base. Wetlands and areas adjacent to water bodies, referred to as riparian areas, are also particularly important with regard to our people and to land and water ecology.

#### GOALS

- The protection of the natural environment including plant and animal habitat which is essential to the health of communities and the spiritual and cultural dimension of Sq'ewá:lxw people.
- Protect, preserve, and manage the wildlife element of our heritage in a manner consistent with Stó:lō values, beliefs and traditions.
- Develop internal and external awareness with regard to local wildlife and habitat stewardship issues.
- Effective wildlife habitat and wetland protection, including affording opportunities for trapping and hunting.
- Effective stewardship of fish populations.
- Restore and enhance wildlife habitat across Sq'ewá:lxw lands.



#### OBJECTIVES

Objective	Indicator	Target
Within areas designated as Sq'ewá:lxw	Ecologically functioning forest and riparian	100%
Environmental Protection Zone	areas	
(Sq'ewa:lxw Land Use Plan Section 8.2.1)		
preserve and restore the natural		
landscape.		









#### STRATEGIES

- Actively and consistently declare and practice inherent title and rights over the lands of the ancestors.
- Continuously develop and strengthen Sq'ewá:lxw relationships with outside agencies which are responsibility for the wildlife values of the lands within Canada and British Columbia.
- Advance with those agencies an agenda of co-management and stewardship leadership with regard to all natural resources.
- Through the Stó:lō resource referrals system and the Sq'ewá:lxw development permit system, take every opportunity to imprint upon the land the vision of Sq'ewá:lxw people.
- Implement environmental protection and cultural and traditional land use zones for primary protection of wildlife habitat on Sq'ewá:lxw lands.
- Control hunting by outsiders through the Sq'ewá: Ixw Removal of Trespassers Law (2018).
- Undertake and maintain an environmental inventory of natural habitats, environmentally sensitive areas, and rare and endangered species and ecosystems.
- Establish community and public communication and education programs emphasizing the importance to the sustainability of our community of natural resources and the actions required to preserve those resources.

#### **21.1 INVASIVE SPECIES**

Invasive species have been defined as animals, plants, or other organisms introduced by people into places out of their natural range of distribution, where they become established and disperse, generating a negative impact on the local ecosystem and species. Invasive plants are a significant cause of biodiversity loss and change to ecosystem function. They carry potential negative impacts to the economy, environment, and society. Significant impacts on ecological function within Sq'ewá:lxw lands is likely given the level of invasion reported in the Sq'ewá:lxw report Timber Values, Non-timber Values, and Biophysical Inventory (HiMark, 2003).

Invasive species are addressed by the B.C. Ministry of Agriculture, the Invasive Species Council of British Columbia, and the Fraser Valley Invasive Plant Council (FVIPC).

FVIPC has organized invasive species into four categories: prevent, eradicate, contain and control. These categories help to prioritize activities.

- **Prevent** species are not known to occur in the region but are likely to establish if introduced. Watch for, and if found, eradicate.
- Eradicate species are known to occur in limited distribution and low density. Eradicate if found.
- **Contain** species are found in established infestations in portions of the region. Contain existing infestations and prevent spread to non-infested areas.
- **Control** species are commonly found, are often in established infestations and are widespread throughout the Fraser Valley. Focus control in high value areas and use biological control if available.

#### GOALS

- Undertake community involvement and provide community education programs on invasive species and the harm they can do.
- Control, and as possible eliminate, invasive species on the land and waters of Sq'ewá:lxw.



#### OBJECTIVES

Objective	Indicator	Target
Contribute to the control of the spread of invasive species in the face of climate change	Presence or absence of invasive species in the waters and on land	Absence of "Prevent", "Eradicate" and
		"Contain" species

#### STRATEGIES

- Prohibit the introduction of invasive species to Sq'ewá:lxw lands and encourage the removal of all such species by land holders.
- Develop a list of local potential invasive species, and undertake Sq'ewá:lxw staff training on invasive species identification and management techniques and integrate these techniques into species into staff work routines.
- Complete inventory of existing infestations of invasive species and continue monitoring of lands for invasive species.
- Consider a range of species-specific treatment methods that fit with current and future landuse.
- Undertake community involvement and provide community education programs on invasive species and the harm they can do.





# Invasive Species -Japanese Knotweed

Fallopia japonica (Japanese Knotweed) is an invasive species which has gained a significant foothold at Ruby Creek. It forms dense thickets of bamboo-like vegetation that aggressively outcompetes native plants and negatively impacts wetland and riparian areas. Control of knotweed at Ruby Creek has been initiated and this photo depicts a significant infestation which was treated and the dead debris remains on the site.



# **Issues Highlight**

Figure 10 – Issues Highlight – Invasive Species



#### 21.2 EOP 16 – INVASIVE SPECIES

Environmental Operating Procedure No. 16	EOP Revision: 03
Invasive Species Eradication	Revision Date: August 31, 2024
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Management of invasive species is the responsibility of the Lands Manager or CP holder as well as any proponent of any project which may increase risk of invasive species impacts.

#### SCOPE

• All resource development proposals or other activities deemed to potentially introduce invasive species to Sq'ewá:lxw land.

#### **BEST PRACTICES**

- Develop a list of local invasive species of concern.
- A qualified professional should develop a species-specific plan for eradication. Such plans would:
  - Implement most the effective method of eradication (mowing/hand pulling);
  - o Complete activities when the species is not in seed to prevent expansion; and
  - Bag plants (specifically seed heads) for burning or disposal.
- Care should be taken when handling toxic species (to prevent exposure some species should not be handled, or stored in enclosed airspace where human exposure is possible, some species should not be burned to prevent further release of noxious substances).
- Plant materials and seed heads should not be composted.

Invasive species of concern in the Fraser Valley are listed below.

PREVENT	
Russian knapweed Acroptilon repens	Yellow bush lupine Lupinus arboreus
Garlic mustard Alliaria petiolata	Yellow loosestrife Lysimachia punctata
Common bugloss Anchusa officinalis	Garden loosestrife Lysimachia vulgaris
Bur chervil Anthriscus caucalis	Wand loosestrife Lythrum virgatum
Giant reed Arundo donax	Common reed Phragmites australis ssp. Australis
Flowering rush Butomus umbellatus	Curled pondweed Potamogeton crispus
Yellow starthistle Centaurea solstitialis	Kudzu Pueraria montana; Pueraria lobata
Marsh plume thistle Cirsium palustre	Carpet burweed Soliva sessilis
Common crupina Crupina vulgaris	Milk thistle Sylibum marianum
Leafy spurge Euphorbia esula	Gorse Ulex europaeus
Giant mannagrass Glyceria maxima	



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ERADICATE	CONTAIN
Hound's-tongue Cynoglossum officinale	Wild chervil Anthriscus sylvestris
Spurge laurel/Daphne Daphne laureola	Hoary alyssum Berteroa incana
Baby's breath Gypsophila paniculata	Knapweeds (Diffuse, Spotted, Mountain bluet,
	Meadow) Centaurea diffusa; C. maculosa/ Centaurea stoebe
	ssp micranthos; C. montana; C. pratensis
Giant hogweed Heracleum mantegazzianum	Scotch broom Cytisus scoparius
Yellow flag-iris Iris pseudachoris	Knotweeds (Japanese, Giant, Bohemian, Himalayan) Fallopia
	japonica; Fallopia sachalinese, Fallopia x bohemica, Polygonum
	polystachyum
	Toadflaxes (Dalmatian, Yellow) Linaria genistifolia ssp
	dalmatica; Linaria vulgaris

CONTROL
Butterfly bush Buddleja davidii
Cheatgrass Bromus tectorum
Wild clematis <i>Clematis vitalba</i>
Poison hemlock <i>Conium maculatum</i>
Morning glory/Bindweed Convulvulus spp.
English hawthorn Crataegus monogyna
Orchardgrass Dactylis glomerata
Blueweed Echium vulgare
Cypress spurge Euphorbia cyparissias
English ivy Hedera helix and varieties
Hawkweeds (Orange and Yellow) Hieracium aurantiacum; H. piloselloides; H. caespitosum; H. praealtum; H.
flagellar
Hops Humulus lupulus
St. John's wort Hypericum perforatum
English holly <i>Ilex aquifolium</i>
Small touch-me-not Impatiens parviflora
Pacific jewelweed Impatiens x pacifica
Himalayan balsam/Policeman's helmet Impatiens glandulifera
Yellow archangel/Yellow lamium Lamiastrum/Lamium galeobdolon
Purple loosestrife Lythrum salicaria
Parrot feather Myriophyllum aquaticum
Eurasian water-milfoil Myriophyllum spicatum
Reed canarygrass Phalaris arundinaceae
Sulphur cinquefoil Potentilla recta
Himalayan blackberry; Evergreen blackberry Rubus armeniacus; Rubus lacianatus
Tansy ragwort Senecio jacobaea
Scentless chamomile/Mayweed Tripleurospermum inodorum
Periwinkle Vinca minor, Vinca spp.



#### 21.3 SPECIES AT RISK

Plants, animals and microorganisms are essential to the natural processes that keep the earth's atmosphere, climate, landscape, and water in balance. They help ensure our health and economic prosperity. However, the number of plant and animal species at risk of disappearing in Canada is growing. The reasons are many, including the results of human activity. To address this, Environment Canada uses the *Species at Risk Act* (SARA) to protect endangered and threatened species and the spaces they need to flourish. As a federal law SARA applies to Sq'ewá:lxw lands, but it also applies to all listed aquatic species and migratory birds throughout Canada.

To be protected under SARA a species must be on the List of Wildlife Species at Risk in Schedule 1 of the Act. The source of this list is the national list of species at risk prepared by the Committee on the Status of Wildlife in Canada (COSEWIC).

Categories in the List of Wildlife Species at Risk are:

- 1. **Extirpated species**: a wildlife species that no longer exists in the wild in Canada, but exists elsewhere in the wild.
- 2. Endangered species: a wildlife species that is facing imminent extirpation or extinction.
- 3. **Threatened species**: a wildlife species that is likely to become an endangered species if nothing is done to reverse the factors leading to its extirpation or extinction.
- 4. **Species of special concern**: means a wildlife species that may become a threatened or endangered species because of a combination of biological characteristics and identified threats.

Once a species is placed on the list, species listed as extirpated, endangered, or threatened cannot:

- 1. Be killed, harmed or traded (including parts); or
- 2. Have their "residence" damaged or destroyed.

All species, once listed as endangered, threatened or extirpated under SARA will have recovery strategies prepared for them.

A permit is required when works either affect a migratory bird or aquatic species or its residence, that is listed as 'Endangered' or 'Threatened' or 'Extirpated' on Schedule 1 of SARA; or affect any Schedule 1 'Endangered' or 'Threatened' or 'Extirpated' species or its residence on federal land.

#### GOALS

The protection of plant and animal habitat is essential to the health of communities and the cultural dimension of who we are as Stó:lō. Animal, plants, medicines, food, spirituality, these all depend on habitat protection.

- Develop internal and external awareness with regard to species-at-risk.
- Identify, predict, prevent, mitigate, and minimize any impacts on species-at-risk from any and all activities on Sq'ewá:lxw lands.



#### OBJECTIVES

Objective	Indicator	Target
Compliance with species at risk	Incidents of unmitigated impacts on species	Zero
legislation	at risk	

#### STRATEGIES:

- Utilize the resources of Federal and Provincial programs supporting the management of rare and endangered species.
- Undertake staff training on rare and endangered species and management techniques.
- Implement protection and mitigation techniques for rare and endangered species in resource referral and development permitting processes.
- Establish community and public communication and education programs emphasizing the importance to the sustainability of our community's natural resources and the actions required to preserve those resources.
- Develop community education programs on species at risk and the benefits they afford.
- Establish community and public communication and education programs emphasizing the importance to the sustainability of our community of all components of ecosystems, particularly rare or endangered species.



#### 21.4 EOP 17 – SPECIES AT RISK

Environmental Operating Procedure No. 17	EOP Revision: 03		
Species at Risk	Revision Date: August 31, 2024		
Responsibility: Lands Manager	EOP Page 1 of 2		

#### SCOPE

• All resource development proposals or other activities deemed to potentially impact species at risk, red or blue listed species, or migratory birds on reserve land.

#### **BEST PRACTICES**

- Be aware of and continuously update the list of known species and habitats at risk found or potentially to be found on reserve.
- Prepare guidelines for developers.
- A qualified professional biologist will assess each development as required



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The management of species at risk is the responsibility of the project proponent.

All land and resource developments must be assessed for potential impacts on species at risk as defined by SARA Schedule 1 "List of Wildlife Species at Risk". All environmental assessment processes will address species at risk.

Are species at risk or critical habitat possibly present? Tools available to help:

- BC Ministry of Environment's Conservation Data Centre <u>http://a100.gov.bc.ca/pub/eswp/</u>
   <u>http://www.env.gov.bc.ca/cdc/access.html</u>
   SARA Registry Advanced Search Tool
- http://www.sararegistry.gc.ca/search/default\_e.cfm

A qualified professional must determine the presence of species at risk or critical habitat.

A qualified professional must assess the potential impacts of the project and prescribe any possible avoidance or mitigation strategies.

No

• Consider relevant recovery plans and strategies.

Yes

- Direct projects and physical activities away from conservation priorities.
- Determine if wildlife at risk or their survival or recovery habitat or residences are present.
- Involve the appropriate government departments and specialists.
- Identify wildlife species at risk as valued ecosystem components.
- Describe project effects on wildlife at risk with rigour and detail.
- Plan the project to avoid or minimize effects.
- Work out the best approach to mitigation.
- Apply the precautionary approach/principle.
- Follow up to ensure the success of mitigation measures.



Proceed in permitting

process.

# 22.0 EDUCATION AND OUTREACH

Successful implementation of this Environmental Management Plan is entirely dependent upon the effective communication of the Plan to all stakeholders about their responsibilities contained in the Plan.

Effective community awareness through dialogue will lead to the success of environmental management initiatives undertaken within our community.

Ensuring that our members and residents are familiar with best practices is the most important step toward effective waste management. Limiting waste in the community starts with behavioural change. Solid waste is generated by every one of us and we all must assume responsibility to take good care of our own waste. Having strategies and action plans in place to manage waste is good, but if they are not being implemented, they are useless. Education on waste reduction and our environment at the grassroots level can effectively start to change the way in which people deal with their waste, such as reducing, reusing, and recycling.

The communication program will create a two-way exchange of ideas resulting in increased knowledge and changed behaviour. The outcome will be the accomplishment of the goals set out in the Environmental Management Plan.

Timing is as important as the message. Effective best practices must be taught and communicated at the same time as facilities and programs are being implemented so that they can be put into practice.

A comprehensive public outreach program will involve a wide range of media to disseminate information, educate households, and continue the collection of community input.

Program initiatives shall include:

- A strong presence on the Sq'ewá:lxw website for environmental management;
- Use of social media to expand the reach of communications initiatives and create a true dialogue on continuous improvement of our environmental policies and programs;
- Newsletter articles coinciding with social media updates focusing on constantly changing and coordinated themes;
- Simple, one- or two-page handouts with information on major topics, for example:
  - For waste management, describe best practices, poor waste management practices that need to be avoided, drop off locations, program staff contact information and relevant web links for further information,
  - Emergency procedures,
- Promoting environmental solutions at community events;
- Distribute recycling containers to encourage segregation of waste;
- Distribute compost bins with information packages;
- Signage throughout the community promoting environmental action and providing information with regard to waste sites and procedures;
- Undertake periodic community educational workshops on various key environmental topics and emergency procedures practice drills; and
- Establish a community awards program.

Successful educational alternatives have been carried out by many communities. Sq'ewá:lxw can take advantage of a wealth of education materials, flyers, and school curricula already prepared by industry and other governmental agencies.



Table 9 links proposed education and outreach messages and activities to the Environmental Management Plan goals, objectives and progress measurement scheme. There is overlap between themes which will help reinforce our messages.

Strategy	Messages and Actions
Solid Waste Management	
Promote the full segregation of waste materials in homes, offices, and businesses. Educate our members and other residents with respect to the benefits of waste reduction including reuse, composting, and recycling, including use of the full range of product stewardship programs available to us. Advertise and promote the location and use of depots and other disposal processes in the area to ensure the proper disposal of all elements of the waste stream including hazardous wastes. Promote and assist in organizing periodic community environmental events including community cleanups.	<ul> <li>Benefits and best practices of segregation, reusing and recycling, and particularly reducing</li> <li>Bear aware and bear proofing</li> <li>Rethink, reduce, reuse, and recycle</li> <li>Safe substitutes</li> <li>Donations, free store and reuse</li> <li>What are product stewardship programs?</li> <li>Provision of recycling bins to all households, offices, and businesses</li> <li>Composting benefits and best practices</li> <li>Provision of composting kits to households or businesses requesting them</li> <li>Hazardous materials that may be in our homes and the risks of illness</li> <li>Local disposal methods and locations for hazardous wastes</li> <li>Safe handling and storage of fuels</li> </ul>
Soil and Water Conservation, Air Qualit	y, Land Development
Make members aware of the full range of Sq'ewá:lxw legislation and policy with regard to soil conservation, water management, and air quality. Establish community and public communication and education programs to raise awareness of clean water issues, drinking water systems, and importance of proper use and care of septic systems.	<ul> <li>EOP 7 – Land filling and Soil Conservation</li> <li>13.0 Safe Fuel Handling and Storage</li> <li>EOP 9 – Fuel Spills and Response</li> <li>EOP 10 – Leaks Threatening Water</li> <li>EOP 11 – Water and Wastewater</li> <li>EOP 12 – Air Quality</li> <li>Clean water and air</li> <li>Road and gravel dust and human health</li> <li>Smoke and human health</li> <li>Alternatives to wood heat</li> </ul>
Establish community and public communication and education programs to raise awareness of risks to human health from poor air quality and the actions required to eliminate the risk. Ensure that Membership is aware of the full range of Sq'ewá:lxw legislation and policy with regard to land	<ul> <li>Dangers of backyard burning of garbage</li> <li>Sq'ewá:lxw Land Use and Zoning Law and its policies and protocols</li> <li>Sq'ewá:lxw Land Use Plan</li> <li>Sq'ewá:lxw Subdivision, Development, and Servicing Law</li> <li>Sq'ewá:lxw Development Permitting Guide</li> <li>EOP 13 – Land Development</li> <li>EOP 14 - Environmental Assessment</li> </ul>

Table 9	- Proposed	<b>Education</b> an	d Outreach	Messages	and Activities
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Strategy	Messages and Actions
development for the protection of environmental values. Promote the principle of sustainable development for our lands, ensuring that development takes place in a manner that plans for and protects ecologically and culturally significant areas.	• Environmental and cultural sustainable development
Climate Resilience, Safety and Security,	, Food Security
Establish community communication and education programs to raise awareness of climate change and its impacts and the actions required to mitigate the risks on our people and the environment. Involve youth and Elders. Focus on resilience. Establish community and public communication and education programs to ensure the success of our emergency management program including raising awareness of the need to create a resilient community. Encourage community and individual home gardens wherever possible to allow for the membership to grow, prepare, and store quality and wholesome food.	<ul> <li>Climate change and resilience</li> <li>Causes and impacts of climate change</li> <li>Greenhouse gas reduction</li> <li>Local concerns from climate change</li> <li>Sq'ewá:lxw efforts to mitigate risks</li> <li>Environmental emergencies and the Sq'ewá:lxw All-Hazards Emergency Management Plan.</li> <li>Hazards and risk levels</li> <li>Household preparedness</li> <li>Grab and go</li> <li>Evacuation procedures</li> <li>Practice exercises</li> <li>Provide emergency information materials</li> <li>Food security</li> <li>Link between good food and health</li> <li>Local food and climate change</li> </ul>
Cultural Heritage	
Establish community and public communication and education programs emphasizing the importance of cultural resources to the sustainability of our community and the actions required to preserve those resources. Develop further awareness amongst our people and all users and visitors to our lands of the need to honour and respect our culture and traditions. Ensure that members are fully aware of the full range of Sq'ewá:lxw initiatives to protect cultural values.	<ul> <li>Stó:lō and Sq'ewá:lxw history, territories, and inherent rights</li> <li>What cultural resources are and how and why they are valued</li> <li>How traditions are carried forward today and into the future</li> <li>The link to the past and the future through cultural resources</li> <li>Respect and protection of cultural and spiritual places and resources</li> <li>The importance of cultural resources to the sustainability of our community</li> <li>Planning and protection processes and documents and agreements</li> <li>Continued support and development at Syéxw Chó:leqw</li> </ul>



Strategy	Messages and Actions
Ecosystems Health, Wildlife and Habitat	<ul> <li>Use of Halq'eméylem language in place names and signage</li> <li>Increased external agency engagement and sharing of messages in all interactions</li> <li>Stó:lō Heritage Policy and the S'ólh Téméxw Use Plan</li> <li>Sq'ewá:lxw Land Use Plan</li> <li>Cultural resource protection EOP</li> <li>t Protection</li> <li>The environmental management program and its</li> </ul>
Further develop community awareness and responsibility for the protection of our global environment. Operate an ongoing public education and engagement program to first introduce, and then continuously promote, the Environmental Management Plan and all of its components. Promote wellness, and ensure the health and safety of our members and all residents and guests on our land. Develop internal and external awareness with regard to local wildlife and habitat stewardship issues. Develop internal and external awareness with regard to species-at- risk. Undertake community involvement and provide community education programs on invasive species and the harm they can do.	<ul> <li>The environmental management program and its components</li> <li>The past and how planning can change the future</li> <li>Vision of the future</li> <li>Best practices</li> <li>Environmental operating procedures</li> <li>The connection between individual wellness, family wellness, community wellness, and environmental health</li> <li>Wildlife habitat and healthy ecosystems</li> <li>Rare and endangered species on our lands</li> <li>Plant and animal habitat protection</li> <li>Impacts of invasive species</li> <li>Traditional uses of animals and plants</li> <li>Traditional medicines</li> <li>Food and ceremonial goods</li> <li>The importance of ground and surface water protection</li> <li>Proper maintenance of septic systems</li> <li>Planning and protection processes</li> <li>Actively and consistently declare and practice inherent title and rights</li> <li>Continuously develop and strengthen Sq'ewá:lxw relationships with outside agencies which are responsibility for the wildlife values</li> <li>Undertake community involvement and provide community education programs on species-at-risk</li> </ul>



### 23.0 IMPLEMENTATION PLAN

This section provides a work plan for implementation of this Sq'ewá:lxw Environmental Management Plan.

The work plan is meant to feed into the next administrative strategic planning process.

Activities identified are not intended to include current and ongoing staff activities including regular update of the Land Use Plan, All-Hazards Plan, and Environmental Management Plan.



Strategy	SQFN Strategic Plan	Key Result	Cost	Responsible	Priority	Timeline
	Elements		(H/M/L)	Party	(H/M/L)	(Year)
Administration	-					
Establish as the responsibility of	Governance,	Clear responsibility and	Moderate	Office Manager	High	2024
the appropriate staff member the	Environmental	accountability in				
annual planning, monitoring, and	Stewardship	support of program				
reporting functions required for		success.				
continuous improvement of the						
environmental management						
system.						
Build into the annual staff	Governance,	Staff well prepared to	Moderate	Office Manager	High	2025
performance planning process an	Environmental	implement the				
environmental and emergency	Stewardship, health	environmental program				
management training plan.	and safety					
Implement as part of the	Governance,	Integrate a grass-roots	Low	Environment	High	2025
outreach program, an annual	Environmental	element into program		Culture		
membership feedback	Stewardship	success monitoring.		Coordinator		
mechanism on environmental						
issues.						
Continue to develop an	Governance,	An effective	High	Office Manager	High	2030
enforcement and adjudication	Environmental	enforcement and				
process to support the	Stewardship	adjudication process.				
environmental program.						
Create an information	Governance,	A practical tool for	Low	Office Manager	Moderate	2025
management system capable of	Environmental	efficient and effective				
tracking achievable	Stewardship	monitoring of program				
environmental goals.		success.				
As part of the administrative	Governance,	Meeting of all	High	Office Manager,	High	2030
duties, enforce all waste	Environmental	environmental goals.		Environment		
reduction legislation and policy.	Stewardship			Culture		
				Coordinator		



Strategy	SQFN Strategic Plan Elements	Key Result	Cost (H/M/L)	Responsible Party	Priority (H/M/L)	Timeline (Year)
Address environmental health issues, such as asbestos, hazardous waste, and waste water, through subdivision, development, and permitting policy and procedures.	Infrastructure and housing, health and safety.	Systematic approach to public health issues.	Low	Office Manager, Environment Culture Coordinator	Moderate	2025
Local community information and engagement program to promote the full segregation of waste materials in homes, offices, and businesses including composting and hazardous wastes.	Governance, Environmental Stewardship, Health and Safety.	Well informed and motivated community, less waste in land-fill.	Low	Environment Culture Coordinator	High	2025
Consider looking to partnerships in composting with First Nation neighbours.	Environmental Stewardship, Health and Safety.	Capture more materials from residual waste.	Moderate	Office Manager, Environment Culture Coordinator	Low	2025
Assist those with barriers to participation.	Environmental Stewardship, Health and Safety.	Capture more materials from residual waste. Improve quality of life for members.	Moderate	Environment Culture Coordinator	Low	2025
Soil and Water Conservation, Air Q	uality, Land Developme	nt				
Enforce all Sq'ewá:lxw laws and regulations with regard to soil conservation, fuel handling, spill response, water management, air quality, and land development.	Governance, Environmental Stewardship, health and safety.	Meeting of all environmental goals.	High	Office Manager, Environment Culture Coordinator	High	2030
Address storm water management and flood mitigation issues through subdivision, development, and permitting policy and procedures.	Environmental Stewardship, health and safety.	Systematic approach to public safety issues.	Low	Office Manager, Environment Culture Coordinator	Moderate	2025



Strategy	SQFN Strategic Plan Elements	Key Result	Cost (H/M/L)	Responsible Party	Priority (H/M/L)	Timeline (Year)
Community information program on Sq'ewá:lxw legislation and policy with regard to soil conservation, fuel handling, spill response, water management, air quality, and land development.	Governance, Environmental Stewardship and Lands	Well informed and motivated community.	Low	Environment Culture Coordinator	High	2025
Continue to integrate land use, emergency management, and environmental planning, and continue to support regional flooding and geo-hazard mitigation projects.	Economic Development Infrastructure and Housing Health and Safety Environmental Stewardship	The mitigation of risk from flooding and geohazards	Low	Office Manager, Environment Culture Coordinator	High	2025
Create and update regularly an information and monitoring system in order to protect surface and ground water including all environmental issues and risks.	Environmental Stewardship and Lands	Informed risk assessment and mitigation activities and meeting of all environmental goals.	High	Office Manager	Moderate	2030
Climate Resilience, Safety and Secu	rity, Food Security					
Establish community communication and education programs to raise awareness of climate change and its impacts and the actions required to mitigate the risks on our people and the environment. Involve youth and Elders. Focus on resilience. Differentiate the message between local and non- local members.	Governance, Environmental Stewardship	Well informed and motivated community.	Low	Environment Culture Coordinator	High	2025
Cultural Heritage		I				



Strategy	SQFN Strategic Plan Elements	Key Result	Cost (H/M/L)	Responsible Party	Priority (H/M/L)	Timeline (Year)
Apply our Sq'ewá:lxw consultation, referral, and development permit process across our multi-level jurisdiction and interests as defined in the Land Use Plan. Full application of the Stó:lō	Governance, Culture, Lands Governance, Culture,	Meeting all cultural heritage goals. Meeting all cultural	Moderate Moderate	Office Manager Environment	High High	2026
Heritage Policy and the S'ólh Téméxw Use Plan to Sq'ewá:lxw lands and interests.	Lands	heritage goals.		Culture Coordinator		
Establish community and public communication and education programs emphasizing the importance of cultural resources to the sustainability of our community and the actions being taken and required to preserve those resources. Differentiate message for local and non-local members.	Governance, Environmental Stewardship, Culture	Well informed and motivated community.	Low	Environment Culture Coordinator	High	2025
Ecosystem Health, Wildlife and Habitat Protection						



Strategy	SQFN Strategic Plan Elements	Key Result	Cost (H/M/L)	Responsible Party	Priority (H/M/L)	Timeline (Year)
Continuously develop and strengthen Sq'ewá:lxw relationships with outside agencies which are responsible for the wildlife values of the lands within Canada and British Columbia. Sq'ewá:lxw should advance with those agencies an agenda of co-management and stewardship leadership with regard to all natural resources.	Governance, Environmental Stewardship, Culture	Well informed partners and other external agencies. Achievement of environmental goals.	Low	Environment Culture Coordinator, Office Manager	Moderate	2026
Undertake and maintain an environmental inventory of natural habitats, environmentally sensitive areas, and rare and endangered species and ecosystems	Governance, Environmental Stewardship	Well informed partners and other external agencies. Achievement of environmental goals.	Moderate	Environment Culture Coordinator	Moderate	2026
Undertake community involvement and provide community education programs on invasive species and species at risk.	Governance, Environmental Stewardship, Culture	Well informed and motivated community.	Low	Environment Culture Coordinator	High	2025
Establish community and public communication and education programs emphasizing the importance to the sustainability of our community of natural resources and the actions required to preserve those resources. Funding opportunities being identified.	Governance, Environmental Stewardship	Positive public perception,	Low	Environment Culture Coordinator	Moderate	2026



# 24.0 GLOSSARY OF TERMS

**Asbestos** - Is a set of six naturally occurring silicate minerals used commercially for their desirable physical properties associated with their thin fibrous crystals. The inhalation of asbestos fibers can cause serious illnesses, including malignant lung cancer, mesothelioma (a formerly rare cancer strongly associated with exposure to amphibole asbestos), and asbestosis (a type of pneumoconiosis). Long exposure to high concentrations of asbestos fibers is more likely to cause health problems.

**Bio-hazardous waste** - Any waste containing infectious materials or potentially infectious substances such as blood. Of special concern are sharp wastes such as needles, blades, and other wastes that can cause injury during handling.

**Commingled recycling** - The collection of recyclable materials without separation by type of material. Commingled recycling reduces costs and results in higher levels of participation in recycling. Materials are later separated by automated systems.

**Compost** - Organic matter that has been decomposed and recycled as a fertilizer and soil amendment. Compost is a key ingredient in organic farming. The decomposition process is aided by shredding the plant matter, adding water and ensuring proper aeration by regularly turning the mixture. Worms and fungi further break up the material.

**Comprehensive community planning (CCP)** - CCP addresses key planning areas, all of which are interrelated and interdependent: governance, land and resources, health, infrastructure development, culture, social issues and the economy.

**Environmental Management Framework** – is a set of ideas, principles, agreements, or rules that provides the basis or outline for subsequent development of an environmental management plan(s) and ultimately the operation of an environmental management system.

**Environmental Management Information System** – A repository of information, and tools to utilize that data in an efficient and consistent manner, used to advance the objects of environmental management.

**Environmental Management Plan** – The synthesis of all proposed mitigation and monitoring actions, set to a timeline with specific responsibility assigned and follow-up actions defined.

**Environmental operating procedures** - A set of written instructions that document a routine or repetitive activity followed by an organization to achieve environmental protection goals.

**Free Store** – A facility established with full public access for the drop off and pick up of useable items facilitating exchange between those who have unwanted useful items and those who have a need for those items.

Goal – a personal or organizational desired end-point.

**Hazardous waste** - Waste that poses substantial or potential threats to public health or the environment. It is either toxic (poisonous), can catch fire, will corrode other materials, or will react with other chemicals.

Indicator – A factor to be measured to determine the success of achieving a goal.

**Industrial waste** –Waste produced by industrial or commercial entities that is extra to the community waste stream and for which the disposal responsibility rests with the operator.

**Materials Safety Data Sheets (MSDS)** - A document that contains information on the potential health, fire, and environmental hazards associated with a product and how to work safely with the product.

**Mercury** - A heavy, silvery chemical element, mercury is the only metal that is liquid at standard conditions for temperature and pressure. Mercury poisoning can also result from exposure to water-soluble forms of mercury (such as mercuric chloride or methyl mercury), inhalation of mercury vapor, or



eating seafood contaminated with mercury. Mercury is used in thermometers, barometers, manometers, sphygmomanometers, float valves, some electrical switches, and other scientific apparatus. It remains in use in amalgam material for dental restoration and in fluorescent lighting.

**Product stewardship programs** - British Columbia's industry-led product stewardship programs require producers of designated products to take extended producer responsibility (EPR) for the life cycle management of their products, including collection and recycling.

**Recycling -** The collection, transportation and processing of products separated from the municipal solid waste stream which are no longer useful in their present form and the use (including composting) of their material content in the manufacture and sale of new products.

**Reduce** - Decreasing the volume, weight, and/or toxicity of discarded material and includes activities which result in greater ease or efficiency of reuse of a product or recycling of materials.

**Residual waste** - Business, office, or household garbage not able to be recycled, re-used, or composted.

**Reuse** - The repeated use of a product in the same form but not necessarily for the same purpose.

**Solid waste** - Unwanted solid or semi-solid materials to be disposed of. Garbage.

**Sustainable development** - Development that meets the needs of the present without compromising the ability of future generations to meet their own needs.

Target - The numerical value of an indicator used to determine the success of achieving a goal.

**Waste reduction** - The activities associated with removing waste from the waste stream for other use resulting in some volume of residual waste to be disposed of.

**Waste stream** - All items and materials disposed of and contributing the volume of waste, before, during, and after waste reduction.

White goods - Major household appliances, such as the stove and refrigerator, washer, dryer and dishwasher, hot water heaters and air conditioners, some of which are often factory-finished in white enamel.

**Workplace hazardous materials information system (WHIMIS)** - Canada's national hazard communication standard. The key elements of the system are cautionary labelling of containers of WHMIS "controlled products", the provision of material safety data sheets (MSDSs) and worker education and training programs.



# 25.0 KNOWLEDGE BASE

The following documents can be found in the Sq'ewá:lxw Environmental Management Knowledge Base.

B.C. Ministry of Environment. 2013. British Columbia Inland Oil Spill Response Plan. B.C. Ministry of Water, Land and Air Protection. 2002. A Field Guide to Fuel Handling, Transportation & Storage 3rd Edition, February 2002. Canadian Wildlife Service. 2004. Environmental Assessment Best Practice Guide for Wildlife at Risk in Canada. Environment Canada. Environment Canada. 2007. A Guide to the Species at Risk Act (SARA): Information For Federal Land Manaaers. First Nations Environmental Assessment Technical Working Group. 2004. First Nations Environmental Assessment Toolkit. First Nations Leadership Council. 2011. First Nations Heritage Conservation Action Plan. Fraser Valley Regional District. 2015. FVRD Solid Waste Management Plan. Fraser Valley Regional District. 2021. Air Quality Management Plan. Government of Canada. 2007. Text of the Framework Agreement on First Nation Land Management Government of Canada. 2024. https://www.canada.ca/en/environment-climatechange/services/species-risk-public-registry.html Harper, David. 2016. A Guide to Preparing Environmental Management Plans For Operational First Nations Version 2.0. First Nations Land Management Resource Centre Inc. Indian and Northern Affairs Canada. 2010. Protocol for Centralised Drinking Water Systems in First Nations Communities. Palmer. 2023. Geomorphological Assessment of Fluvial Hazards at Sq'ewa:lxw People of the River Referrals Office. 2018. S'olh téméxw Use Plan Policy. Sq'ewa:lxw. 2023. Focusing the Vision. Sq'ewa:lxw. 2022. FireSmart Community Plan DRAFT 2 Sq'ewa:lxw. 2021a. Subdivision Development and Servicing Law Ver 1.1 Sq'ewa:lxw. 2021b. Development Procedures Ver 1.1 Sq'ewa:lxw. 2021. Development Permitting Guide Ver 1.6 Sq'ewa:lxw. 2019. Our Future Vision Project CCP Sq'ewa:lxw. 2018. Climate Adaptation Flood Mitigation for Housing. Stó:lō Nation Lalems ye Stó:lō Si:ya:m. 2003. Stó:lō Heritage Policy Manual. Teranis Consulting Ltd. 2015b. Former Dumpsite (AEC 6) Remediation. Teranis Consulting Ltd. 2015a. Former Dumpsite (AEC - 6) Additional Remediation. Teranis Consulting Ltd. 2014. Skawahlook Phase 3 ESA Teranis Consulting Ltd. 2012. Skawahlook Supplemental Phase 2 ESA Teranis Consulting Ltd. 2011a. Skawahlook Phase 2 ESA Draft Feb 2011 **Teranis Consulting Ltd.** 2011b. Skawahlook Phase 2 ESA Findings Feb 23, 2011 Teranis Consulting Ltd. 2009. Skawahlook Phase 1 Report Final May 26 2009 Thurber Engineering Ltd. 2023. Sq'ewá:lxw First Nation Terrain Hazard Assessment Urban Systems Ltd. 2023. Memorandum Flooding and Geohazard Assessment Final October 2023 Urban Systems Ltd. 2017. Highway 7 Commercial Development Engineering Feasibility Report.



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